A SURVEY OF THE DISTRIBUTION OF PERSONALITY TYPES AND RELATED INTERESTS AMONG COMPETENT TEACHERS IN ADVANTAGED AND DISADVANTAGED SETTINGS

> Thests for the Degree of Ed. D. MICHIGAN STATE UNIVERSITY Donald IH. Nickerson 1966



This is to certify that the

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presented by

Donald H. Nickerson

has been accepted towards fulfillment of the requirements for

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Major professor

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ABSTRACT

A SURVEY OF THE DISTRIBUTION OF PERSONALITY TYPES AND RELATED INTERESTS AMONG COMPETENT TEACHERS IN ADVANTAGED AND DISADVANTAGED SETTINGS

by Donald H. Nickerson

The specific purpose of this investigation was to survey the distribution of personality types and examine the personality and academic related interests of a population of competent teachers from both advantaged and disadvantaged teaching situations. Both psychological and academic related interests were examined to determine whether the type of teacher who is seen as effective is related to the kind of teaching situation.

The data for this investigation were collected from a sample of 94 teachers from a large school system in Michigan. Fifty-two of these teachers were drawn from disadvantaged schools and forty-two from advantaged schools. They were selected on the basis of competency and effectiveness as judged by the building principal.

The Manifold Interest Schedule developed by Louis Heil and others was used to assess personality type, personality related interests, and academic related interests. Teachers were classified into three personality configurations.

- A personality configuration turbulent, impulsive variable.
- B personality configuration self-controlling, orderly, work-oriented.

3. C - personality configuration - fearful.

The chi square test was used to measure differences in the distribution of personality types and personality and academic related interests.

Because of the educational and psychological needs of many disadvantaged children, it was postulated that a particular kind of teacher would be seen as effective more frequently in disadvantaged schools. The following hypotheses were tested:

- There will be a significantly greater number of teachers with the self-controlling personality configuration among competent teachers in disadvantaged schools than in advantaged schools.
- 2. There will be a significantly greater number of teachers with the self-controlling personality configuration in early elementary grades than in later elementary grades in both advantaged and disadvantaged schools.
- 3. There will be a significantly greater variability in the personality types of teachers seen as competent in the later grades in advantaged schools when compared with teachers in disadvantaged schools.

With respect to the first hypothesis, it was found that there was no statistically significant difference in the distribution of the self-controlling personality type when comparing the total disadvantaged sample with the total advantaged sample.

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However, when disadvantaged school early grade teachers were compared with advantaged school early grade teachers, a difference which was significant was found. The self-controlling personality type was found to be significantly more numerous among disadvantaged school early grade teachers than among advantaged school early grade teachers. Hypothesis 1, then, can be supported when limited to early grade teachers.

With respect to Hypothesis 2, it was found that in this research project no evidence was presented which supports the position posited: that there will be a significantly greater number of teachers with the self-controlling personality configuration in the early grades. There was no significant difference between early grade teachers and later grade teachers in the disadvantaged schools. In the advantaged sample there was a significant difference at the .05 level between early grade and later grade teachers. However, the difference was in the opposite direction to that which was hypothesized; that is, the self-controlling personality type was more numerous in the later grades.

With respect to Hypothesis 3, no evidence was presented which would substantiate the contention of greater variability of personality types seen as effective in advantaged later grade teaching situations when compared with disadvantaged later grade teaching situations.

In summarizing the results of the comparisons between the disadvantaged and advantaged teacher samples on personality and academic related interests, it would appear that the revealed differences between the groups are not great. Although a significant difference was found

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between the disadvantaged early grade teacher sample and the advantaged early grade teacher sample in the distribution of personality types, only two significant differences were found between these same groups on the personality interest categories. With respect to the academic related interests only six out of fifty-six comparisons were significant.

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by Donald H? Nickerson

A THESIS

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CHAPTER I

INTRODUCTION

General Statement of the Problem

In recent years a renewed general interest in teacher characteristics has been found in educational literature. The underlying assumption persists among these researchers that the presence or absence of deeply embedded personality traits may determine teaching effectiveness. At least some of this renewed interest results from the fact that the recruitment and placement of competent teachers in deprived situations has become increasingly difficult. In response to the complex problems which teachers meet in urban teaching assignments, some colleges in conjunction with neighboring school systems have developed cooperative approaches to the education of teachers who will fill these positions. Project BRIDGE, Building Resources of instruction for Disadvantaged Groups in Education, at Queens College, and Project TRUE, Teachers and Resources for Urban Education, at Hunter College, are two examples of the kind of attempt being made to solve this complex problem.

The rapidly changing character of the core area population of most cities has been responsible for the host of problems which have beset the schools serving this area. Neighborhoods which were formerly middle-class and stable have undergone a rapid transition leaving them

deprived and unstable. The rapid exodus of middle class families from the core area has often been accompanied by a matching exodus of teachers who have found teaching in the new situation unrewarding and difficult. Staffing of these "difficult" schools is a continuing problem with most school systems.

In the long run the solution of the problems which plague the children in deprived schools - disinterest in school, low achievement, and drop-outs - demands that the most effective teachers for those situations be placed in them.

It is essential then that the characteristics of teachers identified as competent and effective, both in deprived and advantaged schools, be surveyed. Such a survey would first of all identify the kinds of people most often seen as effective in both situations. It may well be that effective people are the same type for any situation. However, if it were revealed that there is a personality type more often seen as effective in deprived schools as compared with advantaged schools, this fact would be of great importance to schools of teacher education and placement officials in school systems. The contention that a teacher with particular characteristics is best for deprived children has been stated by Leonard Kornberg of Queens College.

What makes a teacher meaningful to slum children? I have talked about this meeting their needs and about his "reaching" them through his caring for them. One other pattern of teacher competency has to do with caring about something besides the children. I am not referring to a passion for subject matter, although it is an aspect of what I mean. I am thinking of a passion for ordering, knowing, and creating reality.

There are teachers who live in a verbal world primarily, but they do not order or create what I conceive as reality. Slum children are lost with them, and other children too are lost in their verbalism--though less dramatically so. There

are other teachers, however, who can use the classroom to discover and make a world. They delight in doing things, in mastering real problems, in transforming what is already known. It is not beneath these teachers to reiterate what the rules are for sitting, for passing papers, for taking turns with the classroom jobs. They do not see it as trivial for children to have responsibilities in the classroom, to be teacher's "assistants," to care for the walls and the windows and the closets.

By doing and encouraging this, some of the important needs of disadvantaged children are met -- to have clear boundaries and expectations, to feel "big," to have a world which in part they "own." But there is something more in this than the children's needs. The teacher of whom I am thinking does this to satisfy himself as well. He must live in a structure that is clearly defined; he must master a world by knowing and shaping it. By this necessity in him to make things clear (from a simple routine to a complex rule in grammar) and by his faith that all aspects of reality are essentially good to know (the children's interests as well as his own), he provides (and completes, as far as I can describe it here) a model of teaching which alienated children need desperately.¹

Recognition of the possibility that effective teachers of the

deprived may differ from effective teachers of the advantaged is found

in this statement:

Dean Harry Revlin points to the need of all children for good teachers, but feels that the "in-migrant children need good teachers desperately, for most of these youngsters do not have access to the kind of family and community resources which can compensate for many inadequacies in the educational opportunities offered by schools." What special qualities are required for the "good teacher" in a depressed area school as distinct from those in the suburban or privileged school? Are these qualities identifiable in the college years of the prospective teacher?²

The research conducted by Louis Heil at Brooklyn College seems to indicate that there may well be a personality type best suited for

¹Leonard Kornberg, "Teachers for Depressed Areas," <u>Education in</u> <u>Depressed Areas</u>, ed. A. Harry Passow (New York: Teachers College Press, Columbia University, 1963), pp. 276-277.

²A. Harry Passow (ed.), <u>Education in Depressed Areas</u> (New York: Teachers College Press, Columbia University, 1963), p. 241. teaching in disadvantaged schools. His research project attempted to identify teacher personality variables which are associated with the academic progress of children who have also been categorized as to personality type. The general findings of this research indicate that teacher personality has a differential effect on pupil achievement and that this effect is related to the ability of certain teacher personality types to meet more effectively the psychological and educational needs of certain kinds of children.³

The instrument "Assessing Children's Feelings" was used to separate the children into four groups on the basis of personality factors. These groups, named according to their outstanding characteristics, were conformers, strivers, opposers, and waverers.

The assessment of teacher personality was made with the "Manifold Interest Schedule" developed by Sheviakov, Heil, and Stone. Through profile analysis, teachers were placed in one of three personality categories:

A - turbulent, impulsive, variable

- B self-controlling, orderly, work oriented
- C fearful

The results of the study indicate that children make significantly more progress with type B than with type C. Type A teachers, fall between B and C with respect to children's progress. The type B teacher is especially effective with "opposing" and "wavering" children.

The results achieved by type A teachers vary with the type of

³Louis M. Heil, Marion Powell, and Irwin Feifer, <u>Characteristics</u> of <u>Teacher Behavior and Competency Related to the Achievement of</u> <u>Different Kinds of Children in Several Elementary Grades</u>, Contract #SAE7285 Cooperative Research, Office of Education, U. S. Department of Health, Education, and Welfare (Washington: 1960).

child. However, little growth was achieved with "opposing" and "wavering" children.

Correlation between the mean class achievement and observation ratings of teachers was negligible.

In his discussion of the implications of these findings the author states:

It apparently means that the clear overriding factor in determining children's academic achievement is a deep-seated teacher personality. It also appears to mean that, while the "Teacher Education Examination" (Educational Testing Service) and the teacher observation results are consistent between themselves, the kind of information and teacher behavior generally considered conducive to children's learning have little or no relation to such learning.

All of the teachers in the sample were college graduates with similar professional preparation. In discussing this educational factor, Heil maintains:

Beyond that minimum, differences in knowledge and behavior seem to have little relationship, if any, to children's achievement, the one important factor being the teacher's own personality characteristics.

The importance of the preceding study to the research intended in this proposal is that it identifies an instrument which has been successfully used to place teachers in categories by personality analysis, and that one of these categories is comprised of teachers who are significantly more effective with "wavering" and "opposing" children. An examination of the characteristics of these children would support the contention that this kind of child is significantly more numerous in disadvantaged schools than in so-called middle-class schools. In a more recent article Heil expands his description of the three personality types.⁴ The self-controlling or B type is described as highly structured, prefering an ordered atmosphere, and setting limits and immediate goals for children. The teacher is the center of authority. An interesting observation by the author is that Selfcontrolling teachers are almost always downgraded by observers. They are considered rigid and conservative. However, their very selfcontrolling nature is likely to produce an atmosphere which meets the needs of opposing and negative children.

The Self-accepting or A type teacher is seen as creative, values thinking and originality, and prefers an unstructured situation -even disorder. This person is often described by observers as creative, alive, and stimulating. However, classrooms under this teacher are not conducive to systematic learning, especially for that child who may need a structured working situation.

The Self-effacing or C type teacher is characterized as vague and uncertain in setting educational goals for children. This person is unlikely to create an atmosphere for either systematic or creative learning.

There are implications in these findings for teacher education and placement. The author suggests differential training programs for the different personality configurations with an emphasis on clinical experience.

⁴Louis M. Heil, "Personality Variables: An Important Determinant in Effective Elementary School Instruction," <u>Theory Into Practice</u>, Vol. III (February, 1964), pp. 12-15.

It should be stated at this point that there are several important assumptions which underlie the theoretical approach to this research problem. First, it is assumed that for teachers to be judged competent and effective, they must be meeting the psychological and educational needs of their pupils in an effective manner for their situation. Second, it is assumed that there will be a significant number of children in disadvantaged school situations whose psychological and educational needs can best be met by a particular kind of teacher, one characterized by structure and warmth. While this kind of teacher, as Heil's research indicates, was able to achieve good results with all children, he was particularly effective, comparatively speaking, with those children who had rather serious educational and adjustment problems. This is not an attempt to say that all disadvantaged children fall into this category. Many of them probably would not. However, it is felt that the proportion of such children would be higher in disadvantaged schools when compared with "advantaged" schools to a degree which would significantly favor this type of teacher's being seen as effective. In "advantaged" schools where "conforming" and "striving" children predominate, many other types might just as readily be seen as effective.

There is ample evidence in the literature to support the contention that deprived living conditions create special psychological and educational problems for children. Some idea of how these educational and psychological problems arise is indicated by the following statement by David and Pearl Ausubel:

Many Negro parents have had little schooling themselves and hence are unable to appreciate its value. Thus they do not provide active, whole hearted support for high level academic performance by demanding conscientious study and regular attendance from their children.⁵

Martin Deutsch in discussing the implications of broken homes for the lower class child with regard to prospects for school progress states the following:

----The lower-class Negro child entering school often has had no experience with a "successful" male model or thereby with a psychological framework in which effort can result in at least the possibility of achievement. Yet the value system of the school and of the learning process is predicated on the assumption that effort will result in achievement. To a large extent, much of this is true not only for the Negro child but for <u>all</u> children who come from impoverished and marginal social and economic conditions.

In considering the relation that home situations have to needed

school programs, Deutsch maintains that routine and regulation are

important.

----one can postulate that the absence of well structured routine and activity in the home is reflected in the difficulty that the lower-class child has in structuring language. The implication of this for curriculum in the kindergarten and nursery school would be that these children should be offered a great deal of verbalized routine and regulation so that expectation can be built up in the child and then met.⁶

Leonard Kornberg indicates his view of the problems in this area

thus:

⁵David and Pearl Ausubel, "Ego Development Among Segregated Negro Children" in <u>Education in Depressed Areas</u>, ed. A. Harry Passow (New York: Teachers College Press, Columbia University, 1963), p. 124.

⁶Martin Deutsch, "The Disadvantaged Child and the Learning Process," in <u>Education in Depressed Areas</u>, ed. A. Harry Passow, (New York: Teachers College Press, Columbia University, 1963), pp. 167, 175. But how to reach all the bored, defiant, confused, sullen children who have had so much failure that they will scarcely try again to pay attention in school and do the work there? --- in our schools we have seen that the "very difficult children" are almost a norm among the culturally disadvantaged youngsters ----7

As previously stated the traits attributed to disadvantaged children who have trouble adjusting seem to fit Heil's description of "opposing" and "wavering" children. He states that outstanding attributes of opposing children were disturbed authority relations, oppositional-trends, pervasive pessimistic tone, intolerance of ambiguity, and dissappointment in self and others as a central dynamic. "Wavering" children were characterized by higher anxiety, ambivalency, fearfulness, and floundering and indecisiveness. These were the children whose academic needs were best met by the self-controlling type teacher. And it can also be maintained that improved academic success resulted in part from their basic psychological needs being met more adequately. The literature cited indicates that these children have a need for structure in school situations and for affection from adults to fulfill dependency needs.

In discussing the self-controlling type of teacher Heil states:

This kind of teacher focuses on structure, order, and planning. This focus is also accompanied by high work-orientation. There is likely to be a sensitivity to children's feelings and a warmth toward children which is an integral part of this personality-type's character and which is not, therefore, predicated, upon a need for her to feed upon the children's offering her affection. This teacher is also likely to emphasize interpersonal relationships in the classroom. --- interestingly enough, opposing children with the B-type teacher tend to perceive authority as more controlling, but, at the same time, there is a clear-cut increase in their

⁷Kornberg, <u>Op. Cit</u>., p. 263.

perception of authority as effective. It would appear, therefore, that these children are likely to be more threatened by and rebellious towards authority figures whom they regard as ineffectual, because of lack of structure and order, than towards authority figures who may be directly hostile to them.... The very likely implication of this characteristic is that the children know where they stand and what is expected of them.⁸

Specific Statement of the Problem

The specific purpose of this investigation is to survey the personality structure and academic interests of a population of teachers from both deprived and advantaged teaching situations. These teachers will be selected on the basis of effectiveness and competency in their situation as judged by the building principal. Both psychological and academic interest configurations will be examined to determine whether the type of teacher who is seen as effective is related to the kind of teaching situation. A systematic description of the characteristics of both groups of teachers will be prepared in the hope of adding new insight into the nature of teacher effectiveness.

On the basis of evidence concerning children's needs and teachers' competencies, the following hypotheses have been formulated:

- There will be a significantly greater number of teachers with the self-controlling personality configuration among competent teachers in disadvantaged schools than in advantaged schools.
- There will be a significantly greater number of teachers with the self-controlling personality configuration in early

⁸Heil, Powell, and Felfer, <u>Op. clt</u>., p. 70.

elementary grades than in later elementary grades in both advantaged and disadvantaged schools.

3. There will be a significantly greater variability in the personality types of teachers seen as competent in the later grades in advantaged schools when compared with teachers in disadvantaged schools.

Importance of the Investigation

The primary focus of this investigation is the description of personality attributes of teachers who are serving two different populations of children. One group consists of teachers from schools serving children from the middle socioeconomic class. The other group consists of teachers from schools serving children from the lower socioeconomic class. All of the schools in the latter sample have been identified as deprived by the school system in which the study was conducted.

It is generally believed by educators that there are attributes which are peculiar to deprived teaching situations which make them more difficult. It is also generally recognized by educators that there are teachers who handle this kind of teaching situation very well. If it is found that there are identifiable characteristics which these teachers have, it would be extremely valuable information for school personnel directors. The implication of this finding would be that teachers could then be placed so that the possibility of failure could be minimized, at least where socioeconomic level of the school population is a significant factor.

