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# A Study of Ninth Grade Students' Satisfaction with School and Self-Esteem in Two Grade Organization Patterns 

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# A STUDY OF NINTH GRADE STUDENTS' SATISFACTION WITH SCHOOL AND SELF-ESTEEM IN TWO GRADE ORGANIZATION PATTERNS 

by

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A Dissertation<br>Submitted to the Graduate Faculty<br>of the<br>University of North Dakota<br>in partial fulfillment of the requirements<br>for the degree of<br>Doctor of Education

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1992

This dissertation, submitted by Marcia Jane Brokenik Fivizzani in partial fulfillment of the requirements for the Degree of Doctor of Education from the University of North Dakota, has been read by the Faculty Advisory Committee under whom the work has been done and is hereby approved.


This dissertation meets the standards for appearance, conforms to the style and format requirements of the Graduate School of the University of North Dakota, and is hereby approved.


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#### Abstract

This study focused on ninth grade students attending school in two grade organization patterns, 7 through 9 and 9 through 12. Students' satisfaction levels with school as measured by the NASSP Student Satisfaction Survey and students' self-esteem measures on the Coopersmith Self-Esteem Inventory were assessed to determine whether a relationship between grade organization, gender, satisfaction with school, and self-esteem existed. Ninth graders from one upper midwest community who attended a four-year high school ( $\mathrm{N}=317$ ) or a 7 through 9 junior high school $(\mathrm{N}=226)$ participated in the study. The data were analyzed using two-way analyses of variance and Pearson product moment correlations.

Findings revealed that both schools scored within the average range on all subscales of the Student Satisfaction Survey. Scores for males and females also were within the average range. Significant differences in the mean satisfaction scores were found. Ninth graders in the four-year high school expressed significantly greater satisfaction than junior high school students on the Teachers; Schoolwork; Activities; Discipline; Decision-Making; and Building, Supplies, and Upkeep subscales. The differences were not significant for males and females.

Significant interactions between school and gender were discerned through the analyses of the self-esteem scales. This indicated concomitant influences of school and gender on self-esteem measures on the General, Social, and Total Self scales. A consistent pattern persisted through all four analyses. Males' self-esteem scores were higher for junior high students; females' self-esteem scores were higher for senior high students. Grade organization patterns to enhance


self-esteem differed by gender in the two schools studied. Consistently significant positive correlations between the eight satisfaction subscale scores and the four self-esteem measures were found.

While grade organization was found to affect student satisfaction and self-esteem, neither pattern was judged superior. The educational program provided was considered key. Educators should be sensitive to the many disruptions students realize in school transitions, the problematic self-esteem among adolescents, their dissatisfaction with elements of school, and their disparate levels of intellectual, social, and physical development.

## CHAPTER I

INTRODUCTION

[^0]When the Soviets hurled a 184-pound satellite into space in 1957, they simultaneously launched our nation's renewed focus upon and commitment to public education (Boyer 1983, pp. 1-2). This Russian achievement was perceived as threatening to our national security while casting a shadow upon our pride as a world leader in all arenas, including education. Congress reacted with the passage of the National Defense Education Act for the development of improved math, science, and foreign language curricula. This was followed by the Equal Educational Opportunities Program of the Civil Rights Act of 1964 and President Johnson's unprecedented Elementary and Secondary Education Act of 1965 to provide educational programs and materials for the poor. The 1960s, 1970s, and 1980s found educators involved in experimentation to achieve excellence, embracing innovative ideas that at times were founded upon little or no research support. Thus appeared the "back to basics" movement as early as the 1950 s in response to the doleful and fearsome criticism in popular literature of the era (Goodlad 1984, p. 2). New math and open classrooms were embraced for a period but did not endure (Tanner 1984, p. 5). Innovative organizational approaches such as flexible modular scheduling were introduced only to become the bane of many secondary level principals in the years to follow.

It was evident that Americans wanted schools to strive for excellence. One of the most strident exhortations on this educational mandate was contained in the report of the National Commission on

Excellence in Education (1983), A Nation at Risk. It concluded that "the educational foundations of our society are presently being eroded by a rising tide of mediocrity that threatens our very future as a Nation and a people" (p. 5). Educators such as Edmonds (1979), Brookover and Lezotte (1977, 1979), Rutter et al. (1979), and Goodlad (1984) among a host of others contributed to a prolific body of literature which sought to reveal the qualities of effective, successful schools. Indeed Barth (1990) contended that, "In the past two decades, we as educators have seen the major question before us shift from the depressing, 'Do schools make any difference?' to the far more hopeful, 'What characteristics of schools are associated with what desirable outcomes for students, teachers, and principals?'" (p. 512).

It was in the 1960 era when fresh ideas, creative changes, and renewed interest in child-based learning teemed that a middle school concept was initiated. This movement has endured for more than a quarter of a century, has matured under the scrutiny of educational researchers, has basked in the revelations of the effective schools literature, and "is of such a magnitude that it is practically unequalled by any other national educational effort" (George and Oldacker 1985, p. 2).

This movement has significance for ninth graders, although the grade is rarely the focus of middle school advocates. Typically the debate has become whether to educate the middle grades in a junior high or middle school setting. Ninth grade characteristically is included in a junior high school and excluded from the middle school grade organization. Hence the question, "How fares the ninth grade?," seems appropriate to explore at this juncture as those characteristics associated with desired student outcomes are sought.

This chapter includes an overview of the backgrounds and histories of both the junior high school and middle school movements. In citing the need for the study, references to the bodies of literature
regarding grade organization, self-esteem, and school climate and satisfaction are made. The literature is reviewed in greater depth in chapter II. The first chapter is concluded with a statement of the purpose of the study, a reference to the delimitations and assumptions of the study, definitions of terms pertinent to the study, and the delineation of the questions that are investigated by the study.

## Background and History of the Problem

A study of 141 ninth grade students conducted under the auspices of the National Association of Secondary School Principals (NASSP) Middle Level Committee and Council in March 1984 suggested that "prevailing educational wisdom and, increasingly, common practice would seem to support the generalization that the ninth grade belongs in the high school" (Lounsbury and Johnston 1985, p. 1). This grade, however, has been central to a continuing issue of appropriate organizational structure. The emergence of graded schools in the nineteenth century foreshadowed the controversy that still prevails today as to how grade levels should be organized in order to address optimally the educational, social, and psychological needs of students. This debate has been focused most pointedly at the middle years of schooling where the transition between elementary and secondary education occurs and where the students are in transition from childhood to adolescence. These "in-between" years, termed "transescent" by Eichhorn (1966), are marked by a pronounced lack of uniformity in students' characteristics, an inevitability that confounds educators' decisions as to how best to aggregate grades to serve this diverse population. It is in this developmental state that students experience the onset of puberty, and the wide variability of physical, mental, and socio-emotional maturation rates for individuals in these years cause them to not only be dissimilar to students in grades above and below their own placements but also to be relatively unlike those among their own age ranks. The
challenge to educators remains how best to meet the special needs of students in the middle grades (Calhoun 1983).

At the turn of the century, educators sought to ameliorate the dilemma through the development of the junior high school, a unique educational institution to address specifically the needs of preadolescent and adolescent students. By removing the ninth grade from the high school and joining it with the seventh and eighth grade classes from the elementary school, the junior high school revamped the prevalent grade arrangements of kindergarten through eighth grade elementary settings and ninth through twelfth grade high schools. It was intended that such a reorganization would solve many of the persistent educational problems for the middle grade students. One among those concerns was the large number of students who dropped out of school at the end of sixth grade or after having completed eighth grade. Through the introduction of secondary school subjects to a younger age group, it was anticipated that greater numbers of students would be retained in school. An institution that bridged the elementary years where children were loved and secure in self-contained classrooms was seen as a means to ease the transition to the high schools where it could be perceived by many students that they were relatively anonymous and insignificant among the large numbers of students in attendance. The junior high school was also an initiative for providing more appropriate space for the physical needs of growing boys and girls as well as for addressing the developmental changes of early teens. New evidence concerning the physical and emotional characteristics of pubescent children encouraged the view that adolescent students should be segregated from elementary and high school pupils (Calhoun 1983, p. 51). Some educators also looked to this new grade configuration as a vehicle for the provision of opportunities for the most able students to be accelerated in order to enter college at an earlier age as well as a
response to the demands for better preparation for all from such college leaders as Harvard's President Charles Eliot.

Noar (1953) suggested that the functions and purposes of the junior high schools of the 1950 s were unchanged from those of the emergent institution in 1910 save for the mistaken attempt to advance academically superior students into the high school prior to their social and emotional readiness to associate with older youth. Swenson (1963) concurred that grade acceleration was not an acceptable procedure in the education of junior high school students. Rather, subject acceleration was both desirable and effective. Less chance of hindering the long-range development of individual boys and girls during the diversity of variation of physical growth, emotional adjustment, and intellectual maturity would be realized by having them remain with their age group throughout three years of junior high school. Noar cited the basic principles upon which the junior high school was founded to have been:

1. Articulation -- helping children's transition from elementary school through junior high school and into senior high school with as little difficulty as possible.
2. Exploration -- giving young teenagers an opportunity to discover through brief experiences what some of the high school courses were like, with the expectation that this would enable them to select their senior high school courses more wisely.
3. Educational guidance -- helping pupils to choose from among elective subjects offered in the junior and later in the senior high school.
4. Vocational guidance -- helping students to make decisions about jobs and careers.
5. Activity -- providing social and athletic experiences and giving the students an opportunity to participate in administration and control of the school. These activities were organized into an "extracurricular program" of clubs.
6. Time-saving -- permitting bright students to skip a semester and thus to specialize earlier and enter senior high school sooner (p. 4).

Gruhn and Douglass (1956) believed that "the junior high school movement from the very beginning was dominated by a desire to develop a program of education that effectively would meet the needs, interests, and abilities of early adolescents" (p. 26). They developed a list of functions that the junior high school of the middle 1940s was
expected to provide, concluding that the institutions should address the students' needs for integration, exploration, guidance, differentiation, socialization, and articulation (pp. 31-32). These functions persisted into the next decade while the concepts that they symbolized initially for Gruhn and Douglas matured into deeper and broader significance for educators who followed.

The term integration became threefold in meaning. It encompassed the notions of a unified program from the seventh through the ninth year of schooling. It also encompassed a modern environment that replaced the departmentalized program with one that structured multi-disciplinary units and an acknowledgment that focus was to be given to programs that fostered personality adjustment and mental health among students. Exploration was the objective of the extracurricular club programs in which students were allowed to experience new activities and through which they were to grow in awareness of their own aptitudes and interests. Curricular offerings in areas such as home economics, shop classes, foreign languages, algebra, and business education provided additional exploratory opportunities for students who were to determine the "curriculum groove" that they would follow through senior high school. Guidance was recognized as a necessary component in adolescents' education. It began as a homeroom in which a group of students were assigned to an adviser whose responsibility it was to create warm, friendly relationships similar to those found in the home and where students could bring their concerns to the teacher for wise counsel and advice. This evolved into a practice of character education where programs of guidance were taught to pupils during the home room period and finally moved to a recognition that guidance practices must be characterized as a way of life in the school, the means by which students and teachers should interact to ease the difficulties encountered in the adolescent years. Differentiation referred to the classroom function of meeting individual needs and providing for
individual differences and abilities. Its practice encouraged the recognition of the interdependence of all people and the necessity of contribution of one's best to a group effort so that the end result might exceed that which any one person could attain singularly. Socialization embraced the objectives of assisting the child to achieve a degree of self-acceptance and adjustment to the peer group as well as to learn about the dynamic processes of civilized society and to attain the skills for effective participation in the democratic state. Finally, articulation focused upon the necessity that teachers of the several school levels should meet to exchange information about the children in order to plan a continuous curriculum that would envelop kindergarten through twelfth grade and ensure an ease in adjustment of students as they moved from elementary to junior high to senior high schools. Articulation among junior high school teachers was deemed essential to the development of programs and activities requisite for accomplishing the goals of assisting students to accept themselves, each other, adults, and authority; to adjust to new ways of learning and living; and to meet increasingly more rigid academic requirements through the years (Noar 1953, pp. 4-26).

Popper (1967) envisioned the role for the junior high school to be the "mediator between the human condition at the onset of adolescence and the pressure of culture" so as to continue the education of the child that had begun in elementary school (pp. 48-49). Lounsbury (1962) wrote that "if the junior high school has any real justification as a separate educational unit or a distinct level of education today or any day that justification must grow out of the nature of early adolescents" (p. 45). Spagnoli (1967) studied the needs of the adolescent and compared these with the programs of the junior high school. He concluded that the "purposes and functions of the junior high school in the mid 1960 s are . . . directly related to the well-being of the early adolescent" (p. 94). Spagnoli cited "the
dominating purpose of the junior high school may be stated in these words: To provide an educational program which will best meet the needs, interests, and abilities of the early adolescent" (p. 95).

The first junior high school opened in Richmond, Indiana, in 1895, but the 1910 reorganization of schools in Columbus, Ohio, and Berkeley, California, into 6-3-3 systems was considered the real beginning of the movement, one that readily gained the favor of the nation's educators. By 1970 junior high schools in the United States numbered almost 6,000 (Calhoun 1983, p. 53). However, during the past two decades, many educators have begun to question the effectiveness of the junior high school with some going so far as to consider it a great educational folly.

Those who embraced the new middle school movement, emerging in earnest in the 1960s, spoke to the need of humanizing education for youth during their unique period of growth and development. These new schools, or, more accurately, new concepts of schools in the middle grades, were envisioned as bridges from elementary to secondary education as well as from childhood to adolescence (Alexander and George 1981, pp. 1-2). Proponents of the middle school sometimes focused greater criticism on the perceived failings of the junior high school program rather than on the philosophical girdings upon which it had been conceived. It was claimed that the junior high school evolved into a "mini" senior high school where emphasis was placed on the subject matter to be learned rather than on the learner of the subject matter. Even the name, "junior" high school, reflected this mimicry in practices. Alexander et al. (1968), frequently acknowledged to be the "father of the middle school," exclaimed that "the junior high school has generally become a school more like the high school, better geared to the teenager than the 'in-between-ager'" (p. v.). Stewart (1975) envisioned the central focus of the middle school to be the student himself. He wrote, "The middle school, which features an educational
program predicated on each individual student's characteristics, interests, and objectives, is in a good position to be of positive value to the early adolescent" (p. 23). Such individual emphasis was seen to have been thwarted and shifted to a subject-matter orientation in the junior high school by the introduction of Carnegie units in the ninth grade. Strict departmentalization detracted from the needs for attention to and guidance of transescents. These academic practices coupled with the sophisticated social influences of evening parties, fraternal organizations, dating, and competitive school athletic contests were viewed to be inappropriate for the maturity level of students in the middle grades (Coffland 1975). Furthermore, a growing body of evidence suggested that adolescents were maturing at a younger chronological age and that the onset of puberty had been occurring four months earlier every decade since 1840 (Eichhorn 1966, pp. 12-13; Tanner 1962, p. 43). Though this trend appears now to have slowed, if not stopped, and the average age of menarche has stabilized at twelve and one-half years, today's adolescents are biologically two years advanced in maturation than their 1910 counterparts for whom junior high schools first were established (Lipsitz 1984, p. 6). Such critical analyses of the efficacy of junior high school programs led to the development of a new concept of schooling, the middle school, consisting usually of grades 5 or 6 through 8. "The concomitant occurrence has been the return of the ninth grade to the high school from whence it came when junior high schools were organized" (Lounsbury and Johnston 1985, p. 1).

While the reasons cited previously were reactionary to
negative perceptions of the 6-3-3 grade organization, there were also positive needs that middle school proponents espoused to support the new configuration of grades. Alexander and George (1981) pronounced the necessity of the middle school to bridge elementary and secondary education by addressing the here and now needs of its students, not by impassively linking the early childhood program to the secondary program
that would follow, but by becoming a dynamic educational force for improving the lives of middle school youngsters. Other reasons also encouraged the development of the middle school. The elimination of overcrowding in school buildings, a consequence of the swell of student enrollments caused by the post World War II baby boom, prompted many districts pragmatically to establish the schools in the 1960 s and 1970 s (Alexander et al. 1968; Booker 1978). The integration of diverse ethnic and racial groups at an earlier age was also a supportive rationale for some districts to shift to a middle school format. It was believed that moving children from their neighborhood elementary schools as early as grades five or six and introducing them to a broader mix of student backgrounds would inhibit the formation of stereotypic attitudes toward groups unlike themselves and facilitate integration (Calhoun 1983, p. 84). Sometimes support for the decision to shift could be explained as a desire to experiment with the modern innovations of open classrooms, team teaching, utilization of multi-media presentations, or student groupings by talent and interest rather than age alone; sometimes it was as pragmatic a reason as to use new or existing buildings more effectively.

Whether the decision to organize the middle school was based on a philosophical position, economic conditions, demographics, or a local preference, the expressed goals of the middle school were markedly similar to those espoused by the early architects of the junior high school. Calhoun (1983) noted that this uncanny resemblance was not of concern to many of the middle school advocates, for although the goals were congruent, it was anticipated that the means for achieving these aims were far more conducive to successful attainment in the middle school grade organization and structure. Alexander and George (1981) delineated these objectives of the new middle school to be:

1. A bridging of the gap between the elementary and the high school;
2. A provision of individualized instruction and curriculum to a student population widely varied in its physical and mental abilities;
3. The design of a curriculum to include a planned sequence of new concepts, an effort to develop the skills necessary for continued learning, and an emphasis on the development of values;
4. A focus on fostering the continuous progress through the entire educational program, including adequate articulation from one school level to the next; and
5. The improvement of the student's education through the optimum use of personnel and facilities (p. 19).

Brown (1981) advocated certain "key ingredients" had to be present for a middle school to be successful. His extensive list
included the following essential elements:

1. Grade Organization -- to include at least three grades and typically organized as grades 5 through 8 or 6 through 8 .
2. Team Teaching -- to emphasize the strengths of each teacher, to assist in grouping students, and to facilitate teachers to plan together.
3. Instructional Planning -- to allow team planning by faculty instructional leaders and administrators.
4. Student Groupings -- to provide for one-to-one, small group, and large group instruction depending on the nature of the learning activities.
5. Flexible Scheduling -- to allow teachers and students to design programs that meet the needs of students.
6. Continuous Progress -- to promote the continuous progress of a student with consideration for the individual needs, rates of learning, and abilities of that student.
7. Individualized Instruction -- to recognize the diverse needs of the individual student with programs responsive to those needs.
8. Independent Study -- to foster the development of individual interests.
9. Instructional Materials -- to design a diversity of materials to match the diversity of students' needs.
10. Basic Skills -- to provide remedial programs in basic subjects such as reading and mathematics that reinforce elementary grade teachings.
11. Exploration -- to provide a strong elective program.
12. Creative Experience -- to provide outlets for creative expression in activities such as music, art, drama, or literary publications.
13. Social Development -- to provide programs and guidance to help each student develop social skills.
14. Intramural Sports -- to offer additional opportunities for every student to develop physically in addition to the physical education program.
15. Focus on Development - to assist the student in the acceptance and understanding of the physical changes that his or her body would undergo during this developmental period.
16. Individual Guidance -- to develop a guidance program to meet the individual needs of each student.
17. Home Base Program -- to offer personal guidance to each student on a daily basis in a homeroom setting.
18. Values Clarification -- to assist the student in the identification of appropriate values and the clarification of conflicting ones.
19. Student Evaluation -- to evaluate a student's work positively, in a nonthreatening manner, and on a personal basis.
20. Transition from Elementary to High School -- to provide a gradual transition from self-contained elementary classrooms to departmentalized high school programs (pp. 18-19).

Lipsitz (1984) offered criteria requisite to the
identification of a successful middle school. The following defined
those characteristics of excellence:

1. They measure up to a set of "threshold" criteria related to safety, comportment, and achievement;
2. They respond appropriately to the developmental levels of students;
3. They pursue competence in learning;
4. They have won acceptance within the context of the local community and its expectations; and
5. They function well in response to or despite unresolved national policy issues (p. 11).

From these "laundry lists" of goals and objectives of the exemplary or successful middle school, it became clear that middle school education was to be responsive to the individual needs of rapidly changing, widely diverse young students in a group setting. Desired outcomes for this young adolescent population were defined in terms of teachable skills, acquisition of attitudes, and expectations for behaviors. It was not solely the academic growth but also the social development of these students in transescence to which middle schools were to be responsive.

The middle school movement gained great momentum in the decades following its inception, but schools in the middle still have remained organized in a wide variety of grade combinations. In a report, Valentine et al. (1981) identified the predominant organizational structure to contain grades 7,8 , and 9 with 42 percent of middle level schools configured in that manner. He found 31 percent to contain only grades 7 and 8 while 15 percent were comprised of grades 6,7 , and 8 and 4 percent were organized as schools of grades 5, 6, and 7. Though this was the practice, it was not the expressed preference of administrators of the middle level grades. Valentine et al. also
surveyed 1,413 principals for the NASSP and compared their 1980 responses to those from a similar 1966 NASSP survey. In the 1966 study, 65 percent of those questioned preferred a $7-8-9$ structure, 13 percent identified groupings of grades 7 and 8 as most ideal, and 18 percent selected the 6-7-8 grouping as the best for middle grade students. The 1980 responses indicated a shift in administrative thinking about optimum middle school grade organization. Regardless of the current grade arrangement in their own schools, 54 percent of respondents then identified the 6-7-8 organization pattern as most ideal, 18 percent preferred the 7-8 grouping, and 17 percent continued to believe that the 7-8-9 structure was most appropriate for the transescent youth population. Nearly a decade later it appeared as if the middle school had continued to grow in popularity as the organizational structure preferred for grades 6, 7, and 8. Cawelti (1988) noted that the middle school had overtaken the junior school as the predominant form of school organization for early adolescents. In a national survey of principals of schools containing grade 7, Epstein and Mac Iver (1990) reported that 39.3 percent of all seventh graders attended a middle school comprised of grades 6, 7, and 8. A school containing grades 7 and 8 accounted for 24.6 percent of seventh grade attendance while 17.4 percent of students in seventh grade attended a junior high school of grades 7, 8, and 9 . In much smaller numbers the remainders of the nation's seventh graders were reported to attend elementary-middle combinations ( $\mathrm{K}-8$ ), elementary-middle-high combinations ( $\mathrm{K}-12$ ), or middle-high combinations (7-12) (p. 3).

Perhaps consensus has not been reached and preference and practice have yet to reach congruence. The question still can be posed, "Should the ninth grade be the top grade in a three year junior high school or the bottom grade in a four year senior high school?" (Conant 1960, p. 11).

## Need for the Study

The fact that several grade organization patterns persist at the middle level of schooling has invited comparisons of the differing structures. Johnston and Markle (1986) noted that research could be focused in two general lines of inquiry: those based on curriculum and instruction and those based on the outcomes produced by each school. Lipsitz et al. (1985) stated that research has been hampered by serious problems, foremost of which they claimed to be the homogeneity of the schools themselves and the studies' poor research designs. They cited:

> Middle grade schools often lack a cadre of professionals sufficiently trained to distinguish middle schools from junior high schools. Given the sameness of curricula and professional training in the schools, whatever their grade organization, it comes as no surprise that study after study fails to find differences in student achievement, discipline, and self-esteem, or that the results of studies are contradictory (p. 18).

In a survey of middle schools, Brooks (1978) noted that the organization and curriculum design for the original junior high schools was still very prevalent for students in grades 7 through 9. Only the title given to the educational unit and the grade configurations of the students it served varied; schools were essentially the same.

Lipsitz et al. (1985) also noted that research design was frequently flawed, thus rendering it feasible to draw only tentative conclusions to questions investigated. They stated:

Researchers tend to look at one or even several variables, comparing a certain number of junior high schools with a certain number of middle schools -- but their studies fail to reveal what is actually happening inside those schools. Some of the studied schools are in transition, an important fact that is not mentioned until the last few paragraphs of one lengthy research report. It is often impossible to tell how school size and departmentalization influenced the results of a study because they were ignored in the research design (pp. 18-19) .

In a literature review prepared by Calhoun (1983) for the Educational Research Service, the findings of more than 180 studies of middle level schools were summarized. According to this report:
-- Research on how well junior high schools and middle schools achieved the goals that educational theorists established for
each showed neither was able to live up to the expectations of its advocates.
-- Studies found a similarity of goals in both junior high schools and middle schools.
-- Junior high schools and middle schools were found to be more alike than different in regard to curricula, organizational structure, instructional practices, administrative practices, staffing patterns, extra-curricular activities, elective courses, personnel, and co-curricular activities.
-- Little significant difference exists between the academic achievement of middle and junior high school students. However, some studies of schools that were changed from a junior high school to a middle school indicated that the middle school contributed to higher achievement and created an improved academic environment.
-- More than one-half of the studies comparing the attitudes and behavior of middle school and junior high school students as a function of the school that they attended found no significant difference between the two schools. Those studies identifying differences found more positive student attitudes among middle school students regarding school; themselves; and other students, teachers, and administrators.
-- Researchers who examined different aspects relating to grade organization agreed that quality of the school program was more important than its grade organization.
-- Grade pattern has no apparent effect on the organizational climate of the schools.
-- Evidence suggested that sixth graders more closely resembled seventh graders than elementary school students and ninth graders held more in common with high school students than with eighth graders. The maturity level of ninth grade students indicated that they more closely resembled tenth graders than eighth graders. Academic achievement of ninth grade students was not found to be affected by placement in either a junior or senior high school. The majority of principals and district administrators believed that the ninth grade belonged to the high school rather than with the seventh and eighth grades (pp. 171-79).

The literature in the field has not produced definitive
answers. Johnston and Markle (1986) contended neither was there clear evidence that one plan was better than the other nor that either plan, the junior high or middle school, could be chosen over the other with confidence. Lipsitz (1984) found nothing persuasive in the research to argue for a particular grade organization; however, in 1985 she suggested that there was a nagging suspicion, based on hints from careful research and the experience of thoughtful educators, that grade organization did at least indirectly make a difference.

Blyth, Smyth, and Hill (1984) wrote that there have been two basic approaches to the issue of grade level arrangements. One focused
on which grade levels contained students most similar in terms of several maturational dimensions and advocated that students who were most similar should be grouped together in the same school. They contended that this was problematic in that it failed to take into consideration the overall diversity that pervades the adolescent years. Such diversity would exist no matter how grades were organized. "The gains realized by excluding ninth graders and including sixth graders are slight when compared to the overall diversity that still remains" (p. 106). A second approach to determining optimal organization examined the consequences of different grade level arrangements. Blyth, Smyth, and Hill explained the complexity of the debate as integral to the questions regarding which aspects of development should be optimized and for whom the grade level organization should be optimal.

To the question, "Where does the ninth grade belong?," the 1985 NASSP study concluded that the issue remained open.

As is true with the middle level institution (should it be $5-8,6-8$, or 7-9?), there is no right answer. The key lies in the program provided for that grade wherever it is housed. At the same time, it has to be recognized that what is provided and the climate in which it is provided is "inevitably affected by the type of school unit in which it is housed" (Lounsbury and Johnston 1985, p. 75).

Lipsitz et al. (1985) acknowledged that because schools were similar no matter how grades were organized there was difficulty finding discrete examples that differed one from another to enrich our knowledge. They suggested:

Those who are entrusted with making decisions about grade organization should concentrate upon many other subjects, such as school leadership, responsiveness to early adolescent developmental characteristics, and educational effectiveness (p. 22).

The results of the 1985 NASSP shadow study, which documented the actual classroom experiences of 141 ninth graders across the nation, was revealing but did not yield clear support for one organizational structure over another. The researchers concluded that there was no inherent educational advantage to a particular form of organization and
since 7 through 9 and 9 through 12 schools exist in large numbers and for a variety of reasons, educators must be encouraged to examine the programmatic aspects of the ninth grade.

If Conant's statement in 1960 concluding that "there is no consensus whatever among experienced educators as to the place of grade nine in the organizational framework," (p. 11) and findings of the NASSP study twenty-five years later, which yielded no conclusive evidence that one organizational pattern was superior for ninth graders, are both accurate, then it becomes important to understand how ninth grade students perceive themselves and their educational experiences in these two different educational organizations. "Actually, the expectations of curriculum designers may be illusions and the teacher's guides and syllabi mere paper representations of hollow hopes" (Lounsbury and Marani 1964, p. v.). "It is not really fair to assess a school's program by examining the course of study or even by watching the teacher's performance. What counts is what the individual pupil experiences -- and what a single pupil experiences is not necessarily what the teacher is teaching or what the class in general is experiencing" (Lounsbury and Johnston 1985, p. 2).

In the body of research now being termed the "effective schools literature," it is concluded consistently that, among other attributes, school climate was a powerful determinant of student outcomes. In her identification of the minimum threshold criteria to form a framework for the identification and observation of successful middle grade schools, Lipsitz (1984) adopted as a "positive nonnegotiable criterion a readily observable phenomenon of infrequent occurrence in many schools: joy" (p. 15). It was her bias that laughter, vitality, interests, smiles, and other indications of pleasure should be reasonable expectations in schools. In gathering data about social indicators for policy analysis, social scientists selected happiness in marriage as a subjective indication of well-being.

Likewise, in the lives of children and adolescents, happy experiences in school were central to well-being and should be so recognized by policy setters, practitioners, and researchers (Lipsitz 1984, p. 15). Student satisfaction with the school, the individual's personal affective reaction to a specific situation or condition, is a mediating variable and an outcome measure; it is both influential in school success and corroborative of it (Halderson, Kelley, and Keefe 1987).

It is the assumption of this writer that students.
satisfaction with aspects of school could be affected by the type of school unit which the student attends. Therefore, using the NASSP Student Satisfaction Survey, ninth graders' expressed levels of satisfaction with school should be measured in order to determine whether there was a significant difference in satisfaction with school between that for students in 7 through 9 and 9 through 12 educational settings.

There is also a body of literature suggesting that a relationship between self-esteem and school achievement exists. While common sense might lead one to conclude that the manner in which students feel about themselves should influence how they perform school tasks and how they behave in the school environment, the correlations between general assessments of self-esteem and wide-range measures of achievement and behavior have remained weak and inconclusive (Means 1986). The intuitive significance that educators affix to self-esteem and achievement is better substantiated through the research that suggested the relationship of the effect of self-esteem on behaviors that are themselves related to academic achievement rather than the direct effect of self-esteem on achievement. Illustrative of this concept were the findings of Coopersmith (1967). He learned that people with high self-esteem approached tasks with the intent that they would succeed while individuals with low self-esteem believed that they would fail. Those low self-esteem people might even reject the success that
they earned and might possibly sabotage their efforts to succeed in order to avoid the conflict that would result from successful outcomes when diminished self-expectations were held. Coopersmith found that high self-esteem subjects tended to resist social pressures to conform, relying on their own analyses of situations and their own creative abilities to devise solutions to problems. They were more independent, inner-directed, and responsible for that which happened to them, attributes frequently accepted as contributory to academic achievement. Among middle school educators, the effect of teacher behaviors and attitudes on student self-esteem is deemed to be extremely important. Again, this is not due to the strong empirical evidence that couples self-esteem and student adjustment or achievement but to the tenet held by middle level educators that the development and enhancement of student self-esteem is a central objective of the school program (Eichhorn 1966; Lounsbury and Vars 1978). That this should be a high priority in curriculum and program design is attested to in Branan's (1972) findings. The fact that teachers can have a significant effect on the development of the self-esteem of their students was revealed in reports of college students who were asked to describe their most negative experiences. These reports typically listed personal interactions, the large majority of which were with teachers. The research suggested that teachers outdistanced the next most influential group, parents, in their capacity to influence student self-esteem.

Research on the self-esteem conducted by Simmons, Rosenberg, and Rosenberg (1973) as well as continued analyses of the data set (Blyth, Simmons, and Bush 1978; Simmons, Blyth, Van Cleave, and Mitsch-Bush 1979) indicated that girls were more vulnerable in terms of their self-esteem than boys during the adolescent period. Their studies showed a relationship between measures of self-esteem and transitions from elementary to junior high school to high school.

Such findings invite the comparisons of levels of self-esteem for ninth grade students in 7 through 9 and 9 through 12 educational settings. Should significant differences exist, such findings might suggest program alterations for educators to enact in order to enable students to grow more positively in self-awareness and self-acceptance. The writer administered the Coopersmith Self-Esteem Inventory to ninth grade students attending school in the two different organization patterns to determine if a significant difference in mean self-esteem measures existed.

## Purpose of the Study

This study focused on ninth grade students attending schools representative of two different grade organization patterns, 7 through 9 and 9 through 12. Students' satisfaction levels with school and students' self-esteem measures were assessed to determine whether a relationship between grade organization pattern, student gender, student satisfaction with school, and student self-esteem existed.

