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Second language learners' perceptions of school climate and educational satisfaction and their relationships to academic achievement and the mediational effects of gender

Varona, Marcelino, Jr., Ed.D.

The University of Arizona, 1994

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SECOND LANGUAGE LEARNERS' PERCEPTIONS OF SCHOOL CLIMATE
AND EDUCATIONAL SATISFACTION AND THEIR RELATIONSHIPS TO
ACADEMIC ACHIEVEMENT AND THE MEDIATIONAL EFFECTS OF GENDER

by

Marcelino Varona, Jr.

A Dissertation Proposal Submitted to the Faculty of the

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As members of the Final Examination Committee, we certify that we have read the dissertation prepared by Marcelino Varona, Jr.

entitled Second Language Learners' Perceptions of School
Climate and Educational Satisfaction and Their
Relationships to Academic Achievement and the
Mediational Effects of Gender

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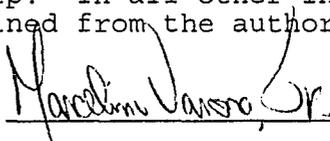
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ABSTRACT

The purposes of this study were (1) to compare perceptions of school climate measured by 10 subscales of the NASSP School Climate Survey and student satisfaction measured by 8 subscales of the Student Satisfaction Survey of language-minority students to those of non-language-minority students and (2) to investigate whether students' perceptions of school climate, student satisfaction, gender, or language group affected students' academic achievement.

The sample population included ninth-grade students at Nogales High School. Students were classified as second-language learners according to the district's Identification, Assessment, and Program Placement flow chart. The study used four independent predictors of reading and math achievement: language group, gender, school climate, and student satisfaction. A multiple regression analysis tested relationships between the predicated variable and independent predictors. The Pearson product-moment correlation determined the relationship between student satisfaction and perception of school climate. A two-way analysis of variance (ANOVA) distinguished whether satisfaction and perceptions of school climate were different for second-language learners and non-second-language learners and whether there was a difference in satisfaction and perceptions of school climate by gender

among second-language learners and non-second-language learners.

The findings of this study indicated a moderate correlation between student satisfaction and perceptions of school climate. Statistically significant differences were found by language group for student satisfaction and for satisfaction by gender among non-second-language learners. No statistically significant differences were found by language group for school climate, for gender among second-language learners for satisfaction or school climate, or between perceptions of school climate for boys and girls among non-second-language learners.

The parameter estimates showed that gender, school climate, and language group were significant independent predictors of reading achievement, while student satisfaction was not. Language group was the only significant independent predictor of mathematics achievement.

CHAPTER 1

INTRODUCTION

Research on effective schools has provided educational leaders with a broad horizon of understanding and insight; however, this research has predominantly focused on urban elementary schools in low-income neighborhoods (Lucas, Henze, & Donato, 1990). The literature on effective schools and their impact on the education of language-minority students (that is, students for whom English is their secondary language) is limited in scope. Nonetheless, secondary schools with a large percentage of language-minority students must provide an environment that is conducive to learning and which gives all students the opportunity to experience success.

In "Effective Schools for the Urban Poor," Edmonds (1979) stated: "All children are eminently educable, and the behavior of the school is critical in determining the quality of the education" (p. 20). It is this behavior that will affect the academic success of language-minority students. These perceptions of academic success as well as student outcomes and their relationship to school climate and student satisfaction in combination with the mediational

effects of gender will enhance a school's curriculum design and the delivery of instruction.

It is difficult to separate the research on effective schools, school climate, and student satisfaction. These three variables must be interactive. The literature on effective schools identifies the characteristics of successful schools. These characteristics include strong leadership, high expectations of students, school-wide staff development, parent involvement and support, recognition of students' academic success, district support, collaborative planning, collegial relationships, and a sense of community (Edmonds, 1979; Purkey & Smith, 1983). The National Association of Secondary School Principals' (NASSP) (1982) Comprehensive Assessment of School Environments has identified certain sociological characteristics as correlates of effectiveness:

1. Clearly stated goals, a high degree of consensus among participant groups, and shared expectations that all persons can attain the goals.
2. An orderly environment.
3. Strong leadership with regard to both norm-forming behaviors (transformational leadership to establish new standards and to provide a sense of vision) and transactional

behaviors (those which state expectations and enforce norms adopted within the environment). (p. 1)

Effective schools have the same characteristics as successful societies or organizations: a sense of purpose, a sense of security, and leadership that accomplishes the immediate tasks and provides a sense of vision for the future. When societal norms stress success or effectiveness, these norms become, to some extent, self-sustaining. When societal norms do not stress success, interventions to change these norms often require high intensity, and changes are likely to occur slowly (Austin, 1979; Bridge, Judd, & Moock, 1979; Brookover et al., 1982; Brookover & Lezotte, 1979; Edmonds, 1982; ERIC, 1984; Lipham, 1981; Phi Delta Kappa, 1980; Purkey & Smith, 1982; Rogus, 1983; Stallings & Mohlman, 1981).

Research conducted by Lucas et al. (1990) emphasized that common elements of schools that are successful with language-minority students include a positive attitude toward the students, willingness to question conventional practices, strong and competent leadership, highly committed teaching staff, high expectations and standards, and an emphasis on high academic achievement. This research further indicated that a number of studies have examined effective instructional practices for language-minority

students in elementary bilingual programs (Ramirez, 1988; Tikunoff, 1985; Wong-Fillmore, McLaughlin, Ammon, & Ammon, 1985). However, there is little research at the secondary level and little at either the elementary or secondary level that looks beyond effective classroom instruction to the issues involved in effective schooling for language-minority students. In a critique of the ways in which the "effective schools formula" has been applied, Stedman (1987) argued for a reconceptualization of the effective schools literature focusing on "detailed descriptions of school organization and practice" (p. 217) and on providing "concrete guidance about what to do to make a school effective" (p. 218). Methods utilized by "good" schools to foster cultural pluralism need to be documented, Stedman wrote, and more attention to secondary schools is needed.

Research indicates that there are numerous definitions of "school climate" (Soberanis, 1984), and the difficulty of defining school climate is reflected in the diversity of climate typologies that have evolved, despite their often common roots (Anderson, 1982). Yet, school climate is a motivating factor that contributes to student academic success and outcomes. It is on these areas that this study focuses. Since few studies delineate academic outcomes based on school climate and student satisfaction on secondary school campuses and even fewer relate this to

language-minority students, this study focuses on language-minority students' perceptions of school climate and student satisfaction and their relationship to academic achievement and the mediational effects of gender.

Purpose of the Study

The purpose of this study is to compare the academic perceptions on 10 subscales of the School Climate Survey (Kelley, Glover, Keefe, Halderson, Sorenson, & Speth, 1986) (see Appendix A) and 8 subscales of the Student Satisfaction Survey (Schmitt & Loher, 1986) (see Appendix B) of language-minority students to those of non-language-minority students with the mediational effects of gender on a predominantly Hispanic secondary school campus employing instruments designed to measure school climate and student satisfaction. Student perceptions on the Climate Survey include the following subscales: Teacher-Student Relationships, Security and Maintenance, Administration, Student Academic Orientation, Student Behavioral Values, Guidance, Student-Peer Relationships, Parent and Community-School Relationships, Instructional Management, and Student Activities. Student perceptions on the Satisfaction Survey include Teachers; Fellow Students; Schoolwork; Student Activities; Student Discipline; Decision-Making Opportunities; School Building, Supplies, and Upkeep; and Communications. The study examines the following questions.

1. What is the relationship between student satisfaction and perception of the school climate?
2. Are satisfaction and perceptions of school climate different for second-language learners and non-second-language learners?
3. Are satisfaction and perceptions of school climate different for boys and girls among second-language learners?
4. Are satisfaction and perceptions of school climate different for boys and girls among non-second-language learners?
5. Do student gender, language group, school climate, and satisfaction influence reading achievement scores? If so, how?
6. Do student gender, language group, school climate, and satisfaction influence mathematics achievement scores? If so, how?

The high school which is the focus of this study is located in Southern Arizona in a border community in Ambos Nogales. It is the only high school within the District. Enrollment at the beginning of the 1993-94 academic year was 1,863 students. Of these, 1,300 were classified as second-language learners (SLL). Figure 1 shows the flow chart used

by the Nogales Unified School District to classify students as SLL.

These students are identified upon registering in the District. If a language other than English is the student's first home language or present language, the student's English speaking, reading, and writing are assessed according to State-mandated criteria. If a student is determined to be below grade level in any one of the three areas measured, the student's speaking, writing, and reading are further evaluated. Upon determining the student's strengths, English and academic programs are assigned. The District assigns second-language learners to one of three categories: (1) those literate in Spanish with minimal or no English proficiency, (2) students who are pre-literate in Spanish with minimal or no English proficiency, and (3) those students who speak English proficiently but do not read or write it at grade level.

Significance of the Problem

Research (Soberanis, 1984) indicated that more than 500 studies of the relationship between school climate and student outcomes were issued between 1962 and 1983. Miller (1983) found that the majority of these traditional school climate studies focused on perceptions held by adults about the characteristics of schools that are sources of satisfaction for adults. In reality, then, most studies of

school climate have examined the morale or job satisfaction of educators and have not focused on student satisfaction or productivity as the primary outcomes of schools. Miller pointed out two weaknesses in the school climate literature which affect the impact of this study. First, most studies of school climate have not included any examination of student outcome measures but have focused solely on the affective concerns of one or more participant groups or audiences (teacher, students, administrators, patrons, community). Second, a pervasive assumption among educators is that a "good feeling" in a school is a prerequisite to improving schooling and learning. This belief is widespread despite consistent research findings (Miller, 1983) that satisfaction and productivity within school environments are two separate constructs with different outcomes. The relationship between these two constructs may be negative, neutral, or positive, and the precise relationship cannot be accurately assessed unless measured in the specific environment. Efforts to improve the satisfaction or productivity of teachers and administrators as a means of improving school climate must be evaluated in terms of student outcomes.

