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**An investigation of selected at risk factors in rural high schools
in the Midwest**

Anderson, Kevin Mark, Ed.D.

University of Northern Iowa, 1992

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AN INVESTIGATION OF SELECTED
AT RISK FACTORS IN RURAL
HIGH SCHOOLS IN THE MIDWEST

A Dissertation
Submitted
In Partial Fulfillment
of the Requirements for the Degree of
Doctor of Education

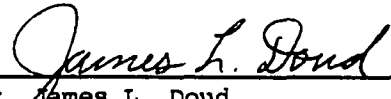
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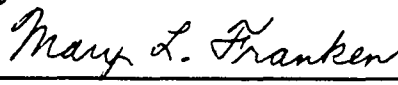
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May 1992

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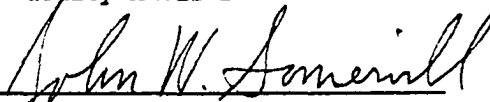
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Approved:



Faculty Advisor



Dean of the Graduate College

Kevin M. Anderson

University of Northern Iowa

May 1992

ABSTRACT

This study investigated the use of selected at risk factors to predict student high school success. In addition, academic and social viewpoints of students in grades 9-11 who had been retained were investigated, as were the perceptions of their parents. The sample was drawn from two public school districts which were representative of rural schools in a Midwestern state. A total of 373 students in grades 9-11 from both districts participated. Data on 26 selected at risk factors were gathered from school records and personnel to determine predictors of school success. Data analysis included descriptive statistics, step-wise multiple regression, and correlational analysis.

Fifteen students who had been retained in grades K-4 participated in an interview dealing with views of school, while parents completed a mailed survey concerning their perceptions of how the students viewed school. Tabulations and frequency analyses were used to ascertain patterns of responses and whether parents and children shared similar viewpoints about school and retention.

Findings indicated that combinations of at risk factors served as significant predictors of students' success in high school. Self-concept score was predicted using a combination of grade point average, lack of participation in extracurricular activities, IQ score, and number of failed courses. Performance on Test Q (Quantitative) of the ITED was predicted using a combination of the Reading Total of the ITED, grade point average, IQ score, and number of failed courses. Performance on the Reading Total of the ITED was predicted using a combination of Test Q score, grade point average, lack of participation

in extracurricular activities, IQ score, and being the youngest or only child in the family. Grade point average was predicted using a combination of Reading Total, number of failed courses, Test Q score, IQ score, attendance, number of sibling dropouts, and self-concept score.

Findings also indicated that high school students who were retained and their parents showed positive agreement about academic, general, and social perceptions. Students viewed the effects of retention on current academic and social status more positively than did the parents.

CHAPTER 1

INTRODUCTION

Staying in school and successfully completing a program of study are becoming of prime importance as this century draws to a close. However, students are continuing to leave schools without the skills necessary to compete in a changing world. These youth are drawing the increased attention of educators and business leaders across the country.

Youth at risk of school failure has been recognized by the Forum of Educational Organization Leaders as a national imperative (National Education Association, 1986). National dropout rates of between 11% and 14% have alerted the school community to a serious academic and economic problem (Gage, 1990). School dropouts are not new, but the effect on the economy of the United States has only recently been intensely examined. In 1986, male workers who had an incomplete high school education had the equivalent of a 20% pay cut as compared to those with four years of high school. Also, dropouts tend to read less well and to have more difficulty securing well-paid, steady jobs throughout their lives (U.S. Department of Education, 1988). As noted by the American Association of School Administrators, it is becoming clear that the nation is facing an economic crisis in the next century if nothing is done about students who are at risk of not completing school and of becoming productive members of society (Brodinsky, 1989).

The term "at risk" has been used to designate a variety of students who leave school early: (a) pushouts--undesirable students,

(b) disaffiliated--students no longer wishing to be associated with the schools, (c) educational mortalities--students failing to complete a program, (d) capable dropouts--family socialization which did not agree with school demands, and (e) stopouts--dropouts who return to school, usually in the same academic year (Seiffert & Seiffert, 1988). Ogden and Germinario (1988) refer to the at risk population as the portion of every school population that consistently shows a lack of the necessary intellectual, emotional, and/or social skills to take full advantage of available educational opportunities.

In the state of Iowa, students are identified as being at risk if it appears they will not:

. . . meet the goals of the educational program established by the district, complete a high school education, or become a productive worker. These students include, but are not limited to, those identified as: dropouts, potential dropouts, teenage parents, drug users, drug abusers, low academic achievers, abused and homeless children, youth offenders, economically deprived, minorities, culturally deprived (rural isolated), culturally different, those with sudden negative changes in performance due to environmental or physical trauma and those with language barriers, gender barriers and disabilities. (Iowa Department of Education, 1988)

There are a number of factors which put students at risk of failing in school. Three of the most frequently cited are the lack of basic skills, lower socio-economic background, and families who have not attained high levels of education (Ruby & Law, 1983).

Grade level retention is becoming more widely recognized as a major cause for failure in school. Studies by Phi Delta Kappa (Frymier, 1989b) and Shepard and Smith (1986) indicate that the consequences of holding a child in grade, for academic failure, are substantial. Students who have been retained are more likely to drop

out of school, engage in illegal acts, decline in academic attainment, and develop negative self-concepts (Frymier, 1989a; Shepard & Smith, 1989a). Also, a student susceptible to at risk problems often maintains unsatisfactory relations with the majority of his or her peers. Alienation is the most common result--a disconnection from the mainstream of the student body, from family and teachers, and from himself (Brodinsky, 1989). Medical and psychological effects of this alienation include lowered self-esteem and higher mortality and suicide rates (Gage, 1990).

According to a study by Wehlage and Rutter (1985), information should be gathered on school and community policies and practices that have either positive or negative impact on the potential dropout. Identification of these at risk students could enable teachers, counselors, and administrators to better provide programming for students with potential for school failure. Heeding these early warning signs could encourage youth to remain in school longer and to work more productively as a student and as a member of adult society.

Statement of the Problem

This study investigated the use of selected at risk factors to predict student self-concept, educational development, and high school grade point average. In addition, academic and social viewpoints of 9th through 11th grade students who shared the at risk factor of retention in a grade were investigated, as were the views of their parents.

Research Questions

Four major research questions were generated from the problem statement. The major questions and related suggestions were:

1. What quantitative factors may be used as predictors of future school success?
 - a. To what extent can self-concept scores be predicted using selected at risk factors as independent variables?
 - b. To what extent can performance on the Iowa Tests of Educational Development be predicted using selected at risk factors as independent variables?
 - c. To what extent can high school grade point average be predicted using selected at risk factors as independent variables?
2. What are the perceptions of students who were retained in a grade?
 - a. What attitudes toward school are held by students currently in grades 9-11 who were retained in grades K-8?
 - b. What social attitudes are held by students in grades 9-11 who were retained in grades K-8?
 - c. What viewpoints are held by students in grades 9-11 who were retained in grades K-8 toward the desirability of retention and the influence of retention on academic and social growth?
3. What are the perceptions of parents whose children were retained in a grade?

a. What are the viewpoints of parents of students in grades 9-11 who were retained in grades K-8 concerning the students' attitudes toward school?

b. What are the viewpoints of parents of students in grades 9-11 who were retained in grades K-8 concerning the students' social attitudes?

c. What are the viewpoints of parents of students in grades 9-11 who were retained in grades K-8 concerning the desirability of retention and its influences on academic and social growth?

4. How do the viewpoints of students in grades 9-11 who were retained in grades K-8 compare to the viewpoints of their parents?

Purpose of the Study

Children in school often undergo great physical and emotional changes caused by many factors which are both internal and external. The focus of this study was to look at those factors which can affect their academic performance and feelings about themselves. While some children are able to make satisfactory progress through even the most trying circumstances, many children are unable to cope with these environmental, academic, and social influences. These are the children who are in the most danger of failing in school (Brodinsky, 1989).

While high school students in Iowa drop out of school far less frequently than their counterparts in other states, they are still influenced by many factors which may lead to poor academic performance and social problems. In the 1980s, the dropout rate in Iowa increased

slightly, from 2.04% in 1983 to 2.46% in 1990. In addition, students are now dropping out in increasing numbers in the 9th and 10th grades when compared to the 11th and 12th grades, where dropouts have traditionally been most numerous (Iowa Department of Education, 1991).

In rural schools other factors are also working against students. In a study of the nation's rural schools, researchers found that rural students fared worse than non-rural children in 34 out of 39 statistical comparisons, including incidences of substance abuse, depression, attempted suicide, and low self-esteem (National Rural Development Institute, 1989).

This study will be conducted in two Iowa school districts which would be representative of schools in a rural, agricultural locale.

Assumptions

For the purpose of this study it was assumed that:

1. Information gathered from the school records was accurate and up-to-date.
2. Viewpoints shared in the interviews were accurate indications of academic and social views held by students who had been retained.
3. Students who participated in the interviews were candid in their responses.
4. Parents were candid and forthcoming in their responses.
5. Students in the sample were representative of other students from agrarian settings.

Delimitations

1. Most students who participated in the interviews have had a previous acquaintance with the interviewer.
2. Many parents who participated in the study were familiar with the researcher.
3. The sample was limited to students in grades 9, 10, and 11 at two rural high schools.

Limitations

The following limitations were noted:

1. The sample was limited to those students for whom complete information could be obtained from school records.
2. Students may have consciously or unconsciously distorted responses on the self-concept instrument in the direction of more socially desirable responses (Piers, 1989).
3. Student responses in the interview portion of the study may have been influenced because of the relationship to the interviewer.
4. Parent relationships to the researcher may have influenced responses.
5. The 26 at risk factors used in the study were selected from 45 factors identified by Phi Delta Kappa because they could be obtained from school records and/or personnel and were not considered to contain highly sensitive or confidential material.

Summary

Educational leaders have identified the need to address factors affecting students who are at risk of school failure (Frymier, 1988).

This study was designed to look at the at risk factors influencing predictability of self-concept scores, performance on the Iowa Tests of Educational Development, and high school grade point average of ninth through eleventh grade students at two selected Iowa school districts. In addition, attention was given to academic and social viewpoints of high school students currently in grades 9-11 who were retained in the elementary grades at these school districts and of their parents.

A study of factors affecting academic performance, social interaction, and self-concept of rural high school students was important because it could help identify those areas in need of additional school attention. As the National Rural Development Institute (1989) indicated, rural students are influenced by a number of pressures impacting upon their educational progress. Identifying and addressing these at risk factors which affect students may allow schools to offer a more meaningful educational program.

CHAPTER 2

REVIEW OF RELATED LITERATURE

The need to help children at risk of school and life failure is becoming one of the top priorities of American education. School success, as evidenced by high school graduation, continues to be one of the most important steps to personal, career, and life opportunities. These opportunities include enhanced earning power, economic stability, personal independence, self-satisfaction, and social influence. School success is influenced by children's inability to cope with health, social, educational, and economic stressors which affect school attendance and performance (Wisconsin Department of Public Instruction, 1986).

This review of literature focused on: (a) presenting the national scope of the at risk problem, (b) reporting on the characteristics of at risk students, and (c) examining the literature about factors which best predict at risk problems. Specific attention was focused on grade retention and self-concept as major at risk indicators for students.

National Scope of the At Risk Problem

In October of 1987, at the 41st Biennial Council, delegates and alternates from the 635 chapters of Phi Delta Kappa International were asked to predict those issues they felt would be most critical in the 1990s. Emerging as the top priority of this body of educators was the issue of at risk students (Frymier, 1989b). Likewise, the National Education Association (1987) and the Carnegie Council on Policy Studies in Higher Education (1979) stated that potential dropouts and problems

of at risk students are critical issues for educators which should be examined in order to reduce the number of alienated and dropout students.

Who are the at risk children? Children at risk may be dropouts and other K-12 students whose school achievement, progress toward graduation, or preparation for employment are in serious jeopardy (Wisconsin Department of Public Instruction, 1986). According to a subcommittee of the Education Commission of the States, at least 15% of all American teenagers between the ages of 16 and 19 were unlikely to become productive adults because of drug abuse, pregnancy, unemployment, delinquency, and dropping out of school (Christensen, 1988).

Dropouts compose the group most often referred to in at risk literature. However, there is no consistent method used to calculate the actual dropout rate, making it difficult to compare data between schools and states. According to the U.S. Bureau of Census (1986), dropouts are "persons who are not enrolled in school and who are not high school graduates (or the equivalent)." Using this definition, 682,000 teenagers dropped out during the 1985-86 school year--an 18% rate. According to an Office of Educational Research and Improvement (U.S. Department of Education, 1991) report for the years 1973 through 1990, there has been a decline in the dropout rate for 16- to 24-year-olds from 14.1% to 12.1%. This decrease was especially dramatic for Black students.

Using a second method, the U.S. Department of Education (1984) calculates dropout numbers by determining the percentage of students who complete high school during the same year as their original ninth grade class. According to this report, the dropout rate of public school sophomores in the spring of 1980 who did not graduate in 1982 was 14%. However, for other studies carried out by the National Center for Educational Statistics, the dropout rate has been as high as 28% (Institute for Educational Leadership, 1986).

Urban areas often have dropout rates in the 40% to 50% range, much higher than the national average (Barber & McClellan, 1987). According to Levin (1986), there is an emerging crisis for disadvantaged students and at least 30% of elementary and secondary students in the U.S. are educationally at risk.

In Wisconsin, approximately 75% of prison inmates were high school dropouts (Wisconsin Department of Public Instruction, 1986). Stephens and Repa (1992) reported that 79% of the inmates at one prison in New York were dropouts. Nationally the unemployment rate of dropouts was four times higher than for graduates, and for every dollar it cost to keep a child in school through graduation, society paid more than six dollars for maintenance of undereducated adults (Wisconsin Department of Public Instruction, 1986).

In 1986, male workers over the ages of 25 who had completed 4 years of high school (but no college) had a median income of \$24,701, almost 20% higher than for workers who never graduated (U.S. Department of Education, 1986). Also, the correlation between high school

completion and the ability to support a family is apparent. In 1982-83, 39% of children in two parent families in which neither parent had completed high school lived in poverty; 20% of children in families in which one parent had graduated were poor. When both parents had graduated, only 7% were classified as poor (National Governors Association, 1987).

Beyond the economic and social effects, being at risk and dropping out have medical and psychological effects, as well. Higher unemployment is associated with higher suicide figures, increased rates of admission to mental facilities, and higher mortality rates. In addition, dropping out lowers tax revenues, increases social service requirements, increases crime, and reduces political participation (Rumberger, 1987).

