

## INFORMATION TO USERS

This dissertation was produced from a microfilm copy of the original document. While the most advanced technological means to photograph and reproduce this document have been used, the quality is heavily dependent upon the quality of the original submitted.

The following explanation of techniques is provided to help you understand markings or patterns which may appear on this reproduction.

1. The sign or "target" for pages apparently lacking from the document photographed is "Missing Page(s)". If it was possible to obtain the missing page(s) or section, they are spliced into the film along with adjacent pages. This may have necessitated cutting thru an image and duplicating adjacent pages to insure you complete continuity.
2. When an image on the film is obliterated with a large round black mark, it is an indication that the photographer suspected that the copy may have moved during exposure and thus cause a blurred image. You will find a good image of the page in the adjacent frame.
3. When a map, drawing or chart, etc., was part of the material being photographed the photographer followed a definite method in "sectioning" the material. It is customary to begin photoing at the upper left hand corner of a large sheet and to continue photoing from left to right in equal sections with a small overlap. If necessary, sectioning is continued again — beginning below the first row and continuing on until complete.
4. The majority of users indicate that the textual content is of greatest value, however, a somewhat higher quality reproduction could be made from "photographs" if essential to the understanding of the dissertation. Silver prints of "photographs" may be ordered at additional charge by writing the Order Department, giving the catalog number, title, author and specific pages you wish reproduced.

### University Microfilms

300 North Zeeb Road  
Ann Arbor, Michigan 48106  
A Xerox Education Company

70-7704

HAYDEN, Jay Gary, 1936-  
CHARACTERISTICS OF ELEMENTARY SCHOOL PUPILS  
PERCEIVED AS POSSIBLE REFERRALS TO AN  
ELEMENTARY SCHOOL GUIDANCE COUNSELOR.

Iowa State University, Ph.D., 1969  
Education, guidance and counseling

University Microfilms, A XEROX Company , Ann Arbor, Michigan

CHARACTERISTICS OF ELEMENTARY SCHOOL PUPILS  
PERCEIVED AS POSSIBLE REFERRALS TO  
AN ELEMENTARY GUIDANCE COUNSELOR

by

Jay Gary Hayden

A Dissertation Submitted to the  
Graduate Faculty in Partial Fulfillment of  
The Requirements for the Degree of  
DOCTOR OF PHILOSOPHY

Major Subject: Counseling and Guidance

Approved:

Signature was redacted for privacy.

In Charge of Major Work

Signature was redacted for privacy.

Head of Major Area

Signature was redacted for privacy.

Dean of Graduate College

Iowa State University  
Of Science and Technology  
Ames, Iowa

1969

## TABLE OF CONTENTS

	Page
INTRODUCTION	1
REVIEW OF LITERATURE	12
METHOD OF PROCEDURE	45
FINDINGS	59
DISCUSSION	88
SUMMARY	104
BIBLIOGRAPHY	113
APPENDIX A	123
APPENDIX B	125
APPENDIX C	128
APPENDIX D	130
APPENDIX E	132
APPENDIX F	134
APPENDIX G	137
APPENDIX H	140
APPENDIX I	143

## LIST OF TABLES

Table		Page
1	Scores of the t-test for ability	60
2	Scores of the t-test for reading achievement	62
3	Scores of the t-test for arithmetic achievement	64
4	Scores of the t-test for adjustment	67
5	Chi square values for sex of the student	70
6	Referrals by grade levels	72
7	Chi square values for grade level	73
8	Referrals by social class for primary group	74
9	Chi square values for social class	75
10	Referrals by social class for intermediate group	75
11	Referrals by family constellation for primary group	77
12	Chi square values for family constellation	77
13	Referrals by family constellation for intermediate group	78
14	Values of r at .05 and .01 levels of significance	79
15	Values of correlations of selected variables	80
16	Reasons written for referral for primary group	84
17	Variables checked as problems for primary group	85
18	Reasons written for referral for intermediate group	86
19	Variables checked as problems for intermediate group	87

## LIST OF TABLES (continued)

Table		Page
20	Means and standard deviations for research variables for primary group	131
21	Means and standard deviations for research variables for intermediate group	133
22	Correlation matrix for the variables for the primary experimental group	135
23	Correlation matrix for the variables for the primary control group	138
24	Correlation matrix for the variables for the intermediate experimental group	141
25	Correlation matrix for the variables for the intermediate control group	144

## INTRODUCTION

The elementary school guidance counselor is a relatively unknown quantity in most elementary schools today. His presence may be totally lacking, as is the case in most schools; his function in the schools may not be understood by classroom teachers, or his role may not be defined.

The actual role and responsibilities of the elementary school guidance counselor are still being formulated. It has been stated that the counselor must consider the "whole child": the individual's intellectual, emotional, personal-social, and achievement characteristics. These factors, and others, must be interpreted as part of the developmental approach to elementary school guidance and its focus on all elementary school children.

The actual job of the elementary school guidance counselor, however, oftentimes is nebulous. Not only are his role and responsibilities frequently not clearly delineated to the counselor himself, but classroom teachers many times seem to have difficulty in determining if a student should be referred to a counselor.

The basic purpose of this research was to determine some of the variables viewed by teachers as most indicative of the individual student's need of being referred to an elementary school guidance counselor. Results of the study can help indicate the type of training needed by the elementary school

guidance counselor, and can help to indicate the type of child with whom the teacher would like assistance.

### Theoretical Basis for the Study

Peters, Shertzer, and Van Hoose, in their book, Guidance in Elementary Schools (71), stated that the purposes of the elementary school form the framework for the guidance functions. They wrote that guidance in the elementary school must be consistent with the educational aims and objectives of the elementary school. It also must specifically fit into the curriculum content of the elementary school, thereby serving all children.

Smith and Eckerson (84) wrote of guidance in elementary schools as usually being interpreted as a service to help all children make maximum use of their abilities, both for themselves and for society. The major importance they placed on the service was the early identification of the student's intellectual, emotional, social, and physical characteristics. Other important aspects to them included development of talent, diagnosis of learning difficulties, and early use of available resources.

In their preliminary statement, the Joint Association for Counselor Education and Supervision-American School Counselors' Association Committee on the Elementary School Counselor stated that guidance for all children is an essential component of the total educational experiences in the

elementary school. They stated that the teacher has many responsibilities in the area of guidance, but elementary school guidance counselors are necessary if the elementary school is to provide the best possible education for each child in terms of his own particular abilities and his own developmental needs and processes.

The elementary school guidance counselor would work as a team member of the elementary school staff. The ACES-ASCA Committee felt he would be "educationally oriented", highly knowledgeable in the area of child growth and development, with a broadly-based, multi-disciplinary background in the behavioral sciences and a high degree of competence in human relations.

Ability, achievement, adjustment, sex of the child, grade placement, social class, and the family constellation all must be considered capable of influencing the life style of the elementary school child. These variables can affect a child's success in the elementary school. Therefore, this research was undertaken to study the type of child referred to an elementary school counselor. The child was evaluated in relation to the above variables.

#### Statement of the Problem

The aim of this study was to determine if significant differences existed in certain characteristics between children perceived as those who should be referred to the

elementary school guidance counselor, if one were available, and those not perceived as ones to be referred. These characteristics were ability, reading achievement, arithmetic achievement, personal-social adjustment, sex of the student, grade placement of the student, social class, and family constellation. Evaluations were made at two levels: the primary level, grades one through three; and, the intermediate level, grades four through six. The results of this research depended partially on the attitudes of the individual classroom teachers toward elementary school guidance and counseling. The results also depended on the depth of understanding the teachers had of the children in their classrooms.

By recognizing these characteristics of elementary school children, school personnel can better understand and provide for the type of child who will use the services of an elementary school counselor on a referral basis.

#### Definition of Terms Used in the Study

Ability: Ability is defined as the power to perform a designated responsive act. It was measured by the Lorge-Thorndike Nonverbal Intelligence Test, or the Cognitive Abilities Test. Cronbach (18) referred to ability as the measure of maximum performance of the subject, or how well a person can perform at his best. It also can be interpreted as being able to perceive and understand relationships, such as logical, spatial, verbal, numerical, and recall of associated

meanings. In this research, the terms intelligence quotient scores and IQ scores are often used as ability.

Achievement: Achievement refers to the amount a pupil has learned or acquired in one or more subject fields or in the general aspects of schooling. It was measured by the Wide Range Achievement Test, Reading and Arithmetic sections. Cronbach (18) mentioned that achievement is the performance of persons who have been given training in a task.

Reading achievement: Reading achievement is the performance of the individual in reading after he has been given instruction in the task. The Wide Range Achievement Test score was used to measure reading achievement. Ausubel (3) stated that reading is a matter of learning to perceive the potential meaning in written messages and then relating the perceived potential meaning to cognitive structure so as to comprehend it. In this research, reading achievement was measured through recognizing and naming letters and pronouncing words.

Arithmetic achievement: Arithmetic achievement, as used in this dissertation, refers to the performance in arithmetic after the child has been given instruction in the task of computation by the use of numbers. It was determined through the score on the Wide Range Achievement Test. Jastak (42) spoke of arithmetic achievement as involving counting, reading number symbols, solving oral problems, and performing written computations.

Personal-social adjustment: Personal-social adjustment is defined as the manner and effectiveness with which the individual meets his personal and social problems. Level of adjustment was derived from the score on the California Test of Personality. It involves the individual's mental, emotional, and temperamental make up and how he has learned to deal with life in general and problems in particular. Personal-social adjustment was defined in the California Test of Personality Manual (55) as more or less specific tendencies to feel, think, and act.

Elementary school guidance and counseling: Elementary school guidance and counseling, as defined by the Joint ACES-ASCA Committee on the Elementary School Counselor, is a service to elementary school children performed by a member of the school staff who is defined as a counselor. The counselor performs three major responsibilities: counseling, consultation, and coordination. He will counsel and consult with individual pupils and groups of pupils, with individual teachers and groups of teachers, and with individual parents and groups of parents. He will coordinate the resources of the school and community in meeting the needs of the individual pupil. Elementary school guidance and counseling involves working with normal children and their developmental needs as individuals and with atypical children and their specific needs. Emphasis is placed on the total child and his educational, vocational, and personal-social needs.

Family constellation: Family constellation, as used in this research, refers to the marital status of the parents of the child. It refers to whether the marriage is intact or broken through death or separation, or if there has been a remarriage of the parent with whom the child is living.

Grade placement: Grade placement is used to indicate the actual school grade, namely grades one through six, in which the child is placed.

Social class: Social class, according to Centers (10), is the totality of individuals whose occupation, economics, rights and privileges, and duties are closely similar. Havighurst and Taba (37) defined social class as a group of people who think of themselves as belonging to the same social level and who generally are willing to associate intimately with one another. Warner, Meeker, and Eells (99) observed that class varies from community to community. Social class is a system by which people are put into superior and inferior positions to each other. In this research, social class was measured by the father's occupation and determined by its level on the Warner Index of Status Characteristics. This index is usually divided into upper class, middle class, and lower class.

Student referred to an elementary school guidance counselor: A student referred to an elementary school guidance counselor is a student who would be referred to the counselor

if a counselor were available in the elementary school. In this study, the student was referred by the teacher for the experimental group.

#### Scales or Instruments Used in the Research

The following tests were administered in this study: The Lorge-Thorndike Intelligence Test, Form 1 of the Nonverbal Battery, or the Cognitive Abilities Test, Primary 2, Form 2 level; The Wide Range Achievement Test, Level 1 of the Reading and Arithmetic sections; and the California Test of Personality, Primary or Elementary level. Other information also was gathered for each child, including the child's sex and grade placement. Determination of whom the child was living with was taken from the child's cumulative record or teacher information. Social class position was determined from the Revised Scale for Rating Occupations by Warner, Meeker, and Eells (99). The father's occupation was used to determine this. Each teacher indicated why she would refer the child to the elementary school counselor and rated the children in both the control and experimental groups in the areas covered in the hypotheses.

The Lorge-Thorndike Test is considered to be a test of abstract intelligence. Form 1 of the test was administered. The 1964 Multi-Level Edition, a group test, provides a Verbal and Nonverbal Battery for grades three through twelve. Only the Nonverbal Battery was used for this research to minimize

the importance of printed words and to be as different from achievement testing as possible. The Nonverbal Battery, according to the manual, uses items which are either pictorial or numerical. It contains three subtests involving pictorial classification, pictorial analogy, and numerical relationships. The tests in this battery yield an estimate of scholastic aptitude not directly dependent upon ability to read. For this research, Level A was administered to grades three and four, and Level C was administered to grades five and six.

The Cognitive Abilities Test, copyrighted in 1968, is considered the downward extension of the Lorge-Thorndike Multi-Level Intelligence Tests. It is a group test which uses pictorial materials and oral instructions. The four short subtests measure oral vocabulary, relational concepts, multi-mental concepts in which the child determines the one that doesn't belong, and quantitative concepts. For this research, Form 2 of the Primary 2 level was administered to grades one and two.

The Wide Range Achievement Test, 1965 revised edition, was used to measure achievement in reading and arithmetic. The reading test is an individually-administered test of word recognition, involving recognizing and naming letters and pronouncing words. The arithmetic test was administered on a group basis and involved counting, reading number symbols, solving oral problems, and performing written computations. Level 1 was used for all students.

The California Test of Personality (95), is organized around the concept of life adjustment as a balance between personal and social adjustment. Personal adjustment here involves self-reliance, sense of personal worth, sense of personal freedom, feeling of belonging, withdrawing tendencies, and nervous symptoms. Social adjustment involves social standards, social skills, anti-social tendencies, family relations, school relations, occupation relations, and community relations. The Primary Series was administered to grades one through three, and the Elementary Series was administered to grades four through six. The child indicates by yes or no whether each statement on the test is true about him and his feelings. Many test reviewers, such as Cronbach (18), have raised questions or objections about the test; others seemed to think it is a valid test. The test was used in this research because the writer could not find another suitable test to objectively measure adjustment in grades one through six. The examiner also felt that the test would satisfactorily discriminate adequate adjustment from poorer adjustment.

Warner, Meeker, and Eells (99) stated that vocation or occupation is probably the most powerful determinant of social position. Because of this, the social class of the subjects in the research was determined by the father's occupation. The classification of occupations was based upon

Warner et al. Index of Status Characteristics. It is an index of socio-economic factors and social class position. It is based on two propositions: that economic and other prestige factors are highly important and closely correlated with social class; and, that these social and economic factors must be translated into social class behavior acceptable to the members of any given social level of the community.

Warner's scale is widely accepted. In addition to the Warner et al. classification of occupations into social class positions, Hollingshead's classification of occupations into an occupational scale was also used for vocational placement. Both systems involve a seven position scale of social class placement.

#### Outline of Study

The study will be divided into five chapters. Chapter 2 will discuss related literature. Chapter 3 will discuss the method of procedure. Chapter 4 will present the findings of the study. Chapter 5 will discuss the findings. Chapter 6 will summarize the study.

## REVIEW OF LITERATURE

The variables used in this study included ability, reading achievement, arithmetic achievement, personal-social adjustment, sex of the student, grade placement, social class, and family constellation.

Equally important to these variables are the teacher's perception of and attitude towards the student's behavior at school. The teacher is an important part of the guidance program. Research by Stewart (86) indicated that guidance attitudes by teachers were positively related to general attitudes toward teaching. Hoyt (39) wrote that the classroom teacher must be viewed as a professional co-worker with the guidance counselor. He stated that the teacher works in guidance by

identifying students in need of counseling, in student appraisal procedures, in increasing student self-understanding and understanding of environmental opportunities through classroom activities, and in follow-through of counseling carried out by the school counselor in terms of environmental manipulation within the classroom.

Hoyt and others have emphasized the need for the teacher to understand pupils and to identify those who could profit from guidance services. Many student problems are related to the areas mentioned in the first paragraph of this chapter. Often the problem results from a combination of factors, rather than specific factors. This research will consider each area separately and each area in relation to other areas.

## Variables Affecting the Student

### Ability

Ability, or intelligence, is related to academic performance and success. Usually, the higher the ability a child has, the better he will do in school. The lower the ability, the more difficulty he will have in school achievement. Ability typically is measured through intelligence tests. Stroud (89) emphasized that ability tests measure what a given child does on a given day on a given test. Test scores of ability do change, but usually not significantly.

Research by Wiener et al. (106) indicated that intelligence changes are related to social class, emotional adjustment, and possible minimal brain damage. They also stated that more subjects with increasing intelligence scores were of premature birth, came from a superior social class background, and had a more constant emotional adjustment. They suggested that the data support the idea that childrearing conditions of the lower class might be emotionally traumatic as well as less stimulating.

Many other studies have agreed that cultural deprivation is related to lowered mental ability scores. Cutts (19) emphasized the importance of verbal handicaps in depressing ability. Jones (43) reviewed a large number of studies and he suggested that ability changes are correlated with social class.

Ability also seems to be correlated with school adjustment. Those in school who meet success because they are capable students less frequently become discipline problems in school. Wiener et al. (106) mentioned studies by Honzik, Kagan, and Sontag which are among the few which have correlated intelligence changes with personality traits or parental behavior.

In summary, ability or intelligence is related to school performance. Usually the higher the ability level, the better the school performance. How the child uses this ability can be affected by other variables. Different types of problems also can affect how closely a child can function at his ability level.

### Achievement

Underachievement and lack of achievement have been a major concern of educators and researchers for many years. Many suggestions have been made to deal with this problem. Waetjen (97) stated that information on underachieving youngsters and school dropouts indicated that the elementary school cannot disclaim involvement. He stated that the elementary school needs to be concerned about dropouts and how to prevent them from becoming pre-dropouts, and that elementary school guidance and counseling has a definite role in this area.

Numerous studies have related achievement to study habits and attitudes. Probably both, achievement and study habits, are the cause and the effect. Poor achievement can lead to poor study habits and poor study habits can lead to poor achievement.

