# AN EXAMINATION OF THE RELATIONSHIP BETWEEN LOWER AVERAGE IQ AND <br> DISCIPLINE REFERRALS 

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There is a category of students whose educational performances are likely to be below acceptable standards but who are unlikely to receive any special educational services. These are students with IQ scores from 75 to 90. With $I Q$ scores in the below average range, these students typically do not meet the eligibility criteria for special education programs and, instead, acquire labels such as slow learner. They are thus faced with the academic demands of the regular classroom while being less able to cope with such demands and unable to receive specialized support. It is this dilemma that may be causing some of the behavior problems that are being exhibited in the classroom.

Background

Various concepts of intelligence and the related attempts at measurement of intelligence have been criticized by educators concerned over the perceived lack of validity of standardized tests and the growing support these tests seem to have received from parents and others in their endeavors to push the educational system to the limit. Psychologists, Heim and Blackburn (Eysenck, 1973), explained that intelligence is a popular and relatively unambiguous word and has a quality that everyone can recognize but few can


#### Abstract

define. Other psychologists have disagreed on the definition of intelligence, indicating that the term may be more ambiguous than Heim and Blackburn perceive it to be (Eysenck, 1973). Educators have argued that instead of labeling students with IQ scores, we should leave necessary decisions to the informed and intuitive insight of the teachers.


Many different intelligence quotient (IQ) tests have been developed with a common goal, testing the cognitive ability of a particular individual. According to Block and Dworkin (1976), evidence indicates that the various tests were assessing the same capacities. The reliability lay within the consistency of the various tests and their own proven statistics.

While behavior problems have existed in the classroom setting for many years, trying to define the term "behavior problems" has been a difficult task. There is a definite lack of consistency from classroom to classroom in teacher expectations of student behavior, in teacher follow-through on such standards, and in teacher patience. In perhaps the most consistent interpretation, behavior problem was defined as any problem resulting in referral of the student to the school office. This included a variety of possible reasons, ranging from continual disruption of the class to situations requiring physical restraint or even suspension from school.

Classroom behavior has been studied in connection with several other factors. Teacher behavior, student behavior and the influence one has on the other were explored through the effect of student behavior and teacher behavior (Sherman, 1973). The
interpretation of this qualitative study indicated that student behavior had consistent effects on the behavior of the teacher. Sherman stressed the importance of reward in changing the behavior of disruptive students'. Klein (1970) found that student behavior causes a significant change in teacher behavior. Student behavior will be more positive when teacher behavior is positive, and teacher behavior is more positive when student behavior is positive or natural as opposed to negative. The research indicated a significant relationship between student behavior and teacher behavior. Student classroom behavior was categorized by Veldman (1983) in four types: good, outgoing, rebellious, and withdrawn. These four classifications were consistent from first grade to junior high. While characteristics of the rebellious and the withdrawn students indicated that they have the greatest potential to cause behavior problems, teacher interaction and reaction affects this possibility (Veldman, 1983). Student attitude and student trust are two identifiers that were linked to behavior problems by Horak (1979). Student classroom behavior was one of eight factors of concern when elementary education majors were asked about classroom management, student trust, and teacher discipline. Student classroom behavior was also found to be associated with anxiety displayed by both low achievers and high achievers in a relationship between self-perception of competence and behavior (Kowalski, 1987).


#### Abstract

Student behavior has also been linked to academic problems by other researchers. Studies focused on growth in reading as a correlate of student classroom behavior (Coker, 1976), student classroom behavior as it relates to problem solving (Shymansky, 1977), student characteristics that affect student learning and coping skills (Peck, 1982), and individual differences among low and high achievers (Kowalski, 1987).


## Purpose of the study

The purpose of this study was to determine the relationship between IQ scores and behavior problems in the regular classroom. and specifically, this study was focused on students in grades four, five, and six who have $I Q$ scores between 75 and 90. Demographic data and disciplinary records were obtained in order to determine if relationships existed between these variables.

Students with IQ scores between 75 and 90 have been reported to exhibit more classroom behavior problems than do other students in the same class who have IQ scores of 90 or above. The low IQ level of these students likely indicates a need for some special, perhaps individual, attention. When such help from teachers or other students is not available, the result may be frustration which is exhibited through inappropriate attitudes or conduct, actions that in this study are referred to as behavior problems.

This study included two aspects of research, qualitative and quantitative. The hypotheses listed relate to the quantitative portion of the study and the research questions relate to the qualitative aspect of the study.

Null hypothesis: There is no significant relationship between IQ scores and behavior problems.

These research questions have been established as guides to the study:
(l) What are students' perceptions about school?
(2) How do students, parents and teachers describe a successful school setting?
(3) What are the perceptions of students, parents, and teachers in regard to the causes of student frustration?
(4) Is student ability related to behavior problems?

Significance of the Study

This study dealt specifically with behavior problems within the regular classroom setting and with students with IQ scores between 75 and 90. Excluded from consideration were those students who may have exhibited behavioral problems but who were receiving some form of special educational services. Most students who were placed in a special education service that required an individualized education plan (IEP) to be on file were not considered for the purposes of this study. If behavior problems are found to be related to the combination of low cognitive skills, inadequate support, and pressure to perform in the regular classroom setting, then such an identifiable cause may enable educators to work towards a solution. Administrators and teachers refer to discipline as a major area of concern. This study identifies a
possible reason for this problem and therefore lays the ground work for solving the problem.

## Limitations of the Study

1. Implications are only indicative of one school district, and with the three grade levels involved.
2. There may be inconsistencies in the number and reason for office referrals from school to school, from teacher to teacher, and from administrator to administrator.
3. There may be multiple causal factors involved but not identified in this study.

## Definition of Terms

Behavior problems - any classroom disruption that resulted in a referral to the office and/or the parent(s).

IEP - Individualized Education Plan - a written document kept on file for any student receiving special educational services. This document directly addresses the specific needs of the handicapping condition. Its contents are mutually agreed upon by the parent(s), regular education teacher(s), special education teacher, and administrator.

IQ - Intelligence quotient as measured by the Cognitive Skills Index (CSI) on the Iowa Test of Basic Skills group test.

Learning disabled (LD) - a handicapping condition that has been identified through testing that qualifies a student for special education services specified by an IEP. The disability is determined by acquiring an IQ score, predicting a level of
achievement based on that score, and identifying actual performance at a level significantly lower than expected.

Office referral - an action in which a student is sent to the school office because of a behavior problem by that student in the classroom. The incident is documented in written form.

Reqular classroom setting - a classroom, with a properly certified teacher, provided by the school system to educate any and all students.

Special education - a program established to provide assistance to those students who have a handicapping condition that has been determined to significantly impair their educational opportunities.

## Summary

There are students who may not be performing well in the classroom while also exhibiting behavior problems in their schools. These students have $I Q$ scores between 75 and 90 and are receiving little help because they typically do not qualify for special education programs. The dilemma of not having the cognitive ability to keep up with the rest of the class while not receiving any outside help may be the cause of the behavior problems these students exhibit.

The purpose of this study was to determine if a relationship exists between student behavior problems and students with IQ scores between 75 and 90. Procedures included both quantitative and qualitative studies of ability and behavior.