The writer neither intended nor expected to discern a superiority of one grade organization pattern over another for ninth grade students as a result of the investigations of this study. Such a condition could not be argued until and unless consideration of the effects of the organization scheme were examined at every other age and the cumulative effects brought to bear upon students in several dimensions of environments which potentially impacted expressed satisfaction and self-esteem were assessed. Nevertheless, it was anticipated that contributions to the body of literature on this subject would be forthcoming and that directions for continued research toward improving the educational experiences of the ninth grade would be suggested by its findings. It is essential consistently to identify areas needing further analysis if the real problems confronting American education are to be remedied. For school board members, educational administrators, and teachers designing the educational programs for this
population of transescents, it is hoped that this research will heighten sensitivities about working with the ninth grade in general and specifically working within the unique context that a grade organization pattern might imply to the perceptions of these fourteen-year-old and fifteen-year-old students with respect to their educational experiences.

The purpose of the study, then, was to examine the relationships among the eight subscales of student satisfaction as measured by the NASSP Student Satisfaction Survey, three of the subscales of self-esteem as measured by the Coopersmith Self-Esteem Inventory, the student's gender, and the grade organization pattern in which the student was enrolled in the ninth grade.

## Delimitations of the Study

This study was delimited to:

1. Public schools in one city in an upper midwest state in which ninth grade students attend school in one of two grade organization patterns: a junior high school containing grades 7 through 9 and a high school containing grades 9 through 12.
2. Ninth grade students enrolled in the public schools.
3. Ninth grade students enrolled in a regular level ninth grade English class or regular level physical science class during May 1989.
4. The perceptions of the sampled ninth grade students with respect to their satisfaction with their school.
5. The self-esteem levels of the sampled ninth grade students.

## Assumptions

The following assumptions were made in the design of this study:

1. Student satisfaction with school is a measurable variable.
2. Self-concept/self-esteem is a measurable variable.
3. The NASSP Student Satisfaction Survey reliably and validly measured students' affective responses to specific situations or conditions.
4. For the purpose of research, the Coopersmith Self-Esteem Inventory reliably and validly measured students' levels of self-esteem.
5. A relationship does exist between school achievement and satisfaction with school.
6. A relationship does exist between school achievement and self-esteem.
7. The distinctions between self-concept and self-esteem remain highly subjective, and the terms can be used interchangeably with confidence.

## Definitions

For this study, the following terms and their definitions are pertinent:

Transescence. The stage of development which begins prior to the onset of puberty and extends through the early stages of adolescence. Since puberty does not occur for all precisely at the same chronological age in human development, the transescent designation is based on the many physical, social, emotional, and intellectual changes that appear prior to the puberty cycle to the time in which the body gains a practical degree of stabilization over these complex pubescent changes (Eichhorn 1966, p. 3).

Middle school. A school which combines into one organization and facility certain school years (usually grades 5 through 8 or 6 through 8) which has in the past usually been separated in elementary and secondary schools under such plans as the 6-3-3, 6-2-4, and 6-6 organizations and which has at least three grades and not more than five grades including grades 6 and 7 (Alexander et al. 1968, p. 1).

Junior high school. An intermediate school which is designed to carry the pupil over from the content and techniques that are typical of the elementary school to those which characterize the senior high school usually including grades 7, 8, and 9 but in some locations including grades 7 and 8 (Noar 1953, p. 309).

Satisfaction. A personal, affective response of an individual to a specific situation or condition (Halderson, Kelley, and Keefe 1987, p. 30).

Climate. The relatively enduring pattern of shared perceptions about the characteristics of an organization and its members (Keefe, Kelley, and Miller 1985).

Self-concept. An organized configuration of perceptions of the self which are admissible to awareness. It is composed of such elements as the perceptions of one's characteristics and abilities; the value qualities which are perceived as associated with experiences and objects; and the goals and ideals which are perceived as having positive or negative valence. It is the organized picture existing in awareness either as a figure or ground, of the self and self-in-relationship, together with the positive or negative values which are associated with those qualities and relationships, as they are perceived as existing in the past, present, or future (Rogers 1951, p. 501).

Self-esteem. The value an individual places on self-concept. Self-concept is the description of self while self-esteem is the value worth of self (Beane and Lipka 1979, p. 4). The distinction between the two terms is highly subjective. Many psychologists and educators use the terms "self-concept" and "self-esteem" interchangeably (Battle 1982).

Grade organization pattern. The structure of a school accomplished through the grouping of students from one or more grades to form a separate administrative unit under the line authority of a single
administrator and using a separate building with a separate staff and operating budget (Gray 1981, p. 7).

## Research Questions

The following questions are investigated in the study:

1. Do ninth grade students in a 7 through 9 organizational structure evidence a different pattern of satisfaction with school than students in a 9 through 12 structure on the following dimensions of the NASSP Student Satisfaction Survey: Teachers; Fellow Students; Schoolwork; Student Activities; Student Discipline; Decision-Making Opportunities; School Buildings, Supplies, and Upkeep; and Communication?
2. Do female ninth grade students evidence a different pattern of satisfaction with school on the dimensions of the NASSP Student Satisfaction Survey than male ninth grade students?
3. Do ninth grade students in a 7 through 9 organizational structure evidence a different pattern of self-esteem than students in a 9 through 12 structure on the selected scales of the Coopersmith Self-Esteem Inventory: General Self, Social Self-Peers, School-Academic, and Total Self?
4. Do female ninth grade students evidence a different pattern of self-esteem as measured by the selected scales of the Coopersmith Self-Esteem Inventory than male ninth grade students?
5. Does a relationship exist between the dimensions of satisfaction with school and the scales of the self-esteem inventory?

## REVIEW OF THE LITERATURE

[T]he time for renewing education has arrived. We believe that today America has the best opportunity it will have in this century to improve the schools. There is a growing national consensus that our future depends on public education. There is a spreading awareness that every mind is a precious resource we cannot afford to waste. There is an eagerness to move beyond the alarming headlines; to begin to rebuild, with confidence, the public schools. As in the past, a new and more compelling vision of education is required to meet this challenge. And if we do not seize this special moment, we will fail the coming generation (Boyer 1983, p. 1).

If we subscribe to the notion that our youth are our future, then we appreciate the enormity of the responsibility that educators assume as they design and implement curricula in our schools to serve the intellectual, developmental, social, and emotional needs of students. The middle school movement initiated in the 1960 s has continued to be a focus of research efforts and has yielded numbers of expressions of professional opinion about how best to educate the students in the middle grades. Though no definitive answer has emerged regarding the efficacy of the middle school, the discourse and debate has continued. Meanwhile, the shift of many ninth graders to high schools has occurred while many others have remained as members of well established, widely supported, and very effective junior high schools (Lounsbury and Johnston $1985, \mathrm{p} .1$ ). It is imperative that middle grade educators be informed about ways to encourage healthy adolescent learning and development. Lipsitz (1977) commented that a considerable lack of fit exists in what we know about young adolescents and what we do to them five days a week in schools. This message was echoed by the Carnegie Council on Adolescent Development (1989) report, Turning Points, when it was stated:

A volatile mismatch exists between the organization and curriculum of middle grade schools and the intellectual and emotional needs of young adolescents. Caught in a vortex of changing demands, the engagement of many youth in learning diminishes, and their rate of alienation, substance abuse, absenteeism, and dropping out of school begin to rise (pp. 8-9) .

Continued inquiry into how to improve educational experiences for all middle grade students surely is warranted if one acknowledges the Carnegie Council's (1989) statement:

Young adolescents face significant turning points. For many youth 10 to 15 years old, early adolescence offers opportunities to choose a path toward a productive life. For many others, it represents their last best chance to avoid a diminished future (p. 8).

Ninth graders, typically fourteen-year-old and
fifteen-year-old youth, are every bit adolescents experiencing the rapidity of physical growth while in the confluence of intensive social, emotional, and intellectual changes. During this time, many youth enter a "period of trial and error, of vulnerability to emotional hurt and humiliation, of anxiety and uncertainty that are sources of unevenness of emotions and behavior associated with age" (Carnegie Council on Adolescent Development 1989, p. 21). This time is of immense importance in the development of the young person, and the period's "turmoil can herald the emergence of a new individual with the potential to learn, to think critically and independently, and to act responsibly according to principles and a code of ethics" (Carnegie Council on Adolescent Development 1989, p. 21).

If we accept this, we also should examine the ninth grade with those questions:

Has it been well served when shifted back to the high school? Are ninth grade programs more effective when they are located
in the upper unit rather than in a junior high school? Have high schools adequately accommodated ninth graders, or do established junior high schools serve their needs better? Do ninth grade programs, wherever they are located, reflect what we know about the nature and needs of 14 - and 15 -year-old youngsters? (Lounsbury and Johnston 1985, p. 1).

This chapter includes a review of the literature that examines adolescent development in the physical, social and emotional, and
intellectual domains. Studies related to satisfaction or attitudes and concomitant levels of achievement, particularly students' attitudes toward school and academic achievement, are examined. Literature relevant to adolescent self-esteem, its importance to life satisfaction and its critical state of flux during these years, is reviewed. Finally, research on the effects of grade organization and its effects on student achievement, attitudes, and general well-being is reported.

## Adolescent Development

Adolescence is a period of great growth and change as youth begin the transition from childhood to adulthood. There are two basic interrelated dimensions affecting the individual. First, there are forces from within caused by internal body changes. These affect the adolescent's relations with the environment. Conversely, there are external forces generated by the environment which impinge upon the individual (Eichhorn 1966, p. 7). The interrelationship of these internal and external forces was emphasized by Strang (1957) who wrote:

Facts about the physical growth preceding and following puberty are important for a number of reasons. Bodily changes, especially if sudden, change the adolescent's body image and self-concept; he may now see himself as an adult with adult privileges and responsibilities. Biological changes give rise to physical sensations; these are translated into emotional states, which in turn, may be expressed in social behavior. Slow or rapid growth, unevenness of growth, or abnormalities of growth may affect an adolescent's total development (p. 209).

While the physical, emotional, social, and cognitive aspects of development evolve simultaneously and interdependently for the individual, one of the most outstanding characteristics of the population of ten-year-olds to fifteen-year-olds is that of extreme variability, for the range of development on each trait is great (Eichhorn 1966, p. 5). Focusing more narrowly on the fourteen-year-old to fifteen-year-old ninth grader, Lounsbury and Johnston (1985) noted that they share a common set of characteristics but there is a broad range of variation, and these variations are significant for both the youngsters and the schools that they attend. The factors that cause
these variations are numerous and include intelligence levels, rates of physical maturation, motivation, socioeconomic status, and family make-up (p. 5).

## Physical Level of Development

The most dramatic change in the human life-span, puberty, is accompanied by a full range of physical changes in males and females. Physical growth over the three to five years of movement from childhood to adolescence is probably the greatest of human experiences: increased height and weight, increased body breadth and depth, and increased muscular strength (Alexander and George 1981, p. 5). Human beings grow more rapidly during this period than during any other time in their lives, except infancy. For females this growth spurt usually begins about age ten and one-half with the most rapid growth about age twelve. On the average, the growth spurt begins for males about one year later, at age fourteen (Dorman and Lipsitz 1984, p. 3). Thus, the ninth grade female might have attained almost her full adult height, and may well have done so two years earlier, while her male counterpart just is entering his growth spurt (Lounsbury and Johnston 1985, p. 6).

The distribution of body weight is also different for fourteen-year-olds and fifteen-year-olds. During the male growth spurt, shoulders broaden, and legs, compared with trunk length, grow longer. Females lose less fat in their growth spurt, and fat deposits occur in the breasts, thighs, and back of the upper arms (Lounsbury and Johnston 1985, p. 6).

Throughout this period of growth, there can be concomitant lack of coordination of bone and muscle development with bones becoming quite susceptible to damage in intense activities such as sports competition. Tendencies exist during periods of great growth for restlessness, overexertion, and fatigue (Alexander and George 1981, p. 6).

On the average, females experience their first menstrual period between the ages of ten and three-quarters and fifteen and one-half. Breast development usually begins between the ages of eight and three-quarters and thirteen and one-quarter and is completed between the ages of thirteen and eighteen. For males, genital growth may begin between the ages of nine and one-half and fourteen and end between twelve and seventeen (Dorman and Lipsitz 1984, p. 3).

The onset of puberty has occurred earlier and earlier. Many of today's females are physically capable of bearing children by age thirteen, and many of today's males probably can father a child by age fourteen or fifteen (Alexander and George 1981, p. 6). Two very different theories have been advanced to explain this accelerated growth in physical development referred to as the "secular trend." One theory is based upon diet and environmental conditions. The other is based upon the premise of hybrid vigor. Muuss (1971) claimed that it appeared impossible to say that one of the factors was entirely or even predominantly responsible while the other was not of influence. He found contributory factors to be nutritional considerations as well as other factors related to better health care, including prenatal care, immunization against disease, and reduction in serious illness. The change in family size from an average of six children in the mid nineteenth century to two or three children in the mid twentieth contributed to the secular trend. Children from small families were found to be consistently larger and to menstruate earlier than children from large families. Since electricity became widely available, children spent more hours awake and under illumination -- and as analogies from animals were drawn -- that too influenced the rate of growth and accelerated sexual maturity. More leisure time, better child care, laws prohibiting child labor, and improved housing and climate control as well as an improved standard of living were also contributory to the secular trend (pp. 57-58).

As part of the hybrid vigor hypothesis, it has been suggested that the inventions of the bicycle and the steam engine contributed to the secular trend. These technological advancements provided increased freedom to travel and select one's mate outside of a narrow confine. The change in pattern of mate selection caused a progressive "breaking down of genetic isolates, that is, of the tendency for marriages to be contracted between members of the same village community" (Tanner 1962, p. 150).

Adolescent adjustment to the maturation process is dependent upon the types of relationships the individuals can achieve with both their adult and peer associates. Some youth are able to adjust to the growth changes because they have been appropriately instructed and/or due to the fact that their growth patterns are compatible with societal expectations. However, in some cases where aţypical growth patterns are manifested or where personal security wanes, adolescents may undergo emotional stress affecting interpersonal relationships (Eichhorn 1966, p. 17).

Physical development occurring at varying ages may be either a source of anxiety or one of accomplishment. The differentiation of growth and its relationship to behavior have been the focus of considerable research. Mussen and Jones (1957) found that early maturing males presented a more favorable psychological profile than late maturing males. The latter were likely to have negative self-concepts; feelings of inadequacy, rejection, and domination; prolonged dependency needs; and rebellious attitudes toward parents. By contrast, the early maturing boys rarely felt inadequate, rejected, dominated, or rebellious. They seemed to be more self-confident, independent, and capable of playing an adult role (p. 255). Jones (1957) conducted a longitudinal study and reported that early maturing males usually were leaders while late maturers evidenced the need to counteract their physical disadvantage in some manner, typically by
striving for attention or by withdrawal. She further noted that patterns exhibited by a group of late maturing males at age seventeen did not alter substantially by age thirty-three. Following the same cohort to age forty Jones (1964) related:

In general it has been shown that boys who are accelerated in physical development in adolescence seem to be advantaged in the peer culture. In adulthood, although physical differences no longer distinguish the extreme maturity groups, some psychological differences still exist. The early developers cling to their early success pattern, continue to be well socialized to make a good impression. Late developers, carrying over a childhood pattern, are adventurous, rebellious, and assertive. They are also more flexible, a finding that suggests some salutary effects of what was interpreted as an adolescent disadvantage (p. 2).

A comparable pattern of behavior was observed in female adolescents. Early maturers generally displayed a more secure sense of self in their relations than did late maturers. More (1953) wrote that early maturing females were more independent, had fewer conflicts with inner values, had fewer feelings of inner guilt, and were more realistic in their self-evaluations than late maturers. Late maturers were likely to believe themselves unloved, misunderstood, and uncared for. Faust (1960) found that early maturing tended to limit prestige for females below the junior high years but enhanced prestige for older ones. The late maturing female was at a disadvantage but less so than the late maturing male. Like the male, but to a lesser degree, Rogers (1972) believed she may have felt out of place among her peers and lacked dating partners (p. 37).

This period of physical maturation results in emotional and social anxiety and tension. Eichhorn (1966) cautioned educators to realize that "the focal point for the learning process is the child's needs . . . [E]ducators' have a responsibility to consider the transescents' needs as the 'engine' and not the 'caboose' of the educational 'train'" (p. 23). Educators need to have both conviction and courage to initiate and to maintain educational processes compatible with their knowledge of the physical nature of the adolescent.

During the middle years of schooling, youth experience an evolution in their social status. As in all age groups, the emerging adolescent has roots firmly imbedded in the nature of the culture in which he or she is developing (Eichhorn 1966, p. 40). Anthropologist Margaret Mead in her study of Samoan culture demonstrated the importance of cultural impact on social structures. While some of her conclusions have been questioned by later scholars, she posed some provocative questions about the relationship between culture and social structures.

Mead (1961) asked:
Is adolescence a period of mental and emotional distress for the growing girl as inevitably as teething is a period of misery for the small baby? Can we think of adolescence as a time in the life history of every girl which carries with it symptoms of conflict and stress (p. 196)?

Mead's (1961) description of the Samoan lifestyle suggested that storm and stress believed to be omnipresent during adolescence could be a cultural phenomenon rather than an attribute of biology. She wrote:

The Samoan background which makes growing up so easy, so simple a matter, is the general casualness of the whole society. For Samoa is a place where no one pays very high prices, no one suffers for his convictions, or fights to death for special ends. Disagreements between parent and child are solved by the child's moving across the street; . . . Neither poverty nor great disasters threaten the people to make them hold their lives dearly and tremble for continued existence. . . . No one is hurried along in life or punished harshly for slowness of development. Instead the gifted, the precocious, are held back until the slowest among them have caught the pace. . . . From the first months of its life, when the child is handled carelessly from one woman's hands to another's, the lesson is learned of not caring for one person greatly, not setting high hopes on any one relationship (pp. 198-99).

Eichhorn (1966) analyzed the differences in the American and
Samoan cultures as related to adolescence:

> First, the security base found in the primitive household is a broad one, not extremely dependent on a few individuals as is the case with the American family. Secondly, in the preindustrial society, there does not appear to be an either/or proposition in the maturing process, such as exists in America, by which the youngster is often considered either a child or an adult. This factor may be one of the reasons for the emergence of youth subcultures in the United States. Finally, the demands of the

Samoan culture are not bound extensively to economic or political pressures so prevalent in the United States (pp. 41-42).

Offer and Offer (1975) believed that social and emotional
problems generally associated with adolescence were overemphasized. In
reality, they found that 80 percent of all adolescents progressed through this period of great change without undue turmoil. Of that 80 percent, about one-quarter experienced continuous, serene development; 35 percent experienced development marked by surging starts and stops, childishness one day and adult behavior the next; about one-fifth developed in a turbulent manner that was neither abnormal nor pathological; and about one-fifth did not fit with any of the descriptors but their tendency was toward continuous or surging development. Dorman and Lipsitz (1984) contended that it was imperative to maintain a realistic perspective on the "storm and stress" of adolescence.

The myth of inherent turmoil is harmful to all young adolescents, because we fail to distinguish between behavior that is distressing (annoying to others) and behavior that is disturbed (harmful to the young person who is exhibiting the behavior). . . . By expecting irresponsible and crazy behavior of young adolescents, we communicate messages that diminish their self-esteem, invite distressing behavior, and raise the fears of the adults who live and work with them (p. 4).

Toby (1964) analyzed the process by which youth had to move from a dependent to an independent state in an industrialized society and noted that environmental adjustment problems could be a reality for some adolescents. He stated:

The small conjugal family system characteristic of industrialized societies tends to make children highly dependent on their parents. Other sources of emotional support are not readily available. Nonetheless, the expectation is that the family into which one is born will disintegrate. Children do not remain dependent throughout life. They must leave the nest. The expectations surrounding occupational choice and the establishment of a family of one's own . . . create pressures to be more independent. During adolescence these two forces meet head on[.] . . . The turmoil of adolescence in industrial societies is largely due to the collision of these incompatible forces (p. 337).

While adolescence is not necessarily a time of continuous turmoil and outright rebellion, profound social and emotional changes do
occur at this stage of development. Among the most apparent social change is the increasing importance of the peer group. In the latter stages of childhood, the youngster depends largely on his or her parents and home for personal security, interests, and values. Gesell, Ilg, and Ames (1956) illustrated the relationship thusly:

If ever the word family acquires its true meaning, it is when the child is ten years of age. Ten not only accepts but likes his lot. In fact no other father or mother seem to surpass his in his own eyes. . . . This is the last age for some time to come when the child enters into a family excursion with casual thoughtfulness, adaptability and full enjoyment (p. 54).

As prepubescence or puberty intervenes, the child who was happily tied to a mother's apron strings the year before keeps a greater distance from them with increased maturity (Alexander and George 1981, p. 7). It is in this period that the child begins to transfer his or her security base to the peer group. Adolescence is the time when youth begin to learn how to establish and maintain a mutual and close relationship with people their own age. To girls especially, the peer group is crucial in developing the capacity for intimacy and trust, for it is within the peer group that girls begin mutually to share deep feelings, concerns, and hopes (Dorman and Lipsitz 1984, p. 4). Boys seek action-oriented relationships (Lounsbury and Johnston 1985, p. 8). Lounsbury and Johnston (1985) noted that the function of the peer group was more than just to provide some independence from the family; it also serves as a reference group for judging one's own behavior and assists in clarifying one's personal identity. It is in this realm that young adolescents experiment with their new sexual role of "man" or "woman," and many ninth graders begin dating in the context of small group activities (Dorman and Lipsitz 1984, p. 4). The increasing sexual interest and arousal is an integral part of their developing identity (Lounsbury and Johnston 1985, p. 8) and a very significant developmental task (Alexander and George 1981).

This affinity for friend and reliance upon the peers for approval and encouragement is not necessarily in defiance of authority.

Parents and teachers who were once the ever omnipotent center of a child's life are shocked, hurt, and perhaps angry when their omnipotence ceases (Alexander and George 1981), but Kandel and Lesser (1972) wrote that adolescents themselves reported that they look to the peer group for association and companionship and to their families for affection, identification, values, and help in solving problems. This period of emancipation may be fraught with disagreements in the home, focusing on issues such as curfews, rules, or homework as families adjust to each other based on the evolving needs of the adolescent. Sorenson (1973) surveyed thirteen-year-olds to nineteen-year-olds and determined that 88 percent of those sampled said they respected their parents, 80 percent said they respected their parents' opinions and ideas, while only 20 percent had given up on being able to get along with their parents.

Adolescents' social relationships are in flux as they work toward mutual interdependent relationships with peers and family. They also experience emotional changes which affect the way they see themselves and the way they relate to other people. Dorman and Lipsitz (1984) wrote that adults are often annoyed and baffled by young adolescents' egocentrism and preoccupation with their appearance, thoughts, and feelings. Elkind (1967) referred to an "imaginary audience" that occurs when the adolescent believes that he or she is constantly being observed because of his or her general importance. "While the 'imaginary audience' concept may result in heightened self-consciousness and concern for one's appearance, it can also result in excessive shyness and increased need for privacy" (Lounsbury and Johnston 1985, p. 8). An extension of this self-consciousness and egocentrism is a sense of uniqueness both in feelings and immortality. Elkind (1967) referred to the "personal fable" in which the adolescent can perceive himself or herself immune to all harm that befalls others. Lounsbury and Johnston (1985) explained that ninth graders regard themselves as very special and unique, feelings often encouraged by
teachers and parents but frequently taken to excess by the student. The authors noted that these feelings could lead to dangerous risk-taking but more often simply to boorish behavior and egocentric mannerisms (p. 9). Gradually they learn by experience and through mutual relationships that they are not being scrutinized constantly, that others share similar feelings, and that there is no immunity from harm.

An important emotional change in this period of life is in the way young adolescents see and feel about themselves. Dorman and Lipsitz (1984) wrote:

They may be happy and helpful at one moment, miserable and uncooperative the next. These mood and behavior swings are not unusual and may be associated with hormonal activity, with adjusting to the varying expectations of others, or with confusion and ambivalent feelings about the changes that are taking place in their bodies. The mood swings are compounded by the fact that 12- to 14 -year-olds seem to experience more problems with self-image than they did when they were 8 to 11 . Twelve- to 14 -year-olds tend to have less stable and positive opinions about themselves and to think that other people have more negative opinions about them. This instability of self-image and diminished self-esteem usually declines in later adolescence as young people adjust to the changes that have taken place in their bodies and begin to develop a more stable sense of identity. Since children tend to have inflated opinions about themselves and their abilities, young adolescents may in fact be learning to be more realistic (p. 5).

Literature that addressed adolescent self-esteem is further reviewed and reported in a separate section of this chapter.

## Intellectual Level of Development

In one of the most important theories on the nature of intellectual development, Piaget (1977) suggested the existence of four distinct phases of mental growth. A child proceeds through the stages sequentially; however, the rate of progression is varied. Early adolescence is a period of transition from the "concrete operations" stage to the "formal operations" stage. The entrance to this stage reached by some at ages eleven or twelve marks the beginning of the ability to reason logically about verbal statements in the absence of particular objects. "This period is characterized in general by a conquest of a new mode of reasoning, one that is no longer limited
exclusively to dealing with objects or directly representable realities but also employs 'hypotheses'" (Piaget 1977, p. 33). New abstract reasoning skills provide students abilities to deal with mathematical concepts such as probabilities, correlations, or permutations. They can engage in linguistic discourse that provides a medium for expanding thinking thus allowing them to join reading and thinking together in propositional thinking (Van Hoose and Strahan 198, pp. 13-14). For the first time they can analyze their own thoughts as well as the thoughts of others and make inferences. No longer bound to what they have actually experienced, they can think about what is possible and "can begin to envision a personal future more realistically matching their interests, abilities, accomplishments, and dreads with what is actually possible" (Dorman and Lipsitz 1984, p. 5).

The development of formal operations is discontinuous. Only when a student has assimilated and accommodated the actions and operations of one stage can he or she progress to the next.

Furthermore, there is a wide variation in ages at which a student first begins to engage in formal operations (Van Hoose and Strahan 1988, p. 14). Piaget's theory suggests that "mental growth is similar to a biological process in which the organizational structures develop by assimilating experiences and then accommodating the results of those experiences into further mental structures. The richness of the experiences to which a learner is exposed appears to have a direct relation to the rate and extent of his cognitive development" (Eichhorn 1966, pp. 38-39). Therefore, differences in social environment and acquired experiences create wide variations in rates of development (Van Hoose and Strahan 1988 , p. 14). While the average age for beginning formal operations is the eleventh year, Piaget (1977) reported experimental studies showing as many as four years of "lag time" (p. 36). This age span is again evidence to suggest the extent of variability in an adolescent population across a grade or within a
single class. Lounsbury and Johnston (1985) noted that a fairly high percentage of fourteen-year-olds still are testing in the concrete operational stage, indicating a pervasive difficulty in abstracting a general principle from a particular example (p. 8).

Research on brain growth (Toepfer 1980) evidenced a growth plateau in children ages twelve through fourteen. This suggests an inability for youngsters to continue to grow and develop new and higher level cognitive thinking skills during the period. Smart and Smart (1973) determined that not only is there a wide variation in the ages at which students begin to enter formal operations, but that the development of formal operations is uneven across subject matter areas. The adolescent may have the capacity to reason abstractly in one area but not in another.

The nature of learners and their variations in previous experience, knowledge, and potential for thought and problem solving must be recognized by the educators of adolescents. Piaget's research indicates that mental development occurs in an ever expanding sequence which implies that current intellectual development is dependent on previous development. It is, therefore, imperative for teachers of fourteen-year-olds to fifteen-year-olds to recognize the disparate needs of students at this level and to realize the futility of providing accelerated learning experiences when intermediate, necessary stages of development have yet to be achieved. Bruner (1962) emphasized the basic tenet:

What is most important for teaching basic concepts is that the child be helped to pass progressively from concrete thinking to the utilization of more conceptually adequate modes of thought. But it is futile to attempt this by presenting formal explanations based on logic that is distant from the child's manner of thinking and sterile in its implications for him (p. 38).

## Student Satisfaction with School, the School Climate, and Student Achievement

Goodlad (1979) chided members of those national commissions which attempted to diagnosis the ills of American schools when he wrote:

Few of those in and around a given school are in a position to set an agenda for improvement, largely because they lack the data required for prescription. One of the reasons for this lack is an almost pathological preoccupation with standardized achievement test results, students' marks, and evidence of order and discipline as criteria for school performance. Little evaluative attention goes to how students spend their time in school each day, what they study, whether they are bored or challenged, and whether they are being motivated to go on inquiring into themselves and civilization for the rest of their lives. Evidence regarding students' liking school and eagerly attending each day usually is rejected as soft and misleading (p. 29).

Dewey (1916) spoke of education as a process of an individual becoming and evolving:

Since growth is the characteristic of life, education is all one with growing; it has no end beyond itself. The criterion of the value of school education is the extent to which it creates a desire for continued growth and supplies means for making the desire effective in fact (p. 53).

The essence of the process of education then is the growth
taking place in the individual and the meaning of the growth
internalized for the individual. The richer that meaning, the more it creates a desire for continued growth and the better the quality of the educational experience (Goodlad 1979, p. 38).

Goodlad (1984) went on to advise that "to survive, an
institution requires from its clients substantial faith in its usefulness and a measure of satisfaction with its performance" (p. 1). The primary clients of schools, he suggested, were school-age children and their parents. Lipsitz (1984) assumed that:
[P]arents will be dissatisfied with schools in which their children's achievement does not approximate parental expectations, in which the atmosphere is not conducive to learning and interpersonal harmony, and in which they are not reasonably hopeful about their children's academic and personal preparation for the future (p. 14).

## Halderson, Kelley, and Keefe (1987) identified student

satisfaction with school as both a mediating variable and an outcome measure; it both influences school success and corroborates it. They defined satisfaction as the personal, affective response of an individual to a specific situation or condition (p. 3). Schneider and Snyder (1975) termed satisfaction as a perception of internal responses
consisting of processed perceptions filtered through the individual's system of norms, values, and expectations.

Satisfaction is differentiated from climate which Keefe, Kelley, and Miller (1985) defined as the relatively enduring pattern of shared perceptions about the characteristics of an organization and its members. "Perceptions held by stakeholder groups (e.g., students, parents, teachers) about the physical, social, and learning environments of a school may influence both the processes and outcomes that occur" (Halderson, Kelley, and Keefe 1987, p. 3). Climate is measured by assessing the individual's perception of what he or she believes most people hold to be true about the environment; whereas, satisfaction is the measure of the individual's personal affective reaction to that environment. Climate tends to be persistent and stable over time. It is a mediating variable rather than a measure of outcome (Halderson, Kelley, and Keefe 1987, p. 3).

A renewed focus on school climate began during the education research thrust in the 1970 s, and its analysis has persisted throughout the school effectiveness research of the last two decades. Definitions have varied from a terse statement such as that of Halpin and Croft (1962) in their reference to climate as the "personality" of the school to a more thorough statement by Taguiri and Litwin (1968). They defined climate as an enduring quality of the internal environment that could be experienced by members of the organization, that had influence on their behavior, and that was described in terms of values inherent in the characteristics of the organization (p. 27). Howard (1970) saw school climate as the "aggregate of social and cultural conditions which influence individual behavior in the school" (p. 12). Other researchers have termed the elusive concept as "ethos" (Rutter et al. 1979), "saga" (Clark 1975), or "culture" (Sarason 1971; Swidler 1979; Waller 1932). The stability of climate or culture and the relative consistency from school to school has been written of often. Meyer and Rowan (1983)
found a remarkable consistency in schools across time and national boundaries. Half a century earlier Waller (1932) offered insight into the stability of the patterns in classrooms and their immunity to change:

Schools have a culture that is definitely their own. There are, in the school, complex rituals of personal relationships, a set of folkways, mores, and irrational sanctions, and a moral code based upon these. There are games, which are sublimated wars, teams, and an elaborate set of ceremonies concerning them. There are traditions, and traditionalists waging their world-old battles against innovators. There are laws and there is the problem of enforcing them (p. 103).

Goodlad (1984) echoed Waller's sentiments but cited the
importance for educators to look critically at the subtle differences that are suggested in school culture:

Alike as school may be in many ways, each school has an ambience (or culture) of its own and, further, that its ambience may suggest to the careful observer useful approaches to making it a better school (p. 81).

Goodlad (1986) said, "The way to improve education is to have a healthy environment at each school" (p. 1), and the improvement of both achievement and satisfaction has been intertwined with school climate improvement. Howard, Howell, and Brainard (1987) envisioned a school's climate as its atmosphere for learning. It included the feelings people had about a school and whether it was a place where learning could occur. A positive climate fostered a place where both staff and students wanted to spend a substantial portion of their time; it was a good place to be (p. 5).