States in the Southeast have the highest dropout rates because of generally higher minority populations, fewer English speakers, and younger, more concentrated populations. In contrast, the lowest rates are in the Midwest, where there are more rural, homogeneous, and older populations, as well as smaller schools which are tied closely to community life (Institute for Educational Leadership, 1986).

In Iowa, the Department of Education estimated that 16,000 students were at risk of failing in the educational system. Each year about 5,000 Iowa students dropped out and at least 462 children were labeled at risk because of homelessness (Iowa Department of Education, 1989). Using figures reflecting actual numbers of students leaving school since 1970, Iowa has had dropout rates ranging from a high of 3%

in 1980 to a low of 2.04% in 1983. The latest Iowa figures showed a dropout rate of 2.46% in 1990 (Iowa Department of Education, 1991).

Levin (1987) noted that schools respond to low achievement and retention of disadvantaged children by relegating them to impoverished rather than enriched educational experiences. Students with several risk factors tend to have more educational problems, including lower grades and higher absenteeism, than students with none. Students with two or more risk factors were six times as likely as those with none to report that they did not expect to graduate from high school and twice as likely to score in the lowest 25% on achievement tests, and to receive the lowest 25% of grades (U.S. Department of Education, 1990).

Key at risk factors were noted in The Human Factor: A Key to Excellence in Education (National Association of School Social Workers, 1985). The study found these barriers to achieving excellence in the nation's schools:

1. Community

- (a) lack of community support services
- (b) lack of links between school and community services
- (c) lack of preventative mental health programs, such as those which address drug, alcohol, or family problems

2. Family

- (a) child abuse and neglect
- (b) divorce/separation

(c) parental apathy

(d) family crisis

(e) poverty

3. Personal

(a) low self-image

(b) problems with parents and/or other family members

(c) truancy/absenteeism

(d) disruptive behavior

4. School

(a) lack of positive, cooperative relationships
between and among students, staff, parents, and
administrators

(b) inadequate discipline policies and/or procedures

(c) lack of alternative schools/programs

(d) lack of collaborative teamwork among school and
community professionals

As barriers to educational advancement have been identified, researchers have begun to investigate ways to minimize these educational hurdles. Several sources have cited the following interventions:

1. Preschool early intervention programs help children get a sound start.

2. Public relations efforts are essential to building cooperative solutions.

3. School/community networks best serve the varied needs of at risk children.

4. Comprehensive and integrated pupil services are critical for both urban and rural children.

5. Parent education about school attendance and achievement seem to increase family support.

6. Schools and communities need to utilize available, low-cost resources.

(Wehlage & Rutter, 1985; Business Advisory Commission of the Education Commission of the States, 1985; Wisconsin Department of Public Instruction, 1986)

Effective at risk programs also need to emphasize what Mann (1986) has called the "four Cs--cash, care, computers, and coalitions." Hamilton (1986) identified 17 well-documented vocational education programs that seem to lower the dropout rate, raise average grades and test scores, and lower rates of absenteeism and class cutting. Giving students remedial help in reading and writing, organizing alternative schools, linking at risk students with high quality teachers and counselors, and putting at risk pupils into small, highly structured groups were also recommended (Boyer, 1983). Quinn (1991) reported that smaller school size was effective in serving at risk youth because it contributes to one-on-one relationships between staff and students and sense of control over school conditions.

Comprehensive programming, intensive preventative and remedial instruction, and frequent assessment of progress and adaptation of

instruction were cited as general characteristics of effective at risk programs (Slavin, 1989). Cuban (1989) also added that effective programs should emphasize direct instruction, linkages with life experiences of students, and mixed ability and multi-age groupings within and across classrooms. School activities which add relevance to the lives of at risk youth should be stressed (Firestone & Rosenblum, 1988).

Developments in the theory of human intelligence and intelligence testing have led to the recommendation that schools recognize other dimensions of learning beyond logical/mathematical reasoning and linguistic/verbal. Gardner and Hatch (1989) added four more dimensions which could aid in at risk programming through their incorporation into teaching strategies: (a) bodily/kinesthetic intelligence, (b) interpersonal intelligence, (c) intrapersonal intelligence, and (d) musical intelligence.

The U.S. Department of Education (1987), through the Urban Superintendents Network Report, has identified six research-based strategies for the prevention of dropouts and the facilitation of student achievement:

1. intervene early (Berrueta-Clement, Schweinhart, Barnett, & Weikart, 1984),
2. create a positive school climate (Wehlage, 1983; Edmonds, 1979; Purkey & Smith, 1983),
3. set high expectations (Brophy, 1985; U.S. Department of Education, 1987; Wheelock, 1986),

4. select and develop strong teachers (Frymier, 1988; Lieberman & Miller, 1984),
5. provide a broad range of instructional programs (U.S. Department of Education, 1987),
6. initiate collaborative efforts (Hargroves, 1986).

Characteristics of At Risk Students

American students are at risk of school failure for a variety of reasons. Although they are often interrelated, it is possible to group the characteristics into three major categories: (a) work and economic factors, (b) personal and family conditions, and (c) school experiences.

Work and Economic Factors

The most obvious demographic predictor of at risk students is poverty (Boyer, 1983; Rumberger, 1983). Students in the bottom third of national income scales more frequently leave school than more affluent students (Edmonds, 1979).

Leaving school to find a job or to help support the family are major reasons why males drop out (Rumberger, 1983; Ekstrom, Goertz, Pollack, & Rock, 1986). D'Amico (1984) reported that, among 12th graders, most of the students averaged 15 to 18 hours of work per week and an intensive work involvement was associated with higher rates of dropping out, at least for some groups of students. Working also interferes with participation in extracurricular activities sponsored by the school (Spreitzer & Pugh, 1973).

Research suggests that while some students drop out due to heavy work involvement, others drop out because of the lack of jobs. Almost 50% of minority and poor students would fall into the latter group (Rumberger, 1985).

Finally, the economic conditions of the school at risk students attend also influence the at risk problem. Graduates of suburban schools are more likely to have access to better resources, more sensible counseling, and information about future educational and employment opportunities. Data on smaller schools are less numerous, but it is apparent that small, rural schools may lack resources and services essential to serving at risk populations (Bills, 1986).

Personal and Family Conditions

A second set of factors associated with failure to complete high school concerns personal and family conditions. Teenage pregnancy is one condition which has reached epidemic proportions in some large cities (Hodgkinson, 1985; Furstenberg, 1976). Pallas (1986) found that pregnancy was second only to poor academic performance as the reason for young women leaving school. Many students who drop out also cite marriage or marital plans (Rumberger, 1983).

Hammack (1987) noted that substance abuse, alcohol, suicide, accidents, homelessness, violence, and youth unemployment were all linked to statistics involving at risk students. In addition, students from single-parent families and broken homes were twice as likely to drop out of school as are students living with both parents (Neill, 1979; Gadwa & Griggs, 1985). A large number of dropouts and at risk

students also come from homes where parents did not complete high school, have negative attitudes about schools, and do not support the education of their child (Gadwa & Griggs, 1985).

In a large majority of cases, low self-esteem and poor emotional health make students susceptible to at risk problems. Often students who do not have the ability to recognize and deal with their feelings about themselves or deal with their emotions, assume or adapt to unproductive life styles (Brodinsky, 1989). Schools have often not helped students see themselves as capable, worthwhile, and valued (Uroff & Greene, 1991).

At risk studies refer to both self-esteem and self-concept, terms which may be used interchangeably for most purposes (Piers, 1989). Self-concept, as assessed by the Piers-Harris Children's Self-Concept Scale (Piers, 1989), is defined as a relatively stable set of self-attitudes reflecting both a description and an evaluation of one's own behavior and attributes. Self-concept is viewed as: (a) relatively stable, (b) possessing both global and specific components, (c) phenomenological in nature, and (d) having a self-evaluative as well as a self-descriptive component.

At risk students often demonstrate low self-concept as well as a sense of having lost control of their futures. The students perceive that teachers do not show interest in them and the school's general system is unfair (Wehlage & Rutter, 1986). If young people are consistently discouraged in school because of academic inadequacies and failures, perceive little interest or caring from teachers, and see the

institution's discipline as both ineffective and unfair, then these students often become alienated and uncommitted to finishing high school (Wehlage, Rutter, & Turnbaugh, 1987).

According to Canfield (1990), one of the most detailed studies done on self-esteem and students was carried out at Silver Creek School in San Jose, California. The freshman class was divided into three groups. The self-esteem group was instructed by teachers who treated all students with unconditional positive regard, encouraged all students to be all they could be, and encouraged all students to set and achieve goals. This group also participated in a regularly scheduled activity in self-esteem during the freshman year. The control group received no treatment but was monitored along with the self-esteem group for 4 years. The third group was not involved in the study.

At the end of 4 years, the self-esteem group had fewer days of absenteeism per semester, had a greater percentage of students who completed 90% of their homework, and had more students who participated in extracurricular activities than the control group. In addition, the self-esteem group held various class offices as compared to none for the control groups. Finally, 83% of the self-esteem group completed high school while the control group had a graduation rate of 50%.

School Experiences

Poor academic performance has been identified as a common reason for not completing high school (McDill, Natriello, & Pallas, 1986; Kolasa, 1989). The High School and Beyond study found that 42% of

dropouts were previously receiving mostly Ds in class, with 18% getting Cs, 8% getting Bs, and 2% receiving As (Institute for Educational Leadership, 1986; Boyer, 1983). Wehlage (1986) reported that the at risk student was normally in the bottom 25% of the class as measured by grade point average and that failed courses coupled with insufficient graduation credits often led to dropping out. Lang (1991) found that dropouts in Alabama had significant reading and math ability level deficiencies.

The underlying agenda of schools stressing silence, order, control, and competition often proves ineffective for at risk students. Rebellion against that agenda, marked by frequent expulsion, suspension, truancy, and in-school delinquency, is a major reason why students, especially males, drop out (Hodgkinson, 1985). Pallas (1986) reported that chronic truants were 40% more likely to drop out than regular school attendees. Wehlage (1983) noted that truancy leads to failure, which in turn leads to negative relationships with school personnel.

In School Dropouts - Everybody's Problem (Institute for Educational Leadership, 1986), six major in-school factors have been identified as helping to push at risk students out of school:

1. School and class size lead to anonymous, impersonal school environments.
2. Academic tracking serves to further alienate students having difficulties.

3. Misuse of standardized tests acts to determine competence for promotion and graduation.

4. Higher requirements without remediation or support for lower achieving students pose serious risks to students whose school experiences were already negative.

5. Emphasis on seat time versus competency limits the academic attainments of students who react more favorably to individualized approaches.

6. Lack of support for minorities often leaves cultural and linguistic minorities with few adults to serve as role models and advisors.

Studies using student interview data report that school policies and atmosphere were often dominant in the leaving process. Anonymous and uncomfortable school climates, coupled with feelings of intellectual incompetence, boredom, and racism have pushed many students out of school (Wehlage & Rutter, 1986; Turner, 1991). Maat (1991) found that school climate was a significant predictor of the dropout rate among disadvantaged schools.

In a study of student perceptions of grade retention, Hursey (1990) concluded that the students weighed the social and emotional detriments of retention more heavily than any academic benefits. Byrnes (1989) also interviewed children and found that 87% said being retained made them feel "sad," "bad," "upset," or "embarrassed." Only 6% gave any positive answers.

Schulz, Toles, and Rice (1986) reported from a study of Chicago school freshmen that students who were overage dropped out at a rate 13% higher than on-grade students. A second Chicago study found that overage students represented more than a third of all dropouts (Hess & Greer, 1986). Stevenson (1985) found that the dropout rate in Dade County, Florida, was 28% higher for overage students. In the Pasco, Washington School District, 50% of the high school dropouts had repeated a grade, with far more than half repeating first grade (Noth & O'Neill, 1981). Stephens and Repa (1992) found that 44% of the 220 subjects of a New York prison study had been retained in one or more grades. Out of 22,018 students in a Phi Delta Kappa at risk study, one out of seven students had been retained in grade at least once (Frymier & Gansneder, 1989).

In another Chicago study, Toles, Schulz, and Rice (1986) reported a direct measure of the consequences of retaining more students. Following the imposition of a more stringent eighth grade promotion policy, the overall dropout rate climbed to an all-time high of 45%. Furthermore, the rate of dropping out for overage students actually increased, especially for those in the middle and above-average achievement categories. Through the use of logistic regression weights based on a previous class, Toles et al. (1986) concluded that being overage was more of a handicap than poor achievement. In a similar manner, Edgerton (1967) concluded that retention was a particularly devastating indictment of a person's whole being, regardless of later

academic achievement. Garber, Sunshine, and Reid (1989) found that the more often youngsters are retained, the more likely they will drop out.

General policies on school retention tend to be mandated by school boards and are often established after the local community expresses dissatisfaction with the academic gains of its children (Thompson, 1979). Academic retention appears to be popular, at least in part, because it does not disrupt the organization of the district, local school, and classroom (Labaree, 1984). For the system of public schools, retention functions as a way to preserve the structure of efficient, grade-level production while enhancing an image of concern for children (Shepard & Smith, 1989b).

Shepard and Smith (1989b) have estimated that 5% to 7% of public school children are retained in the U.S. annually. Based upon their method of summing the rates across the grades up to ninth grade, they speculate that approximately half of all students in the U.S. have been retained in at least one grade or are no longer in school. This cumulative rate of non-promotion would be comparable to practices of schools in the 19th century.

Holmes (1989), following a meta-analysis of retention research, reported that 54 studies showed overall negative effects from retention, even on measures of academic achievement. Grissom and Shepard (1989) also examined the retention--dropout relation after controlling for achievement and found that with equally poor achievement, students who repeated a year were 20% to 30% more likely to drop out of school. Youth who have repeated grades are

substantially more likely to drop out regardless of whether the grade retention occurred early or late in the youth's school career (Roderick, 1991). Jackson (1975) and Holmes and Matthews (1984) noted that grade retention did not ensure significant gains in achievement for children who were academically below grade level. In addition, grade retention did not generally improve achievement or adjustment for developmentally immature students (May & Welch, 1984; Shepard & Smith, 1985). Mackey-Roguenant (1992) found that retaining a low achieving student in junior high was not likely to improve test scores, grades, or the tendency toward absenteeism or dropping out.

Haddad (1979) found that grade retention was a poor use of the education dollar because it increased the cost of education without any benefits for the vast majority of retained children. Shepard and Smith (1989b) estimated that U.S. school districts spend nearly 10 billion dollars a year to pay for the extra year of schooling necessitated by retaining 2.4 million students.