## CHAPTER II

REVIEW OF THE LITERATURE

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The purpose of this study was to determine if there is a relationship between low IQ scores and student behavior problems in the regular classroom. This chapter contains a summary of the current research literature related to intelligence, intelligence testing, behavior, and behavior problems. Literature on intelligence and testing is reviewed in the first part of the chapter followed by a review of behavior. The concluding section contains the review of studies on \(I Q\) and behavior.
Intelligence and Testing
The definition of intelligence and the attempt to measure intelligence by standardized tests have been heavily debated issues for many years. Wechsler defined intelligence as "what intelligence tests measure" (Eysenck, 1973) while Burt's definition of intelligence dealt with "innate, general, cognitive ability" (Eysenck, 1973).
The earliest attempts to analyze and to classify the functions of the mind were made by observation of different and various people in everyday situations. Plato, who drew the first basic distinctions, alluded to a distinct difference between "nature" and "nurture," thus leading to such later categorical terms as
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intellect, emotion, cognition, and affection (Burt, 1955).
Aristotle contrasted the actual with the hypothetical, thus introducing the idea of an "ability." Cicero tried to provide a Latin translation for the Greek term for the cognitive function of the brain and came up with the compound "intelligentia."

The idea of intelligence as a single entity was suggested by the instrumentality of Spencer (Eysenck, 1981). Spencer identified two aspects of mental life, the cognitive and the affective. He explained that all cognition involved both an analytical and a synthetic process as well as the ability to adapt to an ever-changing environment. Evidence to favor Spencer's theory was added by others in the field of comparative psychology. Spencer's views on intelligence were also accepted by the likes of Darwin, Binet, and Claparede (Fancher, 1985).

Individual psychology was first applied by Galton (Fancher, 1985). While Darwin and Spencer had based the abilities of the brain on genetics and "racial endowment," Galton argued that the abilities were also innate. He devised two separate categories of abilities: general ability and special aptitudes, with general ability being the more powerful. Galton used his Anthropometric Laboratory in 1884 to define established principles which could accurately predict the "natural ability" of young adults (Fancher, 1985) •

In publishing details of a research program in 1890, Cattell introduced the term "mental tests." Ironically, one of Cattell's graduate students, Clark Wissler, in 1901 proved that Cattell's
tests, which have not survived to this time, had no correlation to achievement (Fancher, 1985).

Mental tests were brought back into the mainstream of study when a new approach was introduced by Alfred Binet in 1905. According to Fancher (1985), Binet's development of the first successful intelligence test properly qualified him for the title "father of the modern intelligence test."

The definition of intelligence has often led to the measurement of intelligence. Intelligence is most often measured by a standardized instrument referred to as an "IQ test." These tests attempt to measure a general cognitive ability. The actual formula for measuring the intelligence quotient is

$$
I Q=\frac{M A}{C A} \times 100
$$

in which $M A$ represents mental age and CA represents chronological age.

The IQ test is generally calibrated so that the "average" student, one whose mental and chronological ages exactly match, would have an IQ score of 100 . If an individual's mental age exceeded the chronological age, the 19 would be above 100. If the mental age was inferior to the chronological age, the $I Q$ would be lower than 100 (Eysenck, 1981).

There are a number of different test instruments which are purported to measure $1 Q$. The CSI offers a group cognitive index skill assessment that is most often administered to a group of students by a classroom teacher. This is referred to as a group IQ
test. While conclusions from group IQ tests are generally not considered to be as powerful as those based upon individual IQ tests, they are likely to be reflective of the general ability of the students tested (Jensen, 1981). The two main disadvantages of group tests as compared to individual tests are that (1) they do not cover as wide a variety of abilities and (2) they do not provide for the detailed observation allowed by individualized testing. The greatest advantages are in time saved by not having to test each student individually and the receipt of an ability indicator without the trauma of individual testing.

The quantitative meaning of a student's IQ can be readily understood in terms of its percentile rank. This is the percentage of the student's peer group of the same chronological age that scored lower on the test. If a student's score is placed at the percentile rank of 55 , it means that the student scored higher than $55 \%$ of the students of that same age group in the norming sample. Table $I$ shows $I Q$ values with their corresponding percentile ranks. On some instruments, students may score at varying percentile ranks on different test areas. This information is useful in determining possible strengths and weaknesses for that particular student.

## The Use of IQ Tests in Education

There are three general, identifiable uses of IQ tests in
education: (1) management of instruction, (2) public
accountability, and (3) legitimizing the schooling process

TABLE I

SELECTED IQ SCORES AND THEIR CORRESPONDING PERCENTILE RANKS

| IQ | Percentile | IQ | Percentile |
| :--- | :---: | :---: | :---: |
| 145 | 99.9 | 100 | 50.0 |
| 140 | 99.6 | 95 | 36.3 |
| 135 | 98.9 | 90 | 24.2 |
| 130 | 97.7 | 85 | 15.9 |
| 125 | 95.0 | 80 | 8.8 |
| 120 | 90.3 | 75 | 4.5 |
| 115 | 84.1 | 70 | 2.3 |
| 110 | 74.2 | 65 | 0.9 |
| 105 | 63.7 | 60 | 0.4 |

(Sternberg, 1979). The management of instruction involves the placement of students into various programs. While results from aptitude, intelligence, and/or readiness tests are frequently used as criteria to determine appropriate placements for students, they may also be used to determine the strengths and weaknesses of individual students so that the teacher may develop appropriate instructional plans or materials for each student. Public accountability comes from the efforts of the schools to produce an observable product for the public they serve (Sternberg,

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1979). The public is perceived to want information on how well its
schools are doing and, if necessary, will insist that they do
better, meaning that they raise their test scores. The CSI or other
IQ score tests serve as a guide from which to set expectations for
performance in other testing areas.
    The use of test scores to legitimize the school process is
considered to be the statistical method of doing so.
    Tests became a standard part of American school
    practice during the very period, the 1920's, when
    educators were seeking to establish themselves as
    'scientific managers'. Tests have remained part
    of the armamentarium of 'scientific' education
    called upon to buttress, and sometimes to replace,
    intuitive judgements, particularly in situations
    where educators feel challenged (Sternberg, 1979,
    p. 205).
    The role of the IQ and other tests in the legitimization of the
schooling process creates little opposition among senior school
administrators. A recent survey in 45 school districts suggested
that such administrators perceive that IQ tests are "proper and
rational ways of discovering children's academic ability"
(Sternberg, 1979, p. 205). IQ tests can then be used to justify the
process of education and its implementation through the academic
growth of the student. This method will make education a legitimate
process because the tests verify that what needs to be taught is
being taught and is being taught using the appropriate methods for
the particular strengths and weaknesses of the student.
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## Reliability and Validity of IQ Tests

If IQ tests are to continue to be used throughout the American educational system, they need to be as reliable and valid
as possible. There have been many debates over $I Q$, but none that have produced a better alternative (Jensen, 1981). Reliability refers to the consistency of the test. A test with high reliability would be a test with internal consistency or high self-correlation. Most standardized tests or achievement tests have reliability scores around .90. The Stanford-Binet and the Wechsler have reliability scores between . 90 and . 95 (Jensen, 1981). The reliability of $a$ test is important because it affects the test validity and because no test score should be interpreted as an exact point.

There is no such concept as perfect reliability. The lack of reliability is expressed as the standard error of measurement. The standard error of measurement is the measure for the lack of internal consistency within the test itself. standard error of measurement is expressed as a plus or minus to the score of the test. If a student scores a 110 on an IQ test with a standard error of measurement of 5 then the student's true IQ probably falls within plus or minus 5 points of the score of 110 . Another student scoring 105 with a standard error of measurement of 5 should not be considered to have that much of a difference in true IQ score from the student who scored 110, also with a standard error of measurement of 5 .

An IQ test with high reliability does not guarantee high validity. However, a test with low reliability does guarantee an test with low validity. Validity is simply saying, does this test do what it says it does? Does an IQ test measure intelligence?