Bloom, Hastings, and Madaus (1971) believed that positive attitudes toward school tended to increase the likelihood that students would be graduated from school, commit themselves to learning, advantage themselves more completely of opportunities in school, and build satisfying relationships with both peers and teachers. Epstein and McPartland (1978) wrote:

Overall, the quality of school experiences may influence student behavior and attitudes. Thinking positively about school, classwork, and teachers is important for youngsters' general health and mental health and may enhance other school
related behavior and learning. Thinking negatively about school may make youngsters' day-to-day life in school unsatisfactory and act as a barrier to learning (p. 2).

Kelley (1980) observed:
School climate, an elusive but encompassing component of secondary education, is gaining new recognition today. Not only is it essential to good student achievement, but it is important to positive school attitudes. A favorable school climate provides the framework within which students, teachers, administrators, and parents function cooperatively and productively (p. v.).

A most significant contribution to the volumes of school effectiveness literature was made through the writings of Brookover, Lezotte, and their colleagues (Brookover and Lezotte 1977, 1979; Brookover et al. 1982). Through a series of studies of thousands of students, they presented evidence to dispel the belief that race and socioeconomic status were determinants of academic underachievement. Through their research they concluded that the school structure and the learning climate which resulted were the real determinants of school achievement. The school was a social system, and its norms, beliefs, and attitudes shaped the behavior of administrators, teachers, and students. The behavior affected the resultant quality of academic achievement. Among those beliefs that appeared to enhance significantly the level of achievement were:
-- Beliefs held by teachers about the learning potential of students and their own abilities to teach students essential skills,
-- Beliefs held by students about their own academic abilities and about the expectations that teachers had for their achievement,
-- Beliefs held by students regarding the likelihood of their opportunities to realize success in a particular class or school, and
-- Beliefs held by principals regarding students' learning potentials and the level of concern parents held for the quality education provided their children.

In an analysis of approximately forty schools in the Chicago area, Wynne (1981) reported findings regarding school learning climate and student achievement that were complementary to those revealed through the Brookover and Lezotte studies. Characteristics of good schools were found to include:
-- The utilization of a wide variety of schoolwide incentives to enhance student learning,
-- The maintenance of effective assessment programs to identify students and programs that were not performing as they should,
-- The provision of a diverse program of extracurricular activities and student services, and
-- The perception that school spirit was a vital element for school cohesiveness.

Other studies have corroborated these findings and suggested that a school climate in which academics and achievement were prized enhanced student achievement (Brandt 1982; Deal and Kennedy 1983; National Committee for Citizens in Education 1980). Owens (1970) found that schools where elements of the climate placed value in supportiveness, open communication among parties, collaboration, and intellectual pursuit and that rewarded achievement and success exhibited higher levels of student achievement, better attendance rates, lower numbers of dropouts, and lower levels of alienation than schools where competition, constraint, restrictive rules, and conformity prevailed.

The many studies reported in effective schools literature that showed relationships among climate, satisfaction, and achievement in educational institutions have congruent relationships to success in industrial and corporate organizations. Argyris (1957) found that
bureaucratic/pyramidal values that dominated many organizations had negative effects on industrial behavior and growth within the work environment. While the healthy personality developed from childhood to adulthood along a continuum from immaturity to maturity, the management of the industrial organization could promote immature behavior of employees. Employees who were given minimal control over their environment and were encouraged to be passive, dependent, and subordinate acted immaturely. He challenged organizations to provide a climate in which everyone would have the opportunity to grow and mature as individuals. As members of a group they could strive to satisfy their personal needs as well as contribute to the organization. Argyris' (1957) theory suggested that both individual and organization would profit should the employee's level of responsibility be upgraded and increased.

Herzberg, Mausner, and Snyderman (1959) studied the human needs of esteem and self-actualization in the development of the motivation-hygiene theory of work. Hersey and Blanchard (1982) explained Herzberg's theory:
[P]eople have two different categories of needs that are essentially independent of each other and affect behavior in different ways. He found that when people felt dissatisfied with their jobs, they were concerned about the environment in which they were working. On the other hand, when people felt good about their jobs, this had to do with the work itself. Herzberg called the first category of needs "hygiene" or "maintenance" factors: hygiene because they describe people's environment and serve the primary function of preventing job dissatisfaction; maintenance because they are never fully satisfied -- they have to continue to be maintained. He called the second category of needs "motivators" since they seemed to be effective in motivating people to superior performance (p. 57).

Factors that were cited as positively affecting job satisfaction with the potential of improving the individual's total output capacity included achievement in the job, recognition for achievement, the level of challenge presented by the work, increased job responsibility, and the opportunity for growth and development (Hersey and Blanchard 1982).

George (1983) analyzed successful practices in Japanese and American corporate management in an effort to determine how these might be applied to schooling in the efforts toward educational improvement. Four questions were considered:

1. What are the secrets of successful Japanese and American corporations?
2. Can these concepts be applied to schools?
3. What would be the results of these applications?
4. Is it possible to move beyond effectiveness (p. 2)?

To answer the questions, George looked to the work of Ouchi (1981) who had researched and examined both the major corporations in Japan and most of the successful American Fortune 500 companies. The product of these inquiries were Ouchi's outlines of the basic components of three differing corporations: the successful Japanese corporations (Type J); the typical, less successful American corporation (Type A); and the American enterprises (Type $Z$ ), which maximized the best of the American and Japanese management practices (George 1983, p. 6).

According to Ouchi, central to the successful Japanese corporation was the attention focused on the workers and their involvement in the corporate structure. Stability was a hallmark of these corporations as more than one-third of all Japanese workers enjoyed a lifetime of affiliation with a single organization. A company philosophy enunciated what members of the company believed, how they were to relate to customers and competitors, and the role of the corporation as a contributor to society's greater good. A corporate culture was shared among employees. All persons who would be affected in a significant manner by a policy or practice implementation participated in the decision-making process that deliberated the change. Loyalty to the work group existed in a culture where members were collectively responsible for accomplishments, suggestions, or problems. Finally, the affective nature of groups was nurtured and a family-style approach to belonging to the organization was fostered (George 1983). Similar constructs -- long-term employment, long-term job rotation,
interpersonal skills, explicit and implicit controls, the corporate philosophy, egalitarianism, sense of community, participatory decision-making, and spirited leadership -- were central to the corporate excellence in the Theory Z corporations (George 1983).

Educational studies cite similarities in successful schools' and the successful corporations' holistic approaches to their product and to the people involved in the process. Rutter et al. (1979) conducted a study of secondary school students in inner-city London. They discovered that several of the schools were very successful while others were not and that the determinants to success could not be attributed to grade level composition of the schools, socioeconomic backgrounds of the students, or the elementary feeder schools from which students came. The reasons for success of some and failure for others appeared to be related to two diverse but complementary sets of factors: academic emphasis and psychosocial environment.

The Rutter study confirmed the importance of an academic focus in which there were reasonable, yet high, expectations, direct instruction, homework, and other aspects of schools that enabled teachers and students to engage in the serious pursuit of learning. Rutter et al. (1979) concluded, however, that the critical difference between a more successful and less successful school was the psychosocial environment that was fostered. Where students and teachers saw themselves as members of a team striving for common purposes of education, the unity of shared perspective led to higher student achievement.

Rutter and Ouchi both bring focus to the importance of an organization as a social institution where an "ethos for caring" (Rutter et al. 1979) is perceived. Lipsitz (1984), in a study of successful schools for young adolescents, arrived at a similar conclusion about the necessity of a highly personalized environment for these students:

The nature of the school's organizational structure establishes continuity in adult-child relationships and
opportunities for the lives of students and adults to cross in mutually meaningful ways. In each school, students express their appreciation for being cared about and known. They are actively aware of being liked, which is notable only because in most schools, young adolescents are generally disliked (p. 181).

Another approach was taken by several researchers as they inquired into the quality of schooling. Goodlad (1984) designed a broad study, the intent of which was to compile "thick" descriptions of thirty-eight selected schools across the country. He and his colleagues chose to describe schools through the compilation of perceptions of persons closely associated with each school as well as of trained, independent observers. At that time few educators had studied schools as total entities. Most researchers chose to focus on a single aspect or on several aspects of schooling such as students, teachers, or methods of teaching. In the belief that understanding schools was prerequisite to improving them, Goodlad wrote:
[W]e set out to compile the questions to which we wanted answers -- about school functions, problems, and issues; about students' satisfactions, interests, and perceptions of teachers; about classroom activities and school climate; about teachers' values, satisfaction, teaching practices, and perceptions of principals, students, and one another; about some selected aspects of principals' views of the school, the teachers, and parental roles; about parents' satisfactions, expectations, involvement, and perceptions of problems facing their schools; about school and classroom organization; about the distribution of subjects in the curriculum, topics taught, and materials used; and on and on" (pp. 16-17).

In the Goodlad (1984) study, junior and senior high school students were asked to choose the one best thing about their school given a choice of twelve possibilities. At both levels, "my friends" was the top choice. "Sports" was the second choice at both levels. The third ranking category was "good student attitude," meaning friendly and cooperative peers. The response "nothing" was chosen above either "classes I'm taking" or "teachers" (p. 77).

While the social and athletic aspects of schooling were deemed most important by students when taken "en masse," Goodlad reported that there was evidence to indicate that the academic and intellectual
aspects of life did have a place in the total school experience of many youth. At one participating junior high school, although only 10 percent and 7 percent of the students selected "classes I'm taking" and "teachers" respectively as the school's most important aspect, the congruence between the function individuals perceived to be most emphasized and the function most preferred was relatively high. All three groups -- teachers, students, and parents -- perceived academic goals to be emphasized highly and the agreement was a strong indicator of high satisfaction with the school on the part of all three groups (p. 83).

At another high school in Goodlad's study, although students perceived the intellectual function to be most emphasized, they and their parents expressed concern about the quality of education being provided. In greater numbers than at any other of the schools, both groups disagreed with the statement that "most of the teachers at this school are doing a good job" and agreed that "too many students are allowed to graduate without knowing very much." Furthermore, in greater numbers than at any other school, students generally disagreed with the statement that "this school gives students a good education" (pp. 84-85). Goodlad wrote, "Many students perceived their school as not providing them with a good education and seemed to see themselves as cheated, as victims of circumstances they would like to see changed" (p. 86).

The NASSP conducted a shadow study of ninth grades (Lounsbury and Johnston 1985) to determine what a typical day was like for a ninth grader, whether the educational program provided for these youth was compatible with their nature and needs, and whether the educational program was varied depending upon the type of organizational unit in which the ninth grade was housed.

In end-of-day interviews, students were asked what they liked best about their school. Most frequently the answers were "my friends"
or "the kids" and the "the teachers" with kids winning by a slim margin. Other responses included "my counselor," "activities," "computers," "physical education," or "sports." The particular school activity or athletic program in which the student was involved regularly was cited as the "best thing" about school. When asked about the "best thing that happened to you today," responses generally had social, personal, or academic themes. In like manner, worst experiences of the day and/or the year were reflected in a social or an academic vein. Citing who they would turn to for help, friends, teachers, counselors, and coaches were mentioned. Some students noted that they would go to their parents with serious problems. Finally, when asked how they would describe their school to a newcomer, most students were lavish in their praise (pp. 15-16).

Lounsbury and Johnston (1985) reported:
All in all, there was little doubt about the positive perceptions students hold of their teachers and their schools. Evident in nearly all of their responses was a recognition of the importance of the human element. Schools simply have a built-in advantage -- they are filled with people (p. 16)!

From all of the preceding it may be generalized that satisfaction with school as an institution was based upon how well it served humankind sensitively and effectively. While it could be measured, satisfaction was best understood in the social context of the school; its climate; and in terms of the academic, social, and emotional achievement students were able to realize in the school setting.

## Self-Esteem in Adolescence

In response to the turbulent changes experienced in physical and intellectual development, early adolescents experience dramatic changes in self-concept (Van Hoose and Strahan 1988, p. 19). While the self-concept is important at all ages, it is possibly the most problematic during adolescence. Whether or not it is accurate to refer to the period as one of "crisis" or "storm and stress" remains a matter of debate (Dorman and Lipsitz 1984; Offer, Ostrov, and Howard 1981;

Simmons, Rosenberg, and Rosenberg 1973). Nevertheless, it is interesting to note that when people at various life stages were asked to identify the worst period in their lives, more that two-fifths cited adolescence as the most difficult while only one-third selected old age (Lowenthal, Thurnher, and Chiriboga 1975, p. 133). Self-criticism and other negative self-feelings are most severe during adolescence, and self-esteem problems are both serious and widespread at this age.

Psychologists have long viewed the formation of self-concept during early adolescence as a search for identity (Van Hoose and Strahan 1988). Suggesting identity to be the central theme of adolescence, Stone and Church (1968) believed that the search for it entailed an adolescent's discovery of who he or she was, what he or she believed in and valued, and what he or she aspired to accomplish in life. The individual who had discovered his or her identity, according to Erickson (1971), "feels and acts predominantly in tune with himself, his capacities, and his opportunities. . . . He knows where he fits (or knowingly prefers not to fit) into present conditions and developments" (p. 251). An adolescent who successfully establishes his or her identity becomes less dependent on both peers and parents and more prepared to establish friendships and a love-based, mutually satisfying intimate relationship in young adulthood. A person who cannot enter wholly into an intimate relationship with a member of the opposite sex for fear of losing his or her identity subsequently may develop a deep sense of isolation (Erickson 1971, p. 257).

Rosenberg (1985) reported that it was necessary to consider several dimensions of self-esteem in order to characterize an adolescent's self-esteem as healthy or unhealthy. The dimensions associated with psychological well-being he determined to be self-esteem, feelings of "mattering," self-concept certitude, vulnerability, feelings of personal control, public anxiety, and harmonious place coordination (p. 206).

Maslow (1954) identified self-esteem as one of the preponderant human needs. Self-esteem refers to the feeling of being satisfied with oneself, the belief that one is a person of worth. High self-esteem is characterized by self-acceptance as well as self-tolerance, self-liking, and self-respect (Rosenberg 1985, p. 210). Evidence exists to indicate that self-esteem is closely connected to feelings of life satisfaction. Andrews and Whitney (1976) found that a three-item index of self-esteem proved to be the best predictor of global life satisfaction. According to Campbell (1980), "dissatisfaction with self had a more damaging effect on general feeling of well-being than dissatisfaction with any of the other domains of life" (p. 217). It also may be situationally variable -- high at one moment and low at another (Rosenberg 1985).

O'Malley and Bachman (1979) found persuasive evidence that; between the ages of thirteen and twenty-three, there was regular and consistent improvement in global self-esteem. This did not suggest that there was steady growth along a continuum from younger to older years. Rosenberg and Simmons (1975) found in a study of 1,155 students twelve years and older that 25 percent of students between ages eight and eleven had lowered self-esteem while the proportion rose to 30 percent for students twelve to fourteen years. Low self-esteem measures dropped to 22 percent of the sample aged fourteen years or older. Though the differences were not dramatic, they did suggest that early adolescence was a period when self-esteem was somewhat disturbed.

Mattering, a dimension of self-concept, is defined by
Rosenberg (1985) as the feeling that one makes a difference or has significance to others (p. 215). It is a feature of the perceived self and a judgment of one's position in a significant other's value system. Rosenberg wrote:

Although we are unable to test our speculations with data, we would expect mattering to be low during adolescence. The adolescent is something of a sociological superfluity, an irrelevance. In less-advanced societies, mattering presumably
would be high because the adolescent would already have established his or her own family. In America half a century ago, the adolescents' families would have depended on their earnings or their work on the farm. It may be that one reason why the adolescent clings so tenaciously to his or her peers is that to them, at least, he or she matters. If it is true that the feeling of being socially irrelevant is widespread among adolescents, this fact may underlie some of the problems of contemporary youth (p. 219).

The certitude and stability of self-concept are not readily separated. First, it is important that the individual have a firm and clear picture of what he or she is like, for "the individual's conception of himself is the basic axiom of his whole life theory" (Lecky 1945, p. 265). According to Rogers (1951), "Any experience which is inconsistent with the organization or structure of self may be perceived as a threat" (p. 515). Furthermore, the person whose self-attitude changes from moment to moment has difficulty developing a firm assurance of what he or she is like. Conversely, the person uncertain about a self-concept element will find it varying in different situations (Rosenberg 1985, p. 221).

Adolescence is probably the stage of life when uncertainty about the self-concept peaks. It is the period in life when attention shifts from a nearly exclusive preoccupation with features of external experience to an intense probing, scrutiny, and evaluation of the self (Rosenberg 1985). It is therefore not surprising to find the adolescent experiencing a rise in confusion and uncertainty about the self (Rosenberg 1985). At all ages, but particularly during adolescence, girls are more likely than boys to experience incertitude of self-concept, a fact which could be attributable, in part, to their greater interpersonal sensitivity and the intense awareness of their changing physical appearance (Rosenberg and Simmons 1975). During these years, people are more likely to experience uncertainty of self, and this is likely to impact females to a greater degree than their male peers.

When Rotter (1966) introduced the concept of locus of control, he defined it in terms of generalized expectancies concerning one's actions. Individuals characterized by internal locus of control envision what happens in their lives to be a consequence of their own actions. Those with an external locus view the consequences fatalistically controlled by external forces or conditions. Many research studies have indicated internal locus is associated with higher global self-esteem (Brim 1974; Lecky 1945; Rosenberg and Simmons 1975; Rotter 1966). It is not surprising to learn that adolescents are less likely than adults but more likely than younger children to feel that they exercise control over their lives. There is evidence of an increase in the sense of personal control from first to tenth grade and a substantial increase in the sense of personal control from tenth to twelfth grade (Brim 1974; Milgram 1971).

The term vulnerability refers to the individual's sensitivity to negative responses from others. Hypersensitivity and extreme reaction to criticism resulting in acute pain or extreme depression are descriptors of the vulnerable person. Most writers on adolescence agree that this is a sensitive period of life. Adults do seem to acquire some imperviousness to inevitable threats on the self-esteem as the years lead them to accept the consequences of mistakes, flaws, or interpersonal attacks (Rosenberg 1985, pp. 228-30). Rosenberg and Simmons (1975) did find that adolescents fourteen years and older were less likely to demonstrate vulnerability than younger adolescents, and that at every age, females were nearly twice as likely as males to score high on hypersensitivity scales.

Self-consciousness, the individual's state of consciousness at a given moment, is heightened during adolescence. According to Stone and Church (1968):

Writers on the subject of adolescence . . . have been struck by the adolescent's agonies of self-consciousness, his preoccupation with who he is and where he belongs. . . . The central theme of adolescence is finding one's self. The adolescent must learn to
know a whole new body and its potentials for feelings and behavior, and fit it into this picture of himself. . . . This means an intensified self-awareness -- largely manifested as self-consciousness (pp. 268-70).

An enormously complicating factor in the search for what constitutes a healthy self-concept is the fact that the human mind operates on different planes -- planes of reality, possibility, fantasy, and so on (Piaget 1951). Especially during adolescence the planes seem to be indistinct. Allport (1961) observed:

> The search for identity is revealed in the way an adolescent tries on different masks. He first develops one line of chatter, then another, one style of hairdress and then another (always within the range permitted by the peer group). He imitates one hero and then another. He is still searching for a garb that will fit (pp. 125-26).
> There is evidence to suggest that adolescence is a period of disturbance on some self-concept dimensions. Situational variables also may be impacting on the development of self-concept during this period. One of the situational variables that has been determined to affect the self-concept is the type of interpersonal relationship in which the self is referenced. This perspective is especially plausible with respect to adolescent self-concept development since the period is seen as a time of restructuring interpersonal relationships (McCandless 1970).

Smollar and Youniss (1985) investigated the self-conceptions of ten-year-olds to twenty-three-year-olds in two relational contexts, the parent-child and the close friend relations. They examined whether there were variations in the conceptions of the self across relations, and, if so, they assessed the developmental properties of the self-concept within the given relationships (p. 250). Parent-child and close friend relations have been characterized by distinct forms of interaction (Youniss 1980). Parent-child relations are primarily unilateral with parents obliging children to perform or behave in a certain manner and with children opting whether or not to comply with directives. Close friend relations are viewed in a mutual climate of reciprocal cooperation.

Smollar and Youniss (1985) found:
[A]dolescents conceptualized the self in ways that were quite different from the self-conceptions of preadolescents. In fact, variation in the self-concept across relations was itself developmentally related in that adolescents and young adults tended to differentiate the self across relations to a significantly higher degree than did preadolescents. This increase in differentiation suggested qualitative differences in the structure of the self-concept of adolescents and preadolescents. While some researchers may view increased differentiation as indicative of a "storm and stress" period or an identity crisis, such a conclusion is not necessarily justified. Instead, it is possible that the differentiation of self across relational contexts is a productive developmental process that begins in adolescence and continues throughout the life span (pp. 261-62).

The cognitive reorganizations of the conceptions of self
indicate an incorporation of features of adolescent self-concept not present in preadolescence. In the context of close friend relations, aspects of self such as intimacy, sensitivity, and spontaneity begin to emerge at ages fourteen to fifteen, and by later adolescence they are dominant features of the self-concept. Hostility and anxiety emerge during adolescence in the context of parent-child relations. These features of the self are dominant between the ages of fourteen and fifteen, indicating that at some point during midadolescence there is a restructuring of the self in the context of the parent-child relation with respect to the authority role or unilateral control of the parent (Smollar and Youniss 1985, pp. 259-62).

The previous findings suggest a discontinuous development of self-concept during adolescence; the self-concepts of adolescents are qualitatively different from those of preadolescents. The person who enters adolescence is not altogether the same individual who exits it. In almost all aspects, self-concept is being negotiated throughout these years. The intellectual changes that the individual undergoes allow him or her to think about thinking, with the implication that the individual gains a new power of introspection. One's view of the self is impacted by everything he or she does and by all who have a meaningful role in his or her life. In turn, one's view of the self can have implication on how one will relate or perform in society. An individual's
perceptions of self have been shown to determine, to a considerable degree, how he or she will behave or what he or she will believe. Behavior is the consequence of one's conception of the self and perception of one's abilities (Snygg and Combs 1949, p. 78).

There is a body of literature which suggests the possibility that a direct, linear relationship between self-concept and school achievement may exist. Coopersmith (1959) reported a correlation of . 36 between positive self-esteem and school achievement in a study of 102 fifth and sixth grade students. Roth (1959) lent credence to the Coopersmith findings in his conclusion that individuals, in terms of their conception of self, have a definite investment to perform as they do. With all things being equal, those who do not achieve "choose" not to do so, while those who do achieve have made that choice. Brookover, Paterson, and Shailer (1962) reported correlations of . 42 and . 39 between grade point average and self-concept in a study of one thousand urban seventh graders. Caplin (1969) found children in grades four, five, and six having more positive self-concepts to demonstrate greater academic achievement.

Johnston and Markle (1986) urged practitioners to understand that it was not the "statistical" significance but the "practical" significance of findings that is important:
[W]e can probably conclude that it is not the weak relationship between achievement and self-concept that gives self-concept its importance to the school professional. The intuitive significance we attach to the student's self-concept results, no doubt, from a much stronger and more observable series of phenomena than what is suggested by unimpressive correlational coefficients. . . . In order to trace this intuition, it is important to examine research which suggests the way that self-concept affects behaviors that are, themselves, related to academic achievement (p. 85).

Several studies implicate self-concept, interpersonal relationships, and achievement. The results of a study by Stock (1949) indicated that an individual's self-concept affected the way he or she would relate to others. An individual who holds negative feelings toward himself or herself tends to hold negative feelings toward others.

As the individual's self perceptions are altered, his or her feelings about other people are altered in a similar direction. Schmuck (1963) found that a self-perception of low status among peers is related to underutilization of intellectual abilities and to having negative attitudes toward school. He reported that students who perceive that they are liked, in spite of their actual low-liking status, make better application of their abilities than do those students who hold a more realistic view of their low-liking status. Furthermore, Horowitz (1962) determined that negative self-concept tends to be associated with high anxiety in an individual. He reported that children who hold a poor self-concept frequently are less popular with their peers than are those who are less anxious. These less popular students lack the confidence requisite for coping with environmental demands.

The theory of the "self-fulfilling prophecy" is replete in many studies that demonstrate how self-concept affects the behaviors that enhance or inhibit achievement in congruence with the perception one holds of the self. A study conducted by Zimmerman and Allenbrand (1965) found that good readers, identified as those scoring well on reading achievement measures, could be characterized as better adjusted, more likely to set long-term goals, and express greater confidence in their own abilities to meet the goals than their lower achieving peers. The good readers were more likely to hold perceptions of themselves as well adjusted, and they were motivated to persist in successful endeavors.

Stanwyck and Felker (1973) studied students in grades three through six and found the need for children to act in accordance with their expectations of their own abilities. In the discovery that individuals seek to maintain the stability of their self-concept, the researchers found that low self-concept students enter a form of conflict whenever they succeed because the condition is in defiance of their own self-expectations. To resolve the internal conflict, the
student can adjust his or her self-concept or attribute success to the trivial nature or meaningless value of the task. Stanwyck and Felker reported that students more frequently downplayed the success in order to seek equilibrium between expectation and outcome.

Liska (1975) reinforced Stanwyck and Felker's conclusions by reporting that a student with a low self-concept is likely to continue to perform so as to sustain that internal image. The striving for consistency could result in a persistence of the student's disruptive behavior because the student is accustomed to negative comments from a teacher and because his or her peers anticipate the student's noncompliant actions. An alteration of behavior patterns could lead the student to experience internal anxiety and conflict due to the lack of consistency in performance and expectations of other's reactions to behavior.

In a study of first grade reading groups, Weinstein (1976) determined that students in low reading groups have reduced status in the classroom. This status, reinforced by the teacher's behavior, leads to the conception on the student's part that he or she is different from other students. In the knowledge of their status coupled with a need to maintain certitude and stability of self-concept, Weinstein concluded that the children may react in a manner to continue to contribute to their own low levels of achievement in reading.

Johnston and Markle (1986) concluded that there are important reasons for attending to self-concept enhancement in the middle grades. While a self-concept improvement program may not raise academic achievement, there is considerable promise that adolescents will realize other tangible benefits that are as important in the school program as are the "basics." "In fact, good mental health and a rich emotional life may be the most basic basics of all" (p. 87).

Beane (1991) wrote that the school's role in enhancing self-esteem is a moral imperative when the statistics about the
self-destructive tendencies such as substance abuse, crime, and suicide are considered. He saw this as a signal that many young people do not find much about themselves to like.

Beane (1990) claimed that the most urgent reason schools are compelled to enhance self-esteem goes beyond the idea of personal development and coping with problems to personal efficacy or power that can lead to action. The power or the sense that an individual can make a difference, Beane claimed, is essential to personal and collective effort to address the inequity that plagues society. As schools have a responsibility to extend democracy, human dignity, and cultural diversity throughout the greater society, they must be engaged in the development of self-esteem.

## The Role and Effects of Grade Organization

The emergence of graded schools in the nineteenth century initiated controversy as to how grade levels should be organized in order to address optimally the educational, social, and psychological needs of students. Since the 1960s and the trend to shift from junior high schools to middle schools, the debate has intensified and existing variations of grade organization, particularly as they pertain to middle grade organization, have invited comparisons. Educators have hypothesized that the nature of the grade organization pattern of a school and the student's grade and/or sex may affect the student's level of achievement as well as various affective outcomes such as attitude toward school, self-esteem, perception of teachers' controlling behaviors, and attendance. A number of studies reported in the 1970 s and the first half of the 1980 s sought to determine whether schools organized as junior highs including grades 7,8 , and 9 or middle schools containing grades 5 or 6 through 8 fostered greater academic achievement, more desirable student behavior, and a higher quality of student life (Johnston and Markle 1986, p. 1).

Trauschke (1970) compared the achievement, attitudes, and self-concept of students in one junior high school, one middle school, and two elementary schools in Miami, Florida. He found the middle school students to have had a significantly more favorable attitude toward school, other students, and teachers. Their self-concepts were at least equal to those of students in junior high schools. In grade 7, there was a significant difference favoring the middle school regarding students' self-concepts. Academically, fifth and sixth graders achieved equally well in the middle or elementary schools while seventh and eighth graders in middle schools achieved equally as well as their junior high counterparts. However, after a minimum of two years in the middle school, seventh and eighth graders achieved at significantly higher levels than junior high school students in the same grades, and middle school students showed significant gains in all areas of the achievement battery after only one year in the program.

Mooney (1970) compared student achievement and attendance records of fifth through ninth graders in Florida elementary, middle, and junior high schools. He found no significant differences in achievement among any of the students that would be attributable to the grade organization of the school. In addition, there was no significant achievement difference for ninth graders in junior high schools and those graduates of middle schools enrolled in four-year high schools. Attendance was significantly greater, however, in the middle schools than in equated regular schools.

Evans (1970) conducted a comparative study of two middle schools and two junior high schools in the Fort Worth Independent School District. He found that middle school students scored significantly higher in reading and study skills while junior high students scored significantly higher in mathematics. Attendance records were not significantly better in either grade organization structure.

Not all of the research suggested that middle schools yielded enhanced academic achievement or desirable student outcomes. Gaskill (1971) compared achievement and attitude scores of students in four middle school and two junior high schools. He found junior high school achievement significantly higher on total language skills, total arithmetic skills, and the knowledge and use of reference materials. No results of the achievement battery favored the middle school. In addition, though neither school significantly differed from the other on measures of student attitude or school adjustment, Gaskill again found no scale to favor the middle school organization.

Sardone's (1976) comparison of eighth graders attending middle and junior high schools in New Jersey yielded results that endorsed the middle school. He found that generally the eighth grade students attending middle schools attained better scores on pre- and post-tests with respect to basic skills, verbal creativity, and figurative creativity. Although the differences were not significant, Sardone concluded that middle schools afforded students superior advantages and more success than respective junior high schools (pp. 188-89).

In a comparison of seventh and eighth graders who attended nine K through 8 schools and an equal number of junior high schools in the City School District of New York City, Moore (1984) found achievement and behaviors more favorable in all areas for students in the K through 8 schools. Students were compared on reading achievement, attitude toward school, self-esteem, perceptions of teachers' control methods, and attendance. For all five variables, students in the $K$ through 8 schools scored significantly better than their junior high school peers. They achieved higher reading scores, indicated a more positive attitude toward school, reflected a stronger self-esteem, perceived their teachers' controlling methods more humanistic, and they were absent less frequently. Moore concluded that the school social system did affect cognitive and affective school outcomes and that the $K$
through 8 grade organization pattern should be considered when making decisions about school setting for early adolescents (p. 13).

Other studies examined the effects of restructuring a school from a junior high school to a middle school. Baker and Beauchamp (1972) studied a school in its last year as a junior high school and its first year following conversion to a middle school. In a joint dissertation, they reported significantly improved achievement in the seventh grade and higher achievement, though not significant, in the eighth grade after restructuring. The traditional elementary school pattern evidenced better, though not significantly better, achievement levels in the sixth grade. Student attitude toward school was significantly better for all three grades in the middle school arrangement.

In tracing the changes brought about by the conversion of a Tennessee junior high school to a middle school, McGee and Krajewski (1979) indicated a general improvement of student performance and behavior in several areas. Though not significant, student achievement improved slightly, attendance improved by 1 percent, and discipline referrals to the principal decreased by 50 percent.

Brantley (1982) compared student achievement scores from 1973
to 1975 when a school was a junior high school to scores from 1976 to 1981 when it operated as a middle school. He too found that reading and mathematics achievement scores were improved under the middle school grade configuration. In the middle school, eighth graders consistently scored at the tenth grade level in mathematics and reading. Eighth graders in the former junior high school performed at an average of slightly below the eighth grade (pp. 20-21).

Researchers have focused on the enduring effects of grade organization on student performance. Austin (1967) found the high school careers of junior high and middle school graduates were not significantly different in measured areas; however, mean scores in
achievement and aptitude at grade ten favored the former junior high students. There were no significant differences in attendance records between the two groups, but the junior high school group had a higher rate of extracurricular participation in grade ten than their middle school counterparts.

Caliste (1975) compared twelfth grade students who attended K through 8 schools with those who attended a 7 through 8 grade school unit. All of the students attended ninth grade in one school and continued their education in a school comprised of grades 10 through 12. The results of the study showed that differences in achievement as measured by grade point average were not statistically significant. There were few differences in students' perception of school experiences, and those that were reported could be attributed to socioeconomic status and sex differences rather than grade organization patterns. No differences in extracurricular participation levels were reported.