In a study of teacher beliefs and attitudes toward students at risk, Holbach (1991) reported that retention was used more often by middle level teachers than by teachers at other levels. Forty-five percent to 57% of all respondents in the study believed retention was an effective strategy for serving at risk pupils. Shepard (1989), however, in a review of 16 controlled studies on the effects of extra-year programs, wrote that the predominant finding was one of no difference. This conclusion of "no benefit" held true even for studies where children were selected on the basis of immaturity rather than for

academic risk. In addition, extra-year children are more likely to have lower self-concepts and poorer attitudes toward school compared to control students (Shepard, 1989). Parental interviews also revealed both short-term and long-term distress associated with retention (Shepard & Smith, 1989b). In contrast, remedial help, before- and after-school programs, summer school, instructional aides, and no-cost peer tutoring were all more effective than retention (Hartley, 1977).

Predictors of At Risk Problems

Research has found that by the time students are in the third grade, fairly reliable predictions can be made about which students will ultimately drop out and which will complete their schooling (Howard & Anderson, 1978; Lloyd, 1978). At risk factors have different predictive value depending on student age and other variables. For preschool pupils, the best at risk indicators are socio-economic factors (Schreiber, 1968). As students move through the grades, their actual performance in school becomes a much better predictor (Lloyd, 1974). Finan (1992) reported that a study of Texas students and dropouts found the most significant predictor variables to be peer influence followed by parental and school influences. This was a change from an earlier study where school influences were foremost.

Lilly (1990) found in a study of high school dropout prevention programs that the use of objective academic measures for the identification of at risk students seemed to be an appropriate system for locating the majority of pupils who may eventually drop out of school. Brown (1988) noted that information gathered on ninth grade

students could be useful in making accurate predictions about which students were most at risk of dropping out of high school. Pallas (1986) also reported that national trends indicated poor academic achievement as the best predictor of who may drop out of school or be at risk of several school problems. It was found that students with a D average were five times more likely to drop out or have school problems than students with a B average (U.S. Department of Education, 1983).

In a study by Bowser (1990), a discriminant function analysis was used to determine at risk factors possessing the most discriminating power for distinguishing potential dropouts from nondropouts. Those factors exhibiting the most discriminating power were, in decreasing order: race, GPA, sex, reading achievement, employment status, residence, parenting, days absent and/or late, disciplinary removal and/or suspension, locus of control orientation, and school climate perception. Also, the Highland (Florida) County School District reported that regression analysis revealed variables which best differentiated between graduates and nongraduates. The variables were grade point average, socio-economic status, number of discipline referrals, basic skills achievement, attendance, and remedial education (Berquist & Kruppenback, 1987). Mignerone (1991) also found that grade point average and absence variables were identified as predictors of at risk behaviors. A factor influencing lower grade point averages was found to be high involvement in out-of-school involvement options as

opposed to participation in school organized programs (Reikowski, 1992).

In another study of potential dropouts, Seeley (1990) attempted to determine if academic factors present in school records could be used to identify dropout proneness. It was found that a significant correlation existed between dropping out and the following measures: scores on the Quality of School Life instrument, attendance, GPA, mathematics grades, and age in school. Similarly, Wehlage and Rutter (1986) also identified school grades, standardized test scores, and grade retention as predictors of possible school failure. Trusty and Dooley-Dickey (1991) found that poor grades and low perceived school relevance helped to predict future dropout problems.

In a study of the Chicago School District, Hammack (1987) reported that entering high school overage--at least 15 or older--is a potent predictor of school failure, especially for males. The effect of being overage is increased by grade retention, reading below grade level, and/or being Black. Similar effects were not as strong for Hispanics, Whites, or Asians. Schulz, Toles, and Rice (1986) also reported in their study of the Chicago schools that reading achievement and high school entry age, in contrast to race and gender, could account for much of the predictable variation in student dropout rates. The interaction between reading achievement and entry age, when entered first in the regression analysis, accounted for 80% of the modeled variance. In another Chicago study, it was found that the schools did

a poorer job of educating the students when the concentration of overage students was higher (Hess & Greer, 1986).

Hess and Greer (1986) also found that overage students, even if they were reading at higher levels than their normal aged peers, were still more likely to drop out. Since being overage is related to district retention policies, this study showed that even if a student were to gain a whole stanine through retention, the likelihood of failing in school was still higher than for normal aged peers reading at a lower score level.

A Los Angeles Unified School District study (LAUSD Dropout Prevention/Recovery Committee, 1985) found that dropouts were retained in a grade five times more often than graduates. In addition, less proficient students who failed either of the first two grades in school had only a 20% chance of graduating. Fine (1986) also found in her studies of the New York City schools that being held back in school was the best single predictor of school failure and dropping out.

In a study of the Eugene, Oregon Public Schools, Schellenberg (1985) noted that attendance emerged as the strongest predictor of graduation and overall school performance. It was also noted that the dropout group was substantially lower than the graduate group in overall GPA, English GPA, average number of credits completed, and standardized math and reading scores. The GPAs of dropouts were an average of 1.2 below the level of the graduates and the dropouts were an average of four credits per term behind the graduating students.

Summary

The American educational system is becoming aware of the importance of providing meaningful school experiences for at risk students. This review of literature examined the following aspects of the at risk issue: (a) the national scope of the at risk problem, (b) characteristics of at risk students, and (c) factors which best predict at risk problems.

Research has shown that at risk students, including dropouts, comprise a significant segment of the school population. The National Association of School Social Workers (1985) has identified four factors which serve as barriers to learning for this at risk population: (a) community problems, (b) family problems, (c) personal problems, and (d) school problems. Numerous researchers have identified strategies for dealing with these problems, including early intervention, positive school climate, high expectations, strong teachers, a variety of instructional programs, and collaborative efforts (U.S. Department of Education, 1987).

Characteristics of at risk students focus on three major categories: (a) work and economic conditions, (b) personal and family conditions, and (c) school experiences. At risk students often cite job requirements or family economic conditions as reasons for leaving school. Pregnancy, substance abuse, and low self-concept also account for many at risk problems. In the school setting, poor academic performance is the most common reason for dropping out, with retention in a grade acting as a strong underlying factor.

Identifying those factors which will best predict at risk problems is of prime importance. Researchers have noted several factors which can be used to foresee potential problems. Academic performance and school attendance have been shown to be among the best indicators for use by schools.

CHAPTER 3
DESIGN OF THE STUDY

Introduction

This chapter presents a systematic and detailed plan for investigating the use of selected at risk factors to predict student self-concept, performance on the Iowa Tests of Educational Development, and high school grade point average. In addition, procedures for examining academic and social viewpoints of 9th through 11th grade students who were retained in grades K-8, and of their parents, are presented. The research focused on four major questions:

1. What quantitative factors may be used as predictors of future school success?
 - a. To what extent can self-concept scores be predicted using selected at risk factors as independent variables?
 - b. To what extent can performance on the Iowa Tests of Educational Development be predicted using selected at risk factors as independent variables?
 - c. To what extent can high school grade point average be predicted using selected at risk factors as independent variables?
2. What are the perceptions of students who were retained in a grade?
 - a. What attitudes toward school are held by students currently in grades 9-11 who were retained in grades K-8?

b. What social attitudes are held by students in grades 9-11 who were retained in grades K-8?

c. What viewpoints are held by students in grades 9-11 who were retained in grades K-8 toward the desirability of retention and the influence of retention on academic and social growth?

3. What are the perceptions of parents whose children were retained in a grade?

a. What are the viewpoints of parents of students in grades 9-11 who were retained in grades K-8 concerning the students' attitudes toward school?

b. What are the viewpoints of parents of students in grades 9-11 who were retained in grades K-8 concerning the students' social attitudes?

c. What are the viewpoints of parents of students in grades 9-11 who were retained in grades K-8 concerning the desirability of retention and its influences on academic and social growth?

4. How do the viewpoints of students in grades 9-11 who were retained in grades K-8 compare to the viewpoints of their parents?

Chapter 3 presents the design of the study by describing the population, sample selection, instrumentation, procedures, and data analysis.

Population

The population of the study consisted of all 9th, 10th, and 11th grade public school pupils and their parents in two selected school

districts in Iowa. The two selected schools were determined by the researcher based on geographic proximity, common district characteristics, and ease of access to pertinent student school information.

The general population from which these schools draw students would be characterized as rural and agriculturally-based with most family incomes designated as lower to average middle-class. The racial make-up of the area is predominantly Caucasian, with less than 1% of the county population of 21,098 coming from racial minorities.

Iowa is considered to be a rural Midwestern state with seven small urban centers. According to the Iowa Department of Economic Development (State of Iowa, 1991), the population is primarily Caucasian (96.5%), with the following minority population levels: Black (1.6%), Hispanic (.9%), other non-White (1.0%). The median age of the population is 31.7 years.

Sample

The sample of students was obtained from the population of students in grades 9-11 in two public school districts in Iowa which were close to each other in proximity, composed of basically heterogeneous student populations, and willing to participate with the researcher in this study.

The initial sample consisted of 63 ninth graders, 60 tenth graders, and 69 eleventh graders in School 1, and 59 ninth graders, 63 tenth graders, and 67 eleventh graders in School 2. This amounted to a

total student population of 381. There were incomplete records for 8 students, providing a sample size of 373 for the analysis on predictability of at risk factors. The number of students in the School 1 sample who had been retained within the district previously was 25, while 10 pupils had been previously retained in School 2. These retained students constituted the initial sample used in the interview portion of the study. Following the process of obtaining permission to conduct the interviews, 12 pupils from School 1 and 3 pupils from School 2 agreed to participate. Parents of the these 15 retained students constituted the parental portion of the study.

Instruments

This study used six main instruments for collecting data about the student and parent samples. Instrument 1 (see Appendix A) was developed by the researcher using 26 of 45 at risk factors identified by Phi Delta Kappa International (see Appendices B & C) as part of their comprehensive national research study, "A Study of Students At Risk" (Frymier, 1989b). These 26 at risk factors were selected by the researcher because they could be obtained from standard school records and/or personnel and were not considered to be extremely sensitive, confidential data:

1. What is the student's score on a self-concept instrument?
2. Has the student been expelled from school in the past year?
3. Have any of the student's siblings dropped out of school?
4. How many courses has the student failed in the past year?

5. How many times has the student been suspended in the past year?
6. How many days has the student been absent in the past year?
7. Has the student been retained in a grade at some time within the district?
8. What are the student's scores on sections of a standardized achievement test such as the Iowa Tests of Educational Development?
9. How many schools has the student attended in the past five years?
10. What is the student's cumulative grade point average?
11. What is the student's reported IQ?
12. Have the student's parents been divorced or separated in the past year?
13. Have either of the student's parents died during the past year?
14. Has the student been identified as needing special academic or social assistance?
15. Does the student speak a primary language other than English at home?
16. Is there only one parent in the home?
17. Is the student older than the rest of the class?
18. Did the student's mother graduate from high school?
19. Was the student dropped from an extracurricular activity in the past year?

20. Has the student experienced a serious illness or accident in the past year which required several days of home care?
21. Does the student participate in extracurricular activities?
22. Has a sibling of the student died in the past year?
23. Did the student's father graduate from high school?
24. Has the student changed schools during the past year?
25. How many brothers and sisters does the student have?
26. Is the student the youngest child or the only child in the family?

The second instrument used in the study (see Appendix D) was the Piers-Harris Children's Self-Concept Scale (Piers, 1989). This is an 80-item, self-report questionnaire designed to assess how children and adolescents, ages 8-18, feel about themselves. The students are shown a number of statements that tell how some people feel about themselves, and are asked to indicate whether each statement applies to them using dichotomous "yes" or "no" responses. An overall assessment of self-concept is reflected in three summary scores: a total raw score, a percentile score, and an overall stanine score. In addition, six cluster scales are also provided: Behavior, Intellectual and School Status, Physical Appearance and Attributes, Anxiety, Popularity, and Happiness and Satisfaction.

The Piers-Harris Children's Self-Concept Scale (Piers-Harris) measures an individual child's self-evaluative attitudes and behaviors which have a bearing on self-concept. Because of this, it can be used in three different manners: (a) as a screening device in special

education and other classroom settings, (b) as an aid to individual assessment in a variety of settings, and (c) as a research instrument to provide a quantitative, self-report measure of children's self-concepts.

The Piers-Harris appears to be a highly reliable instrument, with test-retest coefficients ranging from .42 (8 month interval) to .96 (3 week interval) and internal consistency estimates for the total score range of .88 to .93. The test is judged to have adequate temporal stability and good internal consistency. Also, estimates of the content, criterion-related, and construct validity of the Piers-Harris have been obtained from a number of empirical studies which have used a variety of approaches including item analysis, intercorrelations among the scales and items, and comparisons of the responses of various criterion groups (Piers, 1989).

The third instrument used in the study was the Iowa Tests of Educational Development, Eighth Edition (University of Iowa, 1987). Specific subsections used for data purposes were Test Q (quantitative subtest) and the Reading Total. Included in the Reading Total are scores obtained from Part 2 of the social studies test, Part 2 of the natural sciences test, and the entire literature test.

The Iowa Tests of Educational Development (ITED) are well established achievement tests which measure skills which are important in adolescent and adult life. Students' performance on the tests will generally reflect not only experiences in school but also out-of-school learning situations. The interpretive emphasis is placed on individual

and group growth, recognizing that general academic achievement is not achieved exclusively through school activities, and that all students do not mature intellectually by taking identical patterns of courses (University of Iowa, 1987).

Serving as the fourth instrument in this study was the grade point average computational system. Each school studied used the marking system based on 4 points for an A grade, 3 points for a B grade, and so on. Therefore, a straight A student would receive a grade point average (GPA) of 4.00 and a student failing all courses would have a GPA of 0.00. Grade point averages for each student were obtained following computation by each high school office staff.

The fifth instrument (see Appendix E) used in the study was developed by the researcher for use in the interview setting. It contained a section on demographics with five questions and a second section containing 22 questions about student attitudes toward school, friends, outside influences, and future plans. This instrument was piloted with eighth grade pupils in an Iowa school district during the Fall of 1989 and revised for use with high school students.

The sixth instrument (see Appendix F) used in the study was developed by the researcher for use in the mailed parental survey. It contained 25 questions concerning parents' perceptions about student attitudes toward school, friends, outside influences, and future plans. This instrument was piloted with parents of retained students in grades not included in this study.

Face validity, for instruments five and six, was obtained through peer review by doctoral students at the University of Northern Iowa, by Dr. Jack Frymier of Phi Delta Kappa International, Dr. Stephan D. Regan of Upper Iowa University, and Dr. Roger W. Anderson of Luther College.

