The Relationship of Student Perceptions of School Climate and Student Retention

Frank D. Garrett
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THE RELATIONSHIP OF STUDENT PERCEPTIONS OF SCHOOL CLIMATE AND STUDENT RETENTION

by

Frank Douglas Garrett

A Dissertation
Submitted to the
Faculty of The Graduate College
in partial fulfillment of the
requirements for the
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- -

Western Michigan University
Kalamazoo, Michigan
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THE RELATIONSHIP OF STUDENT PERCEPTIONS OF SCHOOL CLIMATE AND STUDENT RETENTION

Frank Douglas Garrett, Ed.D.
Western Michigan University, 1991

The purpose of this field research study was to describe the differences in perceptions of school climate, as measured on the 10 subscales of the National Association of Secondary School Principals (NASSP, 1987) School Climate Survey, for at-risk students as compared to students not classified as at-risk.

The population of this study was 6,250 students from three Michigan public high schools, urban (U), suburban (S), and rural (R). In each school two subgroups were identified with 30 in each subgroup. Random sampling procedures were used to identify 30 at-risk and 30 not-at-risk students in each school.

Three major research hypotheses were tested using two-way analysis of variance. In S, R, and U schools there was a significant difference in at-risk and not-at-risk students in 9 of 10 climate subscale areas and a significant difference between at-risk student climate scores and national normative student scores. The at-risk group in U school differs significantly from the at-risk groups in R and S schools. This possible difference in U needs to be explored further to be certain that appropriate plans are made for serving the needs of at-risk students in urban settings.
The relationship between climate and achievement suggests potentially important policy concerns for educators concerned with at-risk learning and student retention.
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The relationship of student perceptions of school climate and student retention

Garrett, Frank Douglas, Ed.D.
Western Michigan University, 1991

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My sincere appreciation is extended to the students, counselors, and administrators who made this study possible. My hope is that the participants have benefited personally and that the organizations involved will be able to use the information for self-improvement.

To all who gave encouragement and assistance to my educational growth I give my sincere thanks. A special thank you goes to my family, who have tolerated my absence and dedication to this dissertation. Their love and support provided the foundation for this accomplishment.

Frank Douglas Garrett
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CHAPTER I

INTRODUCTION

Research findings support the conclusion that students who are achieving academically are more likely to continue in school than are students who are not achieving; indeed, they may be 10 times more likely to remain in school (U.S. Department of Education, National Center for Educational Statistics, 1983). These differences in school retention rates for achievers and nonachievers may be, in part, due to the feeling of disassociation, a sense of not belonging to the school, which is common among the at-risk student population (Goodlad, 1987; Mandel & Marcus, 1988; Raffini, 1988).

Thousands of students are dropping out of American schools each week. The state of Florida has the poorest rate of retention, 58%, while Minnesota has the highest rate at 90.9%. Detroit loses 6,000 students each year (Hahn, 1987; May, 1989a). Some will return to the educational system, but many will never return. Students who have dropped out of school face economic and social disadvantages which will pervade their lives. The American dropout problem results in higher welfare costs, lost tax dollars, and increased crime rates for all citizens. There are many programs at the state and local level to aid at-risk students and students who have dropped out if they decide to complete their diploma or meet General Education Development (GED) requirements (Myll, 1988). Various programs
are offered at state and local levels (see Table 1). Despite the availability of programs and the efforts of concerned educators, problems for the at-risk student population remain.

When *A Nation at Risk* was published (U.S. Department of Education, National Commission on Excellence in Education, 1983), many school districts reacted by increasing the academic requirements for graduation. Higher standards for high school students often resulted in more required academic classes at the cost of elective classes, including vocational choices. The students who suffer the most with lost elective choices are the low achieving at-risk group. The at-risk group is also least likely to benefit from increased attention to academics. When students have relatively low grade point averages (GPA), completion of additional academic courses is seldom related to improved student test performance (Alexander & Pallas, 1984).

The wants of at-risk students (e.g., increased electives) and political realities for schools (e.g., increased academics) can produce conflict. Increased academic demands for at-risk students often include increased homework requirements, but one of the characteristics of at-risk students is that they have laid claim to adult status and have made commitments to work and family (Stinchcombe, 1964). Increased demands for homework coupled with work pressures may increase the likelihood that a student will drop out (Hirschi, 1969; Kunisawa, 1988). Increased schoolwork usually influences time available for extracurricular student activities; participation in activities have been shown to have a desirable
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<td>truants</td>
<td>school board room, media center, school library</td>
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<td>fourteen to eighteen</td>
<td>youth at-risk for dropping out</td>
<td>school site</td>
<td>regular staff, volunteers, community entrepreneurs</td>
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influence on students, such as lower student delinquency (Landers &
Landers, 1978) and development of a normative attachment to the
school (Natriello, Pallas, & McDill, 1986).

In many American secondary schools, students who are most
likely to drop out as well as those with limited ability are given a
schedule of traditional academic classes and told, "Do the best you
can!" The choice for the student can become chronic failure in
courses or a decision to drop out of school. To help at-risk stu-
dents, a school may provide remedial classes; however, conventional
secondary programs offering remediation to at-risk students usually
are not effective (Hahn, 1987; Wickman & Whitten, 1980). The credi-
bility of a school is damaged when little is done to stem the tide
of failure among the at-risk student population (Blank, 1984; Good &
Brophy, 1987). What can school leaders do to identify at-risk stu-
dents and improve the school environment to produce more positive
and effective experiences for these students?

Purpose of the Study

The purpose of this study was to describe the differences in
perceptions of school climate, as measured on the 10 subscales of
the National Association of Secondary School Principals (NASSP,
1987) School Climate Survey, for at-risk students as compared to
students not classified as at-risk.
Importance of the Study

The importance for studying the relationship between at-risk student perception of school climate, achievement, and retention is due to the widespread concern in America that all students must learn. There is general agreement in the nation, although not always tested, that the school environment experienced by the at-risk students is not the same as the environment experienced by the achieving students. Identifying the school environment perceived by students may permit educators to identify interventions which could improve schools for both achievers and nonachievers.

Definitions

Three terms are defined, as used in this study: Students at-risk are children of school age who due to one or more factors of disadvantageous behavior or circumstances are in danger of dropping out of high school. Disadvantageous factors related to the individual at-risk student include: overall grade average (D or lower), attendance profile (at-risk of removal), and discipline profile (referral to office more than once).

Climate as used in this study is defined as the shared perceptions of students about the physical, social, and learning environment of a school. These shared perceptions represent what most students believe (National Association of Secondary School Principals [NASSP], 1987).
Dropout as used in this study is defined as persons neither enrolled in high school nor high school graduates (U.S. Department of Education, National Center for Education Statistics, 1983).

Research Hypotheses

1. There are significant differences in the perceptions of achievers and nonachievers within each of three schools for the 10 subscales of the NASSP School Climate Survey.

2. When the data for achievers in three schools and the data for nonachievers in three schools are aggregated, there will be significant differences in the perceptions of achievers as compared to nonachievers for each of the NASSP subscales.

In addition to the first two hypotheses decision was made to examine a third hypothesis if the conclusion based on the findings of the first two hypotheses was that significant differences existed for more than half of the 10 subscales. This third hypothesis was:

3. The perceptions of school climate held by at-risk students will differ significantly from the NASSP school climate national norms.

Overview of the Study

In Chapter I the background and purpose of the study have been described, terms have been defined, and the importance of the study has been explained. Related literature is reviewed in Chapter II. The design and procedures are described in Chapter III. The findings and data analysis for the research are located in Chapter IV.
The conclusions of the study followed by discussion and recommendations are presented in Chapter V.
CHAPTER II

REVIEW OF RELATED LITERATURE

The purpose of this study was to describe the differences in perceptions of school climate, as measured on the 10 subscales of the NASSP School Climate Survey, for at-risk students as compared to students not at-risk. In this chapter a review of related literature is presented. The chapter has five sections: the economics of dropping out, the dropout student, correlates of retention, school climate, and research hypotheses, as well as a summary.

The Economics of Dropping Out

In 11 studies, high dropout rates in public education were described as a threat to the productivity of the nation and a waste of young lives; the economic costs to the nation include lost tax dollars and wage disadvantages for dropout students (Committee for Economic Development, 1985; Freeman, 1978; Hahn & Lerhman, 1985; Hill, 1979; Levin, 1972, 1983; Mann, 1987; Rumberger, 1987; Sewell & Hauser, 1975; Spratling & Chesley, 1989; Wehlage, 1983). The 1985 Appalachian Regional Commission estimated that dropouts will earn $237 billion less during their lives than will high school graduates. Federal, state, and local governments will collect over $100 billion less in taxes. Given these figures, various levels of government should place priority on student retention to increase
Dropouts have more trouble finding and holding jobs than high school graduates; in 1985, the estimated unemployment rate for dropouts was twice as high as for graduates of the same age. Dropouts who are unemployed, are on welfare, and undereducated have little hope for success. In 1985 the typical high school graduate earned over $4,000 more each year than the non-high-school graduate. Stated another way, the lifetime earnings of high school graduates who do not attend college are approximately $200,000 more than high school dropouts (Crain, 1984; Pallas, 1984). Since 1958, the national dropout rate has remained at approximately 25% (Peng, 1982). In 1958 American dropouts could find comparatively high paying jobs without a high school diploma; in 1989 the jobless rate for white dropouts was 47% and for African-Americans 73% (Borus, 1985; Hahn, 1987).