Achievement test results in both reading and arithmetic consistently indicated that children with high levels of anxiety tended to perform poorer than children with lower levels of anxiety, according to a study by Stevenson and Odom (85). They also indicated that children of fathers with higher class level occupations tended to have lower anxiety scores.

A study by Taylor (91), in which he reviewed literature pertaining to achievement, named a number of factors which relate to level of achievement. These factors were: the degree to which the student is able to handle his anxiety, the value the student places on his own worth, the ability to conform to authority demands, student acceptance by peers, minimum conflict over independence-dependence, activities centered around academic interests, and the realism of goals. Other important factors in achievement would seem to be ability level, level of readiness, and maturity.

Ruth Strang (88) wrote that most of our guidance problems are related to, if not caused by, failure in reading. She stated that guidance is a process of helping individuals

through their own efforts to discover and develop their potentialities for both personal happiness and social usefulness. To her, problems and failures in reading carry over into educational and vocational guidance problems, emotional disturbances, premature school leaving, and delinquency. The problems tend to multiply. Reading skill, however, is just one factor in the total development of the child. Isolated factors have to be considered as one in a multitude of factors which form an individual's life style.

Brunkan and Shen (6) found a relationship between quality of reading and reading rate, and good adjustment and achievement. Difficulty in reading tends to generalize to other areas of achievement. Grams (33) wrote that the frustration of failure in school often generalizes to poor achievement and resulting problems.

Research by Jastak and Jastak (42) seemed to indicate that emotional factors are mostly unimportant as a primary cause of reading disability. Conversely, Lindgren (54) wrote that several studies have indicated that reading problems are often caused by emotional problems. Reading disability can cause conflicts and behavior problems.

Arithmetic achievement seems dependent upon ability, previous understanding of background materials, maturity, and adjustment. Cleveland and Bosworth (13) stated that research indicates a positive correlation between arithmetic achievement

and a psychologically healthy personality. They also found little difference between sexes in arithmetic achievement. To them, personality factors were important in arithmetic achievement.

Montague (64) found arithmetic concept differences among kindergartners from high and low social class backgrounds. Lower class children tended to score lower and more heterogeneously in knowledge of these concepts.

In summary, achievement is not an entity unto itself. Achievement, or lack of it, depends on many interrelated factors. Research has indicated that reasons for poor achievement can be multiple and various. Some of the causes of poor achievement mentioned were low ability, specific learning disabilities, cultural deprivation, and poor adjustment. Difficulty in achievement can cause other problems. For example, poor achievement can contribute or result in poor self concepts, behavior problems, and other emotional problems. Poor achievement often precipitates poor adjustment.

### Adjustment

The ways children use to overcome difficulties, relieve frustrations, and resolve conflicts range from constructive to destructive actions. The child who uses constructive methods functions adequately within his group. Children also develop consistent ways of dealing with problems which they tend to use throughout their lifetimes. Schools need

to be aware of the behavior patterns children use to deal with their problems.

The elementary school years are critical in the formation of the child's personality -- his basic attitudes, goals and values. During this time, the child begins to develop a concept of himself.

This self-concept is an important determinant of school success. The environment of the school and how the child succeeds in school helps determine this self-concept, which, in turn, affects the child's own social adjustment. For example, research by Gill and Spilka (30) reported that achievers manifest less hostility and more social maturity, intellectual efficiency, and conformity to rules.

Adjustment is related to school achievement. Much research, according to Williams and Cole (107), showed positive correlations between self-concept and academic achievement. However, self-concept and intellectual ability correlations tend to be less. Levy (52) indicated that an individual views his school the same way he views himself. Achievers tend to have better personal and social adjustments than underachievers.

Adjustment seems to have a far-reaching effect. Williams and Cole (107) illustrated this when they found significant positive correlations between self-concept measures and concept of school, social status, emotional adjustment,

mental ability, reading achievement, and arithmetic achievement. The cause and effect probably is multiple because variables continually affect and react with other variables.

Matlin and Mendelsohn (61) emphasized that what one thinks of himself and what he thinks of others are consistent. If he sees himself in a positive way, he tends to look at others with a positive attitude. Their research with the California Test of Personality showed a high correlation between personal and social adjustment scores; that is, how a child sees himself and adjusts to others. Perhaps in their research, the two subtests were measuring the same thing, that the two variables are consistent, but it seems one looks at others as he looks at himself.

A number of researchers have found that parents greatly influence the personalities of their children. Reviews by Frankiel (27) and Sears (82) also indicated that the achievement motivation can be attributed to the relationship established between the child and the parents.

According to Ausubel (3), several lines of evidence indicated that poor personality adjustment was associated with inferior academic achievement. Factors which could be involved include minimal brain damage, elementary school achievement correlated negatively with anxiety, and severe withdrawal reaction. These would render any kind of long-term learning impossible. Both factors, adjustment and achievement, work in both directions.

Stevenson and Odom (85) studied the impact of anxiety on adjustment. They found that verbal ability, teacher's ratings, and achievement test scores correlated negatively with anxiety level. They also feel that anxiety has its most disruptive effect on performance of tasks involving verbal processes.

Matlin and Mendelsohn (61) related teachers' attitudes and adjustment. They concluded that personality variables may indirectly affect school grades at the elementary level because teachers tend to base grades on adjustment as well as achievement.

In summary, a child's adjustment is affected by what he thinks of himself and what others think of him. His successes, or lack of successes, parental concern, and his ways of dealing with problems affect his total adjustment. What the child thinks of himself often generalizes to what he thinks of others and how he faces his tasks. Adjustment affects most areas of his life.

### Sex differences

Sex differences between boys and girls in the area of general intelligence tend to be negligible. Differences between sexes in particular abilities and in achievement, however, tend to be larger and more significant.

Baller and Charles (4) reported that differences in maturity and growth rate between boys and girls are present

from birth onward. By junior high school, the differences are often great. For example, girls enter a period of acceleration in growth at about nine years of age, about two years earlier than boys. As a group, girls are more mature than boys when they start to kindergarten. Since differences in rate are greater within each sex than between sexes, little notice is given the difference in the lower grades. These within-sex differences frequently have a greater effect on behavior than between-sex differences, but there is a difference in rate of development between boys and girls.

A number of studies have found two to three times as many boy underachievers as girl underachievers. Boys also seem to have more adjustment or emotional problems and discipline problems than girls have. Some researchers attribute much of this to "over-feminization" of our schools. Typically there are few, if any, male teachers in the elementary grades. Yet differences in rate of development do have an effect.

Girls tend to achieve better than boys. Carmichael (9) wrote that school grades almost universally favor the girls. Achievement testing indicates girls are better in language skills and boys tend to be better in science and arithmetic. Wyatt (109) reported that boys, as a group, are behind girls in reading achievement in the early years of school. He went on to state that boys tend to catch up with girls as they progress through school. Despite this, about three-fourths of the children referred to remedial reading clinics are boys.

Research by Gates (28) in the elementary grades indicated that girls are better in reading speed and vocabulary. Boys' scores in vocabulary and comprehension vary more than girls' scores do, but there was no significant difference in reading comprehension between boys and girls. Powell et al. (73) conducted a study in reading achievement where grade placement was held constant. They found no significant differences between boys and girls in this case. They pointed out that frequently boys will be older than girls in a grade. Prescott (75) found no differences in achievement between boys and girls. He found a slight superiority of girls over boys when chronological age was held constant.

Research seems to indicate that some differences do exist between boys and girls in areas important to school success, but not everyone agrees to the magnitude of these differences. Cardon (8) summarized some ideas on this when he stated that perhaps lower achievement for boys could be attributed to society. Perhaps there are conflicts between the expectations of the school and what the boy does to work toward manhood. Perhaps teachers hold less expectations for boys than for girls in achievement. Perhaps there is "over-feminization" of the school. Within-group differences are greater, but girls do tend to mature faster and boys tend to have more problems in school.

### Grade placement

Elementary school children can have difficulty in school because they are too young and immature for their grade. Many of these children have summer birthdates, making them barely old enough to be in the grade. This does not mean that all young children have difficulty, but that those who are young have difficulty more frequently. Their learning ability tends to be consistent with their maturity level.

Those children who have difficulty in school in such areas as ability, achievement, and adjustment often have to repeat grades. Frequently a much larger proportion of children who have difficulty in the above areas are in grades below that which is expected on the basis of chronological age. One such study reporting this was by Stone and Rowley (87).

Types of problems often vary in importance at different grade levels. Joseph Rice (77) evaluated reasons why elementary children were referred for pupil personnel services. He reported that primary school children were shown to be referred primarily for intellectual problems, particularly involving low ability. Among primary children most other types of problems were mentioned, but not as many, nor as consistently, as at higher grade levels. Intermediate pupils were largely referred for intellectual problems, but these included more perceptual difficulties complicated by

underachievement. More children were referred because of social problems, especially involving anti-social activities.

Grade placement can have an effect on a child's success in school and the type of problems he might have. Young and immature children can find a grade too difficult. Students of low ability and low achievement are often in grades below their chronological age level.

### Social class

Almost all American communities have social classes. Almost all American individuals are affected by class, both consciously and unconsciously; for instance, social class controls many of the marriage, personality, and training habits people have.

Schools do not escape the operations of social classes. Fifth and sixth grade children have become class oriented and this orientation becomes stronger with age. The course of studies and outside activities that a student follows can indicate the class to which he belongs. A study by Warner and Gross (98) found that teachers' rating of personality development of children from different class levels statistically corresponds very definitely to the class position of the child.

Stroud (89) wrote that social class differences are associated with school adjustment in many ways. There appears to be a positive relationship between social class and such variables as intelligence test scores, academic achievement,

school readiness, motivation in school, participation in extra-curricular activities, and continuation in school. It easily could be that a combination of factors, rather than one specific factor, distinguishes the differences between social classes.

Studies by Coleman and Brim in (59) could not adequately explain relationships between social class and such variables as intelligence and achievement. Research by McDonald (59) questioned the assumption that social class is related to aptitude, achievement, or motivation. Most studies do reveal some relationship, however. Ausubel (3) stated that research tends to show differences in ability between different social classes, but that there is controversy as to whether these differences are basically hereditary or environmental. Other studies by Kranzler et al. (51), Frankel (26), Clark (12), Neale and Proshek (65), Geisman, Laserte and Ayres (29), and Sybouts (90) all see relationships between social class and school variables.

Evidently social class variables either affect or are related to the child's success in school, his readiness, achievement, and attitudes.

#### Family constellation

Children who live in happy homes have a much better chance to grow up emotionally and psychologically happy.

Quite logically this general well-being will carry over with the child in his success and adjustment in school.

Most often when parents are in conflict the child is subjected to insecurity, conflicting loyalties, inconsistent discipline, and unbalanced identification complicated by social stigma. This places the child in a difficult position.

Sometimes divorce is better for the children than the alternative of living in an unhappy home with both parents. Research has indicated that when children are compared from happy unbroken homes, unhappy unbroken homes, and broken homes, the children from unhappy unbroken homes frequently exhibit the poorest adjustment. This was particularly true in the areas of family relationships and delinquency.

These unhappy unbroken homes are sometimes referred to as "empty shell" families; the people carry out their formal duties toward each other, but they do not give understanding, affection, or support. They also tend to communicate poorly.

Divorce can create the possibility of a danger of excessive intimacy with one parent rather than proper balance in love and identification with both parents.

Many studies have also shown that delinquency is associated with broken homes and unhappy homes. Even if social class is held constant, delinquency rates are higher for

broken than for unbroken homes, and higher for children of homes broken by separation or divorce than for homes broken by the death of a parent, according to Goode (32).

Glueck (31) made an extensive study of juvenile delinquency and found that delinquents are slightly more likely to come from divorced homes than from intact homes. Children from widowed or widowered homes are almost 50 per cent more likely to be delinquent than those from intact homes. Children from separated homes are over-represented still more.

Role failure within the home has a more destructive impact on children than the withdrawal of one spouse. Homes with continued marital conflict or separation seem to cause adolescents to have more personal adjustment problems than homes broken by divorce or death.

Being a stepchild may create special types of problems for the child. The stepchild may suffer rejection, jealousy, discrimination, and overdomination. Much depends upon age, personality, and prior experiences. Adjusting to this situation can be very difficult. However, a stepparent can be a fine person who provides all that a child could want from a natural parent.

Another special family situation is placing the child in a foster home. Again, adjustment can be difficult.

There is great difference between homes broken by divorce and those broken through the death of one parent.

Perhaps the biggest factor is the type of memories that remain with the child.

The mother-deceased family is one in which the husband becomes both the father and the mother. How much children suffer in this situation often depends on the age of the children at the death of their mother. Young infants and children well-launched into grade school probably suffer less than the pre-school child. Much depends on the mother substitute. In this case, the boy loses the love interchange with a person of the opposite sex, perhaps detrimental to later love experiences. For the girl, she loses the introduction of feminine roles, perhaps detrimental to proper age-sex typing.

The father-deceased family presents some different types of problems. One of the biggest ones is the loss of the father's income. Again the death of the father can disturb normal parent-child interaction. The boy might fail to develop masculine roles; the girl loses chances for the exchange of love with a person of the opposite sex as a preliminary to later love experience in courtship and marriage.

In summary, it is obvious that the happy, unbroken home offers distinct advantages to the child. It makes growing up much easier because problems of adjustment through the loss of a parent or parents are not encountered. Different types of family disturbances can present different types of

problems. The effect on the child depends on his previous experiences and how well he is able to handle the new crisis.

### Teachers' Attitudes

Elementary school guidance counselors must meet the varied expectations of many people, including parents, students, administrators, and teachers. How the teacher perceives the elementary school guidance program and the rapport between the counselor and the teacher affect the quality of the program.

The teacher's perception of the program and her relationship with the counselor provide her a frame of reference about what the program is to do. Through this frame of reference she decides what type of student problems to bring to the elementary school counselor.

Dreikurs (23) wrote that statistical evidence is lacking on the extent that teachers understand children because ideas and theories are lacking in this area. He added that a teacher has to understand a child and his goals in order to work with the child effectively. It is also important to remember that children's perceptions of their teacher's feelings toward them correlate positively and significantly with their self-perceptions according to Davidson and Lange (20).

There have not been many studies on what kinds of problems the teacher would refer to the elementary school guidance counselor. Past studies can give indications on how teachers view the guidance program.

One of the oldest studies in this area is one conducted by Wickman (105) in 1926. He found that the majority of teachers considered such extrovertive acts as whispering, defiance, profanity, moving about, lack of courtesy to those of the opposite sex, destroying school property, and lying as the more serious symptoms of maladjustment. The teachers tended to disagree with mental hygienists who considered unsocialness, suspicion, depression, sensitiveness, and fearfulness as evidence of maladjustment. Teachers rated these as being relatively harmless and even desirable forms of adjustment to school.

Hunter (41) replicated this research in 1955, finding more agreement between teachers' and mental hygienists' ratings. Teachers again rated politeness and obedience as criteria of good adjustment and not being indicative of maladjustment.

The ten most serious behavior problems of the Wickman and Hunter studies were:

Wickman	Hunter
1. Heterosexual activity	Stealing
2. Stealing	Destroying school materials
3. Masturbation	Truancy
4. Obscene notes, talk	Cruelty, bullying
5. Untruthfulness	Unhappy, depressed
6. Truancy	Impertinence, defiance
7. Impertinence	Untruthfulness
8. Cruelty, bullying	Unreliableness
9. Cheating	Disobedience
10. Destroying school materials	Heterosexual activity

In 1963 Sherwin Radin (76) categorized the types of behavioral concerns of teachers and others. His categories were: (1) academic problems of underachievement, overachievement, erratic or uneven performance; (2) social problems with peers, siblings, including aggressive, submissive behavior; (3) conflicts with authority figures including teachers and parents, such as defiant or submissive behavior; (4) overt behavioral manifestations such as tics, nail-biting, thumb-sucking, toilet problems, exhibitionism, phobias, fire-setting, speech peculiarities, and other bizarre behaviors. In this study, there was a broader range of problem areas than in the previous studies listed.

Joseph Rice (77) made a study of types of concerns referred to a central guidance agency composed of both counselors and psychologists. He examined these by grade levels, kindergarten through grade twelve. The study indicated that teachers can be capable of diagnosing students' problems to the extent that they can express their findings in suitable language. Six types of behavioral concerns the teachers consistently referred were: (1) emotional problems, such as anxiety, hyperactivity, immaturity, impulsivity, moodiness, and withdrawal; (2) intellectual disabilities, such as short attention span, low ability, defective memory, perceptual malfunctioning, poor study habits, underachieving, and inability to understand; (3) motivational inadequacies, including such

aspects as lack of ambition, poor or negative attitudes, frustrations, lack of interests, and low levels of aspirations; (4) moral defects, such as lying, obscenity, psychosexual indiscretions, stealing, and undeveloped values; (5) physical ailments, including chronic illness, poor health habits, orthopedic handicaps, and psychosomatic manifestations, and (6) social maladjustment, including aggressive anti-social behavior, family conflicts, isolation, and uncouth behavior. Rice's study found that pupil problems could be classified into these categories.

In the Rice study, pupils tended to be referred for different reasons at different grade levels. Intellectual disabilities and social maladjustment seemed to be the most common problems at any grade level. Problems of moral defect and physical ailments tended to be less common problems at all grade levels except for junior high school where pupils showed more moral problems. Problems of emotional reactions also tended to be constant at all grade levels.

McDougall and Reitan (60), in surveying principals regarding elementary school guidance functions, found that principals felt student counseling and parent consultation were the most important functions. The rank order of the five most important activities were: counseling students with personal and social problems, consulting parents about student problems, counseling students with academic and education problems, counseling severe discipline problems, and student appraisal.

The majority of principals felt emphasis should be placed on working with individual students in a preventive nature.