In addition, teacher education institutions would benefit by being able to identify the prospective teachers who are best suited for teaching the deprived. The experiences which are designed as an integral part of teacher education programs could be modified to develop the kind of people needed.

Limitations of the Study

There are several limitations which must be placed on any generalizations drawn from this study. This study was conducted in a city of approximately 200,000. The characteristics of the deprived children taught by the teachers in this study may differ significantly from those of the deprived children in larger metropolitan areas.

The middle-class school sample was also confined to the city school system. However, many of the upper middle-class schools of the area lie beyond the boundaries of the city and hence were not included. This may have introduced a bias by lowering the level of the middleclass schools selected.

Many of the teachers in this school system are drawn from two local church affiliated colleges. Therefore there may be a higher proportion of teachers in the sample with a particular church affiliation than would be typical in other cities of this size. Close church affiliation for many of the teachers may be an additional selective factor that would tend to make the group atypical.

The teachers in this study were selected on the basis of competency as seen by the building principal. However, no attempt was made to determine whether this sample differed from the total universe

of the study. Therefore, no inferences of difference between the sample and the rest of the population can be made.

A further limitation of this study is found in the fact that no attempt was made to take into consideration the effect of various kinds of social interaction and school morale on perceived teacher competence. While it is recognized that these factors may certainly affect r' perceived teacher competence, it was felt that their consideration was beyond the scope of this research.

Plan and Content of this Thesis

The problem to be investigated has been presented in this chapter. Both a general and a specific statement of the problem have been included. Three major hypotheses have been outlined for consideration. The importance of the study and its major limitations were also discussed.

Chapter Two contains a review of literature selected on the basis of relevancy.

Chapter Three deals with methodological procedures. The chapter includes a description of the samples used in the study, the operational definition of terms, a description of the research instrument, and a description of the statistics used to test the hypotheses.

Chapter Four deals with the analysis of the data. Overall surveys and comparisons of the groups are made.

Chapter Five concludes the study. The research findings and implications for further study are presented.

CHAPTER II

A REVIEW OF THE LITERATURE

Research Literature

As the pressure for increased numbers of competent teachers has grown, numerous articles have appeared in popular magazines and research journals which have attempted to identify just what is is that makes a teacher effective. The broadly defined, general category of \swarrow teacher behavior, and personality factors as the determiners of behavior, has often been the focal point of these efforts to pinpoint effectiveness. The volume of literature in this area gives testimony to the persistence of the belief that teacher personality will finally be revealed as the key to effectiveness. Hopefully the desired outcome of all this effort will be some instrument or technique which might permit identification of those with teaching potential, modification of teacher education procedures to develop the characteristics needed, and assignment of teachers to positions where their abilities could be utilized most successfully. In reviewing the research literature, no studies were found which specifically tried to explore the effects of different teaching situations on the relative effectiveness of teachers found in them. More significantly, no studies were found in which degree of advantagedness of the children was a variable in the teaching situation. Many articles can be found which support one view or the

other, but little has been done beyond this stage of asserting and supporting without objective evidence, a particular position. However, certain research projects have addressed themselves to problems which are related in a general way to the study proposed here and it is these related studies which will be reviewed in this chapter.

Many research projects have been undertaken which have as their general purpose the examination of teacher personality with particular research instruments in the hope of finding correlates which may be predictive of future success. In most of these studies the criterion of teacher effectiveness was established either by principals' or supervisors' ratings, or by ratings which pupils made of their teachers.

M. Innocentia Burkard attempted to assess teacher characteristics by a projective technique.¹ The researcher states that many investigations have found differences in the observable behavior of teachers rated at the extremes, but few have attempted to study the underlying aspects of personality that might account for these differences. The author hypothesized that these fundamental differences can be reached by a hidden technique such as a projective test. Arnold's TAT Sequence Analysis was used to uncover personality variables. Criterion groups were set up on the basis of pupil ratings obtained with the Diagnostic Teacher-Rating Scale by Amatora. Seven areas were assessed by the scale: (1) liking for the teacher, (2) teacher's ability to explain, (3) kindness, friendliness, understanding, (4) fairness in grading, (5) discipline, (6) amount of work required, (7) liking for lessons.

¹M. Innocentia Burkard, "Discernment of Teacher Characteristics by TAT Sequence Analysis," <u>Journal of Educational Psychology</u>, Vol. 52 (December, 1962), pp. 279-287.

Out of the original sample of 300 teachers, 25 pairs of elementary and secondary teachers were selected and matched for age and intelligence. The results of the study indicate that the TAT can find personality differences in teachers ranked high and low by pupils. With respect to achievement and also loss and hardship as personality variables, the teachers ranked high were active and those ranked low were passive.

With regard to life, those teachers ranked high had an objective principled view. That is, they accepted right because it is right. They saw good as being rewarded and wrong-doing as failing or being punished. The teachers who were ranked low saw life as all drudgery or joy without adequate reason.

The high groups saw people as good and helpful. The low group saw people as hostile or as friendly in a sentimental way without apparent reasons for their feelings.

In conclusion the author speculates that these differences may be reducible to rationality versus emotionality as the basic personality dynamic.

David G. Ryans has recently completed a massive investigation into the characteristics of teachers which continued for a number of years.² The findings have been drawn together and reported in a single volume. While he has made no claim to finding the quick, easy solution to the problems of teacher selection, screening, and placement, he has succeeded in finding certain teacher traits that are related to success

²David G. Ryans, <u>Characteristics of Teachers</u>, American Council on Education. Washington, D.C., 1960, 416 pages.

in a wide range of situations. He has also developed pencil-and-paper experimental inventories to assess these traits. In establishing the need and purpose of his study. Ryans states:

Both the lay public and professional educators generally agree that the "goodness" of an educational program is determined to a large extent by the teaching. The identification of qualified and able teaching personnel, therefore, constitutes one of the most important of all educational concerns. Obtaining capable teachers is an intrinsic interest and obligation of education. If competent teachers can be obtained, the likelihood of attaining desirable education outcomes is substantial. On the other hand, although schools may have excellent material resources in the form of equipment, buildings, and textbooks, and although curricula may be appropriately adapted to community requirements, if the teachers are misfits or are indifferent to their responsibilities, the whole program is likely to be ineffective and largely wasted.³

In his opening chapters, Ryans presents a thorough discussion of the research philosophy underlying his investigations. In this discussion he makes several statements which support an assumption which is basic to the study proposed here---that situational factors and teacher characteristics are both important in determining what behaviors are effective.

A basic assumption of research in teacher behavior is --Teacher behavior is a function of situational factors and characteristics of the individual teacher.⁴

An important postulate under this assumption is that:

Teacher behavior is a function of personal characteristics of the individual teacher.---Teacher behavior is determined in part by the teacher's personal and social characteristics (e.g., in the intellectual, emotional, temperamental, attitudinal,

³¹b1d., p. 11.

⁴¹b1d., p. 16.

and interest domain) which have their sources in both the genetic (unlearned) and experimental (learned) backgrounds of the individual. Knowledge of such characteristics contributes to prediction within limits, of teacher behavior.5

Participating in Ryans' study were over 6,000 teachers from more than 1700 schools. The study extended from 1948 - 1954. Many discrete investigations were undertaken and reported. The overall findings of the study for effective teachers were a general tendency for teachers rated high on general classroom behavior to: "be extremely generous in appraisals of the behavior and motives of other persons; possess strong interest in reading and literary affairs; be interested in music, painting, and the arts in general; participate in social groups; enjoy pupil relationships; prefer nondirective (permissive) classroom procedures; manifest superior-verbal intelligence; and be superior with respect to emotional adjustment."⁶

Glander and Kleyle have attempted to isolate those personal and professional characteristics which would differentiate successful teachers from the less successful.⁷ The population on which the research was based included 108 teachers who were graduates of Duquesne University in Pittsburgh. The top and bottom 25 per cent of the sample were compared on the following characteristics: (1) personal appearance;

⁵Ibid., p. 21.

⁶Ibid., p. 396.

⁷Herbert T. Olander and Helen M. Kleyle, "Differences in Personal and Professional Characteristics of a Selected Group of Elementary Teachers with Contrasting Success Records," <u>Educational</u> <u>Administration and Supervision</u>, Vol. 45 (July, 1959), pp. 191-198. (2) health and vitality; (3) cooperation; (4) sociability;
(5) adaptability, and resourcefulness; (6) emotional maturity;
(7) interest in teaching; (8) mental ability; (9) academic achievement.
The findings were based on data from in-service records, college
records and the Minnesota Teacher Attitude Inventory.

The results indicate that there is no significant difference between the two groups in personal appearance, health and vitality, and cooperation. Significant differences, however, were found in sociability, adaptability and resourcefulness, emotional maturity, and interest in teaching.

Four predictors of teaching efficiency were found among the many factors examined. These predictors were the emotional maturity rating, The National Teachers Examination - Optional Examination, The Purdue English Test, and the Student's Quality Point Average at the University. The grade in student teaching did not discriminate.

Carrol Edward Flanagan attempted to relate success in teaching to scores on the Minnesota Multiphasic Personality Inventory.⁸ The specific purpose of this investigation was to study the relationship between certain aspects of personality and teacher efficiency using the MMPI and success in teaching as indicated by principals' and supervisors' ratings. In explaining the general orientation of the study Flanagan states:

As to the aspect of teaching here chosen for study a teacher's personality is apt, according to the thinking and researches of many persons, to influence his success in teaching. Various

⁸Carrol Edward Flanagan, "A Study of the Relationship of Scores on the MMPI to Success in Teaching as indicated by Supervisory Ratings," Journal of Experimental Education, Vol. 29 (June, 1961), pp. 329-354.

qualities affect his classroom effectiveness, his enthusiasm, his pupil contacts, his discipline, his contacts with fellow teachers and with citizens of his community, or other aspects of his life as a teacher. Certainly, extreme abnormalities in personality determine a teachers' effectiveness in guiding pupils in the learning-teaching situation. The study here reported purports to explore the influence of certain personality abnormalities as measured by supervisory ratings. It is expected that the study will discover such relationships as may exist between teacher effectiveness as measured by supervisory ratings and scores on the MMPI.¹⁹

The sample used in the investigation consisted of all students who were enrolled at the University of Wisconsin during the fall semesters of 1949, 1950 and 1951 who received Wisconsin State Teaching Certificates in 1953, 1954, 1955, or 1956. A further qualification was that they must have taught in the public schools of Wisconsin. The original sample of students who met these qualifications and on whom MMPI data was available was 431. However, the final sample for which complete data was collected included 167 teachers. Twenty of the teachers were men.

On a five point rating scale with one as high and five as low, the 147 women were rated thus:

10 were rated 1 or outstanding
8 were rated 1.5
61 were rated 2 or above average
14 were rated 2.5
42 were rated 3 or average
3 were rated 3.5
7 were rated 4 or below average
2 were rated 5 or poor

⁹Ibid., p. 330.

The MMPI scales used and their number designations in this research were: 0 - Social Introversion - Extroversion, 1 - Hypochondriasis,

- 2 Depression, 3 Hysteria, 4 Psychopathic Deviate,
- 5 Masculinity Femininity, 6 Paranoid, 7 Psychasthenia,
- 8 Schizophrenia, 9 Hypomania.

An analysis of some of the pertinent findings indicates:

- A high coding of scale 3 for women was positively related to outstanding ratings. This tended to be true for men also.
- Scale 7 did not distinguish between good and poor teachers. An absence of 7 coded high was somewhat related to high supervisory ratings for women teachers. Low codings seemed positively related to low supervisory ratings.
- For women teachers high coding on scale 5 was positively associated with above average ratings and low coding somewhat related to average or below ratings.
- 4. Low coding of scale 2 for women was associated with above average supervisory ratings.
- Scale 0 for women was coded low much more frequently than high. A low coding seemed to be related to above average ratings.

The results seem to indicate that MMPI may be useful in a general way in predicting success in teaching.
Moore and Cole also studied the relationship of MMPI scores of student teachers to ratings by their supervising teachers.¹⁰ The results found were in general comparable to those found by Flanagan in the previous study. The sample included 185 students of which 143 were women. The rating forms were separated by two judges into top and bottom ten per cent, the next twenty per cent at each end, and the remaining 40 per cent as a middle group. Disagreement of judges ratings reduced the sample to 127. According to the author the findings seem to suggest that the MMPI may be useful in predicting the degree of success in student teaching.

Goodenough attempted to link teacher personality characteristics with success in discipline through a forced choice technique.¹¹ The author maintains that:

Two major problems in teacher selection and evaluation are the lack of adequate instruments with which to measure teacher personality and the lack of satisfactory criteria by which to evaluate such instruments. --- Even though expert opinion emphasizes the importance of teacher personality as a factor contributing to teacher success, most studies which have used measured changes in pupil behavior as a criterion have found little relationship between success and measures of teacher personality. This might be interpreted as showing that teacher personality actually has little relationship to success in spite of expert opinion to the contrary, but a more plausible explanation for the seeming conflict is that the instruments used for measuring teacher personality are inadequate.

¹⁰Clark H. Moore and David Cole, "The Relation of MMPI Scores to Practice Teaching Ratings," <u>Journal of Educational Research</u>, Vol. 50 (May, 1957), pp. 711-716.

^{1]}Eva Goodenough, "The Forced Choice Technique As A Method for Discovering Effective Teacher Personality," <u>Journal of Educational</u> Research, Vol. 51 (September, 1957), pp. 25-31.

This study had as its purpose the determination of the relative importance of personality characteristics associated with teacher success in discipline. The research was conducted in the public schools of Excombia County, Florida. Each teacher in the sample was asked to rate three colleagues, one considered very effective in discipline, one considered poor and one ranked in between. In this way 858 ratings were collected - 390 for primary teachers, 234 for intermediate, and 234 for junior high.

The results confirm that this technique can select items associated with effective discipline. Kindness, patience, cooperation, sympathy, and tact, were found to be more closely associated with effectiveness in discipline than self-confidence, frankness, independence, and modesty.

The prediction of success in secondary teaching was explored by Bicknell and others as part of a research project supported by The State Education Department of New York.¹² "This study was undertaken to determine whether or not, or to what extent, effectiveness of secondary teachers could be predicted from characteristics known prior to college admission."¹³ The sample included all of the students who enrolled as prospective secondary teachers in 16 colleges in upstate New York during 1949-1950. Approximately 1300 students participated. Five hundred and thirty one became teachers by September, 1954. Three hundred and ten dropped out before graduation. Four hundred and ten

¹²John E. Bicknell, <u>A Prediction of Effectiveness in Secondary</u> <u>School Teaching</u>, The University of the State of New York, The State Education Department, 1959, 27 pgs.

¹³Ibid., p. 1.

were graduated as teachers but did not teach. Teacher characteristics

were assessed by the following instruments:

- 1. Academic aptitude, the ACE test.
- 2. Academic performance at the high school level.
- 3. Reading skill, The Cooperative Reading Comprehension test.
- 4. Fields of interest, The Kuder Preference Record.
- 5. Attitudes toward teaching, The Minnesota Teacher Attitude Inventory.
- 6. Personality Characteristics, The Minnesota Multiphasic Personality Inventory.
- 7. Experience.
- 8. Socioeconomic level of family.
- 9. Size of family.
- 10. Attitude of family toward teaching.
- 11. Leadership activities.
- 12. Cultural and hobby activities.
- 13. Age at time of entry into teacher education.
- 14. Sex.

Some of the pertinent findings of this study were:

1. The Teacher Personality Inventory was as good as, and

sometimes better than college recommendation scores in

predicting teaching effectiveness.

2. Regression equations were not equally effective in

predicting effectiveness of males and females indicating that effectiveness characteristics are different for the sexes.

3. Differences were found in the effectiveness of

predictions of regression equations for students who entered teacher education early and those who entered late or post graduate.

In addition, it was found that the groups of students who dropped out of college had more of the characteristics associated with effective teaching than those who actually taught. Another category of personality studies has attempted in part to relate aspects of teacher personality to changes in pupil behavior. The researchers conducting these studies maintain that the degree of desirable change produced in pupil behavior is a more appropriate criterion measure for determining effective teacher characteristics. Some of these studies have used change in pupil behavior as reported by trained observers as the measure of behavior change for judging effectiveness. Others have used growth in the academic areas as the measure of pupil behavior change. Heil's research previously cited is an example of the latter type of study. It relates teacher personality types to academic growth produced in children.¹⁴

Ryans has reported a research study which relates pupil behavior to teacher characteristics through the use of trained observers.¹⁵ Basic to this line of research is the following assumption:

It usually is assumed that what goes on among pupils in a classroom is dependent to a major degree upon the presence of a teacher - a teacher whose role is to provide leadership in "learning" activities at which the pupils themselves are initiates, unprepared without assistance to determine appropriate goals or to select and employ suitable ways and means of attaining such goals."¹⁶

16_{1b1d.}, p. 82.

¹⁴Louis M. Heil, Marion Powell, and Irwin Feifer, <u>Characteristics of Teacher Behavior and Competency Related to the</u> <u>Achievement of Different Kinds of Children in Several Elementary</u> <u>Grades</u>, Contract #SAE7285 Cooperative Research Office of Education, U. S. Department of Health, Education and Welfare, (Washington, 1960), 119 p.

¹⁵David G. Ryans, "Some Relationships Between Pupil Behavior and Certain Teacher Characteristics," <u>Journal of Educational Psychology</u>, Vol. 52 (April, 1961), pp. 82-90.