Still other researchers investigated achievement as it might be affected by the instructional practices. Smith (1975) studied one hundred students in each of two Canton, Ohio, junior high schools organized in the same grade configuration. One of the schools employed a traditional instructional approach characterized by departmentalization, a non-thematic approach, grouping by age, and no team planning. The second school employed a program more typically associated with middle school education practices. This was characterized by interdisciplinary teaching; grouping of students according to their learning needs, interests, and capabilities; thematic approaches across disciplines; student behavior concerns addressed by teams of teachers and counselors; and advisee programs that enabled each student to be well known by at least one adult in the school. Smith administered achievement tests and attitude scales at the beginning and end of the school year. Middle school instructional practices promoted
significantly higher scores in reading and science. In other subjects, no significant differences were found; however, the students receiving instruction through middle school practices had higher mean scores in social studies and use of resources. Attitude score differences between the two groups were not statistically significant.

In a similar study, Bagley (1977) compared the achievement and attitudes of seventh grade students who attended either a school with interdisciplinary teams and flexible schedules or a school with departmentalized structures and fixed schedules. Those students attending schools with departmentalization scored significantly higher on eight of the achievement subscales of the SRA Achievement Test. There were no significant differences on the subscale scores of the Nebraska Student Attitude Scale.

Findings on achievement as it related to grade organization were summarized in a 1983 publication of the Educational Research Service. The ERS synthesis of one hundred eighty studies on middle level organization reported:

> Through the years, educators were unable to reach a consensus as to the most appropriate grade organization. Some educators favored the junior high school's seventh through ninth grade organization; some educators favored the middle school's fifth or sixth through eighth grade; and some educators believed that grade organization per se was of less importance than the quality of the program offered in the school. . . . In general, grade organization appeared to have no detrimental effect on the academic achievement or attitudes of the students of the middle years (Calhoun 1983, pp. 176-78).

Lipsitz et al. (1985) agreed with the preceding conclusions when they wrote, "The issue is complex. . . . Grade organization per se does not appear to affect student achievement directly" (p. 19).

Grade Organization and Student Attitude toward School
Schoo (1970) focused on the relationship between grade organization for transescents in grades 5 through 9 and the students' self-concept, social behavior, and attitude toward school in a study of four 5 through 8 middle schools, twelve 6 through 8 middle schools, and
fifteen 7 through 9 junior high schools. He concluded that students in 5 through 8 middle schools indicated a more positive self-perception on the self-measure of the Coopersmith Self-Esteem Inventory than 6 through 8 middle school and 7 through 9 junior high school students. Students in 6 through 8 middle schools and 7 through 9 junior high schools were not significantly different from one another on the self-measure subscale. On the social-measure subscale there was no significant difference in students in 5 through 8 middle schools and peers in 6 through 8 or 7 through 9 schools; however, 6 through 8 middle school students had significantly lower self-perceptions on the social-measure subscale than students in 7 through 9 schools. Students in 5 through 8 middle schools had a significantly more positive attitude toward school than did students in the 6 through 8 middle schools or 7 through 9 junior high schools. Yet, eighth grade students in 5 through 8 middle schools revealed less mature social behavior patterns than their counterparts in 6 through 8 middle schools or the junior high schools. Schoo found students in 5 through 8 middle schools were more homogeneous in their social behavior, attitudes toward classmates, and attitudes to school in general than were students in either of the other two school organizations that he studied (pp. 271-73).

Wood (1973) found that junior high school instilled more positive attitudes toward school, peers, teaching staff, and instruction than did middle schools. In the middle school and one of the junior high schools involved in the study, students from all grades were able to intermingle while in two junior high schools, seventh graders were separated from eighth and ninth grade students in "seventh grade centers." In the junior high school with the centers, the students held attitudes significantly more positive than did middle school students. In a project conducted by Nash (1974), the effects of middle school and junior high school on student attitudes toward their school, the staff, themselves, and their peers were investigated. Students from
five middle schools and five junior high schools were matched, but no significant differences on any of the attitude scales were revealed. The junior high school males, however, had somewhat better attitudes toward school than did males in the middle schools.

Students from ten middle schools and ten junior high schools participated in Draud's (1977) comparative study of attitudes exhibited toward facets of schooling. He found that middle school students expressed more positive attitudes with respect to relationships with teachers and administrators, attitudes regarding participation in school activities, and attitudes relative to the image that they and others had of their school. Junior high school students held more favorable impressions of their counselors. Draud found no significant difference among students' attitudes toward the curriculum in either organization pattern.

Middle level students' perceptions of school climate were assessed in a study conducted by Rhone (1985). Participants were seventh and eighth graders selected from three-year junior high schools, three-year middle schools, one-year middle schools, and a six-year combination junior and senior high school in the Tuscaloosa City, Tuscaloosa County, and Decatur school systems in Alabama. Findings revealed no significant differences in the perceptions of school climate held by students in the schools regardless of the number of grades or the aggregate grades in a school. While female students' mean scores indicated a higher degree of school satisfaction than males' scores, there were no significant differences among students' scores in schools containing a single grade or the combined junior and senior high schools. There was, however, a significant difference in the mean scores of male and female students attending school comprised of three grades. Regardless of attendance at a three-grade middle school or junior high school, females indicated significantly higher satisfaction scores than males.

## Grade Organization, School Transition, and Student Self-Esteem

Middle schools, in a study conducted by Fallon (1969), were not significantly more successful than junior high schools in helping sixth and seventh grade males improve their self-concept or solve their problems. Fallon concluded, "Difference in self-concept attainment among transescent boys in grades six and seven of conventional and middle school settings probably rests more upon the curricular design and staff execution of that design than it does upon the placement of these boys in a particular school setting" (pp. 78-79).

Elie (1970) examined the influence of junior high school versus middle school practices on student behavior as related to socio-emotional concerns, self-concept of ability to learn, creative thinking ability, and physical fitness and health criteria. She paired seventh and eighth grade students who attended middle and junior high schools. While results of the study yielded no significant differences between students in the two school organizations on the four identified aspects of student behavior, Elie found the mean differences between the two schools to be consistently favorable for middle school students.

Gray (1981) studied the attitude toward school and self-concept of seventh graders who attended school in three different grade organizations: the conventional junior high school of grades 7, 8, and 9; middle schools of grades 6, 7, and 8; and single seventh grade centers. He found no significant differences in regard to self-concept or attitude toward school among seventh graders in the three vertical grade organizational plans. Gray stated, "Type of organization may make some difference in student's attitude toward school, but the real impact of the school environment likely resides within each individual school regardless of the organizational patterns" (p. 81).

In an extensive longitudinal investigation of the means by which two different grade organization patterns affected the social and psychological development of pre and early adolescents, Blyth, Simmons,
and their colleagues (Blyth, Simmons, and Bush 1978; Blyth, Simmons, and Carlton-Ford 1983; Simmons, Blyth, Van Cleave, and Bush 1979; Simmons, Bulcroft, Blyth, and Mitsch-Bush 1979; Simmons, Rosenberg, and Rosenberg 1973) determined the extent of impact of transition from elementary to junior high school on seventh grade students' self-esteem. Simmons, Rosenberg, and Rosenberg (1973) suggested that early adolescence was a particularly disturbing period for the child and that the level of disturbance in terms of self-picture and degree of happiness was affected significantly by the type of school the student attended. As the youngster progressed from childhood into adolescence, he or she was confronted frequently with the onset of puberty and the simultaneous alteration of school environment. This shift from the intimate, stable nature of the elementary classroom to the larger junior high school where teachers, peers, and classrooms were interchanged six or seven times daily presented the child with the challenge of an anonymous and impersonal environment (Blyth, Simmons, and Bush 1978). Benedict (1938) argued that the more discontinuous or different two school environments were, the greater the psychological, academic, and social disruption there would be.

To ascertain the extent of the disruption for the transition from sixth to seventh grade, Blyth, Simmons, and colleagues studied 798 Milwaukee students in two primary grade level organizational patterns: $8-4$ and $6-3-3$. The results indicated that overall in seventh grade, males had higher self-esteem than females. Seventh grade females in elementary school consisting of grades K through 8 had higher self-esteem than those in junior high schools. School type did not affect males' self-esteem. Additionally, all students except females in junior high schools showed some improvement in self-esteem between sixth and seventh grade, but females entering junior high school demonstrated a significant decline in self-esteem (Simmons, Bulcroft, Blyth, and Mitsch-Bush 1979, pp. 8-9).

In prior research (Rosenberg 1965; Rosenberg and Simmons 1972; Simmons, Rosenberg, and Rosenberg 1973) qualities were identified that were presumed to be important to a child's self-esteem: perceived peer popularity, academic success, athletic success, physical appearance, and level of parental approval. Sixth grade participants in the Milwaukee study were categorized as "vulnerable" or "less vulnerable" within each of these dimensions according to their expressed perceptions of themselves along the dimension. The researchers then determined whether sixth graders vulnerable in at least one dimension experienced more negative changes in self-esteem in seventh grade than their peers and whether they responded less favorably to the transition into junior high school versus the stability of remaining in their previous K through 8 school environment. Blyth, Simmons, and Bush (1978) reported the following:

1. Males almost always experienced more positive change in self-esteem between sixth and seventh grade than did females. Females always reacted more disadvantageously than boys unless they initially were "less vulnerable" and were able to remain in a K through 8 school.
2. Junior high school females experienced more negative change in self-esteem than did $K$ through 8 females. Among the females, those remaining in the same K through 8 school type demonstrated more negative changes in seventh grade self-esteem than their $K$ through 8 peers if they were already particularly vulnerable on any of the identified indicators.
3. Females who were vulnerable in sixth grade on any one of the indicators and then attended junior high school showed the most negative changes in self-esteem. Among males, no significant effects were found for school type or prior vulnerability (pp. 9-10).

Therefore, in terms of self-esteem, adolescent females who entered the junior high school appeared to be at a disadvantage in comparison both to males in general and to females who did not have to change schools in seventh grade. Prior vulnerability rendered the child less capable of making the transition without diminishment of self-esteem. Furthermore, self-image disturbance was potentially greatest when there were "interactions of biological, psychological, and social structured conditions" (Simmons, Blyth, Van Cleave, and Mitsch-Bush 1979, p. 950).

Blyth, Simmons, and Carlton-Ford (1983) considered the long-term consequences of the transition between school environment in the continued study of the Milwaukee students. They found a general pattern of increasing self-esteem for males with advances in grade levels. For males entering junior high school, there was no decrease in self-esteem. The only disruption of the generally upward trend for the junior high school cohort was when males in the junior high school cohort entered the senior high school at grade ten. There they found a leveling off in self-esteem between ninth and tenth grade. Due to a lack of measure of self-esteem at the eighth grade, it was impossible to determine whether the increase across the years was continuous for the $K$ through 8 cohort between seventh and ninth grades, but it was noted that self-esteem at ninth grade was considerably higher than it had been in seventh grade. Without an eighth measure, the effect of transition could not be ascertained (p. 109).

Similar to $K$ through 8 males, $K$ through 8 females had increased self-esteem with increased grade level. The same caveat with respect to the continuity of the increase from seventh to ninth grade existed due to the lack of an eighth grade measurement. This pattern was contrasting for the junior high school cohort. These females had significantly lower self-esteem than their $K$ through 8 counterparts during seventh grade and during tenth grade. As the junior high cohort of females made the transition into senior high school, they experienced another decline in the mean level of their self-esteem (Blyth, Simmons, and Carlton-Ford 1983, pp. 109-11).

Blyth, Simmons, and Carlton-Ford (1983) concluded that the psychological adjustment of students in terms of self-esteem indicated that females in the junior high school cohort had a more difficult time with school transitions than did males and that transition into the junior high school was more difficult and had a longer lasting effect than did the transition into a four-year high school in ninth grade for
the K through 8 cohort. Furthermore, there appeared to be an increased vulnerability to the senior high school transition when the initial transition occurred in seventh grade. The apparent lack of a serious self-esteem disturbance in the K through 8 cohort suggested that the timing of the transition, particularly for females, was a major factor affecting the magnitude of any self-esteem disruption (p. 111).

Using the same student sample, Blyth, Simmons, and Carlton-Ford (1983) also investigated the relationship of grade organization pattern and time of transition as it affected other student outcomes. Student grade point average calculated on a core set of academic subjects was studied. For sixth grade males there were no initial differences in grade point average, but there were significant differences between the two groups in seventh grade. Males who entered junior high school earned a lower grade point average than those who remained in the K through 8 elementary school. Without eighth grade measures, the continuity of decline was not determined; however, the male grade point average of the K through 8 cohort was much lower in ninth grade than it had been in seventh grade. Both groups of students had approximately the same ninth grade grade point average, and both groups again experienced a grade point average decrease in tenth grade. There was indication that this was somewhat greater for the junior high school cohort who had just entered senior high school (pp. 111-13). For females, Blyth, Simmons, and Carlton-Ford (1983) observed a similar pattern. Seventh grade females in junior high school had a lower grade point average as compared to seventh grade females in $K$ through 8 schools. There was a considerable decrease in the mean grade point average between seventh and ninth grade for those females in the K through 8 cohort as they made the transition to the four-year high school. This group had recovered partially from the decline by tenth grade. The junior high school cohort experienced a second sharp drop in grade point average as it moved into the first year of senior high
school (p. 113). In general, Blyth, Simmons, and Carlton-Ford concluded that a change in school environment was associated with a decrease in grade point average (p. 113).

Blyth, Simmons, and Carlton-Ford (1983) found the extent of student participation in extracurricular activities to be impacted by transitions. Both males and females remaining in K through 8 schools continued to increase their participation levels through seventh and eighth grades. For those students entering the junior high school, there was not only a dramatic decrease in participation during seventh grade but even the gradual recovery from the deficit was insufficient to enable females to catch up by ninth grade with the K through 8 cohort (pp. 113-15).

Males in the K through 8 cohort realized a decline in participation levels upon entering the ninth grade, but there was no. significant difference in the rate of ninth grade participation of the "top dog" junior high school ninth graders versus the "bottom dog" senior high school ninth graders. The K through 8 females actually participated more in ninth grade despite the transition. Significantly, males and females in the K through 8 cohort recovered to a participation rate equally as high as or higher than their eighth grade levels by their sophomore year. The tenth grade transition to senior high evidenced a second decrease in mean participation rates for both males and females of the junior high school group (Blyth, Simmons, and Carlton-Ford 1983, p. 115).

The authors concluded that while both cohorts of students had started at about the same level of participation in sixth grade, they ended quite differently. Once students had been in an environment where actual participation was made difficult or was perceived to be difficult, it was more difficult for them to overcome participation declines. Yet, greater participation in early adolescence led to
increased participation throughout middle adolescence (Blyth, Simmons, and Carlton-Ford 1983, p. 115).

Jones and Thornburg (1984) studied a group of fifth and sixth graders who were projected to enter the same middle school the following academic year. The sample represented students from one K through 5 feeder elementary, three K through 6 feeder elementaries, and the 6 through 8 middle school. Students responded to questionnaires administered two weeks prior to the end of the 1982 academic year, on the third day of the 1983 academic year, and three additional times during the first quarter of 1983. Analysis of results revealed significant transition effects in measures of self-consciousness, victimization, and anonymity. The sixth to seventh grade feeder cohort expressed significantly higher perceptions of anonymity than the fifth to sixth grade feeder cohort. The fifth to sixth grade feeder cohort expressed significantly higher perceptions of anonymity than the sixth to seventh same school group. No significant differences were found in the constructs of self-image or on measures of self-esteem immediately following transitions. All effects of transition were found to have dissipated by the end of the first quarter of school.

An additional impact of school level transition on students considered by Blyth, Simmons, and Carlton-Ford (1983) was the perceived level of anonymity students experienced in various grades. This level was found to fluctuate in direct proportion to the student's position in school. Upon entering a new school, the level increased dramatically and gradually decreased throughout the course of the student's tenure in the school. The perceived degree of anonymity was determined to have had short-term disruptive effects due to transition regardless of the grade level at which transition occurred (pp. 115-18).

For all areas except perceived anonymity, Blyth, Simmons, and Carlton-Ford (1983) suggested the developmental preparedness hypothesis was appropriate. They concluded:

> [T]ransition which is made too early can have relatively long lasting negative effects while transitions made at a later developmental stage may be without serious negative consequences. Thus, the transition into junior high school in early adolescence has negative consequences for youth, particularly in terms of participation and girls' self-esteem. By contrast, the delaying of the transition into secondary schools until ninth grade, as occurred for the $k$ through 8 cohort seems to reduce the magnitude of the disruptions which occur and the time it takes to recover. In spite of some recovery between seventh and ninth grade for the junior high students, they again experience disruption when they make the transition into senior high school. It is as though the difficulty in coping with the first transition left them vulnerable rather than strengthened for the second transition (p. 119).

## Grade Organization and the Place of the Ninth Grade

At the turn of the century, educators envisioned a unique institution that would best meet the special physical, mental, and social-emotional needs of preadolescent students. In so doing, the ninth grade was removed from the high school and was joined with the seventh and eighth grades from the elementary school. Thus the junior high school assumed its place as the educational setting for middle level students. It persisted until the onset of the middle school movement in the 1960s. Educators then proposed what was considered to be a more effective middle level grade organization to include grades 5 or 6 through 8, and many grade organization studies were undertaken to determine the efficacy of middle grade organization patterns. The ninth grade was more appropriately aligned as the initial grade in a four-year high school in the thinking of those who embraced the middle school movement. Yet, according to Lipsitz et al. (1985), one of the problems with the existing research on the consequences of grade level arrangements was that the studies, for the most part, ignored the effect on ninth graders as they were transferred from the junior high school to the senior high school (p. 21).

A basic approach assumed by those who studied how best to organize the middle grades was to identify those grade levels containing students most similar in terms of several maturational dimensions (Blyth, Smyth, and Hill 1984). In a longitudinal study of ninth grade
attitudes and interests in 1935, 1953, and 1959, Jones (1960) described ninth graders in the 1950 s as more comparable to the eleventh and twelfth grade students of twenty years earlier in terms of their maturity and social sophistication.

Buell (1962) argued the case for retaining the sixth grade in the elementary setting and ninth grade in the junior high school. He wrote that the majority of ninth graders were early adolescents and should be part of the junior high school where teachers recognized and understood the characteristics of transescence. There teachers developed programs that helped students with the transition from childhood to adolescence unlike high school teachers who were not sympathetic to the tremendous variety of growth patterns in self-concept, social needs, and attitudes toward school demonstrated by transescents (pp. 19-20).

Research conducted by Dacus (1963) on students in grades 5 through 10 supported the supposition that ninth graders more closely resembled tenth graders than eighth graders. His study indicated that the smallest differences between social, emotional, and physical maturity as well as opposite sex choices existed between students in grades 6 and 7 and between students in grades 9 and 10. A significant difference in social and emotional maturity levels was found among males between eighth and ninth grades.

Sanders (1966) studied students in schools containing grades 6 through 8 and those in schools containing grades 7 through 9 with respect to mental and educational development in order to ascertain whether grades 6 through 8 constituted a more heterogeneous grouping than grades 7 through 9. No significant differences were found between the populations, and Sanders concluded that school should base grade organization decisions on factors other than student homogeneity factors.

The Bureau of School Services (1969) through the University of Michigan provided the Detroit Public Schools with a study that summarized the literature on the debates with respect to placement of the ninth grade in a junior high school as opposed to a senior high school. In the recommendation in favor of educating ninth graders in a four-year high school based largely upon student observation and data gathered from educational publications, the Bureau cited biological and anthropological research findings that provided convincing evidence of the greater similarity of ninth to tenth graders than of ninth graders to seventh and eighth graders. In addition, it was suggested that the tendencies of ninth graders to be collectively self-centered, aggressive, and annoying to teachers and classmates indicated their need to be served in a well run high school where they might be "kept in their place" rather than in a junior high school (pp. 21-22).

Myers (1970) investigated the physical, intellectual, emotional, and social maturity levels of eighth, ninth, and tenth graders from two St. Louis school districts. The eighth and ninth grade students attended a 7 through 9 junior high school and tenth graders were enrolled in a high school. He found females in all grades to be more physically and socially mature than their male peers. No other significant differences were found between males and females. Eighth graders were significantly less mature physically, intellectually, and emotionally than ninth and tenth graders. No significant differences were found between the intellectual, emotional, and social maturity of ninth and tenth graders. Based upon the results, Myers concluded that ninth and tenth grade students were better placed together in schools than were eighth and ninth graders.

While he cited reasons for the failure of conventional junior high schools to achieve their stated purposes and objectives, Schoo (1970) stated that research in physical, social, and emotional growth
had demonstrated that ninth graders were too mature for educational programs designed specifically for the early adolescent.

Blyth, Smyth, and Hill (1984) contended that the approach to organizing grades most similar in terms of maturational dimensions was problematic in that it failed to take into account the overall diversity pervasive among early adolescents. The diversity existed in any combination of grades containing early adolescents; thus, the gains made in similarity by excluding ninth graders and including sixth graders in a school organization pattern were slight when compared to the overall diversity that remained (p. 106).

A second approach to achieving optimal grade arrangement was to consider the consequences that evolved when certain grades were grouped. Studies of this nature frequently focused on the precocity of younger students who had been placed with older students (Blyth, Smyth, and Hill 1984, pp. 105-06).

White (1964) studied the effects of grade combinations upon seventh graders who attended schools containing one, two, three, six, and nine grade levels. He examined the impact that the organization had on students' academic achievement, personal-social development, and extracurricular activity participation. Significant findings indicated that students at lower grade levels in secondary school experienced detrimental consequences in their school adjustment as related to problem solving skills and participation in activities when the majority of the pupils in the school exceeded the seventh grade level.

Shovlin (1967) conducted a study of sixth graders attending $K$ through 6 elementary and 6 through 8 middle schools. Examining the achievement, self-concept, and social behavior of these students, he found a significant difference in dating, conformity, and independence traits between the two groups. The middle school environment tended to accelerate social behavior where sixth graders emulated the behavior of
their eighth grade counterparts as opposed to the behaviors exhibited by their elementary school peers.

The National Institute of Education's (1978) report on school safety reported that the student most vulnerable to being victimized in the school setting was typically a seventh grade male who attended a junior high school.

Other research suggested there were positive effects on younger students in the presence of older students. The study conducted by Wood (1973) compared students from one middle school with those from three junior high schools. The middle school sixth grade students expressed significantly more negative attitudes toward school than seventh graders in two of the junior high schools. Middle school students were significantly more negative toward their peers across all three grades than students in one of the junior high schools that housed seventh graders in a "seventh grade center." Finally the students in the two junior high schools that operated seventh grade centers displayed significantly more positive attitudes toward the staff and instruction than middle school students.

In a study, Blyth, Smyth, and Hill (1984) described the influence of older students on younger students in six areas: perception of the school environment, victimization, dating/sexual behavior, self-evaluation, participation, and students' smoking and substance abuse. The two-year study was conducted in a suburban district that changed from a 6-3-3 plan to a 6-2-2-2 plan prior to the study's second year. Data were gathered in a pre-/post-test design from all seventh through ninth graders and a random sample of tenth through twelfth graders. The research design demonstrated the effect reorganization had on ninth graders exposed to tenth graders when transferred from the junior high school to the intermediate high school as well as the effects of ninth grade absence on seventh and eighth graders. Major
differences as a result of the shift to the 6-2-2-2 configuration were found in several of the areas investigated (pp. 106-12).

With respect to student perceptions of the school environment, it was hypothesized that the absence of older students would result in younger students feeling that their school was more optimally controlled. This was the case for all students in grades 7, 8, and 9. Significant differences were found for eighth grade males and seventh and eighth grade females. The absence of older students was expected to result in younger students feeling less anonymous. The difference in perceived anonymity was dramatic for all groups. The absence of older students resulted in younger students' decreased concern about victimization at school. Differences were significant for all categories except ninth grade females (Blyth, Smyth, and Hill 1984, pp. 112-13).

In general, seventh and eighth graders participated in the same number of athletic activities regardless of whether ninth graders were present. The ninth grade male athletic participation level decreased significantly when placed with tenth graders. Ninth grade participation in nonathletic activities declined significantly when transferred to the intermediate high school while eighth grade male participation levels increased significantly in the absence of ninth graders. Following the reorganization, ninth grade males assumed significantly fewer leadership positions while eighth grade females became leaders significantly more frequently (Blyth, Smyth, and Hill 1984, pp. 113-14).

The incidence of cigarette smoking was reduced significantly for eighth grade males and seventh and eighth grade females in the absence of ninth graders; however, ninth grade females indicated significantly greater incidents of smoking in the presence of tenth graders. The absence of ninth grade resulted in significantly less marijuana use for eighth grade males, but the presence of tenth grade
students resulted in a significant increase of use for ninth grade males. Offers to use other drugs were significantly reduced in the absence of ninth graders for seventh and eighth grade females and eighth grade males. Though not significant, in the presence of older students, eighth grade males were threatened with physical harm more frequently, and ninth grade males drank alcohol and had sexual intercourse more often. Similarly, when ninth grade females attended the intermediate high school, they drank more alcohol, experienced more thefts, and were more likely to date in groups. The ninth grade presence in the junior high school was related to seventh grade females experiencing more thefts and having diminished self-esteem (Blyth, Smyth, and Hill 1984, pp. 114-15).

## Grade Organization and School Practices

Through a study conducted by the Johns Hopkins Center for Research on Elementary and Middle Schools in 1988, data were collected from 2,400 public schools, all of which enrolled seventh grade students. This revealed that the grade level organization of the school was associated with different patterns of practices. Among the differences discussed were those in curricula, instructional programs, school goals, and report card evaluations as well as several others most frequently associated with middle school programs (Epstein and Mac Iver 1990).

It was found that varied grade organizations had some distinctive emphases in the course offerings for the middle grades. In elementary-high schools, K through 12 , there was a tendency to place less emphasis on advanced courses such as algebra and foreign language, and very few students had the opportunity to take the advanced course. Elementary-middle combination schools, K through 8 , offered more students reading and fewer students physical education and exploratory courses than did other grade organizations. The program in middle schools, 6 through 8, was more innovative, diverse, and responsive to early adolescents than programs in other grade spans. Reading,
computers, keyboarding, and other exploratory electives or mini-courses were typically offered in these schools. The 7 through 8 schools resembled middle schools in course offerings while junior high schools, 7 through 9, looked more like high schools and offered more algebra, foreign language, industrial arts, and home economics than other middle grade organizations. The middle-high combinations, 7 through 12 , on average resembled the junior high more than other grade organizations but offered fewer advanced courses than 7 through 9 schools (Epstein and Mac Iver 1990, pp. 17-20).

Grade organization influences the instructional practices of teachers. Instruction in K through 8 schools was characterized by greater emphasis on basic skills and less emphasis on active, exploratory, or technological instructional practices. In K through 12 schools there was less writing and editing in English, less lab work in science, and more social interaction in social studies than in other schools. Middle schools, 6 through 8 or 7 through 8, emphasized innovative, active, and student-centered instruction. In the 7 through 9 junior high schools, the picture was one of standard or traditional instruction in most subjects, and the middle-high, 7 through 12, combination gave greater attention to student activities and advanced content in English; although, rather undistinguished approaches in the other subjects were noted (Epstein and Mac Iver 1990, pp. 20-21).

School goals for students may affect curriculum offerings, instructional programs, relationships among students and staff, and other practices. As principals ranked seven academic, personal, and social goals they set for all students, mastery of basic skills and subject matter was rated as the most important of all and citizenship and community service to school and community was the least important goal regardless of the grade span. The combination schools in the study, K through $8, \mathrm{~K}$ through 12 , and 7 through 12 , placed even greater emphasis on the academic goal of basic skills and subject matter
mastery; whereas, schools dedicated to the early adolescent, the middle and junior high schools, placed more emphasis on personal growth and development. K through 8 schools gave significantly less weight to personal growth and development and K through 12 schools found higher level thinking skills more important than any other grade organization. The 7 through 12 schools differed from all other schools by placing less emphasis on higher level thinking skills and human relations than did other groups (Epstein and Mac Iver 1990, pp. 21-22).

Though most schools do not present students with a formal list of goals, they do communicate what is important by what is monitored, evaluated, and rewarded. Nearly all schools, 99 percent, gave students letter grades for academic performance in each subject, but only onefourth of the schools educating seventh graders gave separate grades for effort. Fewer than one-fifth of the schools recognized improvement with progress grades in each subject. Approximately half of the schools graded conduct in each subject and half gave written comments. Computer-generated comments were used by about 30 percent of the schools (Epstein 1990, p. 440).

Types of marks and evaluations were found to vary depending on the grade organization of the school. The middle schools for grades 6 through 8 and 7 through 8 provided the greatest amount of different types of information on their report cards. Grades for effort were most common in schools that ended with middle grades and least common in schools that contained high school students, especially 7 through 9 and 7 through 12 schools. The K through 8 and K through 12 schools were most likely to provide written comments, and larger junior high schools were most likely to provide students with computer-generated comments. The K through 12 schools used progress grades more frequently than the others, a fact attributed to the relative ease of monitoring a smaller population at each grade level. Junior high schools issued progress
grades significantly fewer times than other grade organizations (Epstein and Mac Iver 1990, pp. 27-28).

Lounsbury and Johnston (1985) shadowed ninth graders attending school in 7 through 12 junior-senior high schools, 7 through 9 junior high schools, and 9 through 12 high schools. They found that, irrespective of school type, ninth grade programs were similar. While they reported that the majority of schools for ninth graders were well established and operated smoothly, they generalized some concerns. They found a lack of meaningful intellectual interaction between students and teachers. Instructional programs were dominated by the textbook with relationships between content and the "here and now" seldom identified. The curriculum was fragmented into separate subjects with little subject matter integration. Infrequent provision for student diversity was made, as activities were typically of a large group nature with the same expectations and standards applied to the entire group (pp. 71-74).

Lipsitz et al. (1985) claimed, "There is a nagging suspicion, based on hints from careful research and the experience of thoughtful educators, that grade organization does at least indirectly make a difference. However, to date, the research contains nothing definitive to argue for a particular grade organization" (p. 21).

Where does the ninth grade belong? Lounsbury and Johnston (1985) believed that there was no right answer. The key was found in the program provided for the grade wherever it was housed. At the same time they cautioned educators to realize that what was provided and the climate in which it was provided was inevitably affected by the type of school unit in which it was housed (p. 75).

In the following chapter, the methods employed to obtain and analyze the data pertinent to this study are presented. The population of ninth grade students who participated in the study is identified. Descriptions of the instruments employed to obtain the data for the study and the rationale for their selection are included.

This chapter includes descriptions of the population of ninth grade students who participated in the study, the means by which the data were obtained, the instruments administered, and the statistics used in the analysis of the data.

## Background of the Study

This study focused on ninth grade students attending schools representative of two different grade organization patterns, 7 through 9 and 9 through 12. Its purpose was to determine whether relationships did exist among the students' expressed satisfaction levels with various aspects of their schools, their measures of self-esteem, the grade organization pattern of the school that they attended, and the students' gender. It examined these relationships among the eight subscales of the NASSP Student Satisfaction Survey, three of the subscales of the Coopersmith Self-Esteem Inventory, the grade organization pattern of the school, and the students' gender.

The literature review revealed a paucity of information regarding the ninth grade as an entity. At the turn of the century, educational leaders supported the creation of the junior high school and the removal of the ninth grade from the senior high school to this new educational unit. In part, this was an effort to retain greater numbers of students in school beyond the sixth grade and to better meet the distinctive needs of early adolescent students. During the past two and one-half decades, a shift of attention has focused the inquiry on the efficacy of the new concept of middle schools, consisting primarily of grades 5 or 6 through 8 with the concomitant return of the ninth grade
to the high school from which it came. The nature of the research on grade level organization has had two predominant foci. One has sought to determine those grades in which there was the greatest manifestation of similarities among students' maturational levels in order to group them into single educational units. A second approach has examined the consequences to students in different grade level arrangements, more frequently assessing those that affect the younger students in the middle grades and minimizing or ignoring the resulting effects on ninth graders as they were returned to high school settings. It is noteworthy that while the research has yielded no definitive conclusions as to the optimal grade level organization pattern, the debate continues about the grade level arrangements that best address the educational, psychological, and social needs of early adolescents.

Few educators would deny the complexity of the ninth grade adolescent.

> Youngsters in the 14 - to 15 -year-old range share a common set of characteristics, but it should not be forgotten that there is a broad range of variation and that these variations are significant for both the youngsters and the schools that they attend. The factors that cause these variations are numerous and include intelligence levels, rate of physical maturation, motivation, socioeconomic status, and family make-up (Lounsbury and Johnston 1985, p. 5).