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Intelligence tests, cognitive ability tests, scholastic aptitude tests, and general qualification tests all measure [intelligience] to about an equally large extent. The IQ unquestionably shows significant correlations with more other variables of educational, occupational, and social importance than any other currently measurable psychological trait (Jensen, 1981, p. 29).
IQ tests are even sometimes used to predict personality. Research indicates that the normal student will score higher than the emotionally disturbed student and that there will be a significant difference among selected subtests (Price, 1986).
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Behavior

The study of student behavior has been included as part of many research studies in which it serves as one of the variables. Research has even attempted to classify student classroom behavior (Veldman, 1983). Observers identified and labeled four types of behavior in junior high school students that were also found in first grade students: good, outgoing, rebellious and withdrawn. Research also indicated that there is a significant change in teacher behavior when there is change in student behavior (Klein, 1970). Klein's study validated the correlation between student behavior and teacher behavior. This is significant because her research also indicated that the teacher behavior is more positive when student behavior is positive rather than negative. If indeed a student with a low IQ score becomes frustrated, which causes a negative behavior, the student may add the negative behavior of the teacher to an already frustrated state of mind.

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Student behavior does seem to influence teacher behavior. Two disruptive fifth grade pupils were observed in order to explore the relationship between changes in student classroom behavior and teacher behavior (Sherman, 1973). The results indicated that changes in the students' classroom behavior had consistent effects on the behavior of the teacher. Other literature also indicated that teacher behavior had strong effects on student time-on-task behavior and outcomes, and that teaching behavior has different effects on different kinds of students, especially very low-achieving, low socio-economic status, minority students and high-achieving, high status students (Peck, 1982).
Student classroom behavior affects the academic performances and self-perception as well. Student classroom behavior in problem solving situations was affected more in low self-esteem students than those with a positive self concept (Shymansky, 1977).
Some students fail to fit the general normal pattern, thus suggesting reasons for disruptive classroom behavior (Kowalski, 1987). Kowalski's research indicated that some low achievers were not motivated by punishment or reward, some high achievers were not interested in school work, and some high achievers were anxious in the classroom.
Classroom observations were also used to study the relationship between student behavior and student growth in reading (Coker,1976). Two variables for predicting student reading success were found to be exhibiting compliant behavior and exhibiting low amounts of inappropriate behaviors.
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Programs established for classroom management skills often emphasize intervention strategies as well as classroom management techniques. Monitoring student classroom behavior requires the possession of a meaningful set of categories with which to describe student behavior, the ability to identify examples of those behaviors in the classroom setting, and the ability to classify student behaviors from multiple groupings (Ingersoll, 1978). Behavior modification was found to be generally effective in changing the behaviors of most students. Eight different methods designed to correct student classroom behavior were tested by Turco (1986). The research determined that the students generally were able to differentiate between various methods for improving student behavior.

Teacher education programs have recognized the need to prepare future teachers to deal with students' negative classroom behaviors. Preservice elementary education majors were studied to determine their beliefs about classroom management, student trust, and teacher discipline (Horak, 1979). The research indicated that these elementary education majors were concerned about social influences of discipline, student responsibility, influence of disciplinary options, teacher respect and order, school rules and student punishment. It was recommended that careful consideration must be given to students' prior attitudes and attitude structures when changes in teacher education programs are planned (Horak, 1981). The research also indicated that the total attitude structure included global topics such as management, discipline, and
trust differ and that there may not be one "best" teacher education, behavior management program.

## IQ and Behavior

This study was focused on the question whether there is a specific linkage between behavior and intelligence. The review of literature revealed a number of applicable studies, including research relating behavior and low intelligence in learning disabled students, behavior and special education status of students, and behavior and high intelligence. However, there was a limited amount of research relating behavior problems and low average inteliigence students without special educational placement. This realization helped to validate the need for this study.

According to a study done by Daley (1988), negative behavior ratings of boys with low intelligence were significantly higher than behavior ratings of normally developing boys. He also indicated that the higher the chronological age, the more intense the behavior problems became. When Daley compared the boys in his study by mental age, he found that those with lower intelligence still had more behavior problems than the normally developing boys. Regardless of whether chronological age or mental age was used to make the comparison, boys with low intelligence appeared behaviorally deviant when compared to normally developing boys. DeSetton (1988) agreed with Daley and came to the conclusion that a majority of misbehaved students were male and that significant relationships exist between students' self-concept, achievement, behavior, and family environment.

IQ scores were found to be of help in the prediction of behavior problems in students. Lindgren (1986) reported that continued behavioral problems were more likely in students with discrepancies between verbal and performance intelligence quotients. Pre-school intelligence quotients predicted problem behavior during the first year at school (Stanton, 1990).

The concept of behavior and intelligence, as separate but related constructs, was considered to be significantly more reliable than perceptions of behavior and intelligence as completely unrelated constructs or as identical underlying constructs (Keith, 1987). The concept that behavior and intelligence are two separate entities but related in that one may help in identifying the other was substantiated much more so than the two concepts being unrelated or interchangeable.

Behavior problem students were found to share intellectual strengths and weaknesses. The strengths on IQ sub-tests of the behavior problem students tend to reflect perceptual organization skills. The weaknesses were in sequencing, memory, and attention (Paget, 1982). The study indicated that, on IQ tests, there was a remarkable consistency among behavior problem students in the sub-tests. Most seemed to share poor short term memory and a short attention span, as noted by test administrators.

In a study of cognitive differences between honors and remedial students, Shaughnessy (1990) pinpointed emotional irresponsibility and motivation as two significant, non-intellectual differences between the two groups. Motivation interprets to actually be a lack
of motivation for remedial students as compared to high levels of motivation for honors students. This relation between motivation and responsibility was found to be consistent. Remedial students seemed to possess lower levels of responsibility and honors students a higher level of responsibility.

Teaching practices play an important role in student achievement.' The potential for preventing discipline problems and improving achievement can be increased in the mainstream classrooms through sound, proven teaching practices (Hawkins, 1988). His study indicated that teaching practices can determine the extent of student success. Some proven practices were found to include student involvement, reinforcement, and hands-on practice techniques.

There is little doubt that a reasonably close relationship does exist between IQ and school success (Esyenck, 1981). Students with high IQ's tend to do better and stay in school longer that students with low IQ's. It is clear that, while a relationship exists, it is not sufficient to alone predict success. Other factors play an important role, including persistence and hard work. Achievement requires application as well as ability. Personality is another factor, since it was found that introverts tended to do better at academic work than did extroverts. These factors led to an asymmetrical relationship between intelligence and achievement.

Placement of Behavior Problems

Placement of the behavior problem child was yet another area of review. Proper placement seemed to be important, as indicated in
previous research. While Atlas (1989) indicated that it could be possible to predict learning disability placement, it was not as easy to predict placement for behavior disorder students.

Multidisciplinary teams tend to identify too many students for the learning disability class and continued to not identify students as behavior disorder. Although these two classifications did not differ cognitively, they did differ in behavior (Atlas, 1989). Behavior disorder children may be placed into learning disability classes because of the lack of knowledge and/or funding for behavior disorder classes. These students were determined to be in need of help but were only able to receive such help through the learning disabled program due to lack of recognition and funding for behavior problem students.

Perrin (1987) did a study involving the alternative school placement and the impact of grades, attendance, and suspension behaviors. The study dealt with the components that had an effect on their attendance, behavior, and grades. Students in the alternative school showed significant gains in all areas. A similar study was done by Sparks (1980) with the Behavior Learning Problems Program of the Cincinnati Public Schools. While it was found that the subjects of this study were considered to have behavior problems, the most severe behavior problems were perceived to be linked to the students placed in regular classrooms with no support services. The students in this sample were all placed in the Behavior-Learning Problems Program and had a mean IQ of 82.3.