The method chosen was correlational research in which pupil behavior was correlated with teacher behavior. The following results were obtained:

For elementary school classes, high positive relationships were noted between observers' assessments of productive pupil behavior (e.g., assessments of behavior presumed to reflect pupil alertness, participation, confidence, responsibility and self-control, initiating behavior, etc.) and observers' assessments of previously identified patterns of teacher behavior which seemed to refer to understanding, friendly classroom behavior; organized, businesslike classroom behavior; and stimulating original classroom behavior.¹⁷

Secondary classes when analyzed showed low positive correlations between pupil behavior and the above teacher behaviors. There was a tendency for stimulating, original teacher behavior to show a slightly higher correlation with pupil behavior than understanding friendly, or the organized businesslike teacher behavior.

McCall and Krause, in a study reporting the measurement of teacher merit for salary purposes, indicate some findings which may have implications for the study proposed here.¹⁸ The criterion of merit was measured by children's growth in what the author called the nine R's -- "Readin, Ritin, 'Rithmetic, Research, Reasoning, Reporting, Relationship of persons, Recreation, and Responsible work skills." The growths children made in these areas, appropriately weighted, were combined into a single criterion-of-merit score. With the criterion of pupil growth as the measure, the researchers found that principals and

¹⁷Ibid., p. 89.

¹⁸William A. McCall and Gertrude R. Krause, "Measurement of Teacher Merit for Salary Purposes," <u>Journal of Educational Research</u>, Vol. 53 (October, 1959), pp. 73-75.

supervisors tended to rate good teachers poor and poor teachers good. A close relationship, however, was found between pupil growth and teacher personality. As stated by the authors:

One of the important findings of the McCall's study was the relatively close relationship between teacher personality and pupil's comprehensive growth. While it is true that causal connections cannot be inferred from correlations, the correlations found in these studies, when reasonably interpreted, and in the absence of conflicting evidence, appear to justify the following suggestions:

- 1. Teacher training institutions might attempt to discover what makes teachers good and attempt to incorporate these qualities in prospective teachers.
- 2. More attention should be given to selecting or developing teacher personalities which are helpful to pupils.

Of importance here is the fact that teacher personality is found to follow closely changes in a criterion measure, pupil growth.

C. M. Christensen in a recent study has attempted to link pupil achievement and affect-need with two aspects of teacher personality,

warmth and permissiveness.¹⁹ He states:

Guidance or direction of pupil learning and general arousal or motivation of pupils are, in the present study, considered two important factors influencing the achievement of pupils.

Directiveness-permissiveness is seen as an aspect of the guidance factor. Affective response (warmth) of the teacher and affect-need of the pupil are aspects of motivation. The author states that separating warmth and permissiveness which are often confused will help to clarify teaching process problems. The following hypotheses were checked:

¹⁹C. M. Christensen, "Relationships Between Pupil Achievement, Pupil Affect-Need, Teacher Warmth, and Teacher Permissiveness," Journal of Educational Psychology, Vol. 51 (June, 1960), pp. 163-174.

- 1. Positive affective response (warmth of teacher is positively related to achievement gains.
- 2. Permissiveness of teacher is negatively related to achievement gains.
- 3. Teacher warmth and permissiveness interact significantly such that warm directive teachers will produce the greatest achievement gains.
- 4. Affective needs of pupils interact significantly with teacher warmth and permissiveness.

The study was conducted with ten fourth grade and ten fifth grade classes and their teachers.

The instruments used were a Warmth-Permissiveness Scale devised by the author and an Affect-Need-Cognitive-Affective Scale developed by Della Piana and Gage.

Only the first hypothesis was partially substantiated by the results. The author claims that the results, however, support the contention that affective response of teacher is more important to achievement than permissiveness. The implication for motivation of pupils and the training of teachers is to develop affective responsiveness in teachers.

In some respects the research proposed here may be considered as viewing advantaged and disadvantaged teaching situations as different occupational areas or at least as different emphasis areas within the same occupation or profession. Some recent studies with a slightly different approach reveal that occupational choice and interest areas may well be related to personality characteristics which can be measured by tests. It has also been found that people in different categories within the same occupation may have significant differences with respect to certain personality traits. The following studies are typical of this body of research with reference to methodology and findings:

Philippus and Fleigler using student teachers in elementary, secondary and special education have tried to determine whether or not different personality, value, and interest patterns are associated with these groups.²⁰ The authors' stated purpose was to study and determine similarities and differences in the three groups mentioned. In addition, three secondary hypotheses were to be tested:

- a. Secondary personnel are more interested in subject-matter than in working with human beings per se;
- b., The values held by all the groups parrallel those held by the American middle-class which would reflect economic and religious emphasis;
- c. Relative to the teacher stereotype all student teachers would exhibit obsessive-compulsive characteristics.²¹

The teacher stereotype referred to characterizes all teachers as emphasizing orderliness, exactness, and fact collecting.

The sample studied included 60 students, twenty from each group elementary, secondary, and special education. Each group had ten males and ten females. The participants were drawn from the School of Education at the University of Denver during 1960-1961. Data relative to the student's personality, interests and values was collected using the Thurstone Interest Inventory, The IPAT Self Analysis Form, The IPAT Human Test of Personality, the Psychasthemia Scale of the MMPI, and the

²⁰ John Manion Philippus, and Louis Fliegler, "A Study of Personality Value, and Interest Patterns of Student Teachers in the Areas of Elementary, Secondary, and Special Education," <u>Science</u> <u>Education</u>, Vol. 46 (April, 1962), pp. 247-252.

²¹ Ibid., p. 248.

Allport, Vernon, Lindsey, Study of Values. The significance of variation among the groups was determined by comparison of means, standard deviation, and use of the F test.

All three of the secondary hypotheses were rejected. However, some results of interest were that special education student teachers tend to separate significantly from elementary and secondary teachers. Differences appeared on 11 of 22 scales when compared with elementary students. The differences were significant from the .1 per cent to the 5 per cent level of confidence. On trait scales there appeared an actual hierarchy of the groups with special education highest, secondary students second, and elementary students lowest with two exceptions - religious values and anxiety. Traits were thus more pronounced in special education students and least pronounced in elementary students. Special education students tended to be least inhibited on the sexual debonair scale. Secondary students were by far the most variable. When divided into male and female groups, special education females were the most variable. From this study, it appears that it may be legitimate to assume that differences in teacher personality can be found for groups selected on the basis of their interest in a particular area of education.

Thorpe in her research has attempted to survey the personality structure of a group of successful women undergraduate and graduate students and teachers in physical education.²² The purpose of the study was to determine whether there was a pattern of similarity in

²²Joanne Thorpe, "Study of Personality Variables Among Successful Women Students and Teachers of Physical Education," <u>The</u> <u>Research Quarterly</u>, Vol. 29 (March, 1958), pp. 83-92.

personality variables among successful women students and teachers in physical education. The author affirms the importance of this type of personality study by the following statement:

Numerous studies have shown that personality has a close relationship to quality of teaching. Because there are definitely measurable relationships between personality and vocational interest, personality inventories should be included in a guidance testing program, however, researchers must first derive profiles of personality patterns peculiar to various occupations and establish the means of specific occupations with regard to factors.²³

The Edwards Personal Preference Schedule was used. The following personality variables were checked: Achievement, Deference, Order, Exhibition, Autonomy, Affiliation, Intraception, Succorance, Dominance, Abasement, Nurturance, Change, Endurance, Heterosexuality, and Aggression.

Persons for the sample were suggested by administrators of physical education programs throughout the United States. From those suggested, 100 teachers, 55 graduate students, and 100 senior majors were selected. The t-test for significance of difference between means was used to compare all groups. The three groups were also compared with the norming group scores used by Edwards.

The results indicated the physical education group was significantly higher in Deference, Order, Endurance, and Dominance. Some variations were noted with age, however. The group mean was significantly lower in Autonomy, Succorance, Abasement, Nurturance, Heterosexuality, and Aggression. No significant differences were found in Achievement and Affiliation. The findings indicate that there

²³ ibid., p. 83.

is a general personality pattern among persons in physical education which can be explored by the use of the Edwards Inventory.

Garrison and Scott hypothesized that the personal needs of students preparing for teaching would differ according to the area of teaching chosen.²⁴ Personal needs were assessed by the Edwards Personal Preference Schedule (EPPS). The test consists of 210 pairs of items which measure 45 psychological needs.

The study sample consisted of 530 college students at the University of Georgia in a teacher education program. The students were classified in five areas of teaching:

- 1. lower elementary-grades, kindergarten through three;
- 2. upper elementary-grades, four through eight;
- 3. general secondary-grades, nine through twelve, of language arts, mathematics, science, and social science.
- 4. nongeneral secondary-grades, nine through twelve, of business education, art, music, home economics, and physical education; and
- 5. special education-speech correction, mentally retarded, motor handicapped, and academically talented.

The analysis of the data revealed significant differences among the groups on the need for achievement, the need for nurturance, the need for order, and the need for succorance. The hypothesized relationship was maintained for these variables. The hypothesis was confirmed, but with reservations, for the following needs: the need for autonomy, the need for heterosexuality, the need for affiliation, the need for exhibition, the need for change, and the need for abasement. The hypothesis was rejected for the need for intraception, the need for

²⁴Karl C. Garrison and Mary Hughle Scott, "A Comparison of the Personal Needs of College Students Preparing to Teach in Different Teaching Areas," <u>Educational and Psychological Measurement</u>, Vol 21 (Winter, 1961), pp. 955-964.

endurance, the need for deference, the need for aggression, and the need for dominance.

Gunderson and Nelson studied differences in Navy personnel in different occupations using personality and value scales.²⁵ The study included 561 men and continued over a two year period. The authors draw the following conclusions as a result of their research:

The results of the study lend support to the hypothesis that there are personality and value differences among Navy occupational groups. ----

The theoretical basis for expecting differences in personality orientations among various occupations rests primarily upon two assumptions. The first is that choice of occupations is partly determined by particular personal needs and values, presumably derived from early family and social influences, that are compatible with a given pattern of occupational experience; the second is that experiences in a specific occupation to some extent shape an individuals values, attitudes, and characteristic behaviors, that is, his personal identity.26

Melton, in a study involving three hundred and twenty-four high school seniors attempted to relate personality to vocational interest.²⁷ His results were similar to those reported by Thorpe and others. "Though high in a few but slight in a majority of instances --- there are definitely measurable relationships between personality and vocational interest."

25E. K. Erick Gunderson and Paul D. Nelson, "Personality Differences Among Navy Occupational Groups," <u>The Personnel and</u> <u>Guidance Journal</u>, Vol. 44, (May, 1966, pp. 956-961.

²⁶Ibid., p. 960.

²⁷William R. Melton, Jr., "An Investigation of the Relationships Between Personality and Vocational Interest," <u>Journal of Educational</u> <u>Psychology</u>, Vol. 27, (1956), pp. 163-174. The research literature presented in this chapter has been divided into three categories according to focus. Research in the first category was concerned primarily with the determination and analysis of relationships between particular research instruments and the aspects of teacher personality which these instruments were designed to measure. Generally teacher effectiveness in these studies was determined by the ratings of superiors. It was shown by the results obtained in these research projects that several kinds of research instruments and techniques can unearth significant characteristics associated with teacher personality.

The second category of research literature included studies in which researchers attempted to discover relationships between teacher personality and the changes which these teachers were able to bring about in pupil behavior. These studies were concerned with the correlates of teacher personality which produce desired changes in pupil behavior and also with differences in the amount of change which various teacher personality types might produce.

The third category of personality research included studies which had as their intent the determination and analysis of personality factors which are correlated with the choice of a particular occupation or success in a particular occupation. The results of this research indicate that personality differences can be found which differentiate people in one field of work from those in another field. The results also showed that in some instances differences can be found in personality traits which differentiate the characteristics of certain

groups within the same field of work but with discrete areas of specialization.

The research reported in this review lends support to the idea that it is feasible through personality research techniques to find characteristics of effective teachers which may vary with the work situation. Folkerson affirms this position when he comments on educational research:

A more fruitful approach has seemed to be the hypothesizing of teaching ability in multi-dimensional terms that take into account the possibility of different patterns of effective teacher behaviors for different kinds of teachers, different kinds of pupils and different kinds of educational situations.²⁸

²⁸Glen Folkerson, "A Resume of Current Teacher Personnel Research," Journal of Educational Research, Vol. 47, (May, 1954), p. 678.

CHAPTER III

METHODOLOGY

The Universe and Sample

The purpose of this study was to survey the personality and academic interest configurations of teachers who had been identified by using competence and effectiveness in their teaching situation as the criterion. In addition, the study was intended to investigate whether teachers who were seen as effective in inner-city or disadvantaged schools had different patterns of personality traits from those of teachers seen as effective in advantaged schools.

Before the effective teacher sample could be selected, a number of schools were first identified as falling in the advantaged or disadvantaged category. All of the schools included in this study are in the Grand Rapids Public School System. The schools serving the disadvantaged or inner-city area had previously been identified by the school administration in order to provide compensatory services. The characteristics of the children and the life style of the families in this area had been the subject of an intensive study conducted by the principals of the eleven schools originally included. The study ran from October, 1961 to October, 1963. In 1965 several more schools were defined as inner-city which brought the total to sixteen schools. Ten of the original inner-city group and one from those added later

were included in this study. All of the schools serve the poverty area as defined by the United Community Services.¹ A high composite ranking on seven selected variables is used to indicate a poverty area. The variables are per cent Negro, per cent functional illiterate, low family income, male unemployment, substandard housing, property value, overall crime rate.

In addition, further evidence of the disadvantaged condition of the children in the schools selected was indicated by an analysis of certain school related variables. The principals' study group report showed the children in schools identified as disadvantaged to be lowest in I.Q., highest in children over age for their grade, lowest in reading readiness, lowest in reading skills, lowest in academic achievement, highest in use of indigent books, and highest in transciency.²

The advantaged schools included in this study were chosen from areas at the opposite end of the indices of poverty continuum. With reference to the school related variables referred to previously, the children in these schools were among the highest in the city in I.Q., reading readiness, reading skills, academic achievement, and among the lowest in children over aged for their grade, use of indigent books, and transciency. Fourteen schools were included in the advantaged

¹<u>Community Action Program Against Poverty</u>, A descriptive mimeographed pamphlet by United Community Services, Grand Rapids, Michigan, 22 p.

²<u>Report of the Study Group on Education of Culturally</u> <u>Disadvantaged Children</u>, Grand Rapids Public Schools, Grand Rapids, Michigan. Mimeograph, 1963, 28 p.

sample. In academic achievement, three of the fourteen advantaged schools were at the national norm for the Stanford Achievement Test. The remaining eleven schools were above the national norm by from .1 to .9 of a grade year. All of the disadvantaged schools were below the national norm in achievement as indicated by the Stanford Achievement Test. Schools in the advantaged areas tend to be smaller than schools in the disadvantaged area. Therefore, more schools were needed in the advantaged group to provide an adequate universe from which to draw the sample.

The universe of this study was comprised of all the faculty members of the eleven disadvantaged schools and the fourteen advantaged schools. The group of teachers in the disadvantaged schools from which the sample was drawn totaled 206. The group of teachers in the advantaged schools from which the sample was drawn totaled 148.

A private interview was held with the principal of each school involved to identify the teachers for the study. The principal was first acquainted with the purpose and format of the investigation. He was then asked to identify those teachers on his staff that he considered highly competent and effective in their teaching situation. Effectiveness and competency with respect to the teachers in the sample were determined by the principals' perception of their ability to achieve the following:

- Provide specific learning experiences which are adapted to the needs of the children.
- 2. Establish a classroom climate and promote interpersonal relationships between teacher and pupil which are

conducive to learning.

 Establish appropriate classroom discipline and order for different kinds of learning situations.

The number identified was not to exceed approximately one-third of the staff and if possible should be divided equally between early elementary grades (K-3) and later elementary grades (4-6). A descriptive statement of the qualities which contributed to the effectiveness of each teacher chosen was obtained from the principal. The interviews with principals were purposely held at the same time as tenure rating in order to take advantage of the evaluation process already in progress. The teachers were then contacted and informed of the aims of the research project. Of the ninety-five teachers identified, all but one agreed to participate in the study. The Manifold interest Schedule was explained and administered to teachers in each school as a group. Tables I and 2 give the distribution of teachers in the sample among participating schools.

Definition of Terms

<u>Advantaged School</u> refers to schools serving children from middleclass and upper middle-class areas. All of these schools are situated in census tracts of high property value. They tend to be located away from the core area of the city. Children in these schools are at or above the national norm in average academic achievement as indicated by the Stanford Achievement Test.

<u>Disadvantaged School</u> refers to schools serving children from lower socioeconomic areas. All of these schools are located in poverty

School	Number of Teachers	Number in the Sample
A	13	4
В	17	7
C	17	5
D	22	4
Ε	20	5
F	23	4
G	21	4
Н	14	4
I	23	7
J	24	4
К	12	<u>4</u>
	206	52

TABLE 1.--Number of teachers from each school in the disadvantaged sample

TABLE	2Number	of	teachers	from each	school	İn	the
		a	dvantaged	sample			

School	Number of Teachers	Number in the Sample
Α	25	7
В	9	3
C	15	3
D	8	2
E	6	2
F	8	2
G	7	2
н	8	2
I	13	4
J	5	2
К	12	4
L	10	3
м	11	22
N	<u>_11</u>	<u>_4</u>
	148	42

areas as identified by the United Community Services of Grand Rapids. The schools are all located close to the central area of the city. Average academic achievement in all of these schools is below the national norm as indicated by the Stanford Achievement Test.