In 1964 a study by Russell and Willis (80) reported that the intermediate school teachers in their study understood the role of guidance after the program had been in operation for three years. The teachers also frequently sent students to the guidance office for disciplinary action. The authors reported a significant difference of opinion among teachers as to the role of guidance concerning discipline; many teachers felt counselors over-protected students. The authors also indicated that a large minority of teachers did not support the guidance program.

Elementary school teachers viewed elementary school guidance services as very effective in a California study by McCreary and Miller (58). The teachers surveyed in this study wished the services to be expanded. Counselors who answered the questionnaire in this study reported they spent 50 per cent of their time working with students, 17 per cent working with teachers, 10 per cent with administration, 12 per cent with parents, and 11 per cent doing other duties. Services received by teachers included individual testing of pupils, individual counseling of pupils, help with classroom problems, parent conferences, administration of group tests, interpretation and evaluation of test results, teacher-counselor conferences, and taking disciplinary

action. For the most part, teachers could not name any other services they needed from the counselor, but they did desire more of the existing services.

Whetstone (103) reported teachers and counselors had different perceptions of students. The counselors seemed to perceive the ideal student as more flexible in his relationships than teachers did; teachers seemed to desire more rigidity and conformity. This study would tend to agree with previously mentioned studies on what constitutes serious student problems.

A study by Rippee, Hanvey and Parker (78) pointed out that teachers' perceptions changed as counseling services had been in a school for a period of time, seeming to indicate that teachers understand the role of guidance better as they become accustomed to the services. The personality of the counselor also could affect how he is perceived.

Surveying teachers can indicate what they feel should be the most important guidance services. Brown and Pruett (5) did this in Indiana. The respondents in their study felt there was a need for guidance in the elementary school and that it logically should be the responsibility of an elementary school counselor. The teachers felt the counselor should work primarily with students as individuals and in small groups, do research, and organize and administer the guidance program. Teachers visualized their role as that of

identifying needs and problems, making referrals, working with the home, and working with student learning difficulties.

The majority of teachers in this study felt counselors should provide counseling for students who are disciplinary problems, counsel children with learning and adjustment problems, conduct group sessions on social and emotional adjustment, survey pupil needs and interests, confer with children on future plans, conduct research, counsel on sociometric results and peer adjustment, conduct follow-up studies, and release guidance news.

Many teachers felt counselors should conduct case studies on learning, adjustment and environment problems, schedule special classes, do diagnostic work, meet with small groups of children with common problems, conduct case conferences, provide in-service education, discuss vocational and educational plans with groups, develop local test norms, procure and evaluate occupational information, explain sociogram results to faculty and students, and administer personal data blanks.

In summary, it appears that teachers tend to view as their primary problem, that which creates a problem in their classrooms. For example, teachers frequently seem to desire help with discipline problems. In the past, they have tended to overlook withdrawn behavior, but not aggressive behavior.

Today's teachers seem to have a broader view of types of problems than did teachers in the Wickman study over forty

years ago. The studies reported here seemed to indicate that teachers view elementary school guidance as an important addition to the elementary school program. Yet many teachers and counselors disagree on what are worthwhile and desirable services and how best to serve individual students.

Teachers' perceptions of elementary school guidance services tend to change as they work together in a specific school guidance program.

### Elementary School Guidance and Counseling

Elementary school guidance and counseling is a recent innovation in the school systems. Since it is a rather new field, there has been much discussion as to what the philosophy and objectives of the program should be for the elementary school. Many authors, such as Hoyt (40), have felt that the philosophy and objectives of elementary school guidance need to be defined further.

Guidance programs should be an integral part of educational programs, not just specialized services for a few students. Dinkmeyer (22) stated that elementary school guidance serves two purposes: improving teaching and promoting the development of each child. He stated that the objectives for improving teaching include: (1) assisting the total educational program to meet the needs of all students in intellectual, personal, and social areas; (2) promoting early identification of individual strengths and weaknesses;

(3) making the teacher aware and sensitive to the child's needs, goals, and purposes, and (4) stimulating the use of guidance techniques in the classroom.

For the child, the objectives of elementary school guidance include: (1) assisting the child in increased self understanding; (2) promoting self-direction, problem-solving, and decision-making by the child; (3) developing wholesome attitudes, convictions, and concepts about self and others; (4) assisting the child to understand, plan, make choices, and solve present and future problems; (5) developing a sensitivity to the needs of others; (6) understanding the causal and purposive nature of behavior and using this knowledge, and (7) assisting the child in solving the fundamental tasks of life.

The primary functions of the elementary school guidance counselor involve counseling, consultation, and coordination. The Report of the ACES-ASCA Joint Committee of the Elementary School Counselor is a position paper from these professional organizations stating the role of the guidance specialist in the elementary school. A summary of this report, which further defines the functions of counseling, consultation, and coordination, is in Appendix A of this paper.

The elementary school counselor must provide services. Dinkmeyer (22) reviewed these services. He listed the primary services as being pupil appraisal, consulting, counseling, classroom guidance program, group guidance and information

services, and administration, research, and evaluation. Another important service is in-service education for teachers.

Wren (108) wrote of the desirable direction of elementary school guidance programs as an "emphasis upon the positive rather than upon the negative, upon the identification of pupil characteristics and talents, upon the developmental needs of all pupils rather than deviate and problem students only." In his study he also surveyed the reactions of a representative number of elementary school counselors. Two-thirds of the counselors were female, the majority had a master's degree, and three-fourths worked in grades one through six. The median student-counselor ratio was one to 690, but one-third served more than 1,000 students. The counselors perceived their roles as ones of service to children directly, and indirectly through contact with teachers and parents.

MacMinn and Ross (57) studied the types of selection and preparation programs in existence in the area in 1959. They found that 128 schools had master's programs and 47 had doctorate programs in elementary school guidance and counseling. Most of these schools were state institutions. A majority of the programs required work in the areas of analysis of the individual, education and occupation information, counseling, counseling practicum, organization and administration, philosophy and principles, methods of research

and evaluation, and psychological foundations. Most changes that schools were contemplating in their programs were additions to or extensions of the existing programs, not basic modifications of the program. At that time, there were approximately 1,000 students enrolled in these programs.

Van Hoose and Vafakas (96) in a survey of state programs, reported that in 1967, fourteen states had certification requirements for elementary school counselors. Seventy per cent of the existing school programs were partially financed by federal funds. There were approximately 4,000 counselors in the field, and the majority of these elementary school counselors were former elementary school teachers.

Research studies in the area of elementary school guidance and counseling have been reported previously in preceding sections of this chapter. A study by McCreary and Miller (58) surveyed elementary school counselors in California. Another study previously reported was one by Brown and Pruet (5) which surveyed teachers' attitudes towards guidance. In another previously reported study, Strang (88) emphasized the relationship between guidance and reading. Other studies of different guidance methods have also been reported.

Mayer (62) wrote that he felt counseling should be the central role of the elementary school counselor. He indicated the counselor could help by obtaining the child's perception of his environment and facilitate the child's

development through increased understanding of himself. To him, counseling should be the central focus of the program.

Research by Nelson (67, 66) emphasized the importance of facilities and play activity. He emphasized that facilities should be attractive, permit group and individual counseling, permit observation, and encourage the use of play media. He promoted the use of play activities to facilitate expression and communication. He felt it should be used to express and work through concerns with the child, not to analyze the child. He also favored unstructured materials. Through play activities, the child can learn ways of operating in social situations, test various roles, and express his frustrations and concerns.

Other research of different techniques and procedures has been reported. Foreman, Poppen and Frost (25) used discussion, case study, and sensitivity training learning experiences in in-service education of elementary teachers. They felt the methods were productive in developing skills and attitudes in teachers in the area of guidance functions in the classroom. Research by Kranzler, Mayer, Dyer, and Munger (51) involved using counseling and teacher guidance. They reported that this was more effective at first and had better carry-over into new situations. Mayer, Kranzler and Matthes (63) conducted a similar study later. When they used sociometric status as the measurement, they found no significant differences between counseling and teacher guidance.

A study by Kowitz and Kowitz (50) reported that they found no support that school attendance was an index of pupil achievement nor adjustment.

Kennedy and Thompson (46) used reinforcement counseling with a first grade boy. The results they reported were that he paid closer attention to teachers and improved in completion of assignments. A study in group counseling reported by Hansen, Niland and Zani (35) found that reinforcement groups with a counselor plus at least one model child from each sex made more gain in social acceptance than straight counselor groups. Research by Luckey (56) emphasized the importance of involving parents in the work with children.

Presently research in elementary school guidance and counseling is limited. Much more research is needed. Thompson (93), in surveying the literature in elementary school guidance, identified seven problems. They were: (1) lack of empirical data to support guidance activities; (2) the "bandwagon phenomenon" of everyone going along with it; (3) the lack of role definition; (4) conflict among different specialists in the schools; (5) lack of training programs for elementary school counselors; (6) the need for teaching experience for elementary school counseling, and (7) lack of new ideas in the field.

Aubrey (2) reported the need for a critical look at elementary school counseling and guidance in three areas.

The areas were: (1) too often the training and models of elementary school counselors are those originally devised for secondary school pupils and are inadequate for elementary aged pupils; (2) there is a serious lack of theory and research at the elementary level, and (3) there is a problem of role conflict with teachers who at times are suspicious and hostile.

Zaccaria (110) summarized the functions of the elementary school counselor as: (1) focusing upon problems and adjustment, utilizing individual and group counseling or play activity; (2) serving as a mediator between home and school; (3) giving and interpreting tests; (4) serving as a consultant or co-worker with teachers, and (5) serving as a team member with other pupil personnel services. He also wrote that the crucial factors are communication and planning, with the teacher, administrator, and guidance counselor working as a team.

Eckerson (24) and many others have urged a multi-disciplinary approach to training elementary school counselors. She also indicated that actual practice is not keeping up with this principle.

Elementary school guidance programs are expanding into many schools. Training institutions are also expanding their programs in this area. The training should emphasize specialized guidance skills, cover related disciplines, and should promote depth of understanding of children. There

has been some research in the areas of elementary school guidance and counseling, but much more research is needed.

Experts feel elementary school guidance and counseling should involve counseling, consultation, and coordination. It should have a concern for all students, not just the problem student. It should help the child, directly and indirectly, to explore his feelings, attitudes and convictions. It should be concerned with developmental tasks and problems of living.

#### Summary

The success an elementary school pupil meets in and out of school can be affected by many variables. These variables can include ability, achievement, adjustment, sex differences, grade placement in school, social class of the student's family, and family constellation. Much research has been conducted in each of these areas and how they can affect the student.

The attitude of the individual teacher can have a great bearing on how she meets the problems which can arise from conflicts within these areas. Teachers naturally have to deal with many individual problems as they arise in the classroom. Many times, however, the assistance of a staff member with more specialized training is needed in dealing with normal developmental problems and atypical problems. The elementary school guidance counselor, if available, can provide

assistance to the elementary school teacher, student, or parent in trying to resolve a problem.

Greatly affecting the success or failure of the teachers' utilization of the services of the elementary school guidance counselor, however, are the teachers' attitudes on and understanding of what constitutes a problem of such a nature that the student should be referred to an elementary school guidance counselor. This understanding of what is a problem and the teachers' attitudes on what type of problems should be referred to an elementary school guidance counselor are the emphases of this research.

## METHOD OF PROCEDURE

Problems of this study were formulated into basic hypotheses which were stated and defined. Certain instruments were used to gather data to test some of the hypotheses; for others, information was gathered from school records. It was also necessary to select the population or sample for the research project.

## Hypotheses and Selection of Instruments

The general hypothesis examined in this study was that there were no significant differences in ability, achievement, personal-social adjustment, sex of the student, grade placement of the student, social class, and family constellation, between those students recommended to be referred and those not recommended to be referred to an elementary school guidance counselor. The research hypotheses were:

1. There was no significant difference in ability between those referred and those not referred to an elementary school guidance counselor.
2. There was no significant difference in reading achievement between those referred and those not referred to an elementary school guidance counselor.
3. There was no significant difference in arithmetic achievement between those referred and those not referred to an elementary school guidance counselor.
4. There was no significant difference in personal-social adjustment between those referred and those not referred to an elementary school guidance counselor.

5. There was no significant difference in the sex of the student of those referred and those not referred to the elementary school guidance counselor.

6. There was no significant difference in the grade placement of those referred to the elementary school guidance counselor.

7. There was no significant difference in the social class, as determined by the occupation of the father, of those referred and those not referred to an elementary school guidance counselor.

8. There was no significant difference between those referred and those not referred to an elementary school guidance counselor as to the type of family constellation, whether the child lived with both parents, one living parent, one divorced parent, guardian, or remarriage with a stepparent.

### Assumptions

It was assumed that all of the variables could be measured, either through testing or through school records.

It was also assumed that those students who were chosen for the control group through the process of random sampling would constitute a "normal population" in statistical terms. It was also assumed that the teachers were able to make referrals.

Although an elementary school counselor was not available in any of the schools, it was assumed that those recommended by teachers as referrals to an elementary school counselor for this study would be similar to those referrals made by teachers in schools with elementary school counselors.

The basic assumption as stated in the research hypotheses was that both groups, the group referred to the elementary

school guidance counselor and the group not referred, would be similar; the groups would not differ significantly in the areas defined in the research hypotheses.

### Instruments

Tests used in this research included the Lorge-Thorndike Intelligence Test, Nonverbal Battery; the Cognitive Abilities Test; the Wide Range Achievement Test, Reading and Arithmetic sections; and the California Test of Personality.

Data taken from school records included the student's sex, grade placement, and with whom the child was living. Determination of the family's social class rating was basically derived from the occupational rating scale of the Warner Index of Status Characteristics. The father's occupation was used for this rating.

### Population Sample

All students chosen for the study were in grades one through six of the schools in Humboldt and Pocahontas Counties, Iowa. The experimental group was composed of children whom teachers considered should be referred to an elementary school guidance counselor. Teachers completed referral forms on these children, indicating why they felt the child should be referred, whether they felt variables defined in the hypotheses were problem areas for the child, and how they felt the child rated on a five-point scale in the variables defined in the hypotheses.

An equal number of children was chosen for the control group. These children were selected by the method of random sample from a random numbers table. The number of control group children chosen in each classroom equalled the number of the children initially referred to the experimental group from that classroom. The primary level group was composed of 80 children in each the experimental and control groups. The intermediate level group had 53 children in each the experimental and control groups. Each teacher completed a form rating each control group child on a five-point scale on the variables defined in the hypotheses.

#### Area Description

Humboldt and Pocahontas Counties are located in North Central Iowa. The area is basically considered to be rural. However, as is generally true across the nation, there has been a change showing a decline in the number of people employed in agriculture and an increase in the number employed in manufacturing.

Reports of the 1960 Census showed that in Humboldt County, about 8,000 persons lived in towns and approximately 5,000 people lived in rural areas. In Pocahontas County, about 6,500 persons lived in towns and approximately 7,700 people lived in rural areas. Both counties showed a decrease in population from the previous ten year period.

Average family income has increased in these counties during the last few years. Sales Management (16) indicated that the range where the median income would be for families in Humboldt County in 1967 was \$5,000 to \$7,999. Approximately 25 per cent of the families had incomes below \$5,000, while approximately 38 per cent of the families had incomes above \$8,000. In Pocahontas County, the range where the median income would be was \$5,000 to \$7,999. Approximately 41 per cent were below \$5,000 while approximately 32 per cent were above \$8,000. Humboldt County showed a higher average family income than Pocahontas County over the previous twenty years.

#### Description of the Schools

There were ten community school districts in Humboldt and Pocahontas Counties. In addition to these ten, there were five parochial schools operating elementary programs. These parochial schools were not included in the study.

The schools included in the study and their total school enrollments were:

Humboldt County		
Bocne Valley Community School		419
Gilmore City-Bradgate Community School		487
Humboldt Community School		1940
Twin Rivers Community School		514
Pocahontas County		
Fonda Community School		285
Havelock-Plover Community School		289
Laurens Community School		806
Palmer Community School		211
Pocahontas Community School		687
Rolfe Community School		445

No school in the two counties had an elementary school guidance counselor. All of the schools in Humboldt County had elementary school principals. Only one of the schools in Pocahontas County had an elementary school principal. In the schools without an elementary school principal, the superintendent also served as elementary school principal. One school in Pocahontas County did not have a secondary school guidance counselor. Two other schools in the county shared a guidance counselor for their high schools. All other schools in the two counties had a full-time high school counselor.

There were nine attendance centers for elementary children in Humboldt County. In Pocahontas County, there were eight elementary attendance centers. Nine of these centers in the two counties included grades one through six. Other attendance centers varied from one grade to five grades.

#### Description of Instruments and the Collection of Data

The Lorge-Thorndike Intelligence Test, Nonverbal Battery, Form 1, was used to compute an intelligence quotient score for students in grades three through six. There were three subtests in the Nonverbal Battery: finding items which were alike in certain ways, determining the order or series in which numbers or letters were arranged, and determining how two pairs of items were related. Students marked their answers on a separate answer sheet. These tests were scored by determining the number of right items. These raw scores

were then converted into IQ scores by the use of tables in the test manual. Level A of the test was administered to grades three and four; Level B was administered to grades five and six. These two levels adequately covered the age span.

Students in grades one and two were given the Cognitive Abilities Test to determine their ability level. The Primary 2, Form 2, of the Cognitive Abilities Test was administered to both grades one and two. The Primary 2 battery sufficiently covered the age span of the two grades. Both the general test directions and the directions for each specific item were given orally, according to test directions. The test measured the child's ability through four subtests. These subtests involved labeling, naming, and identifying objects; identifying size, position, and quantity; seeing relationships and categorizing objects; and dealing with quantitative relationships and concepts. The students marked their answers in the test booklets. The raw score was determined by the number of right responses. This raw score was then converted into an IQ score.