Procedures/Methodology

This study was conducted during the Spring of 1991. The following procedures were used to select the sample:

Task 1: Two school districts were selected by the researcher based on geographic proximity, common school populations and procedures, and ease of access to student information.

Task 2: The two selected districts were asked to participate in the study and permission was granted.

The following procedures were used to acquire the data for this study:

Task 3: The researcher obtained access to the cumulative folders of the students to be studied and recorded information based on the selected at risk factors.

Task 4: The researcher visited with the high school guidance counselors to obtain information missing from the cumulative folders.

Task 5: The students in grades 9-11 at both schools were given the Piers-Harris questionnaire by the school counselors.

Task 6: The student interview instrument (see Appendix E) was piloted with a small group of eighth grade pupils in one of the districts to determine whether the form was appropriate.

Task 7: The parent survey instrument (see Appendix F) was piloted with a small group of parents of retained students who were not in the grades included in this study to determine appropriateness.

Task 8: Student scores on the Piers-Harris questionnaire were obtained from the schools and recorded.

Task 9: Parents of students in grades 9-11 who had been retained in a grade were contacted by mail for permission to conduct interviews with the pupils (see Appendix G).

Task 10: Parents of retained students were contacted by telephone if they did not respond to the initial mailing.

Task 11: Those students who were given permission to participate in the interview process were scheduled for a 15-minute session with the researcher in the school building. The students were given a copy of the questions (see Appendix F), which were then read orally by the researcher, and students were asked to respond in writing.

Task 12: Following the completion of all the interviews, responses were recorded by the researcher on a data sheet (see Appendix H).

Task 13: Parents of retained students who were interviewed were mailed a cover letter and survey form (see Appendix F) corresponding to the student form. They were asked to complete the form and return it to the researcher.

Task 14: Parents not completing the survey were contacted by telephone to facilitate the return of the survey form.

Task 15: Following the completion of the parent surveys, responses were recorded on a data sheet (see Appendix I).

Task 16: Completed parental surveys were matched with the appropriate student surveys for later response comparison.

Data Analysis

Data from the cumulative folder search were analyzed using the Systat (SYSTAT, 1989) statistical program. The emphasis was on generating a multiple regression analysis to establish which of the 26 selected at risk factors were most closely related to self-concept score, ITED performance (Test Q and Reading Total), and grade point average. A correlational analysis of the individual predictors was also conducted. The significance level was set at $p < .10$.

In the portion of the study using data from the students who were retained, tabulations and frequency analyses were used to ascertain patterns of student responses. Parental survey data were analyzed in the same manner and matched with student responses to determine whether parents and children shared similar viewpoints.

Summary

This chapter presented the plan for investigating the use of selected at risk factors to predict student self-concept, performance on the Iowa Tests of Educational Development, and high school grade point average. In addition, viewpoints of both students who were previously retained in the elementary grades and of their parents were examined through an interview and survey process. The research focused on two major areas: (a) at risk factors as predictors of high school

academic performance and self-concept; and (b) viewpoints of students currently in grades 9-11 who were retained in the elementary grades, and of their parents.

The population consisted of students in grades 9-11 at two public high schools in Iowa and their parents. The sample 1 study was conducted with students in grades 9-11 for whom complete cumulative folder data were available. The sample 2 study was conducted with students from sample 1 who were retained in grades K-4 and with their parents. Information about students in sample 1 was obtained from reviews of cumulative folders, visits with the school counselors, and the Piers-Harris Children's Self-Concept Scale. Additional information was gathered during an interview process from students who were retained in grades K-4 during their schooling in the district and from their parents by means of a survey instrument.

Data from the cumulative folder search were analyzed using the Systat statistical program. A multiple regression analysis was conducted to determine which of the 26 selected at risk factors were most closely related to self-concept score, ITED performance (Test Q and Reading Total), and grade point average. A correlational analysis of the individual predictors was also conducted.

In the portion of the study using data from the students who were retained, tabulations and frequency analyses were used to ascertain patterns of student responses. Parental survey data were analyzed in the same manner and matched with student responses to determine whether parents and children shared similar viewpoints.

CHAPTER 4

RESULTS

This chapter presents demographics of the student population involved in this study and results of the investigation of the use of selected at risk factors to predict student self-concept, performance on the Iowa Tests of Educational Development, and high school grade point average. Included are gender characteristics, grade point averages, self-concept scores, ITED results, and the numbers of students who were identified as fitting the 26 selected at risk factors used in the study. In addition, IQ scores, numbers of siblings, and ages of the subjects are reported. Results of the study of academic and social viewpoints of 9th through 11th grade students who were retained in grades K-4 and of their parents are also presented.

The information has been summarized in three major sections. Section 1 describes the demographics of the student population. Section 2 corresponds to the research question:

1. What quantitative factors may be used as predictors of future school success?

Section 3 corresponds to the remaining three research questions:

2. What are the perceptions of students who were retained in a grade?

3. What are the perceptions of parents whose children were retained in a grade?

4. How do the viewpoints of students in grades 9-11 who were retained in grades K-8 compare to the viewpoints of their parents?

Demographics of the Student Population

Data from students in grades 9-11 from two rural high schools were investigated to determine the predictability of various measures of school success using selected at risk factors. Data were collected by reviewing student cumulative folders, standardized test reports, and attendance records.

Gender characteristics of the sample group are summarized in Table 1. The student population represented an approximate balance of males and females in each school. Total student population was also approximately the same between School 1 and School 2 for grades 9, 10, and 11.

Student self-concept was determined using the Piers-Harris Children's Self-Concept Scale. Schools' statistics for self-concept scores are presented in Table 2. In both schools, over 50% of the students tested had scores in the top 25% of the score range. Also, less than 5% of the students had self-concept scores in the lower half of the score range.

Student performance on Test Q (Quantitative) of the ITED is presented in Table 3. School 1 had slightly higher student scores throughout the score range. Approximately 40% of the students in School 2 received Test Q scores higher than 15, while 47% of the School 1 students had scores higher than 15.

Student performance on the Reading Total of the ITED is presented in Table 4. The Reading Total is a compilation of reading scores from various subtests of the ITED and reflects a general reading ability

Table 1

Gender Characteristics of Students

Schools	Gender	Grades			Totals
		9	10	11	
School 1	Female	31	25	35	91
	Male	31	34	34	99
	Total	62	59	69	190
School 2	Female	27	32	27	86
	Male	32	26	39	97
	Total	59	58	66	183
School Totals	Total Females	58	57	62	177
	Total Males	63	60	73	196
	Total Students	121	117	135	373

score. Students in School 1 scored slightly higher throughout the score range, with 55% of the students scoring higher than 15 while 46% of the School 2 students scored above 15.

Student grade point averages are presented in Table 5. The number of students having GPAs under 2.00 was very similar for both schools. The numbers of students in the top two ranges of GPA for School 1 were almost equal, while a far greater number of students in School 2 had grade point averages in the 2.01-3.00 range than in the top range.

Table 2

Student Self-Concept Score Frequencies, N = 373

Schools	Self-Concept Scores			
	0-20	21-40	41-60	61-80
School 1	0	10	69	111
School 2	0	9	77	97
Totals	0	19	146	208

Note. \bar{M} = 60.08. SD = 10.58

Table 3

Student Test Q Score Frequencies, N = 373

Schools	Test Q Scores						
	0-5	6-10	11-15	16-20	21-25	26-30	31+
School 1	0	43	58	46	30	9	4
School 2	5	51	55	44	21	6	1
Totals	5	94	113	90	51	15	5

Note. \bar{M} = 15.05. SD = 5.88.

Table 4

Student Reading Total Score Frequencies, N = 373

Schools	Reading Total Scores						
	0-5	6-10	11-15	16-20	21-25	26-30	31+
School 1	5	33	47	62	28	13	2
School 2	5	41	53	52	24	6	2
Totals	10	74	100	114	52	19	4

Note. \bar{M} = 15.61. \underline{SD} = 6.01.

Table 5

Student Grade Point Average Frequencies, N = 373

Schools	Grade Point Averages			
	0.00-1.00	1.01-2.00	2.01-3.00	3.01-4.00
School 1	1	30	78	79
School 2	2	33	95	53
Totals	3	63	173	132

Note. \bar{M} = 2.71. \underline{SD} = 0.71.

Overall, the student populations were very similar between the two schools. School 1 had higher score frequencies in most areas, but the actual differences were slight.

Frequency tabulations and descriptive statistics are presented, where appropriate, for the group results on the selected at risk factors used in the study. Student frequencies on 20 of the selected at risk factors are presented in Table 6. Using the tabulation of data for each school, most of the at risk factors show student frequencies being almost equal. Differences were apparent, however, for certain factors. School 1 had fewer students suspended during the year and several fewer students identified for special education. However, School 1 also had all of the cases of a parent or sibling recently dying and of parents being divorced. In addition, School 1 had 2.5 times more students retained in a grade than did School 2.

Student attendance patterns are presented in Table 7. The numbers of days absent from school were similar for the two schools. School 2 had a slightly lower number of student absences than did School 1 throughout the school year, with the number of days missed for the entire study population averaging less than 10 days.

Student IQ scores are presented in Table 8. Scores were similar for the two schools. IQs averaged approximately 108.8 for the entire student group, and School 1 had the only student above the 141 level.

Numbers of siblings reported by each student in the study are presented in Table 9. Family size is similar for both schools, with the students reporting an average of 2.5 brothers and/or sisters each.

Table 6

Student Frequencies on Selected At Risk Factors, N = 373

At Risk Factors	School 1	School 2	Total
Expelled this year	0	0	0
Siblings who dropped out	9	14	23
Failed course(s) this year	27	29	56
Suspended this year	1	6	7
Attended several schools in last 5 years	2	2	4
Parents were divorced recently	4	0	4
Parent died recently	3	0	3
Served as a special needs student	7	18	25
Primary language other than English	0	1	1
Has only 1 parent at home	18	13	31
Mother didn't graduate from high school	20	23	43
Dropped from a school team/group	6	5	11
Had a serious illness/injury this year	16	21	37
Lack of participation in extracurriculars	46	48	94
Sibling died recently	2	0	2
Father didn't graduate from high school	31	31	62
Changed schools this year	6	6	12
Is the youngest or only child in family	71	81	152
Overage for the grade level	27	15	42
Retained in a grade while in-district	25	10	35

Table 7

Student Attendance Frequencies, N = 373

Schools	Days Absent							
	0-5	6-10	11-15	16-20	21-25	26-30	31-35	36+
School 1	65	48	32	17	14	1	5	3
School 2	78	46	26	17	11	2	1	2
Totals	143	94	58	34	25	3	6	5

Note. \bar{M} = 9.46. SD = 8.26.

Table 8

Student IQ Score Frequencies, N = 373

Schools	IQ Scores							
	0-80	81-90	91-100	101-110	111-120	121-130	131-140	141+
School 1	0	12	37	61	42	22	7	1
School 2	3	11	27	62	37	29	6	0
Totals	3	23	64	123	79	51	13	1

Note. \bar{M} = 108.88. SD = 12.48.

Table 9

Student Sibling Frequencies, N = 373

Schools	Number of Siblings														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
School 1	10	61	53	29	12	9	5	7	3	0	0	0	0	0	1
School 2	5	45	67	30	9	9	8	6	2	0	2	0	0	0	0
Totals	15	106	120	59	21	18	13	13	5	0	2	0	0	0	1

Note. \bar{M} = 2.52. SD = 1.91.

Ages of the students in the study are presented in Table 10. Students in School 1 were about the same age as the students in School 2 for each grade level. The table shows that the ages of the students sampled in grades 9, 10, and 11 ranged from 14 years to 19 years, or six different ages categories for three grades of schooling. Out of the 373 subjects, 42 were classified as overage for the grade, with most of these being accounted for by retention in grades K-8.

Table 10

Student Age Frequencies, N = 373

Student Ages (years)	School 1			School 2		
	Female	Male	Total	Female	Male	Total
14	2	4	6	8	15	23
15	32	24	56	29	19	48
16	23	34	57	25	26	51
17	32	29	61	24	31	55
18	2	8	10	0	5	5
19	0	0	0	0	1	1
Totals	91	99	190	86	97	183

Note. $M = 15.97$. $SD = 1.04$.

Predictors of Future School Success

Predictors of Self-Concept

The predictability of performance on the Piers-Harris Children's Self-Concept Scale was investigated with a step-wise multiple regression using the selected 26 at risk factors (see Appendix B). In this study, the significance level was established as $p < .10$ rather than the more common level of $p < .05$. The results are summarized in Table 11, with each at risk factor identified by its number from the list of 26 selected factors (see Appendix B).

Performance on the Piers-Harris was best predicted by a combination of factors: (a) grade point average, (b) participation in extracurricular activities, (c) recent death of a parent, (d) IQ score, (e) the number of failed courses, and (f) a recent serious student illness or injury. As expected, low self-concept score, an at risk factor, was found to be associated with low GPA, lack of participation in extracurricular activities, low IQ, and failed courses. Contrary to expectation, however, serious illness or injury was found to be associated with higher self-concept score. Also, since only three students were identified as having experienced a parental death in the past year, the recent death of a parent was considered to be an anomaly and not considered to be a significant factor.

Table 11

Predictors of Self-Concept, N = 373

At Risk Factors (Question #)	Beta	<u>t</u>	<u>p</u> (2 Tail)
Failed Courses (F4)	-0.103	-1.864	0.063
Grade Point Average (F10)	0.124	1.901	0.058
IQ Score (F11)	0.108	1.853	0.065
Parent Died Recently (F13)	0.079	1.616	0.107
Serious Illness/Injury (F20)	0.073	1.485	0.138
No Extracurriculars (F21)	-0.183	-3.566	0.001

Note. R = .374. F(6,366) = 9.892. p < .10.

Predictors of Standardized Test Performance

The predictability of performance on the Test Q (Quantitative) of the Iowa Tests of Educational Development was investigated with step-wise multiple regression using the selected 26 at risk factors. In this study, the significance level was established as $p < .10$ rather than the more common level of $p < .05$. The results for Test Q are summarized in Table 12, with each at risk factor identified by its number from the list of 26 selected factors (see Appendix B).

The performance on the Test Q section of the ITED was best predicted by a combination of the following factors: (a) Reading Total on the ITED, (b) grade point average, (c) IQ score, and (d) the number of failed courses. As expected, low Test Q performance, an at risk factor, was found to be associated with failed courses, a low Reading Total, low GPA, and low IQ.