Efforts have been made to address the needs of at-risk students and to lower dropout rates. The National Commission on Excellence (U.S. Department of Education, 1983), which presented the report A Nation at Risk, had no significant impact on the secondary student population who constitute the low-income at-risk group. Title One of the Elementary and Secondary Education Act from 1965 to 1981 and its successor, Chapter One, since 1981, did make a difference. The National Assessment of Educational Progress reported that, between 1970 and 1980, disadvantaged 9-year-olds showed significant improvement in reading ability, with the greatest gains occurring among African-American children and other children in the Southeast, where
federal (Title One) money had been concentrated (Schorr & Schorr, 1988).

The findings of at least nine studies support the conclusion that the ideal at-risk intervention level is preschool (Beck & Muia, 1980; Elkind, 1988; Fox, 1987; Kagan, 1989; Ross, 1983; Ryan, 1989; Schweinhart & Weikart, 1980; Spratling & Chesley, 1989; Weir, 1989). For every dollar spent on preschool education of disadvantaged children, an estimated $4.75 will be saved later in social services (Ralph, 1989).

The Dropout Student

A measurement problem for those who study student retention is accurate estimation of dropout rates. Estimating is difficult due to differing school system definitions of what constitutes non-completion. There is no standard definition of what constitutes a dropout or how to calculate a retention rate in the United States (Sexton, 1985). Definitions of retention differ in individual school districts, for example, in Chicago, students who leave school before graduation are grouped into 19 different categories called "leave codes." Only one of these categories is labeled dropout. Categories are labeled: lost--not coming to school, needed at home, married, cannot adjust, etc. (Hahn, 1987). Consistency of reporting retention figures is suspect both within and across districts. For example, some districts count special education and adult education transfers, while other districts choose not to count them and only count regular day school students. Some districts do not count
transfer to a technical or business school as dropping out, while others based the decision on the question of diploma granting certification. Students often drop out during the summer months making it difficult for the districts to identify a reason, which is then often listed as "no show," not dropout by the district. These differences in reporting dropouts can be quite dramatic as was found in 1985 at one particular high school in Chicago. This school had reported a dropout rate of 1.9%, but under scrutiny by the Chicago Panel on Public School Finances the rate was found to be 58.3% (Natriello, 1987). Ninth grade dropouts often go unreported due to "slipping through the cracks" of the reporting system which often is limited to 10-12 high school only. Ninth graders are reported only when the ninth grade happens to be a part of the high school (Hess & Greer, 1986).

To count dropouts, the United States General Accounting Office uses the following all inclusive definition: Persons neither enrolled in schools nor high school graduates. While the United States figures are selected from a national sample, there are no accurate local statistics to use in a meaningful way due to the different methods of student accounting which individual school districts apply. If one were to rely on figures provided by the U.S. General Accounting Office, some central questions about the retention problem could be answered. For example, in 1985, 4.3 million people between the ages of 16 and 24 had dropped out of school. Of those, 3.5 million were white, 700 thousand were African-American, and 100 thousand were from other groups. Dropout
rates in major cities are believed to be in the 40% to 60% range. The data, as reported by census data and the high school attrition rate computed from state-level school enrollments, show widely different retention rates and probably represent lower and upper limits to the true rate (Rumberger, 1987). The Bureau of the Census reports the proportion of 18- and 19-year-old students who have completed high school, while the United States Center for Statistics reports the number of high school graduates as a proportion of public school ninth graders from 3 years earlier (see Table 2).

Correlates of Retention

A particular school retention rate is predicted by two general categories: organizational characteristics and characteristics of groups and individuals. Student outcome as measured by retention is an appropriate measure of school effectiveness since one of the desired outcomes of effective schooling is the retention of students. The use of a school dropout rate as a performance indicator depends on other presuppositions about low dropout rates (How good is a school with a low rate?) or high ones (How bad?). A school with a high rate of student dropout may have characteristics which prevent their rates from being even higher and schools with low rates of student dropout may have characteristics which prevent their rates from being even lower (Toles, Schulz, & Rice, 1986).

What are some of the causes and correlates for dropout from public school programs? One must be careful in interpretation since most students are unable to give underlying causal motivation.
Table 2
High School Retention Rates 1975-1985

<table>
<thead>
<tr>
<th>Year</th>
<th>Bureau of the Census</th>
<th>Center for Statistics</th>
</tr>
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<tbody>
<tr>
<td>1974</td>
<td>73.4</td>
<td>75.7</td>
</tr>
<tr>
<td>1975</td>
<td>73.7</td>
<td>74.7</td>
</tr>
<tr>
<td>1976</td>
<td>73.1</td>
<td>75.1</td>
</tr>
<tr>
<td>1977</td>
<td>72.9</td>
<td>74.7</td>
</tr>
<tr>
<td>1978</td>
<td>73.5</td>
<td>73.7</td>
</tr>
<tr>
<td>1979</td>
<td>72.8</td>
<td>72.6</td>
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<tr>
<td>1980</td>
<td>73.7</td>
<td>71.9</td>
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<td>72.5</td>
<td>72.1</td>
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<td>1982</td>
<td>72.0</td>
<td>72.8</td>
</tr>
<tr>
<td>1983</td>
<td>72.7</td>
<td>73.9</td>
</tr>
<tr>
<td>1984</td>
<td>73.3</td>
<td>74.1</td>
</tr>
<tr>
<td>1985</td>
<td>74.6</td>
<td>NA</td>
</tr>
</tbody>
</table>

Note. NA = not available.

Common reasons, such as getting a job or getting pregnant, should be considered a symptom of dropping out rather than the actual cause. A conference in Detroit, Michigan, concerning the retention problem listed five areas that could influence a decision to stay in school: drug abuse, pregnancy, uncaring staff, absentee parents, and coping in a new situation. This list was compiled by a student task force as part of the Detroit Schools Dropout Prevention Program (Gilchrist, 1989). The 1983 survey, "High School Dropouts: Descriptive Information from High School and Beyond" (U.S. Department of Education, National Center for Education Statistics, 1983), includes longitudinal data collected beginning in 1980. Fourteen percent of 1980 high school sophomores dropped out of school during or after their sophomore year; of these, 24% left in their sophomore year, 47% left in their junior year, and 29% left in their senior year. American Indians and Alaskan natives had the highest rate of dropout (over 29%), Hispanics dropped out at a rate of 18%, African-Americans at 17%, whites at 12%, and Asians at a rate of 3%. Students with grade point averages which approximated 1.0 (on a 4.0 scale) dropped out at a rate of 42.5%, 2.0 at a rate of 18.5%, 3.0 at a rate of 8.1%, and 4.0 at a rate of 2.9%. The survey also asked students to give a reason why they chose to drop out. The male students listed: poor grades (36%), did not like school (35%), chose to work instead (27%), could not get along with teachers (21%), and were expelled or suspended (13%). Females listed: got married or planned to marry (31%), did not like school (31%), had
poor grades (30%), and got pregnant (23%) (U.S. Department of Education, National Center for Education Statistics, 1983).

Retention Variables

Retention variables commonly found in the literature are related to the following categories: family background, socioeconomic status, preschool intervention, reading level, entry age, poor grades, poor attendance, low self-esteem, school curriculum, lack of guidance, lack of teacher care, governance, school choice, locus of control, state funding inequity, teacher empowerment, demographics, and extracurricular activities.

Most retention research has focused on student behavior and performance in school. What effect does the organization itself have on the dropout rate? What is it about school climate that creates failure and negative experiences for at-risk students? When there has been a history of negativity attached to attending school, a student often becomes disassociated, a feeling of not belonging or fitting in with the system. The educational system and, more importantly, the dynamics of the socialization process have failed and the value of education is not respected by the student (Cavazos, 1990; Maeroff, 1988; Mahood, 1981; Marini, 1988; May, 1989b; O'Connor, 1985; Pallas, 1984; Rehberg & Rosenthal, 1976; Spreitzer & Pugh, 1973).

To provide positive influences for disassociated at-risk students, educators may need to focus on social development as well as educational remediation. The remediation must not be so narrow as
to "pigeonhole" a student into a worthless vocational skill that will not be needed in the future and will only lead to greater despair on the part of the student (Committee for Economic Development, 1985). Remediation programs should not be designed to group students into large custodial or "warehousing" tracks (a formal procedure of putting students into groupings such as vocational, general, or college prep), since they often breed failure and resentment. A school tracking system often results in a "dumbing effect," a reduction in cognitive development to the lowest common denominator. "We can't do the assignment! We're the slow class" (Anonymous student, 1977). Tracking systems are not related to positive student outcomes. They interfere with both the cognitive and the affective development of the student (Ianni, 1989). Research findings about use of "tracking" confirm the negative effects of social categorization, leading to identification with a particular group even when there is no attraction among those sorted into the category (Turner, 1987). School leadership must not concentrate their efforts for the at-risk students in the cognitive area while ignoring the affective and psychomotor areas. As Piaget (1971) noted: "Human intelligence develops in the individual in social interaction" (p. 107). A distinguishing characteristic of at-risk students is the existence of trouble with the social, emotional, and economic part of their daily lives (Haskell & Yablonsky, 1982).

