ORGANIZATIONAL STRUCTURES AND STUDENT TRANSITIONS FROM ELEMENTARY TO MIDDLE SCHOOL: MEETING YOUNG ADOLESCENTS' SELF-CONCEPT AND CLASSROOM ENVIRONMENT NEEDS

by

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(Under the Direction of Stacey Neuharth-Pritchett)

ABSTRACT

The purpose of this study was to investigate the effect of different organizational structures on young adolescents' perceptions of their self-concept and classroom environment across the transition from elementary to middle school. Data were collected from groups of elementary students who were transitioning into one middle school. Cohorts were formed comprised of students from each school across two years of the transition project. Observations of the activities both within the classrooms as well as a review of transition activities conducted by the school counselors and administration did not suggest a qualitatively different experience with regard to the transition program for students over the two years of the study. Data were collected using the Piers-Harris Self-Concept Scale and the Modified Classroom Climate Inventory and analyzed between the two groups of elementary school students using one-way analysis of variance. In addition, time effects were measured using multivariate analysis of variance. The data suggests that students' self-concept and perceptions of classroom climate did not vary prior to or after the transition to middle school based on the type of instructional structure they experienced in fifth grade. However, analyses suggest that the time effect for

students' self-concept did significantly increase across the transition to middle school. Students' ratings on classroom climate suggested a mixed effect of time on students' perceptions of classroom climate, as only two of the five subscales increased significantly. The results suggest the type of elementary school structure students experience does not significantly impact students' ratings of self-concept or classroom climate across the transition to middle school. The positive overall time effect on students' self-concept suggests that the structures of the middle-school environment, including teaming and advisory, positively effect students' perceptions of self-concept. The mixed effect of time on students' perceptions of classroom climate may indicate that the emphasis at the beginning of sixth grade appears to be on the socialization of students into the middle-school culture as opposed to the cognitive aspects of schooling.

INDEX WORDS: Transition, Middle-school, Young adolescents, Developmentally appropriate practices

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DEDICATION

To my parents, whose love and encouragement fostered a

true appreciation for the value of learning.

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CHAPTER 1

INTRODUCTION

"Our main concern as teachers seems to be to skirt all the messiness-and exuberance-of these years, mostly by regimenting our kids' behavior: tracked groupings, busy work and seat work, few opportunities for students to initiate activities or work together, and fewer opportunities for any demonstration of affect in our classrooms. Our policies tell (young adolescents) that their active participation is too risky an enterprise. It's safer to keep them passive and under control, thereby avoiding the certain discovery that our students' tastes and values are alarmingly, not our own."

-Nancy Atwell (1987), In the Middle

In the spring of every year, young adolescents brace for a traditional rite of passage: leaving the nurturing, caring confines of the elementary school for the larger, competitive, and sometimes intimidating middle school. Although transitions may be difficult at any age, the transition to middle school is associated with a myriad of physical and emotional changes that typically occur during early adolescence. These changes make the move to classrooms with new teachers and new school environments particularly challenging. Fortunately, many students make smooth transitions into middle schools. For those students who have difficulty with the transition, achievement, self-esteem, and perceptions of school may be negatively affected. Despite the fact that schools attempt to prepare students for new learning environments through transition programs, research indicates that for some young adolescents, poor transitions have negative long-term outcomes, including dropping out of school, drug abuse, and delinquency (Wigfield & Eccles, 1996).

The factors contributing to difficult middle school transitions are widely debated. Blyth, Simmons, and Carlton-Ford (1983) hypothesized that the middle-school transition experience is challenging for some adolescents because of the timing of the move to a new school at the same time as radical physical, cognitive, and emotional changes. When considering the vast number of changes associated with early adolescence, the work of Blyth, Simmons, and Carlton-Ford appears logical. Young adolescents experience rapid physical growth and maturing thought processes, including the ability to think in a more logical and abstract manner, to engage in problem solving, and to draw conclusions (Rice, 1999). The acquisition of these formal cognitive processing skills impacts the personality and social behaviors of young adolescents, thus complicating their peer and adult relationships. Adolescents begin to develop a sense of idealism. They begin to think about the future, society as a whole, social injustices, choices and decisions, and their influence (Midgley & Feldlaufer, 1987). Given the complexity of early adolescence, it is not surprising that the transition to middle school may present problems.

A second line of thinking suggests that difficult transitions into middle school are a function of developmental mismatches (Eccles & Midgley, 1989). Using stage-environment fit theory, Eccles and Midgley assert that it is the developmental mismatch between early adolescence and typical middle-school environments, rather than timing, that is the primary factor in negative transitions to middle school. This theory suggests the importance of investigating the fit between the needs of young adolescents and school environments. Typical stage-environment fit mismatches include increases in teacher control, whole task organization, ability grouping, and declines in personal relationships, decision-making opportunities, and student-teacher relationships (Eccles et al., 1993a). Given this theoretical perspective, a prediction may be made that if the social environments during the transition years do not fit with the psychological needs of young adolescents, students' motivation, interest, performance, and behavior will be negatively affected (Eccles et al., 1993a).

In order to address the stage-environment mismatches experienced by young adolescents transitioning to middle school, the National Middle School Association's Committee on Future Goals set forth a series of goals to enhance the educational experience of middle-school students. The most recent reiteration of these goals can be found in The Carnegie Corporation's *Turning Points 2000: Educating Adolescents in the 21st Century* (Jackson & Davis, 2000). The main directives for middle schools are to teach a rigorous, standards-based curriculum that addresses the concerns of young adolescents, to assess students in a variety of ways, to use diverse and differentiated instructional methods to prepare all students for achievement, to prepare middle-school teachers for work with young adolescents, to create a sense of community to allow students opportunities to foster close, positive relationships with adults who get to know students academically and socially, and to create a positive, safe environment that encourages parent and community involvement (Jackson & Davis, 2000).

Unfortunately, most middle schools philosophically adhere to a place somewhere on the continuum between traditional departmentalized junior-high schools and the ideal, developmentally appropriate middle schools described by Jackson and Davis (2000). Research indicates that the middle-school movement of the 1990's successfully generated a number of structural changes to address the unique needs of adolescence (Jackson & Davis, 2000). These include changes in grade configurations and organizational structures, such as teaming and advisory, that have positively affected students' academic performance, behavior, and socio-emotional adjustment (Jackson & Davis, 2000). Teaming structures at the middle school typically organize students by grade into "teams" of 2-4 teachers with between 50 and 120 students on each team. This structure creates a family-like atmosphere and increases students' likelihood of developing close relationships with their teachers. Similarly, advisory meetings are

comprised of small groups of students meeting formally and informally with a teacher who serves as an advisor or mentor. Again, the focus is on developing positive, personal relationships with students. These structural changes are fairly widespread and have had a positive impact on students' relationships within schools. Midgley and Edelin (1998) proposed similar findings when they suggested that students' sense of belonging actually increased after the transition to middle school, while emotional well-being stayed the same or improved.