<u>Inner-City School</u> is another term designating the disadvantaged school. It is the name given to this group of schools by the Grand Rapids Public School System.

<u>Outer-City School</u> refers to the same schools in this study previously identified as advantaged schools.

<u>Teacher Personality</u>, as operationally defined in this study, refers to the eighteen personality related interest categories as assessed by the Manifold Interest Schedule.³

<u>Academic Interest</u> in this study refers to the fourteen interest categories related to specific academic areas as assessed by the Manifold Interest Schedule.⁴

<u>Early Elementary Grades</u> refers to grade-levels Kindergarten through grade three.

Later Elementary Grades refers to grades four through six.

<u>Competent, Effective Teacher</u> refers to those teachers who according to the evaluation of their building principal are doing a highly effective job in their teaching situation. Qualities which make these teacher effective were listed for each one by the principal as part of the identification process.

³See Appendix A.

⁴See Appendix A.

Description of the Research instrument

The instrument used to assess the personality and academic related interests of teachers was the Manifold Interest Schedule developed by Sheviakov, Heil, and Stone.⁵ This instrument was developed and refined over a five year period by the Office of Testing and Research at Brooklyn College. It is presently administered to all incoming freshmen at the College.

A basic assumption underlying the development of the instrument was that the pattern of interests which are typical of a person can reflect that person's personality. Interest items were selected which are related to psychoanalytic concepts since these would be most useful in giving a personality estimate through this semi-projective technique.

The Manifold Interest Schedule is composed of 420 activity items. These items are grouped into thirty categories of fourteen items each. Eighteen of the categories are composed of personality related interests and twelve contain interest items related to various academic fields. Twenty-eight of the academic items are crosscoded so that two additional categories are derived making a total of thirty-two.

Personality is assessed by an examination of the pattern of responses in the eighteen non-academic categories. Each individual is then assigned a stanine value which indicates the goodness of fit with respect to each of six standard personality profiles for which behavioral data have been obtained. In addition to data on personality

⁵See Appendix A.

type, the level of like or dislike is assessed for each of the thirtytwo interest categories.

Statistical Procedures

The initial analysis of the raw data was made with the IBM 650 computer using the program developed by the Office of Testing and Research at Brooklyn College. In order to assure comparability of individual scores the level of like or dislike was adjusted by profile elevation or depression.⁶ The personality type for each individual was determined from these data. No personality type determination was made for subjects scoring equally close to three or more profiles, or for those who scored no closer to a particular profile than a stanine of five. Stanine one for personality types would indicate the closest relationship while stanine nine would indicate the least relationship.

For each of the thirty-two personality and academic interest categories a stanine value is assigned to indicate the level of interest in that category. A stanine of nine is associated with high interest and a stanine of one indicates low interest. The relationship between stanines and percentiles is given below.

⁶Method described by Heil, Powell, and Feifer. Op. Cit., p. 105.

Stanine	Percentile
9	97 - 100
8	90 - 96
7	78 - 89
6	61 - 77
5	41 - 60
4	24 - 40
3	12 - 23
2	5 - 11
1	0 - 4

The raw data generated by the Manifold Interest Schedule were then used to determine whether or not there were differences in the distribution of personality types between Inner-city and Outer-city elementary grade teachers. The personality classifications were examined and individuals were assigned to categories using the criteria of best fit for personality types A, B, and C. They were placed in the category for which they had the closes stanine value. No assignment was made for individuals who were farther removed than a stanine of four from one of the three categories. The same method was described and used by Heil.⁷ The assigned category distribution is shown in Table 3. The chi square test was then used to determine the relationship between these frequency distributions.

7_{ibid., p. 20.}

Personality Type	Ä	В	С	Unclassified	Total
Inner-City	4	24	18	6	52
Outer-City	6	16	16	4	42

TABLE 3.--Distribution of personality types

The survey of the distribution of personality and academic interests between teachers of early and later elementary grades and between inner-city teachers and Outer-city teachers was made using the chi square test. Stanine values for each teacher in each category were obtained from the data which ranged from 1 to 9. These values were used to compute the chi squares. The stanine scores were coded into three classes as follows: (1) low interest-stanine 1-3, (2) average interest-stanine 4-6, (3) high interest-stanine 7-9. When on several occasions the computed expected frequencies were less than five, the data were regrouped into a 2 x 2 table with comparisons then being made between low and average-high or between low-average and high.

In this chapter the methods used in the study have been discussed in some detail. The persons included in the universe and sample have been identified. Terms used in the study have been defined and the nature of the research instrument has been outlined. The statistical procedures used to analyze the data have been explained.

CHAPTER IV

ANALYSIS OF THE DATA

The two major purposes of this study as described in Chapter I were: (1) to survey the personality structure and academic interests of a population of teachers from both deprived and advantaged teaching situations, and (2) to determine whether the characteristics of teachers seen as effective may be different for inner-city and Outercity schools.

The data presented in this chapter was collected by using a sample composed of fifty-two teachers from inner-city schools and forty-two teachers from Outer-city schools. The teachers were identified as competent and effective on the basis of the building principal's judgment.

The analysis of the data is divided into three sections. In the first section of the analysis, the results of chi square tests to examine the distribution of teacher personality types between innercity, Outer-city schools and between early elementary, later elementary grades are presented.

In the second section of the analysis the results of chi square tests are presented to determine differences in the distribution of personality related interests between inner-city, Outer-city teachers and early elementary, later elementary teachers.

In the third section of the analysis, the results of chi square tests are presented to determine differences in the distribution of academic related interests between inner-city, Outer-city teachers and early elementary, later elementary teachers.

Distribution of Personality Types

Table 4 presents the chi square table comparing the distribution of the B, or self-controlling type personality, with other personality types for the total inner-city, Outer-city sample.

This chi square determination tests Hypothesis 1: That there will be a significantly greater number of teachers with the selfcontrolling personality configuration among competent teachers in disadvantaged schools than in advantaged schools.

It may be seen in Table 4 that there is no significant difference in the frequency distribution of the self-controlling type personality when comparing the total inner-city sample with the total Outer-city sample. Forty-six per cent of the teachers in the innercity sample were of the self-controlling type and thirty-eight per cent of the teachers in the Outer-city sample were of the self-controlling type. However, this difference was not significant at the .05 level of confidence. On the basis of the evidence generated by the chi square test, Hypothesis 1 is not substantiated.

Table 5 and Table 6 present chi square determinations which compare inner-city early grade teachers with Outer-city early grade teachers and inner-city later grade teachers with Outer-city later grade teachers. The results in Table 5 show that when comparing the

Personality Type	В	A-C	Total
Inner- City	24	22	46
Outer- City	16	22	38
Total	40	44	84
$x^2 = 0.8417$	l degree of	freedom, X ²	.95 = 3.84

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TABLE 4.--Chi square table comparing the distribution of inner-city and outer-city personality types

TABLE 5.--Chi square table comparing the distribution of the self-controlling personality type among inner-city early elementary teachers and outer-city early elementary teachers

Personality Type	В	A-C	Total
Inner- Çity	16	12	28
Outer- City	6	16	22
Total	22	28	50
$x^2 = 4.46$	l degree of	freedom, X ²	.95 = 3.84

TABLE 6.--Chi square table comparing the distribution of the self-controlling personality type among inner-city later elementary teachers and outer-city later elementary teachers

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Personality Type	В	A-C	Total
Inner- City	8	10	18
Outer- City	10	6	16
Total	18	16	34
$x^2 = 1.107$	l degree of	freedom, X ²	.95 = 3.84

TABLE 7.--Chi square table comparing the distribution of the self-controlling personality type among early elementary teachers with the distribution among later elementary teachers

Personality Type	В	A-C	Total
Early Elementary	22	28	50
Later Elementary	18	16	34
Total	40	44	84
$x^2 = 0.647$	l degree of	freedom, X ²	.95 = 3.84

frequency distribution of the self-controlling personality type between Inner-city early grade teachers and Outer-city early grade teachers, there is a difference which is significant at the .05 level of confidence. It may be seen in Table 5 that the self-controlling personality type is found to be significantly more numerous among Inner-city early grade teachers. From these data it appears that Hypothesis I can be supported when used in reference to early elementary teachers only.

Table 6 shows that differences in the distribution of the selfcontrolling personality type between inner-city later grade teachers and Outer-city later grade teachers are not significant at the .05 level of confidence.

Table 7, Table 8, and Table 9 present chi square results which test Hypothesis 2: There will be a significantly greater number of teachers with the controlling personality configuration in early elementary grades than in later elementary grades in both advantaged and disadvantaged schools. Table 7 presents the chi square table comparing the distribution of the self-controlling personality type among early grade teachers and later grade teachers. It may be seen in Table 7 that when inner-city and Outer-city teacher samples are combined and then compared on the basis of early or later elementary grades, there is no significant difference at the .05 level of confidence in the distribution of the self-controlling personality type. However, when early and later grade teachers are compared separately for innercity and Outer-city, and interesting difference in distribution does occur as indicated in Tables 8 and 9.

TABLE 8.--Chi square table comparing the distribution of the self-controlling personality type among inner-city early elementary teachers with the distribution among inner-city later elementary teachers

Personality Type	В	A-C	Tota l
inner-City Early Elementary	16	12	28
Inner-City Later Elementary	8	10	18
Total	24	22	46
$x^2 = 0.705$	l degree of	freedom, X ²	,95 = 3.84

TABLE 9.--Chi square table comparing the distribution of the self-controlling personality type among outer-city early elementary teachers with the distribution among outer-city later elementary teachers

Personality Type	В	A-C	Total
Outer-City Early Elementary	6	16	22
Outer-City Later Elementary	10	6	16
Total	16	22	38
$\chi^2 = 4.71$ 1 degree of freedom, $\chi^2 = 3.84$.95			

Table 8 presents the chi square table comparing the distribution of the self-controlling personality type between inner-city early and later grades. It may be seen in Table 8 that differences in the distribution of the self-controlling personality type are not significant at the .05 level of confidence. However, the table reveals that such differences as exist are in the direction which was expected.

This is not true of Table 9. Table 9 presents the chi square values which compare the distribution of the self-controlling personality type between Outer-city early and later grade teachers. It may be seen in Table 9 that a difference exists in the distribution of this personality type which is significant at the .05 level of confidence. Of greater importance is the fact that the difference is not in the direction which was expected. The self-controlling personality is found significantly more often in the later grades among competent teachers in Outer-city schools.

In positing Hypothesis 2 it was reasoned that the psychological and educational needs of young children for guidance, structure, and controlling behavior on the part of the teacher would be considerably greater than those needs for older children. Hence, it was felt that teachers who might best fill these needs would be more often seen as effective in the early grades. With Outer-city teachers the opposite of this distribution was found to be true. It is probably true in Outer-city schools that some other considerations are more important in the selection of competent teachers than those cited in support of Hypothesis 2. Since the children in Outer-city schools come mainly from stable, well-regulated homes, the need for an early grade teacher

with guiding, structuring characteristics may be less apparent than in Inner-city schools. This contention is supported by the results shown in Table 5. In addition, the middle class, Outer-city emphasis on learning and achievement which increases through the grades may well explain the significant preference for the structuring, work-oriented type of teacher in the later grades in schools serving this area. These two considerations which are interacting in Outer-city schools would tend to explain the reversal in the expected distribution of personality types. On the basis of evidence presented in Tables 7, 8, and 9, Hypothesis 2 cannot be substantiated.

On the basis of evidence presented in Table 9, Hypothesis 3 cannot be substantiated. It would seem that the lessened personal need of Outer-city upper grade children for structured, controlled situations, which might allow for more variability in the personality of teachers seen as effective, is not an important factor. A more important factor in perceived effectiveness may be community emphasis on achievement which may serve to produce constriction in the personality types seen as effective rather than variability as hypothesized.

Personality Related Interests

In this section chi square values are presented which compare the relative strength of interest in eighteen personality related categories for four dimensions of the inner-city and Outer-city teacher samples. The personality related categories are divided into three general areas: Human Relations, Fantasy Life, and Organization of Drives and Impulses.

Human Relations

Table 10 presents the chi square values comparing frequency distributions related to interest in the Authority category. It may be seen in Table 10 that the chi square values obtained indicate that there are no significant differences in the samples on the four dimensions tested. Comparisons were made between low-middle and high since very few teachers exhibited low interest in this category. The Inner-city sample was divided approximately 2 to 1 between average and high scores. The Outer-city sample was divided approximately equally between average and high scores. High scores in this category indicate high interest in being independent of direction by authority flaures.¹ While the difference did not reach statistical significance, the higher proportion of the Outer-city group who showed high interest in resistance to authority may be related to age differences in the samples. Over half of the Outer-city sample was over forty years old, while about one-third of the inner-city sample exceeded forty. By way of contrast, over half of the Inner-city sample was thirty or under and less than one-third of the Outer-city sample fell into this age group.

Table 11 presents chi square values comparing frequency distributions related to interest in the <u>Opposite Sex</u> category. It may be seen in Table 11 that there are no significant differences in the samples on the four dimensions tested. Throughout the four dimensions tested the respondents distributed themselves approximately normally.

¹Material which interprets interest in a category is derived from Heil, Powell, and Felfer, <u>Op. Cit</u>.

TABLE 10.--Chi square values comparing four dimensions of the inner-city sample and outer-city sample on the <u>authority</u> related interest category

	Total Inner- City Total Outer- City	Inner-City Early Grade Outer-City Early Grade	Inner-City Later Grade Outer-City Later Grade	Total Early Grade Total Later Grade		
x²	1.540*	1.971*	0.0 69 *	0.088*		
One degree of freedom, X ² .95 = 3.84. Two degrees of freedom, X ² .95 = 5.99. *Low-middle compared to high, one degree of freedom. #Low- compared to middle-high, one degree of freedom.						

TABLE 11.--Chi square values comparing four dimensions of the inner-city sample and outer-city sample on the opposite sex related interest category

	Total Inner- City Total Outer-	Inner-City Early Grade Outer-City	Inner-City Later Grade Outer-City	Total Early Grade Total Later
	City	Early Grade	Later Grade	Grade
x ²	1.027	1.184	0.000#	4.282
One degree of freedom, X ² .95 = 3.84. Two degrees of freedom, X ² .95 = 5.99. *Low-middle compared to high, one degree of freedom. #Low- compared to middle-high, one degree of freedom.				

Only when comparing the inner-city later with the Outer-city later group was it necessary to use a low to middle-high classification because so few scored in the high category. The relatively small number of teachers in the later grades indicating high interest in the opposite sex may be related to age. By far the majority of those in the later grade sample were in the over forty age group.

Table 12 presents the chi square values comparing frequency distributions related to interest in the <u>Leadership</u> category. By examining Table 12 it may be seen that there are no significant differences in the sample on the four dimensions tested. Interest in the items in the Leadership category appeared to be normally distributed throughout the sample with the majority of cases falling in the average range. High scores in the Leadership category indicate high interest in organizing and directing the activities of others.

Table 13 presents the chi square values comparing frequency distributions related to interest in the <u>Family</u> category. An examination of Table 13 indicates that there is no significant difference in the samples on the four dimensions tested. Scores were concentrated in the average and high interest range. The later grade groups showed a slightly greater tendency toward scores indicating high interest in Family when compared with the early grade group. This tendency did not reach statistical significance. High scores in the Family interest category indicate high interest in sharing experiences and activities with family members.
TABLE 12.--Chi square values comparing four dimensions of the inner-city sample and outer-city sample of the <u>leadership</u> related interest category

	Total Inner- City Total Outer- City	Inner-City Early Grade Outer-City Early Grade	Inner-City Later Grade Outer-City Later Grade	Total Early Grade Total Later Grade	
x²	1.156	1.812	0.000#	0.803	
One degree of freedom, X ² .95 = 3.84. Two degrees of freedom, X ² .95 = 5.99. *Low-middle compared to high, one degree of freedom. #Low- compared to middle-high, one degree of freedom.					

TABLE 13.--Chi square values comparing four dimensions of the inner-city sample and outer-city sample on the <u>family</u> related interest category

	Total Inner- City Total Outer- City	Inner-City Early Grade Outer-City Early Grade	Inner-City Later Grade Outer-City Later Grade	Total Early Grade Total Later Grade		
x ² .	0.864*	0.074*	1.253*	1.255*		
One degree of freedom, X ² .95 = 3.84. Two degrees of freedom, X ² .95 = 5.99. *Low-middle compared to high, one degree of freedom. #Low- compared to middle-high, one degree of freedom.						

Table 14 presents the chi square values comparing frequency distributions related to interest in the <u>Same Sex</u> category. High scores in the Same Sex category indicate high interest in involvement in social, educational, and athletic activities involving only the same sex. The values in Table 14 reveal that there are no significant differences in the samples on the four dimensions tested. The characteristic seemed to be normally distributed throughout the groups with the heaviest concentration of scores in the average interest range.

Table 15 presents the chi square values comparing the frequency distributions related to interest in the Identification with Others category. High scores in the Identification with Others category indicate high interest in the thoughts, feelings, actions, and problems of others. This interest may be intellectual or it may manifest itself in the form of direct action and personal involvement with others. An examination of Table 15 reveals that on three of the dimensions tested there was no significant difference between the groups. However, a significant difference was found between the Inner-city later grade group and the Outer-city later grade group. The difference was significant at the .05 level of confidence. Over half of the Inner-city group indicated high interest in Identification with Others while less than one-fifth of the Outer-city group indicated high interest in this category. There was no significant difference between the two early grade groups; however, both groups showed a high level of interest in Identification with Others.