Twelve of 100 articles reviewed for this study included information concerning the possible contamination of the educational process by the organization itself. The word used to describe what
"poor" organizations seem to do, leading some students to dropout, is disassociation. Although disassociation was not explicitly identified as the problem, in all 12 articles the existence of particular institutional characteristics which were creating barriers for at-risk students were described. Given these barriers, students were not able to compete, feel good about being in school, or advance with appropriate classmate age groups (Fine, 1988; Gilchrist, 1989; Howe & Edelman, 1985; Kilpatrick, 1989; Mahan & Johnson, 1983; Mann, 1987; May, 1989b; Morgan, 1984; Newmann, 1981; Rumberger, 1981; Spratling & Chesley, 1989; Wehlage, Rutter, & Turnbaugh, 1986).

Insofar as at-risk students and students who drop out of school are concerned, the million dollar question (actually billions of federal and state dollars) is: What can school leaders do to improve school climate to produce a more positive and successful experience for at-risk students? Dropping out is positively correlated to course failure, disciplinary conflict, and a projection by the student of an external locus of control (a feeling of falling without a net) (Wehlage et al., 1986). The problems experienced by at-risk youth must be taken seriously by school leadership as an indication of the extent to which public schools can be alienating institutions (Wehlage, Stone, & Kliebard, 1980). According to the director of the Yale Child Study Center, "The most basic problem in education today is the assumption that if a kid doesn't learn, it's the kid's fault. The school doesn't take the responsibility" (Comer, cited in Schorr & Schorr, 1988, p. 237).
Reading Level and Overage

Three studies included in the review of literature had investigated the relationships between entering age, reading ability, grade retention, and retention rates. The findings of these studies showed that students who entered high school 1 year older than their classmates (overage) were more likely to drop out (60% vs. 37%). For those students who were 2 or more years older than their classmates, the dropout rate was even higher (69% vs. 37%). Even when overage students were reading at grade level, they dropped out at rates 7% to 10% higher than their younger classmates (Hahn, 1987; Hess & Greer, 1986; Toles et al., 1986). Alternative approaches to grade level retention need to be developed if these practices are not helping students (Wayson, 1988).

Gerald (1984) studied whether or not reading scores and overage variables were equally strong correlates of dropout rates. The findings of his study were confirmed by Hess & Greer (1986), who reported that both below normal reading scores and being overage were closely related with dropout rates.

Cultural Considerations

Cultural differences exist but social development, as defined in schools, is usually defined by standards accepted as appropriate by the middle class (Clark, 1984; Howell & Freese, 1982; Wickman & Whitten, 1980). Implementing middle-class standards in lower-class social environments is difficult and may be inappropriate. In a
study of a community with a lower-class culture, extensive data were collected over a period of 30 months. The data included observations of behavior patterns of group members and other community residents, social workers' contact reports, and direct recordings of group member activities and discussions. One inference, based on the findings, was that student rebellion is not motivated by the delinquency subculture; instead, student rebellion is often guided by the traditions of the lower-class community itself (Elliot, 1978; McPartland & McDill, 1977; Wickman & Whitten, 1980). Middle and lower-class cultures are usually in opposition and the school with its middle-class orientation is often the battleground. Schools are managed by board members and educators who foster middle-class values and reject lower-class values. Judged by standards outside of their culture, lower-class students of all races often feel defeated and degraded and choose to drop out of school rather than struggle through a system they do not comprehend. This cultural difficulty was aptly described in Manchild in the Promised Land (Brown, 1965):

It seemed that whenever I went to school, I got into a fight with the teacher. The teacher would take me to the principal's office. After I had fought with the principal, I would be sent home and not allowed back in school without one of my parents. So to avoid all the trouble, I just didn't go to school. (p. 7)

A common misconception which exists in American culture is to judge minority groups as being more likely to drop out than whites. When appropriate variables are controlled--reading level and entry age--whites are at least as inclined to drop out as
African-Americans and Hispanics. The problem of poverty is the number one factor in student dropout among all racial groups in America. There is no difference between the rate of dropout between races when the data are controlled for poverty (Toles et al., 1986).

School Climate

The NASSP School Climate Survey (Appendix A, Examiner's Manual) can be used to measure perceptions held by stakeholder groups (e.g., students, parents, and teachers) about the physical, social, and learning environments of a school. Unlike satisfaction surveys, which measure an individual's affective response, climate is measured by asking each individual to serve as an informant, that is, to respond by selecting an answer which corresponds to what most people believe about the school environment. Shared perceptions of climate represent what most individuals believe. A difference between the NASSP Comprehensive Assessment School Environment (CASE) Model and other climate instruments is the description of climate as a mediating variable, or influencing factor, rather than as an outcome measure (Keefe, Kelley, & Miller, 1985).

Research Hypotheses

1. There are significant differences in the perceptions of achievers and nonachievers within each of three schools for the 10 subscales of the NASSP School Climate Survey.

2. When the data for achievers in three schools and the data for nonachievers in three schools are aggregated, there will be
significant differences in the perceptions of achievers as compared to nonachievers for each of the NASSP subscales.

In addition to the first two hypotheses a decision was made to examine a third hypothesis if the conclusion based on the findings of the first two hypotheses was that significant differences existed for more than half of the 10 subscales. This third hypothesis was:

3. The perceptions of school climate held by at-risk students will differ significantly from the NASSP school climate national norms.

Summary

The problem of student retention in America is well documented. The 25% annual dropout rate, with inner city schools sometimes doubling the annual rate, is reality. The purpose of this case study was to gather and examine school climate data in three different demographic settings to compare and describe the differences in perceptions of school climate, as measured on the 10 subscales of the NASSP survey between a high achieving and low achieving (identified as at-risk of dropping out) group of students. Based on the review of literature, the three broad research hypotheses were formulated and the decision was made to state these in a directional form. In the next chapter the design and the procedures are described.
CHAPTER III

DESIGN AND PROCEDURES

The purpose of this study was to describe the differences in perception of school climate, as measured on the 10 subscales of the NASSP (1987) School Climate Survey, for at-risk students as compared to students not at-risk. This case study was designed to examine perceptions of school climate in urban, suburban, and rural schools in part to speak to differences and to compare both the high achieving and low achieving student perceptions of school climate to identify areas within a school that seem to promote or inhibit student achievement for the at-risk population. In this chapter the procedures used for data collection and analysis are described. This chapter has six sections: research populations and subjects, instrumentation, data collection, organization and analysis of the data, assumptions and limitations, and research hypotheses, as well as a chapter summary.

Research Populations and Subjects

School Selection and Population

This study on the subject of student perception of climate and student retention was conducted with student groups of three Midwestern American high schools. The subject sample consists of three at-risk and three not-at-risk student groups at three separate
schools. The students were identified by overall grade average (B or higher and D or lower), attendance profile (at-risk of removal from school), and discipline profile (more than one referral to office). The three low performing student groups were identified as at risk of dropping out of school by staff and research professionals using the three-part criteria. In order to increase the meaning of the three case studies, schools were selected from three different settings in the Midwestern United States: urban, suburban, and rural to speak in an exploratory sense about differences in different settings. School 10 is a suburban school of 2,212 predominantly Caucasian students, and School 11 is a rural school with 649 predominantly Caucasian students. School 12 is an inner-city school of 2,440 predominantly African-American students.

Subjects

A listing of students was prepared by the counseling staff and research team using the three-part selection criteria based on overall grade average, attendance, and discipline referrals for both the high achieving and low achieving groups at each school using a team meeting approach. Accessible members were selected from the listing by using the Table of Random Numbers (Kerlinger, 1986). Six groups of 30 students were identified for the study (one low and one high at each site). Subjects were chosen using random sampling techniques and were assumed to be representative of their subgroup within their school. A date was set for the climate instrument to be administered. In order to increase the reliability and validity of
the testing procedure, a practice administration of the survey took place with 10 subjects not involved in the survey.

Instrumentation

Instrument Subscales

The Student Climate Survey instrument used for this study and developed by NASSP has 10 subscales (55 total variables): Teacher-Student Relationships (12), Security and Maintenance (7), Administration (6), Student-Academic Orientation (4), Student Behavioral Values (3), Guidance (4), Student-Peer Relationships (4), Parent and Community-School Relationships (4), Instructional Management (7), and Student Activities (4).

Instrument Reliability

The survey used was the student perception of school climate developed by the NASSP organization. The survey has both high validity and reliability as a systematic data gathering instrument (see Table 3). Table 3 is a listing of reliability testing for student (Cronbach's alpha) scores based on data collected in national pilot and normative studies.