Table 12

Predictors of Test Q (Quantitative) Performance, N = 373

At Risk Factors (Question #)	Beta	t	p(2 Tail)
Failed Courses (F4)	0.081	-2.416	0.016
Reading Total (F8)	0.579	12.650	0.001
Grade Point Average (F10)	0.235	4.788	0.001
IQ Score (F11)	0.121	3.277	0.001

Note. $R = .819$. $F(4, 368) = 187.398$. $p < .10$.

The predictability of performance on the Reading Total of the Iowa Tests of Educational Development was investigated with step-wise multiple regression using the selected 26 at risk factors. In this study, the significance level was established as $p < .10$ rather than the more common level of $p < .05$. The results for the Reading Total are summarized in Table 13, with each at risk factor identified by its number from the list of 26 selected factors (see Appendix B).

The performance on the Reading Total of the ITED was best predicted by a combination of the following factors: (a) Test Q score on the ITED, (b) grade point average, (c) IQ score, (d) the mother's high school graduation status, (e) participation in extracurricular activities, and (f) being the youngest or only child. As expected, poor Reading Total performance, an at risk factor, was found to be associated with a low Test Q score, low GPA, low IQ, lack of participation in extracurricular activities, and being the youngest or only child. However, the reported connection between being the youngest or only child and lower Reading Total performance does not match previous research on only children (Falbo, 1983). Having both youngest child and only child identified in the same factor does not allow for differentiation.

Predictors of Grade Point Average

The predictability of high school grade point average was investigated with step-wise multiple regression using the selected 26 at risk factors. In this study, the significance level was established as $p < .10$ rather than the more common level of $p < .05$. The results

Table 13

Predictors of Reading Total Performance, N = 373

At Risk Factors (Question #)	Beta	t	p(2 Tail)
Test Q Score (F8)	0.509	12.559	0.001
Grade Point Average (F10)	0.319	7.825	0.001
IQ Score (F11)	0.073	2.093	0.037
Mother Didn't Graduate (F18)	-0.041	-1.449	0.148
No Extracurriculars (F21)	-0.080	-2.679	0.008
Youngest or Only Child (F26)	-0.073	-2.549	0.010

Note. $R = .845$. $F(6,366) = 152.409$. $p < .10$.

for grade point average are summarized in Table 14, with each at risk factor identified by its number from the list of 26 selected factors (see Appendix B).

Grade point average was best predicted by a combination of the following factors: (a) self-concept score, (b) sibling dropouts, (c) failed courses, (d) attendance, (e) Reading Total on the ITED, (f) Test Q score on the ITED, and (g) IQ score. As expected, low grade point average, an at risk factor, was found to be associated with a low self-concept score, one or more sibling dropouts, failed courses, lack of school attendance, low performance on the Reading Total and Test Q of the ITED, and low IQ score.

Table 14

Predictors of Grade Point Average, N = 373

At Risk Factors (Question #)	Beta	t	p(2 Tail)
Self-Concept Score (F1)	0.059	1.867	0.063
Sibling Dropouts (F3)	-0.064	-2.096	0.037
Failed Courses (F4)	-0.200	-6.063	0.001
Lack of Attendance (F6)	-0.139	-4.304	0.001
Reading Total (F8)	0.353	6.859	0.001
Test Q Score (F8)	0.238	4.721	0.001
IQ Score (F11)	0.148	4.032	0.001

Note. $R = .822$. $F(7,365) = 108.915$. $p < .10$.

Retention as an At Risk FactorDemographics of the Student Sample

Thirty-five students were identified as having been retained in a grade while attending grades K-4 in Schools 1 and 2. These students and their parents were contacted about participation in a survey of academic and social viewpoints following retention, the second segment of the study on at risk predictors. From this initial group, 15 students agreed to participate in an interview investigating the students' viewpoints of school. Of the participants, 12 students came from School 1 and three came from School 2. The parents of these

15 students agreed to complete a mailed survey containing questions about their perceptions of the students' viewpoints of the school.

Notable may be the fact that 20 students who had been retained in grades K-4 did not agree to participate in the study. Many of these students were known to the researcher and their lack of participation may have been related to the fact that they tended to come from families within the two districts who did not often participate in school activities or support the school.

Each student was asked to answer several demographic questions (see Appendix J). The study group was quite evenly split, with seven females and eight males. Of this group, 86.7% were retained in grades one, two, or three. Only one student was retained in kindergarten and one student was retained in the fourth grade, with no retentions above the fourth grade level.

In addition, the subjects came largely from natural two-parent families (93.3%) and the same percentage identified that home as their daily residence. Also, 14 subjects stated that four or less siblings currently lived in the home, with 80% of the subjects having a total number of siblings amounting to four or less.

Perceptions of Retained Students

Academic and social perceptions of students who were retained in grades K-4 were gathered by means of a 25-question survey instrument administered in an interview setting. Students were surveyed using a five-point Likert scale, with the lowest numbers corresponding to negative or no effect views and the highest numbers corresponding to

positive or high effect views. This scale is used in Tables 15-20. Academic and general school questions are summarized in Table 15.

The data in Table 15 show that the students demonstrated a general satisfaction with the school and with their school work. The results also show that the influences of teachers and personal student behaviors were of most importance to academic standing. In regard to having been retained in a grade, 100% of the students felt that the retention had either a neutral or positive effect upon their current academic status.

Table 15 also demonstrates that the students were split quite evenly between involvement and non-involvement in school activities. Parents, however, were viewed by the students as generally being not involved with school groups and activities.

All of the subjects indicated not only a desire to graduate, but also the belief that they would graduate from high school. The students also were heavily in favor of continuing retention of elementary students as a beneficial practice.

The results of the questions involving social viewpoints are presented in Table 16. Shown are responses to questions about students' views of social standing in the school. Over 85% of the subjects felt that they could make friends easily and were included in the popular school groups. Regarding influence upon social standing, the students indicated that other students, outside factors, and personal behaviors played the biggest role. Teachers and school rules and procedures were felt to have little effect on social status.

Table 15

Academic and General School Perceptions of Retained Students, n = 15

School Perceptions	Frequency of Responses					<u>M</u>	<u>SD</u>
	1	2	3	4	5		
Q1 Feelings About School	0	0	6	7	2	3.73	0.70
Q2 Feeling About School Work	0	3	4	8	0	3.33	0.82
Q3 Effect of Teachers on Grades	0	1	5	5	4	3.80	0.94
Q4 Effect of Other Students on Grades	3	4	5	2	1	2.60	1.18
Q5 Effect of School Rules on Grades	3	4	3	3	2	2.80	1.37
Q6 Effect of Outside Factors on Grades	2	4	3	3	3	3.07	1.39
Q7 Effect of Personal Behaviors on Grades	1	2	3	3	6	3.73	1.34
Q8 Academic Effects of Retention	0	0	2	4	9	4.47	0.74
Q9 Personal School Involvement	2	3	1	2	7	3.60	1.60
Q10 Parental School Involvement	3	6	4	1	1	2.40	1.12
Q22 Plans to Complete High School	0	0	0	0	15	5.00	0.00
Q23 Desire to Graduate	0	0	0	0	15	5.00	0.00
Q24 Chances of Graduating	0	0	0	0	15	5.00	0.00
Q25 Retention Viewed as a Desirable Practice	0	0	4	1	10	4.40	0.91

Table 16

Social Perceptions of Retained Students, n = 15

Social Perceptions	Frequency of Responses					<u>M</u>	<u>SD</u>
	1	2	3	4	5		
Q11 Ability to Make Friends	0	1	0	5	9	4.47	0.83
Q12 Inclusion in Popular School Groups	0	2	6	4	3	3.53	0.99
Q13 Effect of Teachers on Social Standing	7	3	3	1	1	2.07	1.28
Q14 Effect of Other Students on Social Standing	2	0	2	9	2	3.60	1.18
Q15 Effect of School Rules on Social Standing	6	3	5	0	1	2.13	1.19
Q16 Effect of Outside Factors on Social Standing	2	2	4	2	5	3.40	1.45
Q17 Effect of Personal Behavior on Social Standing	2	0	4	1	8	3.87	1.46
Q18 Ability to Change Social Standing	0	3	4	6	2	3.47	0.99
Q19 Desire to Change Social Standing	7	4	3	0	1	1.93	1.16
Q20 Academic Relationship to Social Standing	2	5	6	2	0	2.53	0.92
Q21 Social Effects of Retention	0	0	3	3	9	4.40	0.83

The majority of students stated that it would generally be quite easy to change their social standing, but most were not inclined to do so. Also, only 13.3% of the subjects felt that their academic standing affected their social status within the school. In addition, all of the students felt that retention in the elementary grades had, at the worst, no effect upon their current social standing.

Perceptions of Parents

Parental perceptions of how their children, all of whom were retained in grades K-4, viewed academic and social aspects of the school were gathered by means of a 25-question survey instrument mailed to their homes. Parents were asked not to discuss the questions with their children until after completing the survey. The parental questions corresponded to the student version and used a five-point Likert scale, with the lowest numbers corresponding to negative or no effect views and the highest numbers corresponding to positive or high effect responses. Table 17 presents academic and general perceptions.

The data in Table 17 shows that the parents viewed their children as being generally satisfied with school and with their school work. The results also show that the parents view the academic standing of their children as being influenced most by teachers and personal behaviors, and, to a lesser degree, by school rules and procedures. Parents also perceive their children as viewing retention to have had a positive effect upon their current academic standing. In addition, parents view their children's participation in school groups and

Table 17

Parent Perceptions of Student Academic and General School Views, n = 15

School Perceptions	Frequency of Responses					<u>M</u>	<u>SD</u>
	1	2	3	4	5		
Q1 Feelings About School	0	0	10	1	4	3.60	0.91
Q2 Feeling About School Work	0	2	9	2	2	3.27	0.88
Q3 Effect of Teachers on Grades	0	2	5	5	3	3.60	0.99
Q4 Effect of Other Students on Grades	3	3	6	3	0	2.60	1.06
Q5 Effect of School Rules on Grades	0	4	7	3	1	3.07	0.88
Q6 Effect of Outside Factors on Grades	3	4	4	4	0	2.60	1.12
Q7 Effect of Personal Behaviors on Grades	0	1	5	5	4	3.80	0.94
Q8 Academic Effects of Retention	0	1	2	7	5	4.07	0.88
Q9 Personal School Involvement	3	1	5	2	4	3.20	1.47
Q10 Parental School Involvement	6	5	3	1	0	1.93	0.96
Q22 Plans to Complete High School	0	0	0	1	14	4.93	0.26
Q23 Desire to Graduate	0	0	0	0	15	5.00	0.00
Q24 Chances of Graduating	0	0	1	0	14	4.87	0.52
Q25 Retention Viewed as a Desirable Practice	1	1	1	3	9	4.20	1.27

activities as covering the range of options, while viewing their own parental involvement as minimal.

The parents strongly felt that their children planned and desired to graduate from high school. All the parents but one felt that their children would definitely fulfill the graduation requirements of the school. The parents also responded very positively that they felt retention of students in the elementary grades should be continued by the school as a beneficial practice. Only two parents (13.4%) stated that retention was a negative practice.

The results of the questions involving parental perceptions of student social viewpoints are presented in Table 18. Shown are the parents' perceptions of student attitudes toward their social standing in the school. All of the parents responded that their children could make friends without a great deal of effort, but they viewed inclusion in popular school groups as a middle range response. Parental views of student attitudes toward social standing reflected the opinion that social standing was affected most by other students in the school, personal behaviors, and outside factors. The effects of school rules and procedures and of teachers were viewed as of little consequence.

Parents strongly felt that their children would have a hard time changing their social standing in the school and viewed their children as having a lukewarm attitude toward making a personal change in social status. In addition, parents responded that they felt their children viewed academic standing as having little impact on social standing.

Table 18

Parent Perceptions of Student Social Views, n = 15

Social Perceptions	Frequency of Responses					<u>M</u>	<u>SD</u>
	1	2	3	4	5		
Q11 Ability to Make Friends	0	0	6	4	5	3.93	0.88
Q12 Inclusion in Popular School Groups	1	1	10	1	2	3.13	0.99
Q13 Effect of Teachers on Social Standing	6	3	4	2	0	2.13	1.13
Q14 Effect of Other Students on Social Standing	0	1	8	4	2	3.47	0.83
Q15 Effect of School Rules on Social Standing	0	5	7	2	1	2.93	0.88
Q16 Effect of Outside Factors on Social Standing	1	0	6	7	1	3.47	0.92
Q17 Effect of Personal Behavior on Social Standing	0	2	5	6	2	3.53	0.92
Q18 Ability to Change Social Standing	2	3	9	0	1	2.67	0.98
Q19 Desire to Change Social Standing	2	5	4	4	0	2.67	1.05
Q20 Academic Relationship to Social Standing	1	4	8	1	1	2.80	0.94
Q21 Social Effects of Retention	1	2	8	2	2	3.13	1.06

Also, children's views of the benefits of retention applying to current social status were seen as neutral by the parents.

Comparison of Parent Perceptions and Actual Student Viewpoints

Student responses to the survey of pupils retained in grades K-4 were compared with the parental responses regarding their perceptions of how the students felt about academic and social standing in the school. All but one of the questions on the parental survey asked for them to respond about how they thought their children would answer in order to ascertain the degree of understanding the parents had about their children. Only the last question on the survey, Q25, asked for the parents' own feelings about the practice of retaining a student in a grade. The results of the comparison of student and parent responses pertaining to academic and general school questions are shown in Table 19.

Student views toward academic standing do not vary much from parental perceptions of these views. However, the parents felt that their children would view the role of school rules and procedures on academic standing (Q5) in a more neutral way than was actually the case. Also, students gave more influence on academics to factors outside of school (Q6) than the parents believed.