Unfortunately, research in middle school education suggests that changes in structural practices do not translate into changes in the instructional practices that characterize the classroom environment. This stagnation in instructional practices may explain the struggles of some students after the transition into the middle-grades environment (Jackson & Davis, 2000). As a result some young adolescents continue to show declines in grades and in motivational constructs such as school interest, intrinsic motivation, self-perceptions, and confidence in intellect. In addition, increases in behavioral characteristics such as school misconduct, learned helplessness, test anxiety, truancy, and school dropout as compared to elementary school, continue to be problematic for young adolescents. The same may also be true in upper elementary grades as many teachers work in departmentalized structures not aligned with the structural goals of the middle school movement. Teachers may experience a shift towards more developmentally inappropriate classroom instructional practices. Regardless of grade level, structural changes made independent of instructional changes will do little to improve students' learning in middle schools.

Influential within both structural and instructional changes is the recurring theme of young adolescents' needs for positive relationships with adults who know them well academically, socially, and emotionally (Jackson & Davis, 2000). Due to the structural changes

in middle school, the ability to meet this developmental need is present through a team-oriented approach and advisory opportunities. Unfortunately, the same may not be true for many elementary-aged students who are finding themselves in environments that are contrary to this developmental need. In the current era of high stakes testing per the *No Child Left Behind Act*, school leaders and teachers are making decisions to departmentalize elementary classrooms beginning as early as second grade in order to ability group students for the core subjects of math and reading. As a result, young children may have two or three classroom teachers for their content area subjects. Elementary students in the upper grades may find that they have as many as five different teachers for the content area subjects.

The reason for this type of organization in upper-elementary grades is often that the students need to be readied for middle school by experiencing what it is like to change classes. As a result, upon entering middle school, students may have experienced any number of different organizational structures including departmentalized environments, environments with teams of teachers, or environments that are self-contained. Given these organizational structures, there is little evidence of how students' needs are addressed as they move from one type of structure in elementary school to another type of structure in the middle school. Indeed, it may be the degree to which students' needs are met or unmet across these educational structures that has a great influence on the outcomes of middle-school transitions.

Given the complexity of the transition to middle school, it is imperative that we understand how different organizational structures in elementary and middle schools contribute to the psychological needs of young adolescents. This study begins that line of inquiry by examining different organizational structures in elementary school environments and the impact these structures have on students as they make the transition to middle school. By examining differences in adolescents' ratings on psychosocial and classroom environment variables, this study will assist in documenting how organizational structures impact adolescent developmental needs across the transition to middle school.

Rationale

Since the late 1970's, a primary goal of the National Middle School Association (NMSA) was to create a culture in schools that supports the unique developmental needs of young adolescents. Several key changes designed to foster positive, smaller learning environments in middle schools have been shown to positively affect students' academic performance, behavior, and socio-emotional adjustment (Jackson & Davis, 2000). In spite of also educating young adolescents in upper elementary grades, many elementary schools are not following the developmentally appropriate guidelines suggested by NMSA. In addition, researchers note that the positive changes in structure at the middle-school level do not correlate to changes in the quality of instruction for young adolescents. Unfortunately, "most middle-grades classes (still) emphasize passive learning and drill and practice in language arts basic skills, math computation, science facts, and facts of history. Most middle-school teachers infrequently use active and interactive instructional approaches, including writing and editing, student-team learning, and other cooperative learning methods, and technology in science and math" (Mac Iver & Epstein, 1993, p. 525). Furthermore, young adolescents typically move into regressive classrooms in which their teacher may believe that they should have fewer opportunities than afforded them in elementary school (Midgley & Feldlaufer, 1987). Unfortunately, this is in opposition to the instructional approaches necessary for promoting young adolescents' cognitive, social, and emotional growth.

In light of what is known about developmentally appropriate practices for young adolescents and the National Middle School Association's attention to these goals, the increased use of practices typically associated with a junior-high school model, such as departmentalized instruction, may not be as meritorious in upper elementary school grades. Given the nature of young adolescents, such grade organizations and school structures may conflict with their developmental needs. Young adolescents need the experience of being valued and feeling special. Furthermore, it is commonly proposed in the literature that students experience transition difficulty as a result of leaving the confines of a single, supportive elementary teacher who knows each child's cognitive and social needs and move to an environment characterized by brief contact with several teachers (Seidman, Allen, Aber, Mitchell, & Feinman, 1994). The question as to what happens when young adolescents in elementary schools are juggling several teachers a day at an earlier age than perhaps developmentally appropriate remains unanswered. Because many elementary schools use a variety of departmentalized practices in an effort to ready students for middle school, developmental mismatch issues prior to the transition may be arising. Developmental mismatch and its effects on the move to middle schools has yet to be fully researched.

Statement of the Problem

Given the current trend towards departmentalization in upper elementary grades, there is a need for investigating the impact of various elementary organizational structures on students' academic, social and emotional outcomes across the transition to middle school. While true for all children, it is especially critical that young adolescents experience positive, individualized student-teacher relationships to meet their developmental needs. This study is also consistent with the call of researchers (Anderman & Anderman, 1999; Midgley, Feldlaufer, & Eccles, 1989) to pay less attention to the timing of the transition, and more to the academic and social environments of the classroom as critical factors in students' interest and motivation in school. Furthermore, key early adolescence researchers note that "there are developmentally inappropriate changes in a cluster of classroom organizational, instructional, and climate variables, including task structure, task complexity, grouping practices, evaluation techniques, motivational strategies, locus of responsibility for learning, and quality of teacher-student and student-student relationships" (Eccles, et al., 1993a, pp. 92-93) that impact students' motivation, self efficacy, and academic growth. However there is little research evidence on these variables. This study may shed light as to whether departmentalization across the transition enhances or inhibits these typical inappropriate changes. In addition, we may learn valuable information about trends in student self-concept and perceptions of classroom environment as a function of their organizational structures across the transition. Finally, this study may inform the middleschool literature as to the types of reforms (structural and/or instructional) that may or may not be occurring in typical middle schools.