The writer's interest in a study of ninth grade has as its genesis an appreciation of the diversity of this student population gained through a career of teaching, counseling, and administering students in grades 7 through 12. Recently this employment has been in a school district that is considering the feasibility of reorganizing the junior high schools currently consisting of grades 7, 8, and 9 potentially to include the ninth grade in the high school units. This has heightened an awareness of the consequential effects that such a transition could precipitate. The literature does indicate to educators that there is a relationship between self-esteem and numbers of school transitions that a student makes; that there is a relationship between self-esteem, school achievement, and attitude toward school; and that
any change in grade level patterns might effect a series of consequences, some of which positively and others of which negatively impact younger students who are exposed to older students as a result of the alteration of the organizational structure. The implications for administrators of this age group, no matter what grade organizational scheme is considered, are that concerted efforts to understand the attitudes, experiences, and behaviors of students are necessary to the provision of a school that best addresses the educational, social, and emotional needs of all in attendance.

Several instruments that measured student attitude toward school or student satisfaction with school were examined, and the NASSP Student Satisfaction Survey was selected because it provided a comprehensive assessment of student satisfaction with school in eight distinct categories or subscales. Furthermore, the battery in which the survey is included distinguishes between the measurement of climate whereby the individual responds as an informant in terms of what he or she believes most people find to be true about the characteristics of the school environment and satisfaction whereby the respondent is asked to give a personal affective reaction to a specific situation or condition (Halderson, Kelley, and Keefe 1987, pp. 3-4).

The Self-Esteem Inventory developed by Coopersmith was selected as the self-esteem measure. According to a review by Peterson and Austin (1985), the inventory has much to recommend its use, for it is among the best known and most widely used of the various measures of self-esteem. It is brief, easily scored, reliable and stable, and there exists an impressive amount of information bearing on its construct validity. Furthermore, the measure is based straightforwardly on general theory of self-esteem and its relationship to academic performance (p. 396).

## Population Studied

The population for this study included the ninth grade students attending the public schools in one city in an upper midwest state. This community was selected as appropriate for the study because ninth grade students attended school in one of two grade organization patterns: a high school containing grades 9 through 12 or a junior high school containing grades 7 through 9. This unusual attendance scheme in a single community provided an opportunity to study the relationships among self-esteem, satisfaction with school, and grade level arrangement by reducing the numbers of the possibilities of confounding comparisons potentially to be attributed to the grade level arrangement with actual differences between school districts. All ninth grade students in attendance on the day that the instruments were administered in each of the two schools participated. A total of 317 students in grade 9 in the high school and a total of 226 ninth grade students in the junior high school did participate in the study.

The Human Subjects Review Form for New Projects Involving Human Subjects was submitted to the University of North Dakota's Office of Research and Program Development on March 30, 1989. This application included a statement of justification for use of human subjects in the study, a description of the procedures to which the students would be subjected, a statement of the benefits to be accrued through the study, and delineation of the precautions taken to ensure the maintenance of student anonymity and minimization of any risk to the subjects. The project was approved on April 3, 1989, and April 4, 1989, by two members of the University of North Dakota's Institutional Review Board.

Permission was granted initially by the Assistant Superintendent of Public Schools in the community for students to complete the Student Satisfaction Survey and the Self-Esteem Inventory. Arrangements were made then with each of the building principals to have
selected teachers administer the instruments to their students in designated ninth grade classes.

In the high school, identified as School A, the four ninth grade English teachers participated in this effort. In the junior high school, School B, the three physical science teachers participated. The choice of departments was left to the discretion of the building principal and the teachers. The only stipulation made was that the identified classes in which the instruments were to be administered had to include all mainstreamed ninth grade students in that school. The writer met with the building principals and the teachers on May 5, 1989, to provide them with answer sheets, copies of the NASSP Student Satisfaction Survey and the Coopersmith Self-Esteem Inventory, and necessary administration supplies. General procedures to be followed were discussed during those meetings, and a set of directions (see appendix C) was provided each teacher so that the administration of the Student Satisfaction Survey and Self-Esteem Inventory would be standardized among the seven teachers. Students completed the survey instruments on May 8, 1989, or on May 9, 1989, during the regular English or physical science class periods.

In School A, 315 (male=157, female=158) Student Satisfaction Surveys were usable. Two surveys were eliminated because the requested gender identification information was not provided by the students. A total of 295 (male=143, female=152) Coopersmith Self-Esteem Inventories were scored. Two inventories were eliminated because the requested gender identification information was not provided. Five inventories were eliminated because they were not completed or only partially completed. Fifteen inventories were eliminated because the student indicated his or her age to be at least sixteen years. (The School Form of the Coopersmith Self-Esteem Inventory is to be used with students aged eight through fifteen.)

In School B, 219 (male=117, female=102) Student Satisfaction Surveys were usable. Seven surveys were eliminated because the requested gender identification information was not provided or because it was provided in such a manner as to render it impossible to distinguish the student's gender. A total of 203 (male=106, female=97) Coopersmith Self-Esteem Inventories were scored. Seven inventories were eliminated because the requested gender identification information was omitted or inappropriately recorded. An additional sixteen inventories were not scored because the student indicated his or her age to be at least sixteen years.

## Instruments

## Description of the NASSP Student Satisfaction Survey

In 1982, NASSP named a Task Force on Effective School Climate to review existing literature and measures of school climate and to offer recommendations to practitioners and researchers about assessing and improving school climate. As a result of the literature review, the task force identified a number of concerns:

1. Available definitions of "climate" were varied but generally unclear or vague in meaning.
2. Most studies of climate were based on perceptual data collected from a single stakeholder group, usually teachers.
3. Measures of satisfaction were 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.
4. Measures with adequate psychometric properties, useful for research, were not widely used by practitioners.
5. Measures popular with practitioners, while informative, often lacked even basic psychometric validation.
6. A positive school climate was assumed to be indicative of positive student learning outcomes, but evidence of these outcomes was not provided in most studies (Halderson, Kelley, and Keefe 1987, p. 1).

The task force formulated a general model of school
environments depicting the contextual, input, mediating, and outcome variables thusly associated (Keefe, Kelley, and Miller 1985). This model expanded a simple conceptualization of school climate to encompass a full range of inputs and outputs, including those from the societal
environment, the school district and the community environments, and the school and/or classroom environments implicated in the process of school improvement (Halderson, Kelley, and Keefe 1987, pp. 1-2). The task force perceived that there was a need to develop new instrumentation to provide valid, reliable, and practical measures of school environment, for existing instrumentation was considered inadequate or was unavailable. The Comprehensive Assessment of School Environments (CASE) battery was developed based on the task force model. This battery includes a climate instrument and three satisfaction instruments. Each of the instruments may be used singly or in any combination.

For this study, the NASSP Student Satisfaction Survey of the CASE battery was selected. It was developed by Neal Schmitt and Brian Loher at Michigan State University and specifically provides data about student perceptions on eight subscales:

Teachers. Student satisfaction with the professional behaviors of teachers.

Fellow Students. Student satisfaction with peer group relationships.

Schoolwork. Student satisfaction with the range of courses and the nature of classwork in the school.

Student Activities. Student satisfaction with the number and types of school-sponsored activities and with opportunities for student participation.

Student Discipline. Student satisfaction with the degree to which the school is an orderly and a safe environment.

Decision-Making Opportunities. Student satisfaction with opportunities to provide input on decisions about curriculum, school events, etc.

School Buildings, Supplies, and Upkeep. Student satisfaction with the quality and availability of library resources, learning materials and supplies, and with the upkeep of the buildings and grounds.

Communication. Student satisfaction with the availability of information and opportunities to communicate with others about school events (Halderson, Kelley, and Keefe 1987, p. 4).

The instruments in the CASE battery are normalized for use with students in grades 6 through 12, and the readability level of the Student Satisfaction Survey is grades 4 through 6 (Halderson, Kelley, and Keefe

1987, pp. 3-4). Students respond on a five point Likert scale from 1 (I am very unhappy about this aspect of my school) to 5 (I am very happy about this aspect of my school). Items marked 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) are not scored.

The CASE battery instruments were administered to more than 1,500 teachers, 14,000 students, and 4,400 parents during the national pilot and normative studies. The Student Satisfaction Survey has high face validity and good psychometric properties. As an estimate of the degree to which items on a given subscale are similar in meaning, internal consistency coefficients (Cronbach's alpha) were calculated. The average reliability of the Student Satisfaction Survey subscales is .81, with a range from .76 to .83 (Halderson, Kelley, and Keefe 1987, p. 5).

Content validity, the extent to which items on a scale are representative of the domain(s) of interest, was established through the field testing and factor analysis of items. Redundant and ambiguous items were revised or excluded. Empirical data from the field studies and rational considerations guided the formulation of the drafts of the instrument (Halderson, Kelley, and Keefe 1987, pp. 5-6).

Construct validity, the extent to which the instrument measures student satisfaction, was supported through emphasis that the task force placed on scale and item conceptualization. Extensive use of exploratory and confirmatory factor analysis in field testing the instruments ensured that only concepts and items with strong factor loadings were retained. Factor analysis identified both the interconnected items and the underlying factors (subscales) that seemed to account for correlations. The task force review and factor analyses both support a strong construct validity for the climate and satisfaction instruments (Halderson, Kelley, and Keefe 1987, pp. 6-7).

Table 1 presents the internal estimates of reliability and summary data for the eight subscales of the Student Satisfaction Survey (Halderson, Kelley, and Keefe 1987, pp. 6, 13).

TABLE 1
STUDENT SATISFACTION SURVEY INTERNAL CONSISTENCY ESTIMATES OF RELIABILITY AND SUMMARY DATA

| Subscale | Items | Cronbach's Alpha | Mean | S.D. | N* |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Teachers | 1-7 | . 82 | 24.0 | 4.9 | 5,632 |
| Fellow Students | 8-12 | . 78 | 17.2 | 3.8 | 6,271 |
| Schoolwork | 13-18 | . 76 | 18.8 | 4.4 | 6,602 |
| Student Activities | 19-23 | . 81 | 18.1 | 4.1 | 6,509 |
| Student Discipline | 24-29 | . 83 | 20.1 | 4.6 | 6,404 |
| Decision-Making Opportunities | 30-34 | . 83 | 15.0 | 4.5 | 5,460 |
| School Buildings, Supplies, Upkeep | 35-40 | . 82 | 21.9 | 4.5 | 6,421 |
| Communication | 41-46 | . 82 | 20.5 | 4.8 | 6,042 |

*Number of cases varies because of missing data and "don't know" responses.

A "Total" score is not reported for the Student Satisfaction Survey. Similarly, no "Total" score is calculated for any of the CASE battery surveys assessing climate or satisfaction. However, scores on one subscale may be affected by or related to scores on another subscale (Halderson, Kelley, and Keefe 1987, p. 30). Scores within the range of one standard deviation above or below the subscale mean or norm should be interpreted as "about average" for the scale, as they would fall by definition within the middle 68 percent of all of the scores.

## Description of the Coopersmith Self-Esteem Inventory

As a part of an intensive study of self-esteem carried out during 1959-65, Coopersmith developed a fifty-eight-item Self-Esteem Inventory to measure self-esteem from the perspective of the subject. A team of five psychologists sorted the original items into groups indicative of high and low self-esteem. Items that seemed ambiguous, repetitious, or about which there was disagreement were eliminated and then the remaining items were tested for comprehensibility with a group of thirty children. The final form of the inventory consisted of fifty items that addressed the subject's self-attitudes in four areas: peers, parents, school, and personal interests. The subscales for each area were entitled, respectively, Social Self-Peers, Home-Parents, School-Academic, and General Self. The final form was administered to two fifth and sixth grade classes of both males and females. Scores. ranged from 40 to 100 (maximum possible of 100 ) with a mean of 82.3 and a standard deviation of 11.6 . The mean score for the forty-four males was 81.3 with a standard deviation of 12.2 ; the mean score for the forty-three females was 83.3 with a standard deviation of 16.7 . There was no significant difference between the mean scores of the males and females. The distribution was skewed in the direction of high self-esteem (negatively skewed). Five weeks later the inventory was readministered to thirty students in one of the fifth grade classes, and test-retest reliability for this time interval was calculated to be . 88 .

Subsequently, the inventory was administered to 1,748 children attending public schools in central Connecticut. This constituted a more diverse student population in terms of ability, interest, and social background than had the initial fifth and sixth grade classes that were examined. The mean for the males was 70.1 with a standard deviation of 13.8 ; the mean for the females was 72.2 with a standard deviation of 12.8 . There was no significant difference between the mean scores for males and females. Test-retest reliability after a three
year interval with a sample of fifty-six children from the population was .70 (Coopersmith 1967, pp. 5, 9-10).

Since its development, the Self-Esteem Inventory has been administered to tens of thousands of children and adults participating in research studies or in special educational or clinical programs to enhance self-esteem. All socioeconomic ranges and many ethnic and cultural groups have been included, and well over one hundred studies of the inventory's reliability and validity have been conducted (Coopersmith 1981, p. 12). The following accounts are representative of the studies conducted using the School Form of the Self-Esteem Inventory.

Spatz and Johnston (1973) administered the Self-Esteem Inventory to over six hundred students in grades 5, 9, and 12 in a rural school district. From each grade, one hundred inventories were randomly selected, and Kuder-Richardson reliability estimates (KR20s) were calculated. Coefficients obtained were . 81 for grade 5, . 86 for grade 9, and . 80 for grade 12. This was indicative of adequate internal consistency for students in all three grades.

Kimball (1972) administered the Self-Esteem Inventory to approximately 7,600 public school children in grades 4 through 8 representative of all socioeconomic ranges as well as black and Spanish-surnamed students. KR20s were generated for each grade level and the calculated coefficients ranged between . 87 and .92 .

Rubin (1978) conducted a three-year longitudinal study of 380 students aged nine, twelve, and fifteen to assess the stability of the inventory. The author found that children tested at the age of twelve and again at the age of fifteen showed greater test-retest consistency ( $r=.64$ ) than children tested at the ages of nine and twelve ( $r=.42$ ). Rubin concluded that the individual's self-esteem gains stability as the younger child moves into early adolescence.

Drummond and McIntire (1977) administered the Self-Esteem Inventory to 591 children in grades 2 through 12. In a pretest-posttest comparison at six month intervals, significant correlations were found for all grade levels and for both sexes for the General Self subscale and Total Self scores. The findings suggest the temporal stability of the inventory.

In a study of its construct validity, Kokenes (1974, 1978) administered the Self-Esteem Inventory to 7,600 children in grades 4 through 8. Her investigations were designed to observe the comparative importance of home, peers, and school to the global self-esteem of preadolescents and adolescents. The findings confirmed the construct validity of the subscales proposed by Coopersmith as sources that provided legitimate measures of self-esteem.

On the basis of studies conducted or reviewed by Coopersmith (1967), it was found that Self-Esteem Inventory scores were significantly related to creativity, academic achievement, resistance to group pressures, willingness to express unpopular opinions, and perceptual constancy.

In assessing normative data, it was recommended that caution should be exercised. The primary value derived from these data was suggested to be for comparison purposes. Users were encouraged to develop local norms (Coopersmith 1981, p. 17).

Owens and Gustafson (1971) administered the Self-Esteem Inventory to over four hundred students in grades 3, 6, and 9. These children attended five low-income urban schools in California in which there was an excess of 50 percent Spanish-surnamed student enrollment. Means and standard deviations for this sample are shown in table 2.

TABLE 2
SELF-ESTEEM INVENTORY MEANS AND STANDARD DEVIATIONS FOR TWO GROUPS OF STUDENTS BY GRADE, SUBSCALE SCORE, AND TOTAL SELF SCORE (OWENS AND GUSTAFSON STUDY)

|  |  | $\begin{aligned} & \text { Mexican-American } \\ & \text { Mean S.D. } \end{aligned}$ |  | Other <br> Mean S.D. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Grade 3 |  |  |  |  |
| General Self |  | 28.2 | 6.6 | 30.4 | 7.6 |
| Social Self-Peers |  | 10.2 | 3.1 | 10.3 | 3.2 |
| Home-Parents |  | 9.8 | 3.6 | 9.7 | 4.1 |
| School-Academic |  | 9.4 | 3.5 | 10.4 | 3.4 |
| Total Self |  | 57.5 | 12.6 | 60.8 | 14.6 |
|  | Grade 6 |  |  |  |  |
| General Self |  | 32.0 | 7.5 | 33.5 | 9.7 |
| Social Self-Peers |  | 10.5 | 3.9 | 10.0 | 3.5 |
| Home-Parents |  | 10.7 | 4.0 | 11.1 | 4.2 |
| School-Academic |  | 8.6 | 3.8 | 9.7 | 3.4 |
| Total Self |  | 61.8 | 14.2 | 64.4 | 15.4 |
|  | Grade 9 |  |  |  |  |
| General Self |  | 33.2 | 9.7 | 34.6 | 7.9 |
| Social Self-Peers |  | 10.9 | 3.0 | 11.8 | 3.8 |
| Home-Parents |  | 9.1 | 4.9 | 10.2 | 5.4 |
| School-Academic |  | 7.9 | 4.1 | 9.4 | 4.1 |
| Total Self |  | 61.2 | 18.6 | 64.6 | 15.6 |
| $\mathrm{N}=400+$ |  |  |  |  |  |

Maximum possible scores: General Self, 52; Social Self-Peers, 16; Home-Parents, 16; School-Academic, 16; and Total Self, 100.

In a study conducted by Ketcham and Morse (1965), 454 students in grades $3,5,7,9$, and 11 in a large city school system completed the Self-Esteem Inventory. The sample was representative of central city and suburban students. The authors found that self-esteem was high at grade 3 , that there was a significant drop in self-esteem at grade 5, and that there was a gradual increase in self-esteem until grade 11. No significant sex differences were reported. Table 3 summarizes the findings of the Ketcham and Morse study with respect to the Total Self scores.

TABLE 3
SELF-ESTEEM INVENTORY MEANS AND STANDARD DEVIATIONS BY GRADE (KETCHAM AND MORSE STUDY)

|  | Mean | S.D. | N |
| :--- | :--- | :--- | ---: |
| Grade 3 | 60.4 | 13.1 | 97 |
| Grade 5 | 54.0 | 14.6 | 100 |
| Grade 7 | 55.8 | 13.0 | 100 |
| Grade 9 | 56.7 | 11.7 | 100 |
| Grade 11 | 59.1 | 12.2 | 87 |
| Combined Total | 57.3 | 13.2 | 484 |

Maximum possible total score is 100.

Currently, the Coopersmith Self-Esteem Inventories are three self-report questionnaires that present respondents with generally favorable or generally unfavorable statements about the self, which they indicate as "like me" or "unlike me." The School Form is a fifty-eight-item inventory to be used with eight-year-old to fifteen-year-old children. It contains four subscales pertaining to the self-esteem domains of peers, parents, school, and personal interests. In addition, an eight-item Lie Scale is included to assess the defensiveness of respondents. The School Short Form contains twenty-five items from the School Form, and the Adult Form is an adaptation of the School Form to be used with ages sixteen and older (Peterson and Austin 1985, p. 396). For the purposes of this study, the School Form was selected as an appropriate measure of ninth grade students' self-esteem. Scores for all subscales were calculated in order to arrive at a Total Self score, but the scores of the Home-Parents subscale were not reported due to the focus of the study.

## Treatment of the Data

The techniques of descriptive and correlational statistics were used to analyze the relationships among the subsets of the Student Satisfaction Survey and the Self-Esteem Inventory.

## The NASSP Student Satisfaction Survey

The Student Satisfaction Survey was scored in a three stage process: (1) subscale raw scores were generated; (2) subscale standard scores were determined; and (3) group summaries and profiles were prepared. The Student Satisfaction Survey employs a six-response Likert scale. Items were scored from values of 1 (strongly disagree, very dissatisfied) to 5 (strongly agree, very satisfied). Items that were marked 6 (don't know) were not included in the scoring. Individual item totals were not used in reporting data, as the survey was designed and validated using group scores.

To generate subscale raw scores for each respondent, the values of each subscale item with a 1 to 5 response were summed and this total was divided by the total number of items used in the computation in order to determine the average item raw score for that subscale. Items marked 6 (don't know) and items with missing responses were omitted in the calculation. The item average score was multiplied by the actual number of items on the subscale and rounded to the nearest whole number for the adjusted individual subscale raw score.

Each subscale for all respondents was scored and individual raw scores on each subscale were summed to produce group subscale values. These results were divided by the number of individuals responding to that subscale and rounded to the nearest whole number to calculate the group subscale average score. This score was used in determining the standard score. Standard deviations also were computed. Finally, group summaries and profiles for each of the two ninth grade groups were prepared (Halderson, Kelley, and Keefe 1987, pp. 12-29).

The Coopersmith Self-Esteem Inventory
The Self-Esteem Inventory contains fifty-eight items.
Students respond checking either "like me" or "unlike me" according to their own perceptions of how accurately the statement describes how they usually feel. Four subscales pertaining to different self-esteem domains in addition to a lie subscale to assess respondent defensiveness can be factored out of the inventory. Due to the nature of the focus of this study, the eight items in the Home-Parents subscale are not reported in the findings but were calculated in order to arrive at a Total Self score. The eight items in the Lie Scale are not reported. Each of the subscales, General Self, Social Self-Peers, School-Academic, and Home-Peers were scored in the following manner. Negative items were scored as correct (for example, "I often feel upset at school") if they were answered "unlike me." Positive items were scored as correct (for example, "I'm pretty sure of myself") if they were answered "like me." To arrive at a Total Self score, the raw scores for each of the subscales were summed and this figure was multiplied by two. The maximum possible score for each subscale is General Self, 26; Social Self-Peers, 8; School-Academic, 8; Home-Parents, 8; and Total Self, 100.

There are no exact criteria for high, medium, and low levels of self-esteem. For the Self-Esteem Inventory, high scores correspond to high self-esteem. In most studies, the distributions of the inventory scores have been skewed in the direction of high self-esteem. The means generally have been shown to increase monotonically with grade level. Considering position in the group as a determinant of relative self-appraisal, the upper quartile generally is indicative of high self-esteem, the lower quartile is indicative of low self-esteem, and the interquartile range typically represents a medium level of self-esteem (Coopersmith 1981, p. 8).

## Analysis of the Data

To answer the research questions, two-way analysis of variance and multiple correlations were calculated using SPSSX (SPSS Inc. 1983). Using these statistics, the writer sought to determine the relationships between scores on the eight subscales of the Student Satisfaction Survey, scores on the three subscales and Total Self score of the Self-Esteem Inventory, the grade organization of the school, and the gender of the student. A significance of .05 was selected as adequate for rejecting the hypothesis of equal means.

Research questions one and two were paired to determine whether students' satisfaction with aspects of school had a relationship to either grade organization pattern of the school and/or gender. Similarly, questions three and four that sought to determine whether measures of self-esteem had a relationship to school grade organization patterns and/or grades were paired in the investigation. Employing this design, the two-way analysis of variance was considered the appropriate statistic. The fifth question which sought to determine whether a relationship existed between the dimensions of satisfaction with school and measures of self-esteem was examined through the application of the Pearson product moment correlation.

## RESULTS AND ANALYSIS

After a brief statement of the purpose of the study and descriptions of the instruments used to obtain data and of the demographics of the study, this chapter reports and analyzes the data that were collected relevant to the five research questions reported in chapter I.

## Overview of the Study

The study focused on ninth grade students attending schools representative of two different grade organization patterns, 7 through 9 and 9 through 12. Its purpose was to determine whether relationships existed among the students' expressed satisfaction levels with various aspects of their schools, their self-esteems, the grade organization pattern of the school that they attended, and the students' gender. It examined these relationships among the eight subscales of the NASSP Student Satisfaction Survey, four of the subscales of the Coopersmith Self-Esteem Inventory, the grade organization pattern of the school that the students attended, and the students' gender.

The Student Satisfaction Survey provided data about student perceptions on the following subscales:

Satisfaction
Variable

## 1

2

3

Subscale and Description

Teachers. Student satisfaction with the professional behaviors of teachers.
Fellow Students. Student satisfaction with peer group relationships.
Schoolwork. Student satisfaction with the range of courses and the nature of classwork in the school.

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

The Coopersmith Self-Esteem Inventory provided data about an individual's perceptions of self-esteem in different areas of experience. The following subscales as delineated from the inventory allow for such variances:

| Self-Esteem <br> Variable | Subscale |
| :---: | :--- |
| 1 |  |
| 2 | General Self |
| 3 | Social Self-Peers |
| 4 | Home-Parents |
| 5 | School-Academic |
|  | Total Score |

For the purpose of this study, all subscales of the Student Satisfaction Survey were employed. Variable number 3, Home-Parents, of the Self-Esteem Inventory was not investigated. The data were analyzed using a two-way analysis of variance and the Pearson's product moment correlation.

## Demographics

The two schools in which the surveys were conducted are located in one city in an upper midwest state. The high school containing grades 9 through 12 was designated as School A. The junior high school containing grades 7 through 9 was designated as School B.

All ninth graders enrolled in regular English classes in School A or physical science classes in School B in attendance on the day the instruments were administered in their school participated in the study.

In School A, 315 (male=157, female=158) Student Satisfaction Surveys were scored and 295 (male=143, female=152) Self-Esteem Inventories were scored. In School B, 219 (male=117, female=102) Student Satisfaction Surveys were scored and 203 (male=106, female=97) Self-Esteem Inventories were scored.

## Results

Four of the five research questions upon which this study was based sought to determine whether the relative position of the ninth grade in the grade organization structure of the school or the students' gender had a relationship to the expressed levels of student satisfaction with the aspects of their school and to measures of self-esteem. The first four research questions could have been investigated separately using a one-way analysis of variance for each question. It was deemed more appropriate to pair questions one and two which sought to determine whether students' satisfaction with aspects of school had a relation to either grade organization pattern of the school and/or gender. Similarly questions three and four that sought to determine whether measures of self-esteem had a relationship to school grade organization patterns and/or gender were paired in the investigation. Employing this design, the two-way analysis of variance was considered the most appropriate statistic, for it is the extension of the simple analysis of variance to the situation in which there are two independent variables. It permits the simultaneous investigation of both variables, school and gender, while providing the capacity to study possible interaction between both of the independent variables. Interaction is a treatment effect that is dependent upon the concomitant influence of two independent variables. If, in the study, the variables school and gender did not interact significantly, then (1) the effect of
attendance at one school on satisfaction or self-esteem would vary consistently for both males and females, and (2) the effect caused by gender on satisfaction or self-esteem would vary consistently with respect to either school. Using a two-way analysis of variance, a nonsignificant interaction would be indicative of the fact that school and gender were independent of each other and the hypothesis of equal means could be rejected with confidence if a significance of .05 were calculated for either of the main effects, school or gender.

Research questions one and two considered whether different patterns of satisfaction were evidenced by school organization pattern and student gender with respect to the eight subscales of the NASSP Student Satisfaction Survey. The first question asked, "Do ninth grade students in a 7 through 9 organizational structure evidence a different pattern of satisfaction with school than students in a 9 through 12 structure?" Table 4 presents the means, standard deviations, and standard scores for School A as well as the national means and standard deviations of the NASSP Student Satisfaction Survey. Table 5 presents similar data for School B.

The standard scores for Schools A and B were calculated using the appropriate conversion table in the NASSP Examiner's Manual. The subscale scores were standardized as T-scores, a linear standard score with a mean of 50 and a standard deviation of 10 . Any score within one standard deviation of the mean (50), either above or below, falls by definition within the middle 68 percent of all the scores. Standard scores on a group profile of 40 to 60 should be interpreted as "approximately average" for the scale. Standard scores above 60 are positive indicators and those lower than 40 may identify a source of concern that should be addressed to the extent deemed reasonable.

The standard scores for School A ranged from a low of 48 on the Communication subscale to a high of 51 on the Student Activities subscale. All scores were well within the average range. The standard

TABLE 4
NASSP STUDENT SATISFACTION SURVEY DATA FROM SCHOOL A

|  |  | School |  | Items | Mean | SD |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Scale Name | SS | National <br> Mean |  | SD |  |  |
| Teacher | $1-7$ | 23.44 | 4.9 | 49 | 24.0 | 4.9 |
| Fellow Students | $8-12$ | 17.28 | 3.9 | 50 | 17.2 | 3.8 |
| Schoolwork | $13-18$ | 18.98 | 4.5 | 50 | 18.8 | 4.4 |
| Student Activities | $19-23$ | 18.71 | 4.0 | 51 | 18.1 | 4.1 |
| Student Discipline | $24-29$ | 19.93 | 4.5 | 50 | 20.1 | 4.6 |
| Dec-Making Opp | $30-34$ | 14.84 | 4.3 | 50 | 15.0 | 4.5 |
| Bldgs, Supp, Upkeep | $35-40$ | 21.87 | 5.2 | 50 | 21.9 | 4.5 |
| Communication | $41-46$ | 19.59 | 5.1 | 48 | 20.5 | 4.8 |

TABLE 5
NASSP STUDENT SATISFACTION SURVEY DATA FROM SCHOOL B

| Scale Name | Items | School <br> Mean | $\stackrel{B}{S D}^{2}$ | SS | National <br> Mean SD |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Teachers | 1-7 | 21.95 | 5.5 | 46 | 24.0 | 4.9 |
| Fellow Students | 8-12 | 16.77 | 3.9 | 49 | 17.2 | 3.8 |
| Schoolwork | 13-18 | 16.24 | 4.6 | 48 | 18.8 | 4.8 |
| Student Activities | 19-23 | 17.00 | 4.0 | 47 | 18.1 | 4.1 |
| Student Discipline | 24-29 | 18.59 | 5.0 | 47 | 20.1 | 4.6 |
| Dec-Making Opp | 30-34 | 13.80 | 4.3 | 48 | 15.0 | 4.5 |
| Bldgs, Supp, Upkeep | 35-40 | 19.66 | 5.3 | 45 | 21.9 | 4.5 |
| Communication | 41-46 | 18.92 | 5.0 | 47 | 20.54 | 4.8 |

scores for School B ranged from a low of 45 for the subscale Buildings,
Supplies, and Upkeep to a high of 49 for $t$ subscal
the data showed that the mean raw scores on each of the subscales were consistently, if modestly, greater for School A than those on the corresponding subscales for School B.

The second research question asked, "Do female ninth grade students evidence a different pattern of satisfaction with school than male ninth grade students?" Table 6 presents the means, standard deviations, and standard scores for the males as compared to those for the females who participated in this study. National norms with respect to data specific to gender are not reported in the NASSP Examiner's Manual and are, therefore, not available for comparative purposes.

TABLE 6
NASSP STUDENT SATISFACTION SURVEY GENDER DATA

| Scale Name | Males <br> SD |  |  |  | SS | Mean |  |  | Females <br> SD | SS |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $1-7$ | 22.49 | 5.3 | 45 | 23.18 | 5.1 | 48 |  |  |  |
| Fellow Students | $8-12$ | 16.88 | 3.8 | 49 | 17.27 | 4.0 | 50 |  |  |
| Schoolwork | $13-18$ | 17.71 | 5.0 | 47 | 18.00 | 4.6 | 48 |  |  |  |
| Student Activities | $19-23$ | 17.75 | 4.1 | 49 | 18.27 | 4.1 | 51 |  |  |  |
| Student Discipline | $24-29$ | 19.07 | 5.1 | 48 | 19.71 | 4.4 | 49 |  |  |  |
| Dec-Making Opp | $30-34$ | 14.32 | 4.3 | 49 | 14.51 | 4.3 | 49 |  |  |  |
| Bldgs, Supp, Upkeep | $35-40$ | 20.79 | 5.6 | 48 | 21.14 | 5.1 | 48 |  |  |  |
| Communication | $41-46$ | 19.19 | 5.0 | 47 | 19.44 | 5.2 | 48 |  |  |  |

The standard scores for males ranged from a low of 45 on the Teachers subscale to a high of 49 on each of the subscales Fellow Students, Student Activities, and Decision-Making Opportunities. All scores were within the average range. The standard scores for females ranged from a low of 48 on each of the subscales Teachers; Schoolwork; Buildings, Supplies, and Upkeep; and Communication to a high of 51 on
the Student Activities subscale. All scores were within the average range. A visual examination of the data showed that the mean raw scores on each of the subscales were consistently, if modestly, greater for females than those on corresponding subscales for males.

To determine whether a relationship between satisfaction with the aspects of school and school organization (School A and School B) or between satisfaction with the aspects of school and student gender existed, a two-way analysis of variance was performed for each of the eight subscales of the Student Satisfaction Survey. The results of the statistical treatment of the data are presented in tables 7 through 14. All analysis of variance tables in the study were constructed similarly in order to delineate the information necessary for the interpretation of the analysis. For each source of variance, the degrees of freedom (df), sum of squares (SS), mean square (MS), F ratio, and F probability (F Prob) or significance level were reported. The amount of variance attributed to the main effects of school and gender was displayed in two ways. The total variance of the combined main effects was displayed in one row and subsequently was separated into individual reports for each independent variable. The variance attributed to the two-way interaction of the variables, school and gender, was displayed on the fourth line of each table. The fifth line reported the variance termed residual or error. Finally, appropriate totals were reported for each column.