School climate must have a linear effect on student outcomes, particularly in achieving effective schooling for language-minority students. Carter and Chatfield (1986)

reported on characteristics of three effective bilingual elementary schools, emphasizing processes over structures and attributes. The schools they described were characterized by such factors as a well-functioning total system producing a school climate that promotes positive student outcomes.

The research on school climate is abundant, and this issue has been debated for many years. This study is an outgrowth of previous research on school climate, student satisfaction, and student outcomes as they relate to second-language learners and gender.

Definition of Terms

The following definitions are used in this study.

Language-Minority Student. A language-minority student is one whose first, home, or present language is not English. Students whose primary language is English are included in this category if English was not their first language or if it is not the language spoken by others in the home.

Second-Language Learner (SLL). Second-language learners are also language-minority students; that is, English is their second language. They differ only in their English proficiency as measured by State-mandated assessments of reading, writing, and speaking. These assessments are conducted using a variety of methods.

Kindergarten and first grade students are tested orally to determine their English proficiency, and those in grades 2-12 are tested in speaking, reading, and writing. In all cases, students who are limited-English proficient receive assessments in Spanish to identify an appropriate English and academic program designed to build on their first and second language strengths. If Spanish is not the student's native language, a structured interview is utilized to determine the student's English and native language literacy skills. Following analysis of these assessments, students who are not limited in English are classified as language-minority students, while those who demonstrate deficiencies are categorized as SLL language-minority students.

Limitations of the Study

1. As principal of the high school where this study was conducted, the researcher may be inherently biased. However, research in the areas of effective schools and successful student outcomes, particularly for Hispanic students, is limited, and every effort is made in this study to illuminate successful and progressive programs in an impartial manner.
2. This study was limited to those students classified as second-language learners (SLL)

and non-SLL during the 1993-1994 academic year and may not be generalizable to the total population.

3. This study was limited to students enrolled in Nogales High School (Arizona), and results may not be generalizable to other geographic areas.

Summary and Organization of the Study

Chapter 1 has identified the issue to be studied and its significance. Chapter 2 reviews related literature. Chapter 3 describes the research design and methodology. Chapter 4 presents the data analysis, and Chapter 5 presents concluding comments and implications.

CHAPTER 2

REVIEW OF THE LITERATURE

Introduction

The purpose of this study is to assess the impact of school climate and student satisfaction on student outcomes and gender. Inherent to the study is an understanding of the prevailing research regarding school climate, student satisfaction, and the relationships among school climate, student satisfaction, and student outcomes. This chapter explores those areas.

School Climate

There have been numerous definitions of the term school climate (Soberanis, 1984). Despite similarities in the structure and functions of schools, visitors entering a particular school sense a unique set of internal characteristics--its school climate--that affects the lives of those in the building. This composite of qualities sets each school apart from others and has been described as its feel, tone, ambience, or atmosphere. Steele and Jenks (1977) compared school climate to weather and stated that it is equivalent to spending time in an area defined by the social system that occupies that space. Brookover and Erickson (1975) perceived that a compilation of various

elements that had previously been highlighted and accepted by those within a given group makes up the factors that give school climate its unique definition. Once these factors are identified, they become the controlling norm for members of that group and are the variables of school climate that are communicated within that specific population. Halpin and Croft (1963) called school climate the organizational "personality" of a school. "Climate is to the organization," they stated, what "'personality' is to the individual" (p. 1). Nwankwo (1979) referred to climate as "the general 'we-feeling,' group sub-culture or interactive life of the school" (p. 268). Schools do possess something called climate, unique to each organization (Kalis, 1980; Owens, 1970; Sinclair, 1970). School climate, like the climate of any other organization, determines whether the school can achieve excellence or will flounder ineffectually. A school with high levels of disorder, low morale, and poor cooperation between teachers and administrators is not a good place to learn or teach, and such a school is bound to have a poor public image (Gottfredson & Hollifield, 1988, p. 63). Tagiuri and Litwin (1968) defined climate as

The relatively enduring quality of the total environment that (a) is experienced by the occupants, (b) influences their behavior, and (c)

can be described in terms of the values of a particular set of characteristics (or attributes) of the environment. (p. 25)

Gilmer (1966) wrote

By organizational climate we mean those characteristics that distinguish the organization from other organizations and that influence the behavior of people in the organization. It is, in effect, what we react to . . . the context of stimulation and confusion where we work. . . . Climate affects not only the behavior of individuals but also how organizations themselves interact. (p. 57)

Organizational climate, according to Forehand and Gilmer (1964), is "the set of characteristics that describe an organization and that (a) distinguish the organization from other organizations, (b) are relatively enduring over time, and (c) influence the behavior of people in the organization" (p. 362).

The concept of school climate is broad, and its relative significance is becoming even more meaningful as administrators become more involved with school restructuring. School climate, though difficult to explain precisely, encompasses the total environmental quality of a school. It results from the interaction of four material

and social dimensions of the school environment: ecology, milieu, social system, and culture. Ecology consists of the relationship of living organisms and environment. In other words, it is the study of the environment and the relationship between physical and material aspects of the total educational environment. Components of this dimension include the physical facilities, materials, equipment, and financial incentives. Milieu refers to persons and groups and arises from the background characteristics which adults and students bring with them. Components of this dimension include teacher education, experience, and satisfaction; also included are student socioeconomic status, self-concept, and morale. The social system refers to patterned relationships of persons and groups and consists of the formal and informal roles which pattern school operation and social interaction. Components of this dimension include administrative organization, instructional program structure, ability grouping, administrator-teacher interaction, teacher-teacher interaction, and teacher-student interaction and communication. The decision-making and participation patterns of teachers and students are also included. Culture includes such aspects of the social environment as belief systems, values, general cognitive structures, and meaning (e.g., language). Components of this dimension include principals' philosophy of education,

parent and student cultural background, community beliefs about educational expectations, and the educational programs of a school district. Ecology, milieu, social system, and culture, together with climate, serve as synthetic concepts for the terms in the most specific group. Climate, however, has more of an interpretive quality and greater significance for action. Ecology, milieu, social system, and culture are more descriptive, and the climate would depend upon their particular characteristics (Tagiuri & Litwin, 1968, pp. 20-23).

Climate reflects the school culture. If a school has a positive climate, its cultural norms and expectations are positively perceived. Climate, then, is a good general predictor of school success (Pellicer, Anderson, Keefe, Kelley, & McCleary, 1990). "Climate is the relatively enduring pattern of shared perceptions about the characteristics of an organization and its members" (Keefe, Kelley, & Miller, 1985, pp. 70-77).

Why is school climate important? According to School Leadership: Handbook for Excellence (Smith & Piele, 1989), empirical data suggested that climate influences the final outcomes of education, as evidenced by two well-known studies conducted by Brookover, Beady, Flood, Schweitzer, and Wisenbaker (1979) and by Rutter, Maughan, Mortimore, Ouston, and Smith (1979).

Brookover et al.'s (1979) team studied 91 elementary schools chosen at random from among the 2,226 elementary schools in Michigan that enrolled fourth- and fifth-grade students. A total of 11,466 students, 453 teachers, and 91 principals participated in the study. From school records and from questionnaires administered to the students, teachers, and principals, the researchers obtained data on "input" into the school system. Data included both demographic variables (such as the socioeconomic status and racial composition of a school's students) and school climate variables. These variables were designed to describe the school cultural or normative social-psychological environment. One subset of these variables was based upon the students' perceptions of their ability to function successfully in the system, their perception of others' expectations and evaluations of them, and the norms of the school social system. Another subset of climate variables was based upon the teachers' own expectations, evaluations, commitment, and norms of the social system and their perceptions of others. The third subset of climate variables was based upon the principals' perceptions of others and his/her behavior with regard to student expectations, norms, and efforts to improve. In addition to measuring input into the schools, the study measured certain outcomes variables: the achievement scores of the fourth-

grade students on state-administered math and reading tests, measures of the students' self-concepts of academic ability, and measures of students' sense of self-reliance.

The study (Brookover et al., 1979) demonstrated that the normative social-psychological variables identified as climate explained much of the between-school variance in school achievement. An interpretation of the study indicated the following relationship between climate and family background:

Although the measures of climate are highly correlated with the measures of socio-economic and racial composition of the student bodies which reflect family background of students, it is clear that the proportion of variance explained by climate, .720, is essentially the same as that explained by the combined composition variables, .744, in the representative state-wide sample. When the student body composition variables, SES and racial composition, are in part controlled in the analysis of the three sub-samples, the contribution of the climate variables to achievement is more sharply identified. In the three sub-samples, high SES white, low SES white, and majority black schools, the climate variable explains decidedly more of the between-school

variance in achievement when entered into regression analysis first than does [sic] the combined input variables including student body composition. Furthermore, in each of these sub-samples climate variables explain an additional 25 percent or more of the variance in achievement after the effect of both the inputs and structural variables are removed. Also, when the contribution to variance in achievement in the three sub-samples is partitioned, the proportion uniquely attributable to climate variables is clearly greater than that attributable to either input or structure except in the high SES white sample. In the latter, the structural variables explain the same proportion as climate. These analyses clearly indicate that variance in climate does exist within the sub-samples with SES and racial composition controlled and that this climate variance explains significant proportions of the differences in achievement within those sub-samples. (p. 14)

Despite problems posed by high levels of correlation between climate and the economic and racial composition of the student bodies, Brookover et al. (1979) demonstrated that their climate variables had a stronger influence on

achievement than did the racial and economic (demographic) ones. "Although it is not sufficient proof," they concluded, "these analyses suggest that school climate rather than family background as reflected in student body composition has the more direct impact on achievement" (pp. 141-142).