TABLE 14.--Chi square values comparing four dimensions of the inner-city sample and outer-city sample on the <u>same sex</u> related interest category

	Total Inner- City Total Outer- City	Inner-City Early Grade Outer-City Early Grade	Inner-City Later Grade Outer-City Later Grade	Total Early Grade Total Later Grade	
x ²	0.546	1.890	0.316*	0.255	
One degree of freedom, X ² .95 = 3.84. Two degrees of freedom, X ² .95 = 5.99. *Low-middle compared to high, one degree of freedom. #Low- compared to middle-high, one degree of freedom.					

TABLE 15.--Chi square values comparing four dimensions of the inner-city sample and outer-city sample on the <u>identification</u> with others related interest category

	Total Inner- City Total Outer- City	Inner-City Early Grade Outer-City Early Grade	Inner-City Later Grade Outer-City Later Grade	Total Early Grade Total Later Grade	
x ²	3.013	0.000	<u>5.499</u> *	0.182	
One degree of freedom, X ² ₉₅ = 3.84. Two degrees of freedom, X ² = 5.99. *Low-middle compared to high, one degree of freedom. #Low- compared to middle-high, one degree of freedom.					

Table 16 presents the chi square values comparing the frequency distributions related to interest in the <u>Solitary</u> category. High scores in the Solitary category indicate high interest in working by oneself rather than with others. Since very few respondents showed low interest in this category the chi square values were obtained by comparing low-average to high. It may be seen in Table 16 that for three of the four dimensions tested there was no significant differences in the groups. A difference which was significant at the .05 level was found when comparing the inner-city early and Outer-city early grade groups. The Outer-city early grade group showed a significantly greater number with high interest in the Solitary category.

Fantasy Life

Table 17 presents the chi square values comparing the frequency distributions related to interest in the <u>Magic</u> category. High scores in the Magic category indicate high interest in supernatural and superstitious beliefs. This category is related to wishful and unrealistic approaches to reality. It may be seen in Table 17 that there are no significant differences in the sample on the four dimensions tested. Less than one per cent of the sample indicated high interest in this category. Early grade teachers showed a greater tendency to exhibit low interest in this category than did later grade teachers.

TABLE 16.--Chi square values comparing four dimensions of the inner-city sample and outer-city sample on the <u>solitary</u> related interest category

	Total Inner- City Total Outer- City	Inner-City Early Grade Outer-City Early Grade	Inner-City Later Grade Outer-City Later Grade	Total Early Grade Total Later Grade	
x²	1.863	<u>3.865</u> *	0.007*	0.368*	
One degree of freedom, X ² .95 = 3.84. Two degrees of freedom, X ² .95 = 5.99. *Low-middle compared to high, one degree of freedom. #Low- compared to middle-high, one degree of freedom.					

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TABLE 17.--Chi square values comparing four dimensions of the inner-city sample and outer-city sample on the <u>Magic</u> related interest category

	Total Inner- City Total Outer- City	Inner-City Early Grade Outer-City Early Grade	Inner-City Later Grade Outer-City Later Grade	Total Early Grade Total Later Grade	
x²	0.074*	0.623#	0.253#	1.977#	
One degree of freedom, X ² = 3.84. Two degrees of freedom, X ² .95 *Low-middle compared to high, one degree of freedom. #Low- compared to middle-high, one degree of freedom.					

Table 18 presents the chi square values comparing the frequency distribution related to interest in the <u>Mystery</u> category. High scores in the Mystery category indicate high interest in the origins of things and a high level of curiosity. An examination of Table 18 reveals that there is no significant difference between the groups on the four dimensions tested. Individuals in the respondent groups were distributed approximately normally except for inner-city later and Outer-city later grade groups. The inner-city later grade group showed a tendency to score heavily in the low interest cell, while the Outercity later grade group tended to score heavily in the high interest cell. The difference did not reach statistical significance, however.

Table 19 presents the chi square values comparing the frequency distributions related to interest in the <u>Humor</u> category. High scores in the Humor category indicate high interest in many forms of humor. This category is related to use of this socially acceptable form of tension-release and hostility. It may be seen in Table 19 that there is no significant difference between the samples on the four dimensions tested. The inner-city early grade group differed from the other groups in that there was a greater tendency for the respondents to score high. This tendency is reflected in the relatively high chi square value for the inner-city early grade and Outer-city early grade comparison. The value did not reach statistical significance, however.

TABLE 18.--Chi square values comparing four dimensionsof the inner-city sample and outer-city sampleon the mystery related interest category

	Total Inner- City Total Outer- City	Inner-City Early Grade Outer-City Early Grade	Inner-City Later Grade Outer-City Later Grade	Total Early Grade Total Later Grade	
x ²	1.207	0. 226	4.154	2.357	
One degree of freedom, X ² = 3.84. Two degrees of freedom, X ² .95 = 5.99. *Low-middle compared to high, one degree of freedom. #Low- compared to middle-high, one degree of freedom.					

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TABLE 19.--Chi square values comparing four dimensions of the inner-city sample and outer-city sample on the <u>humor</u> related interest category

	Total Inner- City Total Outer- City	Inner-City Early Grade Outer-City Early Grade	Inner-City Later Grade Outer-City Later Grade	Total Early Grade Total Later Grade		
χ2	2.533	3.441	0.069#	1.731		
One degree of freedom, $X^2_{.95} = 3.84$. Two degrees of freedom, $X^2_{.95} = 5.99$. *Low-middle compared to high, one degree of freedom. #Low- compared to middle-high, one degree of freedom.						

Table 20 presents the chi square values comparing the frequency distributions related to interest in the <u>Dramatics</u> category. High interest in this category may be associated with prominence and power needs. Table 20 reveals that there are no significant differences between the groups on the four dimensions tested. Scores of all groups appeared to be normally distributed with respect to interest in this category.

Table 21 presents the chi square values comparing the frequency distributions related to interest in the <u>Fantasy</u> category. High scores in this category are related to interest in imagining and conjecturing about relations with others and about power acquisition. They reflect a means of satisfying unacceptable social impulses or of escaping problems which are too difficult. It may be seen in Table 21 that there are no significant differences between the groups on the four dimensions tested. However, it is of interest to note that the scores were approximately equally divided between low interest and average interest for all groups except the inner-city later grade group. There was a discernible tendency for this group to score in the low interest cell. Only four out of ninety-four in the total sample showed high interest in this category.

Table 22 presents the chi square values comparing the frequency distributions related to interest in the <u>Life-Death Universe</u> category. High interest in this category is associated with high interest in the beginnings and ends of life. It may indicate a need to externalize anxieties. The majority of the scores on this category were

TABLE 20.--Chi square values comparing four dimensions of the inner-city sample and outer-city sample on the <u>dramatics</u> related interest category

	Total Inner- City Total Outer- City	Inner-City Early Grade Outer-City Early Grade	Inner-City Later Grade Outer-City Later Grade	Total Early Grade Total Later Grade	
х ²	2.845	2.874	2.252	0.223	
One degree of freedom, X ² = 3.84. Two degrees of freedom, X ² .95 = 5.99 *Low-middle compared to high, one degree of freedom. #Low- compared to middle-high, one degree of freedom.					

TABLE 21.--Chi square values comparing four dimensions of the inner-city sample and outer-city sample on the <u>fantasy</u> related interest category

	Total Inner- City Total Outer- City	Inner-City Early Grade Outer-City Early Grade	Inner-City Later Grade Outer-City Later Grade	Total Early Grade Total Later Grade		
x ²	0.686	0.179	3.062#	0.042#		
One degree of freedom, χ^2 .95 = 3.84. Two degrees of freedom, χ^2 .95 = 5.99. *Low-middle compared to high, one degree of freedom. #Low- compared to middle-high, one degree of freedom.						

TABLE 22.--Chi square values comparing four dimensions of the inner-city sample and outer-city sample on the <u>life-death universe</u> related interest category

	Total Inner- City Total Outer- City	Inner-City Early Grade Outer-City Early Grade	Inner-City Later Grade Outer-City Later Grade	Total Early Grade Total Later Grade	
x ²	1.282#	0.051#	3.794#	0.097#	
One degree of freedom, $X^2 = 3.84$. Two degrees of freedom, $X^{2.95} = 5.99$. *Low-middle compared to high, one degree of freedom. #Low- compared to middle-high, one degree of freedom.					

TABLE 23.--Chi square values comparing four dimensions of the inner-city sample and outer-city sample on the preoccupation with cleanliness related interest category

	Total Inner- City Total Outer- City	Inner-City Early Grade Outer-City Early Grade	Inner-City Later Grade Outer-City Later Grade	Total Early Grade Total Later Grade		
x2	0.056*	0.647*	0.239*	1.591×		
One degree of freedom, X ² .95 = 3.84. Two degrees of freedom, X ² .95 = 5.99. *Low-middle compared to high, one degree of freedom. #Low- compared to middle-high, one degree of freedom.						

concentrated in the low and average interest range. Table 22 reveals that there are no significant differences between the groups on the four dimensions tested. The chi square value comparing inner-city later grade with Outer-city later grade teachers approached significance with a value of 3.794. Inner-city later grade teachers showed a tendency toward lower interest in this category than did the Outer-city group.

Organization of Drives and Impulses

Table 23 presents the chi square values comparing the frequency distributions related to interest in the <u>Preoccupation with Cleanliness</u> category. It may be seen in Table 23 that there are no significant differences between the groups on the four dimensions tested. The scarcity of individuals scoring in the low interest cell necessitated combining low-average interest and comparing this with high interest. Most teachers in the sample apparently have rather high interest in cleanliness as indicated by this distribution.

Table 24 presents the chi square values comparing the frequency distributions related to interest in the <u>Self-Severity</u> category. High scores in the Self-Severity category indicate high interest in selftesting and self-discipline. An examination of Table 24 reveals that for three of the dimensions tested there was no significant difference between the samples. The comparison of inner-city early grade with Outer-city early grade teachers revealed a difference which was significant at the .05 level of confidence. Outer-city early grade

TABLE 24.--Chi square values comparing four dimensions of the inner-city sample and outer-city sample on the <u>self-severity</u> related interest category

	Total Inner- City Total Outer- City	Inner-City Early Grade Outer-City Early Grade	Inner-City Later Grade Outer-City Later Grade	Total Early Grade Total Later Grade	
x ²	2.293*	<u>5.029</u> *	0.043*	0 . 70 4*	
One degree of freedom, $X^2_{.95} = 3.84$. Two degrees of freedom, $X^2_{.95} - 5.99$. *Low-middle compared to high, one degree of freedom. #Low- compared to middle-high, one degree of freedom.					

TABLE 25.--Chi square values comparing four dimensions of the inner-city sample and outer-city sample on the <u>methodical</u> related interest category

	Total Inner- City Total Outer- City	Inner-City Early Grade Outer-City Early Grade	Inner-City Later Grade Outer-City Later Grade	Total Early Grade Total Later Grade		
x2	0.262*	0.287*	1.952*	0.493*		
One degree of freedom, $X^2_{.95} = 3.84$. Two degrees of freedom, $X^2_{.95} = 5.99$. *Low-middle compared to high, one degree of freedom. #Low- compared to middle-high, one degree of freedom.						

teachers showed a significantly greater tendency to score high in interest in the Self-Severity category.

Table 25 presents the chi square values comparing the frequency distributions related to interest in the <u>Methodical</u> category. High scores in this category indicate high interest in patterned and repetitive activity. Inner-city early and later grade teachers, and Outer-city early grade teachers scored more frequently in the high interest cell than did Outer-city later grade teachers. However, the data in Table 25 reveal that there are no statistically significant differences between the groups on the four dimensions tested. All groups exhibit relatively high interest in methodical activities.

Table 26 presents the chi square values comparing the frequency distributions related to interest in the <u>Acceptance of Impulses</u> category. High scores in this category indicate high interest in letting oneself go or in doing things impulsively. Relatively few teachers exhibit high interest in this category. Half or more of those falling in each group exhibit average interest in this category; most of the remaining exhibit low interest. Only about ten per cent of the total can be classified as having high interest in Acceptance of Impulses.

Table 27 presents the chi square values comparing the frequency distributions related to interest in the <u>Aggression</u> category. High scores in this category are associated with high interest in doing things which may harm or irritate others. Such activities may be either verbal or physical. An examination of the results in Table 27

TABLE 26.--Chi square values comparing four dimensions of the inner-city sample and outer-city sample on the <u>acceptance of Impulses</u> related interest category

	Total Inner- City Total Outer- City	Inner-City Early Grade Outer-City Early Grade	Inner-City Later Grade Outer-City Later Grade	Total Early Grade Total Later Grade	
x ²	0.137	0.021#	0 . 397 #	1.409	
One degree of freedom, $\chi^2_{.95} = 3.84$. Two degrees of freedom, $\chi^2_{.95} = 5.99$. *Low-middle compared to high, one degree of freedom. #Low- compared to middle-high, one degree of freedom.					

TABLE 27.--Chi square values comparing four dimensions of the inner-city sample and outer-city sample on the <u>aggression</u> related interest category

	Total Inner- City Total Outer- City	Inner-City Early Grade Outer-City Early Grade	Inner-City Later Grade Outer-City Later Grade	Total Early Grade Total Later Grade	
x²	0.04 8 #	0 . 243 #	0. 080#	1.00 9 #	
One degree of freedom, $X^2_{.95} = 3.84$. Two degrees of freedom, $X^2_{.95} = 5.99$. *Low-middle compared to high, one degree of freedom. #Low- compared to middle-high, one degree of freedom.					

indicates that there is no significant difference between the samples on the four dimensions tested. In addition, it is apparent from the distribution of the respondents that very few teachers in the sample have a high interest in Aggression.

Academic Related Interests

In this section chi square values are presented which compare the relative strength of interest in fourteen academic related categories for four dimensions of the inner-city and Outer-city teacher samples.

Table 28 presents the chi square values comparing the frequency distributions related to interest in <u>Social Science</u>. From Table 28 it may be seen that there are no significant differences in the samples on the four dimensions tested. Two values, however, were relatively large. The comparatively high chi square for total inner-city compared with total Outer-city was caused mainly by the difference in the frequency of respondents in the low interest range. A considerably greater number was found in this cell in the inner-city group than in the Outer-city group.

Table 29 presents the chi square values comparing the frequency distributions related to interest in the <u>Physical Science</u> category. It may be seen in Table 29 that there are no statistically significant differences between the samples on the four dimensions tested. There may be some tendency, though not statistically significant, for early grade teachers to show higher interest than later grade teachers in this category.

TABLE 28.--Chi square values comparing four dimensions of the inner-city sample and outer-city sample on the <u>social science</u> related interest category

	Total Inner- City Total Outer- City	Inner-City Early Grade Outer-City Early Grade	Inner-City Later Grade Outer-City Later Grade	Total Early Grade Total Later Grade	
x ²	3.340	3.041*	0.080*	0.537	
One degree of freedom, $\chi^2_{.95} = 3.84$. Two degrees of freedom, $\chi^2_{.95} = 5.99$ *Low-middle compared to high, one degree of freedom. #Low- compared to middle-high, one degree of freedom.					

TABLE 29.--Chi square values comparing four dimensions of the inner-city sample and outer-city sample on the <u>physical science</u> related interest category

	Total Inner- City Total Outer- City	Inner-City Early Grade Outer-City Early Grade	Inner-City Later Grade Outer-City Later Grade	Total Early Grade Total Later Grade		
x ²	0.533	0.000*	0.345*	1.266		
One degree of freedom, X ² .95 = 3.84. Two degrees of freedom, X ² .95 = 5.99 *Low-middle compared to high, one degree of freedom. #Low- compared to middle-high, one degree of freedom.						

Table 30 presents the chi square values comparing the frequency distributions related to interest in the <u>Biological Science</u> category. Table 30 reveals that for three of the dimensions examined there was no significant difference in the samples. The chi square value comparing the inner-city early with the Outer-city early grade teachers was significant at the .01 level of confidence. Five times as many Outer-city early grade teachers showed low interest in the Biological Science category. In the later grade sample only 4 out of 41 showed high interest in this category.

Table 31 presents the chi square values comparing frequency distributions related to interest in the <u>English</u> category. It may be seen in Table 31 that on the four dimensions tested there are no significant differences in the samples. Early grade teachers did not differ in interest from the later grade teachers in the sample. Most respondents in the total sample tended to score in the average interest range for this category.

Table 32 presents the chi square values comparing the frequency distributions related to interest in the <u>Foreign Language</u> category. The high interest cell was combined with the average interest cell because so few respondents showed high interest in this category. Over one-fourth of the total sample showed low interest in this category. There were no significant differences in the samples on the four dimensions tested.

Table 33 presents the chi square values comparing frequency distributions related to interest in the <u>Mathematics</u> category. It may be seen in Table 33 that for two of the dimensions tested there were

TABLE 30.--Chi square values comparing four dimensions of the inner-city sample and outer-city sample on the <u>biological science</u> related interest category

	Total Inner- City Total Outer- City	Inner-City Early Grade Outer-City Early Grade	Inner-City Later Grade Outer-City Later Grade	Total Early Grade Total Later Grade	
χ2	3.651	<u>9.845</u>	1.436#	2.588	
One degree of freedom, X ² .95 = 3.84. Two degrees of freedom, X ² .95 = 5.99. *Low-middle compared to high, one degree of freedom. #Low- compared to middle-high, one degree of freedom.					