The behaviorally handicapped student was studied by Boggs (1989) to find a motivation for achievement. The study showed little or no motivation for achievement. An ANOVA showed no significant difference between internal and external factors. On the basis of teacher ratings, more than $67 \%$ of the behaviorally handicapped students were rated in the clinical range and below average in their school performance (Boggs, 1989).

Research was done on the correlation of retention and the decrease in number of behavior problems (Vollrath, 1983). A group of third and sixth grade students recommended for retention were followed to determine any difference in those who were retained and those who were promoted even though retention was recommended. The possibility of retention and behavior problems led to the following conclusions: retained third and sixth grade students had significantly higher academic achievement scores and significantly fewer behavior problems than groups for whom retention was suggested but not implemented. There was no significant difference in IQ scores of these students. This study indicated that retention is one alternative to help alleviate behavior problems by decreasing the frustration for those students being over-placed. The implication is that these students were not developmentally ready to be promoted regardless of IQ score.

If the behavior problems of students are due to the frustration of not being developmentally ready, then the Johnathan Turner Junior High School Slow Learner Program could be an example of a successful alternative (Hardin, 1987). A total of 121 students were identified
as slow learners and placed in the program. The program had no more than 20 students per class. Teaching strategies included remedial reading, increased retention, experiential learning, improved selfconcept, and development of organizational skills. The program used a token economic system where the students were receiving income from attending classes, completing homework assignments, and receiving high grades. The students were paying fees for renting forgotten supplies and breaking rules. The instructional team used the interdisciplinary approach and reported a high success rate among the students.

Behavioral management techniques were recommended to help solve common discipline problems after early identification of behavior problem students (Blumberg, 1986). Identifiers for behavior problems and eventual dropouts were: (1) slow learner -- the traditional dropout, (2) the student whose academic achievement drops each year, (3) the student with an uneven pattern of performance, and (4) the student strongly affected by an event or situation. After determination of students falling into one or more of these four identifiers, the students were recommended for the earliest possible intervention by implementing the recommended behavioral management techniques. The identifiers make good tools for those interested in early identification. Other identifiers found to be linked to dropouts in a similar study were identified as: students who come from large families, with limited education; have poor classrooms grades and attendance; must work; and have problems with drugs (Gastright, 1987).

No recommendations were made for intervention but there seem to be consistency among dropout with these identifiers.

## Summary

IQ tests have been used in the educational setting for years. They are used in the determination of placement as well as potential. They have a high reliability and validity score, which makes them difficult to argue with. They have been proven to be good predictors and indicators of student achievement. Achievement and behavior are linked to intelligence and expectancy of teachers is sometimes guided by IQ scores. Placement and programs have been developed to help students with low IQ, low achievement and behavior problems. Early identification and intervention seems mandatory. Multidisciplinary approaches are recommended along with cooperative learning among peers.

The need of early identification and intervention along with positive teaching techniques and cooperative learning seem to be the way to help the slow learner with the frustration of not being able to keep up with the rest of the class.

Behavior has been researched with attempts to identify specific types of behavior. Behavior has been linked to self-esteem and self-perceptions. Research indicates multiple reasons for the variances in behavior including socio-economic class, teacher expectations, self-perception, teacher trust and minority groups. Programs have been developed to help in managing student behavior and colleges of education are examining the programs they offer as well as student attitudes about student behavior.

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    Studies have been done to relate behavior problems, low
intelligence and learning disabled students. IQ score were
determined to be helpful in determining potential for behavior
problems. Behavior and intelligence were determined to be related
constructs in the relationship between IQ and school success.
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## METHOD AND PROCEDURES

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The purpose of this study was to determine the relationship between students with low average IQ scores and student behavior problems in the regular classroom. Specifically, this study was focused on students with \(I Q\) scores between 75 and 90 in grades four, five, and six in a suburban school district.
This study included two aspects of research; qualitative and quantitative. The following hypothesis was used to focus on the quantitative portion of this study.
Null hypothesis: There is no significant relationship between IQ scores and behavior problems.
Four research questions were developed to provide a qualitative focus for the collection of interview data necessary to accomplish the stated purpose of the study.
1. What are students' perceptions about school?
2. How do students, parents, and teachers describe a successful school setting?
3. What are the perceptions of students, parents, and teachers in regard to the causes of student frustration?
4. Is student ability related to behavior problems?
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In order to find answers to these questions, data were collected for 744 students and interviews were then conducted with 10 students, 10 parents and 6 teachers.
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## Population

The study included the entire population of 744 fourth, fifth, and sixth grade students, except some receiving special educational services, from three different elementary schools within the suburban district chosen for the study. The district used in this study was selected because of the availability of both discipline records and CSI scores due to the researcher being employed by the district involved. A student was determined to be receiving special educational services if an Individual Education Plan (IEP) was in effect. Most such students were excluded. Learning disabled (LD) students were the largest group eliminated from this study. Students with only speech therapy IEPs, however, remained in the population.

Students were chosen for interviews by application of the following criteria: (1) assignment as fifth grade students, (2) IQ score between 75 and 90 on the CSI, and (3) number of discipline referrals received. Five students with high numbers of discipline referrals and five with low numbers of discipline referrals were selected for the interviews. The five students with the highest and the five students with the lowest number of referrals were first contacted. Students were then replaced as necessary by selecting the next appropriate name on the list so
the best possible sample could be attained. The parents of the selected students were also interviewed. The six teachers selected for interviews were chosen on the basis of the number of referrals given. Interviews were held with three teachers who gave high numbers of referrals and three teachers who gave low numbers of referrals.

## Instrumentation

For this study, data were gathered by two different means. The quantitative data were gathered from discipline referrals contained in records in the offices of the three elementary schools involved. The IQ scores were gathered from the central office computer print out of the Cognitive Skills Index (CSI) scores of each school and grade level involved. The CSI score is a sub-test of the Iowa Test of Basic Skills (ITBS). The CSI has been reported to have a high score of reliability and validity.

The qualitative data were gathered from the three protocols, which were developed from the research questions. After the protocols were prepared, they were reviewed by teachers, parents, and administrators involved in school discipline. Revisions were made based upon suggestions from these professionals. The protocols were then field-tested. Three teachers, three students, and three parents responded to the revised protocol questions and were then asked to provide suggestions regarding the questionnaire. These teachers, students, and parents were chosen based on availability, willingness to participate and accessibility. The teachers teach in
the selected school districts, the parents were patrons of the district but attended other schools, and the students were the children of the parents selected. The instruments were again revised to incorporate their recommendations. All interviews were conducted by the researcher during the month of May, 1992.

The interview protocols each consisted of 10 questions (see Appendixes A, B, and C). The first four questions dealt with the individuals' perceptions of school. The next two questions dealt with perceptions as to what constitutes a successful teacher and a successful classroom. The next two questions dealt with perceptions of characteristics of students with behavior problems. The last two questions dealt with student and teacher frustration.

## Collection of Data

As noted previously, the sample of 744 students were selected from three elementary schools using all fourth, fifth and sixth grade students, except the majority of those on IEPs. The student sample for interviews was selected by grade (only fifth graders), number of discipline referrals, and an IQ score between 75 and 90. The parents interviewed were those of the selected students. The teacher sample for interviews was selected on the basis of number of referrals given to students. After the subjects were selected, they were each contacted and scheduled for an interview with the researcher. Each subject was given a consent form for research participation prior to the interview.

Interviews were conducted at the convenience of the members of the sample during the month of May, 1992. Interviews took place
wherever the subjects reported to be most comfortable, some at the elementary schools and some at their homes.