Instrument Validity

Validity testing was conducted on the climate instrument; both content (item representativeness) and construct (meaningfulness) were tested using factor analysis. Extensive field testing ensured
Table 3
School Climate Survey: Internal Consistency
Estimates of Reliability

<table>
<thead>
<tr>
<th>Subscale name</th>
<th>Items</th>
<th>n</th>
<th>Cronbach's alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher-Student Relationships</td>
<td>12</td>
<td>5,220</td>
<td>.87</td>
</tr>
<tr>
<td>Security and Maintenance</td>
<td>7</td>
<td>3,946</td>
<td>.84</td>
</tr>
<tr>
<td>Administration</td>
<td>6</td>
<td>4,710</td>
<td>.82</td>
</tr>
<tr>
<td>Student Academic Orientation</td>
<td>4</td>
<td>6,088</td>
<td>.75</td>
</tr>
<tr>
<td>Student Behavioral Values</td>
<td>3</td>
<td>6,865</td>
<td>.67</td>
</tr>
<tr>
<td>Guidance</td>
<td>4</td>
<td>5,612</td>
<td>.78</td>
</tr>
<tr>
<td>Student-Peer Relationships</td>
<td>4</td>
<td>6,315</td>
<td>.80</td>
</tr>
<tr>
<td>Parent and Community-School Relationships</td>
<td>4</td>
<td>4,640</td>
<td>.74</td>
</tr>
<tr>
<td>Instructional Management</td>
<td>7</td>
<td>6,173</td>
<td>.79</td>
</tr>
<tr>
<td>Student Activities</td>
<td>4</td>
<td>5,373</td>
<td>.72</td>
</tr>
</tbody>
</table>

Note. From Examiner's Manual: School Climate Survey (Table 1, p. 5) by NASSP, 1987, Reston, VA: Author. (See Appendix A).

that only concepts and items with strong factor loadings were retained in the survey.

The NASSP school climate model is one part of the CASE model which has been subjected to a national validation study conducted in 354 schools in 10 states and completed in 1988.
Data Collection

Permission was granted at each of the schools to administer the School Climate Survey to students identified as at-risk and not at-risk.

A listing of students was prepared by the counseling staff and research team at each school using the three-part criteria consisting of grade average, attendance profile, and behavior profile. Random selection of students identified subgroups for survey purposes. Surveys were administered by the research team following appropriate guidelines approved by the Western Michigan University Human Subjects Institutional Review Board.

Organization and Analysis of the Data

After the data were collected and scored, summary data charts were prepared for each group of students listing national normative and individual score data for each survey subscale. Group profiles are presented using a "box and whisker" arrangement to show the distribution of national normative group scores. The "box" represents 68% of the scores in the middle of the normative distribution (+ or - 1 SD). The "whiskers" or vertical lines above and below the boxes indicate the upper and lower 16% of the distribution.

Statistical analyses were conducted on the six student group profiles within and between schools by creating subscale mean scores for each climate item and each of the 180 students as well as group mean scores for the six sample groups. The data collecting scale
was designed with the following six choices: (1) strongly disagree, (2) disagree, (3) neither agree nor disagree, (4) agree, (5) strongly agree, and (6) don't know. Scores of 6 on the survey instrument (don't know) were excluded when calculating mean scores to avoid mean contamination. The research findings were examined with t testing for sample subgroups and with 10 two-way analysis of variance tests, one for each subscale area to check differences between groups, schools, and for variable interaction. The level of significance and sample size calculations were determined based on the formula supplied by Krejcie and Morgan (1970). Sample size was estimated relative to the population of the individual school, associated with a specified confidence level and designated degree of accuracy as reflected by sampling error. The calculation of the formula and the general design and intent of the study resulted in the decision to use a minimum sample size of 30 students for each subgroup and a level of significance set at .05. Based on this recommendation, only differences that are significant at the probability level of 5 in 100 ($p < .05$) will be considered. The decision to use a level (.05) allowing for the chance of increased Type I error was made to maximize all promising leads so no climate prospect would be overlooked, since the intention of this study is to identify climate areas within a school which need to be evaluated by the professional staff. Of course, it is understood given the level of significance and small sample size that chance of Type II error is increased and one must be cautious in interpreting findings (Isaac & Michael, 1987; Kerlinger, 1986).
Assumptions and Limitations of the Study

The only applicable assumptions and limitations are those normally associated with the use of surveys: Survey research has the advantage of a wide scope. Survey research within sampling error is accurate. Survey research is best adapted to extensive rather than intensive research. Survey research demands large investments of time and energy. Survey research can temporarily lift the respondent out of his social context making a response invalid. Survey research requires a good deal of research knowledge and sophistication (Kerlinger, 1986).

Research Hypotheses

1. There are significant differences in the perceptions of achievers and nonachievers within each of three schools for the 10 subscales of the NASSP School Climate Survey.

2. When the data for achievers in three schools and the data for nonachievers in three schools are aggregated, there will be significant differences in the perceptions of achievers as compared to nonachievers for each of the NASSP subscales.

In addition to the first two hypotheses a decision was made to examine a third hypothesis if the conclusion based on the findings of the first two hypotheses was that significant differences existed for more than half of the 10 subscales. This third hypothesis was:
3. The perceptions of school climate held by at-risk students will differ significantly from the NASSP school climate national norms.

Chapter Summary

This chapter has a description of the study design and procedures for conducting the study. The selection of schools, population, and instrumentation were described, as well as data collection and organization and analysis of the data.

In the next chapter the findings and data analysis for the research are described.
CHAPTER IV

FINDINGS

The purpose of this field research study was to describe the differences in perceptions of school climate, as measured on the 10 subscales of the National Association of Secondary School Principals (NASSP) School Climate Survey, for at-risk students as compared to students not classified as at-risk. In this chapter the research findings are reported with reference to specific research hypotheses detailed in Chapter III. The data were analyzed using descriptive statistics to classify and summarize the data. The information in this chapter is divided into the following three sections: a description of the population characteristics, the findings for the research hypotheses, and a chapter summary.

Characteristics of the Population

The unit of analysis in this study was the at-risk student attending a Michigan public high school. An at-risk student was defined as a potential dropout and at disadvantage to the "normal" population of a school. At-risk can include one or more of the following factors: poor grades, poor attendance, and discipline problems (profiled in detail in Chapter II).
Findings

The major findings of this study are presented with their respective research hypotheses.

**Hypothesis 1**: There are significant differences in the perceptions of achievers and nonachievers within each of three schools for the 10 subscales of the NASSP School Climate Survey.

The finding drawn from analysis of the NASSP survey data is provided in Table 4.

To analyze the differences between the two groups within the sample schools the means for the subscale items were calculated for each subject. Next, a total mean score was calculated for the two samples. The difference was then divided by the standard error of the difference. This one-tailed $t$ test comparing the means of the matched groups is presented in Table 5.

**Hypothesis 2**: When the data for achievers in three schools and the data for nonachievers in three schools are aggregated, there will be significant differences in the perceptions of achievers as compared to nonachievers for each of the NASSP subscales.

In order to compare the overall scores for the groups (achiever and nonachiever) and schools (suburban [S], rural [R], and urban [U]) and to check interaction between group and school, a two-way analysis of variance (ANOVA) test was used. Summary ANOVA tables are presented for Climate Areas 1 through 10. The row scores are by school and the column scores are by achievement group membership. Interaction significance is reported between school and group for
Table 4

A Descriptive Summary of Data: Sample High School Climate x Scores Depending on Achievement Level
(n = 180)

<table>
<thead>
<tr>
<th></th>
<th>Suburban</th>
<th>Rural</th>
<th>Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Achiever</td>
<td>Nonachiever</td>
<td>Achiever</td>
</tr>
<tr>
<td>Teacher-Student Relationships</td>
<td>3.11</td>
<td>2.92</td>
<td>3.54</td>
</tr>
<tr>
<td>Security and Maintenance</td>
<td>4.01</td>
<td>3.56</td>
<td>3.87</td>
</tr>
<tr>
<td>Administration</td>
<td>2.81</td>
<td>2.96</td>
<td>3.24</td>
</tr>
<tr>
<td>Student Academic Orientation</td>
<td>2.89</td>
<td>3.12</td>
<td>3.42</td>
</tr>
<tr>
<td>Student Behavioral Values</td>
<td>1.99</td>
<td>2.66</td>
<td>2.60</td>
</tr>
<tr>
<td>Guidance</td>
<td>3.76</td>
<td>3.76</td>
<td>4.18</td>
</tr>
<tr>
<td>Student-Peer Relationships</td>
<td>3.11</td>
<td>3.19</td>
<td>3.59</td>
</tr>
<tr>
<td>Parent and Community-School Relationships</td>
<td>3.03</td>
<td>3.46</td>
<td>3.45</td>
</tr>
<tr>
<td>Instructional Management</td>
<td>3.36</td>
<td>3.47</td>
<td>3.92</td>
</tr>
<tr>
<td>Student Activities</td>
<td>3.32</td>
<td>3.22</td>
<td>4.06</td>
</tr>
<tr>
<td>Suburban Achiever</td>
<td>Suburban Nonachiever</td>
<td>Rural Achiever</td>
<td>Rural Nonachiever</td>
</tr>
<tr>
<td>-------------------</td>
<td>----------------------</td>
<td>----------------</td>
<td>------------------</td>
</tr>
<tr>
<td>Teacher-Student Relationships</td>
<td>3.11</td>
<td>2.92</td>
<td>3.54</td>
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<tr>
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<td>3.56</td>
<td>3.87</td>
</tr>
<tr>
<td>Administration</td>
<td>2.81</td>
<td>2.96</td>
<td>3.24</td>
</tr>
<tr>
<td>Student Academic Orientation</td>
<td>2.89</td>
<td>3.12</td>
<td>3.42</td>
</tr>
<tr>
<td>Student Behavioral Values</td>
<td>1.99</td>
<td>2.66</td>
<td>2.60</td>
</tr>
<tr>
<td>Guidance</td>
<td>3.76</td>
<td>3.76</td>
<td>4.18</td>
</tr>
<tr>
<td>Student-Peer Relationships</td>
<td>3.11</td>
<td>3.19</td>
<td>3.59</td>
</tr>
<tr>
<td>Parent and Community-School Relationships</td>
<td>3.03</td>
<td>3.46</td>
<td>3.45</td>
</tr>
<tr>
<td>Instructional Management</td>
<td>3.36</td>
<td>3.47</td>
<td>3.92</td>
</tr>
<tr>
<td>Student Activities</td>
<td>3.32</td>
<td>3.22</td>
<td>4.06</td>
</tr>
</tbody>
</table>

*Significant at $p < .05$. 