Reading achievement was determined through the administration of the reading test of the Wide Range Achievement Test, Level 1. It involved pronouncing the words that were listed on the test. The number of right responses was changed into a grade placement score which was transferred into a standard score comparable to an IQ score. In this

way, achievement and ability scores could be compared as to how close together the scores were. Students who were unable to pronounce all of the words in the first line of the test were asked to give the names of certain alphabetical letters and to pick out identical letters in two different lines.

The Wide Range Achievement Test, Level 1, was also used to measure arithmetic achievement. In this test, the pupils were given ten minutes to work some arithmetic problems. If they did not get five problems right, they were administered an oral arithmetic test. These tests were corrected by counting the number of right answers. This number was then converted into a grade placement score which was converted into a standard score.

The California Test of Personality was administered to all pupils as a measure of personal-social adjustment. The Primary Battery was read to grades one, two, and three. Pupils answered the questions by marking "Yes" or "No" on the answer sheet. Their answers indicated if the questions described how they felt, what they did about things, or what they thought about things. The Elementary Battery was administered to grades four, five, and six. On this battery, the students read the items and marked them as was done on the Primary Battery. These tests were then scored. The raw score was the number of items answered correctly according to the key. This raw score was used for computational purposes.

Testing was done on a group basis in each of the elementary school attendance centers, except for reading achievement, which was administered individually to each pupil. The two groups were tested together.

Other information was taken from school records, including the child's cumulative folder. The sex of the student was used to compare the numbers of boys to girls in each of the groups, experimental and control.

Grades one through six were included in the study. Each child's grade placement was used to determine if some grades had significantly more referrals than other grades. A frequency count was made to determine how many were referred from each grade level.

The determination of social class placement was made from the father's occupation. School information and cumulative record information were used for this. Occupations were rated on a scale from one to seven, according to the Warner Index of Status Characteristics. Further clarification of the occupational status of specific occupations was made at times from the Hollingshead Two Factor Index of Social Position. Occupations were rated from the following scale:

- 1--Upper, professional
- 2--Upper-middle, semi-professional and business managers
- 3--Middle-middle, clerical and sales, small administrative
- 4--Lower-middle, skilled manual laborers
- 5--Upper-lower, small business proprietors
- 6--Middle-lower, semi-skilled workers
- 7--Lower-lower, unskilled workers

With whom the child lived was the measure of family constellation. This information was taken from school records and was used to determine if this had an effect on whether the child was considered as one who should be referred to a guidance counselor. Five groups were considered in this area: both parents at home, one living parent, parents divorced or separated, the child living with a guardian, and a remarriage with a stepparent for the child.

#### Method of referral

Teachers were asked to indicate the children they had in their rooms whom they felt should be referred to the elementary school guidance counselor if one were available. They were instructed to use their own judgment as to which children should be referred and for what reasons. At the time the teachers received the referral forms, they were also given a summary of the Preliminary Statement of the Joint ACES-ASCA Committee on the Elementary School Counselor as a brief explanation of the field of elementary school guidance and counseling. A copy of this statement is in Appendix A.

Teachers were asked to complete a rating scale on each child. The questionnaires differed for the experimental and control groups. Copies of the rating scales used appear in Appendix B and C.

The questionnaire for the experimental group included more information on each child than did the one for the control group. The teacher wrote a short paragraph on why she felt the child should be referred to an elementary school guidance counselor. She then rated the child on a five-point scale from high to low in the areas of ability, reading achievement, arithmetic achievement, and personal-social adjustment. She rated grade placement, social class, and family constellation from "no problem" to "a great problem" on the five-point scale. The teacher also indicated, by "yes" or "no", whether she considered each of the seven variables to be a problem area.

Only the rating scale was completed by the teacher for the control group. The teacher rated each of the seven variables on the five-point rating scale.

#### Analysis of Data

Individual tests were scored for each student's ability, achievement, and personal-social adjustment for both the experimental and control groups. The IQ score was used for the ability variable. Standard scores, comparable to the intelligence score, were used for the reading and arithmetic achievement variables. The raw scores, or number of correct responses, were used for personal-social adjustment, and for personal adjustment and social adjustment. Personal-social adjustment was divided into the two areas, in addition to the total score, to make a finer distinction in adjustment.

All students were classified according to the variables of sex of the student, grade level, social class, and family constellation.

Four groups were formed for statistical evaluation. Two of the groups were experimental groups and two of the groups were control groups. The groups were also divided into primary, which included grades one, two, and three, and intermediate, which included grades four, five, and six. Thus, the four groups were:

- experimental--primary grades
- control--primary grades
- experimental--intermediate grades
- control --intermediate grades

These groups were used to test the hypotheses of the study. The two primary groups were compared and the two intermediate groups were compared.

All data for each person in the study were then coded. These coded data were transferred onto an IBM Fortran coding form.

A correlation matrix was computed. Also supplied were other data, including means, standard deviations, and variances for each variable. Frequency counts were also made on all variables, excluding test scores.

Statistical tests were then computed to test the hypotheses of no significant differences between the experimental and control groups. These tests were described in Wert, Neidt, and Ahmann's book, Statistical Methods in Educational

and Psychological Research (102). Statistical tests used were: the t-test, measuring the difference between the means of the two primary groups and the two intermediate groups; the chi square technique, testing differences in categories; and correlations, determining the degree of relationship between different variables. In addition to these, a tabulation was made of the different types of problems the teachers indicated in their short paragraphs telling why they would refer the student to the elementary school guidance counselor.

The t-test was computed for the variables of ability, achievement, and personal-social adjustment. The t-test of difference between two means, with separate group variance and sample groups of equal size, was used for this research. The statistical model for testing this design was:

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{s_1^2}{n} + \frac{s_2^2}{n}}}$$

where  $\bar{X}$  was the mean,  $s^2$  was the variance of the group, and  $n$  was the number of cases in each group.

A chi square value was computed for the variables of social class, sex of the student, grade placement, and family constellation. The formula used to compute the chi square value was:

$$\chi^2 = \sum \frac{(O-E)^2}{E}$$

where O was the actual frequency, and E was the expected frequency.

Correlation and inter-correlation values as reported in the correlation matrix were used. Correlations reported in results included comparing the following variables: ability and reading achievement, ability and arithmetic achievement, ability and personal-social adjustment, reading achievement and personal-social adjustment, reading achievement and arithmetic achievement, social class and ability, social class and reading achievement, personal-social adjustment and personal adjustment, personal-social adjustment and social adjustment, personal adjustment and social adjustment, ability and teacher's rating of ability, reading achievement and teacher's rating of reading achievement, arithmetic achievement and teacher's rating of arithmetic achievement, personal-social adjustment and teacher's rating of personal-social adjustment, sex and ability, sex and reading achievement, sex and arithmetic achievement, sex and personal-social adjustment, and sex and teacher's rating of personal-social adjustment.

All hypotheses and correlations were tested at the .05 level of significance.

## FINDINGS

The general hypothesis examined in this study was: There were no significant differences in ability, reading achievement, arithmetic achievement, personal-social adjustment, sex of the student, grade placement of the student, social class, and family constellation, between those students recommended to be referred and those not recommended to be referred to an elementary school guidance counselor. In addition, other relationships between the data were determined, and other information was recorded.

## Findings Related to Hypothesis I

Hypothesis I stated that there was no significant difference in ability between those referred and those not referred to an elementary school guidance counselor.

Primary group

The results of the ability testing of the primary groups, including grades one through three, showed a difference of 9.82 points between the means of the experimental and control groups. The mean for the experimental group was 95.19, while the mean of the control group was 105.01.

The experimental group had the larger standard deviation score, which was 13.91. The standard deviation of the control group was 11.69. This would indicate that there was more variance of scores in the experimental than the control group.

In both groups there was a wide range of scores. The range of scores for the experimental group was from 69 to 128, or 59 points. The range of scores for the control group was from 76 to 140, or 64 points.

The t-test score for this hypothesis was 4.84, which was significant at the .01 level.

The results indicated that there was a significant difference between the two groups of this sample. In the primary groups in this study, teachers generally tended to refer to the elementary school guidance counselor those of lower ability than those who were not referred. For this test, the null hypothesis was rejected.

Table 1. Scores of the t-test for ability

Group	n	$H_1$	.05	.01
Primary	80	4.84**	2.00	2.66
Intermediate	53	4.66**	2.02	2.70

\*\*Significant at the .01 level.

#### Intermediate group

In the intermediate group, grades four through six, there was a 9.72 point difference between the mean scores of the experimental and control groups in ability testing. The experimental group mean score was 100.98; the control group mean score was 110.70.

The standard deviation for the experimental group was 13.65. The standard deviation was 12.68 for the control group. There was less than one point difference in the standard deviation between the two groups.

The differences in the range of scores between the two groups was one point. Scores for the experimental group ranged from 81 to 132. For the control group, the range was from 80 to 132.

The t-value for the intermediate group was 4.66. This score was highly significant.

The results for this particular group indicated that there was a significant difference in scores between these two groups. For this research, teachers generally tended to view, as a group, students of lesser ability as ones who should be referred to an elementary school guidance counselor. The null hypothesis was rejected.

#### Findings Related to Hypothesis II

Hypothesis II stated that there was no significant difference in reading achievement between those referred and those not referred to an elementary school guidance counselor.

##### Primary group

The mean scores of reading achievement differed 8.48 points between the two groups, with the control group having the higher mean score. That score was 103.18. The experimental group mean score was 94.70.

The standard deviation for the control group was slightly larger than for the experimental group. Standard deviation of the control group was 11.11, while the experimental group had a standard deviation of 10.78. The difference between the two groups was less than one point.

The control group scores had a broader, but higher, range, 82 to 141. Experimental group scores ranged from 77 to 125.

The t-value for the primary group was 4.90, which was highly significant.

With this particular sample, the results indicated that there was a significant difference between the two groups in reading achievement. The control group had, as a group, a significantly higher reading level than the experimental group. Teachers apparently visualized those of lesser reading achievement as ones who should be referred to an elementary school counselor. The null hypothesis was rejected.

Table 2. Scores of the t-test for reading achievement

Group	n	H <sub>2</sub>	.05	.01
Primary	80	4.90**	2.00	2.66
Intermediate	53	5.31**	2.02	2.70

\*\*Significant at the .01 level.

Intermediate group

A larger difference in reading achievement was noted for the intermediate group than for the primary group. The difference in mean scores for the intermediate group was 10.05 points. The control group mean score was 106.81, while the experimental group mean score was 96.76.

The standard deviation of the two groups varied almost four points. Experimental group standard deviation was 13.79, while control group standard deviation was 9.85, seeming to indicate that scores were more widely distributed for the experimental group.

The range of scores for the experimental group was 54 points, ranging from standard scores of 73 to 127. The range for the control group was 45 points, ranging from 80 to 125.

The value of  $t$  for the intermediate groups was 5.31, which was highly significant.

The results of this test indicated that, with this sample, there was a significant difference in reading achievement between the two groups. Those who were not referred to the elementary school counselor in the intermediate grades were, as a group, significantly higher in reading achievement. The null hypothesis was rejected.

#### Findings Related to Hypothesis III

Hypothesis III stated that there was no significant difference in arithmetic achievement between those referred and those not referred to an elementary school guidance counselor.

Primary group

Mean scores between the experimental and control groups in arithmetic achievement differed 4.14 points. The mean score for the control group was higher than for the experimental group. The control group mean was 98.28, while the experimental group mean was 94.14.

The standard deviation was larger for the experimental group. This standard deviation was 8.29. The standard deviation for the control group was 7.38. Standard scores for the experimental group ranged from 74 to 115, while the control group ranged from 86 to 118.

The t-value for the primary group in arithmetic achievement was 3.33. This value was highly significant.

The results indicated that, with this sample, there was a significant difference between the two groups in arithmetic achievement. The null hypothesis was rejected.

Table 3. Scores of the t-test for arithmetic achievement

Group	n	$H_3$	.05	.01
Primary	80	3.33**	2.00	2.66
Intermediate	53	4.06**	2.02	2.70

\*\*Significant at the .01 level.

Intermediate group

The difference in mean scores for arithmetic achievement for the intermediate group was 5.20 points. The mean score for the experimental group was 94.76 and the mean score for the control group was 99.96.

The standard deviation for the two groups, experimental and control, differed less than one point. The standard deviation for the experimental group was 8.59; for the control group, it was 7.61.

The total range of scores was almost identical for the two groups. Experimental group scores ranged from 75 to 115; control group range was 80 to 119.

The computed value for  $t$  for arithmetic achievement between the two groups was 4.06. This value was highly significant.

The null hypothesis of no significant differences in arithmetic achievement between these two sample groups was rejected. The results showed a significant difference in mean scores with those referred to the elementary school counselor, as a group, tending to score lower in arithmetic achievement.

#### Findings Related to Hypothesis IV

Hypothesis IV stated that there was no significant difference in personal-social adjustment between those referred and those not referred to an elementary school guidance counselor.

Raw scores were used to determine if there was statistical significance between the two groups. Therefore, all scores reported in this section will be raw scores. The results also were reported in three areas: personal-social adjustment, personal adjustment, and social adjustment. The scores of personal adjustment and of social adjustment were added to determine the score for personal-social adjustment.

#### Primary group

The mean scores of the total personal-social adjustment differed 3.53 points. The experimental group had the lower total mean score of 61.05. The mean score of the control group was 64.58. In dividing this score into personal adjustment and social adjustment, the mean scores were, of course, lower. For personal adjustment, the mean score for the experimental group was 27.03; for the control group, 28.71. There was a difference between the two groups of 1.68 points, with the experimental group having the lower mean score in personal adjustment. For social adjustment, the mean score for the experimental group was 34.03. The mean score for social adjustment for the control group was 35.86.

The standard deviations for the two groups for the adjustment scores were:

	P-S	P	S
Experimental	13.81	7.53	8.17
Control	12.06	6.12	7.12

The standard deviation scores for the experimental group were higher than for the control group for all three adjustment scores.

The spread of scores was determined for the total personal-social adjustment. Scores for the experimental group ranged from 19 to 97; scores for the control group ranged from 16 to 82. Between the two groups, there was a 12 point difference in spread of scores.

These results showed no significant difference between the two groups in this sample population. This applied to all three adjustment areas, personal-social adjustment, personal adjustment, and social adjustment. There was insufficient evidence to reject the null hypothesis.

Table 4. Scores of the t-test for adjustment

Group	n	$H_4$	.05	.01
<hr/>				
Primary				
Personal-social	80	1.72	1.993	2.646
Personal	80	1.56	1.993	2.646
Social	80	1.52	1.993	2.646
Intermediate				
Personal-social	53	4.11**	2.008	2.675
Personal	53	4.22**	2.008	2.675
Social	53	3.30**	2.008	2.675
<hr/>				

\*\*Significant at the .01 level.

### Intermediate group

Mean scores for personal-social adjustment for the intermediate group differed more than did the mean scores for the primary group. The difference in personal-social adjustment mean scores for the group was 10.70 points. The mean for the experimental group was 94.11, while the mean for the control group was 104.81. Mean scores for personal adjustment were 5.70 points apart. The experimental group personal adjustment mean was 43.92, while the control group mean was 49.62. For social adjustment, the means differed 5.00 points. The mean score for the experimental group was 50.19, while the mean score for the control group was 55.19.

The derived standard deviations for the different groups were:

	P-S	P	S
Experimental	17.65	9.16	10.51
Control	15.15	7.86	8.58

The experimental group scores varied more as a group than did the control group scores.

For personal-social adjustment, the spread of scores for the experimental group was 84 points, with a 70 point spread for the control group. Experimental group scores ranged from 39 to 123, while control group scores ranged from 69 to 139.

T-values were again computed for the areas of personal-social adjustment, personal adjustment, and social adjustment. Values for these variables were determined and values in all areas were found to be highly significant.

The results of this population sample showed a significant difference in mean scores between the experimental and control groups. The difference was highly significant for all three adjustment scores. The hypothesis of no significant difference between the intermediate level groups in personal-social adjustment was rejected.

#### Findings Related to Hypothesis V

Hypothesis V stated that there was no significant difference in the sex of the student of those referred and those not referred to an elementary school guidance counselor.

##### Primary group

Thirty-four more boys than girls were in the experimental group; of those who were considered referrals to an elementary school counselor in the primary grades, 57 were boys and 23 were girls. Of the referrals, 71.25 per cent of the group were boys, and 28.75 per cent were girls.

Forty boys and forty girls were chosen for the control group. Therefore, 50 per cent of the control group were boys and 50 per cent were girls.

A chi square value was computed to see if there was a significant difference in the number of boy and girl referrals. The chi square value computed was 7.57. This value was highly significant.

The test of this hypothesis indicated that a significantly greater number of boys than girls were considered to be referrals to an elementary school counselor. The hypothesis of no significant difference in the number of referrals in the primary group was rejected.

Table 5. Chi square values for sex of the student

Group	df	$H_5$	.05	.01
Primary	2	7.57**	3.84	6.64
Intermediate	2	5.53*	3.84	6.64

\*Significant at the .05 level.

\*\*Significant at the .01 level.

#### Intermediate group

For grades three through six, 36 boys and 17 girls were referred in the experimental group, resulting in 19 more boys than girls. Slightly over two-thirds of the referrals for the experimental group were boys; approximately one-third were girls. Twenty-four boys and 29 girls composed the control group. In the control group, about 45 per cent were boys and about 55 per cent were girls.

The chi square value for differences between the groups was computed to be 5.53. This value was significant at the .05 level.

The results of this grouping indicated that the groups were different at the .05 level of significance. Therefore, the hypothesis of no significant differences was rejected. More boys than girls were referred.

#### Findings Related to Hypothesis VI

Hypothesis VI stated that there was no significant difference in the grade placement of those referred to the elementary school guidance counselor.

For this study, 60.16 per cent of the referrals for the experimental group were in the primary grades, grades one, two, and three. The remaining 39.84 per cent were in the intermediate grades, or grades four, five, and six. There were 133 students in the experimental group. Of this number, 80 were in the primary group and 53 were in the intermediate group.

Table 6 lists the number of referrals and percentage of total referrals by grade levels.