Both parents and students responded that retention was beneficial to current academic standing (Q8), but the students believed the effects to be more positive than their parents perceived. Students also responded that their parents were more involved in school activities (Q10) than the parents thought they would answer. On the

Table 19

Comparison of Parent and Student Academic and General School Views,n = 30

School Perceptions	Frequency of Responses					<u>M</u>	<u>SD</u>
	1	2	3	4	5		
Q1 Feelings About School							
Students	0	0	6	7	2	3.73	0.70
Parents	0	0	10	1	4	3.60	0.91
Q2 Feelings About School Work							
Students	0	3	4	8	0	3.33	0.82
Parents	0	2	9	2	2	3.27	0.88
Q3 Effect of Teachers on Grades							
Students	0	1	5	5	4	3.80	0.94
Parents	0	2	5	5	3	3.60	0.99
Q4 Effect of Other Students on Grades							
Students	3	4	5	2	1	2.60	1.18
Parents	3	3	6	3	0	2.60	1.06
Q5 Effect of School Rules on Grades							
Students	3	4	3	3	2	2.80	1.37
Parents	0	4	7	3	1	3.07	0.88

(table continues)

School Perceptions	Frequency of Responses					<u>M</u>	<u>SD</u>
	1	2	3	4	5		
Q6 Effect of Outside Factors on Grades							
Students	2	4	3	3	3	3.07	1.39
Parents	3	4	4	4	0	2.60	1.12
Q7 Effect of Personal Behaviors on Grades							
Students	1	2	3	3	6	3.73	1.34
Parents	0	1	5	5	4	3.80	0.94
Q8 Academic Effects of Retention							
Students	0	0	2	4	9	4.47	0.74
Parents	0	1	2	7	5	4.07	0.88
Q9 Personal School Involvement							
Students	2	3	1	2	7	3.60	1.60
Parents	3	1	5	2	4	3.20	1.47
Q10 Parental School Involvement							
Students	3	6	4	1	1	2.40	1.12
Parents	6	5	3	1	0	1.93	0.96
Q22 Plans to Complete High School							
Students	0	0	0	0	15	5.00	0.00
Parents	0	0	0	1	14	4.93	0.26

(table continues)

School Perceptions	Frequency of Responses					<u>M</u>	<u>SD</u>
	1	2	3	4	5		
Q23 Desire to Graduate							
Students	0	0	0	0	15	5.00	0.00
Parents	0	0	0	0	15	5.00	0.00
Q24 Chances of Graduating							
Students	0	0	0	0	15	5.00	0.00
Parents	0	0	1	0	14	4.87	0.52
Q25 Retention Viewed as a Desirable Practice							
Students	0	0	4	1	10	4.40	0.91
Parents	1	1	1	3	9	4.20	1.27

subject of continuing the practice of retention in grades K-8, both parents and students responded that the practice should be continued.

The results of the comparisons of student and parent responses pertaining to social standing in the school are summarized in Table 20. Students and parents disagreed about feelings concerning social standing in the school on over 50% of the questions. Parents viewed the student attitudes toward making friends (Q11) and being included in popular school groups (Q12) as being more neutral than was actually the case. The reverse was true for the effect of school rules and procedures on social standing (Q15). Here parents thought that the

Table 20

Comparison of Parent and Student Social Views, n = 30

Social Perceptions	Frequency of Responses					<u>M</u>	<u>SD</u>
	1	2	3	4	5		
Q11 Ability to Make Friends							
Students	0	1	0	5	9	4.47	0.83
Parents	0	0	6	4	5	3.93	0.88
Q12 Inclusion in Popular School Groups							
Students	0	2	6	4	3	3.53	0.99
Parents	1	1	10	1	2	3.13	0.99
Q13 Effect of Teachers on Social Standing							
Students	7	3	3	1	1	2.07	1.28
Parents	6	3	4	2	0	2.13	1.13
Q14 Effect of Other Students on Social Standing							
Students	2	0	2	9	2	3.60	1.18
Parents	0	1	8	4	2	3.47	0.83
Q15 Effect of School Rules on Social Standing							
Students	6	3	5	0	1	2.13	1.19
Parents	0	5	7	2	1	2.93	0.88

(table continues)

Social Perceptions	Frequency of Responses					<u>M</u>	<u>SD</u>
	1	2	3	4	5		
Q16 Effect of Outside Factors on Social Standing							
Students	2	2	4	2	5	3.40	1.45
Parents	1	0	6	7	1	3.47	0.92
Q17 Effect of Personal Behavior on Social Standing							
Students	2	0	4	1	8	3.87	1.46
Parents	0	2	5	6	2	3.53	0.92
Q18 Ability to Change Social Standing							
Students	0	3	4	6	2	3.47	0.99
Parents	2	3	9	0	1	2.67	0.98
Q19 Desire to Change Social Standing							
Students	7	4	3	0	1	1.93	1.16
Parents	2	5	4	4	0	2.67	1.05
Q20 Academic Relationship to Social Standing							
Students	2	5	6	2	0	2.53	0.92
Parents	1	4	8	1	1	2.80	0.94

(table continues)

Social Perceptions	Frequency of Responses					<u>M</u>	<u>SD</u>
	1	2	3	4	5		
Q21 Social Effects of Retention							
Students	0	0	3	3	9	4.40	0.83
Parents	1	2	8	2	2	3.13	1.06

students would claim more of an effect than the students actually claimed.

Attitudes toward the ease of changing social standing (Q18) were quite disparate, with students feeling the change to be a much easier process than their parents believed. Parents also felt that the students would be more neutral about wanting to change social status, but student responses indicated a negative attitude toward the change.

Finally, the greatest difference in responses concerned attitudes about the benefits of retention on social status. Parents again predicted more neutral responses from the students, but the student responses were strongly in favor of the positive social aspects of retention.

In addition to the responses given in Tables 19 and 20, students and parents were asked to specify why they responded as they did to the question, "Do you think retaining a student in a grade is a desirable

school practice?" (Q25). The responses are listed below in pairs matching each student's answer with the parental response.

Student and Parent Retention Comments to Q25:

"Do you think retaining a student in a grade is a desirable school practice?"

Student 1: "I think that it is a good practice to keep a student back if they are not doing well because it will help them later on in their lives. If they can't make it that year, I don't think they ever will."

Parent 1: "It gives them an extra year to mature and to have a better understanding of problems and class work. Being a year older, younger class members looked up to him in sports and play."

Student 2: No comments.

Parent 2: "I feel if it will benefit the student it would be well worth it. But if the student would be retained because of a social status (friends) he or she belonged to, it wouldn't be fair. I know some teachers tend to favor students with high academics, good athletic skills, etc., and other students tend to be disregarded. I hope the teacher would base it on individual requirements."

Student 3: "Yes. If they do poorly and fail a lot of classes, it is only fair to the other students in the class."

Parent 3: "Retention was beneficial because he was not as socially and intellectually mature as the other students in his grade. He was very young for his class anyway and we should have waited

another year to start him in kindergarten. Retention is simply an avenue of adjustment to match a student with the correct class."

Student 4: "Yes, because it helps that kid out a lot more. The kid already knows what he-she is doing and other kids ask them for help."

Parent 4: "If the child is held back, it gives him/her time to catch up. Otherwise, they're going to have problems all the way and they will feel worse than if they are held back. For example, if they are let to go on, the grades may be Ds and Fs. If they were held back, the grades could be Cs and maybe even Bs. They are going to feel better that way. On the personal side, they may feel they could have graduated a year earlier without retention."

Student 5: "Sometimes it's not holding the kid back that will make them improve."

Parent 5: "In her case, she was very immature and needed that year to mature and be able to cope with school and peer stress."

Student 6: "It helps them because they get to start over. Maybe not everything is new, but they have another chance to change what they want."

Parent 6: "We held her back in the 2nd grade because of her immaturity. She was struggling to finish required school work and having some difficulty with social relations. In her case, retaining her was very beneficial. I feel in most cases retaining a student would have beneficial results."

Student 7: "Yes, it helps a little bit to give them time to get into their school work."

Parent 7: "I feel he gets disgusted easily and sometimes talks of being held back and would have liked to have graduated this year. I believe and in every way think he's going to try to go back and graduate. Holding him back in 1st grade I do believe was a mistake, so now this year when they wanted to hold back my other son, I didn't approve. I don't think boys should be held back for growing-up time because it will come as they get older. I believe they should try to get them some extra help. I feel he has tried harder the last 2 years than he ever has, and hope he does continue this for the next year.

He has been in factories and he sometimes talks about conservation jobs because he is an outdoor kid. He loves the woods and out-of-doors. He has talked about DNR (Department of Natural Resources) schooling, but I don't believe he will be able to handle it--maybe he can. I wish he could get a conservation job for next summer to see if it is really what he wants, but he tried Osborne and they say our family income is too high. I really don't think he has any definite plans."

Student 8: "Yes, because some of the kids need more help, but feel excluded from the "normal" kids."

Parent 8: "I have a mixed opinion about this. I feel if there was an LD program and a behavioral program, then she would have benefited a lot more. The kids at school classify all kids as misfits that go to the resource room."

Student 9: "Yes, because I feel that it will help their grades in the long run."

Parent 9: "I feel retention helped him. I think he would have had more problems if not held back. I feel kids that are having problems will only make it worse if not held back, and they will have trouble understanding all the way through."

Student 10: "It kinds of depends on the student. I think it is beneficial a majority of the time. It helped me to increase maturity level before moving on."

Parent 10: "She was very small for her age and didn't seem to relate to the other girls in her class. The teachers generally thought I was crazy to hold her back, but after the 2nd year said, "Gee, you were smart to do that!" as she had become so much more outgoing. If her original class had not been bused to the other town, I might not have held her back. We're really glad we decided to hold her back."

Student 11: "It helps the student because it gives them a second chance to meet the requirements they didn't meet before."

Parent 11: "I think it gives a boy a little more chance to mature."

Student 12: "I think how the kid acts really says if they should be retained or not. If they act younger, maybe it's a good idea."

Parent 12: "She vacillates about being held back in school, but I believe as she gets older she feels more positive about it. It really depends on many factors if you keep a child back--both the kid's

attitude, parents, grandparents, teachers, other kids. As parents, we were both positive about it. One grandparent was very against it.

Since her grade went to the other town and she would stay in here, I thought this was a very positive factor. We also told her she was being held back to pull it together, not because she was stupid or anything. We're still glad we held her back."

Student 13: "Yes, because I believe if kids are having trouble in school, they should stay back, because in the long run it will turn out to be the best for them."

Parent 13: "We had both our girls held back and it has helped them a lot as far as their grades are now. She has never expressed any anger because of it, but our youngest doesn't like the fact she was held back. I do feel both girls would have had lots of problems if they would not have stayed back, as far as being able to do the work in the next grade."

Student 14: "Yes, because I get along better with the people in the grade below my original grade."

Parent 14: No comments.

Student 15: "Yes, because I live near my classmates and they can help me or I can help them."

Parent 15: No comments.

CHAPTER 5

SUMMARY, DISCUSSION, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

Summary

A national sense of urgency about youth at risk of school failure has been documented by numerous state and national studies (Boyer, 1983; Carnegie Task Force on Teaching as a Profession, 1986; Iowa Department of Education, 1988; Levin, 1986; Pallas, 1986; U.S. Department of Education, 1987). The reports have centered on dropout statistics and the at risk characteristics of these students.

The identification of predictors of future school success, or the lack of it, may prove useful in the process of early intervention for at risk problems. By focusing on those readily available factors which may help pinpoint at risk students in the high school, these data will aid counselors, teachers, and administrators in addressing curricular and procedural areas of concern. In addition, knowledge of a specific at risk factor, retention in a grade, may help in the establishment of grade promotion policies which meet the needs of the child rather than those of the school.

The purpose of this study was to investigate the use of selected at risk factors to predict student self-concept, performance on the Iowa Tests of Educational Development, and high school grade point average. In addition, academic and social viewpoints of 9th through 11th grade students who shared the at risk factor of retention in a grade were investigated, as were the views of their parents.

Data were gathered on selected at risk factors for 373 students in grades 9-11 at two rural Midwestern school districts. Instruments used for data collection were the Piers-Harris Children's Self-Concept Scale, the Iowa Tests of Educational Development--Test Q and Reading Total, grade point average records, and an at risk factor grid developed by the researcher. Also, 15 students who were identified as having been retained in grades K-4 participated in individual interviews to determine their academic and social views several years after retention. The parents of these students were also surveyed to ascertain how closely their perceptions of their children's views matched the actual student opinions.

Four major research questions were investigated:

1. What quantitative factors may be used as predictors of future school success?
2. What are the perceptions of students who were retained in a grade?
3. What are the perceptions of parents whose children were retained in a grade?
4. How do the viewpoints of students in grades 9-11 who were retained in grades K-8 compare to the viewpoints of their parents?

A review of the literature focused on the national scope of the at risk problem, the characteristics of at risk students, and factors which best predict at risk problems. The National Education Association (1987) and the Carnegie Council on Policy Studies in Higher Education (1979) have stated that problems of at risk students are

critical issues for educators and should be addressed. The consequences of ignoring these problems will be lower tax revenues, increased social service requirements, increased crime, and reduced political participation (Rumberger, 1987).

Levin (1987) noted that schools often respond to low achievement and retention of at risk children by relegating them to more impoverished educational experiences. Students with several at risk factors tend to have more educational problems, including lower grades and higher absenteeism, than students with none (U.S. Department of Education, 1990).

Slavin (1989) stated that effective at risk programs must have comprehensive programming, intensive preventative and remedial instruction, and frequent assessment and adaptation of instruction. Other effective techniques include emphasizing direct instruction, linking school and life experiences, and mixing ability and age groupings (Cuban, 1989).

Looking at predictors of potential at risk problems, Bowser (1990) noted that the factors with the most discriminating power included race, grade point average, reading achievement, attendance, and perception of the school climate. In another study, Seeley (1990) identified mathematics performance and age as additional indicators of future school problems.

Selected At Risk Factors as Predictors

Individual at risk factors were presented using descriptive statistics, including the mean and standard deviation. These at risk



factors were investigated to determine which could serve as predictors of self-concept, educational development, and grade point average. The at risk factor data were analyzed using step-wise multiple regression to identify possible predictors.

As expected, low self-concept for students who may be at risk was best predicted by a combination of factors. These at risk factors were: (a) low grade point average, (b) lack of participation in extracurricular activities, (c) low IQ score, and (d) the number of failed courses.

Another at risk indicator was low Test Q (Quantitative) performance. As expected, low Test Q performance was best predicted by a combination of the following factors: (a) a lower Reading Total on the ITED, (b) low grade point average, (c) low IQ score, and (d) the number of failed courses.

A combination of at risk factors best predicted lower performance on the Reading Total of the ITED for students who may be at risk. These factors were: (a) lower Test Q performance on the ITED, (b) low grade point average, (c) lack of participation in extracurricular activities, (d) status as the youngest or only child in the family, and (e) low IQ score.

Lower high school grade point average for students who may be at risk was predicted by a combination of at risk factors. These factors were: (a) Lower Reading Total performance on the ITED, (b) lower Test Q performance on the ITED, (c) the number of failed courses, (d) lack of

attendance, (e) low IQ score, (f) the number of siblings who were dropouts, and (g) lower self-concept score.

Views of Retention as an At Risk Factor

The retention factor was not found to be a negative influence for the students surveyed. Most of the students were satisfied with school and their academic work. They were also quite satisfied with social aspects of the school. In addition, the students felt that graduation was a desired goal and that their retention had benefited them, both academically and socially.