In another landmark study, a team of researchers led by Michael Rutter (1979) followed the progress of a group of children from London's inner city through their first three years in secondary school, comparing behavior and performance at the beginning of the period to those at the end. After allowing for such variables as student socioeconomic status and family background, the researchers found that

Schools differed markedly in the behaviour and attainments shown by their pupils. This was evident in the children's behaviour while at school, the regularity of their attendance, the proportions staying on at school beyond the legally enforced period, their success in public examinations, and their delinquency rates. (p. 177)

Rutter et al. (1979) suggested that differences in school climate contributed to these differences in student performance, incorporating four main measures of outcomes:

attendance, pupil behavior, examination success, and delinquency. They found that the combined effect on school outcomes of the school process variables they measured was much stronger than the effect of any individual process variable.

This suggests that the cumulative effect of these various social factors was considerably greater than the effect of any of the individual factors on their own. The implication is that the individual actions or measures may combine to create a particular ethos, or set of values, attitudes and behaviours which will become characteristic of the school as a whole. (p. 179)

As indicated by the definitions provided, school climate is a very complex concept. Even more complex is the array of instruments utilized to analyze school climate. If there seems to be vague consensus on the definition, there is equal vagueness about how climate should be measured. Arter (1989) provided a "consumer guide" to the major tests and surveys that can be used to assess school and classroom climate. Her guide assigned tests and surveys to the following categories: (1) classroom climate instruments; (2) school climate instruments; (3) other educational climate instruments; (4) higher education climate instruments; (5) naturalistic, case study, and observational

approaches; and (6) classroom interaction analysis. These six categories were described by Arter, who recommended a five-tier approach. First, all subscale descriptions were reported as written by the authors. Second, the Relationship dimension covers the intensity and nature of personal relationships within the environment, the extent to which people are involved in the environment and support and help one another, and the degree of free and open expression. Third, the Personal Development dimension covers the basic direction along which personal growth and self-enhancement tend to occur. Fourth, the System Maintenance and Change dimension involves the extent to which the environment is clear in its expectations, is orderly, maintains control over individuals, and is responsive to change. Fifth is the Physical Environment dimension, which assesses the extent to which the physical surroundings contribute to a pleasant work environment. Gottfredson, Hybl, Gottfredson, and Castenada (1986) reviewed school climate assessment instruments from 22 school improvement projects around the country and presented in-depth reviews of 20 of the best instruments. Covering all grade levels, the instruments come mainly from school districts and state departments of education. Review criteria include the school characteristics assessed, ease

of use, and the reliability and validity of the various scales included in each assessment instrument.

In one of the first attempts to define and measure school climate, Halpin and Croft (1963) considered it to be composed of a wide array of factors: the socioeconomic status of school patrons, personality characteristics of the principal and teachers, "quality" of students, parental attitudes toward the school, the physical plant, teacher salary schedules, district policies, geographic region, grade level, and social interactions occurring between teachers and the principal and among teachers.

James and Jones (1974) distinguished among perspectives on how to measure organizational climate. They found two basic approaches, both perceptual, that are used most frequently to identify climate. The individual attributes approach assumes that climate is a function of the interaction between personal and organizational characteristics and can be measured by individual perceptions; here the conception is idiosyncratic rather than organizational. The organizational attributes approach assumes that climate is a function of stable organizational properties rather than unique perceptions and can be defined at the organizational level. It is this perspective that underlies most of the work in school climate.

Regardless of the system used to analyze climates, basic epistemological issues arise. The controversy has its roots in the general organizational and social-psychological literature (Forehand & Gilmer, 1964; Guion, 1973; James & Jones, 1974; Schneider, 1982; Sirotnik, 1980; Tagiuri & Litwin, 1968), and the major issues can be reduced to three questions.

1. Is climate to be conceptualized as an objective phenomenon (assumed to be validated by a jury of expert observers) or as a subjective phenomenon (arising from phenomenological experiences of individuals in the organization)?
2. Is the reality upon which individuals act objective or individually and socially constructed?
3. If climate is measured by perceptions, are these perceptions basic properties of the organization or merely properties of the person perceiving it? (Kottkamp, Mulhern, & Hoy, 1987, pp. 32-33)

Most theorists and researchers working with school climate have consistently opted to use perceptual definitions and perceptual measures of climate, simply ignoring the epistemological issues. Halpin and Croft

(1963) assumed that the faculty's consensus in its perception of school climate determined organizational behavior. They described the third question as a "phenomenological box" for which there is no ultimate answer. Halpin (1966) later argued that collective perceptions of climate are basically attributes of "something out there" rather than merely idiosyncratic responses, acknowledging that subjectivity and objectivity can never be totally separated.

Halpin and Croft (1963) constructed the Organizational Climate Description Questionnaire (OCDQ) by developing taxonomies of categories; writing and assigning items to categories largely on an intuitive, common-sense basis; and factor analyzing at the individual unit of analysis a logically reduced subset of the original matrix of items. A drawback of using this assessment instrument was that it was initially developed for use in elementary schools and the appropriateness of some items for secondary schools has been questioned (Waldman, 1971). Another drawback was the consideration of such factors as reliabilities of several subtests, construct validity of a number of specific subtests, inconsistency between observations and scores at the school level, and the use of "total" analysis in the development of the eight dimensions of the OCDQ (Kottkamp et al., 1987). Finally, the OCDQ concept of climate measures

only the interaction of teachers and principals, its data are now over 30 years old, and the instrument would be very difficult to use to measure climate in a secondary school.

Halpin and Croft's (1963) OCDQ produced eight subtests based on the behaviors of the principal and teachers: principal behaviors included aloofness, production emphasis, trust, and consideration; and teachers' behaviors were described by disengagement, hindrance, esprit, and intimacy. Six prototypic school climates were then constructed by arranging schools in clusters according to their scores on the various subtests. The prototypes were designated as open, autonomous, controlled, familiar, paternal, and closed, with open and closed as the two extremes.

The open climate has a high degree of trust, esprit, and engagement (low disengagement). Principal and teacher behaviors in the school are genuine and open. The principal leads through example, and teachers respond with enthusiasm. Teachers work well with each other and with the principal. Given the dynamic leadership of the principal and a committed faculty, there is no need for burdensome "busy" work, close supervision, impersonality, or a plethora of rules and regulations. Acts of leadership emerge easily and appropriately. The open school climate is neither exclusively preoccupied with task achievement nor with social-needs satisfaction, but both occur freely. In brief,

the behavior of both the principal and faculty emerge easily and without constraint; the behavior is authentic and open.

In a closed climate, trust and esprit are low while disengagement is high. The principal and teachers simply go through the motions, with the principal stressing bureaucratic routine and unnecessary busy work, and the teachers responding minimally and with little satisfaction. The principal's ineffective leadership is seen in close supervision, formality, and impersonality, as well as in lack of consideration for the faculty and an inability to provide dynamic personal leadership. These misguided tactics produce teacher frustration and apathy. Behavior in the closed school climate is not genuine. Teachers and principals "play games" with each other, and lack of authenticity pervades the atmosphere of the school.

The Rutgers Organizational Climate Description Questionnaire for Secondary Schools (OCDQ-RS) is a revised instrument which contains 34 items that mapped five dimensions of school climate--two at the administrative level and three at the teacher level. They include supportive principal behavior, directive principal engaged teacher behavior, frustrated teacher behavior, and intimate teacher behavior.

Although the OCDQ-RS builds upon and refines the original OCDQ, it is a secondary school measure. It is more

parsimonious, it has different dimensions, and many of the items are new (Kottkamp et al., 1987).

Kottkamp et al. (1987) conducted a revision of the OCDQ in an attempt to create a parallel, valid, and reliable climate measure for high schools. Item revision, deletion, and development began with the conceptual framework established by Halpin and Croft (1963). Old items were revised or eliminated for three reasons: (1) they were not logically appropriate for the high school; (2) they were not conceptually consistent with the subtest; or (3) they had poor measurement characteristics, for example, high factor loadings on more than one factor. Based on the revision, a 100-item questionnaire was developed. This questionnaire contained 37 original OCDQ items and 48 modified or new items designed to complement the original items. In addition, 15 items were added to investigate the social interactions between students and their teachers. The response format for all items was a four-point Likert scale: rarely occurs, sometimes occurs, often occurs, and very frequently occurs. This questionnaire was administered to 1,178 teachers in 78 New Jersey public high schools.

Finally, a rigorous exploratory analysis produced a 34-item questionnaire composed of five subtests. The five subtests of school climate that finally emerged fell into two categories: two of the dimensions described principal

behavior; the other three focused on teacher behavior, particularly teacher relationships with students, colleagues, and superiors (see Table 1 for sample items of each subtest).

Items on the original consideration and trust subtests that came together to form one common factor were named supportive principal behavior. The original and new "production emphasis" items also clustered together and formed a factor called directive principal behavior. The aloofness items, however, simply did not hold up as an independent subtest and were eliminated. Thus, the leadership behavior of secondary school principals was conceived in terms of supportive and directive behaviors.

Items that described teacher behavior clustered into three groups. First, items that described humanistic pupil-teacher interactions joined with those that reflected high teacher morale to form a strong common factor that was called engaged teacher behavior. Next, because intimacy items formed a separate identifiable factor, the label was retained. Finally, certain disengagement and hindrance items united on a common factor to form a pattern of teacher behavior called frustration.

As this review of the literature has indicated, defining school climate is a broad and complex issue. Identifying an assessment instrument capable of

Table 1

Selected Items for the Subscales of the OCDQ-RS

Supportive principal behavior

- The principal sets an example by working hard him-
or herself.
- The principal uses constructive criticism.
- The principal explains his/her reasons for
criticism to teachers.

Directive principal behavior

- The principal rules with an iron fist.
- The principal supervises teachers closely.
- The principal monitors everything teachers do.