Table 6. Referrals by grade levels

Grade	Number	Per Cent
1	20	15.04
2	27	20.30
3	33	24.82
4	17	12.78
5	19	14.28
6	17	12.78

Two chi square values were computed. One chi square value considered all six grade levels. The other value was computed for two groups, the primary and intermediate. The researcher divided the total referrals for the experimental group by the total groupings, namely the six grades and two groups, to derive the control group grade placements. This made an equal number from each grade level.

The chi square value for the separate grade levels was 9.42. Considering five degrees of freedom, the computed chi square value was not significant at the .05 level of significance. The chi square value for the two groups, primary and intermediate, was 5.48. This value was significant at the .05 level of significance.

Table 7. Chi square values for grade level

Grouping	df	Chi Square	.05	.01
Separate grades	5	9.42	11.07	15.09
Primary and Intermediate groups	1	5.48*	3.84	6.64

\*Significant at the .05 level.

Considering all six grade levels, there was insufficient evidence to reject the null hypothesis. A significantly different number were not referred from any one grade. When considering only the primary level and the intermediate level, the hypothesis of no significant difference between the two groups was rejected. A significantly greater number of primary children than intermediate children were referred.

#### Findings Related to Hypothesis VII

Hypothesis VII stated that there was no significant difference in the social class as determined by the occupation of the father of those referred and those not referred to an elementary school guidance counselor.

#### Primary group

The actual number and percentages for the different social class levels for both the experimental and control groups are indicated in Table 8.

Table 8. Referrals by social class for primary group

Level	Class	Experimental		Control	
		Number	Per Cent	Number	Per Cent
1	Upper	2	2.50	2	2.50
2	Upper-Middle	15	18.75	23	28.75
3	Middle-Middle	9	11.25	13	16.25
4	Lower-Middle	7	8.75	2	2.50
5	Upper-Lower	22	27.50	22	27.50
6	Middle-Lower	10	12.50	8	10.00
7	Lower-Lower	15	18.75	10	12.50

When these results were computed in three class levels, upper, middle, and lower, the greatest numbers were in the lower classes. For the upper class, there were 2.5 per cent in both the experimental and control group. The experimental group had 38.75 per cent in the middle class, and the control group had 47.5 per cent in the middle class. In the lower class, the experimental group per cent was 58.75, and the control group per cent was 50.00.

The chi square value for this hypothesis was not significantly different at the .05 level. The computed chi square value was 6.41 with six degrees of freedom.

It is indicated by these results that there were no significant differences in social class placement between the experimental and control groups. There was insufficient evidence to reject the null hypothesis.

Table 9. Chi square values for social class

Group	df	$\chi^2$	.05	.01
Primary	6	6.41	12.59	16.81
Intermediate	6	4.53	12.59	16.81

Intermediate group

The intermediate group appeared to be quite similar to the primary group in terms of social class placement. Again, actual numbers and percentages were computed for each of the seven class levels. They are indicated in Table 10.

Table 10. Referrals by social class for intermediate group

Level	Class	Experimental		Control	
		Number	Per Cent	Number	Per Cent
1	Upper	0	0	0	0
2	Upper-Middle	9	17.0	15	28.3
3	Middle-Middle	7	13.2	5	9.4
4	Lower-Middle	5	9.4	3	5.7
5	Upper-Lower	15	28.3	18	34.0
6	Middle-Lower	9	17.0	4	7.5
7	Lower-Lower	8	15.1	8	15.1

Percentages were also computed considering the upper, middle, and lower classes. None of the intermediate group were in the upper class. The middle class held 39.6 per cent

of the experimental group and 43.4 per cent of the control group. Sixty and four-tenths per cent of the experimental group were in the lower class. Fifty-six and six-tenths per cent of the control group were in this class.

The computed chi square value for the intermediate group social class was 4.53, with six degrees of freedom. This value was not significantly different at the .05 level.

The results indicated that, in this sample population, there were no significant differences between the experimental and control groups in social class placement. There was insufficient evidence to reject the null hypothesis.

#### Findings Related to Hypothesis VIII

Hypothesis VIII stated that there was no significant difference between those referred and those not referred to an elementary school guidance counselor as to the type of family constellation, whether the child lived with both parents, one living parent, one divorced parent, guardian, or remarriage with a stepparent.

##### Primary group

As expected, the majority of the pupils in both the experimental and control groups lived with both their mothers and fathers. The actual numbers and percentages for each of the five groups are presented in Table 11.

Table 11. Referrals by family constellation for primary group

Group	Experimental		Control	
	Number	Per Cent	Number	Per Cent
Both parents	69	86.25	71	88.75
One living parent	1	1.25	1	1.25
Divorced or separated	2	2.50	4	5.00
Guardian	2	2.50	1	1.25
Stepparent	6	7.50	3	3.75

The computed chi square value for the differences between the experimental and control groups was 1.13 with four degrees of freedom.

Therefore, the null hypothesis of no significant differences between the two groups was not rejected. There was no significant difference between the two groups in type of family constellation.

Table 12. Chi square values for family constellation

Group	df	$H_g$	.05	.01
Primary	4	1.13	9.49	13.28
Intermediate	4	3.68	9.49	13.28

Intermediate group

Most of the subjects in either of the intermediate groups lived with both parents. Data are included in Table 13 of actual numbers and percentages.

Table 13. Referrals by family constellation for intermediate group

Group	Experimental		Control	
	Number	Per Cent	Number	Per Cent
Both parents	46	86.77	48	90.55
One living parent	3	5.67	0	0
Divorced or separated	2	3.78	3	5.67
Guardian	1	1.89	0	0
Stepparent	1	1.89	2	3.78

These results were used to compute the chi square value. The derived value was 3.68 with four degrees of freedom. No significant difference was found at the .05 level of significance. There was insufficient evidence to reject the null hypothesis.

#### Findings Related to Correlations between Different Variables

In addition to testing the stated hypotheses, the degree of relationship or correlation between different variables was computed. A correlation matrix of each variable in each group was computed. These four matrices appear in Appendices F, G, H, and I.

The degree of relationship between some of the specific variables has been indicated in the findings of this research. The variables reported in Table 15 were those which seemed to be most meaningful and could be worth further investigation. Comparisons are for each research group.

Values for all of these correlations were at the .05 level of significance. The level of significance was computed on the number of cases for each group, which was 80 for the primary level and 53 for the intermediate level.

Table 14. Values of  $r$  at .05 and .01 levels of significance

Group	Number	.05*	.01**
Primary	80	.220	.286
Intermediate	53	.274	.351

\*Significant at the .05 level.

\*\*Significant at the .01 level.

Correlations were listed for the experimental and control groups of both the primary and intermediate grade levels. These correlations by groups are presented in Table 15.

Table 15. Values of correlations of selected variables

Comparison	Primary		Intermediate	
	Experi.	Control	Experi.	Control
Ability-Reading Achievement	.3273**	.2167	.4108**	.3596**
Ability-Arithmetic Achievement	.3799**	.1046	.7105**	.5159**
Ability-Personal-Social Adjustment	.1520	.2064	.1278	.0234
Reading-Personal-Social Adjustment	.0242	.0664	.1919	-.1553
Reading Ach.-Arithmetic Ach.	.5485**	.1882	.5751**	.5118**
Ability-Social Class	-.1044	-.0330	-.2880*	-.1512
Social Class-Reading Achievement	-.1795	-.0896	-.0815	-.0819
Personal-Social Adj.-Personal Adj.	.8684**	.8954**	.8806**	.9140**
Personal-Social Adj.-Social Adj.	.8896**	.9239**	.9104**	.9283**
Personal Adj.-Social Adj.	.5460**	.6569**	.6057**	.6976**
Sex-Ability	.0353	-.1819	-.0140	.3926**
Sex-Reading Achievement	-.0028	.1189	.1041	.2037
Sex-Arithmetic Achievement	.1235	-.1329	-.0847	.1665
Sex-Personal-Social Adjustment	-.0828	-.0542	.0510	.1174
Sex-Teacher Rating of Adjustment	-.0332	-.2754*	-.0250	.2061
Ability-Teacher Rating of Ability	.2692*	.2412*	.3816**	.5680**
Reading Ach.-Teacher Rating Read. Ach.	.5207**	.5722**	.6105**	.5680**
Arith. Ach.-Teach. Rating Arith. Ach.	-.0073	.0802	.6136**	.3459*
Personal-Social Adj.-Teach. Rat. Adj.	.1214	.2696*	-.0129	.1374

\*Significant at the .05 level.

\*\*Significant at the .01 level.

All scores on the California Test of Personality correlated above .54. The lowest correlation between the total personal-social adjustment score and either the personal adjustment or social adjustment was .86. These correlations seemed consistent with correlations reported in the test manual. It was stated in the manual that correlations between sections vary from .63 to .77. On this research, the correlations varied from .65 to .69 for the control groups, and from .54 to .60 for the experimental groups. The correlation reported in the manual for the different sections, personal adjustment and social adjustment, with the total score was .92. Correlations for control groups on this research on the same variables were from .89 to .92, and from .86 to .91 for the experimental groups.

On teacher's rating of variables, there was a greater relationship between reading achievement and teacher's rating of reading achievement than on other ratings by teachers. In the reading achievement area, all correlations were highly significant. There were highly significant relationships in rating of ability and measured ability at the intermediate level. At the primary level they were significant at the .05 level.

At the primary level, the teacher's rating of arithmetic achievement and the arithmetic achievement measurement were not significant. At the intermediate level, they were

significant for the experimental group, and highly significant for the control group.

There was only one significant relationship in the area of personal-social adjustment and the teacher's rating of personal-social adjustment. This was for the control group at the primary level. For three of the four groups, in comparing personal-social adjustment with the teacher's rating of personal-social adjustment, there were no significant relationships between how the child scored on the test, and how the teacher predicted his adjustment. This could be the cause of either one or both of the variables. Perhaps the teacher's accuracy of prediction was minimal, or the test results lack accuracy, or there was an interaction between the two variables.

Except for the control group at the primary level, there were significant relationships at the .01 level for ability and reading achievement, ability and arithmetic achievement, and reading achievement and arithmetic achievement. These highly significant correlations ranged from .32 to .57. With these groups, there was a significant relationship between ability and achievement areas.

Generally the sex of the student did not correlate significantly with most of the areas in the research. No real pattern of correlations existed in this research between sex of the student and other variables.

Reading achievement scores did not correlate significantly with personal-social adjustment scores. This was also true when considering personal adjustment and social adjustment separately.

#### Findings Related to Teacher's Evaluation of Problem Areas

Teachers were asked to write briefly why they felt they would refer each child in the experimental group to an elementary school counselor. The researcher tabulated these results into categories involving the topics of the different hypotheses and additional reasons indicated by the teachers.

Teachers also checked "Yes" or "No", indicating whether they felt the topics of the different hypotheses were considered to be problem areas for the child. These results were also tabulated.

#### Primary group

Teachers of primary age children indicated sixteen different areas in describing why they referred particular children. Four areas specifically covered in the hypotheses were not defined as problem areas for any child in the primary group. These areas included arithmetic achievement, grade placement of the child, sex of the child, and social class of the child.

Problem areas listed in over 10 per cent of the cases included social adjustment, lack of motivation, slow learner or poor achievement, and emotional problem. In 5 to 10

per cent of the cases, the teachers listed underachievement, reading achievement, personal adjustment, and immaturity as problems with particular students.

In general terms, approximately 28 per cent of the referrals had aspects of school achievement listed as problem areas. About 44 per cent of the problem areas involved adjustment problems. Following is a chart of the reasons listed by teachers for referring the students to an elementary school guidance counselor.

Table 16. Reasons written for referral for primary group

Reason Referred	Gr. 1	Gr. 2	Gr. 3	% of all Referred
Ability	1	0	1	2.08
Reading Achievement	1	2	3	6.24
Underachievement	1	2	5	8.32
Personal Adjustment	1	2	3	6.24
Social Adjustment	4	8	5	17.68
Nervousness	0	0	1	1.04
Family Constellation	1	0	1	2.08
Lacks Motivation	2	3	5	10.40
Withdrawal	1	2	1	4.16
Slow Learner or Poor Achieve.	2	2	9	13.52
Emotional Problem	4	3	5	12.48
Immaturity	4	3	1	8.32
Physical Disability	2	0	1	3.12
Home Problem--Adjustment	0	2	0	2.08
Worrier	0	1	0	1.04
Poor Attitude	1	0	0	1.04

When teachers checked problem areas, the results were different from when they wrote problem areas. The different

areas covered by the hypotheses, the number checked in each category, and the percentages are in Table 17.

Table 17. Variables checked as problems for primary group

Area	Yes		No	
	No.	Per Cent	No.	Per Cent
Ability	46	57.50	34	42.50
Reading Achievement	51	63.75	29	36.25
Arithmetic Achievement	36	45.00	44	55.00
Personal-Social Adjust.	51	63.75	29	36.25
Grade Placement	34	42.50	29	36.25
Social Class	31	38.75	49	61.25
Family Constellation	31	38.75	49	61.25

All areas mentioned in the hypotheses were considered problem areas in at least one-third of the cases. The areas most frequently checked as problem areas were reading achievement and personal-social adjustment. These were considered problems in almost two-thirds of the cases. Over one-half of the teachers checked ability as a problem for those referred.

#### Intermediate group

In the intermediate grades, teachers specifically mentioned fifteen different kinds of problems when they wrote the reasons they referred the particular child. Six areas specifically defined by the hypotheses were not specifically identified as problem areas. These areas were ability,

arithmetic achievement, grade placement of the child, sex of the child, social class of the child, and family constellation. Reading achievement was specifically mentioned in only 7 per cent of the cases.

The most frequently mentioned problem was underachievement, which was indicated in over 17 per cent of the reasons. Other areas mentioned over 10 per cent included social adjustment, lack of motivation, slow learner, and emotional problem.

Table 18. Reasons written for referral for intermediate group

Reason Referred	Gr. 4	Gr. 5	Gr. 6	% of all Referred
Reading Achievement	2	1	1	7.00
Underachievement	3	4	3	17.50
Personal Adjustment	0	0	2	3.50
Social Adjustment	0	6	1	12.25
Scatterbrain	0	1	0	1.75
Lacks Motivation	4	0	3	12.25
Withdrawal or Loner	4	0	0	7.00
Slow Learner or Poor Achieve.	1	3	3	12.25
Emotional Problem	2	0	5	12.25
Immaturity	0	2	0	3.50
Physical Disability	2	0	0	3.50
Home Problem--Adjustment	0	1	0	1.75
Worrier	0	0	1	1.75
Lacks Confidence	1	0	0	1.75
Poor Attitude	0	1	0	1.75

In combining specific problems into general areas, adjustment problems were mentioned in 42 per cent of the cases. Achievement problems were mentioned in 36.75 per cent of the

reasons. In Table 18 is a chart of the reasons listed by teachers for referring the students to an elementary guidance counselor at the intermediate level.

There was a difference between problems given by teachers as reasons for referral and problems checked for referral. Table 19 is the chart of problem areas checked by teachers.

Table 19. Variables checked as problems for intermediate group

Area	Yes		No	
	No.	Per Cent	No.	Per Cent
Ability	27	51.03	26	48.97
Reading Achievement	34	64.26	19	35.74
Arithmetic Achievement	25	47.08	28	52.92
Personal-Social Adjust.	36	68.04	17	31.96
Grade Placement	17	31.96	36	68.04
Social Class	21	39.69	32	60.31
Family Constellation	21	39.69	32	60.31

In approximately two-thirds of the cases of the experimental group, reading achievement and personal-social adjustment were marked as problems. Ability was listed as a problem in slightly over one-half of the cases. Other areas identified ranged from 31 to 39 per cent of the referrals.

## DISCUSSION

The purpose of this research was to determine the type of referral that elementary school teachers would make to an elementary school guidance counselor if an elementary school counselor were available. Mention should be made of some factors which affected the results of the research. Discussion and reaction will be made to the hypotheses which were tested, and the hypotheses' relations to the related literature which was reported in the research. There also were some variables related to the general administration of the research project which should be discussed. Finally, some comments about how these results relate to the general field of elementary school guidance will be made.

## Discussion Pertaining to Hypotheses

The results of this study seemed to indicate that teachers would refer, as a group, those of lesser ability, lesser achievement, and, in the intermediate grades, lesser adjustment. This was true even though the range of scores for each group for each variable was generally similar. It should be remembered that there were no elementary school guidance counselors in any of the schools surveyed. Results in all areas could be affected if these services were available in the schools and teachers were accustomed to using these services.

Peters, Shertzer, and Van Hoose (71), among others, wrote of elementary school guidance as being a service primarily to normal children with normal developmental problems. It seems that the teachers in this study view elementary school guidance as more of a service to those who were achieving poorly or adjusting poorly in school. This is in contrast to normal developmental problems or the problems arising in the regular order of progressive change in a child. Seventy-two per cent of the referrals at the primary level and about 78 per cent of the intermediate group were referred because of achievement and adjustment problems. It seemed that the teachers were viewing these two areas, achievement and adjustment problems, as the major frame of reference for the work of the elementary school counselor. These two areas seem to present the teacher with her major problems in the classroom, and she evidently wants most help in these areas.

In many cases, it is a combination of factors, rather than one specific factor, which causes a child's difficulty in school. Perhaps the results in this research reflect this pattern. Instead of one specific problem, like reading achievement, it is a combination of factors, such as achievement, ability, and adjustment, which affects the child's success in school.

The differences between the primary and intermediate groups in the area of personal-social adjustment have been

noted. The results at the primary level did not show a significant difference between the experimental and control groups; at the intermediate level, a significant difference was found. Four possible reasons for the results with the primary group are: the experimental and control groups are adjusting normally and this was not a primary reason for referral; that the test, the California Test of Personality, did not discriminate adequately between poor adjustment and average or normal adjustment; that by reading the questions to the primary group and each intermediate group student reading the questions to himself resulted in a difference in marking answers; or, that adjustment problems were not overt or critical problems at the primary level. The researcher felt the first two alternatives were the most tenable. The researcher followed test directions in reading the questions to the primary group but not the intermediate group. Teachers wrote that adjustment was a problem in about 44 per cent of the referred cases. The mean scores for all four groups were within the average or normal range of adjustment, using test norms in the California Test of Personality Manual.