The purpose of this study is to investigate the effects of different elementary organizational structures across the transition to middle school on young adolescents' self-concept and perceptions of the classroom environment. By examining the different structural arrangements in elementary schools and linking them to psychological outcomes for young adolescents, this study will begin to build the literature in a needed area in school transition research. This study will allow middle-level researchers to assess the degree to which structural and instructional reforms are impacting adolescents' perceptions of self-concept and the classroom environment.

Research Questions and Hypotheses

The primary question framing this study centers on the different organizational structures that young adolescents experience as they transition from elementary school to middle school. Specifically, what are the effects of organizational structures on young adolescents' self-concept and perceptions of the classroom environment during the transition from elementary to middle school?

Hypotheses

- Adolescents whose psychological and learning needs are met through developmentally appropriate organizational structures will demonstrate significantly higher perceptions of self-concept than students who experience developmentally inappropriate structures prior to and across the transition to middle school.
 Specifically, these higher perceptions will be exhibited through adolescents' ratings of their physical appearance, popularity, sense of happiness, and intellectual status.
 Adolescents' ratings of anxiety will be lower for those who have experienced developmentally appropriate organizational structures.
- 2) Adolescents experiencing developmentally appropriate organizational structures will demonstrate significantly higher perceptions of classroom climate than students who experience developmentally inappropriate structures prior to and across the transition to middle school. Specifically, these higher perceptions will be exhibited through adolescents' perceptions of the: (1) use of differentiated instruction, (2) opportunities for participation in classroom decision-making, (3) independence, (4) opportunities for investigative learning, and (5) personalized learning.

Significance of the Study

The positive or negative nature of the transition to middle school may impact the academic, psychosocial, and emotional outcomes for young adolescents, yet evidence of current research in this area is lacking. Furthermore, the existing literature does not consider current changes in the traditional grade organization of elementary schools, nor does it adequately represent research conducted in a "middle school" as defined by the National Middle School Association. This study holds significant implications for teacher educators, school counselors, and in-service elementary and middle school teachers. The field of teacher education may certainly benefit from an investigation of adolescents' perceptions of the middle-school environment and their own self-concept. Teacher educators may glean powerful information about what is being taught and learned in teacher preparation programs. Furthermore, this investigation may help them identify gaps or weaknesses in the content of teacher preparation programs as it relates to addressing the needs of young adolescents.

The findings regarding impact on students' motivation, self-efficacy, and academic growth will be of most benefit to school counselors. They can use this study to increase their knowledge of young adolescents' transition experiences, assist classroom teachers with changing classroom practices to meet their students' unique needs, and enhance their counseling of young adolescents. Finally, classroom teachers may gain insight as to how their beliefs and practices are influencing young adolescents' motivation, self-efficacy, and school achievement. By increasing their knowledge about the needs of young adolescents, teachers may make changes to their teaching practices, and thus, enhance the educational experiences of their students. Finally, *Turning Points 2000* (Jackson & Davis, 2000) acknowledges a lack of instructional changes to accompany the structural adjustments of schools in accordance with their mission. This study

may shed light onto one of the hindrances of this move to the instructional model advocated by the middle-school field.

CHAPTER 2

REVIEW OF THE LITERATURE

The transition from an elementary school to a middle school is a monumental step for most young adolescents. Although transitions are difficult at any age, changes that occur during early adolescence make the move to new teachers and to a new school environment particularly challenging. Researchers hypothesize that both the timing of the transition with the onset of adolescence (Blyth, Simmons, & Carlton Ford, 1983), and a developmental mismatch between early adolescence and school environments (Eccles & Midgley, 1989) contribute to academic, social, and emotional declines in young adolescents. The purpose of this study is to investigate the effects of organizational structures on students' self-concept and perceptions on across the transition to middle school. An investigation of this potential developmental mismatch is absent from the literature on school transition.

In this review, there are three main sections. The first section addresses necessary background information on the characteristics of young adolescents and the middle-school movement. The second section provides a brief overview of the literature describing the transition impact on the student outcomes of academic achievement, motivational levels, and perceptions of self-concept, as well as the impact of classroom environment variables on students' transition experiences. Finally, the third section describes the theoretical framework guiding this study.

Adolescence

Adolescence is a gradual and uncertain period of growth, maturation, and transition between childhood and adulthood. Young adolescents, aged 10 to 14, are at a stage of development often called early adolescence. In addition to rapid physical growth, young adolescents' thought processes begin to mature. Piaget's and Inhelder's (1969) development theory suggests that young adolescents are in the formal operational stage of cognitive growth, and, as a result, they are able to think in a more logical and abstract manner, engage in problem solving, and draw conclusions. Furthermore, young adolescents are able to construct theories from facts, use algebraic symbols and metaphors, and project themselves into the future.

The acquisition of these formal cognitive processing skills may have an impact on the personality of and social behaviors of young adolescents. They begin to develop a sense of idealism and they begin to think about the future, about society as a whole, and about social injustices. Adolescents lack skill training and experience, leading to a tendency to fail at simple problems because they tackle them with a complex set of problem solving skills (Eccles & Wigfield, 1997). As young adolescents develop, they become more knowledgeable, skillful, and competent; they desire more control over their lives, want to make more choices and decisions, and be more influential (Midgley & Feldlaufer, 1987). Although the capacity for creativity flourishes during this stage, young adolescents typically become less creative due to peer and societal pressures (Rice, 1999).

Middle School Movement

Given the characteristics of young adolescents, the implications for educating students in grades 5 through 8 are profound. The Carnegie Corporation's *Turning Points 2000: Educating*

Adolescents in the 21st Century best synthesizes the academic and developmental needs of young adolescents through a series of recommendations for middle-grades schools (Jackson & Davis, 2000). Middle schools should teach a rigorous, standards-based curriculum that addresses the concerns of young adolescents. This curriculum should be assessed in multiple ways to allow students to show what they know. Diverse and differentiated instructional methods should be used to prepare all students for achievement. Next, middle school teachers should be specifically prepared to work with young adolescents. Middle schools should be organized to create a sense of community and to allow students opportunities to foster close, positive relationships with adults who get to know students academically and socially. Finally, middle schools should provide a positive, safe environment that encourages parent and community involvement.

Understanding the characteristics of young adolescents and of ideal middle schools provides a backdrop for reviewing the transition literature. Conceptualizing typical adolescents and exemplary middle schools provides a useful lens through which to interpret the findings of transition studies from the 1980's to the present. With these characteristics in mind, the findings regarding student difficulties transitioning from elementary to middle school may be more meaningful.