The CSI data were gathered with permission of the superintendent of the school district and the principals of the buildings involved. The CSI had been administered in September, 1991, and were accessed through the district computer program used to score the tests. Disciplinary records were those from the first semester of the 1991-92 school year, from August, 1991, until January, 1992, and were obtained from the school offices.

Data Analysis

Data gathered from the school records involved discipline referrals which were analyzed according to grade level, severity of referral, number of referrals for each student, and reason for referral by teacher. The data analysis then involved the use of the Pearson Chi-Square test of independence which was used to determine the possibility of a relationship between $I Q$ and behavior problems. A two-way contingency table was constructed to test for a relationship between $I Q$ and behavior with the level of significance set at . 01. The following null hypothesis was thus tested.

Null Hypothesis. There is no significant relationship between IQ scores and behavior problems.

In the second segment of the study, the interview data were analyzed and summarized by question for each of the three groups of respondents. Questions were analyzed by student responses, parent responses, and teacher responses to each question and the relationship of data to the appropriate research question.

Summary

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The steps involved in the study included the identification and selection of the population, the construction and field testing of the interview protocol, the collection of the data, and the analysis of the data. Chi-Square test of independence was utilized in the analysis. The questionnaire was used to provide qualitative data. Each interview question was devised to help answer one of four research questions.
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## PRESENTATION AND ANALYSIS OF DATA


#### Abstract

The purpose of this chapter is to provide description and analysis of the data collected. Included are a summary of demographic data, the quantitative analysis of the student data, and the qualitative analysis of the interview data. The qualitative data were analyzed in relation to the research questions and are presented in order for students, parents, and then teachers. A summary follows at the analysis of the data.


## Demographic Data

Discipline referrals and $I Q$ scores were gathered on a total of 744 students in grades four, five, and six from three different elementary schools in one school district in the southwestern part of the United States. The suburban school district contains 3 high high schools, 4 junior and 18 elementary schools. The three elementary schools were selected to represent a cross-section of the student population within the district. One school has a high level of parent participation with students who come from predominantly high socio-economic backgrounds. One school has an average amount of parental involvement with students who come from predominantly middle class homes. The third school has very low parental involvement and students from predominantly low socio-economic
backgrounds. The data were gathered evenly from all three grade levels. The fourth grade represented $32 \%$, the fifth grade represented $32 \%$ and the sixth grade represented $36 \%$ of the 744 students.

IQ scores were broken down into three categories: high average, average, and low average. The high average category represented a measurable IQ score of 111 or higher. The average category represented a measurable $1 Q$ score in the 90-110 range. The low average category represented a measurable $I Q$ score of 89 or less. These categories match the criteria used by the district's staff members in their interpretation of test scores.

While interpretation of $I Q$ scores varies from expert to expert, most agree that the average range is somewhere along the 85 -115 continuum. Higher IQ scores may be used for placement in gifted programs. IQ scores below 70 are usually considered to be an indicator of mentally handicapped classification (Eysenck, 1981). Because most students who were on IEPs were not considered for this study, the chance of students with low IQs was minimal. Students in the district with IQs below 75 in this district were referred to and usually placed in the special education program.

A Chi-Square statistic was done to test for significance in the difference of actual and expected number of discipline referrals using the three IQ levels. Table II shows the difference for each IQ level between the actual and the expected number of referrals received.

TABLE II

DISTRIBUTION OF IQ SCORES AND EXPECTED REFERRALS

| IQ Category | \% of Population | $\frac{\text { Referrals }}{\text { Expected/Actual }}$ |  |
| :--- | :---: | :---: | :---: |
| High average | 16 | 19 | 2 |
| Average | 53 | 61 | 31 |
| Low average | -31 | 36 | $\frac{83}{3}$ |
| Totals | 100 | 116 | 116 |

The expected number of discipline referrals was completed by proportions of the actual population represented by each IQ category. For example, since the average category represented 53\% of the population, it was expected that that category would receive 61 referrals (53\% of 116). However, it was found that only 31 referrals were made for students in that category.

Table III contains a summary of the Chi-Square analysis of the relationship between $I Q$ and behavior, as represented by IQ categories and discipline referrals. The null hypothesis that there is no significant relationship between IQ scores and behavior problems was rejected, in accordance with the results of the Pearson Chi-Square.

TABLE III
CALCULATIONS OF THE CHI-SQUARE FOR ACTUAL AND
EXPECTED DISCIPLINE REFERRALS BY IQ

| Low Average Io |  |  | Average IQ |  | High Average IQ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Actual | pect | Actua | pect |
| Referral | 83 | 36 | 31 | 61 | 2 | 19 |
| No referral | 146 | 193 | 362 | 332 | 120 | 103 |
|  |  | value | df | fica | level |  |
| Pearson Chi-Square |  | 108.3 | 2 | . 01 |  |  |

The Chi-Square showed a significant relationship between $I Q$ and discipline referrals. A comparative analysis makes this relationship even more obvious. The low average IQ category represented $31 \%$ of the population yet it yielded $72 \%$ of the discipline referrals. It is also interesting to note that while the students with high IQ scores represented $16 \%$ of the population, they received only $2 \%$ of the discipline referrals.

Research Questions

The interview data were analyzed by individual research question by question according to responses by students, parents, and teachers. Protocol items were grouped by the research questions for which they were designed. The first four questions
from each protocol were matched with research question one, while the next two protocol item questions were linked to the second research question. Protocol questions seven and eight were designed for research question three, and the last two protocol questions were matched with research question four.

## Student Attitude About School

Research question one was focused on students' attitudes about school. The first four protocol items were used to gather this information. Student responses were varied to the question "How do you feel about school?" While most said school was "boring" and others described it as "fun," the main concern expressed by the low average students was that school was "hard." A number of the students said that they could remember being excited about coming to school but usually more to see their friends than for any other reason.

The parents' answers indicated that they perceived their children to be happy with their schools. The problems mentioned usually dealt with a specific teacher and not with the school in general. Some parents indicated that their students already understand the importance of a good education and, therefore, view school as both an opportunity and a necessity for success in life.

The teachers replied that they try to make their students like school. They also said they try to be fair to all students and not play favorites in order to help all students have an equal opportunity to like school. As one teacher stated, "I see it as my responsibility to make school a successful experience for all my

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students, no matter how challenging." While this was the dominant
attitude, a few teachers said that it was the students'
responsibility to make the most of school.
The second protocol question asked "What do you feel is your favorite part of the school?" The students' replies indicated that their favorite parts of school were focused on social aspects, based upon the consistency of students' responses that their favorite part of school was recess, lunch, and/or physical education. The students indicated that they liked the opportunity to interact with teachers and with other students as well.
The parents reported that their children like school because of the friends they make, because of the good teachers the schools have, and because of the many and varied special activities throughout the year. There were a few who indicated that their children did not like school and equated this to one of two reasons: either the student struggled or the student seemed to be in trouble more than the parent wanted. One parent indicated that her child disliked school because of a lack of a social life while there. The parent bluntly said, "she has no friends."
The teachers hoped that the students' favorite part of school was the learning. They hoped that they made learning an enjoyable experience. Again, the social aspects of school life were mentioned as likely being the students' favorite part of the school day.
Question three was "What do you feel is your least favorite part of the day?" "Work" was the students' emphatic response. The interviews revealed that this usually meant seatwork of any
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kind, since they also indicated that they did not like sitting for long periods of time or having to be quiet all day. Many mentioned the fact that they did not like music classes. The parents' replies indicated that they thought their children's least favorite part of school was homework. Some parents mentioned specific academic classes or subject matter, but more varied from interview to interview and no consistency was found with the exception of music. All parents involved in the interview process indicated their dissatisfaction with music classes with responses such as "Why can't music classes be fun?" or "If my child gets in trouble anywhere, it'll be in music class." They indicated that it was "just too boring."