The results indicating that a significantly greater number of boys than girls were referred seemed consistent with most previous research. In this study, results were highly significant for the primary group and significant for the intermediate group in this area. Few correlations between

sex of the student and other variables in this study showed a significant relationship. Only two groups out of twenty correlations showed significance. More boys were referred, but there were no consistently significant differences in the testing, nor in teacher's ratings.

In teacher's ratings, significant relationships in predicting ability and achievement were found. In all four groups, teacher's ratings and reading achievement were highly significant. Ability and teacher's rating of ability were significant at either the .05 level or .01 level for the different groups. Significance in teacher's rating of arithmetic and arithmetic achievement was noted at the intermediate level, but not the primary level. Teachers tended to predict ability and achievement, particularly reading achievement, well. This could be expected since the child performs in these areas in the classroom.

Correlations between personal-social adjustment and the teacher's rating of personal-social adjustment, however, were not significantly different in three of the four groups. Correlations of these varied from .01 to .26. On this particular research, teachers did not tend to rate students accurately in adjustment. If the rating and test scores were accurate indications, then it would seem teachers would need more assistance in identifying adjustment problems. As has been previously mentioned, another possible reason for the

lack of significance was that perhaps the test was not accurate in predicting adjustment.

With the experimental groups, teachers appeared to check many of the topics covered in the hypotheses as problem areas, rather than checking one or two variables as problem areas. Again, adjustment and achievement were checked as problem areas most frequently. The general pattern seemed to be that of indicating a number of problems, rather than just one problem.

Generally, those areas identified by a majority of teachers as problem areas were the same areas in which the null hypotheses were rejected. At the primary level, ability, reading achievement, and arithmetic achievement, were the areas indicated as problems in a majority of cases, and in which the null hypotheses were rejected. At the intermediate level, these areas included reading achievement, arithmetic achievement, and personal-social adjustment.

Both experimental groups also differed significantly from the control groups in the sex of the student. Teachers referred more boys than girls, which was similar to their checking sex differences as a problem area.

Areas in which a minority of cases were checked as problem areas and where there were no significant differences between the groups were grade placement, social class, and family adjustment. Considering these factors, teacher's ratings and actual testing results were consistent.

Since the teachers tended to check many areas as problems, they may have found it difficult to decide if an area was a definite problem. If there was a doubt as to whether it was a problem, perhaps they tended to check it as a problem. In addition, since each teacher could decide for herself if it was a problem, individual teacher's interpretations and perceptions would affect the checking. Teachers could have had different feelings and ideas about what was a problem. It was a subjective rating.

The short paragraph written by the teacher stating why she would refer a child appeared to be a better indication of why the referral actually was recommended. Here the teacher described her feelings. The statement was a more specific and descriptive reason of her concern about the child.

There were no significant differences when considering referrals from the six grades. No one grade seemed to supply an inordinant number of referrals. However, when considering the primary and intermediate levels, results were significant. As a group, more primary age children were referred than intermediate age children. Early recognition of problems is most desirable. Early recognition of problems and resultant services can frequently prevent the problem from becoming a major problem with extensive services required.

However, there are many children at the intermediate level who could profit from guidance services.

Results pertaining to social class, which could automatically include cultural deprivation factors, were not significant. Most children whom teachers referred had fathers whose occupations were in the middle and lower class levels. However, most children in the school surveyed had fathers with middle or lower class occupations. The geographical area covered in the research also could have been a factor, since there were no great colonies of culturally deprived children as can be found in other geographical areas. Teachers felt, by their referrals and their ratings, that social class was not one of the more important criteria. They did not refer mainly culturally deprived children.

The hypothesis pertaining to family constellation was not significant. This does not mean that children from broken homes of one kind or another do not have problems. Most of the children in this research had both parents in the home, as did most children in the schools surveyed. This can be an important variable, but did not concern many of the students. Since there was a minimal number of cases other than both parents in the home, the results were not significant.

### Discussion Pertaining to Related Literature

Many factors are related in the total development of a child, according to Wiener et al. (106), Taylor (91), Brunkan and Shen (6), and Williams and Cole (107). The results of this research seemed to substantiate this.

Teachers, in their rating of children, often seemed to feel that ability, achievement, and adjustment all were problem areas, rather than just one area being a problem. The researcher also felt that a child's difficulty in school is frequently a combination of factors, rather than a specific factor, but in some instances, there can be just one problem area. A significant relationship was indicated between ability and achievement in a majority of groups. However, no significant relationships were noted between either ability and personal-social adjustment, or achievement and personal-social adjustment.

The importance of the factors of grade placement, social class, and family constellation was discussed in the related literature chapter. This research did not reject the null hypotheses comparing the experimental and control groups in these areas. These factors can be important variables in individual cases. The null hypotheses for the sample population was not rejected, but, as was mentioned in the related literature, these variables can have an impact on individual children. For example, the child who

is young for his grade or is immature can have achievement and adjustment problems. A child who comes from a discordant or broken home cannot leave home problems at home when he comes to school. Cultural deprivation also can have an impact on the child at school.

Research by Rice (77) indicated that types of problems can vary at different grade levels. He reported that primary children were most often referred for intellectual problems, particularly low achievement. He also indicated many other problem areas. In the intermediate grades, intellectual problems, underachievement, and more social problem cases were referred. Most of the referrals in this research at both the primary and intermediate levels were in the areas of achievement and adjustment, particularly underachievement and social adjustment. Although problems in ability seldom were mentioned in their written paragraphs, on the check lists teachers checked ability as a problem area in almost one-half of the cases. This research does not seem to disagree with the Rice study, and with a study reported by Radin (76).

The results of this study were consistent with the results of the Wickman (105) and Hunter (41) studies. Their findings indicated that aggressive behavior and social behavior problems involving others were of most concern to teachers. Hunter's study, however, found growing recognition

by teachers of other types of emotional problems, such as withdrawal. When teachers wrote why they referred a child in this study, the most frequently mentioned adjustment problem was social adjustment. In about 10 per cent of the primary group and 12 per cent of the intermediate group, lack of motivation was listed as a problem. Withdrawal was mentioned in 4 per cent of the primary cases and in 7 per cent of the intermediate cases. Two children were recorded as worriers. There is broader recognition of different types of adjustment problems now, but social adjustment is still considered a problem most frequently.

Teachers evidently did not see the elementary school guidance counselor in the role of surveying pupil needs and interests, conferring on future plans, discussing occupational information, or doing diagnostic workups, as these factors were not mentioned in referrals. These factors are often considered responsibilities and competencies of the elementary school counselor, as was reported in the related literature chapter.

As Rippee, Hanvey and Parker (78) pointed out, teachers' perceptions of counseling services change as the services have been in the schools for a period of time. Research by McCreary and Miller (58) also indicated that having an elementary school guidance counselor in the system can influence how teachers view elementary school guidance and counseling.

This study did not survey any schools with elementary school guidance counselors. Perhaps results would have been different if there had been elementary school guidance counselors in the schools surveyed.

#### Discussion Pertaining to General Administration of Research

Certain procedural aspects of this study had an effect on the findings. The testing done for the research was scheduled, unavoidably, during the peak snow and influenza season. Finding days to get into the schools for the testing was difficult because the weather frequently forced cancellation of school. About 20 students in each of the experimental and control groups were not evaluated because of the flu. The researcher was unable to return to the schools to test these students because of the time it took away from his regular job to do the testing. It also was felt that even though it would have been worthwhile to evaluate these cases, the total results of the research would not have been affected greatly.

Perhaps the Great Plains Study of School Reorganization had its effect on the number of referrals made by some of the smaller schools. Teachers in some smaller schools appeared to be afraid they would lose their school because of an absence of guidance and library services at the elementary school level. In these cases, they seemed to

reflect the attitude that they, as teachers, could handle guidance areas themselves. Certainly, in the area of understanding children, the teacher who has been in the community a long time and works with a child daily can have an excellent understanding of a child. The teacher can contribute greatly in trying different techniques in the classroom, and in relating her understanding of a child and his behavior. However, the teacher often lacks training and skills that a counselor has, one of the biggest of which is counseling. The teacher and counselor should work as a team, rather than serving as a threat to each other.

Instead of group evaluation techniques, it was felt that possibly individual evaluations of referrals would have been more complete and more definitive. The time was not available for these individual evaluations.

Previously in this chapter mention was made of the California Test of Personality. Existing tests of personality were surveyed, but no other suitable group test of personality of an objective type which would cover grades one through six could be found. The California Test of Personality was considered the most suitable of what was available. It was also felt that the test, while possibly not diagnostically strong, could discriminate broadly between adequate adjustment and maladjustment. Intra-test correlations reported in this research were consistent with those

reported in the manual of the test. Significant differences between the experimental and control groups at the intermediate level also were found.

The other tests used in this study seemed widely accepted. The Wide Range Achievement Test is used for individual measurement of reading and arithmetic achievement. The Lorge-Thorndike and Cognitive Abilities Test also seem to be well standardized and popular. They are two of the more recently standardized tests of ability. The Nonverbal Battery of the Lorge-Thorndike was used for two reasons: To administer the Verbal and Nonverbal Batteries would have consumed too much time, and the researcher wanted to minimize verbal learning and reading ability which might have affected the IQ score if only the Verbal Battery were used. Therefore, the Nonverbal Battery was chosen.

This research was conducted in Humboldt and Pocahontas Counties in Iowa. They were mainly rural areas. Some populations not included in the research were urban areas, slum areas, and minority groups. Perhaps different results would be found in different geographic areas.

#### Discussion Pertaining to the Field of Elementary School Guidance

Results of such studies as this can have value to the field of elementary school guidance and counseling and to individual counselors. Training institutions and counselors

must develop their philosophies about the duties of elementary school counselors.

Authors such as Dinkmeyer (21) have written that guidance services in the elementary school are primarily designed for normal children with normal developmental problems, such as feeling a lack of confidence, being shy, worrying, achieving independence from parents, daydreaming excessively, developing good work habits, adjusting to physical changes, and accepting differences in people. The counselor also gives services to the atypical child. In this research, teachers appeared to be most concerned about problem children in the classroom, not normal developmental problems. They were most concerned about problems of achievement and adjustment. Theorists and teachers appear to have different ideas on what the main services of the counselor should be.

To develop appropriate philosophies, it would seem beneficial to know how schools and teachers view the counselor's role. In this way, a common ground of understanding may be reached more easily. To work effectively with teachers, the counselor should consider and evaluate the teachers' feelings about elementary school guidance and counseling, and the types of services the teachers want. This does not mean that a teacher's wishes must be accepted, but that the wishes must be considered and evaluated. The two groups must work together.

The counselor's training is dependent on the type of work he will be doing in the schools. It would seem that the counselor has not suitably defined his philosophy and role, particularly his role with normal children having normal developmental problems. This does not exclude his working with abnormal children with severe problems.

Much of the acceptance of a counselor depends on the counselor's personality and how he presents his role in the school. In addition, his acceptance depends on the actual work he does with individual children and groups of children. Perceptions of counselors and their roles do change. A study by Rippee, Hanvey and Parker (78) reported that teachers' perceptions of counseling services change as the services have been in the schools for a period of time.

Research such as the present also can help the counselor understand what type of child might well be referred to him by a teacher. It can help the counselor understand the major types of concerns and problems with which the teacher wants help. It can give the counselor some guidelines in communicating to teachers the kinds of problems about which she should be concerned, and the kinds of referrals she should make. Possibly it can help give the counselor an understanding of children who are in the schools, and how he can best be of service to them.

### Suggestions for Further Research

The research reported herein had some definite limitations. No school in the study had an elementary school guidance counselor employed in the system. Therefore, the referrals were only ones the teachers would refer if an elementary school counselor were present in the system. These referrals might have been different if an elementary school counselor actually were present.

Since no elementary school counselors were in the schools, none of the children evaluated were those who would refer themselves to the counselor. The study included only those students the teachers would refer, and not "walk-in's". It would seem helpful if research on the evaluation of pupils actually seen by a counselor could be made.

No urban areas or minority groups were included in the research. Different areas and different schools could have different needs for an elementary school counselor to meet. Research in these areas also would seem helpful.

The results reported in this research actually applied only to the sample population reported in the research. These results applied only to the children in Humboldt and Pocahontas Counties who were evaluated in this study. Further studies of similar groups might result in different findings.

## SUMMARY

The purpose of this research was to investigate and evaluate some of the variables viewed by elementary school teachers as indicative of a student's need of being referred to an elementary school guidance counselor. These children were evaluated in the areas of ability, reading achievement, arithmetic achievement, personal-social adjustment, sex of the student, grade placement of the student, social class, and family constellation.

The general hypothesis examined was that there were no significant differences in the variables listed above between those students recommended to be referred and those not recommended to be referred to an elementary school guidance counselor.

## Procedure

Children in grades one through six in Humboldt County and Pocahontas County school systems were the subjects of this study. Eighty pupils in each the experimental and control groups comprised the primary group. In the intermediate level groups, there were 53 children in each group.

Teachers were asked to indicate children whom they felt should be referred to an elementary school guidance counselor. They also indicated why they felt the child should be referred, what problem areas existed, and how they rated

the child in the variables defined in the hypotheses. An equal number of children from each classroom were selected by the method of random sample for the control group and teachers rated these children in the variables defined in the hypotheses.

For those children in each of the four research groups, tests were administered and information was gathered from school records. The Cognitive Abilities Test, Primary 2, Form 2, was administered to grades one and two, and the Lorge-Thorndike Intelligence Test, Nonverbal Battery, Form 1, was administered to grades three through six to compute an ability score. Achievement was measured in both reading and arithmetic with the Wide Range Achievement Test, Level 1. A measure of personal-social adjustment was made by using the California Test of Personality; grades one through three were administered the Primary Battery and grades four through six the Elementary Battery. Other information obtained on each subject included the sex of the child, what grade he was in, with whom the child lived, and what the father's occupation was. The father's occupation was then classified into different social class level, primarily using the Warner Index of Status Characteristics.

An individual's scores were computed and tabulated for each variable. Standard scores were used for ability and achievement. Raw scores were used for personal-social

adjustment. The students were placed in the appropriate categories for the other variables.

Statistical evaluations were made by comparing the experimental and control groups at two levels. The primary level covered grades one, two, and three, and the intermediate level was comprised of grades four, five, and six. The experimental and control groups were compared at the primary level and at the intermediate level. After all data were coded, a correlation matrix was computed.

The variables of ability, reading and arithmetic achievement, and personal-social adjustment were statistically evaluated with the t-test. A chi square value was computed for social class, sex of the student, grade placement, and family constellation. Correlations between different meaningful variables were also considered. Significance for all of these variables was determined at the .05 level.

## Findings

### Hypothesis I

Hypothesis I was that there was no significant difference in ability between those referred and those not referred to an elementary school guidance counselor.

At the primary level, the score for the t-test was 4.84. This value was highly significant. The t-value for the intermediate level was 4.66, also highly significant. The null hypothesis that there was no significant difference between the two groups was rejected at both levels.

### Hypothesis II

Hypothesis II was that there was no significant difference in reading achievement between those referred and those not referred to an elementary school guidance counselor.

Results for the primary level showed a t-value of 4.90, which was highly significant. The t-value for the intermediate group was 5.31, also highly significant. The null hypothesis that there was no significant difference between the two groups was rejected.

### Hypothesis III

Hypothesis III was that there was no significant difference in arithmetic achievement between those referred and those not referred to an elementary school guidance counselor.

The computed value of the t-test for the primary group was 3.33. The computed value of the t-test for the intermediate group was 4.06. Both of these values were highly significant. These results indicated that there was a significant difference in arithmetic achievement between the two groups at both levels. The null hypothesis was rejected.

### Hypothesis IV

Hypothesis IV was that there were no significant differences in personal-social adjustment between those referred and those not referred to an elementary school guidance counselor.

Three separate t-tests were computed for each level. These t-tests were for personal-social adjustment, personal adjustment, and social adjustment. The results of the primary level failed to reject the null hypothesis of significant difference between the groups. T-values for the primary group were 1.72 for personal-social adjustment, 1.56 for personal adjustment, and 1.52 for social adjustment. There was insufficient evidence to reject the null hypothesis at the primary level. However, for the intermediate level, results in all three areas were highly significant. The t-values for the intermediate group were 4.11 for personal-social adjustment, 4.22 for personal adjustment, and 3.30 for social adjustment. For the intermediate group, the null hypothesis of no significant difference between the two groups was rejected.

#### Hypothesis V

Hypothesis V was that there was no significant difference in the sex of the student of those referred and those not referred to an elementary school guidance counselor.

For the primary group, 35 more boys than girls were in the experimental group. In actual numbers, in the experimental group there were 57 boys and 23 girls, while there were 40 boys and 40 girls in the control group. The chi square value for the primary group was 7.57, which was highly significant. In the intermediate group, 36 boys and 17 girls

were in the experimental group, and 24 boys and 29 girls were in the control group. The computed value for the chi square for the intermediate group was 5.53. This value was significant at the .05 level of significance. The null hypothesis of no significant difference between groups was rejected at the primary level. For the intermediate level, the null hypothesis was rejected at the .05 level of significance.

#### Hypothesis VI

In Hypothesis VI, it was stated that there was no significant difference in the grade placement of those referred to an elementary school guidance counselor.