An examination of the data in table 7 shows that the two-way interaction between school and gender was not significant at the .05 level. The main effect, school, was significant at the . 001 level. All ninth grade students in School A had a mean satisfaction with teachers score of 23.44 ; students in School B had a mean score of 21.95. Ninth grade students in School A expressed significantly greater satisfaction with the professional behaviors of their teachers than those in School
B. No significant difference at the .05 level was found in satisfaction with teachers by gender.

TABLE 7
ANALYSIS OF VARIANCE OF SATISFACTION WITH TEACHERS BY SCHOOL AND GENDER

| Source of Variance | df | SS | MS | F Ratio | F Prob |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Main Effects | 2 | 330.537 | 165.269 | 6.319 | .002 |
| School | 1 | 270.552 | 270.552 | 10.344 | .001 |
| Gender | 1 | 50.893 | 50.893 | 1.946 | .164 |
| 2-Way Interactions | 1 | .706 | .706 | .027 | .870 |
| Residual | 514 | 13443.770 | 26.155 |  |  |
| Total | 517 | 13775.014 | 26.644 |  |  |

Table 8 presents the results of the statistical treatment of the analysis of satisfaction of fellow students by school and gender.

TABLE 8
ANALYSIS OF VARIANCE OF SATISFACTION WITH FELLOW STUDENTS BY SCHOOL AND GENDER

| Source of Variance | df | SS | MS | F Ratio | F Prob |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Main Effects | 2 | 51.238 | 25.619 | 1.721 | .180 |
| School | 1 | 31.078 | 31.078 | 2.088 | .140 |
| Gender | 1 | 18.33 | 18.33 | 1.231 | .268 |
| 2-Way Interactions | 1 | 19.382 | 19.382 | 1.302 | .254 |
| Residual | 514 | 7651.737 | 14.887 |  |  |
| Total | 517 | 7722.357 | 14.937 |  |  |

An examination of the data in table 8 showed that there was no significant two-way interaction between school and gender at the . 05 level and that there was no statistically significant relationship at the .05 level in the main effects of school or gender. Students in School A expressed satisfaction with their peer relationships similarly as did those in School B. Males expressed a satisfaction level for their classmates similar to that indicated by females.

Table 9 presents the results of the statistical treatment of the analysis of satisfaction with schoolwork by school and gender.

TABLE 9
ANALYSIS OF VARIANCE OF SATISFACTION WITH SCHOOLWORK BY SCHOOL AND GENDER

| Source of Variance | df | SS | MS | F Ratio | F Prob |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Main Effects | 2 | 943.373 | 471.687 | 22.974 | .001 |
| School | 1 | 932.631 | 932.631 | 45.426 | .001 |
| Gender | 1 | 4.625 | 4.625 | .225 | .635 |
| 2-Way Interactions | 1 | 4.695 | 4.695 | .229 | .633 |
| Residual | 514 | 10552.884 | 20.531 |  |  |
| Total | 517 | 11500.952 | 22.246 |  |  |

An examination of the data in table 9 showed that the two-way interaction between school and gender was not significant at the . 05 level. The main effect, school, was significant at less than the . 001 level. All students in School A had a mean satisfaction with schoolwork score of 18.98; students in School B had a mean score of 16.24 . Students in School A were significantly more satisfied with the range of courses and nature of classwork in their school than were students in School B. No significant difference at the .05 level was found in satisfaction with schoolwork by gender.

Table 10 presents the results of the statistical treatment of the analysis of satisfaction with student activities by school and gender.

TABLE 10
ANALYSIS OF VARIANCE OF SATISFACTION WITH STUDENT ACTIVITIES BY SCHOOL AND GENDER

| Source of Variance | df | SS | MS | F Ratio | F Prob |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Main Effects | 2 | 397.803 | 198.902 | 12.145 | .001 |
| School | 1 | 363.074 | 363.074 | 22.170 | .001 |
| Gender | 1 | 26.908 | 26.908 | 1.643 | .200 |
| 2-Way Interactions | 1 | 2.484 | 2.484 | .152 | .697 |
| Residual | 514 | 8417.705 | 16.377 |  |  |
| Total | 517 | 8817.992 | 17.056 |  |  |

An examination of the data in table 10 showed that the two-way interaction between school and gender was not significant at the . 05 level. The main effect, school, was significant at less than the . 001 level. All ninth grade students in School A had a mean satisfaction with student activities score of 18.71 ; students in School $B$ had a mean score of 17.00 . Students in School A were significantly more satisfied with the number and types of school-sponsored activities and with their opportunities for participation in the activities than were students in School B. No significant difference at the .05 level was found in satisfaction with school activities by gender.

Table 11 presents the results of the statistical treatment of the analysis of satisfaction with student discipline by school and gender.

An examination of the data in table 11 shows that the two-way interaction of school and gender was not significant at the . 05 level.

The main effect, school, was significant at the . 002 level. All ninth grade students in School A had a mean satisfaction with student discipline score of 19.93; students in School B had a mean score of 18.59. Students in School A were significantly more satisfied with the degree to which the school was an orderly and a safe environment than were students in School B. No significant difference at the .05 level was found in satisfaction with student discipline by gender.

TABLE 11
ANALYSIS OF VARIANCE OF SATISFACTION WITH STUDENT DISCIPLINE BY SCHOOL AND GENDER

| Source of Variance | df | SS | MS | F Ratio | F Prob |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Main Effects | 2 | 272.886 | 136.443 | 6.111 | .002 |
| School | 1 | 219.603 | 219.603 | 9.835 | .002 |
| Gender | 1 | 45.545 | 45.545 | 2.040 | .154 |
| 2-Way Interactions | 1 | .312 | .312 | .014 | .906 |
| Residual | 514 | 11476.640 | 22.328 |  |  |
| $\quad$ Total | 517 | 11749.838 | 22.727 |  |  |

Table 12 presents the results of the statistical treatment of the analysis of satisfaction with decision-making opportunities by school and gender.

An examination of the data in table 12 shows that the two-way interaction between school and gender was not significant at the . 05 level. The main effect, school, was significant at the . 010 level. All ninth grade students in School A had a mean satisfaction with decision-making opportunities score of 14.84; students in School B had a mean score of 13.80 . Students in School A expressed significantly greater satisfaction with their opportunities to provide input on decisions about curriculum, school events, etc., than did those in

School B. No significant difference at the .05 level was found in satisfaction with decision-making opportunities by gender.

TABLE 12
ANALYSIS OF VARIANCE OF SATISFACTION WITH DECISION-MAKING OPPORTUNITIES BY SCHOOL AND GENDER

| Source of Variance | df | SS | MS | F Ratio | F Prob |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Main Effects | 2 | 127.465 | 63.732 | 3.466 | .032 |
| School | 1 | 122.885 | 122.885 | 6.683 | .010 |
| Gender | 1 | 2.624 | 2.624 | .143 | .706 |
| 2-Way Interactions | 1 | 6.134 | 6.134 | .334 | .564 |
| Residual | 477 | 8771.070 | 18.388 |  |  |
| Total | 480 | 8904.669 | 18.551 |  |  |

Table 13 presents the results of the statistical treatment of the analysis of satisfaction with school buildings, supplies, and upkeep by school and gender.

An examination of the data in table 13 shows that the two-way interaction between school and gender was not significant at the . 05 level. The main effect, school, was significant at less than the . 001 level. All ninth grade students in School A had a mean satisfaction with school buildings, supplies, and upkeep score of 21.87 ; students in School B had a mean score of 19.66. Students in School A indicated a significantly greater satisfaction with the quality and availability of library resources, learning materials and supplies, and with the upkeep of the buildings and grounds than did students in School B. No significant difference at the .05 level was found in satisfaction with buildings, supplies, and upkeep by gender.

TABLE 13

## ANALYSIS OF VARIANCE OF SATISFACTION WITH SCHOOL BUILDINGS, SUPPLIES, AND UPKEEP BY SCHOOL AND GENDER

| Source of Variance | df | SS | MS | F Ratio | F Prob |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Main Effects | 2 | 574.900 | 287.450 | 10.498 | .001 |
| School | 1 | 559.822 | 559.822 | 20.446 | .001 |
| Gender | 1 | 7.693 | 7.693 | .281 | .596 |
| 2-Way Interactions | 1 | 5.002 | 5.002 | .183 | .669 |
| Residual | 477 | 13060.630 | 27.381 |  |  |
| Total | 480 | 13640.532 | 28.418 |  |  |

Table 14 presents the results of the statistical treatment of the analysis of satisfaction with communication by school and gender.

TABLE 14
ANALYSIS OF VARIANCE OF SATISFACTION WITH COMMUNICATION BY SCHOOL AND GENDER

| Source of Variance | df | SS | MS | F Ratio | F Prob |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Main Effects | 2 | 57.739 | 28.870 | 1.120 | .327 |
| School | 1 | 50.396 | 50.396 | 1.956 | .163 |
| Gender | 1 | 5.642 | 5.642 | .219 | .640 |
| 2-Way Interactions | 1 | 5.803 | 5.803 | .225 | .635 |
| Residual | 477 | 12292.054 | 25.770 |  |  |
| Total | 480 | 12355.597 | 25.741 |  |  |

An examination of the data in table 14 showed that the two-way interaction between school and gender was not significant at the . 05 level and that neither the main effect, school, nor the main effect,
gender, was significant at the .05 level. Ninth grade students in School A expressed a level of satisfaction with the availability of information and opportunities to communicate with others about school events similar to that of students in School B. Males were not significantly more satisfied with these opportunities than were females. Research questions three and four considered whether different patterns of self-esteem were evidenced by school organization pattern and student gender with respect to four of the five scales of the Coopersmith Self-Esteem Inventory. The third question asked, "Do ninth grade students in a 7 through 9 organizational structure evidence a different pattern of self-esteem than students in a 9 through 12 structure on the General Self, Social Self-Peers, School-Academic, and Total Self scales of the Coopersmith Self-Esteem Inventory?" Table 15 presents the means, standard deviations, and maximum possible scores on each of the four scales for students in Schools A and B.

TABLE 15
COOPERSMITH SELF-ESTEEM INVENTORY DATA FOR SCHOOL A AND SCHOOL B

|  | School A <br> Mean |  | SD | School <br> Mean | SD |
| :--- | ---: | ---: | ---: | ---: | :---: | Max Score

There are no exact criteria for high, medium, and low levels of self-esteem. They should and will vary with the characteristics of the sample, the distribution of scores, and theoretical and clinical considerations. No national normative data are provided in the

Examiner's Manual of the Coopersmith Self-Esteem Inventory, but the Total Self score means are reported generally to range from 70 to 80 with a standard deviation of from 11 to 13. High scores correspond to high self-esteem. Employing position in the group as an index of relative self-appraisal, the upper quartile generally can be considered indicative of high self-esteem, the lower quartile generally as indicative of low self-esteem, and the interquartile range generally as indicative of medium self-esteem.

The General Self mean score for School A was 17.90 of a possible 26; the Social Self-Peers mean was 6.15 of a possible 8 ; the School-Academic mean score was 4.26 of a possible 8; and the Total Self mean score was 66.64 of a possible 100 . All scores fell within the interquartile range indicative of medium self-esteem.

Mean scores for School B were measured as 18.29 of 26 on the General Self subscale, 6.20 of 8 on the Social Self-Peers subscale, 4.40 of 8 on the School-Academic subscale, and 67.45 of 100 on the Total Self subscale. All of the scores fell within the interquartile range indicative of medium self-esteem. A visual examination of the data indicated that the mean scores on the four subscales of the Self-Esteem Inventory for ninth graders in School B were consistently, if modestly, higher than those for the ninth graders in School A, the reverse of the pattern discerned for the satisfaction scores reported earlier.

The fourth research question asked, "Do female ninth grade students evidence a different pattern of self-esteem as measured by selected scales of the Coopersmith Self-Esteem Inventory than male ninth grade students?" Table 16 presents the means, standard deviations, and maximum possible scores on each of the four scales for males and females.

Mean scores for males were measured as 18.57 of 26 for the General Self subscale, 5.97 of 8 for the Social Self-Peers subscale, 4.17 of 8 for the School-Academic subscale, and 67.16 of 100 for the

Total Self subscale. Mean scores for females were measured as 17.56 of 26 for the General Self subscale, 6.37 of 8 for the Social Self-Peers subscale, 4.46 of 8 for the School-Academic subscale, and 66.77 of 100 for the Total Self subscale. All of the scores for both males and females fell within the interquartile range indicative of medium self-esteem. A visual examination of the data indicated that males expressed a higher self-esteem on the General Self and Total Self subscales than females while females' scores indicated higher self-esteem on the Social Self-Peers and School-Academic subscales than their male peers.

TABLE 16
COOPERSMITH SELF-ESTEEM INVENTORY DATA FOR MALES AND FEMALES

| Scale | Males |  | FD |  | Meanales |
| :--- | ---: | ---: | ---: | ---: | ---: |
| General Self | 18.57 | 4.88 | 17.56 | 5.37 | Max Score |
| Social Self | 5.97 | 1.79 | 6.37 | 1.62 | 8 |
| Academic | 4.17 | 1.91 | 4.46 | 2.04 | 8 |
| Total Self | 67.16 | 16.99 | 66.77 | 18.99 | 100 |

To determine whether a relationship between self-esteem and school organization (School A or School B) and self-esteem and student gender existed, a two-way analysis of variance was performed for the four scales of the Coopersmith Self-Esteem Inventory. The results of the statistical treatment of the data are presented in tables 17,19 , 21 , and 22 .

An examination of the data in table 17 shows that the two-way interaction between school and gender was significant at the . 018 level. Ordinarily, a significant interaction suggests that the interpretation
of the tests of main effects is inappropriate due to the concomitant influence of the independent variables. For this reason, an additional analysis was conducted.

TABLE 17
ANALYSIS OF VARIANCE OF GENERAL SELF-ESTEEM BY SCHOOL AND GENDER

| Source of Variance | df | SS | MS | F Ratio | F Prob |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Main Effects | 2 | 134.563 | 67.282 | 2.618 | .074 |
| School | 1 | 13.498 | 13.498 | .525 | .469 |
| Gender | 1 | 117.059 | 117.059 | 4.554 | .033 |
| 2-Way Interactions | 1 | 144.062 | 144.062 | 5.605 | .018 |
| Residual | 477 | 12260.627 | 25.704 |  |  |
| Total | 480 | 12539.252 | 26.123 |  |  |

The cell means of the raw General Self-Esteem subscale scores are reported in table 18 in order to analyze further where the variation of the means is not systematic, and, thus, where there is an unexpected relationship between the independent variable(s) and the dependent variable.

TABLE 18
CELL MEANS OF GENERAL SELF-ESTEEM BY SCHOOL AND GENDER

|  | Males | Females |
| :--- | :--- | :--- |
| School A | 17.94 | 17.87 |
|  | $\mathrm{~N}=135$ | $\mathrm{~N}=149$ |
| School B | 19.39 | 17.09 |
|  | $\mathrm{~N}=103$ | $\mathrm{~N}=94$ |

The 135 males in School A had a mean score of 17.94 ; the 149 females in School A had a mean score of 17.87. The 103 males in School B had a mean score of 19.39; the 94 females in School B had a mean score of 17.09. A visual examination of the data indicated that males in both Schools A and B scored higher on the General Self-Esteem subscale than females, but males in School A scored only slightly higher than females (. 07 point difference) while males in School B scored substantially higher than females in School B (2.30 point difference). This fact was observed also in the significance at the .033 level of the main effect, gender. In addition, males in School $B$ had higher general self-esteem levels than males in School A, while the opposite pattern was discerned for females. Females in School B had lower levels of general self-esteem than females in School A.

Table 19 presents the results of the statistical treatment of the analysis of social self-esteem by school and gender.

TABLE 19
ANALYSIS OF VARIANCE OF SOCIAL SELF-ESTEEM BY SCHOOL AND GENDER

| Source of Variance | df | SS | MS | F Ratio | F Prob |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Main Effects | 2 | 19.001 | 9.500 | 3.277 | .039 |
| School | 1 | .575 | .575 | .198 | .656 |
| Gender | 1 | 18.691 | 18.691 | 6.448 | .011 |
| 2-Way Interactions | 1 | 19.009 | 19.009 | 6.558 | .011 |
| Residual | 477 | 1382.668 | 2.899 |  |  |
| $\quad$ Total | 480 | 1420.678 | 2.960 |  |  |

An examination of the data in table 19 showed that the two-way interaction between school and gender was significant at the .011 level. Ordinarily, a significant interaction suggests that the interpretation
of the tests of main effects is inappropriate due to the concomitant influence of the independent variables. For this reason, an additional analysis was conducted. The cell means of the raw Social Self-Esteem subscale scores are reported in table 20 in order to analyze further where the variation of the means is not systematic, and, thus, where there is an unexpected relationship between the independent variable(s) and the dependent variable.

TABLE 20
CELL MEANS OF SOCIAL SELF-ESTEEM BY SCHOOL AND GENDER

|  | Males | Females |
| :--- | :--- | :---: |
| School A | 5.77 | 6.50 |
|  | $\mathrm{~N}=135$ | $\mathrm{~N}=149$ |
| School B | 6.24 | 6.16 |
|  | $\mathrm{~N}=103$ | $\mathrm{~N}=94$ |

The 135 males in School A had a mean score of 5.77 ; the 149 females in School A had a mean score of 6.50. The 103 males in School B had a mean score of 6.24; the 94 females in School B had a mean score of 6.16. Males in School A scored lower than females in School A while males in School B scored higher than females in School B on the Social Self-Esteem subscale. The crossover interaction indicated an inconsistency in variation with respect to expected means. This fact could be observed also in the significance at the .011 level of the main effect, gender. When the scores within the schools were analyzed, little dissimilarity was found. There was a difference of .73 between the social self-esteem scores of males and females in School A and a difference of .08 in the scores of males and females in School B.

Table 21 presents the results of the statistical treatment of the analysis of academic self-esteem by school and gender.

TABLE 21
ANALYSIS OF VARIANCE OF ACADEMIC SELF-ESTEEM BY SCHOOL AND GENDER

| Source of Variance | df | SS | MS | F Ratio | F Prob |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Main Effects | 2 | 13.076 | 6.538 | 1.667 | .190 |
| School | 1 | 2.667 | 2.667 | .680 | .410 |
| Gender | 1 | 10.786 | 10.786 | 2.750 | .098 |
| 2-Way Interactions | 1 | 3.085 | 3.085 | .787 | .376 |
| Residual | 494 | 1937.710 | 3.922 |  |  |
| Total | 497 | 1953.871 | 3.931 |  |  |

An examination of the data in table 21 showed that the two-way interaction between school and gender was not significant at the . 05 level. Neither the main effect, school, nor the main effect, gender, were significant at the .05 level. Ninth grade students in School A did not demonstrate a significantly different measure of Academic

Self-Esteem than did those in School B. Males were not significantly different than females with respect to average measures of Academic Self-Esteem.

Table 22 presents the results of the statistical treatment of the analysis of total self-esteem by school and gender.

An examination of the data in table 22 shows that the two-way interaction between school and gender was significant at the . 019 level. Ordinarily, a significant interaction effect suggests that the interpretation of the tests of main effects is inappropriate due to the concomitant influence of the independent variables. For this reason, an additional analysis was conducted. The cell means of the raw Total Self-Esteem subscale scores are reported in table 23 in order to analyze further where the variation of the means is not systematic, and, thus,
where there is an unexpected relationship between the independent variable(s) and the dependent variable.

TABLE 22
ANALYSIS OF VARIANCE OF TOTAL SELF-ESTEEM BY SCHOOL AND GENDER

| Source of Variance | df | SS | MS | F Ratio | F Prob |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Main Effects | 2 | 95.631 | 47.816 | .148 | .862 |
| School | 1 | 76.346 | 76.346 | .237 | .627 |
| Gender | 1 | 16.542 | 16.542 | .051 | .821 |
| 2-Way Interactions | 1 | 1793.278 | 1793.278 | 5.565 | .019 |
| Residual | 494 | 159200.577 | 322.268 |  |  |
| Total | 497 | 161089.486 | 324.124 |  |  |

TABLE 23
CELL MEANS OF TOTAL SELF-ESTEEM BY SCHOOL AND GENDER

|  | Males | Females |
| :--- | :---: | :---: |
| School A | 65.20 | 67.99 |
|  | $\mathrm{~N}=143$ | $\mathrm{~N}=152$ |
| School B | 69.81 | 64.87 |
|  | $\mathrm{~N}=106$ | $\mathrm{~N}=97$ |

The 143 males in School A had a mean score of 65.20 ; the 152 females in School A had a mean score of 67.99. The 106 males in School B had a mean score of 69.81; the 97 females had a mean score of 64.87 . A visual examination of the data indicated that males in School A had a lower Total Self-Esteem mean score than did females in School A while males in School B indicated a higher mean Total Self-Esteem score than did their female classmates. This crossover interaction demonstrated
the inconsistency of variation with respect to expected means. In addition, the mean scores varied within schools. The difference in mean Total Self-Esteem scores for females and males in School A was 2.79. The difference in mean Total Self-Esteem scores for males and females in School B was 4.94, a substantially greater difference than that expressed by their peers in School A.

The fifth research question asked, "Does a relationship exist between the dimensions of satisfaction with school and the scales of the self-esteem inventory?" This was examined through the application of the Pearson product moment correlation statistic. The correlation coefficients provided an index of the concomitant variation of the eight subscales of the NASSP Student Satisfaction Survey and the four subscales of the Coopersmith Self-Esteem Inventory. The results of the statistical treatment of the data are presented in table 24.

An examination of the data in table 24 shows that all thirty-two possible relationships between the eight subscales of the NASSP Student Satisfaction Survey and the four subscales of the Coopersmith Self-Esteem Inventory were significant. A statistically significant positive relationship at less than the .001 level was calculated for all except three of the comparisons between the satisfaction subscales and the self-esteem subscales. A correlation coefficient of . 1311, significant at the . 002 level, was calculated for the student discipline and academic self-esteem subscales. Decision-making opportunities and the general self-esteem subscales were positively correlated with a . 1188 coefficient, significant at the . 004 level, and the correlation coefficient for decision-making opportunities and social self-esteem was . 1161, significant at the . 005 level.

The practical significance of the findings rests not so much with the fact that self-esteem measures and satisfaction levels were positively correlated consistently, but to the extent that the proportion of the variance of one of the variables can be predicted by
the inconsistency of variation with respect to expected means. In addition, the mean scores varied within schools. The difference in mean Total Self-Esteem scores for females and males in School A was 2.79. The difference in mean Total Self-Esteem scores for males and females in School B was 4.94, a substantially greater difference than that expressed by their peers in School A.

The fifth research question asked, "Does a relationship exist between the dimensions of satisfaction with school and the scales of the self-esteem inventory?" This was examined through the application of the Pearson product moment correlation statistic. The correlation coefficients provided an index of the concomitant variation of the eight subscales of the NASSP Student Satisfaction Survey and the four subscales of the Coopersmith Self-Esteem Inventory. The results of the statistical treatment of the data are presented in table 24.

An examination of the data in table 24 shows that all thirty-two possible relationships between the eight subscales of the NASSP Student Satisfaction Survey and the four subscales of the Coopersmith Self-Esteem Inventory were significant. A statistically significant positive relationship at less than the . 001 level was calculated for all except three of the comparisons between the satisfaction subscales and the self-esteem subscales. A correlation coefficient of .1311 , significant at the .002 level, was calculated for the student discipline and academic self-esteem subscales.
Decision-making opportunities and the general self-esteem subscales were positively correlated with a . 1188 coefficient, significant at the . 004 level, and the correlation coefficient for decision-making opportunities and social self-esteem was .1161 , significant at the .005 level.

The practical significance of the findings rests not so much with the fact that self-esteem measures and satisfaction levels were positively correlated consistently, but to the extent that the proportion of the variance of one of the variables can be predicted by
or accounted for by the second variable. The square of the correlation coefficient, termed the coefficient of determination, indicates the percentage of variance of one variable that is explained by the other.

TABLE 24
PEARSON PRODUCT MOMENT CORRELATIONS OF THE SUBSCALES OF THE NASSP STUDENT SATISFACTION SURVEY TO THE SUBSCALES OF THE COOPERSMITH SELF-ESTEEM INVENTORY

| Satisfaction Subscales | $\begin{aligned} & \text { General } \\ & \text { Self } \end{aligned}$ | Self-Esteem Social Self | Subscales Academic Self | Total Self |
| :---: | :---: | :---: | :---: | :---: |
| Teachers $\mathrm{N}=497$ | $\begin{aligned} & .2429 \\ & p=.001 \end{aligned}$ | $\begin{aligned} & .2118 \\ & p=.001 \end{aligned}$ | $\begin{aligned} & .3480 \\ & p=.001 \end{aligned}$ | $\begin{aligned} & .3220 \\ & \mathrm{p}=.001 \end{aligned}$ |
| $\begin{aligned} & \text { Fellow Students } \\ & \mathrm{N}=496 \end{aligned}$ | $\begin{aligned} & .2479 \\ & p=.001 \end{aligned}$ | $\begin{aligned} & .3225 \\ & p=.001 \end{aligned}$ | $\begin{aligned} & .2080 \\ & p=.001 \end{aligned}$ | $\begin{aligned} & .2912 \\ & \mathrm{p}=.001 \end{aligned}$ |
| $\begin{gathered} \text { Schoolwork } \\ N=495 \end{gathered}$ | $\begin{aligned} & .2471 \\ & p=.001 \end{aligned}$ | $\begin{aligned} & .1502 \\ & p=.001 \end{aligned}$ | $\begin{aligned} & .3701 \\ & p=.001 \end{aligned}$ | $\begin{aligned} & .2933 \\ & \mathrm{p}=.001 \end{aligned}$ |
| Student Activities $N=487$ | $\begin{aligned} & .1386 \\ & p=.001 \end{aligned}$ | $\begin{aligned} & .2765 \\ & p=.001 \end{aligned}$ | $\begin{aligned} & .1667 \\ & p=.001 \end{aligned}$ | $\begin{aligned} & .1955 \\ & \mathrm{p}=.001 \end{aligned}$ |
| Student Discipline $\mathrm{N}=493$ | $\begin{aligned} & .2018 \\ & p=.001 \end{aligned}$ | $\begin{aligned} & .1756 \\ & p=.001 \end{aligned}$ | $\begin{aligned} & .1311 \\ & p=.001 \end{aligned}$ | $\begin{aligned} & .2079 \\ & \mathrm{p}=.001 \end{aligned}$ |
| $\begin{gathered} \text { Dec-Making Opp } \\ N=484 \end{gathered}$ | $\begin{aligned} & .1188 \\ & p=.004 \end{aligned}$ | $\begin{aligned} & .1161 \\ & p=.005 \end{aligned}$ | $\begin{aligned} & .1733 \\ & p=.001 \end{aligned}$ | $\begin{aligned} & .1608 \\ & \mathrm{p}=.001 \end{aligned}$ |
| Bldgs, Supp, Upkeep $\mathrm{N}=495$ | $\begin{aligned} & .1934 \\ & p=.001 \end{aligned}$ | $\begin{aligned} & .1837 \\ & p=.001 \end{aligned}$ | $\begin{aligned} & .2548 \\ & p=.001 \end{aligned}$ | $\begin{aligned} & .2431 \\ & \mathrm{p}=.001 \end{aligned}$ |
| Communication $\mathrm{N}=493$ | $\begin{aligned} & .2865 \\ & p=.001 \end{aligned}$ | $\begin{aligned} & .3319 \\ & p=.001 \end{aligned}$ | $\begin{aligned} & .2812 \\ & p=.001 \end{aligned}$ | $\begin{aligned} & .3373 \\ & p=.001 \end{aligned}$ |

While significant at less than the . 001 level, the correlation coefficient of satisfaction with teachers and academic self-esteem of .3480 indicated that 12.1 percent of the variance of the levels of satisfaction with teachers could be explained by one's academic self-esteem. As . 3480 was the largest correlation coefficient reported, 12.1 percent represented the largest predicting factor of variability among any of the thirty-two relationships. The least amount of
variability that could be accounted for was that for the relationship between satisfaction with decision-making opportunities and social self-esteem. Only 1.3 percent of the variance of the satisfaction subscale was related to the self-esteem subscale.

A further analysis of table 24 showed that the greatest consistency in correlation coefficients was found between the communication subscale of the satisfaction survey and the four self-esteem subscales. The correlation coefficient between communication and general self-esteem was .2865 with a coefficient of determination equal to .0819. The correlation between communication and social self-esteem was .3319 with a coefficient of determination of .1102. The communication and academic self-esteem subscales were correlated at . 2812 with a coefficient of determination equal to . 0791 . The correlation between communication and total self-esteem was .3373 , and the coefficient of determination was .1138. Using the coefficients of determination, it can be interpreted that between 11.4 percent and 7.9 percent of the variance of the students' satisfaction with the availability of information and opportunities to communicate with others about school events was accounted for by the students' measures of self-esteem.

The correlations between students' satisfaction with teachers and the self-esteem measures ranged form a high of .3480 for the academic self to a low of .2118 for the social self. The variance of student satisfaction with the professional behavior of teachers that was accounted for by students' self-esteem ranged from 12.1 percent to 4.4 percent.

The correlation between satisfaction with fellow students and the self-esteem measures ranged from a high of .3225 for the social self measure to a low of .2080 on the academic self measure. Between 10.4 percent and 4.3 percent of the variability of students' satisfaction
with their peer group relationships could be accounted for by the students' self-esteem measures.

Correlation coefficients for satisfaction with student activities ranged from .2765 for the social self measure to .1386 for the general self measure. The variance in the self-esteem measures accounted for between 7.6 percent and 1.9 percent of the variability in students' satisfaction with the numbers and types of school-sponsored activities and with opportunities for student participation.

The correlations between satisfaction with student discipline and self-esteem were highest at .2079 on the total self measures and lowest at .1311 on the academic self measures. Between 4.3 percent and 1.7 percent of the variability of students' satisfaction with the degree to which the school was a safe and an orderly environment could be explained by the self-esteem measures.

Correlations between satisfaction with decision-making opportunities and self-esteem ranged from .1733 on the academic self-esteem subscale to .1161 on the social self-esteem subscale. Between 3 percent and 1.3 percent of the variability of students' satisfaction with opportunities to provide input on decisions about curriculum, school events, etc., could be accounted for by self-esteem.

Finally, the correlations between satisfaction with the buildings, supplies, and upkeep of the school and self-esteem varied from . 2548 for the academic self subscale to .1837 for the social self subscale. Between 6.4 percent and 3.4 percent of the variability of students' satisfaction with the quality and availability of library resources, learning materials and supplies, and with the upkeep of the buildings and grounds was determined by the students' measures of self-esteem.

Since the correlations between aspects of satisfaction with school and measures of self-esteem were not high, the explanatory power of the correlations was not great. Nevertheless, the pattern was
consistent. Higher self-esteem scores were associated with higher satisfaction scores. Still, significant in all cases, the positive correlation for each comparison adequately predicted only a slight amount of variance of one measure that could be accounted for by the other.

Chapter $V$ includes a summary of the procedures followed in conducting the study. Conclusions based upon the significant findings from the analyses of the statistical treatment of the data provided through the students' responses on the satisfaction survey and the self-esteem inventory are reported. A discussion of the findings based upon the analyses of the data presented in this chapter and the literature examined earlier in this study is presented. The limitations of the study and recommendations for practice and further research based upon the findings and the literature reviewed are included.

## CHAPTER V

SUMMARY, CONCLUSIONS, DISCUSSION, AND RECOMMENDATIONS

This chapter includes a summary of the purpose of the study and procedures used to obtain data, the conclusions drawn from an analysis of the data, a discussion relevant to the conclusions, limitations of the study, and recommendations for practice and further research.

## Summary

This study focused on ninth grade students attending schools representative of two different grade organization patterns, grades 7 through 9 and 9 through 12. Its purpose was to determine whether relationships did exist among the students' expressed satisfaction levels with various aspects of their schools, their self-esteems, the grade organization pattern of the school that they attended, and the students' gender. It examined these relationships among the eight subscales of the NASSP Student Satisfaction Survey, three of the subscales and the Total Self score of the Coopersmith Self-Esteem Inventory, the grade organization pattern of the school, and the students' gender.

The NASSP Student Satisfaction Survey was selected to measure student satisfaction with aspects of their schools. The survey, developed at Michigan State University, provided data about students' perceptions on eight subscales: Teachers; Fellow Students; Schoolwork; Student Activities; Student Discipline; Decision-Making Opportunities; School Buildings, Supplies, and Upkeep; and Communication. The survey was normalized for students in grades 6 through 12, and its readability
level was grades 4 through 6. Students responded to forty-eight questions on a Likert scale. All eight subscales were analyzed for the purpose of this study.