33
each climate area.

As shown in Tables 4 and 5, there were statistical differences between achievers and nonachievers in all three schools. The greatest differences between the achievers and nonachievers occurred at the urban school, while the least amount of difference between the two groups was observed at the suburban school.

Table 6 is a summary ANOVA table for Climate Area 1, Teacher-Student Relationships. The row scores are by school and the column scores are by achievement group membership. Interaction significance is reported between school and group.

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig. of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rows (School)</td>
<td>10.223</td>
<td>2</td>
<td>5.112</td>
<td>16.359</td>
<td>.000*</td>
</tr>
<tr>
<td>Columns (Groups)</td>
<td>37.605</td>
<td>1</td>
<td>37.605</td>
<td>120.351</td>
<td>.000*</td>
</tr>
<tr>
<td>Interaction</td>
<td>21.931</td>
<td>2</td>
<td>10.966</td>
<td>35.094</td>
<td>.000*</td>
</tr>
<tr>
<td>Explained</td>
<td>69.832</td>
<td>5</td>
<td>13.966</td>
<td>44.699</td>
<td>.000*</td>
</tr>
<tr>
<td>Residual</td>
<td>53.743</td>
<td>172</td>
<td>0.312</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>123.575</td>
<td>177</td>
<td>0.698</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\( p < .05. \)

When the data were treated together (see Table 6), as measured by two-way ANOVA testing, a significant difference \((p < .01)\) was
found in how achievers see the teacher-student relationship when compared to nonachievers. Nonachievers do not perceive teacher-student relationships as positive as achievers. As measured by the ANOVA testing, a significant difference ($p < .01$) was also found between schools (S, R, and U) on teacher-student relationships. The effects of the independent climate variables were significantly different demonstrating the presence of interaction of both groups and schools.

Table 7 is a summary ANOVA table for Climate Area 2, Security and Maintenance. The row scores are by school and the column scores are by achievement group membership. Interaction significance is reported between school and group.

Table 7
Perception of Climate Held by Achievers and Nonachievers on Subscale: Security and Maintenance

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig. of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rows (School)</td>
<td>27.682</td>
<td>2</td>
<td>13.841</td>
<td>33.145</td>
<td>.000*</td>
</tr>
<tr>
<td>Columns (Groups)</td>
<td>49.891</td>
<td>1</td>
<td>49.891</td>
<td>119.474</td>
<td>.000*</td>
</tr>
<tr>
<td>Interaction</td>
<td>24.646</td>
<td>2</td>
<td>12.323</td>
<td>29.509</td>
<td>.000*</td>
</tr>
<tr>
<td>Explained</td>
<td>102.631</td>
<td>5</td>
<td>20.526</td>
<td>49.154</td>
<td>.000*</td>
</tr>
<tr>
<td>Residual</td>
<td>71.826</td>
<td>172</td>
<td>0.418</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>174.457</td>
<td>177</td>
<td>0.986</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$p < .05$
When the data were treated together (see Table 7), a significant difference ($p < .01$) was found in how achievers and nonachievers perceive security and maintenance. As measured by the ANOVA testing, a significant difference ($p < .01$) was also found between schools (S, R, and U) on security and maintenance. The effects of the independent climate variable were significantly different demonstrating the presence of interaction of both group and school.

Table 8 is a summary ANOVA table for Climate Area 3, Administration. The row scores are by school and the column scores are by achievement group membership. Interaction significance is reported between school and group.

Table 8

Perception of Climate Held by Achievers and Nonachievers
on Subscale: Administration

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig. of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rows (School)</td>
<td>16.646</td>
<td>2</td>
<td>8.323</td>
<td>14.220</td>
<td>.000*</td>
</tr>
<tr>
<td>Columns (Groups)</td>
<td>21.360</td>
<td>1</td>
<td>21.360</td>
<td>36.494</td>
<td>.000*</td>
</tr>
<tr>
<td>Interaction</td>
<td>27.628</td>
<td>2</td>
<td>13.814</td>
<td>23.601</td>
<td>.000*</td>
</tr>
<tr>
<td>Explained</td>
<td>65.745</td>
<td>5</td>
<td>13.149</td>
<td>22.465</td>
<td>.000*</td>
</tr>
<tr>
<td>Residual</td>
<td>100.672</td>
<td>172</td>
<td>0.585</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>166.418</td>
<td>177</td>
<td>0.940</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .05.
When the data were treated together (see Table 8), a significant difference ($p < .01$) was found in how achievers and nonachievers perceive administration. As measured by the ANOVA testing, a significant difference ($p < .01$) was also found between schools (S, R, and U) on administration. The effects of the independent climate variable were significantly different demonstrating the presence of interaction of both group and school.

Table 9 is a summary ANOVA table for Climate Area 4, Student Academic Orientation. The row scores are by school and the column scores are by achievement group membership. Interaction significance is reported between school and group.

Table 9  
Perception of Climate Held by Achievers and Nonachievers on Subscale: Student Academic Orientation

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig. of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rows (School)</td>
<td>8.144</td>
<td>2</td>
<td>4.072</td>
<td>6.796</td>
<td>.001*</td>
</tr>
<tr>
<td>Columns (Groups)</td>
<td>21.392</td>
<td>1</td>
<td>21.392</td>
<td>35.703</td>
<td>.000*</td>
</tr>
<tr>
<td>Interaction</td>
<td>34.493</td>
<td>2</td>
<td>17.246</td>
<td>28.784</td>
<td>.000*</td>
</tr>
<tr>
<td>Explained</td>
<td>64.061</td>
<td>5</td>
<td>12.812</td>
<td>21.384</td>
<td>.000*</td>
</tr>
<tr>
<td>Residual</td>
<td>103.055</td>
<td>172</td>
<td>0.599</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>167.116</td>
<td>177</td>
<td>0.944</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .05.
When the data were treated together (see Table 9), a significant difference ($p < .01$) was found in how achievers and nonachievers perceive student academic orientation. As measured by the ANOVA testing, a significant difference ($p < .01$) was also found between schools (S, R, and U) on student academic orientation. The effects of the independent climate variable were significantly different demonstrating the presence of interaction of both group and school.

Table 10 is a summary ANOVA table for Climate Area 5, Student Behavioral Values. The row scores are by school and the column scores are by achievement group membership. Interaction significance is reported between school and group.

Table 10

Perception of Climate Held by Achievers and Nonachievers on Subscale: Student Behavioral Values

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig. of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rows (School)</td>
<td>0.051</td>
<td>2</td>
<td>0.025</td>
<td>0.034</td>
<td>.967</td>
</tr>
<tr>
<td>Columns (Groups)</td>
<td>4.220</td>
<td>1</td>
<td>4.220</td>
<td>5.628</td>
<td>.019*</td>
</tr>
<tr>
<td>Interaction</td>
<td>22.432</td>
<td>2</td>
<td>11.216</td>
<td>14.957</td>
<td>.000*</td>
</tr>
<tr>
<td>Explained</td>
<td>26.711</td>
<td>5</td>
<td>5.342</td>
<td>7.124</td>
<td>.000*</td>
</tr>
<tr>
<td>Residual</td>
<td>128.977</td>
<td>172</td>
<td>0.750</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>155.688</td>
<td>177</td>
<td>0.880</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .05.
When the data were treated together (see Table 10), a significant difference ($p < .01$) was found in how achievers and nonachievers perceive student behavioral values. As measured by the ANOVA testing, the subscale, Student Behavioral Values, was not significant between schools ($p = .967$). The effects of the independent climate variable were significantly different demonstrating the presence of interaction of both group and school.

Table 11 is a summary ANOVA table for Climate Area 6, Guidance. The row scores are by school and the column scores are by achievement group membership. Interaction significance is reported between school and group.

Table 11

Perception of Climate Held by Achievers and Nonachievers on Subscale: Guidance

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig. of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rows (School)</td>
<td>52.881</td>
<td>2</td>
<td>26.440</td>
<td>45.414</td>
<td>.000*</td>
</tr>
<tr>
<td>Columns (Groups)</td>
<td>18.072</td>
<td>1</td>
<td>18.072</td>
<td>31.041</td>
<td>.000*</td>
</tr>
<tr>
<td>Interaction</td>
<td>21.437</td>
<td>2</td>
<td>10.719</td>
<td>18.410</td>
<td>.000*</td>
</tr>
<tr>
<td>Explained</td>
<td>94.678</td>
<td>5</td>
<td>18.936</td>
<td>32.524</td>
<td>.000*</td>
</tr>
<tr>
<td>Residual</td>
<td>95.482</td>
<td>164</td>
<td>0.582</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>190.161</td>
<td>169</td>
<td>1.125</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$p < .05$. 