Approximately 60 per cent of the referrals were at the primary level, namely grades one, two, and three. The remaining students were in the intermediate grades. The number of referrals for each grade were:

Grade 1	--	20
Grade 2	--	27
Grade 3	--	33
Grade 4	--	17
Grade 5	--	19
Grade 6	--	17

Two separate chi square values were computed, one considering each separate grade, and one considering the primary level and intermediate level. The chi square value for separate grade levels was 9.42. There was insufficient evidence to reject the null hypothesis considering the six grades. The

chi square value considering only the primary group and intermediate group was 5.48. This value was significant at the .05 level of significance. The null hypothesis for these two groups was rejected.

#### Hypothesis VII

Hypothesis VII was that there was no significant differences in the social class, as determined by the occupation of the father, of those referred and those not referred to an elementary school guidance counselor.

The primary group chi square value was 6.41. This value was not significant at the .05 level of significance. At the intermediate level, the chi square value was 4.53. This value also was not significant. There was insufficient evidence to reject the null hypothesis pertaining to social class.

#### Hypothesis VIII

Hypothesis VIII was that there was no significant difference between those referred and those not referred to an elementary school guidance counselor as to the type of family constellation, whether the child lived with both parents, one living parent, one divorced parent, guardian, or remarriage with a stepparent.

For both groups the great majority of subjects lived with both parents. At the primary level, the chi square value was 1.13. It was not significant at the .05 level of

significance. At the intermediate level, the chi square value was 3.68, which also was not significant at the .05 level of significance. There was insufficient evidence to reject the null hypothesis.

#### Other findings

A number of correlations between different variables for each of the four groups was also reported. The significant correlations, those significant at the .05 level or above, were reported in the research. They included ability and reading achievement, ability and arithmetic achievement, reading achievement and arithmetic achievement, personal-social adjustment and personal adjustment, personal-social adjustment and social adjustment, personal adjustment and social adjustment, ability and teacher's rating of ability, reading achievement and teacher's rating of reading achievement, and arithmetic achievement and teacher's rating of arithmetic achievement at the intermediate level.

Teachers also wrote a short paragraph indicating why they referred each child to the experimental group. At the primary level, 28 per cent of these reasons concerned school achievement, and 44 per cent involved adjustment problems. At the intermediate level, adjustment problems were stated in 42 per cent of the cases, and achievement problems were indicated in about 36 per cent of the cases. These were the main reasons for referral.

Teachers also indicated whether variables covered by the hypotheses were considered by them to be a problem for those in the experimental groups. In the majority of cases at the primary and intermediate levels, ability, reading achievement, and personal-social adjustment were considered to be problem areas for the child.

## BIBLIOGRAPHY

1. Association for Counselor Education and Supervision-American School Counselors' Association. The elementary school counselor. *Personnel and Guidance Journal* 44: 658. 1966.
2. Aubrey, Roger F. The legitimacy of elementary school counseling: some unresolved issues and conflicts. *Personnel and Guidance Journal* 46: 355-359. 1967.
3. Ausubel, David P. Educational psychology; a cognitive view. New York, N.Y., Holt, Rinehart and Winston, Inc. 1968.
4. Baller, Warren R. and Charles, Don C. The psychology of human growth and development. New York, N.Y., Holt, Rinehart and Winston. 1961.
5. Brown, Duane and Pruett, Rolla F. The elementary teacher views guidance. *School Counselor* 14, No. 4: 195-203. March 1967.
6. Brunkan, R. J. and Shen, F. Personality characteristics of ineffective, effective and efficient readers. *Personnel and Guidance Journal* 44: 837-843. 1966.
7. Buros, Oscar K. Sixth mental measurements yearbook. Highland Park, N.J., The Gryphon Press. 1965.
8. Cardon, B. W. Sex differences in school achievement. *Elementary School Journal* 68: 427-434. 1968.
9. Carmichael, Leonard, ed. Manual of child psychology. New York, N.Y., John Wiley and Sons, Inc. 1954.
10. Centers, Richard. The psychology of social classes. Princeton, N.J., Princeton University Press. 1949.
11. Christopher, Samuel A. Parent relationship and value orientation as factors in academic achievement. *Personnel and Guidance Journal* 45: 921-925. 1967.
12. Clark, Edward T. Influence of sex and social class on occupational preference and perception. *Personnel and Guidance Journal* 45: 440-444. 1967.

13. Cleveland, G. A. and Bosworth, D. L. Study of certain psychological and sociological characteristics as related to arithmetic achievement. *Arithmetic Teacher* 14: 383-387. 1967.
14. Coleman, Herbert A. The relationship of socio-economic status to the performance of junior high school students. *Journal of Experimental Education* 9: 61-63. 1940.
15. Coopersmith, S. A method for determining types of self esteem. *Journal of Educational Psychology* 59: 87-97. 1959.
16. County City Data. *Sales Management* 100, No. 12: D-76 and D-77. June 10, 1968.
17. Cronbach, Lee J. *Educational psychology*. 2nd ed. New York, N.Y., Harcourt, Brace and World, Inc. 1963.
18. Cronbach, Lee J. *Essentials of psychological testing*. New York, N.Y., Harper and Brothers. 1960.
19. Cutts, Warren G. Reading unreadiness in the underprivileged. *NEA Journal* 52, No. 4: 23-24. April 1963.
20. Davidson, H. and Lange, G. Children's perceptions of their teachers' feelings toward them related to self perception, school achievement and behavior. *Journal of Experimental Education* 29: 107-118. Dec. 1960.
21. Dinkmeyer, Don C. Developmental counseling in the elementary school. *Personnel and Guidance Journal* 45: 262-266. 1966.
22. Dinkmeyer, Don C., ed. *Guidance and counseling in the elementary school*. New York, N.Y., Holt, Rinehart and Winston, Inc. 1968.
23. Dreikurs, Rudolf. Do teachers understand children? In Dinkmeyer, Don C., ed. *Guidance and counseling in the elementary school*. Pp. 180-183. New York, N.Y., Holt, Rinehart and Winston, Inc. 1968.
24. Eckerson, Louise Omwake. Realities confront elementary school guidance. *Personnel and Guidance Journal* 46: 350-354. 1967.
25. Foreman, Milton E., Poppen, William A. and Frost, Jack M. Case groups: an in-service education technique. *Personnel and Guidance Journal* 46: 388-392. 1967.

26. Frankel, Edward. Characteristics of working and non-working mothers among intellectually gifted, high and low achievers. *Personnel and Guidance Journal* 42: 776-780. 1964.
27. Frankiel, R. F. A review of research on parent influence on child personality. Research Monograph. New York, N.Y., Family Service Association. 1959.
28. Gates, Arthur I. Sex differences in reading ability. *Elementary School Journal* 61: 431-434. 1961.
29. Geisman, L. L., Laserte, M. A. and Ayres, S. Measuring family disorganization. *Marriage and Family Living* 24: 51-56. Feb. 1962.
30. Gill, Lois J. and Spilka, B. Some nonintellectual correlates of academic achievement among Mexican-American secondary school students. *Journal of Educational Psychology* 51: 208-212. 1960.
31. Glueck, Sheldon and Glueck, Eleanor. Unraveling juvenile delinquency. Cambridge, Mass., Harvard University Press. 1950.
32. Goode, William J. The family. Englewood Cliffs, N.J., Prentice-Hall, Inc. 1964.
33. Grams, Armin. Facilitating learning and individual development toward a theory for elementary guidance. St. Paul, Minn., Minnesota State Department of Education. 1966.
34. Guinouard, Donald E. and Rychlak, Joseph F. Personality correlates and sociometric popularity in elementary school. *Personnel and Guidance Journal* 40: 438-442. 1962.
35. Hansen, James C., Niland, Thomas M. and Zani, Leonard P. Model reinforcement in group counseling with elementary school children. *Personnel and Guidance Journal* 47: 741-744. 1969.
36. Harrison, Edna L. The elementary school counselor and the gifted underachiever. *Personnel and Guidance Journal* 41: 716-719. 1963.
37. Havighurst, Robert J. and Taba, Hilda. Adolescent character and personality. New York, N.Y., John Wiley and Sons, Inc. 1949.

38. Honzik, M. P. Fluctuations in mental test scores. Ross Pediatric Research Conference [Columbus, O] Ross Laboratories 26: 54-59. 1958.
39. Hoyt, K. B. Guidance, a constellation of services. Personnel and Guidance Journal 40: 690-697. 1962.
40. Hoyt, Kenneth B. Some thoughts on elementary school guidance. In Dinkmeyer, Don C., ed. Guidance and counseling in the elementary school. Pp. 32-39. New York, N.Y., Holt, Rinehart and Winston, Inc. 1968.
41. Hunter, E. C. Changes in teachers' attitudes toward children's behavior over the last thirty years. Mental Hygiene 41: 3-11. Jan. 1957.
42. Jastak, J. F. and Jastak, S. R. The wide range achievement test, manual of instructions. Wilmington, Del., Guidance Associates. 1965.
43. Jones, H. E. The environment and mental development. In Carmichael, L., ed. Manual of child psychology. Pp. 631-696. New York, N.Y., John Wiley and Sons, Inc. 1954.
44. Julius, Marvin. The economic base of the Fort Dodge area. Iowa State University of Science and Technology Cooperative Extension Service in Agriculture and Home Economics Pamphlet 375. 1967.
45. Kagan, J. and Moss, H. Birth to maturity. New York, N.Y., John Wiley and Sons, Inc. 1962.
46. Kennedy, Daniel A. and Thompson, Ina. Use of reinforcement technique with a first grade boy. Personnel and Guidance Journal 46: 366-370. 1967.
47. Kirkpatrick, Clifford. The family as process and institution. New York, N.Y., The Ronald Press Co. 1963.
48. Knight, James and Chansky, Norman M. Anxiety, study problems and achievement. Personnel and Guidance Journal 43: 45-46. 1964.
49. Koplitz, Eugene D., ed. Guidance in the elementary school: theory, research and practice. Dubuque, Iowa, William C. Brown Co. 1968.

50. Kowitz, Gerald T. and Kowitz, Norma Giess. Elementary school attendance as an index of guidance needs. *Personnel and Guidance Journal* 44: 938-943. 1966.
51. Kranzler, Gerald D., Mayer, George Ray, Dyer, Calvin O. and Munger, Paul F. Counseling with elementary school children. *Personnel and Guidance Journal* 44: 944-949. 1966.
52. Levy, L. H. The meaning and generality of perceived actual-ideal discrepancies. *Journal of Consulting Psychology* 20: 396-398. 1956.
53. Lifton, W. M. Social forces and guidance in the elementary school. *Vocational Guidance Quarterly* 12: 89-92. 1963.
54. Lindgren, Henry Clay. Educational psychology in the classroom. 3rd ed. New York, N.Y., John Wiley and Sons, Inc. 1967.
55. Lorge, Irving, Thorndike, Robert L. and Hagen, Elizabeth. The Lorge-Thorndike intelligence tests, manual for administration. Boston, Mass., Houghton Mifflin Co. 1964.
56. Luckey, Eleanore Braun. The elementary school counselor: counselor for parents. *School Counselor* 14, No. 4: 204-209. March 1967.
57. MacMinn, Paul and Ross, Roland G. Status of preparation programs for guidance and student personnel workers. Washington, D. C., Department of Health, Education and Welfare, U. S. Office of Education Bul. 7. 1959.
58. McCreary, William H. and Miller, Gerald. Elementary school counselors in California. *Personnel and Guidance Journal* 44: 494-498. 1966.
59. McDonald, Keith H. The relationship of socio-economic status to an objective measure of motivation. *Personnel and Guidance Journal* 42: 997-1002. 1964.
60. McDougall, William P. and Reitan, Henry M. The elementary counselor as perceived by elementary principals. *Personnel and Guidance Journal* 42: 348-354. 1963.

61. Matlin, Arnold H. and Mendelsohn, Francis A. The relationship between personality and achievement variables in the elementary school. *Journal of Educational Research* 58: 457-459. 1966.
62. Mayer, G. Roy. An approach for the elementary school counselor: consultant or counselor? *School Counselor* 14, No. 4: 210-214. 1967.
63. Mayer, G. Roy, Kranzler, Gerald D. and Matthes, William A. Elementary school counseling and peer relations. *Personnel and Guidance Journal* 46: 360-365. 1967.
64. Montague, David O. Arithmetic concepts of kindergarten children in contrasting socioeconomic areas. *Elementary School Journal* 64: 393-397. 1964.
65. Neale, D. C. and Proshek, J. M. School related attitudes of culturally disadvantaged elementary school children. *Journal of Educational Psychology* 58: 238-244. 1967.
66. Nelson, Richard C. Elementary school counseling with unstructured play media. *Personnel and Guidance Journal* 45: 24-27. 1966.
67. Nelson, Richard C. Physical facilities for elementary school counseling. *Personnel and Guidance Journal* 45: 552-556. 1967.
68. Newman, Ruth Gallert. A study of the difficulties of hyper-aggressive, emotionally disturbed children in adjusting to school and in deriving satisfying learning experiences from school. *Dissertation Abstracts* 17: 2470. 1957.
69. Orton, S. T. Reading, writing and speech problems in children. New York, N.Y., W. W. Norton and Co., Inc. 1961.
70. Perrone, Phillip A., Weiking, Mary L. and Nagel, Elwyn H. The counseling function as seen by students, parents, and teachers. *Journal of Counseling Psychology* 12: 148-152. Summer, 1965.
71. Peters, Herman J., Shertzer, Bruce and Van Hoose, William H. Guidance in elementary school. Chicago, Ill., Rand McNally and Co. 1966.
72. Piaget, J. The child's conception of the world. New York, N.Y., Harcourt. 1929.

73. Powell, Marvin, O'Conner, Henry A. and Deutsch, Murray. Are there really sex differences in achievement? *Journal of Educational Research* 57: 210-212. Dec. 1963.
74. Powers, Ronald C. and Meyers, Sue. The population change of the Fort Dodge area. Iowa State University of Science and Technology Cooperative Extension Service in Agriculture and Home Economics Pamphlet 335. 1966.
75. Prescott, George A. Sex differences in Metropolitan Readiness Test results. *Journal of Educational Research* 48: 605-610. 1955.
76. Radin, Sherwin S. Mental health problems of school children. *Journal of School Health* 33: 252. 1963.
77. Rice, Joseph P., Jr. Types of problems referred to a central guidance office at different grade levels. *Personnel and Guidance Journal* 42: 52-55. 1963.
78. Rippee, Billy D., Hanvey, William E. and Parker, Clyde A. Influence of counseling on the perception of counselor role. *Personnel and Guidance Journal* 43: 696-701. 1965.
79. Roth, R. The role of self concept in achievement. *Journal of Experimental Education* 27: 265-281. 1959.
80. Russell, James C. and Willis, Arthur R. Survey of teachers' opinions of guidance services. *Personnel and Guidance Journal* 42: 707-709. 1964.
81. Seagull, Arthur. The counselor as consultant: what can teachers teach him. *Personnel and Guidance Journal* 46: 808-810. 1968.
82. Sears, R. R. Personality development in the family. In Seidman, J. M., ed. *The child*. Pp. 117-137. New York, N.Y., Rinehart and Co. 1958.
83. Shaw, Merville C. Underachievement is predominantly a male problem. *Personnel and Guidance Journal* 44: 1091-1092. 1966.
84. Smith, H. M. and Eckerson, Louise O. Guidance for children in elementary schools. Washington, D.C., Department of Health, Education and Welfare, U. S. Office of Education. 1963.

85. Stevenson, Harold W. and Odom, Richard. The relation of anxiety to children's performance on learning and problem-solving tasks. *Child Development* 36: 1003-1012. Dec. 1965.
86. Stewart, J. A. Factors influencing teachers' attitudes toward and participation in guidance services. *Personnel and Guidance Journal* 39: 729-734. 1961.
87. Stone, F. Beth and Rowley, Vinton N. Educational disability in emotionally disturbed children. In Lindgren, H. C., ed. *Readings in educational psychology*. Pp. 361-366. New York, N.Y., John Wiley and Sons, Inc. 1968.
88. Strang, Ruth. The relation of guidance to the teaching of reading. *Personnel and Guidance Journal* 44: 831-836. 1966.
89. Stroud, James B. *Psychology in education*. New York, N.Y., Longmans, Green and Co. 1956.
90. Sybouts, W. School discipline and home background. *Personnel and Guidance Journal* 45: 683-686. 1967.
91. Taylor, Ronald G. Personality traits and discrepant achievement. *Journal of Counseling Psychology* 11: 76-82. Spring 1964.
92. Teigland, John J., Winkler, Ronald C., Munger, Paul L. and Kranzler, Gerald D. Some concomitants of underachievement at the elementary school level. *Personnel and Guidance Journal* 44: 950-955. 1966.
93. Thompson, Jack M. Current issues and problems in elementary school guidance. *School Counselor* 13, No. 2: 77-81. 1965.
94. Thorndike, Robert L., Hagen, Elizabeth and Lorge, Irving. *Cognitive abilities test: examiner's manual*. Boston, Mass., Houghton Mifflin Co. 1968.
95. Thorpe, Louis P., Clark, Willis W. and Tiegs, Ernest W. *California test of personality manual*. Monterey, Calif., California Test Bureau. 1953.
96. Van Hoose, William H. and Vafakas, Catherine M. Status of guidance and counseling in the elementary school. *Personnel and Guidance Journal* 46: 536-539. 1968.