Transition Impact on Students Outcomes

The research literature has traditionally measured the transition impact on young adolescents in three domains: academics, perceptions of self-concept, and motivation. Academic outcomes include measures of grades, grade point averages, and standardized test scores. Embedded in perceptions of self-concept are self-efficacy, self-esteem, and self-competence. Motivation includes interest, attitude, and initiative towards school in general and towards specific content areas.

Academic Outcomes

Research highlights the effect that the transition from elementary school to a middlegrades school has on students' academic achievement. For example, in a study examining the impact of school transition on poor, urban youth, Seidman, Allen, Aber, Mitchell, and Feinman (1994) determined that declines in class preparation and GPA were common regardless of race and gender. In a similar study, Wampler, Munsch, and Adams (2002) examined the report card grades of White, Black, and Latino students during the first year of school transition. Results indicated a drop in grades independent of race. Alspaugh (1998) also identified an achievement loss as students moved from elementary to middle-grades school, with the loss being larger if multiple feeder schools were involved. In a recent transition study, student grades declined, in spite of school structures indicative of the impact of middle-school reform (Barber & Olsen, 2004). Throughout the last decade, the potential for declining academic achievement across the transition is one of the many problems that young adolescents face as they move to meet new teachers within a new school environment.

Motivational Outcomes

Numerous studies have tied decreases in motivation to the various independent variables associated with the transition to middle-grades environments (Eccles et al., 1993b). While some researchers argue that the problem lies in the timing of the school transition with the transition into adolescence (Blyth, Simmons & Carlton-Ford, 1983), others argue that the classroom and social environmental characteristics are responsible for declines in motivation (Eccles & Midgley, 1989). Additional work by Eccles and her colleagues (1993b) supports this trend. Specifically, in a two-year, four-wave longitudinal study investigating the impact of classroom environment on young adolescents' motivation across the transition to middle school, Eccles and her colleagues (1993b) found that low teacher efficacy and poor student-teacher relationships were possibly connected to declines in student motivation. Mac Iver and Reuman (1988) suggested that mathematics classrooms that allowed fewer decision making opportunities than young adolescents' preferred levels led to large, consistent declines in intrinsic interest in mathematics (in Eccles et al., 1993b). It is clear that the motivational declines typically cited in the transition literature can be attributed to a number of variables associated with teachers and the classroom environment.

Self-Concept Outcomes

In addition to declining academic achievement, researchers have traditionally identified self-esteem, self perception, and perceived competence as being negatively affected by the transition to middle schools. For example, Seidman et al. (1994) found that decreases in self-esteem and self-perception associated with the transition to middle school were independent of grade level, ability, and age. In comparing perceived academic competence across the transition, Anderman and Midgley (1997) found that declines in self-concept were generally associated with students who had achievement-goal rather than mastery-goal orientations. When looking at both general self-concept and content-specific self-concept across the transition, Eccles, Wigfield, Flanagan, Miller, Reuman, and Yee (1989) suggested that general self-esteem was the lowest immediately after the transition. In their work, Eccles and her colleagues (1993b) found ability ratings showed a linear decline in English and mathematics, self-concept in a social setting showed a cubic trend, and the importance ratings for social activities, sports, and math showed linear declines.

In contrast to the typical findings regarding self-concept, Barber and Olsen (2004) found that students transitioning after grade 5 actually exhibited increases in self esteem and decreases in depression and loneliness. Because this is a recent study, these results may be indicative of the structural influences of middle school reform on affective student outcomes. Interestingly enough, these students did have declines in psychological functioning after the transition to grade 7, even though it was not located in a new school. The researchers hypothesize that this was the year when the structure of schooling changed from more personalized, family pods to a more typical, departmentalized junior-high school (Barber & Olsen, 2004). Although the decline in self-concept was not associated with the transition into a middle-grades school in that particular study, the delayed decline still warrants further investigation as to the role of teacher and classroom variables in young adolescents' middle-grades school experiences.

School-Related Variables Impacting Students' Transition Experiences

In order to better understand the student outcome variables previously described and to begin to answer the research question, it is necessary to examine elements of the classroom environment that impact transitioning young adolescents in more detail. Unfortunately, very few studies have investigated how the school-related variables impact students' transition experiences. The limited research that does exist begins to examine the role of the multitude of classroom environment variables in young adolescents' move to middle schools. Classroom environment variables previously studied include teacher beliefs as they impact the learning environment, teacher efficacy, student-teacher relationships, classroom climate, student input opportunities, and goal-orientation. Because classroom environment variables may have a tremendous impact on the transition experiences of and outcomes for young adolescents, it is important to understand previous studies, so as to inform current and future research projects.

Teacher Beliefs

The beliefs held by teachers about their students and their teaching practice greatly inform classroom environments. Midgley, Feldlaufer and Eccles (1988) compared the beliefs of pre- and post-transition mathematics teachers in four domains: trust, control and discipline, teacher efficacy, and the nature of student ability. Data were collected as a part of the Transitions at Early Adolescence (TEA) Project, which was conducted in middle-income communities in southeastern Michigan. Pre-transition mathematics teachers (grade 6) and post-transition mathematics teachers (grade 7) participated. Results showed that for pre-transition, beliefs about control, autonomy, trust, and efficacy were correlated. In other words, a highly efficacious teacher likely believed that students should have more control and autonomy, and should be trusted more than a teacher with lower efficacy did. For post-transition teachers, control and autonomy were correlated, as were efficacy and trust. There was no correlation among all four domains for post-transition teachers. In all, post-transition teachers' beliefs were more negative than pre-transition teachers' beliefs. Results showed that post-transition teachers, regardless of years of teaching experience, trusted students less, focused more on student control, and had a lower sense of teaching efficacy than pre-transition teachers. In addition, male teachers were more control-oriented than female teachers. The implications for the transition into middlegrades schools are profound, given that students may be moving from teachers with more positive beliefs to those with more negative beliefs.

Teacher Self-Efficacy

Teacher self efficacy, a teacher's beliefs about their abilities as a teacher, has also been investigated in the transition literature. Looking more specifically at the work of Midgley, Feldlaufer, and Eccles (1988) additional insight may be gained into teacher efficacy. They determined that post-transition teachers had a weaker sense of teacher efficacy than pretransition teachers. A 15% variance in the scale for teacher efficacy was attributed to the age of students taught. That is, teachers were 15% more likely to be efficacious if they taught students who were preparing to transition into middle-grades schools than were teachers who taught in a middle-grades school. Midgley, Feldlaufer and Eccles hypothesized that a number of factors contributed to this startling difference. These factors included training, students, departmentalization, negative public views of young adolescents, school climate, and a homogenization of teacher values. Further work is necessary to understand the relationship between teacher efficacy and effects on students' perceptions of teachers, school climate, achievement, motivation, and self-concept.