Teachers indicated that the students' least favorite part of the day was doing "busy work" or seatwork. They also referred to fair treatment of the students by the teacher as essential for making school a good place.

The fourth item on the interview protocol was "Why do you feel this way [about school]?" "The students said that seatwork was boring and that having to sit still for long periods of time was hard and added to that boredom. They repeatedly indicated they do not understand why they have to do some of the assignments that they do and don't understand why some assignments have to be so long.

The parents added that the teacher makes all the difference in the world. A good teacher reportedly can make a tough subject interesting and even fun. The parents indicated that the challenge of teaching music was difficult and seemingly always the one subject the children did not like.

The teachers agreed that seatwork was boring and time-consuming but was used mainly as a management tool so that they had an opportunity to get other important things accomplished. They knew the reason why students felt bored with seatwork and even understood.

Protocol items one through four thus revealed insight as to how the students feel about school and how parents and teachers perceive their students' feelings about school. The questions revealed a certain amount of consistency among the three groups. Overall, the feelings about school were positive with some common concerns: boredom at school, seatwork, social importance, and interaction.

## Description of Successful

## School and Teacher

Questions five and six on the interview protocols were designed to acquire information concerning research question number two: What makes up a successful school setting?

The fifth item sought a description of the successful teacher. The students replied that they look for a teacher who is fair. Fair was interpreted by students as treating everyone the same, in other words, no "teacher's pet." The students also expressed the idea that they like teachers who "will listen to you" and, even more importantly, who will "let you talk, a lot." One common recurring adjective was "nice." The students wanted a teacher who was nice, with "nice" interpreted to be a teacher who is positive, smiles a lot and exhibits lots of patience.


#### Abstract

Parents' responses were consistent with those of the students on this question. The parents said that their children wanted a teacher who was fair and open-minded. Parents also indicated that they looked for a teacher who was willing to give time for that extra help that may be needed from time to time. Parents want a teacher who exhibits a "real concern" for students and will do "whatever it takes" to make their children successful. One parent said, "A student can tell when a teacher likes them and more importantly they can tell when a teacher does not like them and will behave accordingly." The parents noted that teachers needed to be happy most of the time and truly enjoy teaching. Also, parents wanted a teacher who could make learning an enjoyable experience.

The teacher indicated that the students look for a teacher who is kind, considerate, willing to give "lots and lots of time," and occasionally, able to make "life a little easier." They said that students do not want a rigid, "everything the same all the time," kind of teacher but did in fact want discipline and clear expectations "to help the class run smoother for everyone."

Question six was "What is your idea of a successful classroom setting?" The students' consensus was focused on group seating arrangements, a setting that would again allow for the social interaction mentioned in previous responses. They all wanted to be able to sit with their friends. The students frequently mentioned a classroom where the rules were minimal and fair. The term "fair" seemed to be an underlying constant among the student answers. Freedom to move about the classroom was another element of the students' successful classroom setting.


#### Abstract

The parents indicated that a successful classroom setting was one in which creativity for learning was encouraged, A classroom setting not like the norm characterized by rows of desks and rigid schedules. They repeatedly mentioned that the teacher is the key to any successful classroom setting in that the teacher sets the tone for learning. They also implied that the successful classroom setting would instill creativity and learning by the use of appropriate classroom decor.

The teachers considered the successful classroom to be one that fosters learning. In a successful classroom, the students can be at ease and feel as comfortable at school as at home, if not more so. They often mentioned the importance of having the students feel ownership by helping to develop classroom rules or expectations. They all mentioned that the successful classroom is one that produces successful students.

Questions five and six sought descriptions of the successful teacher and successful classroom setting. The two seem to go hand in hand. It was determined that the successful teacher will be "nice" and will be willing to give time to their students. The successful teacher needs to be fair and consistent, avoiding the perception of having a "teacher's pet." The successful classroom will foster learning through appropriate room decor, a feeling of ownership, and evidence of some freedoms with the responsibilities that go with those freedoms. The successful classroom will not only allow but will encourage creativity and the use of social interaction to extend out of the routine, "boring," curriculum.


## Ability and Behavior

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Questions seven and eight were asked to acquire information to help in answering the third research question: "Does student ability relate to behavior problems?"
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Question seven was "Do certain types of students always seem to
be in trouble? Can you describe them?" The students' inevitable
response was "yes." The students remarked that the ones who are
always in trouble are the ones who are "mean," the ones who are
trying to "show off," the ones who are "smart alecks," and the ones
who usually make bad grades. They went on to say that "you never
want to be their partner" or "you can't offer them help cause they
are too cool."

The parents said almost the same as the students, that the students who seem to always be in trouble usually have a "smart mouth." The parents implied that they usually do not do well in school and assume that is why they show off, to gain attention in another way. Another constant among student and parent perceptions was that the trouble student is usually mean to the other students, except for the two or three with whom they are best friends. The parents added that these students are not normally alone, that when they do get in trouble, it is because they are together.

The teachers noted that the ones always in trouble were the ones who came from bad home situations. They perceived them as products of their environment. They mentioned that trouble students may. come from an abusive situation and may need a positive adult influence in their lives. They said these students tend to be

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highly distractable and most seem to have a short attention span.
The teachers said that, in order to teach these children they almost
have to become entertainers.
    Protocol question eight asked respondents, "Do you see a
relationship between these problems and ability level?" The
students had generally responded earlier that the problem students
usually do not do very well in school. Most students indicated that
they didn't do well because they didn't try. The student's felt
like it just wasn't important to them. Most student's felt like
they could do the work; they just chose not to do so.
    The parents said that the behavior problems were caused by the
inability to do the school work. While some reference was made to
the students' choice of doing or not doing the work, the parents
reported a perception similar to that of most of the students, as
described earlier, that problem students do have problems keeping up
in the classroom. They also expressed a concern that some students
act "cool" and thus influence the "good kids" in a bad way. They
expressed concern that the inability to do the work is occasionally
seen as a rebellious action and is almost "admired" by other
students.
    The teachers saw a definite relationship between students'
behavior problems and their ability level. The teachers indicated
that those students who struggle in the classroom almost always have
a behavior problem. However, they were quick to point out that this
was not the case every time, but it was consistent enough to notice.
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Most teachers referred to this student not as a discipline problem but as a "challenge."

Responses to questions seven and eight indicate that parents and teachers see a relationship between observed behavior problems and student ability while students were not as quick to say that such students could not do the work, indicating that they just would not do the work.

## Frustration

The final two questions of the interview protocols were focused on the issue of frustration, as perceived by both the student and the teacher.

Question nine was, "Do students get frustrated? When? Why?" The students said that they do get frustrated at and with school, usually when the work is too hard. Students also said they experience frustration when they don't understand the assignment, the directions, the explanation given by the teacher, or any combination of the above.

There was a distinction between those students with a high number of discipline referrals and those with a low number of discipline referrals. The students who received a low number of referrals made reference to parental involvement as a factor. They eluded to parental support with homework and an overall expectation of not getting in trouble at school. The parents suggested the student and school get together in their discipline efforts, the students' referred to the "you better or else" syndrome.

The parents said that they notice frustration when assignments are long and monotonous. The frustration is also evident when the homework seems irrelevant or unnecessary to the students and the parents have to explain why the work is necessary. The parents also shared the opinion that frustration occurred when there was a lack of understanding or when the work appeared to be too difficult.

The parental support of the educational system was not as evident for parents of those receiving a high number of discipline referrals as those receiving a low number of discipline referrals. Those parents whose students receive a high number of discipline referrals tended to blame the school in whole or at least in part whereas, the parents of those students receiving a low number of discipline referrals blamed the student, if anyone at all.