TABLE 31.--Chi square values comparing four dimensions of the inner-city sample and outer-city sample on the <u>English</u> related interest category

	Total Inner- City Total Outer- City	Inner-City Early Grade Outer-City Early Grade	Inner-City Later Grade Outer-City Later Grade	Total Early Grade Total Later Grade	
x ²	0.733	1.069*	1.436*	0.304	
One degree of freedom, X^2 .95 = 3.84. Two degrees of freedom, X^2 .95 = 5.99. *Low-middle compared to high, one degree of freedom. #Low- compared to middle-high, one degree of freedom.					

TABLE 32.--Chi square values comparing four dimensions of the inner-city sample and outer-city sample on the <u>foreign language</u> related interest category

	Total Inner- City Total Outer- City	Inner-City Early Grade Outer-City Early Grade	Inner-City Later Grade Outer-City Later Grade	Total Early Grade Total Later Grade	
x ²	0.0 29#	0.000#	0. 069#	2.894#	
One degree of freedom, X ² .95 = 3.84. Two degrees of freedom, X ² .95 = 5.99. *Low-middle compared to high, one degree of freedom. *Low- compared to middle-high, one degree of freedom.					

TABLE 33.--Chi square values comparing four dimensions of the inner-city sample and outer-city sample on the <u>mathematics</u> related interest category

	Total Inner- City Total Outer- City	Inner-City Early Grade Outer-City Early Grade	Inner-City Later Grade Outer-City Later Grade	Total Early Grade Total Later Grade	
x ²	<u>7.177</u>	<u>4.604</u> #	0.198*	4.038	
One degree of freedom, $X^2 = 3.84$. Two degrees of freedom, $X^2_{.95} = 5.99$. *Low-middle compared to high, one degree of freedom. #Low- compared to middle-high, one degree of freedom.					

no significant differences in the sample. Differences which were significant at the .05 level of confidence were found for the chi squares comparing the total inner-city with the total Outer-city sample and the inner-city early grade sample with the Outer-city early grade sample. The respondents in the total inner-city sample were heavily clustered in the average interest cell, forty-two out of fifty-two. The Outer-city sample showed more diversity with nine in both high and low interest cells, and twenty-four in the average interest cell.

The comparison between the inner-city early grade and Outer-city early grade teachers revealed a stronger tendency for the Outer-city sample to show low interest in mathematics. Seven of the nine in the Outer-city sample who were in the low interest cell were early grade teachers.

Table 34 presents the chi square values comparing the frequency distributions related to interest in the <u>industrial Arts</u> category. It may be seen in Table 34 that on the four dimensions tested, there is no significant difference between the samples. The respondents seemed to approach a normal distribution among the interest cells with perhaps a slight tendency to score more heavily in the low and average interest range.

Table 35 presents the chi square values comparing the frequency distributions related to interest in the <u>Home Economics</u> category. An examination of Table 35 reveals that for three of the dimensions tested there is no significant difference in the samples. The chi square value comparing the Total Early Grade with the Total Later Grade sample was significant at the .05 level of confidence. Forty-four

TABLE 34.--Chi square values comparing four dimensions of the inner-city sample and outer-city sample on the <u>industrial arts</u> related interest category

	Total Inner- City Total Outer- City	Inner-City Early Grade Outer-City Early Grade	Inner-City Later Grade Outer-City Later Grade	Total Early Grade Total Later Grade	
x²	0.337	1.069#	0.080#	0.320	
One degree of freedom, $X^2 = 3.84$. Two degrees of freedom, $X^2_{.95} = 5.99$. *Low-middle compared to high, one degree of freedom. #Low- compared to middle-high, one degree of freedom.					

TABLE 35.--Chi square values comparing four dimensions of the inner-city sample and outer-city sample on the <u>home economics</u> related interest category

	Total Inner- City Total Outer- City	Inner-City Early Grade Outer-City Early Grade	Inner-City Later Grade Outer-City Later Grade	Total Early Grade Total Later Grade	
χ2	0.102	0.0 25 *	0.324*	<u>6.13</u> 7	
One degree of freedom, X ² .95 = 3.84. Two degrees of freedom, X ² .95 = 5.99. *Low-middle compared to high, one degree of freedom. #Low- compared to middle-high, one degree of freedom.					

per cent of the later grade teachers showed high interest in this category, while only twenty-eight per cent of the early grade teachers scored in the high interest range. Early grade teachers were rather heavily clustered in the average interest cell.

Table 36 presents the chi square values comparing the frequency distributions related to interest in the <u>Business</u> category. The respondents scores on all dimensions of Table 36 seemed to approximate a normal distribution. There may have been a slight tendency for scores to cluster in the average interest range. There were no significant differences between the samples on the four dimensions tested.

Table 37 presents the chi square values comparing the frequency distributions related to interest in the <u>Fine Arts</u> category. It may be seen in Table 37 that the chi square value for the inner-city later grade sample compared with the Outer-city later grade sample was significant at the .05 level of confidence. The value for the comparison of the Total inner-city with the Total Outer-city sample almost reached significance. Values for the other two dimensions were not significant. None of the teachers in the Outer-city later grade sample showed low interest in Fine Arts. Six teachers in the innercity later grade sample were in the low interest range for this category.

TABLE 36.--Chi square values comparing four dimensions of the inner-city sample and outer-city sample on the <u>business</u> related interest category

	Total Inner- City Total Outer City	Inner-City Early Grade Outer-City Early Grade	Inner-City Later Grade Outer-City Later Grade	Total Early Grade Total Later Grade	
x ²	0.181	0.888*	0.903	0.755	
One degree of freedom, X ² .95 = 3.84. Two degrees of freedom, X ^{2.95} = 5.99. *Low-middle compared to high, one degree of freedom. #Low- compared to middle-high, one degree of freedom.					

TABLE 37.--Chi Square values comparing four dimensions of the inner-city sample and outer-city sample on the <u>fine arts</u> related interest category

	Total Inner- City Total Outer- City	Inner-City Early Grade Outer-City Early Grade	Inner-City Later Grade Outer-City Later Grade	Total Early Grade Total Later Grade	
x ²	5.293	0.628 *	<u>5.484</u> #	0.113	
One degree of freedom, X ² = 3.84. Two degrees of freedom, X ^{2.95} = 5.99. *Low-middle compared to high, one degree of freedom. #Low- compared to middle-high, one degree of freedom.					

Table 38 presents the chi square values comparing the frequency distributions related to interest in the <u>Music</u> category. In Table 38 it may be seen that for three of the dimensions tested there is no significant difference between the samples. The difference in the distribution between the inner-city early grade and the Outer-city early grade teachers was significant at the .05 level of confidence. The major difference between these groups was that the majority of the inner-city sample scored in the average cell, while no cell in the Outer-city sample contained a majority. There was a tendency for more teachers in the Outer-city early grade sample to score high in interest in this category. While it did not reach the significant level, it is worthy of note that a considerably larger proportion of the inner-city later grade sample when compared with the Outer-city later grade sample showed low interest in the Music category.

Table 39 presents the chi square values comparing the frequency distributions related to interest in the <u>Sports</u> category. It may be seen in Table 39 that on the four dimensions tested there are no significant differences between the samples. There was some tendency, though it did not reach statistical significance, for early grade teachers to place more respondents in the low interest cell with respect to sports than the later grade teachers.

Table 40 presents the chi square values comparing the frequency distributions related to interest in the <u>Reading</u> category. It may be seen in Table 40 that there are no significant differences between the samples on the four dimensions tested. While the total number was low (9), more early grade teachers (7) showed low interest in reading than

TABLE 38.--Chi square values comparing four dimensions of the inner-city sample and outer-city sample on the <u>music</u> related interest category

	Total Inner- City Total Outer- City	Inner-City Early Grade Outer-City Early Grade	Inner-City Later Grade Outer-City Later Grade	Total Early Grade Total Later Grade	
x ²	3.359	<u>6.100</u>	2.195#	0.148	
One degree of freedom, X ² .95 = 3.84. Two degrees of freedom, X ² .95 = 5.99. *Low-middle compared to high, one degree of freedom. #Low- compared to middle-high, one degree of freedom.					

TABLE 39.--Chi square values comparing four dimensions of the inner-city sample and outer-city sample on the <u>sports</u> related interest category

	Total Inner- City Total Outer-	Inner-City Early Grade Outer-City	Inner-City Later Grade Outer-City	Total Early Grade Total Later	
	City	Early Grade	Later Grade	Grade	
x²	2.956	0.767	0.1 98	2.738	
One degree of freedom, X ² .95 = 3.84. Two degrees of freedom, X ² .95 = 5.99. *Low-middle compared to high, one degree of freedom. #Low- compared to middle-high, one degree of freedom.					

TABLE 40.--Chi square values comparing four dimensions of the inner-city sample and outer-city sample on the <u>reading</u> related interest category

	Total Inner- City Total Outer- City	Inner-City Early Grade Outer-City Early Grade	Inner-City Later Grade Outer-City Later Grade	Total Early Grade Total Later Grade	
x ²	0.016*	0.138*	0.316*	2.833*	
One degree of freedom, $X^2 = 3.84$. Two degrees of freedom, $X^{2.95} = 5.99$. *Low-middle compared to high, one degree of freedom. #Low- compared to middle-high, one degree of freedom.					

TABLE 41.--Chi square values comparing four dimensions of the inner-city sample and outer-city sample on the <u>manipulative</u> related interest category

	Total Inner- City Total Outer- City	Inner-City Early Grade Outer-City Early Grade	Inner-City Later Grade Outer-City Later Grade	Total Early Grade Total Later Grade	
x ²	1.927*	1.513*	0.484*	0.244*	
One degree of freedom, X ² = 3.84. Two degrees of freedom, X ² = 5.99. *Low-middle compared to high, one degree of freedom. #Low- compared to middle-high, one degree of freedom.					

later grade teachers (2). Most of the teachers in both early and later grades scored in the average interest range. Less than one-fifth of the early grade teachers were in the high interest range on this category.

Table 41 presents the chi square values comparing the frequency distributions related to interest in the <u>Manipulative</u> category. An examination of Table 41 reveals that there are no significant differences between the samples on the four dimensions tested. Only 1 out of 52 in the inner-city and 5 out of 42 in the Outer-city showed low interest in this category. At least half of the teachers in each group, with the exception of the Outer-city early grade sample, showed high interest in this category.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The major purpose of this study was to survey the personality traits and academic interests of a population of competent, effective teachers drawn from both inner-city and Outer-city teaching situations. It was the intention of the investigation to determine if there were identifiable personality and academic interest configurations which were associated with effectiveness in these two different types of teaching situations.

A review of some of the current literature concerned with Inner-city teaching situations revealed some consensus of opinion concerning the important educational and psychological needs of these children which must be met for them to succeed in school. There was general agreement that important voids found in the lives of many of these children are in the fulfiliment of the need for security, the need to belong, be a part of something, and the need for order and structure in their lives.

With these needs of children in mind, three hypotheses were formulated to aid in structuring the investigation:

> There will be a significantly greater number of teachers with the self-controlling personality configuration among competent teachers in disadvantaged schools than in advantaged schools.

- There will be a significantly greater number of teachers with the self-controlling personality configuration in early elementary grades than in later elementary grades in both advantaged and disadvantaged schools.
- 3. There will be a significantly greater variability in the personality types of teachers seen as competent in the later grades in advantaged schools when compared with teachers in disadvantaged schools.

The data for this investigation were collected from a sample of 94 teachers in the Grand Rapids Public School System. Fifty-two of these teachers were drawn from inner-city schools and forty-two from Outer-city schools. They were selected on the basis of competency and effectiveness as judged by the building principal.

The Manifold Interest Schedule was administered to assess teacher personality and academic interests. Teachers were assigned to three personality types by profile analysis. The A personality type was characterized by impulsiveness, variability, creativity, lack of empathy.

The B personality type was characterized by orderliness, work orientation, empathy and high regard for interpersonal relations.

The C personality type is characterized by fearfulness, ambiguity, and concern with the form and non-essential aspects of teaching.¹

¹For a complete description of each personality type and its implications see Heil, Powell, and Felfer, <u>Op. Cit</u>.

The raw data from the teachers' responses were translated into stanine values indicating interest in each category. Raw scores corresponding to various stanine values had been previously established on a norming group.²

The stanine data on all personality and academic interest categories were coded into low (stanine 1-3), average (stanine 4-6), and high (stanine 7-9) cells for analysis by use of the chi square technique. Chi square determinations were calculated to assess the distribution of teacher personality types as hypothesized and also to assess any differences in distribution in each of the personality and academic interest categories.

Summary of Findings

Personality Types

With respect to the first hypothesis, it was found that there was no significant difference in the distribution of the selfcontrolling personality type when comparing the total inner-city sample with the total Outer-city sample. Forty-six per cent of the teachers in the inner-city sample and thirty-eight per cent in the Outer-city sample were of the B or self-controlling type. Although this difference was in the direction which was hypothesized, it was not statistically significant at the .05 level of confidence.

²Heil, Powell, and Feifer, <u>Op. Cit</u>., p. 90.

When inner-city early grade teachers were compared with Outercity early grade teachers, a difference which was significant at the .05 level was found in the distribution of the self-controlling personality type. The self-controlling personality type was found to be significantly more numerous among inner-city early grade teachers than among Outer-city early grade teachers. Apparently, there are differences between inner-city and Outer-city early grade teaching situations which favor the self-controlling type of teacher's being seen as effective in inner-city settings. Hypothesis 1, then, can be supported when limited to early grade teachers.

No significant difference was found when comparing inner-city later grade teachers with Outer-city later grade teachers on the distribution of the self-controlling type of personality. In Interpreting this finding, it is important to consider that there was no significant difference between the distribution between inner-city early grade and inner-city later grade teachers. This fact would indicate that the self-controlling type of personality is just as numerous statistically in both situations. The lack of difference between the inner-city later grade and Outer-city later grade samples may be explained by an additional factor operating to raise the Outercity level of the self-controlling personality type which was not considered in the research design. While pressing needs of children may be operative in the inner-city which favor the self-controlling type of teacher, mounting Outer-city parental and community pressure for academic achievement in the later grades may have the same effect.

The well-documented middle-class stress on achievement might well favor the work-oriented, self-controlling type of teacher being identified as effective especially in the upper grades in the Outer-city.

With respect to Hypothesis 2, it was found that in this research project no evidence was presented which supports the position posited; that there will be a significantly greater number of teachers with the self-controlling personality type in the early grades. There was no significant difference between early grade teachers and later grade teachers in the Inner-city. In the Outer-city sample there was a significant difference at the .05 level between early grade and later grade teachers. However, the difference was in the opposite direction to that which was hypothesized; that is, the self-controlling type of personality was more numerous in the later grades. Certain factors which may have caused this reversal are presented in the discussion of Hypothesis 1. An additional factor, not previously considered, may have contributed to this unexpected result. Since Outer-city children come mainly from homes which are stable and well-requlated in terms of school goals, the need for a teacher stressing structure is less apparent in the early grades.

With respect to Hypothesis 3, no evidence was presented which would substantiate the contention of greater variability of personality types seen as effective in Outer-city later grade situations when compared with inner-city later grade situations. There was no significant difference in the distribution of personality types between inner-city later grade teachers and Outer-city later grade teachers. The proportion of teachers falling into each personality type was approximately the same for both samples.

Personality Related Interests

The inner-city and Outer-city samples identified in this study did not exhibit many significant differences in personality related interests as revealed by chi square analysis of the data. Only three of seventy-two chi square determinations in this portion of the study yielded statistically significant results as described below.

1. Identification with Others

The comparison between the inner-city later grade sample and the Outer-city later grade sample gave a chi square values of 5.499 which was significant at the .05 level of confidence. Analysis of the frequency distribution revealed that over half of the inner-city group indicated high interest in Identification with Others. By way of contrast, less than one-fifth of the Outer-city group indicated high interest in this category. Apparently strong feelings of closeness and empathy with others are closely associated with being seen as effective in Innercity later grade teaching situations. These qualities are not nearly as closely linked with being seen as effective in Outer-city later grade teaching situations. Inner-city and Outer-city early grade groups, while not significantly different, were relatively high in interest In Identification with Others.

2. <u>Solitary</u>

A difference which was signficant at the .05 level was found when comparing the inner-city early grade and Outer-city early grade groups on the Solitary interest category. The Outer-city early grade group showed a significantly greater number of respondents who had high interest in this category. This difference may in part be related to age differences in the groups. Sixty-two per cent of the Outer-city group were forty years or more old while thirty-four per cent of the inner-city group were in this age range.

3. <u>Self-Severity</u>

A significant difference at the .05 level was found between the inner-city early grade and Outer-city early grade samples on interest in Self-Severity. The Outer-city sample had significantly more respondents with high interest in this category. Fifty-four per cent of the Outer-city early grade sample showed high interest in this category, while only twenty-four per cent of the inner-city early grade sample were in the high interest cell.

In summarizing the results of the comparisons between the Innercity and Outer-city samples on personality related interests, it would appear that the revealed differences between the groups are not great. Although a significant difference was found between the Inner-city early grade sample and the Outer-city early grade sample in the

distribution of personality types, only two significant differences were found between these same groups on the personality interest categories. It may be that the differences revealed by comparison of personality type distributions are subtle and do not yield readily to further analysis based on degree of interest in personality related categories.