As a part of the larger Michigan Study of Adolescent Life Transition in the mid- 1980s, Eccles et al. (1993b) compared the self-efficacy of mathematics teachers across the transition from grade 6 to grade 7 and found this variable to have the potential to cause huge shifts in student motivation and self perceptions. Their findings revealed that 78 % of young adolescents moved to grade 7 mathematics classrooms with low efficacy teachers. This percentage included a combination of students who moved from low efficacy and high efficacy sixth-grade teachers to low efficacy seventh-grade teachers. These students had more negative attitudes about their own abilities and about mathematics than students who moved to high efficacy teachers in grade 7. Eccles and her colleagues (1993b) also found that teacher efficacy had a much stronger influence on low achieving students than on high achieving students. This finding is particularly important given what is known about outcomes for students who are struggling in school. Clearly middlegrades teachers' beliefs about their abilities to work with young adolescents in a specific content area have the potential to impact students' perceptions of teachers, classroom climate, as well as their self-concept, and motivation.

Student-Teacher Relationships

Midgley and Eccles (1990) describe student-teacher relationships as one of the most critical factors in determining students' attitudes about the transition experience, yet the nature of relationships between students and teachers varies between the pre- and post-transition years. Feldlaufer, Midgley, and Eccles (1988) investigated student-teacher relationships among grade 6 (pre-transition) and grade 7 (post-transition) mathematics classrooms in middle income, southeastern Michigan communities. The researchers (1988) determined that student-teacher relationships changed negatively as a result of differences in methods of instruction, number of students involved in lessons, and duration of time spent with the teacher. Students and observers described student-teacher relationships in grade 7 as being less friendly, less supportive, and less caring than grade 6 student-teacher relationships. These findings are in direct opposition to the needs of developing young adolescents.

Similar conclusions are found in a qualitative, longitudinal study by Oldfather and McLaughlin (1993). Students voiced concern over diluted relationships with teachers after the transition to junior high school. In this particular study, students were co-researchers in an investigation of their experiences moving from a self-contained, whole language elementary school, to a departmentalized junior high school. These students described diluted student-teacher relationships as one of the key problems in their junior high transition. In the end, the students expressed what the literature tells us about young adolescents: meaningful relationships with adults who know them well are important factors in their attitudes of and perceptions towards school.

Attitudes towards specific subjects also appear to be affected by the perceived changes in student-teacher relationships before and after the transition to middle school. For example, as part of the TEA project, Midgley, Feldlaufer, and Eccles (1989) investigated a subset of students who were transitioning to junior high school after sixth grade. The students, largely middle class and Caucasian, reported different levels of valuing for mathematics based on achievement level groups: high vs. low, as well as the perceived support they received from the teacher. More specifically, if the students had high support prior to and after the transition, they changed little in their valuing of mathematics and had the most positive perceptions about mathematics; however, students with low support each year showed a steady decline in and had the most negative perceptions of mathematics. The sharpest decline in perceptions of the value, usefulness, and importance of mathematics was found in the group moving from more supportive to less supportive teachers. The quality of the student-teacher relationships, specifically in teacher support of students, can facilitate academic achievement across the transition. Fortunately, in a recent study indicative of the impact of middle-school reform on transition experiences, Barber and Olsen (2004) found teachers to be more supportive after the transition to sixth grade. This may be an indicator of the need for research in middle-grades schools. While this example is a positive one, the overwhelming majority of the transition literature points to negative teacher-student relationships after the transition to middle-grades school as a factor in declining motivation, achievement, and self-concept.

Classroom Climate

When Midgley, Feldlaufer, and Eccles (1988) first investigated the social, emotional, and academic outcomes for students transitioning from elementary school to middle-grades school, they hypothesized that the nature of the transition to junior high school, in addition to the timing of the transition, contributed to adolescents' difficulties adjusting to a new school environment. Feldlaufer, Midgley, and Eccles (1988) broadened the scope of transition research from teachers' beliefs to teachers' practices as they pertain to the classroom environment. They examined students', teachers', and observers' perceptions of the classroom environment before and after the transition to junior high school. Their results suggest that post-transition students have less autonomy, fewer opportunities for input, and fewer cooperative group interactions than pre-transition students. These findings marked a stark contrast to the needs of young adolescents as advocated by the middle-school movement: more ownership in decisions, positive adult relationships, and critical thinking opportunities. Finally, while Feldlaufer et al. determined that comparisons among peers academically and socially increased in middle-grades school, grading frequency remained stable and student competition actually decreased.

The previously discussed qualitative study by Oldfather and McLaughlin (1993) corroborates the findings of the previous research. In tracing students' perceptions of the classroom environment across the transition to a middle-grades school, the students described a dilution of peer relationships due to grades, competition, and collaboration based on task-orientation versus achievement-orientation (Oldfather & McLaughlin, 1993) . They also noted that the elementary school environment was markedly different from the middle-grades school environment, where teacher-centered instruction dominated. The students also described their new environment as providing few opportunities to negotiate with teachers, having no voice in the rules, and placing a heavy emphasis on facts and right answers. These students did note positive experiences with their core classes, most of which were learner-centered. This is not surprising, given the literature on developmental needs of young adolescents. Overall, these students described an environment that was less developmentally appropriate than their

elementary school, and thus one would expect declines in student motivation, achievement, and self-concept.

Opportunities for Student Input

When looking specifically at opportunities for student input as an embedded feature of classroom environment, similar results were found in the TEA project. In this particular study, Midgley and Feldlaufer (1987) analyzed data from 2,210 fifth and sixth graders transitioning into a new middle-grades school and data from their mathematics teachers before and after the transition. Results indicated that students and teachers perceived fewer actual decision making opportunities in terms of where to sit, homework, classwork, rule construction, and what to do after work was completed. At the same time, while students expressed a desire for more decision making opportunities and input, teachers expressed beliefs that post-transition students should have fewer opportunities for input than they did in elementary school. Clearly all of these studies highlight the negative changes in classroom environment typically associated with transitioning to a middle-grades school. Unfortunately, these studies bring to light the issue of stage-environment mismatch faced by many young adolescents leaving the elementary school environment.