The Self-Esteem Inventory developed by Coopersmith was selected as the self-esteem measure. This inventory contained fifty-eight items to which students responded "like me" or "unlike me" according to their perceptions of how accurately the statement described how they usually felt. Four subscales pertaining to different self-esteem domains could be factored out of the inventory: General Self, Social Self-Peers, School-Academic, and Home-Parents. A lie subscale to assess respondent defensiveness could have been factored out of the inventory and a Total Self score was calculated based upon the four subscales. Due to the focus of the study, the eight items in the Home-Parents subscale were neither reported nor analyzed. They were, however, scored in order to calculate the Total Self score.

The population for this study included the ninth grade students attending the public schools in one city in an upper midwest state. The community was selected as appropriate for the study because there ninth grade students attended school in one of two grade organization patterns: a high school containing grades 9 through 12 or a junior high school containing grades 7 through 9. This unusual attendance scheme in a single community provided an opportunity to study the relationships among self-esteem, satisfaction with school, student gender, and grade level arrangement by reducing the numbers of possibilities of confounding comparisons potentially to be attributed to the grade level arrangement with actual differences between school districts. All ninth grade students in attendance on the day that the instruments were administered in each of the two schools participated. A total of 317 students in grade 9 in the high school and a total of 226 ninth grade students in the junior high school participated in the study.

To determine the relationships between satisfaction measures and school grade organization and gender, a two-way analysis of variance was considered the appropriate statistic. In the same manner, the relationships between self-esteem measures and school grade organization and gender were determined by a two-way analysis of variance. The relationship between the dimensions of satisfaction with school and the scales of the self-esteem inventory were examined through the application of the Pearson product moment correlation. A significance of .05 was selected as adequate for rejecting the hypothesis of equal means.

The data obtained through this study revealed that both schools scored well within the average range on all subscales of the Student Satisfaction Survey. The scores for males and females also were within the average range. When analyzed, the data revealed significant differences in the mean satisfaction scores of six of the eight satisfaction subscales. Ninth grade students in the four-year high school expressed significantly greater satisfaction on the Teacher; Schoolwork; Student Activities; Student Discipline; Decision-Making Opportunities; Buildings, Supplies, and Upkeep subscales than ninth grade students in the junior high school. The differences in mean satisfaction scores were not significant for males and females.

The data revealed a significant interaction between school and gender on the analyses of three of the self-esteem scales. This indicated a concomitant influence of school and gender on self-esteem measures on the General Self, Social Self, and Total Self scales.

Consistently significant positive correlations between the eight subscales of the satisfaction survey and four measures of the self-esteem inventory were found.

## Conclusions

The conclusions for this study are based upon the significant findings from the analyses of the statistical treatment of the data that
were provided through the students' responses on the satisfaction survey and the self-esteem inventory. Conclusions based upon the data and corroborative of the findings in the literature also are presented.

The first research question, "Do ninth grade students in a 7 through 9 organizational structure evidence a different pattern of satisfaction with school than students in a 9 through 12 structure?," was investigated through the eight subscales of the NASSP Student Satisfaction Survey. Students responded to forty-six Likert style questions about their relative satisfaction with aspects of their school that included teachers, fellow students, schoolwork, student activities, student discipline, decision-making opportunities, the buildings and supplies, and opportunities to communicate about school events.

The profiles of the two schools constructed from the raw scores fell within the normal range of 68 percent of the students on the national norms for each of the eight subscales. Students in School A and School B were not unlike their peers throughout the country.

On a normal range of from 40 to 60 the standard scores for School A, the four-year high school, ranged from a low of 48 on the Communication subscale to a high of 51 on the Student Activities subscale. There was little variation in the way students responded among the eight subscales. There were no atypically high or low scores to indicate possible areas of concern or areas where students expressed relative enthusiasm for an aspect of their school.

The standard scores for School B, the junior high school, ranged from a low of 45 on the subscale Buildings, Supplies, and Upkeep to a high of 49 on the subscale Fellow Students. As was found in School A, the scores in School B varied little among the scales. There were no atypically high scores recorded to indicate relatively high satisfaction with an aspect of the school. The scores for the subscale Buildings, Supplies, and Upkeep and the subscale Teachers approached the lower normal range.

A comparison of the two schools revealed that the subscale scores of School A were consistently, if modestly, higher than the scores in School B. The greatest difference in expressed satisfaction was on the subscale Student Activities with standard scores differing by only four points. School A had a standard score of 51 on this scale; School B had a standard score of 47. The differences were found to be significant on six of the eight subscales. Students in School A expressed statistically greater satisfaction on the Teachers subscale. This measured students' satisfaction with the professional behavior of their teachers.

The subscale Schoolwork considered the range of courses and nature of classwork. Students in School A expressed significantly greater satisfaction with this aspect of their school than did students in School B.

The subscale Student Activities reported satisfaction with the number and types of school-sponsored activities. Students in School A scored significantly higher on this subscale than students in School B.

The subscale Student Discipline reflected students' satisfaction with the degree to which the school was an orderly and a safe environment. Students in School A scored significantly higher on this subscale than did the students in School B.

Satisfaction with opportunities to provide input on decisions about curriculum, school events, etc., was measured by the Decision-Making Opportunities subscale. School A students expressed significantly greater satisfaction with this dimension of their school than did those in School B.

The subscale Buildings, Supplies, and Upkeep reported satisfaction with the quality and availability of library resources, learning materials and supplies, and with the upkeep of the buildings and grounds. Students in School A rated this aspect of their school significantly higher than students in School B.

The data from the research lead to the conclusion that, in the circumstances examined, the ninth grade students attending a senior high school containing grades 9 through 12 were more satisfied with their school than the students attending a junior high school containing grades 7 through 9.

The second question, "Do female ninth grade students evidence a different pattern of satisfaction with school than male ninth grade students?," also was investigated through the subscales of the NASSP Student Satisfaction Survey. The profiles of the students in the schools constructed from the raw scores fell within the normal range of 68 percent of the students on the national norms for each of the eight subscales. Females and males were not unlike their peers throughout the country.

On a normal range of from 40 to 60 , the standard scores for males ranged from a high of 49 on each of the subscales Fellow Students, Student Activities, and Decision-Making Opportunities to a low of 45 on the Teachers subscale. There was little variation in the way males responded among the eight subscales. There were no atypically high scores to indicate areas where males expressed relative enthusiasm for an aspect of their school; however, the subscale Teachers did approach the lower end of the normal range.

The standard scores for females ranged from a high of 51 on the Student Activities subscale to a low of 48 on each of the subscales for Teachers; Schoolwork; Buildings, Supplies, and Upkeep; and Communication. There was little variation in the way females responded among the eight subscales. No atypically high scores indicative of areas of relative enthusiasm for the school program or low scores revealing areas of concern were found.

The scores for females were consistently, if modestly, higher on each subscale than were the scores for males. The greatest difference in expressed satisfaction was on the subscale Teachers with
standard scores differing by only three points. Females scored 48 on the subscale; males scored 45. There was a two point variation in standard scores on the Student Activities subscale and a one point difference on each of the subscales Fellow Students, Schoolwork, Student Discipline, and Communication. Decision-Making Opportunities and Buildings, Supplies, and Upkeep were scored equally by both genders.

The statistical analyses of the mean scores showed no significant differences in the expressed satisfaction levels with aspects of their schools between males and females. Based upon the findings, it can be concluded that the ninth grade males and females in this study viewed their schools similarly and that satisfaction was not related to gender.

The third research question, "Do ninth grade students in a 7 through 9 organizational structure evidence a different pattern of self-esteem than students in a 9 through 12 structure?," was investigated through selected scales of the Coopersmith Self-Esteem Inventory. Students responded to fifty-eight questions checking either "like me" or "unlike me" according to their own perceptions of how accurately the statement described how they usually felt.

A comparison of the data from the four scales of the survey indicated that the mean scores of ninth grade students in School $B$ were consistently higher than those for the ninth grade students in School A, the reverse of the pattern observed for the schools with respect to satisfaction scores. All of the scores fell within the interquartile range indicative of medium self-esteem.

The fourth research question, "Do female ninth grade students evidence a different pattern of self-esteem than male ninth grade students?," was investigated through selected scales of the Coopersmith Self-Esteem Inventory. An examination of the data indicated that males expressed a higher self-esteem on the General Self and Total Self scales than females while females' scores indicated higher self-esteem on the

Social Self-Peers and the School-Academic subscales. All of the scores for both males and females fell within the interquartile range indicative of medium self-esteem.

The third and fourth questions were treated statistically using a two-way analysis of variance. Significant interactions between the independent variables, school and gender, were found through three of the analyses.

On the General Self-Esteem subscale, the mean scores for males in both Schools $A$ and $B$ were greater than for the females. Males in School A had a substantially lower general self-esteem than males in School B while females in School A had a slightly higher general self-esteem than females in School B. Males had a higher general self-esteem in the junior high school while females had a higher general self-esteem in the senior high school.

On the Social Self-Peers subscale, males in School A had a lower mean score than females in School A while males in School B had a higher mean score than females in School B. Males in the high school viewed themselves less favorably in the social self-peer context than did their junior high school counterparts, but the reverse was true for females. The high school females expressed greater self approval in the social self-peer context than did their junior high school peers.

The Total Self-Esteem score was calculated as the sum of the four subscales of the Coopersmith Self-Esteem Inventory. While the mean score for all males was found to be greater than that for females, an analysis of the means for each school by gender revealed a difference between the high school and junior high school students' scores. Ninth grade males in School A had a lower Total Self-Esteem score than their female counterparts; males in School B had a higher Total Self-Esteem score than the females in that school. The high school setting was conducive to higher Total Self-Esteem for the ninth grade females while
the junior high school fostered higher Total Self-Esteem scores for males.

There were no significant findings in the analysis of Academic Self-Esteem by school and gender. Ninth grade students in School A did not demonstrate a significantly different measure of Academic Self-Esteem than did those in School B. Males were not significantly different than females with respect to any measures of Academic Self-Esteem. Though the differences were not significant, females in School A had a slightly higher score on the subscale than females in School B, but males in School B had a slightly higher score than males in School A.

From the data it cannot be concluded that one organization pattern is associated with higher self-esteem measures for ninth graders. Neither can it be deduced that aspects of self-esteem are consistently higher for one gender. The school grade organization pattern, the student's gender, and the manner in which the student evaluated himself or herself in different areas of experience did, however, define a pattern that persisted through all four analyses of this study. Males' self-esteem scores were consistently higher for those students in the junior high school, and the females' self-esteem scores were consistently higher for those students in the senior high school. Grade organization patterns to enhance self-esteem were found to differ by gender in the two schools studied.

The fifth question, "Does a relationship exist between the dimensions of satisfaction with school and the scales of the self-esteem inventory?," was examined through the application of the Pearson product moment correlation. There was an overall significant positive relationship between the eight subscales of the NASSP Student Satisfaction Survey and the four subscales of the Coopersmith Self-Esteem Inventory. A statistically significant positive relationship was calculated for all thirty-two possible comparisons
between the satisfaction and the self-esteem subscales. The significant correlations were not of themselves sufficient evidence to establish causal relationships between levels of satisfaction and self-esteem. Though significant in all cases, none showed a high degree of practical application. The positive correlation for each comparison adequately predicted only a slight amount of variance of one measure that could be accounted for by the other. The greatest amount of variance that could be explained between variables, 12.1 percent, was between the students' satisfaction with their teachers and their academic self-esteem. The least amount of variance that could be predicted between two variables, 1.3 percent, was between students' satisfaction with their decision-making opportunities and their social self-peers self-esteem. One could conclude that, to the extent that higher levels of satisfaction and enhanced measures of self-esteem can attribute to heightened student academic, social, and psychological positive outcomes, the educator should be cognizant of the consistent significant relationships of all possible comparisons of the satisfaction and self-esteem subscales.

Greater levels of satisfaction with school were found for ninth grade students attending a four-year high school, but favorable grade organization patterns relative to self-esteem measures were found to differ by gender for high school females and junior high school males. Such conflicting findings suggest the conclusion that neither grade organization pattern is optimal for all ninth grade students. This concurs with the conclusions of numerous studies reporting that grade organization makes a difference in student achievement, attitudes toward school or satisfaction with school, self-esteem development, or student participation, but that no grade organization is deemed superior. It supports the argument that the program provided for the student is key and the educator, in no matter what grade organizational scheme, must be aware of the concomitant effects that program, school
climate and student satisfaction, and grade organization have on the ninth grade student.

Whatever the grade organization, it must be concluded that school personnel should be sensitive to the disruption associated with transition from one school unit to another, to the existence of low self-esteem among many students in the age group, and to the presence of dissatisfaction with elements of schools. Furthermore, no grade organization pattern will ameliorate the potential disruptiveness of variability in an adolescent population across a single grade or within a single class. Disparate levels of physical, social and emotional, and intellectual development are present in fourteen-year-olds to fifteen-year-olds. This implies the need for educators to structure programs that address the problematic period of self-esteem, that acknowledge the social and emotional anxiety and tension that result from the period of physical maturation, and that provide curriculum and instruction commensurate with the diverse range of cognitive thinking skills prevalent among students in the period of transition from concrete to formal operations.

To assess the efficacy of their own practices and to define school improvement programs, educators need to gather data relevant to aspects of schooling in their own educational community. The literature should then inform, support, and guide the decisions educators make about curricula design and revision. In this way, programs will evolve to reflect the best educational practices known.

## Discussion

Satisfaction has been defined as both a mediating variable and an outcome measure. It influences school success and it corroborates it. Educators cited academic achievement and the mastery of basic skills as a foremost goal that they held for their students, and research has demonstrated a positive relationship between satisfaction and productivity. Therefore, administrators and teachers who have
concern about the intellectual, social, and emotional growth of their students should be cognizant of the satisfaction students express with aspects of the school such as their peers, the school personnel, the curriculum, the availability of and the opportunities to participate in activities, and the physical facilities.

The ninth grade students' personal affective reactions (satisfaction) to their schools were relatively typical when evaluated with respect to students nationwide. School A, the four-year high school, scored significantly higher on six of the eight subscales of the satisfaction survey than School B, the junior high school. Though these findings suggest no causal relationship between grade organizational structure and students' satisfaction, they may indicate focal points that merit further investigation to effect improvement in the school environment and thus enhance students' achievement.

The literature indicated that as similar as schools were in general, each school had an individual culture and that to thoughtful educators the culture could suggest useful approaches to making it a better school. Numerous studies concluded that when school prized and promoted supportiveness, open communication among parties, collaboration, and intellectual pursuit and when achievement and success were recognized and rewarded, students' levels of achievement were increased while absences, dropouts, and levels of alienation were decreased.

In a school such as School $B$ in which students expressed less favorable views of their teachers' professional behaviors, research could imply practices to initiate or upon which to improve. For example, while most teachers are competent, conscientious, and well intentioned, all must examine their own beliefs in their students' potential to achieve and in their own level of instructional skills to impact students' learning. Positive attitudes about students' academic abilities coupled with expectations that students would attain success
given the necessary support to achieve the goals were related to improved student attitude and performance. A psychosocial environment in which teachers and students envisioned themselves as members of a team striving for common purposes and in which they interacted in mutually meaningful ways was found to benefit student achievement and their sense that they were cared for and known. Despite the cordiality of student-teacher relationships, administrators and teachers need to be cognizant of the fact that they are key to determining the amount and quality of interaction that will take place between themselves and the students. Student recognition during class and initiation of conversation during and outside of the class times were found to be lacking in schools, thus resulting in a less caring ethos. Research on practices in industry corroborated the educational findings that essential elements for success were the attention focused on workers and their levels of involvement in the corporate structure that engendered a family-style approach of belonging to the company.

Student satisfaction was found to differ between the two school groups regarding the range of courses and the nature of the classwork in the school. Ninth graders in the high school expressed more positive attitudes about this curricular aspect of their school. Effective schools literature consistently supported the need to establish an academic focus in which there were reasonably high expectations for achievement, direct instruction, homework, and other aspects of schooling that enabled students and teachers to engage in the serious pursuit of learning. Student, teacher, and parent satisfaction with the school was found to be related to the academic and intellectual thrust of the institution and the extent to which students were held accountable for learning. While the four-year high schools may offer a greater number of electives, research found instructional programs to be heavily dominated by a textbook-driven curriculum with a paucity of real intellectual interaction between students and teachers and a lack of
application of content to present-day situations and career preparation. Curriculum was fragmented into separate subjects with little integration of content or cooperative planning between departments.

Research indicated that many ninth grade students still functioned in the concrete operational stage and had difficulty in abstracting a general principle from a particular example. The variations that exist in the fourteen-year-old to fifteen-year-old in intellectual, social, and emotional development have implications for the educator in curriculum development and lesson plan design. In spite of the fact that the diversity exists, findings revealed that almost all instruction was of a large group nature with similar expectations and standards applied to the group.

If satisfaction with school were to be improved, there are indicators that it is necessary for a school to address the degree and uniformity to which academic expectations are imposed, the routine nature of learning tasks in which students are engaged, the extent to which content is perceived applicable to the here and now and is preparatory for future careers, the level in which students are actively rather than passively engaged in activities, and the extent to which provisions for which student diversity are made.

Junior high school ninth graders' scores indicated less satisfaction than high school ninth graders with their opportunities to provide input on the decisions about curriculum, school events, etc. Literature that investigated corporate organization found that bureaucratic/pyramidal structure and values in which employees had minimal control over their environments encouraged more passive, dependent, and subordinate behaviors. Successful Japanese companies were likely to involve workers who would be impacted by a change in the decision-making process that deliberated the change. Increased job responsibility was among the factors that contributed to job satisfaction, and egalitarianism, sense of community, participatory
decision-making, and spirited leadership were central attributes associated with corporate excellence. Similar constructs in educational settings imply the necessity of a highly personalized school environment. Adults and students need opportunities to interact in mutually meaningful ways in such areas as cooperative learning situations, collaborative planning sessions, and curriculum review processes that allow for appropriate student participation. Student government such as a student council can be an effective agent whereby students can plan and organize school events and can act as a liaison between the student body and faculty to present student views and concerns.

Students in the four-year high school reported more favorable scores than junior high school students relative to the number and types of school-sponsored activities and with opportunities for student participation. Research linked school transitions with a decreased level of participation in activities. In general, students transferring into the junior high school at seventh grade were found to have decreased rates of participation than peers who remained in the same school setting for seventh grade. Those who transferred into a four-year high school, especially males, realized a decreased participation rate in ninth grade from their eighth grade participation level. Additionally it was found that the ninth graders in junior high school and those in the four-year high school participated in essentially equal numbers. Furthermore, once students were exposed to an environment where participation actually was, or was perceived to be, more adverse they encountered greater difficulty in overcoming the obstacles inhibiting their participation. It is also likely that the high school may offer a wider array of athletic competitions as well as musical, dramatic, or journalistic activities and clubs promoting special interests in which students can participate. Furthermore, the prestige enjoyed by high school activities and athletics gained through
media attention and broadened travel opportunities to events could enhance students' satisfaction with the high school extracurricular program. Educators need to make provisions for ninth graders to be involved in student activities. This could mean the establishment of programs specifically for ninth graders or the active recruitment of high school ninth graders into activities dominated by upperclassmen. Leadership potential could be encouraged as well through the dedication of leadership positions in an organization for ninth graders. Intramural programs for those who are not "varsity" athletes could be promoted.

The junior high school ninth grade students believed that their school was a less orderly and safe environment than the high school students envisioned theirs to be. The subscale investigated students' perceptions of how well rules were enforced and how safe students felt without differentiating safety issues from behavior concerns. Some of the earliest research that sought to aggregate those grades that were most homogeneous categorized ninth graders as more similar to tenth graders than eighth graders in levels of intellectual, social, emotional, and physical maturity. It may be that ninth graders in junior high school are not as tolerant of the less mature behaviors of the seventh and eighth graders in the school, and this is reflected in responses on this subscale. While the results of this study would not support the fact, research substantiated that in the absence of older students, younger students believed their schools to be more optimally controlled, expressed less concern about victimization, and experienced fewer feelings of anonymity. Effective schools literature stressed the necessity of a safe and an orderly environment, and administrators and teachers must ensure its existence.

Finally, differences were observed between the students' satisfaction with the quality and availability of library resources and the learning materials and supplies and with the buildings and grounds
and their upkeep. That high school students expressed more favorable attitudes could have been influenced by the fact that their facility was newer, larger by necessity of a larger student body, and more extensive so as to meet the curricular requirements of a four-year high school. A library that must serve the needs of a student range of freshmen through seniors is likely to have more diverse, sophisticated resources than one geared to the needs of a school that houses seventh and eighth graders as well as the ninth graders. Nonetheless, while the physical environment may not directly affect the ability to learn, attention to environment is noticed and appreciated by students. Administrators and teachers should work to ensure that buildings are clean, comfortable, and well equipped; that the overall building is maintained in good repair; that the grounds are attractive and groomed; and that classrooms are cheerful, bright, and decorated with meaningful bulletin boards and artifacts.

Student satisfaction with peer group relationships and with their ability to procure information and communicate about school events was not significantly different in the two school organization patterns.

Throughout the turbulent changes early adolescents undergo in physical and intellectual development, they also experience dramatic changes in self-esteem, ushering in periods of self-criticism and negative self-feelings that are possibly more problematic than at any other life stage. That the school plays a role in the development of self-esteem has been prevalent thinking among educators for most of the century. Not only has self-esteem been linked to academic performance but also to other self-destructive behaviors such as chemical abuse, teen pregnancy, suicide, and other antisocial acts. The rationale is that if people like or respect themselves, they are less likely to hurt themselves and more apt to succeed in endeavors undertaken.

Research has testified to the fact that adolescence was a particularly disturbing period for the child and that the level of
disturbance in terms of self-picture and degree of happiness was affected significantly by the type of school the student attended. On three of the four subscales of the self-esteem inventory there were significant interactions between school grade organization, gender, and the self-esteem measure. Significance was found on the General Self-Esteem, Social Self-Peer Self-Esteem, and Total Self-Esteem subscales and a parallel, though not significant, result was calculated on the Academic Self-Esteem subscale. In each of the four analyses, females in School A, the four-year high school, had higher self-esteem than females in School B, the junior high school; males in School B had higher self-esteem than males in School A. In this population, students in School A had made a school transition between fifth and sixth grades and again between eighth and ninth grades. The School B students had made a transition between sixth and seventh grades. Research studies indicated that for females the transition from a sixth grade elementary classroom to seventh grade in a junior high school was especially debilitating with respect to self-esteem in contrast to the female cohort who did not make a school transition between the two grades. The negative effects were found to persist through the upper grades. Male self-esteem measures were found to be relatively unaffected by school transition. In this study that pattern was replicated for females although means were not significantly different by school. Males' scores were not significantly different by school, but scores were consistently higher for the junior high school cohort.

Authorities have continued to insist an argument for enhancing self-esteem is found in its persistent relationship with desired educational outcomes such as achievement, participation, school completion, and self-direction. As a social agency, the school assumes a role of contributing to the general health and well-being of youth. In this scope of personal development, an ultimate goal would be to move the individual beyond the ability merely to cope with personal problems
to a more powerful sense of personal and social efficacy, for this society is faced with myriad injustices and challenges. Racism, sexism, homelessness, and unequal distribution of wealth and opportunities abound. It can be suggested that without a secure belief that one's actions will make a difference in restoring a measure of human dignity to the less powerful, any effort to challenge the status quo will go unexpended. Among the goals for students that educators cite are positive attitudes about school and participation, getting along with others and fostering more positive race relations, and an appreciation of citizenship through service to school and community. All of these are complemented by high levels of self-esteem and personal efficacy.

Educators must understand that self-esteem is learned in the context of the environment. Therefore, administrators and teachers must promote authentic participation in classwork and activities. Collaborative and cooperative actions among students and teachers in problem-centered curricula need to be established. Appreciation for social diversity must be fostered through multicultural study that penetrates the psychological and sociological foundations of this world. Those practices that debilitate self-esteem such as tracking, competitive learning situations, gender and culturally biased curricula, and autocratic leadership styles should be eliminated.

The consistently positive correlations between the satisfaction dimensions and the self-esteem subscales imply that an effort to enhance one variable consequently will enhance the other. The low levels of practical significance of the correlation coefficients, however, do not signify that programs initiated to greatly increase levels of satisfaction would result in equal increases of self-esteem measures. Likewise, practices intended to enhance self-esteem would not effect similar improvements in satisfaction scores. Yet, the relationship exists and does imply to administrators and teachers that
students would benefit in both dimensions by program and practices designed to improve one.

Results from this study indicated that students in the population studied were more satisfied with aspects of school when the ninth grade was housed in a four-year high school. Findings determined self-esteem differences for the males and females related to school grade organization pattern. Finally, an overall positive correlation between satisfaction and self-esteem was found.

## Limitations

1. The statistical procedures utilized to treat the data imposed some limitations on the research design. These limitations were associated with the statistic and its attendant assumptions.
2. National norms with respect to data specific to gender are not reported for the NASSP Student Satisfaction Survey. This prohibited comparison of the student population to a national sample.
3. No normative data are provided for the Coopersmith Self-Esteem Inventory because high, medium, and low levels of self-esteem are expected to vary with the characteristics of the sample. Scores had to be generalized as high, medium, or low dependent upon the quartile range into which they fell.
4. This study was conducted with a limited geographical sample and was limited to two schools.
5. This study was conducted in a single community where ninth grade students attended school at either a four-year high school or a junior high school. Students' school assignments were based upon geographical attendance areas. Responses on the satisfaction survey could have been influenced by students' personal preferences to have attended the school to which they were not assigned.
6. The surveys were administered in May 1989. The timing of the administration could have influenced students' responses. Findings were based upon the single administration of the instruments.
7. The administration of the satisfaction survey and the self-esteem inventory was not conducted in a controlled environment. Classroom teachers conducted the administration, and, although written instructions to have been read and followed were provided, varying practices in classrooms may have caused participants to respond in different manners.

## Recommendations

The recommendations were based on the data from this study as well as the insights obtained from the literature review. They are suggestions for practice, policy, and further research in the areas of enhancement of student satisfaction with school and student self-esteem. The broad scope of responsibility for such enhancements of education programs to benefit students lies with legislators, school boards, and all educators, but especially with the principals and teachers of the students in the schools.

1. Secondary principals should examine the levels of satisfaction of the students attending their schools. Instruments such as the NASSP Student Satisfaction Survey are available for this purpose. The information gained should guide program design and principal and teacher practices to improve student satisfaction with aspects of schooling.
2. Secondary principals and teachers should be aware of the self-esteem measures of their students. Instruments such as the Coopersmith Self-Esteem Inventory are available for this purpose. The information gained should guide program design and principal and teacher practices to enhance student self-esteem.
3. Secondary principals and teachers should be knowledgeable of the physical, intellectual, social, and emotional developmental characteristics of ninth grade students, and from discussions about these needs of fourteen-year-olds to fifteen-year-olds, they should define school goals and objectives pertinent to the students' needs. These objectives should then guide the development of course content and instructional methods that will ensure the realization of articulated goals.
4. Secondary principals and teachers in curriculum review sessions should consider how to evolve ninth grade programs into more active, problem-centered, rather than passive learning situations. The value of "hands on" activities should be considered, and content should be able to be construed as relevant to the students' lives and preparatory to their future vocations.
5. Secondary principals and teachers should work to evolve school practices into cooperative rather than competitive or individualistic endeavors. This implies cooperative learning in the classroom and cooperative efforts within the staff. Administrators who are not knowledgeable of cooperative strategies should seek training in the practices and then model these in staff leadership situations. Administrators should make opportunities available for staff members to receive training and to gain expertise in cooperative learning tactics and support teachers as they implement them in classrooms.
6. Secondary principals and teachers should consider the feasibility of structuring interdisciplinary teams of teachers or some means of providing departments mutual planning opportunities as an avenue to encourage the integration of
subjects in the curriculum and to promote cooperative, collaborative planning across subject areas.
7. Secondary principals and teachers should ensure that provision for student diversity is made. Practices that provide for alternative grouping for instruction other than the total class/large group situation should be encouraged. Evaluation practices that do not apply the same expectations and standards for all when inappropriate should be discouraged.
8. Secondary principals and teachers should understand that the environment powerfully informs self-esteem and thus all aspects of the school environment should enhance rather than debilitate self-esteem. Secondary principals and teachers should strive to have schools characterized by a humanistic and democratic climate, student participation in governance, heterogeneous grouping, and positive expectations. Curriculum and instruction should emphasize collaborative teacher-student planning, cooperative learning, thematic units, opportunities for student self-evaluation, multicultural content, and community service projects.
9. Secondary principals and teachers should discourage policies and practices that debilitate self-esteem, including tracking, competitive learning emphases, autocratic leadership styles, and content that is culturally or gender biased.
10. Secondary principals and teachers should ensure that the school is a safe and caring environment for all students. Special provisions should be taken to prevent younger students from becoming victimized, intimidated, or harmfully influenced by older students.
11. Ninth grade students, especially in schools containing grades 9 through 12, should be encouraged to participate in student activities. Special provisions to ensure freedom to
participate, when appropriate, along with active recruitment programs to engage students in activities should be established. The potential to participate in some level of leadership capacity should be protected for underclassmen.
12. Intramural programs should be promoted for the individuals who would benefit from team competition but who are not "varsity" calibre athletes.
13. This study should be replicated using a larger student sample, including a greater number of schools. Multiple assessments of student satisfaction in the two grade organization patterns should be made periodically throughout the year to determine patterns of satisfaction students might evidence with respect to the time during the year. Urban, suburban, and rural communities should be included to provide comparative data.
14. Data should be obtained relative to students' academic achievement and participation levels so as to provide a more dynamic comparison of ninth grade students in the two grade organization patterns.
15. A longitudinal study that provides baseline data from seventh and eighth grades regarding satisfaction, self-esteem, participation, and achievement should be completed to determine the transition effect on ninth grade students entering a four-year high school compared to ninth grade students remaining in a junior high school.

## APPENDIX A

LETTER OF REQUEST TO CONDUCT RESEARCH

25 Fenton Avenue
Grand Forks, ND 58203

March 6, 1989

Dear $\qquad$ :

I understand that you have had a recent conversation with Dr. Richard Hill concerning the possibility of allowing me to survey ninth grade students in your district as a part of my doctoral degree research. He has encouraged me to write and provide you with more information regarding the nature of the study that I propose to complete. Also, he has suggested that include the draft of the first chapter of my dissertation for a more thorough introduction of this study should you wish to examine it.

My interest is in determining whether there are significant differences in expressed levels of satisfaction with school and self-esteem for ninth grade students attending schools representative of two grade organization patterns, 7 through 9 and 9 through 12 . The body of literature in this area does not yield definitive support for one organizational structure over another, and I certainly do not presume to identify the superiority of a particular scheme as a result of the study. The data to be collected in this study alone could never be sufficient to argue such a condition. Instead, I intend to determine whether there are significant differences in the perceptions of students with respect to their educational experiences as a consequence of the grade organization in which they are enrolled. These findings could imply directions for continued research as well as heighten the sensitivities of educators to the needs of the students in the grade. The literature in the field does indicate that there is a relationship between self-esteem, attitude toward school, and school achievement. Much of the research on grade level organization that has examined the consequences to students in different grade level arrangements has focused on the younger students in the middle grades and has minimized or ignored those that affect the ninth grade students.

To assess student satisfaction levels, I propose to use the NASSP Student Satisfaction Survey, one of four instruments in the Comprehensive Assessment of School Environments (CASE) battery. The survey provides data about student perceptions on eight subscales:
(1) professional behaviors of teachers; (2) peer group relationships;
(3) range of courses and nature of classwork; (4) number and type of school-sponsored activities and opportunities for student participation;
(5) degree to which the school is safe and orderly; (6) opportunities to provide input on decisions about curriculum, school events, etc.;
(7) quality and availability of library resources, learning materials, and supplies and with the upkeep of the buildings and grounds; and (8) availability of information and opportunities to communicate with others about school events.

I anticipate using portions of the Coopersmith Self-Esteem Inventory to measure student self-esteem. This instrument contains 58 items which can be factored out into four subscales and a lie scale. As this study will focus on the student's social relationships and attitude toward school, eight items related to the home-parents subscale will be removed
from the inventory. Only the data from the subscales that assess how students perceive themselves, how they perceive themselves with peers, and how they perceive their school lives will be used.

Samples of both instruments are included for your inspection. Completion time is estimated to be a total of twenty minutes. Students will respond to both surveys anonymously. Scores will be reported by school organization type as group means for each subscale of both surveys and standard deviations will be calculated. National normative data are available for each instrument, and all such data will be provided. Significant relationships that are determined to exist between each of the subscales and organization structure will be identified statistically and also will be reported to you. The discussion of findings in the dissertation will mask the identity of the schools and the city of with reference made only to "an upper midwestern community."