Academic Related Interests

The chi square tests on the academically related interests revealed six relationships which were significant out of a total of fifty-six. Again, the inner-city and Outer-city samples do not appear to be greatly different in academic interest. The six significantly different comparisons follow:

1. Biological Science

The chi square value comparing the inner-city early grade sample with the Outer-city early grade sample showed a difference which was significant at the .01 level of confidence. Five times as many Outer-city early grade teachers showed low interest in this category as did inner-city early grade teachers. Although there were no significant differences between the later grade samples, only 4 out of 41 showed high interest in Biological Science.

2. Mathematics

Two comparisons were significant on the interest in mathematics category. The chi square values comparing the total inner-city sample with the total Outer-city sample, and the inner-city early grade sample with the Outer-city early grade sample were significant at the .05 level. The respondents in the total inner-city sample were heavily-grouped in the average interest cell. Forty-two out of fifty-two were in this range. The Outer-city sample showed more diversity with nine in both the high and low interest cells, and twenty-four in the average interest cell. Outer-city early grade teachers showed the lowest interest in mathematics. Seven of the nine in the Outer-city sample in this category were early grade teachers.

3. <u>Home Economics</u>

The comparison of the Total Early Grade sample with the Total Later Grade sample was significant at the .05 level of confidence. Forty-four per cent of the later grade teachers were high in interest in this category, while only twenty-eight per cent of the early grade teachers scored in the high range. Average scores were characteristic of early grade teachers.
4. Fine Arts

Inner-city later grade teachers and Outer-city later grade teachers were significantly different at the .05 level in interest in Fine Arts. The value for Total Inner-city compared with Total Outer-city closely approached significance. Not one teacher in the Outer-city later grade sample showed low interest in Fine Arts, while six teachers in the inner-city later grade sample scored in the low interest range.

5. Music

A significant difference at the .05 level was found between the inner-city early grade and the Outer-city early grade samples. The basic difference between these two groups was that the majority of the innercity sample scored in the average cell while in the Outer-city sample no cell contained a majority.

In summarizing the significant findings with respect to interest in the academic related categories, it would appear that the differences between the inner-city and Outer-city samples as revealed in this study are not great. Such significant results as were found were not sufficiently broad or patterned to warrant making generalizations about the differences in academic interests related to competency in inner-city and Outer-city teaching situations.

This data related to personality and academic interests, however, do provide useful descriptive information concerning the characteristics of this sample of competent teachers. This kind of data may find use in the placement of teachers of a certain personality type in the teaching situation where this type is most frequently seen as effective.

Recommendations for Further Research

The following recommendations for further research are posited as a continuation of this research effort:

- That the same research design be repeated, but with the criterion of teacher effectiveness determined by pupil preference, and administrators' choice.
- That the same research design be repeated in a larger urban area with a larger proportion of seriously deprived children.

APPENDIX A

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- 1. List of Interest Categories
- 2. Manifold Interest Schedule

LIST OF INTEREST CATEGORIES

The over-all category structure of the Manifold Interest Schedule is represented in the following:

Academic Categories

Social Science	Foreign Language	Business	Reading
Physical Science	Mathematics	Fine Arts	Manipulative
Biological Science	Industrial Arts	Music	
English	Home Economics	Sports	

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Non-Academic Categories

Human Relations	Fantasy Life	Organization of Drives and Impulses
Authority	Magic	Preoccupation with Cleanliness
Opposite Sex	Mystery	
		Self-Severity
Leadership	Humor	
		Methodical
Family	Dramatics	
		Acceptance of
Same Sex	Fantasy	Impulses
Identification	Life-Death-	Aggression
with Others	Universe	
Solitary		

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MANIFOLD INTEREST SCHEDULE

Directions for Responding To the Interest Schedules

- 1. You will find a number of items listed in each of the five following interest schedules. You will also find five IBM cards in the manila envelope which has been given to you. Each one of the cards has a different card number in the upper left hand corner and each one corresponds to one of the five interest schedules. Check to make sure that you have these five cards and a white card for your name and other information.
- 2. Fill out the white card giving your name and any other information requested.
- 3. Open the booklet to INTEREST SCHEDULE #1, pages 1 and 2. You are to give your responses to each of the items of this schedule on the card with #1 printed in the upper left hand corner.

Read each statement and blacken one of the three spaces "L", "I", or "D" on the answer card corresponding to the number of the statement. Blacken the space:

- L if you like or think you would like to do what the statement says.
- D if you dislike or think you would dislike doing what the statement says
- I if you are indifferent to, or are undecided about liking to do what the statement says.

Do not omit any statements - mark "L" or "I" or "D" for each statement.

When blackening the spaces, be careful to blacken the space completely but do not allow the blackening to run into an adjacent space. The following diagram shows the proper way to blacken the space for "L" for statement 1.

Also be careful not to bend or in any other way to mutilate the answer card.

- 4. After you have completed the 84 statements for Interest Schedule #1, go ahead with Interest Schedule #2 using the IBM card with #2 printed in the upper left hand corner. Make sure that you use the #2 card. In making your responses, work quickly. Do not ponder over a statement trying to decide whether you like or dislike. Give your first reaction.
- 5. When you complete Interest Schedule #2 on the #2 card, continue on with the other three Interest Schedules #3, #4 and #5. <u>Be sure in</u> each case that you are using the card with the number corresponding to the number of the Interst Schedule.
- 6. When finished, go back and reblacken each of your responses on all five cards. This is to make sure that your responses is black enough for the scoring machine to count it.

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- 1. Getting good, outside, authoritative information to check whether a teacher is right or not.
- 2. Throwing whatever is handy when i'm angry.
- 3. Organizing or setting up plays in my club or neighborhood.
- 4. Going to a dance.
- 5. Working to get a school office.
- 6. Talking with my family about what live been doing.
- 7. Saying or doing just the opposite of what a bigoted or set person want.
- 8. Arguing someone down.
- 9. Devising good plots for plays.
- 10. Attending parties where | meet new people.
- 11. Organizing a committee to bring about some change in school.
- 12. Hearing my family tell about what they've been doing.
- 13. Having a good argument with one of my teachers.
- 14. Sprinkling someone with a hose.
- 15. Getting together and leading a group giving a play.
- 16. Reading about how people feel when they are in love.
- ing signatures.

USE CARD #1

- 18. Listening to radio or watching TV with my family.
- 19. Noticing and pointing out when my teachers or parents are Inconsistent
- 20. Arguing with critical parents or teachers.
- 21. Reading aloud a skit or play.
- 22. Observing some animal give birth.
- 23. Practising public speaking or debating.
- 24. Talking with a friend of my family who drops in for a chat.
- 25. Winning an argument regardless of whether I believe in it.
- 26. Insisting with my parents that they hear my views.
- 27. Watching really good love scenes in a movie or play.
- 28. Making up a play with a little group of friends.
- 29. Hearing my father tell about his work.
- 30. Speaking at assemblies, class meetings or clubs.
- 31. Saying something to create a little excitement.
- 32. Doing my own investigation of a subject rather than relying on the textbook or teacher.
- 17. Writing a petition and collect- 33. Seeing who is dating whom among my friends.

- 34. Designing stage settings and props for a play.
- 35. Talking about my school work with one of my parents.
- 36. Having a position of leadership in a club.
- 37. Having people feel definite about me, either liking or disliking me.
- Being in a group that is playing a joke on a teacher.
- 39. Finding out from friends what they like in people of the opposite sex.
- Experimenting with stage lighting for different dramatic effects.
- Doing something with one of my parents, like going for a walk, shopping, etc.
- 42. Being active in organizing a protest meeting.
- 43. "Telling off" a nuisance.
- 44. Bothering some teachers to see how they will react.
- 45. Learning popular dances.
- 46. Thinking about the best make-up for a certain dramatic role.
- 47. Talking with my folks about what has taken place at a party. 63. Studying the motivation of a
- 48. Taking positions of leadership in school activities.
- 49. Exchanging biting and clever remarks with friends.

USE CARD #1

- 50. Tuning in on radio or TV to a hot argument or debate.
- 51. Seeing two people who are completely in love.
- 52. Playing the lead in a play.
- 53. Exchanging things like clothes with someone in the family.
- 54. Organizing a club among my friends or neighbors.
- 55. Thinking about how I can retaliate when someone has been mean.
- 56. Checking upon the truth of peoples' statements by using dependable references.
- 57. Figuring out why a date went sour.
- 58. Designing or manipulating púppets or marionettes.
- 59. Bringing someone home to meet my family.
- 60. Trying to get other people to vote in the right direction.
- 61. Having my own free choice on what and how to study rather than have a teacher outline things.
- 62. Sticking by the truth no matter whom it hurts.
- 63. Studying the motivation of a character in a play in order to play the role well.
- 64. Wondering about the best person to marry.

- 65. Seeing to it that a committee works well.
- 66. Helping to rearrange furniture and other things at home.
- 67. Examining speeches and radio programs to see if it is mostly propaganda.
- 68. Throwing snowballs or waterballs.
- 69. Playing any role in a play if I can do it well.
- 70. Planning what I will do or say on a new date.
- 71. Thinking up activities for a group of my friends.
- 72. Going out to eat with members of my family.
- 73. Avoiding parties where the chaperone is strict.
- 74. Seeing to it that people who break rules don't get away with it.
- 75. Analyzing a play to see what and how the author is trying to get over.
- 76. Planning a party for fellows and girls.
- 77. Getting together people who are interested in the same hobby.
- 78. Discussing some problem with my brother, sister or one of my parents.
- 79. Trying out my own ideas even when I'm advised differently.

- 80. Seeing a good fight.
- Thinking up unexpected or dramatic endings for plays.
- 82. Figuring out ways of being attractive to the opposite sex.
- 83. Talking to an expert about some problem.
- 84. Getting my parents' opinion about how to act in a certain situation.

- 1. Being in a club with people of my own age and sex.
- 2. Trying to understand what makes people behave the way they do.
- 3. Attending a movie or concert by myself.
- 4. Trying to discover my lucky or unlucky days.
- 5. Figuring out "who done it" in a mystery.
- 6. Pulling a joke on someone.
- 7. Playing on an athletic team.
- 8. Associating with someone to find out why his thoughts and feelings are different.
- 9. Being alone with nature (park, ocean, country, etc.)
- Crossing my fingers to bring me luck.
- 11. Trying to find out how certain superstitions got started.
- 12. Making wise cracks.
- Joining a fraternity or sorority.
- 14. Playing games with children or taking care of them.
- 15. Taking a swim, ride or stroll alone.
- 16. Wishing for something | want when | see a falling star.
- 17. Tracing back the origin of certain words.

- 18. Getting a drunk to act silly.
- 19. Going to a "stag" or "hen" party.
- 20. Listening to children talk about their thoughts and feelings.
- 21. Eating by myself.
- 22. Finding out what brings people luck in an examination.
- 23. Trying thought transmission.
- 24. Watching slapstick movies.
- 25. Wondering what other people on the bus are really like and how they live.
- 26. Eating with the same group of girls or fellows every day.
- 27. Devising little schemes to get good luck.
- 28. Doing my own exploring at an art gallery, museum or zoo.
- 29. Mimicking a teacher.
- 30. Discovering the magician's secret.
- Getting to know people who are quite different from my usual friends.
- 32. Spending a weekend at a friend's house, or having a friend stay at my house.
- 33. Staying away from things which may bring me bad luck, like walking under a ladder.

- 34. Being left alone with my thoughts.
- 35. Watching a clown.
- 36. Thinking about things that science can't explain.
- 37. Encouraging a quiet or shy person to express his thoughts or feelings.
- Working out or playing in a gym.
- 39. Putting a jinx on someone.
- 40. Spending an evening by myself at home.
- 41. Hearing the latest jokes.
- 42. Trying to find out really what makes people do queer things.
- 43. Explaining my most innermost feelings to my closest friend.
- 44. Going to an all boys or all girls school or college.
- 45. Possessing a good luck token.
- 46. Relaxing by myself on a bed or sofa and doing nothing.
- 47. Being with someone who likes to pun.
- 48. Overhearing accidentally other people's conversations.
- 49. Speculating about the thoughts of other people in the room.
- 50. Going shopping with a friend.
- Looking for something to bring me luck, like four leaf clovers.

USE CARD #2

- 52. Reading or studying in a quiet room.
- 53. Watching someone make a fool of himself.
- 54. Tuning in on police car radio conversation.
- 55. Comforting or caring for an unhappy or sick person.
- 56. Camping or fishing with a group of friends.
- 57. Praying for a wish to come true.
- 58. Keeping my thoughts and feelings to myself.
- 59. Imitating a stutterer.
- 60. Discovering how the archaeologist discovers the secrets of ancient civilizations.
- Keeping a scrap book on a famous man or woman athlete.
- 62. Contributing to an organization like Care.
- 63. Staying up to read or watch TV after the rest of the family has gone to bed.
- 64. Concentrating on something to make it come true.
- 65. Being around people when they forget themselves and talk freely.
- 66. Watching the TV comedian squelch the straight man.
- 67. Spending the summer at an all boy's or all girl's camp.

68. Learning how people arrive at their ideas and opinions.

- 69. Getting away by myself when other people press me about something.
- 70. Watching for signs of good or bad luck.
- 71. Learning about the secrets of secret societies, clubs or lodges.
- 72. Seeing someone do a takeoff on a person with an accent.
- 73. Getting home early from a date.
- 74. Seeing a TV program designed to help handicapped people.
- 75. "Keeping my own mind" during group discussion.
- 76. Watching destiny reward good people and punish bad ones.
- 77. Learning about spiritualism.
- 78. Doing a "takeoff" about a stupid politician.
- 79. Joining a group like the YMCA, YMHA, YWCA, YWHA, etc.
- 80. Communicating with a friend who has moved away.
- 81. Lolling in bed on holidays.
- 82. Not mentioning something I want very much because otherwise it might not come true.
- 83. Finding out how a persons tells fortunes by cards or tea leaves.

USE CARD #2

84. Seeing someone imitate a policeman giving a traffic ticket to a pretty girl.

- 1. Daydreaming about the impossible.
- 2. Talking about what happens after death.
- 3. Seeing to it that my clothes are immaculately clean.
- 4. Working on my will-power to strengthen it.
- 5. Cleaning up dishes after a meal.
- 6. Cursing when angry.
- 7. Thinking about what will happen in the future.
- 8. Trying to imagine the size of an atom or of the universe.
- 9. Washing my hands frequently during the day.
- Making myself do things I don't like.
- 11. Making a note of the things I have to do.
- 12. Arguing or fighting with someone if I feel like it.
- Imagining what people are saying when they are out of earshot.
- 14. Thinking about the end of the world.
- 15. Cleaning up the house and polishing things.
- 16. Making resolutions of New Years and other times to break bad habits.

- 17. Outlining a paper before starting to work on it.
- 18. Staying home and loafing in bed when I'm in the mood.
- Thinking about what you would do if you could start life over.
- 20. Wondering what eternity means.
- 21. Having my room clean and neat at all times.
- 22. Accepting a challenge to do something difficult.
- 23. Hanging my clothes carefully before retiring.
- 24. Splashing through puddles when it's raining.
- 25. Talking to friends about what life and death means.
- 26. Wondering how it would feel to have a movie star in love with you.
- 27. Getting my work done before engaging in pleasure.
- 28. Wearing clean clothes and being careful when working instead of wearing dirty or solled clothes.
- 29. Swimming in my "birthday suit".
- 30. Making a tally of my expenses.
- 31. Wondering about cremation.
- 32. Fancying myself as the hero or heroine in a movie.

- Having a teacher who won't allow anyone to cut corners.
- 34. Always brushing my teeth carefully before going to bed.
- 35. Spending most of my money rather than saving it.
- 36. Practicing something until I'm perfect at it.
- 37. Wondering whether space and time are endless.
- 38. Conjecturing what someone you like would say to you.
- 39. Being with people who do what they say they'll do no matter what.
- 40. Taking a shower more than once a day.
- 41. Taking off my shoes during an exam or at the movies.
- 42. Saving some money every month.
- 43. Wondering why people kill themselves.
- 44. Imagining how it would feel to fly through space in a rocket ship.
- 45. Making myself finish a job which has turned out to be disagreeable.
- 46. Keeping the sink or bathtub spotlessly clean.
- 47. Letting go and saying what comes to my mind.
- 48. Arranging a good card file for myself.

- 49. Thinking about what would happen if the law of gravity were suspended.
- 50. Daydreaming about what it's like in a nudist's colony.
- 51. Deliberately choosing something difficult to do and making myself do it.
- 52. Being careful <u>not</u> to let a dog lick my hands or face.
- 53. Eating in bed.
- 54. Seeing to it that my things are in order.
- 55. Wondering how people close to me would feel if I were to die.
- 56. Thinking about what you <u>should</u> have said to someone who hurts your feelings.
- 57. Pushing myself to do a little more than I can comfortably do as a matter of principle.
- 58. Keeping my medicine chest clean and orderly.
- 59. Going somewhere on the spur of the moment.
- 60. Rewriting a letter to make it neat.
- 61. Imagining what it would be like to be able to fortell the future.
- 62. Imagining what things would be like if a super H bomb were dropped.
- 63. Always using my own comb.