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When the data were treated together (see Table 11), a significant difference \( (p < .01) \) was found in how achievers and nonachievers perceive guidance. As measured by the ANOVA testing, a significant difference \( (p < .01) \) was also found between schools (S, R, and U) on guidance. The effects of the independent climate variable were significantly different demonstrating the presence of interaction of both group and school.

Table 12 is a summary ANOVA table for Climate Area 7, Student-Peer Relationships. The row scores are by school and the column scores are by achievement group membership. Interaction significance is reported between school and group.

### Table 12
Perception of Climate Held by Achievers and Nonachievers on Subscale: Student-Peer Relationships

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig. of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rows (School)</td>
<td>0.342</td>
<td>2</td>
<td>0.171</td>
<td>0.294</td>
<td>.745</td>
</tr>
<tr>
<td>Columns (Groups)</td>
<td>26.023</td>
<td>1</td>
<td>26.023</td>
<td>44.755</td>
<td>.000*</td>
</tr>
<tr>
<td>Interaction</td>
<td>16.986</td>
<td>2</td>
<td>8.493</td>
<td>14.606</td>
<td>.000*</td>
</tr>
<tr>
<td>Explained</td>
<td>43.538</td>
<td>5</td>
<td>8.708</td>
<td>14.975</td>
<td>.000*</td>
</tr>
<tr>
<td>Residual</td>
<td>95.360</td>
<td>164</td>
<td>0.581</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>138.898</td>
<td>169</td>
<td>0.822</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\*\( p < .05 \).
When the data were treated together (see Table 12), a significant difference ($p < .01$) was found in how achievers and nonachievers perceive student-peer relationships. As measured by the ANOVA testing, the subscale, Student-Peer Relationships, was not significant between schools ($p = .745$). The effects of the independent climate variable were significantly different demonstrating the presence of interaction of both group and school.

Table 13 is a summary ANOVA table for Climate Area 8, Parent and Community-School Relationships. The row scores are by school and the column scores are by achievement group membership. Interaction significance is reported between school and group.

Table 13

Perception of Climate Held by Achievers and Nonachievers on Subscale: Parent and Community-School Relationships

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig. of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rows (School)</td>
<td>27.699</td>
<td>2</td>
<td>13.849</td>
<td>21.261</td>
<td>.000*</td>
</tr>
<tr>
<td>Columns (Groups)</td>
<td>1.641</td>
<td>1</td>
<td>1.641</td>
<td>2.519</td>
<td>.114</td>
</tr>
<tr>
<td>Interaction</td>
<td>13.605</td>
<td>2</td>
<td>6.802</td>
<td>10.443</td>
<td>.000*</td>
</tr>
<tr>
<td>Explained</td>
<td>43.465</td>
<td>5</td>
<td>8.693</td>
<td>13.345</td>
<td>.000*</td>
</tr>
<tr>
<td>Residual</td>
<td>106.830</td>
<td>164</td>
<td>0.651</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>150.295</td>
<td>169</td>
<td>0.889</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .05.*
When the data were treated together (see Table 13), there was no significance ($p = .114$) between achievers and nonachievers on perception of parent and community-school relationships. As measured by the ANOVA testing, a significant difference ($p < .01$) was found between schools (S, R, and U) on parent and community-school relationships. The effects of the independent climate variable were significantly different demonstrating the presence of interaction of both group and school.

Table 14 is a summary ANOVA table for Climate Area 9, Instructional Management. The row scores are by school and the column scores are by achievement group membership. Interaction significance is reported between school and group.

Table 14

Perception of Climate Held by Achievers and Nonachievers on Subscale: Instructional Management

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig. of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rows (School)</td>
<td>26.896</td>
<td>2</td>
<td>13.448</td>
<td>33.589</td>
<td>.000*</td>
</tr>
<tr>
<td>Columns (Groups)</td>
<td>18.373</td>
<td>1</td>
<td>18.373</td>
<td>45.892</td>
<td>.000*</td>
</tr>
<tr>
<td>Interaction</td>
<td>18.386</td>
<td>2</td>
<td>9.193</td>
<td>22.962</td>
<td>.000*</td>
</tr>
<tr>
<td>Explained</td>
<td>65.278</td>
<td>5</td>
<td>13.056</td>
<td>32.610</td>
<td>.000*</td>
</tr>
<tr>
<td>Residual</td>
<td>65.659</td>
<td>164</td>
<td>0.400</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>130.937</td>
<td>169</td>
<td>0.775</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .05.
When the data were treated together (see Table 14), a significant difference \( p < .01 \) was found in how achievers and nonachievers perceive instructional management. As measured by the ANOVA testing, a significant difference \( p < .01 \) was also found between schools (S, R, and U) on instructional management. The effects of the independent climate variable were significantly different demonstrating the presence of interaction of both group and school.

Table 15 is a summary ANOVA table for Climate Area 10, Student Activities. The row scores are by school and the column scores are by achievement group membership. Interaction significance is reported between school and group.

Table 15

Perception of Climate Held by Achievers and Nonachievers on Subscale: Student Activities

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig. of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rows (School)</td>
<td>28.757</td>
<td>2</td>
<td>14.379</td>
<td>22.373</td>
<td>.000*</td>
</tr>
<tr>
<td>Columns (Groups)</td>
<td>44.629</td>
<td>1</td>
<td>44.629</td>
<td>69.443</td>
<td>.000*</td>
</tr>
<tr>
<td>Interaction</td>
<td>38.043</td>
<td>2</td>
<td>19.021</td>
<td>29.597</td>
<td>.000*</td>
</tr>
<tr>
<td>Explained</td>
<td>113.656</td>
<td>5</td>
<td>22.731</td>
<td>35.369</td>
<td>.000*</td>
</tr>
<tr>
<td>Residual</td>
<td>105.400</td>
<td>164</td>
<td>0.643</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>219.056</td>
<td>169</td>
<td>1.296</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\*\( p < .05 \).
When the data were treated together (see Table 15), a significant difference \((p < .01)\) was found in how achievers and nonachievers perceive student activities. As measured by the ANOVA testing, a significant difference \((p < .01)\) was also found between schools (S, R, and U) on student activities. The effects of the independent climate variable were significantly different demonstrating the presence of interaction of both group and school.

**Hypothesis 3:** The perceptions of school climate held by at-risk students (nonachievers) will differ significantly from the NASSP school climate national normative scores.

The question is descriptive in nature and was responded to by the preparation of "box and whisker" graphs provided by the Western Michigan University scoring service. The graphs illustrate the raw score distributions of at-risk student climate scores in comparison with national normative scores. The boxes represent 68% of the scores in the normative distribution, while the vertical lines above and below the box indicate the upper and lower 16% of the distribution (see Tables 16, 17, and 18 and Figures 1, 2, and 3).

There are obvious differences between sample Michigan public school at-risk student climate scores and national normative scores at School 10 (S) Items 1, 3, 4, 8, 9, and 10; School 11 (R) Items 1, 2, 3, 4, 5, and 7; and School 12 (U) Items 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10. Discussion will follow in Chapter V.
Table 16
NASSP Student Climate Survey: School 10, Group 02, Winter 1990

<table>
<thead>
<tr>
<th>Scale name</th>
<th>Items</th>
<th>School</th>
<th>National</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>SS</td>
<td>Mean</td>
</tr>
<tr>
<td>1. Teacher-Student Relationships</td>
<td>1-12</td>
<td>35</td>
<td>34.9</td>
</tr>
<tr>
<td>2. Security and Maintenance</td>
<td>13-19</td>
<td>44</td>
<td>25.2</td>
</tr>
<tr>
<td>3. Administration</td>
<td>20-25</td>
<td>31</td>
<td>17.3</td>
</tr>
<tr>
<td>4. Student Academic Orientation</td>
<td>26-29</td>
<td>39</td>
<td>12.5</td>
</tr>
<tr>
<td>5. Student Behavioral Values</td>
<td>30-32</td>
<td>54</td>
<td>7.9</td>
</tr>
<tr>
<td>6. Guidance</td>
<td>33-36</td>
<td>50</td>
<td>15.2</td>
</tr>
<tr>
<td>7. Student-Peer Relationships</td>
<td>37-40</td>
<td>41</td>
<td>12.9</td>
</tr>
<tr>
<td>8. Parent and Community-School Relationships</td>
<td>41-44</td>
<td>38</td>
<td>12.7</td>
</tr>
<tr>
<td>9. Instructional Management</td>
<td>45-51</td>
<td>34</td>
<td>24.2</td>
</tr>
<tr>
<td>10. Student Activities</td>
<td>52-55</td>
<td>35</td>
<td>12.8</td>
</tr>
</tbody>
</table>
Figure 1. NASSP Student Climate Survey: School 10, Group 02, Winter 1990.
<table>
<thead>
<tr>
<th>Scale name</th>
<th>Items</th>
<th>School Mean</th>
<th>National Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Teacher-Student Relationships</td>
<td>1-12</td>
<td>32</td>
<td>34.1</td>
<td>39.2</td>
</tr>
<tr>
<td>2. Security and Maintenance</td>
<td>13-19</td>
<td>32</td>
<td>22.7</td>
<td>26.5</td>
</tr>
<tr>
<td>3. Administration</td>
<td>20-25</td>
<td>25</td>
<td>16.5</td>
<td>20.3</td>
</tr>
<tr>
<td>4. Student Academic Orientation</td>
<td>26-29</td>
<td>31</td>
<td>11.7</td>
<td>13.5</td>
</tr>
<tr>
<td>5. Student Behavioral Values</td>
<td>30-32</td>
<td>19</td>
<td>5.7</td>
<td>7.6</td>
</tr>
<tr>
<td>6. Guidance</td>
<td>33-36</td>
<td>52</td>
<td>15.3</td>
<td>15.1</td>
</tr>
<tr>
<td>7. Student-Peer Relationships</td>
<td>37-40</td>
<td>4</td>
<td>10.0</td>
<td>13.7</td>
</tr>
<tr>
<td>8. Parent and Community-School Relationships</td>
<td>41-44</td>
<td>42</td>
<td>13.1</td>
<td>13.9</td>
</tr>
<tr>
<td>9. Instructional Management</td>
<td>45-51</td>
<td>22</td>
<td>22.8</td>
<td>26.2</td>
</tr>
<tr>
<td>10. Student Activities</td>
<td>52-55</td>
<td>43</td>
<td>13.7</td>
<td>14.7</td>
</tr>
</tbody>
</table>
Figure 2. NASSP Student Climate Survey: School 11, Group 02, Winter 1990.
Table 18
NASSP Student Climate Survey: School 12, Group 02, Winter 1990