The teachers saw frustration, as did the parents and students, when there was a lack of understanding. This was noted to be especially true when students "try to do something they simply are not developmentally ready to do."

The teacher frustration for those giving out a high number of referrals varied from those giving and a low number of referrals in their definition of role expectations. The teachers that gave high numbers of referrals expected the principal to have the job of maintaining order and discipline. The teachers that gave out low numbers of referrals was their own job. They felt that sending students to the office indicated a lack of control and inability to do their job(s). Interesting to note that there seemed to be no difference in relating referrals to students only in role definition.

The final item asked "Does the teacher ever get frustrated? When? Why?" The students replied that the teachers do get frustrated when they have to continually discipline either a particular student, a group of students, or the entire class. It is the continual disciplining, when students don't seem to listen, that students notice as a cause for the teacher to become frustrated.

Parents also noticed teacher frustration related to discipline. They said that their children come home and tell about how a particular student or a group of students had behaved and how that had affected their teacher. One parent stated that "I actually had to visit my daughter's principal because her teacher was too nice. I found out she was just frustrated and didn't know what to do, so she did nothing."

The teachers said they become frustrated by continual discipline problems, lack of time to plan, lack of time off during the day, and the never ending job of grading papers. Some referred to frustrations encountered by a lack of funding. Additional frustration was mentioned by the growing lack of respect teachers perceive from the public. Teachers expressed frustration with instruction when they have explained a particular concept many varied ways and still find that "it just doesn't sink in." Teachers expressed frustration when "they just don't understand" a particular lesson or concept.

Questions nine and ten dealt with student and teacher frustration. It was interesting that while teachers and parents agree on the relationship of student frustration and lack of


#### Abstract

ability, the students viewed that as a choice made. In regard to teacher frustration, the students and the parents almost all related frustration to discipline problems with students while the teachers recognized their frustration as stemming from a variety of sources including lack of student ability, lack of time, lack of money, and lack of respect.


## Summary

The information gathered from the research data indicated that while the students with low average intelligence accounted for only $31 \%$ of the population, they accounted for $72 \%$ of the discipline referrals. A Chi-Square statistical procedure was used with the level of significance set at . 01 . These data indicated a relationship between low $I Q$ and behavior problems. The null hypothesis that there is no significant relationship between $I Q$ and behavior was rejected.

Information gathered from research question one indicates that students, parents and teachers all have a good perception of school. The social aspect of school is one of significance as well as the opportunity to interact with others. Research indicated the seatwork was the least favorite of school activities and probably is so because it is boring and serves no purpose as perceived by the students.

Information gathered from research question two indicates that a successful teacher is one who makes learning exciting, one who is "nice", one who listens, one who let's students talk, and one who above all else is "fair." The successful classroom setting is one
that has appropriate room decor., one that fosters trust, one that creates an atmosphere of ownership, and one that encourages group interaction.

Information gathered from research question three indicates that students who seem to be in trouble a lot share some of the same characteristics. They usually are mean to other students, they can be considered to be "smart alecks," and they usually do not perform well in school. Research also indicates that teachers and parents see this behavior as a result of not having the ability to perform, being developmentally not ready, and being from an inappropriate home environment.

Information gathered from research question four indicates that students experience frustration from not being able to understand the lesson, the directions, or the instructions. Students also experience frustration when the work is too hard or if they feel that it is just too much. Research also indicated that teachers can become frustrated from continual discipline problems, lack of time, lack of money, and lack of respect.

## CHAPTER V

SUMMARY, CONCLUSIONS, RECOMMENDATIONS,
AND COMMENTARY


#### Abstract

This chapter includes a summary of the study, conclusions drawn from the data, recommendations for further research, and a commentary. The chapter was designed to bring together the data, and analysis of the study in an effort to explore its implications for education through the conclusions, recommendations, and final commentary.


## Summary

There is a category of students whose academic performance may be below acceptable standards but who receive no special educational services. The dilemma of not performing at acceptable standards and yet not receiving any special educational services may be causing some of the behavior problems that are being exhibited in the classroom. The purpose of this study then was to determine if there is a relationship between $I Q$ and behavior problems in the regular classroom setting. A specific focus of the study was on those students with IQ scores between 75 and 90.

A review of the literature related several studies on the relationship between $I Q$ and behavior. The review of literature was
also used to examine the use of $I Q$ tests within the educational system.

This study was designed to first collect data from a population of 744 fourth, fifth, and sixth grade students from three different elementary schools in a suburban school district. This study then involved the use of a 10-item interview protocol with 10 fifth grade students who all had a measured IQ score in the low average range of 75 to 90. Additional interviews were conducted with their parents and with six teachers.

The initial data analysis involved the use of the Pearson Chi-Square test of independence. IQ scores were divided into three categories: high average, average, and low average. The high average represented a measurable IQ score of 111 or higher. The average represented a measurable $I Q$ score in the 90 to 110 range. The below average represented a measurable IQ score of 89 or lower. The Chi-Square test results proved significant at the .01 level. Data indicated that, while the low average IQ category accounted for $32 \%$ of the sample population, it accounted for $72 \%$ of the discipline referrals. The null hypothesis which stated that there is no significant relationship between $I Q$ and behavior was rejected after analysis through the Chi-Square test of independence with the significant level at the .01 level indicated that a relationship does exist.

Responses pertinent to research question number one indicated that, overall, the feelings about school were positive with some common concerns: boredom, seatwork, social importance, and
interaction. Respondents indicated that the successful teacher is "nice" and is willing to give time to the students. The successful teacher needs to be fair and consistent and be sure to not have a "teacher's pet." The successful classroom will foster learning through a variety of means including appropriate room decor, a feeling of ownership among the students, and allowance for some freedoms within the constraints of the school system.

Parents and teachers both perceive there to be a relationship between student behavior and ability. However, this same perception is not shared by the students. The teachers indicated that the student who struggles with academics usually also has trouble with behavior, too. Students and parents see most frustration as being caused by discipline problems by students or not understanding the work. The teacher cited frustration due to discipline problems, lack of student ability, lack of time, lack of money, and lack of respect.

The main difference noted were on the protocol items regarding frustration. Students with high referrals and students with low referrals differed in their perceptions of parental support of school and expectations of not getting in trouble and receiving a referral. There was also a difference in the amount of involvement to help with school work. The students receiving a low number of referrals received additional help academically at home. Parental support of the educational system was low for parents of those students receiving a high number of discipline referrals and was significantly higher for those receiving a low number of discipline referrals. Also, frustration for teachers giving a high number of
referrals was different than for those teachers giving a low number of referrals. Teachers who gave a high number of referrals view the job of keeping order and discipline as that of the principal. They stated, "they won't act that way in my class." Teachers who gave a low number of referrals viewed the job of keeping order and discipline as one of their own and that a lack of ability to do so was a sign of their own inabilities to succeed.

## Conclusions

1. Student $I Q$ and classroom behavior are related.
2. Most students, parents, and teachers have positive feelings about school. However, some of their common concerns expressed, included boredom, seatwork, social status, and interaction both student-to-student and student-to-teacher.
3. The successful teacher is perceived to be fair in dealing with students. The successful teacher is willing to give of their time and the successful classroom creates ownership, fosters learning, and allows freedom with responsibility.
4. Teacher and parents identify a relationship between behavior and ability while students believe their classmates to choose to have difficulty in school.
5. Frustration by low average students may come from not understanding the work and the work being too hard.
6. Teacher frustration stems from many factors including: discipline problems, lack of student ability, lack of funds, lack of time and lack of respect.
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Recommendations for Further Study
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1. A follow-up study should be conducted to determine if the results would be as powerful with larger populations. A review of the literature produced limited information regarding this specific type of study.
2. A follow-up study should be conducted and expanded to include the junior high and high schools. This study dealt solely with intermediate grades of elementary students.
3. A follow-up study should be done to identify and evaluate programs available for low IQ, behavior problem students.
4. A follow up study should be done to see if boredom and seatwork are true causes of student frustration as indicated in the responses to the research questions.
5. A follow-up study shall examine teacher frustration, particularly as it relates to student frustration. Does teacher frustration exacerbate student behavior problems?