- 64. Punishing myself in some way when I do something mean.
- 65. Saving the string or wrapping from a package.
- 66. Slapping someone who has made me mad.
- 67. Thinking about what it would be like to have a photographic memory, X-ray eyes, etc.
- 68. Seeing real war movies.
- 69. Having a clean set of underwear at least once a day.
- 70. Making it a point to be nice to mean or boring people.
- 71. Making a plan of reading for myself.
- 72. Making it plain to another person what I think of him.
- 73. Wondering what it would have been like to have lived long ago.
- 74. Looking at news pictures of tornadoes, earthquakes, and tidal waves.
- 75. Brushing my clothes and polishing my shoes.
- 76. Staying with a crossword or some other kind of puzzle until I've worked it.
- 77. Organizing neatly things I have collected.
- 78. Sucking hard candy.

- 79. Thinking about how it would feel to have lots of money.
- 80. Imagining what life on another planet would be like.
- 81. Cleaning my fingernails at once when they get dirty.
- 82. Always doing more than my share of work in a club or organization.
- 83. Seeing to it that | have everything | need before starting to work.
- 84. Putting off something I don't want to do.

- 1. Writing about political or social problems.
- 2. Studying the anatomy and physiology of the human body.
- 3. Learning how to do scientific experimentation.
- 4. Reading and discussing poetry.
- 5. Seeing foreign language films.
- 6. Participating in the activities of a mathematics club.
- 7. Reading about labor movements and organizations.
- 8. Learning about the growth and nutrition of plants.
- 9. Analyzing unknown substances to determine their chemical composition.
- 10. Reading and discussing literature.
- 11. Belonging to a foreign language club.
- 12. Doing problems in arithmetic.
- 13. Studying the history of present day political, economic and social problems to discover what is know about their causes and solutions.
- 14. Collecting, preserving and classifying insects.
- 15. Studying atomic structure and types of chemical bonds.
- Speaking at an English club or class meeting.

- 17. Conversing with a foreigner in his language.
- Learning about the mathematical principles involved in modern calculating machines.
- Analyzing and comparing the platforms of different political parties.
- 20. Studying yeasts, moulds, and bacteria with a micropscope.
- 21. Learning about the properties of gases, liquids and solutions.
- 22. Attending lectures on literary criticism.
- 23. Listening to foreign language broadcasts.
- 24. Trying to beat a mathematical puzzle.
- 25. Studying about growth in humans, plants and animals.
- 26. Studying different systems of government; local, national and international.
- 27. Studying the history of English or American literature.
- 28. Reading the history of chemistry and physics.
- 29. Learning how mathematics is used in physics and chemistry.
- 30. Reading foreign language newspapers and magazines.
- Going on a field trip to observe and identify plant and animal life.

- 32. Discussing what should be done about relations with foreign countries.
- 33. Reading biographies and autobiographies.
- 34. Belonging to a physics, chemistry or astronomy club.
- 35. Proving theorems in geometry.
- 36. Acting as an interpreter for a non-English speaking person.
- 37. Learning about the principles of heredity.
- 38. Getting people to vote for qualified political candidates.
- 39. Learning more about English grammar.
- 40. Reading about the lives of great scientists, such as Newton, Galileo and Einstein.
- 41. Obtaining information from mathematical tables and charts.
- 42. Translating foreign publications.
- 43. Finding out about disease-producing organisms such as bacteria, viruses and parasites. 57. Teaching English.
- 44. Listening to lectures or radio and TV talks on political economic and social problems.
- 45. Reading and analyzing the classics in literature.
- 46. Studying important laws and concepts of physics and chemistry.

- 47. Solving examples in advanced mathematics.
- 48. Learning to be a foreign language translator.
- 49. Studying about the relationships between man and his plant and animal environment.
- 50. Keeping up with day-by-day reports on developments in a serious social problem,
- 51. Writing articles or stories for newspapers and magazines.
- 52. Going to a laboratory or exhibit specializing on atomic energy.
- 53. Carrying through a mathematical proof.
- 54. Learning about the beliefs and customs of people in other countries.
- 55. Dissecting frogs and other small animals.
- 56. Hearing radio and TV reports by foreign correspondents on the background and causes of events in foreign countries.
- 58. Reading about how new drugs are made.
- 59. Explaining a mathematical problem to a beginner.
- 60. Studying a foreign language.
- 61. Tracing the development of American political and economic institutions.

- 62. Reading about the lives of great men of biology and medicine, e.g., Darwin, Pasteur and Salk.
- 63. Going on field trips to study rock formations.
- 64. Editing stories and articles.
- 65. Teaching a foreign language to a beginner.
- 66. Reading about mathematics and mathematicians.
- 67. Doing volunteer work for the political party of your choice.
- 68. Learning about the role of yeast in the production of new drugs.
- 69. Working with chemical apparatus. 83. Living with a family in a
- 70. Being with people who want to be poets, authors and journalists.
- 71. Having a "pen pal" in a foreign country.
- 72. Comparing different mathematical solutions of the same problem.
- 73. Reading editorials and columnists' articles in newspapers and magazines.
- 74. Conducting a controlled experiment on plant growth.
- 75. Reading scientific books and magazines.

- 76. Analyzing literary masterpieces to determine what makes them great.
- 77. Finding out how certain English words have been derived from a foreign language.
- 78. Listening to a good mathematics teacher explain a problem.
- 79. Going to a political raily.
- 80. Seeing movies on underwater life, such as, "the Silent World".
- 81. Experimenting with electricity.
- 82. Studying methods of effective English usage.
- Elving with a family in a foreign country.
- 84. Reading and hearing about the meaning of mathematical principals.

- 1. Working part-time in an office or training for business.
- Looking at floor plans and photographs of well designed houses.
- 3. Installing or repairing plumbing.
- 4. Making jewelry or other ornaments.
- 5. Attending a concert or music festival.
- 6. Playing or watching hockey games.
- 7. Learning about business routines and systems.
- 8. Learning how to select clothing of good design and material.
- 9. Watching carpenters and mechanics at work.
- Modeling with clay, plasticene, etc.
- 11. Learning how to play a musical instrument.
- 12. Working out in a gym.
- 13. Learning bookkeeping and accounting operations.
- 14. Learning about sewing, mending, weaving, etc.
- 15. Using and repairing electrical equipment.
- 16. Purchasing reproductions of famous paintings.

- 17. Collecting phonograph records of classical music.
- 18. Pitching horseshoes or quoits with someone.
- 19. Typing business letters.
- 20. Taking care of a house or garden.
- 21. Drawing plans for something to be made.
- 22. Talking with people interested in art.
- Watching or listening to a symphony orchestra on TV or radio.
- 24. Participating in athletic contests.
- 25. Buying food.
- 26. Learning about things useful in business, e.g., Spanish, mathematics, etiquette, etc.
- 27. Painting or sketching something of interest.
- Constructing things of wood, metal, etc.
- 29. Practicing basketball.
- 30. Analyzing the music of famous composers.
- 31. Reading tips and articles about homemaking.
- 32. Operating business machines, e.g., adding machines, dictaphones, mimeograph.

- 33 Studying the differences between the works of famous artists.
- 34. Repairing or refinishing furniture.
- 35. Playing softball.
- 36. Composing or arranging a piece of music.
- 37. Arranging an attractive table for guests.
- Studying how to advertise and display goods.
- 39. Designing posters.
- 40. Building models.
- 41. Listening to or watching a sports broadcast.
- 42. Studying about the pitch, overtones and other physical aspects of music.
- 43. Looking at new dishes and silverware.
- 44. Finding out how people are selected for positions in business and industry.
- 45. Working up new designs for lamps, pottery, etc.
- 46. Learning how to use hand and power tools.
- 47. Going golfing.
- 48. Reading about the lives of famous musicians.

- 49. Interior decorating.
- 50. Studying why some businesses fail and others succeed.
- 51. Making illustrations for something to be published.
- 52. Tinkering with an automobile.
- 53. Being in charge of an athletic team.
- 54. Organizing or leading a band, chorus or orchestra.
- 55. Planning a good budget.
- 56. Developing skill in selling.
- 57. Reading the biographies of great artists.
- 58. Reading "how-to-do-it" in magazines such as Popular Mechanics.
- 59. Officiating in team games.
- 60. Studying music to determine its structure, rhythm, etc.
- 61. Reading about famous people in business and industry.
- 62. Cooking a good meal.
- 63. Trying to find out what is wrong with a broken radio or TV set.
- 64. Attending lectures on different kinds of art.
- 65. Hearing and comparing different interpretations of the same piece of music.

- 66. Learning a new swimming or tennis stroke.
- 67. Figuring out good business opportunities.
- 68. Planning a well-balanced diet.
- 69. Attending hobby shows.
- 70. Going to an art museum.
- 71. Discussing music and musicians.
- 72. Weight lifting and body building.
- 73. Analyzing a sales campaign to discover why it succeeds or fails.
- 74. Arranging furniture.
- 75. Planning and setting up a home workshop.
- 76. Learning how to distinguish color, texture, form, etc., in paintings.
- 77. Hearning the music of primitive people.
- 78. Seeing a movie about the life of a famous ballplayer or athlete.
- 79. Devising record keeping or filing systems.
- 80. Doing things around the house.
- 81. Taking a course in wood or metal work.
- 82. Experimenting with form and color in photography.

- 83. Teaching someone music or about music.
- 84. Reading the sports section of a newspaper.

APPENDIX B

Questionnaire Forms for Identifying the Sample

A Survey of Personality Variables Possessed by Competent Teachers in Different Settings

Please complete the following items:

.

Name:	
Age: _	•
Sex: _	
Race:	
Years	of experience:
Grade:	
Degree	e held:

Teacher's Name: _____

School: _____

Please write a brief description of those qualities possessed by this teacher which contribute to his/her effectiveness.

i

A Survey of Personality Variables Possessed by Competent Teachers in Different Settings

School:_____

Please identify <u>four</u> highly competent teachers on your staff who are doing an effective job in their situation. If possible, select two from the early elementary grades and two from the later elementary grades:

-1

Early	Elementary	(к-3)		
Name:			Grade:	
Later	Elementary	(4-6)		
Name:	• ************************************		Grade:	

APPENDIX C

- 1. Percentage Distribution of Total Samples on Personality Categories.
- 2. Percentage Distribution of Total Samples on Academic Categories.
- 3. Percentage Distribution of Separate Early and Later Grade Samples on Personality Categories.
- 4. Percentage Distribution of Separate Early and Later Grade Samples on Academic Categories.

TABLE 42.--Percentage distribution of total samples on personality categories

	Total	Inner-C	İty	Tota	0 Outer-(: I ty	Tota	l Early (Grade	Tota	l Later (rade
Personality Related	_	nterest			Interest			Interest			Interest	
Interests	Low	Ave.	High	Low	Ave.	HIgh	Low	Ave.	High	Low	Ave.	High
Authority	9	61	33	7	84	45	ω	52	01	2	59	36
Opposite Sex	31	58	Ξ	29	52	61	34	47	61	22	89	01
Leadership	21	60	23	61	67	14	15	5	21	22	61	17
Fami ly	80	52	3	5	45	52	9	55	39	٢	42	51
Same Sex	21	₹	35	21	50	29	21	6†	30	22	#	34
Identification with Others	12	**	1	10	62	28	σ	53	38	12	51	37
Solitary	9	69	25	7	45	38	9	99	28	7	59	34
Magic	38	54	80	36	57	7	43	55	7	29	56	15
Mystery	33	52	15	26	50	24	28	57	15	34	42	24
Humor	31	9	29	28	55	21	25	6†	26	37	4	61
Dramatics	25	++	31	36	84	16	30	L4	23	29	11	27

TABLE 42--Continued.

	Tota	l Inner-(; ity	Tota] Outer-(city	Tota	l Early	Grade	Tota	l Later	Grade
Personality Related		Interest			Interest			Interest			Interest	
Interests	Low	Ave.	HIgh	Mo	Ave.	High	Low	Ave.	High	Low	Ave.	High
Fantasy	54	42	4	45	20	Ś	51	6†	0	6†	42	6
Life-Death Universe	42	50	7	31	62	7	36	57	7	39	54	7
C lean liness	10	20	97	7	50	43	=	53	36	Ś	1 1 6	64
Self-Severity	7	63	35	12	38	50	9	57	37	œ	9 1	94
Methodical	t	38	58	7	14	52	7	4	58	01	39	51
Acceptance of Impulses	33	54	13	36	50	14	30	23	17	39	51	0
Aggression	29	67	4	31	60	6	34	59	7	24	68	œ

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TABLE 43.--Percentage distribution of total samples on academic categories

	Tota] nner-(clty	Tota	Outer-(city	Tota	l Early (Grade	Tota	l Later	Grade
Academic Related Interests	MO	Interest Ave.	H ah	MO	Interest Ave.	Hiah	MO	Interest Ave	H a	30	Interest Ave.	Hlah
Social Science	61	64	17	7	67	26	13	68	61	15	61	24
Physical Science	10	56	34	14	55	31	=	51	38	12	61	27
Biological Science	15	17	14	29	52	61	23	57	20	20	17	6
English	15	7 9	. 12	0	69	21	Ξ	99	23	15	66	61
Foreign Language	27	67	9	29	ß	Ξ	2]	72	2	37	뀸	6
Mathematics	9	81	13	21	57	22	17	72	1	7	68	25
Industrial Arts	21	99	13	26	62	12	23	99	11	24	61	15
Home Economics	12	52	36	12	55	33	Ø	7 9	28	17	39	44
Business Fine Arts Music	21 23 23	87. 2 . 3	23 15	۲ ر	62 79 55	21 16 26	15 21 21	62 70 62	23 17 17	22 15	56 71 60	22 14 18
Sports Reading	23	5 5	23 24	29 7	50 67	21 26	32	47 68	21 19	17	59 61	24 34
Manipulative	7	38	60	12	43	45	6		51	7	42	56

TABLE 44.--Percentage distribution of separate early and later grade samples on personality categories

		ner-City rlv Grad		0	ter-City rlv Grad			ner-City			ter-City	
Personality Related		Interest			Interest		<u> </u>	Interest		3	Interest	
Interests	Low	Ave.	High	Low	Ave.	High	Low	Ave.	High	Low	Ave.	High
Authority	7	62	31	œ	42	50	4-	61	35	9	56	38
Opposite Sex	38	1 48	14	29	91	25	22	70	œ	22	67	=
Leadership	14	59	27	۲۱	11	12	22	61	17	22	61	17
Family	2	55	38	4	54	42	6	1 48	43	9	33	61
Same Sex	17	45	38	25	54	21	26	43	31	17	45	38
Ident If Ication with Others	14	81	38	4	59	37	σ	39	52	21	67	16
Solitary	m	61	18	œ	50	42	6	56	35	9	61	33
Magic	8 4	84	4	38	62	0	26	19	13	33	50	17
Mystery	28	55	<i>L</i> 1	29	59	12	43	44	13	22	39	39
Humor	28	38	34	21	63	16	35	ł3	22	39	11	17
Dramatics	21	52	27	42	42	16	30	35	35	28	56	16

.

	Eal	ner-City rlv Grade		0 Ea	ter-City rly Grade		L L L	ner-City ter Grad	e	Du La	ter-City ter Grade	
Personality Related		Interest			nterest			Interest			Interest	
Interests	Low	Ave.	High	Low	Ave.	High	Low	Ave.	High	Low	Ave.	High
Fantasy	84	52	0	57	91	0	19	30	6	33	56	=
Life-Death Universe	34	55	=	37	59	4	52	43	Ś	22	67	1
C leanliness	14	55	31	ω	50	42	4	43	53	9	50	#
Self-Severity	m	73	24	ω	38	54	0	52	1 48	17	39	1
Methodical	m	41	56	0	38	62	4	35	61	17	44	39
Acceptance of Impulses	31	55	14	29	20	21	35	52	13	77	20	9
Aggression	31	99	ŝ	38	20	12	22	70	80	22	67	Ξ
	4-2											
							_					-

TABLE 44--Continued

TABLE 45.--Percentage distribution of separate early and later grade samples on academic categories

		nner-City		00	ter-City		Ē	ner-City		0-	ter-City	
Acadamic	ŭ	ar iy u auc		J			ב	Ler Grad		La	ter grade	
Related		Interest			Interest			Interest			Interest	
Interests	Low	Ave.	HIgh	Low	Ave.	HIgh	Low	Ave.	High	Low	Ave.	High
Social Science	21	69	10	4	67	29	17	57	26	Ξ	67	22
Physical Science	7	38	55	11	46	37	13	57	30	Ξ	67	22
Biological Science	7	73	20	42	38	20	26	70	4	Ξ	72	17
English	14	69	17	œ	63	29	17	57	26	11	78	Π
Foreign Language	21	76	m	21	67	12	35	57	80	39	50	=
Ma thema tics	2	86	7	29	54	17	4	74	22	Ξ	61	28
Industrial Arts	17	76	7	29	5	17	26	52	22	22	72	9
Home Economis	14	59	27	0	١Ź	29	6	43	84	28	33	39
Business	14	59	27	17	67	16	26	57	17	17	56	27
Fine Arts	17	62	21	80	62	13	26	65	σ	0	78	22
Music	17	17	12	25	91	29	30	52	18	Ξ	67	22
Sports	28	8 †	24	38	1 6	16	17	61	22	18	56	26
Reading	17	62	21	œ	75	17	4	65	31	9	56	38
Manipulative	m	38	59	17	42	ц ц	0	39	61	9	4	50

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