Goal Orientation

Recent transition literature investigated the role of task-goal orientation in young adolescents' descriptions of motivation. Goal orientation theory posits that students' perceptions of classroom goal structures influence their personal goal orientations (Anderman & Anderman, 1999). When students are in classrooms where teachers emphasize improvement, effort, and learning for intrinsic reasons, students are more likely to adopt personal task goals and are referred to as mastery or task-goal oriented. On the other hand, when students are in classrooms where teachers emphasize grades, ability differences, and outperforming others, students are more likely to adopt personal ability goals and are referred to as ability-goal oriented (Anderman & Anderman, 1999).

In a similar study, Anderman and Midgley (1997) used goal orientation theory to add to the understanding of how the learning environment impacts adolescents transitioning into middle school. Their study measured the responses of 341 young adolescents to the Patterns of Adaptive Learning Survey (PALS) during the spring of their fifth-grade year and sixth-grade year. In this survey, personal task and performance goal orientation, perceptions of the task and goal structure, and perceived academic competence were measured in English and in mathematics. They found a high correlation between task goal orientations in English and mathematics, as well as a high correlation between ability goal orientations in English and mathematics. In addition, Anderman and Midgley (1997) found that young adolescents perceived that their post-transition classrooms as focused more on relative ability and less on mastery and improvement. Furthermore, they found a decline in perceived academic competence in both English and mathematics, with high-ability students being particularly vulnerable to this trend across the transition. While the Anderman and Midgley acknowledge that there were some limitations to this study, their work begins to examine the connections between goal-orientation, student motivation and learning environments across the transition.

In a study of 660 fifth grade students transitioning into sixth grade at the middle school, Anderman and Anderman (1999) investigated how both academic and social variables predict students' task and ability orientations as they relate to goals emphasized in their classrooms across the transition. The students, sampled from a mix of ethnically and economically diverse schools, transitioned from self-contained elementary settings to departmentalized middle
schools. Following the transition to middle school, students reported lower levels of task goal orientation. Furthermore, their perceptions of the goals emphasized in the classrooms predicted their personal goal orientations. The students' social perceptions also influenced goal orientation. Students who had a sense of belonging to school and had endorsed social responsibility goals were more task-oriented than their peers who were more focused on peer relationships and social status goals. Ultimately, Anderman and Anderman (1999) concluded that declines in motivation are linked to instructional practices that are inappropriate for young adolescents, and that teachers must be attuned to the social aspect of the transition experience to increase our understanding of student motivation across the transition.

Urdan and Midgley (2003) examined how changes in perceived classroom goal structures relate to changes in students' motivation, affect, and achievement across the transition and throughout middle school. Students were divided into three groups: those perceiving an increase in goal structure from fifth to sixth grade, those perceiving no change, and those perceiving a decrease in goal structure from fifth to sixth grade. In all, the researchers found that students who perceive a decrease in mastery goal orientation also experienced decreases in motivation and achievement outcomes. In contrast, students who perceived an increase in master goal orientation generally avoided decreases in motivation and achievement outcomes and in some cases, had higher positive affect and mastery goal orientation (Urdan & Midgley, 2003). These recent investigations into goal-orientation theory are beginning to shed more light onto the role of teachers and their classroom environment on student outcomes across the transition.

Theoretical Perspective

Given the limited literature on the outcomes of successful and unsuccessful transitions to middle school, the limited literature on psychological issues associated with transition, the

limited literature on implementation of a true middle-school model, and the beginning research that focuses on person-environment fit issues associated with transition, there is a need to situate research in a theoretical frame that accounts for both the person and the environments as transitions are examined.

The theoretical framework guiding this research, stage-environment fit theory. This particular theoretical framework was chosen for several reasons. First, given its extensive use in the transition literature, stage-environment fit theory can be seen as a sound, respected framework for examining issues in school transition. Furthermore, because this study focuses on the appropriateness of elementary school organizational structures for young adolescents, the developmental aspect of stage-environment fit theory has applicability for examining the outcomes of this study. Finally, stage-environment fit theory emphasizes examination of a phenomenon from a developmental psychological perspective, which is also the goal of this study.

Stage-environment fit theory evolved from the person-environment fit paradigm. This paradigm states that "behavior, motivation, and mental health are influenced by the fit between the characteristics individuals bring to their social environments and the characteristics of social environments" (Eccles et al., 1993a, p. 91). Eccles and Midgley (1989), adding a developmental component to this theory, suggested that stage-environment fit theory might best explain the struggles of young adolescents. This theory suggests the importance of investigating the fit between the needs of young adolescents and their school environment. Given this theoretical perspective, a prediction might be that if the social environments during the transition years do not fit with the psychological needs of young adolescents, then students' motivation, interest, performance, and behavior will be negatively affected (Eccles et al., 1993a).

According to Eccles et al. (1993a), "teachers should provide the optimal level of structure for children's current levels of maturity while providing a sufficiently challenging environment to pull the children along a developmental path toward higher levels of cognitive and social maturity (p. 92)." This approach relies heavily on teachers use of developmentally appropriate practices which are rooted in cognitive learning theories. Based on the work of Piaget and Vygotsky, cognitive learning theories are guided by the premise that development refers to patterned changes over time (Schunk, 2000). Uniting the work of Piaget and Vygotsky is the concept of constructivism which assumes that learners construct their own knowledge based on interactions with their environment that challenge their thinking (Schunk, 2000). With constructivist learning, the motivation to engage in intellectual tasks is greatest when tasks are challenging but achievable, and when individuals are given autonomy in selecting and completing tasks (Deci, 1975, Deci & Ryan, 1985 in (Stipek, 1993).

Developmentally appropriate practices emphasize the developmental level and learning style of the whole child in terms of physical, social, emotional and cognitive needs (Charlesworth, 1998b). This view asserts that children learn actively through physical and social experiences to construct their own understandings of the world around them. Furthermore, instruction should be informal, relative to students' lives, integrated across content areas, and guided by student choice and interest.

On the other hand, didactic practices, or often perceived developmentally inappropriate practices, are directly tied to behaviorist theories of learning. According to behaviorism, learning occurs as responses to stimuli. Applied to a classroom setting, children learn when they repeat correct responses to teacher-produced stimuli and when children's errors are corrected immediately so as to keep them from learning incorrect knowledge (Stipek, 1993). Typically,

this approach to instruction incorporates teachers' use of repetition, direct instruction, tasks taught in small sequential steps, and behaviors shaped by external reinforcement (Buchanan, Burts, Bidner, White, & Charlesworth, 1998; Stipek, 1993). These practices are further characterized by teacher-directed learning that involves rote memorization, drill and practice, the use of workbooks and worksheets, lack of student choice and lack of collaboration with peers (Burts, Hart, & Charlesworth, 1990; Charlesworth, 1998a; Stipek, 1993). Finally, didactic practices allow little room for integration of content areas or hands-on, concrete learning experiences, and practices where teachers typically manage student behavior by punishing for unacceptable actions and offering extrinsic rewards for following the rules (Charlesworth, 1998a).