Engaged teacher behavior

- Teachers help and support each other.
- Teachers spend time after school with students who
have individual problems.
- Teachers are friendly with students.
- Teachers are proud of their school.

Table 1, continued

Frustrated teacher behavior

- The mannerisms of teachers at this school are annoying.
- Administrative paperwork is burdensome at this school.

Intimate teacher behavior

- Teachers' closest friends are other faculty members at this school.
 - Teachers invite other faculty members to visit them at home.
 - Teachers socialize with each other on a regular basis.
-

distinguishing the climate of the school is also problematic. One obstacle created by most assessment instruments is that they restrict the domain of climate to principals and teachers. They do not address the relationship between teachers and students, nor do they focus on the interaction between school climate and student outcomes.

The National Association for Secondary School Principals designed a School Climate Survey (Kelley et al., 1986). This assessment was developed from a comprehensive model of the school environment developed by NASSP's Task Force on School Climate. As described by Keefe et al. (1985), this model of the school environment encompasses a wide range of input and output to the process of school improvement. The model measures three areas of influence on school climate: (1) local beliefs, attitudes, and values; (2) organizational characteristics (including the physical environment, the formal organization, and personal relationships and behavioral norms); and (3) characteristics of groups and individuals, including socioeconomic status, ethnicity and geographic location, job performance and satisfaction, and parent and community satisfaction and support.

The School Climate Survey (Kelley et al., 1986) uses 55 items to assess the perceptions of students about 10

characteristics of the school and its members. Those 10 subscales are

1. Teacher-Student Relationships: Perceptions about the quality of the interpersonal and professional relationships between teachers and students.
2. Security and Maintenance: Perceptions about the quality of school building maintenance and the degree of security people feel at the school.
3. Administration: Perceptions of the degree to which school administrators are effective in communicating with different role groups and in setting high performance expectations for teachers and students.
4. Student Academic Orientation: Perceptions about student attention to task and concern for achievement at school.
5. Student Behavioral Values: Perceptions about student self-discipline and tolerance for others.
6. Guidance: Perceptions of the quality of academic and career guidance and personal counseling services available to students.

7. Student-Peer Relationships: Perceptions about students' care and respect for one another and their mutual cooperation.
8. Parent and Community-School Relationships: Perceptions of the amount and quality of involvement in the school by parents and other community members.
9. Instructional Management: Perceptions of the effectiveness of teacher classroom organization and the use of classroom time.
10. Student Activities: Perceptions about opportunities for, and actual participation in, school-sponsored activities.

A more detailed development of the NASSP School Climate Survey (Kelley et al., 1986) is examined in Chapter 3. This survey allows for a meaningful interpretation of data relating to climate and student outcomes.

School climate, then, is conceived of as the mediating variable between these inputs and the outcomes of schooling, which are defined in terms of student satisfaction and productivity. But the relationship among these elements is reciprocal. That is to say, the climate of a school both influences and is shaped by these inputs and outcomes (Lindelow, Mazarella, Scott, Ellis, & Smith, 1989, p. 172). Three assumptions are made about this model. First, the

quality of a school environment is a longitudinal concern because deeply ingrained traditions and habits are difficult to change. Second, a consensus about what is and what is not important among the three major school stakeholder groups (students, staff, and community) is an important indicator of a healthy climate. And third, students are the primary concern of the school (Lindelow et al., 1989, pp. 172-173).

Student Satisfaction

During the conceptualization of the Comprehensive Assessment of School Environments' Information Management System (CASE-IMS) (NASSP, 1982), five strategic areas were highlighted:

1. Although much has been accomplished, there is still a need for a precise definition of school climate and valid instrumentation for use in schools.
2. A school's climate should be investigated in the broader setting of the total school environment.
3. Climate and satisfaction are different concepts and should be assessed separately.
4. The highly interactive nature of the variables in any model of school environment must be recognized.

5. New instruments must be developed based on this broad concept of the school environment.
(Howard & Keefe, 1991)

It is evident that there is a clear distinction between the terms school climate and student satisfaction. School climate has been defined as "the relatively enduring pattern of shared perceptions (by teachers, students, and parents/community members) of the school and of its members" (Howard & Keefe, 1991, p. 1), i.e., the perceptions of the culture of the school. Satisfaction is defined as "an individual's response to his or her environment at a given point in time" (Howard & Keefe, 1991, pp. 2-3). The satisfaction of students is seen both as an element of school culture and as one outcome measure of school effectiveness. Student satisfaction is the personal, affective response of an individual to a particular situation or condition in the environment (NASSP, 1989, p. 5). Students are major stakeholders in any secondary school. Therefore, student satisfaction can and will influence and corroborate school success.

As observers of the various definitions of school climate and the instruments to measure climate, we note that measures of satisfaction are not distinguished from measures of climate. In some instruments, individuals were asked to respond indiscriminately to both climate and satisfaction

items with no clear distinction made in the reporting of data. Therefore, student satisfaction has been integrated into the definition and measurement of school climate. In the Case Model (NASSP, 1989), the two variables have been separated and clearly defined, and validated surveys have been established. The primary purpose of schools is the attainment of successful student outcomes. The principal outcomes are student satisfaction and student productivity. All other conditions or effects, even those of high interest such as employee job satisfaction or morale, are secondary. Within the context of the Case Model, they have importance only insofar as they influence the quality of student satisfaction and student productivity in any specific school environment.

The Student Satisfaction Survey (Schmitt & Loher, 1986) utilized in this study provides data about student perceptions on eight subscales. These subscales are

1. Teachers: Satisfaction with the professional behaviors of teachers.
2. Fellow students: Satisfaction with peer group relationships.
3. Schoolwork: Satisfaction with the range of courses and the nature of classwork in the school.

4. Student Activities: Satisfaction with the number and types of school-sponsored activities and with opportunities for student participation.
5. Student Discipline: Satisfaction with the degree to which the school is an orderly and safe environment.
6. Decision-Making Opportunities: Satisfaction with opportunities to provide input on decisions about curriculum school events, etc.
7. School Buildings, Supplies, and Upkeep: Satisfaction with the quality and availability of library resources, learning materials, and supplies and with the maintenance of the buildings and grounds.
8. Communication: Satisfaction with the availability of information and opportunities to communicate with others about school events.

The Student Satisfaction Survey (Schmitt & Loher, 1986) has 46 items to collect data on eight dimensions of student satisfaction with school. These subscales were designed to give administrators an overview of the perceptions of students toward the delivery of student services, with

emphasis on academic achievement, recognition of a collaborative approach toward decision-making, a firm but fair approach to student behavior management, appropriate budgeting, the presence of a comfortable and conducive learning environment, and a sense of belonging.

Student Outcomes

After an extensive review of the literature on school environments and the measurement of school climate, the NASSP (1989) Task Force members identified a number of concerns. One of these concerns was that a positive school climate was assumed to be indicative of positive student learning outcomes, yet evidence of these outcomes was not provided in most studies.

It is clear and evident, as noted by the NASSP (1989) Task Force members, that the primary purpose of school is the attainment of successful student outcomes. The principal outcomes are student satisfaction and student productivity. All other conditions or effects, even those of high interest such as employee job satisfaction or morale, are secondary. Schools are responsible for the nature and quality of student outcomes. These outcomes are influenced by many other variables, but the nature of the school environment and the nurturing which occurs within the school or classroom environment are the most important determinants to the quality of intended student outcomes.

Student perceptions have a dramatic impact on student outcomes. Marshall Smith (1972) suggested that perceptions of the school may contribute significantly to the variables in achievement. The students' sense of control and their self-concept as well as the teachers' perceptions of the nature of the school seem to contribute significantly to the variations in student achievement. It is these perceptions in the areas of climate and satisfaction and their relationship to student outcomes and gender on which this study focuses. Climate affects many student outcomes, including cognitive and affective behavior (Anderson, 1982; Barker, 1963; Brookover, Schweitzer, Schneider, Beady, Flood, & Wisenbaker, 1978; Duke & Perry, 1978; Weber, 1971). Studies of this nature have been conducted, but those studies were predominantly focused on elementary school students. Yet, there have been some studies of academic climate in a small number of high schools (McDill, Rigsby, & Meyers, 1967; McDill & Rigsby, 1973) in which the research suggested that much of the variance in academic achievement may be explained by the academic norms and expectations that characterized the student body. A basic premise of this study is that the school social system or social environment affects school learning outcomes. Not only is research in the area of secondary school learning outcomes as related to the social environment lacking, but equally important is the

lack of research on Hispanic students, especially those who are language-minority students, in secondary education. This study focuses on language-minority Hispanic students in a secondary school and their satisfaction and perceptions of school climate as they relate to student outcomes and gender.

CHAPTER 3

METHODOLOGY

Introduction

This chapter outlines the methods used to investigate the research problems identified in Chapter 1. The sample population, the selection of the survey instruments used and the procedures for administering them, as well as research strategies are described.

Restatement of the Problem

The purpose of this study is to compare perceptions of language-minority and non-language-minority students on 10 subscales of the NASSP School Climate Survey (Kelley et al., 1986) and 8 subscales of the Student Satisfaction Survey (Schmitt & Loher, 1986) and to compare the relationship of these perceptions to academic achievement by gender. Academic achievement was measured using the Tests of Achievement and Proficiency (TAP) (Riverside, 1993b) in Reading Comprehension and Math.

Research Questions

This study focused on the following research questions:

1. What is the relationship between student satisfaction and perception of the school climate?
2. Are satisfaction and perceptions of school climate different for second-language learners and non-second-language learners?
3. Are satisfaction and perceptions of school climate different for boys and girls among second-language learners?
4. Are satisfaction and perceptions of school climate different for boys and girls among non-second-language learners?
5. Do student gender, language group, school climate, and satisfaction influence reading achievement scores? If so, how?
6. Do student gender, language group, school climate, and satisfaction influence mathematics achievement scores? If so, how?