<table>
<thead>
<tr>
<th>Scale name</th>
<th>Items</th>
<th>School</th>
<th>National</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>SS</td>
<td>Mean</td>
</tr>
<tr>
<td>1. Teacher-Student Relationships</td>
<td>1-12</td>
<td>-18</td>
<td>20.1</td>
</tr>
<tr>
<td>2. Security and Maintenance</td>
<td>13-19</td>
<td>-19</td>
<td>12.6</td>
</tr>
<tr>
<td>3. Administration</td>
<td>20-25</td>
<td>-27</td>
<td>8.6</td>
</tr>
<tr>
<td>4. Student Academic Orientation</td>
<td>26-29</td>
<td>-20</td>
<td>7.1</td>
</tr>
<tr>
<td>5. Student Behavioral Values</td>
<td>30-32</td>
<td>10</td>
<td>5.2</td>
</tr>
<tr>
<td>6. Guidance</td>
<td>33-36</td>
<td>-42</td>
<td>7.7</td>
</tr>
<tr>
<td>7. Student-Peer Relationships</td>
<td>37-40</td>
<td>-1</td>
<td>9.6</td>
</tr>
<tr>
<td>8. Parent and Community-School Relationships</td>
<td>41-44</td>
<td>-14</td>
<td>7.5</td>
</tr>
<tr>
<td>9. Instructional Management</td>
<td>45-51</td>
<td>-59</td>
<td>13.1</td>
</tr>
<tr>
<td>10. Student Activities</td>
<td>52-55</td>
<td>-19</td>
<td>6.3</td>
</tr>
</tbody>
</table>
Figure 3. NASSP Student Climate Survey: School 12, Group 02, Winter 1990.
Summary

This chapter contained a profile of the research respondents and reported findings for each of the research hypotheses. The unit of analysis in this study was the individual high school student identified as fitting a profile of achiever or nonachiever. Two groups were formed at suburban, rural, and urban sites using random sampling procedures and the NASSP School Climate Survey was administered.

The first research hypothesis was addressed through descriptive analyses in the form of tables to classify and summarize the data. The second hypothesis was presented using summary ANOVA tables. The sample groups differed significantly on all climate items with the exception of Parent and Community-School Relationships at .114.

The third research hypothesis was descriptive in nature and was presented in "box and whisker" graphs to illustrate the raw score distribution of at-risk student climate scores in comparison with national normative scores. The box represents 68% of the scores in the normative distribution, while the vertical lines above and below the box indicate the upper and lower 16% of the distribution. There were significant differences between the scores for the at-risk group and the national normative distribution.

Chapter V includes conclusions, discussion, and recommendations for further inquiry.
CHAPTER V

CONCLUSIONS, DISCUSSION, AND RECOMMENDATIONS

The purpose of this field research study was to describe the differences in perceptions of school climate, as measured on the 10 subscales of the National Association of Secondary School Principals (NASSP) School Climate Survey, for at-risk students as compared to students not classified as at-risk.

The major research hypotheses were:

1. There are significant differences in the perceptions of achievers and nonachievers within each of three schools for the 10 subscales of the NASSP School Climate Survey.

2. When the data for achievers in three schools and the data for nonachievers in three schools are aggregated, there will be significant differences in the perceptions of achievers as compared to nonachievers for each of the NASSP subscales.

In addition to the first two hypotheses a decision was made to examine a third hypothesis if the conclusion based on the findings of the first two hypotheses was that significant differences existed for more than half of the 10 subscales. This third hypothesis was:

3. The perceptions of school climate held by at-risk students will differ significantly from the NASSP school climate national norms.
This chapter contains the major findings and conclusions of the study as well as recommendations for future research.

Major Findings

Finding 1: A major finding was that student perception of school climate and student achievement level have a significant positive relationship. Overall school climate scores tended to increase with achievement group membership and decrease with non-achievement membership with groups identified as achievers and non-achievers scoring significantly different on perception of school climate. This confirms a prior expectation derived from the review of the literature concerning perception of school climate and the at-risk population.

Finding 2: The second major finding was the difference in at-risk climate perceptions which exist in the urban setting when compared to the rural and suburban settings.

Finding 3: The third major finding was the significant difference in perception of school climate which exists between the at-risk and NASSP national normative scores.

Finding 4: A fourth major finding seems to suggest that there is significant interaction present within each school between the independent climate variables, schools, subgroups, and student achievement. The interaction operates in a very complex manner and although beyond the scope of this research demands further inquiry. Conclusions and further discussion will follow.
Conclusions

Conclusion 1: The first conclusion was, given the positive relationship between perception of school climate and level of achievement, building leaders need to assess student perception of school climate.

Although the question of why the two groups differ in climate perception and achievement is extremely complex, the knowledge of the difference of perception within a school is a starting point for study and debate of the question: What effect does school climate have on student achievement? The significance of the differences which exist between the groups cannot be ignored, but can only be explored and explained through field examinations that thoroughly analyze a given school.

With perception of climate having a positive and significant effect on achievement and a residual effect on retention, achievers are more likely to remain in school, it follows that all principals should assess their individual school climate. The leadership of each school should examine the differing perceptions of reality which exist for achievers and nonachievers. Further discussion of this conclusion will occur later in this chapter.

Conclusion 2: The second conclusion was that there seems to be significant differences between the at-risk perceptions in different demographic settings which would have an effect on at-risk intervention planning. The differences were most pronounced between the urban at-risk and suburban at-risk groups. This seems to
suggest the importance of knowing the needs of the at-risk population before becoming committed to a particular intervention plan or strategy since the same retention program may not work in different demographic settings.

Recommendations for Further Research

Meeting the needs of the at-risk student population would require fundamental changes in school programming. There is little argument in the professional literature that American schools have a credibility problem with regard to at-risk student perceptions of school. To establish credibility schools need to provide positive experiences to children who have endured negative experiences possibly each day of their lives. When ineffective schools change their practices and programs, perhaps student attitudes and behaviors will also change.

If the young person is consistently discouraged by the school because he or she receives signals about academic inadequacies and failures, perceives little interest or caring from teachers, and sees the institutional discipline system as both ineffective and unfair, then it is not unreasonable to expect that the student will become alienated and uncommitted to getting a high school diploma. (Wehlage et al., 1986, p. 70)

Learning Style

Student attitudes about school, teachers, and learning improve when they are taught by methods and with resources that are suited to their individual and unique characteristics. High achieving
students exhibit different learning styles from students who are not achieving (Anthony, 1984; Dunn, 1982).

Cooperative Learning

Cooperative learning, a team approach to learning, is effective in differentiating instruction, especially for the at-risk population, since students of different abilities work together in small groups. The purpose of cooperative learning is to make learning individual, fun, and more effective than the traditional "whole class" approach (Good & Brophy, 1987; Kohn, 1988). Whole class instruction has been identified as particularly ineffective for the at-risk student population (Presseisen, 1988).

Goodlad (1987) recommended a balanced academic curriculum with a reserve of methods to be used as needed. Boyer (1983) recommended close relationships for the at-risk students, counselors, and teachers to develop a relationship of trust and to build a sense of belonging for the students.

Alternative Education

A difficult problem for educators is how to focus attention on the at-risk student population without sacrificing the quality of the program being offered to both the at-risk and other students. School leaders who design remedial programs to keep at-risk students in school often make accommodations to the students to meet the individual wants and needs of the at-risk population resulting in a "watering down" of the program requirements. In a study of at-risk
students, institutional, classroom, and teacher levels of accommodation designed to hold students in school were identified. Accommodation was defined as a concern for student needs in an effort to make school a more pleasant experience. The goal of accommodation, perceived by those designing the program, was to make school more positive, less threatening, and therefore, a place to stay. The findings of the study included three negative side effects of remedial or alternative programming: (1) student expectations that accommodations will always be made, (2) learning did not require even moderate levels of student active engagement with the content of instruction, and (3) student apathy and boredom (Miller, Leinhardt, & Zigmond, 1985). While attempting to increase the rate of retention by making accommodations to the students, school leaders should be aware of the exchange which affects the credibility of the educational process. Just having a preventive or alternative program for the at-risk population is not the same as being accountable to the at-risk population (Hamilton, 1986).