Typical stage-environment fit mismatches experienced by young adolescents include such developmentally inappropriate practices as increases in teacher control, discipline, whole task organization, ability grouping, public grading, and grading standards, and decreases in positive personal relationships, decision-making opportunities, teachers' self-efficacy, challenging assignments, and student-teacher relationships (Eccles et al., 1993a). Clearly the developmental appropriateness of the classroom environment established by the teacher is tantamount to matching students' needs.

Summary and Conclusions

The transition literature can be summarized in two key areas: student outcomes and perceptions of classroom climate. The three primary domains emerging in the literature in terms of student outcomes across the transition to middle school are academic achievement, self-concept, and motivation. Typically students transitioning into middle school experience declines in academic achievement in terms of preparation (Seidman et al., 1994) and grades (Barber &

Olsen, 2004; Wampler, et al., 2002; Alsplaugh, 1998), self-concept (Seidman et al., 1994; Eccles et al., 1989) and motivation (Urdan & Midgley, 2003; Eccles & Midgley, 1993b; Mac Iver & Reuman, 1988). In terms of classroom environment across the transition, key domains emerging in the literature include teaching efficacy, student-teacher relationships, and classroom climate. According to the literature, middle school teachers tend to have lower teaching self-efficacy (Midgley, Feldlaufer, & Eccles, 1988). In the past, students perceived relationships with teachers as more negative (Midgley & Eccles, 1988), however, current research suggests that this perception may be changing (Barber & Olsen, 2004). Finally, students perceived negative changes in the classroom climate in terms of grading, input opportunities, peer relationships across the transition to middle school (Eccles, et al., 1993b), and goal-orientation (Urdan & Midgley, 2003).

On the surface, it appears that many variables have been investigated in the middle school transition literature; however, a close examination of the literature reveals that many of these smaller studies are derived from one large transition study conducted in the late 1980s. Many of these topics have been addressed only once or twice in the literature. Furthermore, there is no consistency in the grade configurations used in these studies, and very few studies address transition issues in the context of middle schools as defined by *Turning Points 2000*. Finally, prior to the studies of Midgley et al. (1988) and Feldlaufer et al. (1988), the bulk of the transition research focused on the issue of timing. Eccles and Midgley (1993a) hypothesized that another equally critical factor in the transition experience was being overlooked and under-investigated: stage environment-fit. They argued that the nature of the transition, particularly changes in teachers' beliefs and school environment, also contributed to some young adolescents' struggles with the move to middle-grades schools. Clearly the transition literature suggests negative

CHAPTER 3

METHOD

This study was designed to examine the effect of different organizational structures on transitioning students' self-concept and perceptions of classroom climate. This particular study is part of a larger study on school transition and examines academic achievement, teacher perceptions of transition, and adolescents' psychological outcomes following the transition to middle school. As a part of the larger study, student data were collected using a number of instruments including Harter's Scale of Perceived Self-Concept, Coping Resources Inventory, Classroom Environment Scale, Childhood Depression Inventory, and Thinking About My School. Qualitative data were also collected in the form of both student and teacher interviews and observations in all settings. While not all of the data from the larger study were used in this particular study, it did serve the purpose of informally informing data analyses.

Prior to a discussion of this study, it is important to note my status as an informed outsider. As a classroom teacher of young adolescents, I have experienced the anxiety, confusion, and pressure associated with the preparation of students for the transition to middle school. After teaching students in grades four through seven for eight years, I recall the academic, social and behavioral differences among children in these grades. I vividly remember sixth graders' struggles with their new environment, and observed elementary students' and parents' growing trepidation as the transition to middle school approached. I also consider myself an outsider in this study. I had no prior connections to these teachers and this school system. These subjectivities are important to note, as they influence all aspects of this work.

Participants

The participants for this study were selected from two elementary schools in a southeastern state, Howard Elementary School and Sixth Street Elementary School, who all transitioned into Windsor Middle School. Howard Elementary School and Sixth Street Elementary School were the two primary "feeder" schools for Windsor Middle School. Windsor County is considered a bedroom community that has historically been rural, but is increasingly becoming more suburban. The school district services approximately 9,000 students from a wide range of socioeconomic (34% free or reduced lunch) and ethnic backgrounds (77% European-American, 13% African-American, 4% Hispanic-American, and 6% Asian-American). "Free and reduced lunch" refers to students' whose family income is such that the federal government will either reduce the cost of meals or provide lunch at no charge to the students. The median household income in Windsor County is \$51,566. Windsor County currently has 8 elementary schools, 3 middle schools, and 2 high schools.

Sixth Street Elementary services approximately 645 students who live in a close-knit, small town community (Table 1). The demographics closely mirror those of the district; however, the free or reduced lunch population is slightly higher at 36%. The student body demographics are as follows: 75% European-American, 15 % African-American, 3% Asian-American, 4 Latino, 3% Multi-racial). Fourteen percent of the students in this school receive services for disabilities, while five percent receive services for second language. The teaching staff is entirely female with the exception of one teacher, and 67% of the teachers hold advanced degrees. The staff of 46 is predominantly white with the exception of two teachers who are African-American. The average years of teaching experience is 13.1 years. With regard to students in fifth grade, 88% of the students meet or exceed reading competencies, while 86%

	Howard Elementary	Sixth Street	Windsor
Number of Students	645	662	732
Free/Red. Lunch	36%	37%	44%
Race	 75% European American 15% African American 3% Asian American 4% Hispanic 3% Multi-racial 	 67% European American 15% African American 4% Asian American 7% Hispanic 3% Multi-racial 	 70% European American 19% African American 4% Asian American 5% Hispanic 2% Multi-racial
Students Serviced in Special Education	14%	18%	16%
Students Serviced in ESOL	5%	7%	2%
Teachers	67% advanced degrees; All but one are female; Average years of experience = 13.1	48% advanced degrees; All female; 12.58; Average years of experience = 12.58	52% advanced degrees; 29 females and 21 males; Average years of experience = 10.9
Test Scores	88% Reading 86% Math AYP/Title I	86% Reading 85% Math AYP/Title I	86% Reading 79% Math AYP/Title I

Demographic Data for Howard Elementary, Sixth Street Elementary and Windsor Middle School

meet or exceed competencies in mathematics. Sixth Street is a Title 1 school, and in the 2003-2004 they met all criteria for adequate yearly progress in accordance with the No Child Left Behind Act. Sixth Street is accredited by the Southern Association of Colleges and Schools.