The Sample

The Nogales High School Class of 1997 consisted of 611 students, 308 males (50.4%) and 303 females (49.6%). This class was selected to allow for a longitudinal evaluation over three years, and these students provided the baseline

data. Of this population, 170 males (27.8%) and 186 females (30.4%) were classified as second-language learners, and 138 males (22.6%) and 117 females (19.2%) were classified as non-second-language learners. Eighty-three students (13.6%) had accumulated four or fewer academic credits and were classified as second-year freshmen. They were not included as part of the sample.

Also excluded were 48 students (7.9%) who did not take the TAP (Riverside, 1993b) assessment. They may have been ill on the assessment dates or entered school after the assessment was given. Another five students (.08%) were exempted from taking the TAP because of their special education classification and were thus excluded from the sample. Fifty-six students (9.2%) were enrolled in an English as a Second Language Program. The governing board of a school district may exempt pupils who are limited-English proficient (defined in this study as second-language learners) and who are enrolled in a program as prescribed in Arizona Revised Statutes (ARS) 15-754 from the testing requirement if the pupils have been enrolled in a school district in this state for fewer than three academic years beginning with the second grade. The instructional program for limited-English-proficient pupils who are exempt from the nationally standardized norm-referenced testing requires an alternative assessment of achievement

administered pursuant to standards set by the State Board of Education. The assessment administered to these 56 students was The Riverside Spanish Achievement Test (La Prueba de Realizacion en Espanol) (1993a). These students were eliminated from the sample because there is no correlation between La Prueba and Form J of the TAP assessment. In other words, Form J is not translated into Spanish and titled La Prueba. La Prueba is an alternative assessment which is completely different in composition from Form J.

Fifteen students (2.5%) did not participate in the survey or turned in an incomplete answer sheet. The remaining sample population of 404 included 102 (25.2%) male second-language learners, 99 (24.5%) male non-second-language learners, 115 (28.5%) female second-language learners, and 88 (21.8%) female non-second-language learners.

Instrumentation

Academic achievement was measured using two components of the TAP (Riverside, 1993b), Reading Comprehension and Math NCE scores. These NCE scores are derived from national percentile ranks. They are normalized standard scores with a mean of 50. NCEs are equal-interval scores which result from dividing the normal curve into 99 equal units. This assures that the differences between NCEs at different positions on the scale are equal.

ARS 15-741.b mandates that a standardized norm-referenced achievement test adopted by the State Board as provided in Subsection A shall be given annually during the fall. This norm-referenced achievement test must be administered to pupils in grades 4, 7, and 11. However, the Nogales High School administration chose to administer the TAP (Riverside, 1993b) assessment to all students.

The School Climate Survey (Kelley et al., 1986) asks respondents how they think most people characterize various dimensions of the organization. The instrument aims to measure shared perceptions rather than individual reactions. It is designed to capture an "image" of the organization rather than anyone's day-to-day responses to it. The Student Satisfaction Survey (Schmitt & Loher, 1986) is both a mediating variable and an outcome variable; it both influences school success and corroborates it. The School Climate Survey, using a fifth to sixth grade reading level, collects data about perceptions on 10 subscales with 55 items. These subscales include (1) teacher-student relationships, (2) security and maintenance, (3) administration, (4) student academic orientation, (5) student behavioral values, (6) guidance, (7) student-peer relationships, (8) parent and community-school relationships, (9) instructional management, and (10) student activities. The Student Satisfaction Survey, using

a fourth to sixth grade reading level, provides data about student perceptions on eight subscales with 46 items. The subscales include (1) teachers; (2) fellow students; (3) schoolwork; (4) student activities; (5) student discipline; (6) decision-making opportunities; (7) school buildings, supplies, and upkeep; and (8) communication.

A mean score was derived for each student by assigning a numerical value to responses (see Table 2).

Table 2

Numerical Values of Survey Responses

Response	Numerical Value
Very Happy or Strongly Agree	5
Happy or Agree	4
Neither Happy nor Unhappy or Neither Agree nor Disagree	3
Unhappy or Disagree	2
Very Unhappy or Strongly Disagree	1
I Don't Know	0

Reliability

The reliability of an instrument is a measure of its consistency or stability, the extent to which it yields consistent measures of given behaviors or constructs. One indication of the reliability of the NASSP Climate and Satisfaction Surveys is the high internal consistency of each scale in each of the two instruments. Internal consistency measures are based on an analysis of items administered on a single occasion. Internal consistency as measured by Cronbach's alpha provides an estimate of the degree to which items on a given scale are perceived as similar in meaning at the time of administration. (Alpha is also known as a homogeneity coefficient and is closely related to the construct validity of the scales.) The average internal consistency measure of the NASSP Climate Survey is 0.81, with a scale range from 0.67 to 0.87. The average reliability of the Student Satisfaction Survey scales is 0.81, with a range from 0.76 to 0.83. Tables 3 and 4 report the internal consistency coefficients by scale and role group for each instrument. The values of alpha in these tables are gratifiably

Table 3

Student Climate: Internal Consistency Estimates of
Reliability

Scale Name	No. Items	n	Cronbach's Alpha
Teacher-Student Relationships	12	5,220	.87
Security and Maintenance	7	3,946	.84
Administration	6	4,710	.82
Student Academic Orientation	4	6,088	.75
Student Behavioral Values	3	6,865	.67
Guidance	4	5,612	.78
Student-Peer Relationships	4	6,315	.80
Parent and Community-School Relationships	4	4,640	.74
Instructional Management	7	6,173	.79
Student Activities	4	5,373	.72

Table 4

Student Satisfaction: Internal Consistency Estimates of Reliability

Scale Name	No. Items	n	Cronbach's Alpha
Teachers	7	5,632	.82
Fellow Students	5	6,271	.78
Schoolwork	6	6,602	.76
Student Activities	5	6,509	.81
Student Discipline	6	6,404	.83
Decision-Making Opportunities	5	5,460	.83
School Buildings, Supplies, and Upkeep	6	6,421	.82
Communication	6	6,042	.82

high considering the small number of items in many scales.

A second measure of reliability is its stability over a short period of time during which no significant change in the underlying behaviors would be expected to have occurred. the preferred method of obtaining correlations between initial testing and subsequent retesting of the same group of individuals would be alternated, parallel forms of the surveys. No alternate forms exist at this time, however, nor do the survey scales contain a sufficient number of items to permit division into equivalent halves for test-retest purposes.

Within these constraints, estimates of test-retest reliability were obtained using the same survey instruments for both initial testing and retesting over an interval of three weeks. The obtained correlation coefficients are shown in Tables 5 and 6. (Halderson, Kelley, Keefe, & Berge, 1989, p. 33)

Validity

Validity is defined as the extent to which an instrument actually measures what it purports to measure. Two types of validation are relevant to these surveys--content and construct validity.

Table 5

Student Climate: Test-Retest Estimates of Reliability

Scale Name	n	r
Teacher-Student Relationships	94	.82
Security and Maintenance	94	.79
Administration	93	.73
Student Academic Orientation	93	.73
Student Behavioral Values	95	.63
Guidance	92	.81
Student-Peer Relationships	92	.76
Parent and Community-School Relationships	85	.68
Instructional Management	91	.80
Student Activities	87	.74

Table 6

Student Satisfaction: Test-Retest Estimates of Reliability

Scale Name	n	r
Teachers	94	.85
Fellow Students	94	.89
Schoolwork	94	.62
Student Activities	94	.83
Student Discipline	94	.75
Decision-Making Opportunities	93	.79
School Buildings, Supplies, and Upkeep	94	.77
Communication	94	.72

Content validity is concerned with the extent to which items on an instrument are representative of the domains of interest. No obvious body of "content" exists that corresponds to school climate. In developing the pilot versions of the climate instruments, members of the Task Force assembled hundreds of items from existing research and surveys. The school climate scales were developed from this extensive bank of items based on the dimensions of climate and effective schools reported in the literature. Task Force members acted as an expert panel in the selection and further development of the items.

Existing definitions and measurements of role group satisfaction in schools were relatively cohesive, so development of this survey was grounded in a shared understanding of content. Dimensions or components of satisfaction were identified for each group, and principals, researchers, and graduate students reviewed the items and tested their conceptual fit within these categories. This process ensured that the surveys would have face validity as well as content validity.

Construct validity is both a logical and an empirical process. A construct is the underlying dimension of an idea or concept, the trait or characteristic that gives it meaning. Construct validity is concerned with the meaningfulness of a test. Climate and satisfaction are such constructs. The test developer must also decide whether or not the construct is unitary or composed of multiple dimensions. In both its theoretical and practical work, the Task Force treated the constructs of school climate and satisfaction as multi-dimensional. (Halderson et al., 1989, p. 25)

Procedure

Eligible freshman students were administered the NASSP School Climate Survey (Kelley et al., 1986) and Student Satisfaction Survey (Schmitt & Loher, 1986) on Tuesdays and Wednesdays over three consecutive weeks. Surveys were administered in the auditorium during third period. During the first week, surveys were administered to SLL males on Tuesday and to SLL females on Wednesday. During the second week, non-SLL males participated on Tuesday and non-SLL females on Wednesday. During those two days on the third week, the surveys were administered to all students who were unable to participate on their assigned day.

All survey answer sheets were pre-coded with the student's identification number, gender, and class code. Class code indicated the program to which the student was assigned. Students were given an answer sheet, a number two pencil, and a School Climate Survey (Kelley et al., 1986), and the following introduction was provided:

Good Morning. You are about to participate in a survey about our campus and not to take an examination. The purpose of this survey is to collect statistical data for my doctoral dissertation and to provide some important information about our school. We hope to make our school the best possible place. This survey will indicate how the school looks to you as a student. Each of you should have three items: (1) a copy of the NASSP School Climate Survey, (2) a green and white machine-scoreable answer sheet, and (3) a number two pencil. Please make sure that you mark your answer on the side of the answer sheet that indicates school climate. When you finish taking the School Climate Survey, bring the answer sheet and the survey to the front here. At that time, we will just check to make sure that you placed your answers on the correct side of the answer sheet. If this was done correctly, you

will then receive a Student Satisfaction Survey, which is to be answered on the back side of the answer sheet. This survey provides data about student satisfaction on eight subscales about our campus. Does anyone have any questions? You may now begin the survey.