While my initial design proposed sampling a population of ninth grade students in regular level English sections, I am willing to work with the regular level students in any required ninth grade course area. I also would be willing to work with the building principal, counselor, or classroom teachers in organizing this. Either local school personnel or I could administer the surveys, and a full set of directions and all materials would be provided if the preference is to have classroom teachers administer the instruments.

I hope that you find the information that would be provided your district as beneficial in your continuing efforts to address the educational, social, and emotional needs of your students and that you will give favorable consideration to my request to conduct the proposed study with a sample of your ninth graders. Should you have any questions of me, please contact me at Central High School (746-2375) or at home (775-2231). I am certain that Dr. Hill would also be glad to speak with you in greater detail about this research.

I look forward to hearing from you regarding this matter.
Respectfully,

25 Fenton Avenue<br>Grand Forks, ND 58203

May 23, 1989

Dear $\qquad$ :

I was most appreciative that you granted me permission to survey the ninth grade students in your district as part of my doctoral degree research. It was a pleasure to work with research. It was a pleasure to work with
grade science teachers at and the and the ninth grade English teachers at

High School. Everyone was so very gracious and helpful. As I complete the analysis of the data this summer, I will forward the findings to you, and, if you would like, I would be very happy to meet with you and discuss the results.

Thank you very much for your favorable consideration of my request to work with your students.

Sincerely,

Marcia Fivizzani

## APPENDIX B

LETTERS OF INTENT TO USE THE NASSP STUDENT SATISFACTION SURVEY AND THE COOPERSMITH SELF-ESTEEM INVENTORY

CENTER FOR TEACHING aND LEAR VIING bOX \$ISR. UNIVERSITY STATION URANI IORKS. NORIH DAKUIA SS202

## April 18, 1989

## NASSP

1904 Association Drive
Reston, VA 22091
Dear Sir:
Marcia Fivizzani, a doctoral student in Educational Administration at the University of North Dakota, intends to use the NASSP Student Satisfaction Survey to collect data for her dissertation research.

Her study will determine whether there are differences in expressed levels of satisfaction with school and student self-esteem for ninth-grade students artending schools representative of two different grade organization patterns, 7 to 9 and 9 to 12.



Consulting Psychologists Press
P.O. Box 60070

Plo Alto, CA 94306
Dear Sir:
Marcia Fivizzani, a doctoral student in Educational Administration at the University of North Dakota, intends to use the Coopersmith Self-Esteem Inventory to collect data for her dissertation research.

Her study will determine whether there are differences in expressed levels of satisfaction with school and student self-esteem for ninth-grade students attending schools representative of two different grade organization patterns, 7 to 9 and 9 to 12.

Sincerely,


## APPENDIX C

SURVEY ADMINISTRATION INSTRUCTIONS

FROM: Marcia Fivizzani
RE: $\quad$ Ninth Grade Surveys
DATE: May 5, 1989
Thank you so very much for agreeing to participate in the administration of the NASSP Student Satisfaction Survey and the Coopersmith Self-Esteem Inventory. I anticipate that the findings will be quite interesting and useful for the $\qquad$ Public Schools, and I know that they are integral to the successful completion of my own degree research. I sincerely appreciate your help with this.

As an introduction of this activity in your classrooms, you might choose to say:

Today you will be answering some questions regarding your feelings about your school and about yourself. We are very interested in knowing how you honestly feel so that we can work to make this the best possible school for all students. Please think about each question carefully and always give the answer that best describes how you feel.

On the following page I have provided directions that can be read in the administration of the instrument. Please continue to stress that no marks should be made in either booklet. All marks should be made, preferably in pencil, on the answer sheet.

## GENERAL DIRECTIONS

Each of you will now receive one Student Satisfaction Survey, one Coopersmith Inventory, and one answer sheet. Do not make any marks in either booklet. Write only on the answer sheet, but do not begin until I tell you to do so.
[Pass out the materials.]
Turn the answer sheet to Side 1. Complete each of the following by darkening the correct spaces.

School: 1 = ; 2 = $\qquad$
Sex: Indicate the appropriate response $M$ or $F$ Enter your age as the number of years old you are today

Remember, do not write in this booklet or write your name on the answer sheet. Your answers are confidential. [Continue to read the directions aloud and encourage students to continue to follow along on their answer sheets.]

You will use Side 1 for the Student Satisfaction Survey.
This survey has a number of statements which may describe situations in your school. For each number mark one answer on the answer sheet. An example has been marked correctly for you.

Use this scale 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.

Now turn your answer sheet over to Side 2 and look at the Coopersmith Inventory. Remember, do not write in this booklet or write your name on the answer sheet. Your answers are confidential.

On the next pages you will find a list of statements about feelings. If a statement describes how you usually feel, darken the space in the column "Like Me." If the statement does not describe how you usually feel, darken the space in the column "Unlike Me." There are no right or wrong answers.

We are ready to begin. Turn your answer sheet over to side 1. Open your Student Satisfaction Survey and find space \#1 under the heading TEACHERS on your answer sheet. For each statement mark only one answer on the answer sheet. After you have completed the Student Satisfaction Survey turn to Side 2 of your answer sheet and go on to the Coopersmith Inventory.

Are there any questions?
Begin work!

## REFERENCES

Alexander, William M., and Paul S. George. 1981. The exemplary middle school. New York: Holt, Rinehart, and Winston.

Alexander, William M., Emmet L. Williams, Mary Compton, Vynce A. Hines, and Dan Prescott. 1968. The emergent middle school. New York: Holt, Rinehart, and Winston.

Allport, Gordon W. 1961. Pattern and growth in personality. New York: Holt, Rinehart, and Winston.

Andrews, Frank M., and Stephen B. Whitney. 1976. Social indicators of well-being. New York: Plenum Press.

Argyris, Chris. 1957. Personality and organization. New York: Harper and Row Publishers.

Austin, John C. 1967. A comparative study of two forms of school organization for the early adolescent in terms of pupil achievement and school adjustment. Ed.D. diss., University of Houston.

Bagley, Sandra Lee. 1977. A comparison study of seventh grade student achievement and attitude under two different junior high school organizational patterns. Ed.D. diss., University of Nebraska-Lincoln.

Baker, Lansing Gregory. 1972. A study of selected variables in a change from a junior high school organization to a middle school organization. Ed.D. diss., Syracuse University.

Barth, Ronald S. 1990. A personal vision of a good school. Phi Delta Kappan 71 (March) : 512-16.

Battle, Jean. 1982. Enhancing self-esteem and achievement. Seattle: Special Child Publications.

Beane, James A. 1990. Affect in the curriculum: Toward democracy, dignity, and diversity. New York: Teachers College Press. . 1991. Sorting out the self-esteem controversy. Educational Leadership 49 (September): 25-30.

Beane, James A., and Richard P. Lipka. 1979. Enhancing self-concept/esteem in the middle school. Middle School Journal 10 (January): 20-21, 26-27, 30-31.

Beauchamp, Marian Z. 1972. A study of selected variables in a change from a junior high school organization to a middle school organization. Ed.D. diss., Syracuse University.

Benedict, Ruth. 1938. Continuities and discontinuities in cultural conditioning. Psychiatry 1: 161-67.

Bloom, Benjamin S., J. Thomas Hastings, and George F. Madaus. 1971. Handbook on formative and summative evaluation of student learning. New York: McGraw-Hill.

Blyth, Dale A., Charlotte K. Smyth, and John P. Hill. 1984. Grade level arrangements--What are the differences? NASSP Bulletin 68 (April): 105-17.

Blyth, Dale A., John P. Hill, and Charlotte K. Smyth. 1981. The influences of older adolescents on younger adolescents: Do grade-level arrangements make a difference in behavior, attitudes, and experiences? The Journal of Early Adolescence 1 (Spring): 85-110.

Blyth, Dale A., Roberta G. Simmons, and Diane Bush. 1978. The transition into early adolescence: A longitudinal comparison of youth in two educational contexts. Sociology of Education 51 (July): 149-62.

Blyth, Dale A., Roberta G. Simmons, and Steven Carlton-Ford. 1983. The adjustment of early adolescents to school transitions. The Journal of Early Adolescence 3 (Spring/Summer): 105-20.

Booker, Kathleen. 1978. Middle school melancholia: Or when are you losers gonna start winning? Junior high/middle school idea factory. English Journal 67 (October): 72-74.

Boyer, Ernest L. 1983. High school: A report on secondary education in America. New York: Harper and Row.

Branan, John M. 1972. Negative human interaction. Journal of Counseling Psychology 19 (January): 81-82.

Brandt, Ronald. 1982. On school improvement: A conversation with Ronald Edmonds. Educational Leadership 40 (December): 12-15.

Brantley, William E. 1982, May. West Chester Area School District middle school survey. Unpublished report to the West Chester, Pennsylvania, school district.

Brim, Orville Gilbert. 1974. The sense of personal control over one's life. Invited address to Division 7 and 8 of the American Psychological Association, New Orleans, LA.

Brookover, Wilbur B., Laurence Beamer, Helen Efthen, Douglas Hathaway, Lawrence Lezotte, Stephen Miller, Joseph Passalacqua, and Louis Tornatzky. 1982. Creating effective schools: An in-service program for enhancing school learning climate and achievement. Holmes Beach, FL: Learning Publications, Inc.

Brookover, Wilbur B., and Lawrence W. Lezotte. 1977. Changes in school characteristics coincident with changes in student achievement. East Lansing: Michigan State University, College of Urban Development.
1979. School social systems and student achievement. New York: Praeger Publishers.

Brookover, Wilbur B., Ann Paterson, and Thomas Shailer. 1962. Self-concept of ability and school achievement. East Lansing: Office of Research and Publications, Michigan State University.

Brooks, Kenneth. 1978. The middle schools: A national survey. Parts 1 and 2. Middle School Journal 9 (February): 6-7.

Brown, William T. 1981. The makings of the middle school: 21 key ingredients. Principal 60 (January): 18-19.

Bruner, Jerome. 1962. The process of education. Cambridge, MA: Harvard University Press.

Buell, Clayton E. 1962. What grades in the junior high school? NASSP Bulletin 46 (February): 14-18.

Bureau of School Services. 1969. The ninth grade question. Ann Arbor: The University of Michigan.

Calhoun, Frederick S., ed. 1983. Organization of the middle grades: A summary of research. Arlington, VA: Educational Research Service, Inc.

Caliste, Edward R. 1975. Do school organizational patterns make a difference? ERIC, ED 116344.

Campbell, Angus. 1980. The sense of well-being in America: Recent patterns and trends. New York: McGraw-Hill.

Caplin, Morris D. 1969. The relationship between self-concept and academic achievement. The Journal of Experimental Education 37 (Spring): 13-16.

Carnegie Council on Adolescent Development. 1989. Turning points: Preparing American youth for the 21st century. Washington, DC: Carnegie Corporation.

Cawelti, Gordon. 1988. Middle schools a better match with early adolescent needs, ASCD survey finds. ASCD Curriculum Update, November, 1-12.

Clark, Burton. 1975. The organizational saga in higher education. In Managing change in educaional organizations, ed. J. Victor Baldridge and Terrence E. Deal, 98-108. Berkeley, CA: McCutchan Publishing Corp.

Coffland, Jack A. 1975. Reexamining the middle school: A study survey. Clearinghouse 49 (December): 154-57.

Conant, James B. 1960. Recommendations for education in the junior high school years. Princeton, NJ: Educational Testing Service.

Coopersmith, Stanley. 1959. A method for determining types of self-esteem. Journal of Educational Research 59: 87-94. 1967. The antecedents of self-esteem. San Francisco: W. H. Freeman and Company. . 1981. Self-esteem inventories. Palo Alto, CA: Consulting Psychologists Press Inc.

Dacus, Wilfred P. 1963. Study of the grade organizational structure of the junior high school as measured by social maturity, emotional maturity, physical maturity, and opposite sex choices. Ed.D. diss., University of Houston.

Deal, Terrence E., and Alan A. Kennedy. 1983. Culture and school performance. Educational Leadership 41 (February): 14-15.

Dewey, John. 1916. Democracy and education. New York: Macmillan.
Dorman, Gayle, and Joan Lipsitz. 1984. Early adolescent development. In Middle grades assessment program, ed. Gayle Dorman, 3-8. Carrboro, NC: Center for Early Adolescence.

Draud, Jon E. 1977. The effects of organizational structure of middle school and junior high school on the attitudes of teachers and students toward the school. Ed.D. diss., University of Cincinnati.

Drummond, Robert J., and Walter G. McIntire. 1977. Evaluating the factor structure of self-concept in children: A cautionary note. Measurement and Evaluation in Guidance 9 (January) : 172-76.

Edmonds, Ronald. 1979. Effective schools for the urban poor. Educational Leadership 37 (October) : 15-27.

Eichhorn, Donald H. 1966. The middle school. New York: The Center for Applied Research in Education, Inc.

Elie, Marie-Therese. 1970. A comparative study of middle school and junior high school students in terms of socio-emotional problems, self-concept of ability to learn, creative thinking ability, and physical fitness and health. Ed.D. diss., Michigan State University.

Elkind, David. 1967. Egocentrism in adolescence. Child Development 38 (December) : 1025-34.

Epstein, Joyce L. 1990. What matters in the middle grades -- grade span or practices? Phi Delta Kappan 71 (February): 438-44.

Epstein, Joyce L., and Douglas J. Mac Iver. 1990. Education in the middle years: Overview of a national survey of practices and trends. Baltimore: Center for Research on Elementary and Midde Schools.

Epstein, Joyce L., and James M. McPartland. 1978. Administration and technical manual quality of school life scale. Boston: Houghton-Mifflin.

Erickson, Erik. 1971. Youth and the life cycle. In Adolescent behavior and society: A book of readings, ed. Rolf E. Muuss, 251-64. New York: Random House.

Evans, Charles L. 1970. Short term assessment of the middle school plan. Paper presented to Fort Worth Independent School District, Fort Worth, TX. ERIC, ED 057091.

Fallon, John P. 1969. A comparison of transescent male development in two organizational patterns centering on middle grade organization. Ed.D. diss., Michigan State University.

Faust, Margaret S. 1960. Developmental maturity as a determinant in prestige of adolescent girls. Child Development 31 (March): 173-84.

Gaskill, Lynn D. 1971. An investigation of the effects of four middle school programs upon academic achievement and personal adjustment of eighth grade students. Ed.D. diss., North Texas State University.

George, Paul S. 1983. Theory z school: Beyond effectiveness. Columbus, OH: National Middle School Association.

George, Paul S., and Lynn L. Oldaker. 1985. Evidence for the middle school. Columbus, OH: National Middle School Association.

Gesell, Arnold, Frances Ilg, and Louise Ames. 1956. Youth, the years from ten to sixteen. New York: Harper and Row, Publishers.

Goodlad, John I. 1979. What schools are for. Bloomington, IN: Phi Delta Kapppa Educational Foundation. _. 1984. A place called school: Prospects for the future. New York: McGraw-Hill Book Company.
. 1986. Speech presented in Denver, CO, 17 January. Quoted in Eugene R. Howard, Bruce Howell, and Edward Brainard. Handbook for conducting school climate improvement projects. Bloomington, IN: Phi Delta Kappa Educational Foundation, 1987.

Gray, Don G. 1981. A comparative study of self-concept and attitudes toward school of seventh grade students in three vertical grade organizations. Ed.D. diss., University of Missouri-Columbus.

Gruhn, William T., and Harl R. Douglass. 1956. The modern junior high school. 2d ed. New York: The Ronald Press Company.

Halderson, Cynthia, Edgar A. Kelley, and James W. Keefe. 1987. Examiner's manual: School climate survey, student satisfaction survey, parent satisfaction survey. Reston, VA: National Association of Secondary School Principals.

Halpin, Andrew W., and Don B. Croft. 1962. The organizational climate of schools. Chicago: University of Chicago, Midwest Administration Center.

Hersey, Paul, and Kenneth H. Blanchard. 1982. Management of organizational behavior: Utilizing human resources. Englewood Cliffs, NJ: Prentice-Hall, Inc.

Herzberg, Frederick, Bernard Mausner, and Barbara Snyderman. 1959. The motivation to work. New York: John Wiley and Sons, Inc.

Horowitz, Francis D. 1962. The relationship of anxiety, self-concept, and sociometric status among fourth, fifth, and sixth grade children. Journal of Abnormal and Social Psychology 65 (September): 212-14.

Howard, Eugene R. 1970. School climate improvement. Thrust for Educational Leadership 27 (January): 12-14.

Howard, Eugene R., Bruce Howell, and Edward Brainard. 1987. Handbook for conducting school climate improvement projects. Bloomington, IN: Phi Delta Kappa Educational Foundation.

Johnston, Howard J., and Glenn C. Markle. 1986. What research says to the middle level practitioner. Columbus, OH : National Middle School Association.

Jones, Mary C. 1957. The late careers of boys who were early or late maturing boys. Child Development 28 (March): 113-28. 1960. A comparison of the attitudes and interests of ninth grade students over two decades. Journal of Educational Psychology 51 (August): 175-86.
. 1964. Psychological correlates of somatic development. Newsletter of the Division of Developmental Psychology of the American Psychological Association, Fall, 2.

Jones, Randal M., and Hershel D. Thornburg. 1984. Environmental mediators of early adolescent self-image. Paper presented at the Annual Convention of the American Psychological Association, Toronto, Ontario, Canada, 24-28 August. Dialog, ERIC, ED 252772.

Kandel, Denise, and Gerald Lesser. 1972. Youth in two worlds. San Francisco: Jossey-Bass.

Keefe, James W., Edgar A. Kelley, and Stephen K. Miller. 1985. School climate: Clear definitions and a model for a larger setting. NASSP Bulletin 69 (November) : 70-77.

Kelley, Edgar A. 1980. Improving school climate: Leadership techniques for educators. Reston, VA: National Association for Secondary School Principals.

Ketcham, W., and W. C. Morse. 1965. Dimensions of children's social and psychological development related to school achievement. Cooperative Research Project No. 1286. Office of Education, Department of Health, Education, and Welfare. Ann Arbor: University of Michigan.

Kimball, Olive M. 1973. Development of norms for the Coopersmith Self-Esteem Inventory: Grades four through eight. Ed.D. diss., Northern Illinois University.

Kokenes, Barbara A. 1973. Development of norms for the Coopersmith Self-Esteem Inventory. Ed.D. diss., Northern Illinois University. . 1974. Grade evel differences in factors of self-esteem. Developmental Psychology 10 (November): 954-58. . 1978. A factor analytic study of the Coopersmith Self-Esteem Inventory. Adolescence 13 (Spring): 149-55.

Leahy, Robert L., ed. 1985. The development of the self. Orlando: Academic Press, Inc.

Lecky, Prescott. 1945. Self-consistency: A theory of personality. New York: Island Press.

Lipsitz, Joan S. 1977. Growing up forgotten: A review of research and programs concerning early adolescence. A report to the Ford Foundation. Lexington, MA: D. C. Heath and Company.
. 1984. Successful schools for young adolescents. New
Brunswick, $\mathrm{NJ}:$ Transaction, Inc.

Lipsitz, Joan S., Margaret Krabill, Leah Lefstein, and Susan Rosenzweiz. 1985. Grade organization in the middle grades: Is there a "best" solution? ERS Spectrum 3 (Winter): 18-22.

Liska, Allen E., ed. 1975. The consistency controversy: Readings on the impact of attitude on behavior. New York: Wiley.

Lounsbury, John H. 1962. So far so good: The junior high school story. Teachers College Journal 34 (November): 44-46.

Lounsbury, John H., and Gordon F. Vars. 1978. A curriculum for the middle school years. New York: Harper and Row.

Lounsbury, John H., and J. Howard Johnston. 1985. How fares the ninth grade? A day in the life of a ninth grader. Reston, VA: National Association of Secondary School Principals.

Lounsbury, John H., and Jean Marani. 1964. The junior high school we saw: One day in the eighth grade. Washington, DC: Association for Supervision and Curriculum Development.

Lowenthal, Marjorie F., Majda Thurnher, and David Chiriboga. 1975. Four stages of life. San Francisco: Jossey-Bass Publishers.

Maslow, Abraham H. 1954. Motivation and personality. New York: Harper.

McCandless, Boyd R. 1970. Adolescents: Behavior and development. Hinsdale, IL: Dryden.

McGee, Jerry C., and Robert Krajewski. 1979. Middle school effectiveness: A three year study. Middle School Journal 4 (November): 16-17.

Mead, Margaret. 1961. Coming of age in Samoa. New York: William Morrow and Company, 1928; reprint, New York: William Morrow and Company (page references are to reprint edition).

Means, H. Willis. 1986. Self-concept and school performance -- Part II. In What research says to the middle level practitioner, ed. J. Howard Johnston and Glenn C. Markle, 85-88. Columbus, OH: National Middle School Association.

Meyer, John W., and Brian Rowan. 1983. Institutionalized organizations: Formal structure as myth and ceremony. In Organizational environments: Ritual and rationality, ed. John W. Meyer and W. Richard Scott, 21-44. Beverly Hills: Sage Publications.

Milgram, Norman. 1971. Locus of control in Negro and white children at four age levels. Psychological Reports 29 (October): 459-65.

Mooney, Patrick F. 1970. A comparative study of achievement and attendance of 10 - to 14 -year-olds in a middle school and in other school organizations. Ed.D diss., University of Florida.

Moore, Dennis W. 1984. Impact of school grade-organization patterns on seventh and eighth grade students in $\mathrm{K}-8$ and junior high schools. Paper presented at the Annual Meeting of the New England Educational Research Organization, Rockport, ME, 27 April. Dialog, ERIC, ED 245346.

More, Douglas M. 1953. Developmental concordance and discordance during puberty and early adolescence. Monographs of the Society of Child Development, Inc. 18: 35-36.

Mussen, Paul H., and Mary C. Jones. 1957. Self-conceptions, motivations, and inter-personal attitudes of late and early maturing boys. Child Development 28 (June): 243-56.

Muuss, Rolf E. 1971. Adolescent development and the secular trend. In Adolescent behavior and society: A book of readings, ed. Rolf E. Muuss, 51-64. New York: Random House, Inc.

Myers, Norman K. 1970. The physical, intellectual, emotional, and social maturity levels of eighth, ninth, and tenth grade students with implications for school grade organization. Ed.D. diss., University of Missouri.

Nash, Charles Ray. 1974. A comparison of student attitudes toward self, peers, teachers, principals, and school environment in selected middle schools and junior high schools in Mississippi. Ed.D. diss., Mississippi State University.

National Commission on Excellence in Education. 1983. A nation at risk: The imperative for educational reform. Washington, DC: U.S. Government Printing Office.

National Committee for Citizens in Education. 1980. Report on symposium of effective schools. Baltimore: National Committee for Citizens.

National Institute of Education. 1978. Violent schools -- safe schools: The safe school study report to the congress, vol. 1. Washington, DC: U.S. Government Printing Office.

Noar, Gertrude. 1953. The junior high school -- today and tomorrow. New York: Prentice-Hall, Inc.

Offer, Daniel, and Judith Baskin Offer. 1975. From teenage to young manhood: A psychological study. New York: Basic Books, Inc.

Offer, Daniel, Eric Ostrov, and Kenneth I. Howard. 1981. The adolescent: A psychological self-portrait. New York: Basic Books.

O'Malley, Patrick M., and Jerald G. Bachman. 1979. Self-esteem and education: Sex and cohort comparisons among high school seniors. Journal of Personality and Social Psychology 37 (July): 1153-59.

Ouchi, William. 1981. Theory $z$ : How American business can meet the Japanese challenge. Reading, MA: Addison-Wesley.

Owens, Robert G. 1970. Organizational behavior in schools. Englewood Cliffs, NJ: Prentice-Hall, Inc.

Owens, T. R., and R. A. Gustafson. 1971. A comparison of self-esteem levels of Mexican-American children in grades three, six, and nine. Paper presented at the Annual Meeting of the American Psychological Association meeting, Washington, DC, 5 September.

Peterson, Christopher, and James T. Austin. 1985. Review of Coopersmith self-esteem inventories. In The ninth mental measurements yearbook, ed. James V. Mitchell, Jr., 396-97.
Lincoln, NE: The Buros Institute of Mental Measurements.

Piaget, Jean. 1951. The child's conception of the world. London: Routledge and Kegan Paul.
. 1977. The science of education and psychology of the child. New York: Penguin Books.

Popper, Samuel H. 1967. The American middle school: An organizational analysis. Waltham, MA: Blaisdell Publishing Company.

Rhone, Richard. 1985. A comparison of students' perceptions of school climate in middle-level schools with different grade organizational patterns in selected school systems in Alabama. Ed.D. diss., University of Alabama.

Rogers, Carl R. 1951. Client-centered therapy. New York: Houghton-Mifflin Company.

Rogers, Dorothy. 1972. Adolescence: A psychological perspective. Monterey, CA: Brooks/Cole Publishing Company.

Roscoe, John T. 1975. Fundamental research statistics for the behavioral sciencs. New York: Holt, Rinehart, and Winston, Inc.

Rosenberg, Morris. 1965. Society and the adolescent self-image. Princeton, NJ: Princeton University Press.
. 1985. Self-concept and psychological self-being in adolescence. In The development of the self, ed. Robert L. Leahy, 205-46. Orlando: Academic Press, Inc.

Rosenberg, Morris, and Roberta G. Simmons. 1972. Black and white self-esteem: The urban school child. Washington, DC: American Sociological Association.
. 1975. Sex differences in the self-concept in adolescence. Sex Roles: A Journal of Research 1 (June): 147-59.

Roth, Robert M. 1959. Role of self-concept in achievement. Journal of Experimental Education 27 (June): 265-81.

Rotter, Julian B. 1966. Generalized expectencies for intenal versus external control of reinforcement. Psychological Monographs 80: 609.

Rubin, Rosalyn A. 1978. Stability of self-esteem ratings and their relation to academic achievement: A longitudinal study. Psychology in the Schools 15 (July): 430-33.

Rutter, Michael, Barbara Maughan, Peter Mortimore, and Janet Ouston. 1979. Fifteen thousand hours: Secondary schools and their effects on children. Cambrige, MA: Harvard University Press.

Sanders, Stanley G. 1966. Differences in mental and educational development from grades six through nine and implications for junior high school organization. Ed.D. diss., University of Iowa.

Sarason, Seymour B. 1971. The culture of the school and the problem of change. Boston: Allyn and Bacon.

Sardone, Nicholas. 1976. Comparative analysis of basic skills and creativity of eighth grade sudents in selected junior high schools and middle schools in the state of New Jersey. Ed.D. diss., Fordham University.

Schmuck, Richard. 1963. Some relations of peer liking patterns in the classroom to pupil attitudes and achievement. School Achievement 71: 337-59.

Schneider, Benjamin, and Robert A. Snyder. 1975. Some relationships between job satisfaction and organizational climate. Journal of Applied Psychology 60 (June): 318-28.

Schoo, Philip Henry. 1970. Students' self-concept, social behavior, and attitudes toward school in middle and junior high schols. Ph.D. diss., University of Michigan.

Shovlin, Daniel W. 1967. The effects of the middle school environment and the elementary school upon sixth-grade students. Ed.D. diss., University of Washington.

Simmons, Roberta G., Dale A. Blyth, Edward F. Van Cleave, and Diane Mitsch-Bush. 1979. Entry into early adolescence: The impact of school structure, puberty, and early dating on self-esteem. American Sociological Review 44 (December): 948-67.

Simmons, Roberta G., Richard Bulcroft, Dale A. Blyth, and Diane Mitsch-Bush. 1979. The impact of school structure on the self-esteem of vulnerable adosescents. Paper presented at the Annual Meeting of the American Sociological Association, Boston, MA, 27-31 August. Dialog, ERIC, ED 183450.

Simmons, Roberta G., Florence Rosenberg, and Morris Rosenberg. 1973. Disturbance in the self-image at adolescence. American Sociological Review 38 (October): 553-68.

Smart, Mollie S., and Russel C. Smart. 1973. Adolescence. New York: Macmillan Publishing Co.

Smith, James. 1975. A comparison of middle school instruction and conventional instruction with respect to the academic achievement and self-concept of pre and early adolescents. Ed.D. diss., University of Akron.

Smollar, Jacqueline, and James Youniss. 1985. Adolescent self-concept development. In The development of the self, ed. Robert L. Leahy, 247-65. Orlando: Academic Press, Inc.

Snygg, Donald, and Arthur Combs. 1949. Individual behavior. New York: Harper and Brothers.

Sorensen, Robert C. 1973. Adolescent sexuality in contemporary America. New York: World Publishing.

Spagnoli, Joseph. 1967. Today's early adolescent and the needs of youth as identified through the junior high school. Ed.D. diss., Southern Illinois University.

Spatz, K. Christopher, and James O. Johnston. 1973. Internal consistency of the Coopersmith Self-Esteem Inventory. Educational and Psychological Measurement 33 (Winter): 875-76.

SPSS Inc. 1983. SPSSX user's quide. Chicago: McGraw-Hill Book Company.

Stanwyck, Douglas J., and Donald w. Felker. 1973. Intellectual achievement, responsibility, and anxiety as functions of self-concept of third to sixth grade boys and girls. Paper presented at the Annual Meeting of the American Educational Research Association, New York, 4-7 February. Dialog, ERIC, ED 080903.

Stewart, William J. 1975. What causes a middle school to be ineffective: Student-centered teacher approach. Clearinghouse 49 (September) : 23-25.

Stock, Dorothy. 1949. An investigation into the interrelations between the self-concept and feelings directed toward other persons and groups. Journal of Consulting Psychology 13 (February): 176-80.

Stone, L. Joseph, and Joseph Church. 1968. Childhood and adolescence. New York: Random House.

Strang, Ruth. 1957. The adolescent views himself: A psychology of adolescence. New York: McGraw-Hill Book Company.

Swenson, Gardner A. 1963. Acceleration versus enrichment. The Bulletin of the National Association of Secondary School Principals 47 (October): 9-10.

Swidler, Ann. 1979. Organization without authority: Dilemmas of social control in free schools. Cambridge: Harvard University Press.

Taguiri, Renato, and George H. Litwin, eds. 1968. Organizational climate: Explorations of a concept. Boston: Harvard University, Division of Research.

Tanner, Daniel. 1984. The American high school at the crossroads. Educational Leadership 41 (March): 4-13.

Tanner, James M. 1962. Growth at adolescence. Oxford: Blackwell Scientific Publications.

Toby, Jackson. 1964. Contemporary society. New York: John Wiley and Sons, Inc.

Toepfer, Conrad F. 1980. Brain growth periodization data: Some suggestions for reorganizing middle grades education. The High School Journal 63 (March): 224-26.

Trauschke, Edward M., Jr. 1970. An evaluation of a middle school by a comparison of the achievement, attitudes, and self-concept of students in a middle school with students in other school organizations. Ed.D. diss., University of Florida.

Valentine, Jerry, Donald C. Clark, Neal C. Nickerson, Jr., and James W. Keefe. 1981. The middle level principalship, volume I: A survey of middle level principals and programs. Reston, VA: National Association of Secondary School Principals.

Van Hoose, John, and David Strahan. 1988. Young adolescent development and school practices: Promoting harmony. Columbus, OH: Mational Middle School Association.

Waller, Willard Walker. 1932. The sociology of teaching. New York: Wiley.

Weinstein, Rhonda S. 1976. Reading group membership in first grade: Teacher behaviors and pupil experience over time. Journal of Education Psychology 68 (February): 103-16.

Weldy, Gilbert R. 1990. Stronger school transitions improve student achievement. NASSP Bulletin 74 (February): 60-73.

White, William D. 1964. The effect of the grade combination of the junior high school upon pupil progress in seventh grade. Ed.D. diss., University of Denver.

Wiles Jon, and Joseph Bondi. 1986. Making middle school work. Alexandria, VA: Association for Supervision and Curriculum Development.

Wood, Fred H. 1973. Comparison of student attitudes in junior high and middle schools. High School Journal 56 (May): 355-61.

Wynne, Edward. 1981. Looking at good schools. Phi Delta Kappan 62 (January): 377-81.

Youniss, James. 1980. Parents and peers in social development. Chicago: University of Chicago Press.

Zimmerman, Ira Lee, and George N. Allenbrand. 1965. Personality characteristics and attitudes toward achievement of good and poor readers. Journal of Educational Research 59 (September): 20-30.


[^0]:    "How fares the ninth grade?" . . . Educators currently know relatively little about the ninth grade as an entity. It is, in many respects, a forgotten grade. And, in the eyes of many, it is an unwanted grade (Lounsbury and Johnston 1985, p. 1).