Commentary

The purpose of this study was to determine if a relationship exists between $I Q$ and behavior, in general, and specifically between low average $I Q$ and problem behavior in the regular classroom. While a quantitative analysis was used, this study also included a qualitative element involving interviews with students, parents, and teachers.

The review of literature provided a sound base which helped support the possibility that such a relationship does exist.

Studies had been done on the relationship between IQ and behavior of LD students, honors students, and even the severe behavior problem student. This verified the need for this study. The students in this study are the ones referred to as having "slipped through the cracks." A question not specifically dealt with in this study, but important to its implications, is this: is IQ the functional variable by which to identify these students or is it in turn a reflection of one or more basic variables such as socioeconomic status.

Discipline problems are almost always the topic of conversation at principals' meetings or conventions. A workshop on discipline is always full of administrators looking for another answer. If $31 \%$ of the school population is responsible for $72 \%$ of the more serious discipline problems, then efforts to improve student behavior should start with that group.

Intervention was recommended by many other studies and early intervention seems to be the most likely way to make a difference. If these students are coming from less supportive environments, then educators have no choice but to offer them a more supportive environment. If early intervention is the key, then it is necessary to start with these pre-school educational programs. This will not only provide the students with early intervention strategies but will remove them from possibly less stimulating home environments for at least a portion of the day.

There is a lot to be considered in this study. If educators listen to the students, then they have a good idea from where most of their frustration comes. In fact, the perspectives provided by
the students interviewed for this study to a great degree mirror the findings reported by Goodlad (1984). Are the findings of this study, then, a reflection of the needs of a narrowly defined group of students or that of a broader perspective? While educators may not be able to make school totally relevant for all students, they certainly can adjust to the low average group and deal with their specific problems accordingly. Teachers' perceptions were not that much different from those of the students. This indicates that the educators know what will improve student classroom behavior and that organizational constraints and a possible lack of willingness to do so needs to be addressed by administrators.

Administrators can benefit from an understanding of the frustrations expressed by the teachers about money and respect. Administrators can make small changes to indicate that the teaching staff is appreciated. According to the literature, the more positively the teachers feel about themselves and their classes, the more positive the students' behavior will be.

So what do administrators look for in future teachers? Protocol indicated that teachers need to genuinely care for their students and be willing to invest of themselves and their time to their students. Protocol also indicates a need for teachers who are fair and flexible.

With 72\% of discipline problems coming from an identifiable group of only $31 \%$ of the student population, educators should be able to focus on those students, adapt to meet their needs, and make school the successful experience desired by students, parents, and teachers alike.

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APPENDIXES

APPENDIX A

TEACHER INTERVIEW PROTOCOL

1. How do your students' feel about school?
2. What do you feel is your students' favorite part of school?
3. What do you feel is your students' least favorite part of school?
4. Why do you feel this way?
5. Describe the successful teacher. What do you look for?
6. What is your idea of a successful classroom setting?
7. Do certain types of students always seem to be in trouble?

If so, can you describe them?
8. Do you see a correlation of these problems with ability?
9. Do you see student frustration? When? Why?
10. Do you get frustrated? When? Why?

## APPENDIX B

STUDENT INTERVIEW PROTOCOL

1. How do you feel about school?
2. What is your favorite part of school?
3. What is your least favorite part of school?
4. Why do you feel this way?
5. Tell me about your favorite kind of teacher. What did you like the most?
6. How would you set up your own classroom? Why?
7. Do certain students always seem to be in trouble? If so, tell me about them.
8. How do these students do in school?
9. Do you ever get frustrated about school? When? Why?
10. Does your teacher ever get frustrated? When? Why?

APPENDIX C

PARENT INTERVIEW PROTOCOL

1. How does your child feel about school?
2. What do you feel is your child's favorite part of school?
3. What do you feel is your child's least favorite part of school?
4. Why do you feel this way?
5. Do you look for a certain type of teacher? If so, can you describe her/him?
6. What is your idea of a successful classroom setting?
7. Do certain types of children always seem to be in trouble? If so, can you describe them?
8. Do you see a correlation with these problems and ability?
9. Does your child ever get frustrated at school? When? Why?
10. Do teachers ever seem to be frustrated to you? When? Why?

APPENDIX D

CONSENT FORMS FOR RESEARCH PARTICIPATION

## CONSENT FORM FOR RESEARCH PARTICIPATION

I $\qquad$ hereby authorize or direct Greg Seay to perform the following treatment of procedure:

Participants will be individually interviewed for approximately 45 minutes at place of their choice. questions will relate to how they feel about school, and what they like about their school experience. Personal interviews are being conducted so that the participants may create their own responses. The questions will ask for the participant's opinion but the participant has the option not to answer any question. All responses will be kept confidential by the researcher. The participants' names will not be used in any of the published results and individual responses will be known only to the researcher.

This is being done as part of a research project about $I Q$ and behavior problems in the regular classroom. The purpose of the procedure is to gather information which can be used to compare students, parents and teachers perspectives on behavior problems in the school.

I understand that participation is voluntary, that there is no penalty for refusal to participate, and that $I$ am free to withdraw my consent and participation in this project at any time. I understand that there will be no cost to myself, associated with this project. I also understand that I will not receive any monetary compensation for participation in this project.

I may contact Greg Seay at (405)721-3644 during the day, or at (405)722-0894 during the evening or on weekends, should I wish further information about the research.

I have read and fully understand the consent form. I sign it freely and voluntarily.

Date $\qquad$

Time $\qquad$
Signed $\qquad$
(Participant)
I certify that I have personally explained all elements of this form to the participant before requesting the signature.

Signed $\qquad$
(Project Director)

## CONSENT FORM FOR RESEARCH PARTICIPATION

As the parent/guardian of $\qquad$ ,
I hereby authorize or direct Greg Seay to perform the following treatment of procedure:

Students will be individually interviewed for approximately 45 minutes at school. Questions will relate to how they feel about school, and what they like about their school experience. Personal interviews are being conducted so that the students bay create their own responses. The questions will ask for the student's opinion but the student has the option not to answer any question. All responses will be kept confidential by the researcher. The students' names will not be used in any of the published results and individual responses will be known only to the researcher.

This is being done as part of a research project about $I Q$ and behavior problems in the regular classroom. The purpose of the procedure is to gather information which can be used to compare students, parents and teachers perspectives on behavior problems in the school.

I understand that participation is voluntary, that there is no penalty for refusal to participate, and that $I$ am free to withdraw my consent and participation in this project at any time. I understand that there will be no cost to myself, or my child, associated with this project. I also understand that neither $I$, nor my child will receive any monetary compensation for participation in this project.

I may contact Greg Seay at (405)721-3644 during the day, or at (405)722-0894 during the evening or on weekends, should I wish further information about the research.

I have read and fully understand the consent form. I sign it freely and voluntarily.

Date $\qquad$
Time $\qquad$
signed $\qquad$

I certify that I have personally explained all elements of this form to the student and her/his parent/guardian before requesting the signature

Signed $\qquad$
(Project Director)

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VITA
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Gregory W. Seay<br>Candidate for the Degree of<br>Doctor of Education

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