These verbal directions were also stated in Spanish.

These surveys were translated into Spanish by a teacher from the Nogales High School Spanish Department's International Baccalaureate Program. The survey was then translated back into English by another member of the Spanish Department to monitor for accuracy. Students who were classified as SLL were allowed to select which form of the survey they would take.

Null Hypotheses

Ho1: No correlation between student satisfaction and school climate will exist.

Ho2: No difference between the means of student satisfaction and school climate for second-language learners and non-second-language learners will be found.

Ho3: No difference between the means of student satisfaction and school climate for male and female second-language learners will result.

Ho4: No difference between the means of student satisfaction and school climate for male and female non-second-language learners will occur.

Ho5: Student gender, language group, satisfaction, and school climate will have no effect on reading achievement scores.

Ho6: Student gender, language group, satisfaction, and school climate will have no effect on mathematics achievement scores.

Data Analysis

Question 1 was analyzed using the Pearson product-moment correlation. This analysis is often used to examine relationships between several variables on the same subject.

Questions 2, 3, and 4 were analyzed using MANOVA (Multivariate Analysis of Variance). The means of student satisfaction and school climate between the second-language learners and the non-second-language learners by gender were compared to identify any differences.

Multiple regression analysis was used to analyze Questions 5 and 6 to determine the relationships among academic achievement, student satisfaction, perceptions of school climate, language group, and gender.

CHAPTER 4

RESULTS OF THE STUDY

Introduction

For the purpose of presenting the findings of this study, this chapter is organized into three sections. The purpose of the study is reported in the first section. The second section presents the computerized results in relationship to the research questions. The third section is a summary of the findings.

The Purposes of the Study

The population for this study consisted of the freshman class at Nogales High School, which serves grades 9 through 12 and is located on the Mexican border in Southern Arizona. The purpose of this study was (1) to compare perceptions of school climate measured by 10 subscales of the NASSP School Climate Survey (Kelley et al., 1986) and student satisfaction measured by 8 subscales of the Student Satisfaction Survey (Schmitt & Loher, 1986) of language-minority students to those of non-language-minority students and (2) to investigate whether students' perceptions of school climate, student satisfaction, gender, or language group affect students' academic achievement.

Data obtained from the Registrar's Office identified a freshman class of 611 students within the total student body of 1,863. The sample included 404 freshman students. Table 7 shows how the sample was derived, Table 8 demonstrates the means and standard deviations for the two language groups, and Table 9 provides means and standard deviations for language groups by gender.

Results

Question 1: What is the relationship between student satisfaction and perception of the school climate?

The Pearson product-moment correlation was used to address Research Question 1. This analysis yielded a positive correlation coefficient of .69 which is statistically significant at the .01 level. Because the correlation falls within the range of .50 to .75, this is considered a moderate correlation.

Question 2: Are satisfaction and perceptions of school climate different for second-language learners and non-second-language learners?

Two-way analysis of variance (ANOVA) was used to answer this question. The dependent variables were student satisfaction and school climate, and the independent variables were language group and gender.

For student satisfaction, this analysis yielded an F ratio of $(1,403) = 6.77$; $p = 0.0096$. This result

Table 7

Sample Population

Numbers	SLL		Non-SLL	
	Male	Female	Male	Female
Total	170	186	138	117
Retained	27	19	17	20
No TAP Test	10	14	20	4
Special				
Education	0	0	1	4
Alternative				
Assessment	26	30	0	0
Did not take				
survey	5	8	1	1
Final Sample	102	115	99	88

Table 8

Means and Standard Deviations for the Language Groups

Variable	SLL		Non-SLL	
	<u>Mean</u>	<u>S.D.</u>	<u>Mean</u>	<u>S.D.</u>
Reading	33.92	15.87	54.94	18.94
Mathematics	35.45	16.67	48.70	19.13
Satisfaction	3.57	.48	3.43	.60
Climate	3.62	.55	3.52	.52

Table 9

Means and Standard Deviations for the Language Groups by Gender

Variable	SLL				Non-SLL			
	Male		Female		Male		Female	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
Reading	29.99	14.60	37.41	16.19	53.35	18.00	56.73	19.88
Mathematics	35.75	17.06	35.18	16.39	47.43	19.37	50.11	18.86
Satisfaction	3.56	.45	3.58	.50	3.34	.67	3.52	.50
Climate	3.60	.60	3.64	.50	3.45	.56	3.60	.46

demonstrated that the two language groups were statistically significantly different at the .01 level. Examination of cell means revealed a mean of 3.57 for the second-language learners and a mean of 3.43 for the non-second-language learners. The difference between the two means was only .14, which indicates that the satisfaction level between the two groups may not be dissimilar in common practice.

For school climate, this analysis yielded an F ratio of $(1,403) = 3.03$; $p = 0.0825$. This result revealed that there was no significant difference at the .05 level between the two language groups on perceptions of school climate. Examination of cell means revealed a mean of 3.62 for the second-language learners and a mean of 3.52 for the non-second-language learners. The perception of school climate by second-language learners was slightly higher than that of non-second-language learners, but there was no significant difference.

Question 3: Are satisfaction and perceptions of school climate different for boys and girls among second-language learners?

Following the ANOVA, a simple comparison was done between genders in second-language learners to address this question. The dependent variables were student satisfaction and school climate, and the independent variable was gender.

For student satisfaction, this analysis yielded an F ratio of $(1,216) = 0.06$; $p = 0.80$. This result demonstrated that there were no significant differences between boys and girls at the .05 level. Thus, male and female second-language learners had basically the same satisfaction level. Examination of cell means revealed a mean of 3.58 for females and 3.56 for males.

For school climate, this analysis yielded an F ratio of $(1,216) = 0.33$; $p = 0.57$, which demonstrated that the difference between male and female second-language learners was not statistically significant at the .05 level. This indicated that boys had the same perception of school climate as girls.

Question 4: Are satisfaction and perceptions of school climate different for boys and girls among non-second-language learners?

Following the ANOVA, a simple comparison was done between genders in non-second-language learners to answer this question. The dependent variables were student satisfaction and perceptions of school climate, and the independent variable was gender.

For student satisfaction, this analysis yielded an F ratio of $(1,186) = 5.23$; $p = 0.02$. This demonstrated that there was a statistically significant difference at the .05 level. Examination of cell means revealed a mean of 3.52

for female respondents and 3.34 for male respondents. The .18 mean difference between boys and girls indicated that the girls had a slightly higher level of satisfaction. Despite the statistically significant difference, there may be no differences in common practice.

For school climate, this analysis yielded at F ratio of $(1,186) = 3.70$; $p = 0.055$. This demonstrated that there was a statistically insignificant difference at the .05 level. This indicated that boys and girls had the same perception of school climate.

Multiple Regression Analysis

A correlation is simply the relationship between two variables. It does not imply that one variable causes the other. Multiple regression analysis is a statistical procedure used to explore relationships among two or more variables. It is often used to determine whether scores on a criterion variable (Y) can be predicted using k ($k \geq 2$) predictor variables (X_1, X_2, \dots, X_k).

The multiple correlation coefficient (R) is a Pearson product-moment correlation coefficient between the criterion variable and the predicted score on the criterion variable, which is a linear combination of the predictor variables. R^2 , the square of the multiple correlation coefficient, is the proportion of variance in the criterion variable that can be attributed to the variation of the combined predictor

variables (Hinkle, Wiersma, & Jurs, 1988). It is often used as a criterion of goodness of fit of the model. Parameter estimate indicates the significance of the variable in predicating the criterion variable.

Question 5: Do student gender, language group, school climate, and satisfaction influence reading achievement scores? If so, how?

For this question, multiple regression analysis was used. The predicated variable was reading achievement score. The predictors were gender, language group, student satisfaction, and school climate.

The results of this regression analysis are presented in Table 10. This overall model yielded an F ratio of $(4,399) = 42.571$; $p = .0001$, which indicated that the four predictors taken together predicated reading achievement scores. The predictors accounted for 29.21% of the total variance.

It was demonstrated that gender, school climate, and language group were significant independent predictors of reading achievement, while student satisfaction was not an independent predictor. Of the total population, all other variables being equal, it is predicated that males were 5.85 points lower in reading achievement than females, and second-language learners were 21.14 points lower in reading achievement than non-second-language learners. Each point

Table 10

Multiple Regression Analysis of Reading Achievement Scores

Variable	Parameter		
	Estimates	T-Score	Probability
Intercept	69.71**	11.05	.0001**
Gender	- 5.85**	- 3.42	.0007**
Language	- 21.14**	- 12.30	.0001**
Satisfaction	2.05	0.95	.3442
Climate	- 5.31*	- 2.45	.0148*
$R^2 = 0.29$			

* p < 0.05

** p < 0.01

of increase in perception of school climate lowered the reading achievement score by 5.3 points.

Question 6: Do student gender, language group, school climate, and satisfaction influence mathematics achievement scores? If so, how?

This question was also analyzed using multiple regression analysis. The predicated variable was mathematics achievement score, and the predictors were gender, language group, student satisfaction, and school climate.

The results of this regression analysis are presented in Table 11. This analysis yielded an F ratio of $(4,399) = 13.821$; $p = .001$, which indicated that the four predictors taken together predicated mathematics achievement score. The overall model accounted for 12.17% of total variance.