To establish validity and credibility, the alternative program must be responsive to the needs of the individual students, the school system, and society. The expectation for all high school graduates should be the performance of academic and civic competencies demonstrating the credibility of the high school diploma (Benjamin, 1989).

In order for a secondary alternative program to be successful in retaining students it must provide an opportunity to graduate to truant youths and students with poor academic or behavioral records.
Two critical elements have been identified which could enable alternative schools to retain more students: an intense learning environment and considerable concern accorded the social and emotional needs of the students (Hahn, 1987).

Horizon High School in Bakersfield, California, was founded to meet the needs of unsatisfied students and parents of the local community. Horizon, an alternative and open high school, manages to send over 80% of its students on to some form of higher education, far above the state of California average. How does Horizon do it? Part of the answer rests in a daily period during which each teacher assumes guidance responsibility for 15-20 students, giving each student a caring friend on the faculty (Amenta, 1982). To demonstrate care or concern for the at-risk student population, teachers should know the young people by name; ask about their lives; and assign, grade, and return homework. Teacher commitment to improve the academic and social performance of a student, as measured by the perception of the student, has been established as a significant variable in schools rated as excellent (Austin & Garber, 1985). The teacher must be capable of building a relationship of trust with the at-risk student in order to promote achievement (Lipsitz, 1984). The need for caring is far more clear than how to get it where it does not exist, especially since dropout programs are not the most sought after teacher assignments (Mann, 1985, 1987).

Care and concern for the at-risk student should not end when the student ceases to attend the secondary program. About half of all dropouts will return to school for high school completion in
some form of adult education. While most school districts have programs in place, they do not focus on the needs of the adult dropout. The present programs often reinforce a sense of incompetence and result in double dropout (Hahn, 1987). There are many alternative routes a student can follow to complete high school or complete vocational training. In many districts, it is possible to complete both the vocational training and high school credits concurrently resulting in both credentials and necessary job training for returning students. Figure 4 presents nontraditional paths (Pallas & Verdugo, 1986).

Figure 4. K-12 Alternative Educational Paths.

Accountability for the At-Risk Population

In order to be accountable, which is defined as encompassing both validity and credibility, to the at-risk students and to society in general, it will be necessary for building leadership to determine a sound research based plan of action. Educational leaders know more about why students drop than the more important question: What programming interventions will successfully improve the retention rate?

Follow-up interviews at sample schools provided a number of topics for further inquiry. These topics identified during interviews with students are discussed in the remainder of this chapter preceded by the student comment.

Causation or Symptoms

"I'm a Level 1 student, you know, the dummy class."

Educational leaders must defend against the endless array of programs which consider the symptoms but fail to address the causes of the retention problem. Under scrutiny, many remedial programs are Band-Aid approaches to cases calling for major surgery, many retention programs are oversimplified and even harmful to the students they are designed to help. Many schools have remedial programs which foster a climate of failure, the opposite of what they were set up to accomplish. Poor remedial or alternative programs like poor incarceration, can retard the growth and development of a student. For an alternative program to be effective it must offer
more, not less, to at-risk students, reinforcing basic skills through enriched instruction and high expectations and not with more drill and practice. For an improvement program to gain credibility it must address causes, it must be comprehensive, and it must involve all the groups in the school. The focus should be shifted from the student who drops out to the conditions of the school which led to the decision to drop out.

Perception of Reality

"In this school no one cares about us."

The cultural reference points for nonachievers (their version of reality) and achievers is quite different as is demonstrated in the perceptual data for the groups in this study (see Tables 6-15). One could logically assume the same differences would exist between the school staff and the nonachievers, perhaps in an even greater disparity. The recognition of these differing views of reality are necessary, as a first step, if one hopes to improve communication and create a more effective learning environment for the at-risk group. The reasons for teacher apathy are extensive and would make an excellent study topic. Subjects of interest would include: teacher training, class sizes, curriculum development, teacher evaluation, teacher pay, working conditions, building leadership, parental involvement, and dozens of other variables related to how well teachers meet the individual needs of their students.
Funding Inequities

"This school is broke. We don't even have books for some classes."

Every student who quits school ends up costing the state thousands of dollars in lost tax revenues, not to mention welfare increases and the overall decrease in the quality of life for the student. Perhaps if the funding amounts were increased for the at-risk population making them more attractive, schools would have an incentive to meet their needs.

Money is always an issue when one discusses public schools. The spending gap between the rich and poor districts in Michigan is wide. Per pupil spending in Michigan districts ranges from $2,200 to $8,000. This is not to say money is the "answer" to solve the problems of the at-risk students; only that it may be one of the components.

As Thoreau (cited in Krutch, 1965) once wrote "If you give money, spend yourself with it, and do not merely abandon it to them" (p. 132).

Quality Instruction

"There are a few good teachers here who really try and teach us."

To change the status quo teachers must tailor their practices to the needs of their students if they hope to reach the at-risk population. When at-risk students are made to feel a part of the
class, they tend to contribute to the individual class and to the school.

Outstanding staff and support people are needed who are willing to do what is necessary to reach at-risk students. They must be patient and willing to spend an enormous amount of time teaching, willing to go beyond the school day, giving a ride home, or a ride to school when needed. They must be willing to assist the student with life problems, tutoring in other classes, scheduling, and study habits, always trying to apply little lessons to real life situations. And in the end, probably receiving little or nothing in the way of a thank you other than knowing they helped. To be effective the school staff must share, as a team, a goal to be accountable to the at-risk student population. When heart and spirit are lacking in a school, a sense of weariness resides which results in a goal of day-to-day survival for both staff and students.

Leadership and Institutional Change

"Nothing ever changes here."

An inability on the part of school leadership to provide more demanding training and annual evaluation for principals and teachers is part of the problem.

The bureaucratic school systems in this study include a number of unions, each with a contract which must be followed. Teachers are often assigned to a position or a building based on seniority and not on ability or interest. For example, a teacher with a willingness to teach the at-risk population in the area of social
studies at the suburban school in this study would have to have 25 years of seniority in the district to qualify for the department position. Radical changes are necessary to alter the present system—unlikely, given the conservative nature of unions, but critical to bring about change.

**Economic Opportunity**

"I'll probably be on ADC like my mother."

Demographers are projecting tremendous opportunities for young people by the year 2000. Projections of opportunity are especially promising for minority students and women who are projected to fill three of four new positions. Employment opportunities could serve as a bridge between the world of education and work to motivate young people to stay in school. Many young people are frustrated and have disassociated themselves from school; feeling as if they owe nothing to society, they lead lives of desperation. Having an opportunity projected and actually having the job are of course two very different issues. In order to get the job one must have received adequate educational training.

**Accountability**

"I know it's too late for me but maybe my little brother can be helped."

Who is responsible and who is accountable to the at-risk population? Too often, the local government blames the state, the state blames the federal government, the elementary teacher blames the
family, the junior high teacher blames the elementary, the high school teacher blames the junior high, the mother blames the father, while the father blames the mother. Where does it all end? Who will say the buck stops here? Who will stand up when it comes to accepting the blame for why so many young people are not achieving? Has the path of least resistance and a traditional bureaucratic model allowed public education to avoid its responsibility to educate all the students?

There is no magic method to solve the retention problem, there is only the individual school and its staff, parents, and community, responsible and accountable for and to all the students. Accountability for at-risk student achievement must come from the people who work with the students on a daily basis and not from governmental bodies with good intentions.

A critical component of accountability for the at-risk student is the realization that the individual school is the appropriate unit of analysis and must first reform itself if change is to occur. To bring out higher achievement for the at-risk population, complacency and tolerance must be replaced with high expectations and compassion. The cooperative efforts of staff, students, and community are needed to change the system. Follow-through is essential as is the need for a comprehensive approach. Perhaps the traditional school model which allows anonymity for nonachieving students is not working for the at-risk population and different ideas need to be tried, such as providing a linkage between school and work by widening the curriculum, offering more vocational opportunities,
providing counseling services and parental outreach during elementary school, and linking community services with access to health and social service agencies for the at-risk population. The process all begins with the assessment of school climate to plan for school improvement.
Appendix B

NASSP Technical Manual, School Climate Survey
Appendix C

National Evaluation Study of CASE Model
The Comprehensive Assessment of School Environments (CASE) model was evaluated in three steps. First, three sets of bivariate correlational analyses were conducted on the various linkages of the model. The second procedure was to examine the correlations to eliminate variables that did not relate well to the model. Removing inappropriate variables permitted the third step of regression and path analyses to be conducted as suggested by the NASSP model authors. The national validation study identified 34 variables judged to be useful in understanding the effectiveness and efficiency of a school and in making recommendations for appropriate interventions aimed at improving student outcome (NASSP Technical Manual, 1989, p. 41).
Appendix D

An Interactive Model of the School Environment

Date: December 11, 1989
To: Frank D. Garrett
From: Mary Anne Bunda, Chair

This letter will serve as confirmation that your research protocol concerning the relationship between student perception of school climate and student retention rates has been approved under the exempt category of review by the HSIRB. The conditions and duration of this approval are specified in the Policies of Western Michigan University. You may now begin to implement the research as described in the approval application. You must seek reapproval for any changes in this design.

The Board wishes you success in the pursuit of your research goals.

cc: E. Kelley, Educational Leadership

HSIRB Project Number 89-11-09
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