The parental portion of the study found that guardians correctly perceived most of their child's academic views, but differences were noted about social views. The parents tended to perceive social mobility and interaction to be lower for the students than the students perceived such mobility and interaction for themselves. Plans for graduation were very similar between groups, but the parents had a more neutral view of the overall benefits of retention than did the students.

Discussion

This study has addressed a number of possible at risk factors which may be used as predictors of school success, as measured by self-concept score, standardized test performance, and grade point average. The discussion section has been added to assist the reader in synthesizing results from the at risk factor study and retention interviews, incorporating appropriate literature in Chapter 2. Suggestions for the use of these results are offered, along with

curricular and policy implications where they are supported by the literature and the study data.

Further Comments on At Risk Predictors

Predictors of self-concept. Analysis of the data using a step-wise multiple regression indicated that a combination of five at risk factors had predictive value in relation to student self-concept, as measured by the Piers-Harris Children's Self-Concept Scale: (a) low grade point average, (b) lack of participation in extracurricular activities, (c) low IQ score, (d) the number of failed courses, and (e) the recent death of a parent. The last predictor, recent death of a parent, appeared to be an anomaly in this study. Only three students experienced the death of a parent during the period under investigation and these students all had fairly high self-concept scores. On face value, the statistical analysis implies that higher self-concept scores can be predicted if a student loses a parent. Recognizing that it may have been a chance happening matching parental deaths and higher self-concept scores and the difference between this finding and research presented in the literature (Frymier, 1989b), this statistical outcome was considered to be an anomaly by the researcher.

Predictors of standardized test performance. The analysis of predictors of standardized test performance used the Test Q and Reading Total scores from the Iowa Tests of Educational Development as dependent variables. These subtest scores were selected for investigation due to their previous identification as factors affecting

student at risk evaluation (Bowser, 1990; Seeley, 1990; Schellenberg, 1985).

Analysis of the data using a step-wise multiple regression indicated that a combination of four at risk factors had predictive value in relation to lower performance on Test Q of the ITED. These factors were: (a) low performance on the Reading Total of the ITED, (b) low grade point average, (c) low IQ score, and (d) the number of failed courses.

A combination of five at risk factors emerged as predictors of lower Reading Total performance on the ITED. Identified in the combination of factors were: (a) lower Test Q score on the ITED, (b) low grade point average, (c) lack of participation in extracurricular activities, (d) low IQ score, and (e) being the youngest or only child in the family. Since the factors of youngest child and only child were grouped together in the original Phi Delta Kappa ranking (see Appendix C), it is not possible to differentiate between the effects of these two individual factors.

By tracking student performance in the classroom and on the ITED, and noting participation patterns in high school activities, school personnel may be able to anticipate students' at risk needs. Building a database of information integrating family background and school performance should prove beneficial for student assistance personnel.

Predictors of grade point average. A combination of seven at risk factors emerged from the study as predictors of lower high school grade point average. Four of the factors were also predictors of lower

student self-concept and standardized test performance: (a) lower Reading Total on the ITED, (b) the number of failed courses, (c) lower Test Q scores on the ITED, and (d) low IQ score. Appearing in the combination as predictors for the first time in the study were: (a) lack of attendance, (b) the number of siblings who previously dropped out of school, and (c) low self-concept score.

Schellenberg's 1985 study of the Eugene, Oregon Public Schools noted attendance as the key predictor of graduation and overall school performance. The study also found that dropouts and at risk students had a lower overall GPA and lower standardized mathematics and reading scores than did the graduate group. These findings parallel the data accumulated in this investigation.

Further Comments on Retention as an At Risk Factor

Perceptions of retained students. Having initially identified 35 students who had been retained in grades K-4 while attending school in either of the two districts studied, the investigation involved 15 students and their parents who agreed to participate in a study of academic and social views. The students met with the researcher individually and answered general questions about their home environment and 25 questions about their views of school.

The majority of the students were very satisfied with school and felt that their work was largely influenced by their teachers and personal behaviors. Also, none of the students had any negative comments about the effects of retention upon their current grades. The students also viewed their social status as positive and did not feel

that retention had harmed their social standing. As a group, graduation was viewed as an important goal and they all felt they would succeed. In addition, they viewed retention favorably and commented that it should be continued in the school.

Contrary to findings of the negative influences of retention (Holmes, 1989; Shepard, 1989), these students seemed very positive about their retention experiences. Since only 15 out of a possible 35 retainees chose to participate in the interviews, it is possible that these students constituted that portion of the entire group which benefited from retention. It is possible that students and parents who had poor experiences and negative opinions may have been those not participating. Also, it is possible that the retention of elementary pupils is handled in a more positive manner by the schools being studied, due possibly to smaller district size and rural location in the Midwest.

Perceptions of parents. Parents of the 15 retained students responded to a questionnaire containing roughly the same questions as the student interviews. The difference between the two sets of questions was that the parental version asked how they thought their child felt about each question. The intent was to determine how accurately parents were able to assess the feelings of their child about school.

Parents responded that they generally viewed their child as satisfied with school and academic work. They felt that the influence of teachers, school rules and procedures, and personal student behavior

contributed to the academic status of their children. The parents also responded that retention seemed to have had a positive effect on current academic standing.

Social status was viewed by the parents in a more neutral manner. The parents viewed their child as having some difficulty changing social groups and making new friends. In addition, parents felt their child saw little interaction between academic and social status, and they saw their child as having a neutral reaction to the social benefits of retention.

Parents responded that their child wanted to graduate and were on schedule to do so. They also viewed retention as a positive practice which should be continued in the elementary grades.

As with the students, the parents were generally positive about academics, social status, and retention. This appears to conflict with the findings of May and Welch (1984), but it may be because the parents who had good retention experiences agreed to participate.

Comparison of parent perceptions and actual student viewpoints.

Parents and students generally viewed the school as a positive place. They also concurred that academics were largely influenced by teachers and personal behaviors and that retention had been beneficial for future performance.

There was more disagreement about views on social status, but the differences were between neutral and positive effects. None of the respondents were negative about social opinions, but parents tended to be more cautious about social adjustment than was their child.

Both groups generally felt retention should be continued because of its potential for helping students succeed in school. Two parents felt that retention had not been beneficial and responded that more classroom help would be better for students than retention.

Retention studies have recently shown that the practice is generally negative for most students (Shepard & Smith, 1985; Holmes & Matthews, 1984). The positive effects noted in this study may indicate basic schooling differences between various parts of the country, especially urban versus rural. Whatever the cause, schools need to examine their own practices and find those methods which best suit their own unique local problems. For some schools, retention may be totally inappropriate, while for others it may express a genuine concern for the individual student.

Conclusions

A review of the data collected in this study suggests conclusions based upon the original research questions.

Research Question 1:

What quantitative factors may be used as predictors of future school success?

a. To what extent can self-concept scores be predicted using selected at risk factors as independent variables?

Approximately 14% of the variance in self-concept score may be predicted by using a combination of four at risk factors. These factors were: (a) low grade point average, (b) lack of participation in

extracurricular activities, (c) low IQ score, and (d) the number of failed courses.

b. To what extent can performance on the Iowa Tests of Educational Development be predicted using selected at risk factors as independent variables?

Approximately 67% of the variance in performance on Test Q of the ITED may be predicted by using a combination of four at risk factors. These factors were: (a) low performance on the Reading Total of the ITED, (b) low grade point average, (c) low IQ score, and (d) the number of failed courses.

Approximately 71% of the variance in performance on the Reading Total of the ITED may be predicted by using a combination of five at risk factors. These factors were: (a) lower Test Q score on the ITED, (b) low grade point average, (c) lack of participation in extracurricular activities, (d) low IQ score, and (e) being the youngest or only child in the family.

c. To what extent can high school grade point average be predicted using selected at risk factors as independent variables?

Approximately 68% of the variance in grade point average may be predicted by using a combination of seven at risk factors. These factors were: (a) lower Reading Total on the ITED, (b) the number of failed courses, (c) lower Test Q scores on the ITED, (d) low IQ score, (e) lack of attendance, (f) the number of siblings who previously dropped out of school, and (g) low self-concept score.

Research Question 2:

What are the perceptions of students who were retained in a grade?

Even though the original research question centered on retention in grades K-8, students were actually only retained in grades K-4.

a. What attitudes toward school are held by students currently in grades 9-11 who were retained in grades K-8?

The academic and general school perceptions of high school students who were retained in elementary grades K-4 indicated a general satisfaction with school and school work. All of these high school students indicated not only the desire to graduate from high school, but also the belief that they would accomplish this goal.

b. What social attitudes are held by students in grades 9-11 who were retained in grades K-8?

The social perception of high school students who were retained in elementary grades K-4 indicated a satisfaction with current social groups and interactions. They also viewed their academic status as having little influence on their social standing in the school.

c. What viewpoints are held by students in grades 9-11 who were retained in grades K-8 toward the desirability of retention and the influence of retention on academic and social growth?

The high school students viewed retention as having had no negative effect upon their current academic status. Retention was also viewed as not having a negative effect upon their current social situation. None of the high school students who were retained in

elementary grades K-4 were in favor of dropping retention as an elementary school practice.

Research Question 3:

What are the perceptions of parents whose children were retained in a grade?

Even though the original research question centered on retention in grades K-8, students were actually only retained in grades K-4.

a. What are the viewpoints of parents of students in grades 9-11 who were retained in grades K-8 concerning the students' attitudes toward school?

Parental perceptions of student academic and general school views indicated that their child, who had been retained in elementary school, was generally satisfied with school and school work. Parents of retained children also viewed their child as having a desire to graduate from high school and most felt their child would succeed in this goal.

b. What are the viewpoints of parents of students in grades 9-11 who were retained in grades K-8 concerning the students' social attitudes?

Parents of retained students viewed the social standing of their child as generally positive, but perceived social change as being difficult for their child. Parents also viewed their child as seeing little connection between current academic status and social standing.

c. What are the viewpoints of parents of students in grades 9-11 who were retained in grades K-8 concerning the desirability of retention and its influences on academic and social growth?

Parents perceived their child as having positive attitudes toward retention as an influence upon current academic standing. Parental perceptions of student attitudes toward the influence of retention on current social status were seen as generally neutral. The majority of the parents of retained children indicated a desire to continue retention as an elementary school practice.

Research Question 4:

How do the viewpoints of students in grades 9-11 who were retained in grades K-8 compare to the viewpoints of their parents?

Even though the original research question centered on retention in grades K-8, students were actually only retained in grades K-4.

Comparisons of views from high school students who were retained in the grades K-4 and their parents indicated general agreement about academic and general school perceptions. Students had a more positive view of the effects of retention on their current academic status than the parents perceived. High school students who were retained in the elementary grades slightly disagreed with their parents on social status in the school. Students tended to be more positive about their social status than their parents perceived. High school students who were retained in the elementary grades and their parents agreed that retention should be continued, when necessary.

Implications

Possible implications of this study are:

1. Students who attend schools which are located in rural, generally homogeneous areas and have student school populations of less than 1000 may be more likely to view retention as having a positive influence upon later schooling. This contradicts previous research (Shepard & Smith, 1989a; Hahn, 1987; Roderick, 1991) on the impact of retention. Retention may emerge as a favorable practice in settings having home and community support, small class size, and teachers who take time to care about individual students. These factors may make the difference as to whether retention makes a positive contribution to school experiences.

2. Predictors of school success as identified by this study closely match predictors found in previous studies. There is sufficient data in existing student records to enable secondary school officials to identify these students earlier in order to provide appropriate interventions. School administrators, counselors, and teachers should be aware of these commonly occurring predictors so that strategies involving early intervention for at risk youth may be established. The predictors may also be used to identify developing at risk patterns in students and to facilitate academic or social changes.

3. Schools need to establish computerized recordkeeping systems which facilitate the gathering and use of data on students. Standard paper-based systems are cumbersome to use and often are scattered throughout a district, hampering efforts to maintain a clear picture of

student needs. Current technologies available to schools should make a conversion to a more efficient and effective system relatively easy.

Recommendations for Further Study

The results of this study suggest several areas for further investigation:

1. Further investigation of predictors of school success should be undertaken at the middle school/junior high level (grades 5-8) to complement the high school studies.

2. Similar studies, replicated in other geographical areas of the United States, would provide information regarding how predictors of school success compare to this Midwestern state.

3. A follow-up investigation of those students who chose initially not to participate in the retention study could provide insight into the total retention issue.

4. Development of at risk identification strategies could be undertaken to match current research into predictors of school success.

5. Longitudinal studies following potentially at risk students throughout their school years could provide information regarding effective at risk interventions.

6. A study on the influence of self-concept upon the success of elementary retention could provide insights into the development of effective school at risk policies.

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APPENDIX A

At Risk Factor Grid

	Student Numbers												School No.				
At Risk Factors																	
Self-Concept																	
Expelled																	
Sibling Drops																	
Failed Courses																	
Suspended																	
Days Absent																	
Retained																	
Test Q-ITED																	
Reading - ITED																	
No. of Schools																	
GPA																	
IQ																	
Divorced																	
Parent Died																	
Special Needs																	
Other Language																	
Only Parent																	
Age																	
Overage																	
Mom Not Grad.																	
Dropped /Team																	
Illness/Injury																	
No Extracurr.																	
Sibling Died																	
Dad Not Grad.																	
Changed School																	
No. of Siblings																	
Youngest/Only																	

APPENDIX B

Selected At Risk Factors Used In This Study

- F1. What is the student's score on a self-concept instrument?
- F2. Has the student been expelled from school in the past year?
- F3. Have any of the student's siblings dropped out of school?
- F4. How many courses has the student failed in the past year?
- F5. How many times has the student been suspended in the past year?
- F6. How many days has the student been absent in the past year?
- F7. Has the student been retained in-grade at some time within the district?
- F8. What are the student's scores on a standardized achievement test such as the Iowa Tests Of Educational Development?
- F9. How many schools has the student attended in the past 5 years?
- F10. What is the student's cumulative grade point average?
- F11. What is the student's reported IQ?
- F12. Have the student's parents been divorced or separated in the past year?
- F13. Have either of the student's parents died during the past year?
- F14. Has the student been identified as needing special academic or social assistance?
- F15. Does the student speak a primary language other than English at home?
- F16. Is the mother the only parent in the home?
- F17. Is the student older than the rest of the class?
- F18. Did the student's mother graduate from high school?

- F19. Was the student dropped from an extracurricular activity in the past year?
- F20. Has the student experienced a serious illness or accident?
- F21. Does the student participate in any extracurricular activities?
- F22. Has a sibling of the student died in the past year?
- F23. Did the student's father graduate from high school?
- F24. Has the student changed schools during the past year?
- F25. How many brothers and sisters does the student have?
- F26. Is the student the youngest or only child in the family?