The parameter estimate demonstrated that language group was the only significant independent predictor of mathematics achievement and that the second-language learners were 13.36 points lower than the non-second-language learners in mathematics achievement. Gender, satisfaction, and school climate had no relationship to math achievement and were not significant independent predictors.

Summary

Chapter 4 described the population and sample used in the study and summarized analyses used to address the

Table 11

Multiple Regression Analysis of Mathematics Achievement Scores

Variable	Parameter		
	Estimates	T-Score	Probability
Intercep	48.09*	7.26	.0001*
Gender	- 0.90	- 0.50	.6150
Language	- 13.36*	- 7.40	.0001*
Satisfaction	0.66	0.29	.7710
Climate	- 0.34	- 0.15	.8819
$R^2 = 0.12$			

* $p < 0.01$

research questions. There was a moderate, yet positive correlation between student satisfaction and perceptions of school climate. Significant differences in student satisfaction emerged between the language groups. However, these differences were so small that they would not be recognized in common practice. There was no difference between the language groups in their perceptions of school climate. Among second-language learners, student satisfaction and perceptions of school climate were at the same level for boys and girls. Among non-second-language learners, girls had a slightly higher level of student satisfaction than boys. On perception of school climate, boys and girls were the same.

Multiple regression analysis results supported the hypothesis that the four predictors of gender, language group, school climate, and student satisfaction taken together predicate both reading and mathematics achievement scores. The four predictors accounted for 29.21% of the total variance of reading achievement. The parameter estimates showed that gender, school climate, and language group were significant independent predictors of reading achievement, while student satisfaction was not. The four predictors of gender, language group, student satisfaction, and school climate taken together predicated mathematics achievement scores. The overall model accounted for 12.17%

of the total variance of math achievement. The language group was the only significant independent predictor of mathematics achievement. Gender, student satisfaction, and school climate had no effect on math achievement and were not significant independent predictors.

CHAPTER 5

SUMMARY, CONCLUSIONS, AND FUTURE RESEARCH

This chapter summarizes the findings reported in Chapter 4. Conclusions are drawn, and recommendations for future research are suggested.

Purpose of the Study

Little research at the secondary level looks beyond effective classroom instruction to the issues involved in effective schooling for language-minority students. In "Effective Schools for the Urban Poor," Edmonds (1979) stated: "All children are eminently educable, and the behavior of the school is critical in determining the quality of the education" (p. 20). It is this behavior that affects the academic success of language-minority students. These perceptions of academic success as well as student outcomes and their relationship to school climate and student satisfaction in combination with the mediational effects of gender enhance a school's curriculum design and the delivery of instruction.

Procedures of the Study

The population for this study included eligible freshman students from Nogales High School in Nogales,

Arizona, during the 1993-1994 academic year. This freshman class consisted of 611 students, 308 males and 303 females. Of the total population of students, the sample population consisted of 404, including 102 male second-language learners, 99 male non-second-language learners, 115 female second-language learners, and 88 female non-second-language learners.

The sample population was administered the School Climate Survey (Kelley et al., 1986) and the Student Satisfaction Survey (Schmitt & Loher, 1986). The School Climate Survey seeks to determine how respondents think most people characterize various dimensions of the organization by measuring shared perceptions rather than individual reactions. It is designed to capture an image of the organization rather than day-to-day responses to it. The Student Satisfaction Survey is both a mediating variable and an outcome variable; it both influences school success and corroborates it. The School Climate Survey collects data about perceptions on 10 subscales with 55 items, and the Student Satisfaction Survey provides data about student perceptions on eight subscales with 46 items. These surveys, which were available in English and Spanish, were administered over a three-week period during Spring 1994. Student outcomes were measured using the Tests of Achievement and Proficiency in Reading Comprehension and

Math (Riverside, 1993). Four scores were developed for each student: TAP NCE scores for mathematics and reading comprehension and mean scores for school climate and student satisfaction. Finally, comparisons were made between second-language learners and non-second-language learners to determine whether any significant difference existed by gender.

Analysis of Data

Data on these factors were collected and analyzed using various methods. The Pearson product-moment was used to analyze the correlations between student satisfaction and school climate. Analysis of variance was used to analyze the mean scores for student satisfaction and school climate by language group and gender. Multiple regression analysis was used to determine the relationships among academic achievement, student satisfaction, perceptions of school climate, language group, and gender.

Summary of the Findings

Following are summary findings identified from the general findings of this study.

Research Question 1: There was a positive correlation coefficient between student satisfaction and school climate. Because the correlation fell within the range of .50 and .75, this is considered a moderate correlation.

Research Question 2: The perceptions of student satisfaction between second-language and non-second-language learners were statistically significant. Second-language learners were more satisfied. The perceptions of school climate between the two language groups were not significantly different.

Research Question 3: The perceptions of student satisfaction for boys and girls among second-language learners were statistically insignificant, as were the perceptions of school climate by gender among second-language learners.

Research Question 4: The perceptions of student satisfaction for boys and girls among non-second-language learners were statistically significant; however, the perceptions of school climate for boys and girls among this language group were not.

Research Question 5: Parameter estimates showed that gender, school climate, and language group were significant independent predictors of reading achievement, while student satisfaction was not.

Research Question 6: Parameter estimates demonstrated that language group was the only significant independent predictor of mathematics achievement. Gender, satisfaction, and school climate had no effect on math achievement and were not significant individual predictors.

Conclusions

The literature on the impact of the research on effective schools, school climate, and student satisfaction on student outcomes is extensive. Yet, research on the relationship of these characteristics to secondary school students, particularly second-language learners, is minimal. Therefore, it is imperative that educational leaders become more cognizant of the educational needs of second-language learners, especially in the establishment of educational programs to meet the requirements of the President's Goal 2000 program.

The results of this study demonstrated a positive relationship between student satisfaction and school climate. How students perceived others' views of the school and how they viewed the school themselves were positively correlated. This indicated that to a moderate degree students were content with the curriculum and instruction, their safety on campus, and their social interactions with others. In addition, students generally found that the campus met their academic and social needs. There was an overall positive sense of belonging. This sense of belonging was referred to by Nwankwo (1979) as "the general 'we-feeling,' group sub-culture or interactive life of the school" (p. 268). It is illustrated by getting up in the morning and wanting to attend classes. This characteristic

determines whether the school can achieve excellence or will flounder ineffectually (Gottfredson & Hollifield, 1988).

The means for second-language learners on student satisfaction and school climate were higher than those for non-second-language learners. This indicates that home language is not a barrier to equity in education. Despite the higher mean for satisfaction and climate for second-language learners, the two groups may not be dissimilar in common practice. It is interesting that second-language learners had a higher mean score in both categories. This could be a result of the wide range of course offerings, the open access to these courses, and the methodologies implemented by teachers.

Gender for second-language learners was not statistically significant for student satisfaction or perceptions of school climate. Both boys and girls had nearly parallel findings. These results indicate the absence of gender discrimination.

Among non-second-language learners, girls scored significantly higher on student satisfaction than boys; however, there was no significant difference by gender for school climate. Despite the significant difference in student satisfaction in favor of the non-SLL females, the small degree of difference in the variables indicates little or no difference in common practice. The same reasoning

could be induced as for the second-language learners, i.e., primary home language is not an important variable when considering student satisfaction and perceptions of school climate by gender.

Student outcomes should always be the main focus for determining the effectiveness of a school's delivery of instruction. In both math and reading achievement, second-language learners scored 13 to 21 points lower than non-second-language learners. Because participants were freshmen students who had taken the TAP (Riverside, 1993b) achievement tests in early October, the findings would not accurately represent curriculum and instruction at the secondary level. This suggests the necessity for reviewing program offerings and the implementation of methodologies at the middle-school level. There is a critical need for an established pattern of articulation between the middle schools and high schools to provide a consistent program of curriculum and instruction for second-language learners that is implemented by middle schools and enhanced at the high-school level. Another primary consideration is the development of a consistent program in reading and math in high school Chapter I programs.

Recommendations for Future Study

Following examination of the findings and conclusions of this study, several recommendations seem appropriate.

1. This study should be replicated over a three-year period to ensure the validity of the test results.
2. This study should be replicated at the middle-school level.
3. Additional research should be done on the independent predictors for reading and math achievement.
4. Additional research should be done on the effects of teacher credentials in bilingual education and/or English as a Second Language on student outcomes, school climate, and student satisfaction.

APPENDIX A
SCHOOL CLIMATE SURVEY

SCHOOL CLIMATE SURVEY

FORM A

Edgar A. Kelley, John A. Glover, James W. Keefe,
Cynthia Halderson, Carrie Sorenson, and Carol Speth

Directions

This survey asks different groups in a school and community what **most people** think about the school. These groups include students, teachers, school administrators, other school workers, school board members, and parents or other members of the community.

The survey has a number of statements that describe situations found in many schools. Most of these statements will fit your school, but for those that do not, mark the "don't know" answer.

Please mark your answers on the separate answer sheet. Use only a No. 2 pencil. Before you begin the survey, you will be asked to fill in the following information on the answer sheet about yourself and your school:

1. Individual I.D. Number. Your I.D. number at school (students) or Social Security number (teachers, parents, and community members).
2. School Code. (This number will be given to you).
3. Grade. (If you are a student.) 6 = 6th grade; 7 = 7th grade; 8 = 8th grade; 9 = 9th grade; 10 = 10th grade; 11 = 11th grade; 12 = 12th grade
4. Role. 1 = Student; 2 = Teacher; 3 = School Staff other than Teacher or Administrator; 4 = School Administrator; 5 = Parent; 6 = Community Member other than Parent.
5. Class Code. (This number will be given to you if used.)
6. Sex. 1 = Female; 2 = Male
7. Race. 1 = American Indian; 2 = Asian American; 3 = Black; 4 = Hispanic; 5 = White; 6 = Other
8. Special Codes. (If needed, this information will be given to you.)