97. Waetjen, W. B. Counseling services for the elementary school. National Elementary Principals 44: 59-62. Fall 1965.
98. Warner, W. L. and Gross, C. E. Social class and personality development. American Association of School Administrators Official Report 1961: 352-366. 1961.
99. Warner, W. Lloyd, Meeker, Marchia and Eells, Kenneth. Social class in America. Chicago, Ill., Science Research Associates. 1949.
100. Watson, Dorothy. A teacher looks at guidance. National Elementary Principal 43, No. 5: 37-40. April 1964.
101. Weintraub, S. Sex differences in reading achievement. Reading Teacher 20: 155. Nov. 1966.
102. Wert, James E., Neidt, Charles O., and Ahmann, J. Stanley. Statistical methods in educational and psychological research. New York, N.Y., Appleton-Century-Crofts, Inc. 1954.
103. Whetstone, B. D. Ideal student as perceived by counselors and teachers. Journal of Educational Research 61: 118-120. 1967.
104. Whetstone, B. D. Personality differences between selected counselors and effective teachers. Personnel and Guidance Journal 65: 886-890. 1965.
105. Wickman, E. K. Children's behavior and teachers' attitudes. New York, N.Y., Commonwealth Fund. 1928.
106. Wiener, Gerald, Rider, Rowland V. and Oppel, Wallace. Some correlates of IQ changes in children. Child Development 34: 61-67. March 1963.
107. Williams, Robert L. and Cole, Spurgeon. Self concept and school adjustment. Personnel and Guidance Journal 46: 478-480. 1968.
108. Wren, C. G. The counselor in a changing world. Washington, D.C., American Personnel and Guidance Association. 1962.
109. Wyatt, N. M. The reading achievement of first grade boys versus first grade girls. Reading Teacher 19: 661-665. May 1966.

110. Zaccaria, Joseph S. Varied contributions of guidance education. *Education* 86: 75-77. 1965.
111. Zimmerman, Irla Lee and Allebrand, George N. Personality characteristics and attitudes toward achievement of good and poor readers. In Lindgren, Henry Clay, ed. *Readings in educational psychology*. Pp. 355-360. New York, N.Y., John Wiley and Sons, Inc. 1968.

APPENDIX A

SUMMARY OF PRELIMINARY STATEMENT  
JOINT ACES-ASCA COMMITTEE ON THE ELEMENTARY SCHOOL COUNSELOR

We envision a "counselor" as a member of the staff of each elementary school. The "counselor" will have three major responsibilities: counseling, consultation, and coordination. He will counsel and consult with individual pupils and groups of pupils, with individual teachers and groups of teachers, and with individual parents and groups of parents. He will coordinate the resources of the school and community in meeting the needs of the individual pupil. The "counselor" will work as a member of the local school staff and as a member of the team providing pupil personnel services.

We believe that guidance for all children is an essential component of the total educational experience in the elementary school. By guidance we mean a continuing process concerned with determining and providing for the developmental needs of all pupils. This process is carried out through a systematically planned program of guidance functions. These guidance functions are a vital part of the elementary school's organized effort to provide meaningful educational experiences appropriate to each child's need and level of development.

We envision a "counselor" as a member of the staff of each elementary school. By "counselor" we mean a professional person, educationally oriented, highly knowledgeable in the area of child growth and development, with a broadly based, multidisciplinary background in the behavioral sciences and a high degree of competence in human relations. By educationally oriented we mean having a knowledge of the elementary school program, including curriculum, the learning process and school organization. By broadly-based, multi-disciplinary background we mean a program of preparation carefully planned to include the contributions of several disciplines--anthropology, economics, education, philosophy, psychology, sociology.

The "counselor" will have three major responsibilities: counseling, consultation, and coordination. The "counselor" will counsel or work with individual students or small groups of students. The "counselor" will perform a consultative function with parents and with other school and community personnel. The "counselor" will perform a coordinating function in integrating the resources of the school and community - ideas, things, and people - to meet the developmental needs of the individual. The "counselor" must also see himself and the school as an integral part of a total community effort.

APPENDIX B

## REFERRAL FORM FOR EXPERIMENTAL GROUP

Student's Name \_\_\_\_\_

Grade \_\_\_\_\_ Sex \_\_\_\_\_ Teacher \_\_\_\_\_

School \_\_\_\_\_

Indicate why you feel this child is one you would refer to an elementary guidance counselor.

Under what heading or headings would you classify the child's major area of difficulty?

- (1) Please check yes or no for each one as to whether it is a problem.
- (2) Also please indicate in each area on the graph how you place the child in relation to how great it is a problem or is not a problem for the child.

## PART I

## PART II

Please check  
yes or no

<div style="display: flex; justify-content: space-between;"> <div style="width: 10%;">_____</div> <div style="width: 10%;">_____</div> </div>	<p>ABILITY or the intellectual capacity, skill, or competence. high/above average/average/below average/low</p> <hr/>
<div style="display: flex; justify-content: space-between;"> <div style="width: 10%;">_____</div> <div style="width: 10%;">_____</div> </div>	<p>READING ACHIEVEMENT or the amount the pupil has learned in reading. high/above average/average/below average/low</p> <hr/>
<div style="display: flex; justify-content: space-between;"> <div style="width: 10%;">_____</div> <div style="width: 10%;">_____</div> </div>	<p>ARITHMETIC ACHIEVEMENT or the amount the pupil has learned in arithmetic. high/above average/average/below average/low</p> <hr/>
<div style="display: flex; justify-content: space-between;"> <div style="width: 10%;">_____</div> <div style="width: 10%;">_____</div> </div>	<p>PERSONAL-SOCIAL ADJUSTMENT or how well the pupil gets along with others and how well he is satisfied with himself. high/above average/average/below average/low</p> <hr/>

yes or no

\_\_\_\_      \_\_\_\_      GRADE PLACEMENT or to what extent the grade  
the child is in contributes to the problem.  
high/above average/average/below average/low

---

\_\_\_\_      \_\_\_\_      SOCIAL CLASS or those of a same social level  
who are willing to associate intimately with  
one another.  
high/above average/average/below average/low

---

\_\_\_\_      \_\_\_\_      FAMILY CONSTELLATION or whether the family  
unit is intact or broken by death or divorce.  
high/above average/average/below average/low

---

APPENDIX C

## QUESTIONNAIRE FOR CONTROL GROUP

Student's Name \_\_\_\_\_

Grade \_\_\_\_\_ Sex \_\_\_\_\_ Teacher \_\_\_\_\_

School \_\_\_\_\_

Please indicate on the graph how you place the child in each area.

ABILITY or the intellectual capacity, skill, or competence.  
high above average average below average low

---

READING ACHIEVEMENT or the amount the pupil has learned in reading.

high above average average below average low

---

ARITHMETIC ACHIEVEMENT or the amount the pupil has learned in arithmetic.

high above average average below average low

---

PERSONAL-SOCIAL ADJUSTMENT or how well the pupil gets along with others and how well he is satisfied with himself.

high above average average below average low

---

GRADE PLACEMENT or to what extent the grade the child is in contributes to the problem.

high above average average below average low

---

SOCIAL CLASS or those of a same social level who are willing to associate intimately with one another.

high above average average below average low

---

FAMILY CONSTELLATION or whether the family unit is intact or broken by death or divorce.

high above average average below average low

---

APPENDIX D

Table 20. Means and standard deviations for research variables for primary group

Variable	Experimental		Control	
	$\bar{X}$	s	$\bar{X}$	s
Sex	1.29	.46	1.50	.50
Ability	95.19	13.91	105.01	11.68
Reading Achievement	94.70	8.29	103.19	11.11
Arithmetic Achievement	94.14	8.29	98.28	7.38
Personal-Social Adjust.	61.05	13.81	64.58	12.06
Personal Adjustment	27.02	7.53	28.71	6.12
Social Adjustment	34.03	8.17	35.86	7.12
Social Class	4.53	1.82	4.04	1.84
Family Constellation	1.43	1.17	1.30	.92
Grade Placement	2.16	.80	2.16	.80
Ability (Yes or No)	1.43	.50		
Rating--Ability	2.58	.79	3.36	.86
Reading (Yes or No)	1.36	.48		
Rating--Reading Achieve.	2.21	.85	3.33	.94
Arithmetic (Yes or No)	1.55	.50		
Rating--Arith. Achieve.	2.59	.72	3.35	.80
Adjustment (Yes or No)	1.36	.48		
Rating--Adjustment	2.26	.87	3.26	.87
Grade Place. (Yes or No)	1.58	.50		
Rating--Grade Place.	3.68	1.12	4.58	.79
Social Class (Yes or No)	1.61	.49		
Rating--Social Class	3.64	1.28	4.53	.86
Family Constell. (Yes, No)	1.61	.49		
Rating--Family Constell.	3.86	1.37	4.61	.85

APPENDIX E

Table 21. Means and standard deviations for research variables for intermediate group

Variable	Experimental		Control	
	$\bar{X}$	s	$\bar{X}$	s
Sex	1.32	.47	1.55	.50
Ability	100.98	13.65	110.17	12.68
Reading Achievement	96.75	13.79	106.81	9.86
Arithmetic Achievement	94.75	8.59	99.96	7.61
Personal-Social Adjust.	94.11	17.65	104.81	15.15
Personal Adjustment	43.92	9.18	49.62	7.86
Social Adjustment	50.19	10.51	55.19	8.58
Social Class	4.60	1.68	4.28	1.79
Family Constellation	1.26	.79	1.26	.88
Grade Placement	5.00	.81	5.00	.81
Ability (Yes or No)	1.49	.50		
Rating--Ability	2.79	.86	3.43	1.14
Reading (Yes or No)	1.36	.48		
Rating--Reading Achieve.	2.53	1.01	3.43	.97
Arithmetic (Yes or No)	1.53	.50		
Rating--Arith. Achieve.	2.58	.93	3.36	.96
Adjustment (Yes or No)	1.32	.47		
Rating--Adjustment	2.20	.86	3.64	1.00
Grade Place. (Yes or No)	1.68	.47		
Rating--Grade Place.	3.77	1.23	4.66	.71
Social Class (Yes or No)	1.60	.49		
Rating--Social Class	3.74	1.29	4.75	.59
Family Constell. (Yes, No)	1.60	.49		
Rating--Family Constell.	3.72	1.36	4.70	.82

APPENDIX F

Table 22. Correlation matrix for the variables for the primary experimental group

	1 <sup>a</sup>	2	3	4	5	6	7	8
1.	1.0000							
2.	.3273	1.0000						
3.	.3799	.5485	1.0000					
4.	.1520	.0242	.0490	1.0000				
5.	.0414	.0701	.0383	.8684	1.0000			
6.	.2187	-.0238	.0476	.8896	.5460	1.0000		
7.	-.1044	-.1795	-.2530	.1520	.1080	.1573	1.0000	
8.	.0154	.1359	-.3210	.1683	.1167	.1769	.1921	1.0000
9.	.2692	.5644	.4561	.0575	.0358	.0642	-.2998	-.0692
10.	.1962	.5207	.2823	-.0837	.0031	-.1443	-.2114	-.1066
11.	.1938	.0488	-.0073	-.0790	.0205	-.1523	-.0737	-.0793
12.	-.0062	-.2282	-.0350	.1214	.0125	.1936	-.1043	-.0438
13.	.2933	.2574	.0715	-.0267	.0444	-.0860	-.0022	.1858
14.	.2150	.0840	-.0443	.2483	.2225	.2146	-.1896	.1201
15.	.0546	.0427	.0285	.0252	.0680	-.0201	-.1843	.0783

<sup>a</sup>List of variables:

1. Ability
2. Reading Achievement
3. Arithmetic Achievement
4. Personal-Social Adjustment
5. Personal Adjustment
6. Social Adjustment
7. Social Class
8. Grade Placement
9. Rating of Ability
10. Rating of Reading Achievement
11. Rating of Arithmetic Achievement
12. Rating of Personal-Social Adjustment
13. Rating of Grade Placement
14. Rating of Social Class
15. Rating of Family Constellation

Table 22. (Continued)

9	10	11	12	13	14	15
1.0000						
.5668	1.0000					
.3086	.5338	1.0000				
-.1303	.0092	.0940	1.0000			
.2698	.4171	.3626	-.0932	1.0000		
.0085	.0368	.0965	.3616	.1200	1.0000	
.0623	.0798	.0955	.2764	.2593	.3996	1.0000

APPENDIX G

Table 23. Correlation matrix for the variables for the primary control group

	1 <sup>a</sup>	2	3	4	5	6	7	8
1.	1.0000							
2.	.2167	1.0000						
3.	.1046	.1882	1.0000					
4.	.2064	.0664	.0188	1.0000				
5.	.2137	.1256	.0951	.8954	1.0000			
6.	.1659	.0045	-.0498	.9239	.6569	1.0000		
7.	-.0330	-.0896	-.1398	-.1141	-.0530	-.1475	1.0000	
8.	.0484	.2493	-.3474	.0098	-.0496	.0593	.0559	1.0000
9.	.2412	.5915	.1196	.1565	.1787	.1115	.0713	-.1047
10.	.2640	.5722	.0564	.1276	.1399	.0958	.0369	-.0206
11.	.3256	.3228	.0802	.1539	.1325	.1468	.0860	.0287
12.	.2056	.1774	.0657	.2696	.2590	.2333	.1287	.0289
13.	.1647	.3272	.2028	.0378	.0189	.0479	.1763	.1897
14.	.1422	.2543	-.0111	-.0615	-.1085	-.0108	.0115	.1874
15.	.0400	.0977	.0556	-.0274	-.0095	-.0382	.0419	.1121

<sup>a</sup>List of variables:

1. Ability
2. Reading Achievement
3. Arithmetic Achievement
4. Personal-Social Adjustment
5. Personal Adjustment
6. Social Adjustment
7. Social Class
8. Grade Placement
9. Rating of Ability
10. Rating of Reading Achievement
11. Rating of Arithmetic Achievement
12. Rating of Personal-Social Adjustment
13. Rating of Grade Placement
14. Rating of Social Class
15. Rating of Family Constellation

Table 23. (Continued)

9	10	11	12	13	14	15
1.000						
.8870	1.0000					
.7354	.6922	1.0000				
.4643	.4847	.5426	1.0000			
.4890	.4949	.3589	.2565	1.0000		
.2194	.1945	.1910	.2721	.4637	1.0000	
.1773	.1283	.2029	.2600	.4672	.6660	1.000

APPENDIX H

Table 24. Correlation matrix for the variables for the intermediate experimental group

	1 <sup>a</sup>	2	3	4	5	6	7	8
1.	1.0000							
2.	.4108	1.0000						
3.	.7105	.5751	1.0000					
4.	.1278	.1919	.1680	1.0000				
5.	.2258	.1488	.2210	.8806	1.0000			
6.	.0176	.1924	.0891	.9104	.6057	1.0000		
7.	-.2880	-.0815	-.1801	-.1314	-.1842	-.0599	1.0000	
8.	.0070	-.0793	-.0415	.0202	-.0233	.0543	-.1699	1.0000
9.	.3816	.3754	.4340	.2642	.2725	.2058	-.0180	-.1929
10.	.4031	.6105	.4866	.1065	.1308	.0646	-.1461	-.1176
11.	.4315	.3102	.6136	.1847	.3009	.0476	-.0335	.0000
12.	-.0274	-.1799	-.0630	-.0129	-.0563	.0274	.1773	.1654
13.	.1971	.2734	.2376	.2871	.2633	.2523	.0023	.1348
14.	.2544	.0980	.0913	.1265	.2326	.0094	-.0049	-.0554
15.	.1288	.1046	.1400	-.0162	-.1093	.0682	.0760	-.1220

<sup>a</sup>List of variables:

1. Ability
2. Reading Achievement
3. Arithmetic Achievement
4. Personal-Social Adjustment
5. Personal Adjustment
6. Social Adjustment
7. Social Class
8. Grade Placement
9. Rating of Ability
10. Rating of Reading Achievement
11. Rating of Arithmetic Achievement
12. Rating of Personal-Social Adjustment
13. Rating of Grade Placement
14. Rating of Social Class
15. Rating of Family Constellation

Table 24. (Continued)

---

9	10	11	12	13	14	15
---	----	----	----	----	----	----

---

  

1.0000						
.6128	1.0000					
.5862	.5449	1.0000				
-.3285	-.4145	-.2024	1.0000			
.2799	.2516	.1847	.2254	1.0000		
.0189	-.1565	.0191	.5001	.2035	1.0000	
-.0182	-.1125	-.0338	.0509	.0754	.1317	1.0000

---

APPENDIX I

Table 25. Correlation matrix for the variables for the intermediate control group

	1 <sup>a</sup>	2	3	4	5	6	7	8
1.	1.0000							
2.	.3596	1.0000						
3.	.5159	.5118	1.0000					
4.	.0234	-.1553	-.1865	1.0000				
5.	-.0088	-.0836	-.2250	.9140	1.0000			
6.	.0494	-.1977	-.1231	.9283	.6976	1.0000		
7.	-.1512	-.0819	-.2886	-.0420	.0337	-.1050	1.0000	
8.	.0582	.0434	.0781	.2230	.1694	.2384	.0266	1.0000
9.	.5680	.4698	.4361	.1200	.1782	.0487	-.0143	-.0838
10.	.5040	.4609	.3928	.1887	.2310	.1216	-.0056	.0735
11.	.4818	.3194	.3459	.1261	.1707	.0662	-.1046	-.0988
12.	.4107	.2871	.2303	.1374	.1852	.0729	-.1567	-.2849
13.	.1786	.1012	.2806	-.1267	-.1831	-.0559	-.0594	-.0674
14.	.1897	.0852	.0195	.1097	.0589	.1396	.1042	-.1219
15.	.1231	-.1210	-.0449	.2331	.2200	.2100	.0200	-.0289

<sup>a</sup>List of variables:

1. Ability
2. Reading Achievement
3. Arithmetic Achievement
4. Personal-Social Adjustment
5. Personal Adjustment
6. Social Adjustment
7. Social Class
8. Grade Placement
9. Rating of Ability
10. Rating of Reading Achievement
11. Rating of Arithmetic Achievement
12. Rating of Personal-Social Adjustment
13. Rating of Grade Placement
14. Rating of Social Class
15. Rating of Family Constellation

Table 25. (Continued)

9	10	11	12	13	14	15
1.0000						
.8901	1.0000					
.6644	.7151	1.0000				
.5452	.5387	.5945	1.0000			
.3316	.3877	.4092	.2870	1.0000		
.2212	.2925	.4321	.4703	.3532	1.0000	
.0400	.0950	.1636	.1929	.1513	.2028	1.0000