APPENDIX C

Researchers' Estimates of What Makes a Child At Risk
(Kansas City Training Session, N = 97)

(Items ranked from highest priority to lowest priority)

<u>Index</u>	<u>Item</u>
1	Attempted suicide during the past year
2	Used drugs or engaged in substance abuse
3	Has been a drug "pusher" during the past year
4	* Student's sense of self-esteem is negative
5	Was involved in a pregnancy during the past year
6	* Was expelled from school during the past year
7	Consumes alcohol regularly
8	Was arrested for illegal activity
9	Parents have negative attitudes about education
10	* Has several brothers or sisters who dropped out
11	Was sexually or physically abused last year
12	* Failed two courses last school year
13	* Was suspended from school twice last year
14	* Student was absent more than 20 days last year
15	Parent drinks excessively and is an alcoholic
16	* Was retained in a grade (i.e., "held back")
17	One parent attempted suicide last year
18	* Scored below the 20th percentile on a standardized test
19	Other family members used drugs during the past year
20	* Attended three or more schools during the past five years
21	* Average grades were below "C" last school year

- 22 Was arrested for driving while intoxicated
 - 23 * Has an IQ score below 90
 - 24 * Parents divorced or separated last year
 - 25 Father is unskilled laborer who is unemployed
 - 26 * Father or mother died during the past year
 - 27 * Diagnosed as being in Special Education
 - 28 * English is not language used most often in the home
 - 29 Mother is unskilled laborer who is unemployed
 - 30 Lives in an inner city, urban area
 - 31 * The mother is the only parent living in the home
 - 32 * Is a year older than other students in same grade
 - 33 * Mother did not graduate from high school
 - 34 Father lost his job during the past year
 - 35 * Was dropped from athletic team during the past year
 - 36 * Experienced a serious illness or accident
 - 37 * Does not participate in extracurricular activities
 - 38 Parent had major change in health status
 - 39 Had a close friend who died during the past year
 - 40 * Had a brother or sister die during the past year
 - 41 * Father did not graduate from high school
 - 42 * Changed schools during the year
 - 43 Changed place of residence during the past year
 - 44 * Has three or more brothers and sisters
 - 45 * Is the youngest (or only) child in the family
- (* At Risk factor used or modified for use in this study)
(Frymier, 1989b)

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APPENDIX E

Student Viewpoint Survey

Student No. _____

Part A: Personal and Family Data

1. At what grade level were you retained? K 1 2 3 4 5 6

2. With whom do you presently live?

___(1) Both natural parents ___(5) One natural parent

___(2) Adoptive parents ___(6) Relatives

___(3) Friends ___(7) Other _____

___(4) One natural parent and another adult

3. How many days per week do you usually stay overnight at the home specified in #5?

___(1) 0-1

___(2) 2-3

___(3) 4-6

___(4) Everyday

4. How many children in your family currently live at home?

1 2 3 4 5 6 7 8 9 Other ___

5. How many children totally are in your family?

1 2 3 4 5 6 7 8 9 Other ___

Part B: Attitudinal Data

1. How do you feel about school, in general?

(Dislike) 1 2 3 4 5 (Like)

2. How do you feel about your school work?

(Very Unhappy) 1 2 3 4 5 (Very Satisfied)

To what degree do you feel your academic standing is affected by:

	None			Highly	
3. your teachers?	1	2	3	4	5
4. the other students?	1	2	3	4	5
5. school procedures and requirements?	1	2	3	4	5
6. factors outside of the school?	1	2	3	4	5
7. personal behaviors?	1	2	3	4	5

8. How beneficial do you feel being retained was to your

academic standing?

(Harmful) 1 2 3 4 5 (Beneficial)

9. How involved are you with school groups and activities?

(Not Involved) 1 2 3 4 5 (Highly Involved)

10. How involved are your parents with school groups and

activities?

(Not Involved) 1 2 3 4 5 (Highly Involved)

11. How easily do you feel that you make friends?

(Not Easily) 1 2 3 4 5 (Very Easily)

12. To what degree do you feel included in the popular school

groups?

(Not Included) 1 2 3 4 5 (Very Included)

To what degree do you feel your social status is affected by:

	None					Highly
13. your teachers?	1	2	3	4	5	
14. the other students?	1	2	3	4	5	
15. school procedures and requirements?	1	2	3	4	5	
16. factors outside of the school?	1	2	3	4	5	
17. personal behaviors?	1	2	3	4	5	
18. How easily do you feel your social status can be changed?						
(Not Easily)	1	2	3	4	5	(Very Easily)
19. To what degree would you like to improve your social status in the school?						
(Not At All)	1	2	3	4	5	(Very Much)
20. To what degree do you feel your academic success is related to your social status in the school?						
(Not At All)	1	2	3	4	5	(Highly Related)
21. How beneficial do you feel being retained was to your social status?						
(Harmful)	1	2	3	4	5	(Beneficial)
22. Do you plan to complete high school?						
(Definitely No)	1	2	3	4	5	(Definitely Yes)
23. Do you want to graduate?						
(Definitely No)	1	2	3	4	5	(Definitely Yes)
24. Will you graduate from high school?						
(Definitely No)	1	2	3	4	5	(Definitely Yes)

25. a. Do you think retaining a student in a grade is a desirable school practice?

(Definitely No) 1 2 3 4 5 (Definitely Yes)

b. Why do you feel this way?

APPENDIX F

Parental Viewpoint Survey

Parent No. _____

1. How does your child feel about school, in general?

(Dislike) 1 2 3 4 5 (Like)

2. How does your child feel about his/her school work?

(Very Unhappy) 1 2 3 4 5 (Very Satisfied)

To what degree does your child feel his/her academic standing is affected by:

	None					Highly
3. the teachers?	1	2	3	4	5	
4. the other students?	1	2	3	4	5	
5. school procedures and requirements?	1	2	3	4	5	
6. factors outside of the school?	1	2	3	4	5	
7. personal behaviors?	1	2	3	4	5	

8. How beneficial does your child feel being retained was to his/her academic standing?

(Harmful) 1 2 3 4 5 (Beneficial)

9. How involved is your child with school groups and activities?

(Not Involved) 1 2 3 4 5 (Highly Involved)

10. How involved are you with school groups and activities?

(Not Involved) 1 2 3 4 5 (Highly Involved)

11. How easily does your child make friends?

(Not Easily) 1 2 3 4 5 (Very Easily)

12. To what degree does your child feel included in the popular school groups?

(Not Included) 1 2 3 4 5 (Very Included)

To what degree does your child feel his/her social status is affected by:

	None			Highly	
13. the teachers?	1	2	3	4	5
14. the other students?	1	2	3	4	5
15. school procedures and requirements?	1	2	3	4	5
16. factors outside of the school?	1	2	3	4	5
17. personal behaviors?	1	2	3	4	5

18. How easily does your child feel his/her social status can be changed?

(Not Easily) 1 2 3 4 5 (Very Easily)

19. To what degree would your child like to improve his/her social status in the school?

(Not At All) 1 2 3 4 5 (Very Much)

20. To what degree does your child feel his/her academic success is related to his/her social status in the school?

(Not At All) 1 2 3 4 5 (Highly Related)

21. How beneficial does your child feel being retained was to his/her social status?

(Harmful) 1 2 3 4 5 (Beneficial)

22. Does your child plan to complete high school?

(Definitely No) 1 2 3 4 5 (Definitely Yes)

23. In your opinion, do you want your child to graduate?

(Definitely No) 1 2 3 4 5 (Definitely Yes)

24. In your opinion, will your child graduate from high school?

(Definitely No) 1 2 3 4 5 (Definitely Yes)

25. a. Do you think retaining a student in a grade is a desirable school practice?

(Definitely No) 1 2 3 4 5 (Definitely Yes)

b. Why do you feel this way?

APPENDIX G

Parental Permission Letter

301 Oak St. NE
Elkader, IA 52043
(319) 245-2588
April 15, 1991

Dear Parents,

I'm writing this letter to you not as the Curriculum Coordinator for Central and Guttenberg Schools, but rather as a graduate student at the University of Northern Iowa. I'm in the process of preparing a dissertation proposal for the Doctorate of Education degree and I'm considering a study to investigate the attitudes of students who have repeated a grade. Feelings about the effects of retention, perceived influences on school academic performance, ideas about relationships with friends, and perceptions concerning how the students feel about themselves will be examined. Hopefully, this will help add to the body of knowledge about school retention practices.

The procedures for selecting students would involve making a random selection from a portion of the entire Central School student body. Since your child was held back in a grade several years ago, you were selected to receive this initial letter.

If your child was selected to be included in the actual study, would you be willing to allow me to conduct a short interview (about 15 minutes) in school with your child? All information from the interview would be kept in the strictest confidence and would not touch on highly

personal or sensitive areas. Questions would be concerned with how the child fits in the school setting and what attitudes and feelings about school are present. Your child's name would never be associated with the results of this study. Also, your child may withdraw from this study at any time without fear of any penalty.

Please visit with your child about this before making a decision. Then, please mark the attached form and return it to me in the enclosed envelope by May 1. You will receive a verification of consent following my receipt of your form. If you have any questions, feel free to contact me at 245-2588 (home) or 245-1750 (school). In addition, questions about the rights of subjects in research studies may be referred to the Graduate College, the University of Northern Iowa (319)273-2748.

Thank you very much for your time. I hope to hear from you in the near future.

Sincerely,

Kevin Anderson

I am fully aware of the nature and extent of my participation in this project as stated above and the possible risks arising from it. I hereby agree to participate in this project. I acknowledge that I have received a copy of this consent statement.

(Signature of Student) _____ (Date) _____ (Parent Signature) _____ (Date)

(Printed Name of Student) _____ (Signature of Investigator) _____ (Date)

APPENDIX H

Student Data Recording Sheet

Part A: Personal and Family Data

1. K _____ 1 _____ 2 _____ 3 _____
 4 _____ 5 _____ 6 _____

2. ____ (1) Both natural parents ____ (5) One natural parent
 ____ (2) Adoptive parents ____ (6) Relatives
 ____ (3) Friends ____ (7) Other _____
 ____ (4) One natural parent and another adult

3. _____ (1) 0-1 _____ (3) 4-6
 _____ (2) 2-3 _____ (4) Everyday

4. 1 _____ 2 _____ 3 _____ 4 _____ 5 _____
 6 _____ 7 _____ 8 _____ 9 _____ Other _____

5. 1 _____ 2 _____ 3 _____ 4 _____ 5 _____
 6 _____ 7 _____ 8 _____ 9 _____ Other _____

Part B: Attitudinal Data

1. 1 _____ 2 _____ 3 _____ 4 _____ 5 _____

2. 1 _____ 2 _____ 3 _____ 4 _____ 5 _____

3. 1 _____ 2 _____ 3 _____ 4 _____ 5 _____

4. 1 _____ 2 _____ 3 _____ 4 _____ 5 _____

5. 1 _____ 2 _____ 3 _____ 4 _____ 5 _____

6. 1 _____ 2 _____ 3 _____ 4 _____ 5 _____

7. 1 _____ 2 _____ 3 _____ 4 _____ 5 _____
8. 1 _____ 2 _____ 3 _____ 4 _____ 5 _____
9. 1 _____ 2 _____ 3 _____ 4 _____ 5 _____
10. 1 _____ 2 _____ 3 _____ 4 _____ 5 _____
11. 1 _____ 2 _____ 3 _____ 4 _____ 5 _____
12. 1 _____ 2 _____ 3 _____ 4 _____ 5 _____
13. 1 _____ 2 _____ 3 _____ 4 _____ 5 _____
14. 1 _____ 2 _____ 3 _____ 4 _____ 5 _____
15. 1 _____ 2 _____ 3 _____ 4 _____ 5 _____
16. 1 _____ 2 _____ 3 _____ 4 _____ 5 _____
17. 1 _____ 2 _____ 3 _____ 4 _____ 5 _____
18. 1 _____ 2 _____ 3 _____ 4 _____ 5 _____
19. 1 _____ 2 _____ 3 _____ 4 _____ 5 _____
20. 1 _____ 2 _____ 3 _____ 4 _____ 5 _____
21. 1 _____ 2 _____ 3 _____ 4 _____ 5 _____
22. 1 _____ 2 _____ 3 _____ 4 _____ 5 _____
23. 1 _____ 2 _____ 3 _____ 4 _____ 5 _____
24. 1 _____ 2 _____ 3 _____ 4 _____ 5 _____
25. a.
- 1 _____ 2 _____ 3 _____ 4 _____ 5 _____

b. Why do you feel this way?

APPENDIX I

Parent Data Recording Sheet

Attitudinal Data

1.	1	2	3	4	5
2.	1	2	3	4	5
3.	1	2	3	4	5
4.	1	2	3	4	5
5.	1	2	3	4	5
6.	1	2	3	4	5
7.	1	2	3	4	5
8.	1	2	3	4	5
9.	1	2	3	4	5
10.	1	2	3	4	5
11.	1	2	3	4	5
12.	1	2	3	4	5
13.	1	2	3	4	5
14.	1	2	3	4	5
15.	1	2	3	4	5
16.	1	2	3	4	5
17.	1	2	3	4	5
18.	1	2	3	4	5
19.	1	2	3	4	5
20.	1	2	3	4	5
21.	1	2	3	4	5

22. 1 _____ 2 _____ 3 _____ 4 _____ 5 _____

23. 1 _____ 2 _____ 3 _____ 4 _____ 5 _____

24. 1 _____ 2 _____ 3 _____ 4 _____ 5 _____

25. a.

1 _____ 2 _____ 3 _____ 4 _____ 5 _____

b. Why do you feel this way?

APPENDIX J

Retention Sample: Student DemographicsRetention Subjects

1. Gender:

Female 7

Male 8

2. Number of Students Retained by Grade Level:

Grades

	<u>K</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>
No. of Students	1	4	4	5	1	0	0	0	0

3. Primary Residences of Students:

With both natural parents 14

With one natural parent 1

4. Nights Per Week at the Primary Residence:

Number of Nights

	<u>7</u>	<u>6</u>	<u>5</u>	<u>4</u>	<u>3</u>	<u>2</u>	<u>1</u>
No. of Students	14	1	0	0	0	0	0

5. Number of Siblings Living at Home:

No. of Siblings

	<u>0</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>
Student Responses	0	3	5	5	1	0	1	0	0	0

6. Number of Total Siblings:

	No. of Siblings									
	<u>0</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>
Student Responses	0	0	6	5	1	0	1	0	1	1