Do not mark in this booklet or write your name on the answer sheet (your answers are confidential). Mark only one answer for each statement. Choose the answer that you think **most**

people in your school and community would pick. Use the following scale for your answers.

- 1 = Most people would **strongly disagree** with this statement.
- 2 = Most people would **disagree** with this statement.
- 3 = Most people would **neither agree nor disagree** with this statement.
- 4 = Most people would **agree** with this statement.
- 5 = Most people would **strongly agree** with this statement.
- 6 = I **don't know** what most people think about this statement, or I **don't know** whether this statement fits the school.

TEACHER-STUDENT RELATIONSHIPS

- 1. Teachers in this school like their students.
- 2. Teachers in this school are on the side of their students.
- 3. Teachers give students the grades they deserve.
- 4. Teachers help students to be friendly and kind to each other.
- 5. Teachers treat each student as an individual.
- 6. Teachers are willing to help students.
- 7. Teachers are patient when a student has trouble learning.
- 8. Teachers make extra efforts to help students.
- 9. Teachers understand and meet the needs of each student.
- 10. Teachers praise students more often than they scold them.
- 11. Teachers are fair to students.
- 12. Teachers explain carefully so that students can get their work done.

SECURITY AND MAINTENANCE

- 13. Students usually feel safe in the school building.
- 14. Teachers and other workers feel safe in the building before and after school.
- 15. People are not afraid to come to school for meetings and programs in the evening.
- 16. Classrooms are usually clean and neat.
- 17. The school building is kept clean and neat.
- 18. The school building is kept in good repair.
- 19. The school grounds are neat and attractive.

GO TO THE NEXT PAGE

KEY: MOST PEOPLE

- 1 = STRONGLY DISAGREE
- 2 = DISAGREE
- 3 = NEITHER AGREE NOR DISAGREE
- 4 = AGREE
- 5 = STRONGLY AGREE
- 6 = DON'T KNOW

ADMINISTRATION (Principal, Assistant Principal, etc.)

- 20. The administrators in this school listen to student ideas.
- 21. The administrators in this school talk often with teachers and parents.
- 22. The administrators in this school set high standards and let teachers, students, and parents know what these standards are.
- 23. Administrators set a good example by working hard themselves.
- 24. The administrators in this school are willing to hear student complaints and opinions.
- 25. Teachers and students help to decide what happens in this school.

STUDENT ACADEMIC ORIENTATION

- 26. Students here understand why they are in school.
- 27. In this school, students are interested in learning new things.
- 28. Students in this school have fun but also work hard on their studies.
- 29. Students work hard to complete their school assignments.

STUDENT BEHAVIORAL VALUES

- 30. If one student makes fun of someone, other students do not join in.
- 31. Students in this school are well-behaved even when the teachers are not watching them.
- 32. Most students would do their work even if the teacher stepped out of the classroom.

GO TO THE NEXT PAGE

KEY: MOST PEOPLE

- 1 = STRONGLY DISAGREE
- 2 = DISAGREE
- 3 = NEITHER AGREE NOR DISAGREE
- 4 = AGREE
- 5 = STRONGLY AGREE
- 6 = DON'T KNOW

GUIDANCE

- 33. Teachers or counselors encourage students to think about their future.
- 34. Teachers or counselors help students plan for future classes and for future jobs.
- 35. Teachers or counselors help students with personal problems.
- 36. Students in this school can get help and advice from teachers or counselors.

STUDENT-PEER RELATIONSHIPS

- 37. Students care about each other.
- 38. Students respect each other.
- 39. Students want to be friends with one another.
- 40. Students have a sense of belonging in this school.

PARENT AND COMMUNITY-SCHOOL RELATIONSHIPS

- 41. Parents and members of the community attend school meetings and other activities.
- 42. Most people in the community help the school in one way or another.
- 43. Community attendance at school meetings and programs is good.
- 44. Community groups honor student achievement in learning, music, drama, and sports.

INSTRUCTIONAL MANAGEMENT

- 45. There is a clear set of rules for students to follow in this school.
- 46. Taking attendance and other tasks do not interfere with classroom teaching.
- 47. Teachers spend almost all classroom time in learning activities.

GO TO THE NEXT PAGE

KEY: MOST PEOPLE

- 1 = STRONGLY DISAGREE
- 2 = DISAGREE
- 3 = NEITHER AGREE NOR DISAGREE
- 4 = AGREE
- 5 = STRONGLY AGREE
- 6 = DON'T KNOW

INSTRUCTIONAL MANAGEMENT, continued

- 48. Students in this school usually have assigned schoolwork to do.
- 49. Most classroom time is spent talking about classwork or assignments.
- 50. teachers use class time to help students learn assigned work.
- 51. Outside interruptions of the classroom are few.

STUDENT ACTIVITIES

- 52. Students are able to take part in school activities in which they are interested.
- 53. Students can be in sports, music, and plays even if they are not very talented.
- 54. Students are comfortable staying after school for activities such as sports and music.
- 55. Students can take part in sports and other school activities even if their families cannot afford it.

END OF THE SURVEY

APPENDIX B

STUDENT SATISFACTION SURVEY

STUDENT SATISFACTION SURVEY

FORM A

Neal Schmitt and Brian Loher

Directions

This survey has a number of statements which may describe situations in your school. For each statement, mark one answer on the answer sheet. Use only a No. 2 pencil. Do not write on this questionnaire.

Before you begin the survey, you will be asked to fill in the following information on the answer sheet about yourself and your school:

1. Individual I.D. Number. Your I.D. number at school.
2. School Code. (This number will be given to you.)
3. Grade. 6 = 6th grade; 7 = 7th grade; 8 = 8th grade; 9 = 9th grade; 10 = 10th grade; 11 = 11th grade; 12 = 12th grade
4. Role. Fill in # 1 for Student.
5. Class Code. (This number will be given to you if used.)
6. Sex. 1 = Female; 2 = Male
7. Race. 1 = American Indian; 2 = Asian American; 3 = Black; 4 = Hispanic; 5 = White; 6 = Other
8. Special Codes. (If needed, this information will be given to you.)

Do not mark in this booklet or write your name on the answer sheet (your answers are confidential). Use the scale below to select the answer that best describes how **you** feel about each item:

- 1 = I am **very unhappy** about this aspect of my school.
- 2 = I am **unhappy** about this aspect of my school.
- 3 = I am **neither happy nor unhappy** about this aspect of my school.
- 4 = I am **happy** about this aspect of my school.
- 5 = I am **very happy** about this aspect of my school.
- 6 = I **don't know** how I feel about this aspect of my school, or I **don't know** whether this statement fits my school.

KEY: I AM

- 1 = VERY UNHAPPY
- 2 = UNHAPPY
- 3 = NEITHER HAPPY NOR UNHAPPY
- 4 = HAPPY
- 5 = VERY HAPPY
- 6 = DON'T KNOW

TEACHERS

- 1. How well teachers understand my problems.
- 2. How often teachers tell me when I do good work.
- 3. How much teachers help me when I am having trouble.
- 4. How much teachers make me want to learn new things.
- 5. How much teachers help me with my schoolwork.
- 6. How much my teachers seem to enjoy teaching.
- 7. How I feel, in general, about my teachers.

FELLOW STUDENTS

- 8. How easy it is to make new friends at my school.
- 9. How often students help each other on school projects.
- 10. How students treat each other.
- 11. The kinds of students who go to my school.
- 12. How I feel, in general, about other students who go to my school.

SCHOOLWORK

- 13. The choices I have in picking classes.
- 14. How much my classes challenge me.
- 15. The number of tests I have.
- 16. How much my schoolwork is exciting.
- 17. The amount of homework I have.
- 18. How I feel, in general, about my classes and schoolwork.

STUDENT ACTIVITIES

- 19. The number of sports teams at my school.
- 20. The number of school events in which I take part.
- 21. How much students can plan and take part in school events.
- 22. The number of social events at the school.
- 23. How I feel, in general, about student activities in my school.

GO TO THE NEXT PAGE

KEY: I AM

- 1 = VERY UNHAPPY
- 2 = UNHAPPY
- 3 = NEITHER HAPPY NOR UNHAPPY
- 4 = HAPPY
- 5 = VERY HAPPY
- 6 = DON'T KNOW

STUDENT DISCIPLINE

- 24. How safe I feel at school.
- 25. How well students behave in class.
- 26. How well students behave in the school.
- 27. How well school rules are enforced.
- 28. How well students do what is expected without being told.
- 29. How I feel, in general, about student discipline in my school.

DECISION-MAKING OPPORTUNITIES

- 30. The importance of meetings that students are invited to attend.
- 31. How much opportunity students have to comment on courses that are offered.
- 32. How much influence the student council has in suggesting school events.
- 33. How well school administrators listen to student ideas.
- 34. How I feel, in general, about my opportunity to help make decisions at my school.

SCHOOL BUILDINGS, SUPPLIES, AND UPKEEP

- 35. How easy it is for me to use the school library.
- 36. How good the books and other materials are in the school library.
- 37. How well the school grounds are kept clean.
- 38. How well the school buildings are kept clean and in good repair.
- 39. How well classroom supplies and materials help me learn.
- 40. How happy I am, in general, about the school buildings, supplies, and upkeep at my school.

GO TO THE NEXT PAGE

KEY: I AM

- 1 = VERY UNHAPPY
- 2 = UNHAPPY
- 3 = NEITHER HAPPY NOR UNHAPPY
- 4 = HAPPY
- 5 = VERY HAPPY
- 6 = DON'T KNOW

COMMUNICATION

- 41. How easy it is for me to find out about new and important things at school.
- 42. How easy it is for me to talk to teachers outside the classroom.
- 43. How much I am told about what is happening at the school.
- 44. How much time I spend talking with other kids about classes and school activities.
- 45. How easy it is to talk with the principal or other school administrators.
- 46. How I feel, in general, about relating to people and things at my school.

END OF THE SURVEY

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