The sample of students from Sixth Street Elementary School is comprised of 57 students (Table 2). Of the sample of students from Sixth Street, 38 were European American, 3 were African American, 12 were Latino, 2 were Asian, and 2 were coded as other. Of the Sixth Street sample, there were 27 males (47.4%) and 30 females (52.6%). Twelve of the students were overage for grade having been retained during their primary years in elementary school.

The fifth grade team was organized in a self-contained structure. The four teachers did pair for reading and math instruction. At that time, students may have gone to a second teacher for ability-grouped reading or math instruction. Given the research literature on young adolescents, the self-contained setting was considered a developmentally appropriate environment as it allowed for strong, personal relationships with one adult.

Howard Elementary has a student population of 662 students who live in a more agrarian part of the county (Table 1). Children in the school represent a number of different racial and ethnic groups. The distribution of children among these groups is 67% European-American, 19 % African-American, 4% Asian-American, 7% Latino, and 3% multi-racial. Eighteen percent of the students in this school receive services for disabilities, while 7% receive services for second language. At Howard Elementary, 51% of the students receive free and reduced lunch. The teaching staff is entirely female with the exception of one teacher, and 48% of the teachers hold advanced degrees. The staff of 52 is predominantly white with the exception of one teacher who is African-American. The average years of teaching experience on the staff is 12.58 years. With regard to students in fifth grade, 86% of the students meet or exceed reading competencies, while

Demographic Data for Sample of Students from Howard Elementary, Sixth Street Elementary

and Windsor Middle School

	Howard Elementary	Sixth Street Elementary
Total Number of Students	68	57
Gender	40 females 28 males	30 females 27 males
Race	40 European American17 African American6 Latino3 Asian American2 Multi-racial	38 European American3 African American12 Latino2 Asian American2 Multi-racial
Retained	20 of 68 retained once during elementary school	12 of 57 retained once during elementary school
Organizational Structure	Self-contained	Departmentalized/Jr. High model

85% meet or exceed competencies in mathematics. Howard is a Title 1 school, and in the 2003-2004 they met all criteria for adequate yearly progress in accordance with the No Child Left Behind Act. Howard Street is accredited by the Southern Association of Colleges and Schools.

Of the 68 students from Howard Elementary, 40 were European American, 17 were African American, 6 were Latino, 3 were Asian, and 2 were coded as other (Table 2). Of the Howard sample, there were 28 males (41.2%) and 50 females (58.8%). Eight of the students were overage for grade having been retained during their primary years in elementary school.

The fifth grade team at Howard Elementary is strictly departmentalized. Students remain in with their homeroom class as teachers rotate from one room to the next for each content area. The five teachers each teach one subject: reading, mathematics, science, social studies, and language arts. Teachers did periodically discuss concerns about students, but they did not plan together, nor did they meet on a regular basis. The departmentalized, "junior high" setting at Howard was considered a developmentally inappropriate setting for young adolescents as it is in direct conflict with the goals and structures advocated by the National Middle School Association.

Windsor Middle School is a mix of suburban neighborhoods, rural farmland, and smallscale, inner-city living (Table 1). There are 732 students in grades 6-8. The demographics closely mirror those of the district; however, the free or reduced lunch population is slightly higher at 44 %. The student population is 70% percent European-American, 19 % African American, 4% Asian-American, 5% Latino, 2% Multi-racial). Sixteen percent of the students in this school receive services for disabilities, while 2% receive services for second language. The teaching staff is comprised of fifty teachers, with 29 who are female and 21 who are male. Fifty-two percent of the staff members hold advanced degrees. The staff of 50 is predominantly white with the exception of one teacher who is African-American. The average years of teaching experience is 10.9 years. With regard to students in sixth grade, 86% of the students meet or exceed reading competencies, while 79% meet or exceed competencies in mathematics. Windsor, in the 2003-2004 school year, met all criteria for adequate yearly progress in accordance with the No Child Left Behind Act. Windsor Middle is accredited by the Southern Association of Colleges and Schools.

Philosophically, the school adheres to the structural goals of the middle school concept, including teaming, common planning time, student-teacher advisory meetings, and core integrated class time. Teachers are grouped in teams of three to four, and each is responsible for a home base and a content area. Students in sixth grade at Windsor Middle School have no opportunities to participate in organized school-sponsored sports. However, they do have limited opportunities to participate in school-sponsored activities like band, chorus, and some service organizations.

The adolescents in this study began participating in May of their fifth-grade year after returning parental consent forms. Students formed two cohorts, one from each of the two feeder schools sending the largest number of students to the middle school. Students were recruited beginning in the Spring of 2003 for the purposes of the larger study. The cohorts were comprised of students who were fifth graders in the Spring of 2003 and transitioned in Fall of 2003 and of students who were fifth graders in the Spring of 2004 and transitioned in Fall of 2004. Data were collected on students beginning in the spring of their fifth grade year and into the fall of their sixth grade year. Students were surveyed in the spring and fall to capture both pre- and post-transition perspectives. All participants had signed parental consent and also provided their own assent to their participation in the project.

Transition Programming

Students from Sixth Street and Howard Elementary Schools participated in an extensive transition program designed by the guidance counselor at Windsor Middle School. The transition program began with a visit by the guidance counselor to each fifth grade classroom. At that time, she shared pertinent information regarding the expectations, activities, and setting of Windsor Middle School and prepared students for their upcoming visit to the middle school. Students were afforded the opportunity to ask questions.

Fifth grade students also experienced a half-day visit to the middle school, where they took a guided tour, asked questions of current students, and visited exploratory and subjectmatter classes. Concurrently, the fifth and sixth-grade teachers were meeting to discuss strengths and weaknesses of the students in general, as well as to ascertain what they could do to facilitate a smooth transition. In addition to these activities, special education students were also assigned a pen pal to further assist with the transition experience.

Parents are also involved in the transition program through participation in the elementary school's "Sneak-A-Peek" night in the Spring of each school year. "Sneak-A-Peak" night provides parents an opportunity to hear the next grade level's teachers discuss curriculum, expectations, and frequently asked questions. While typically geared towards students in grades K-4, the middle school counselor incorporated an *Introduction to Middle School* presentation for parents. This question and answer session afforded parents the opportunity to acquaint themselves with a new school environment and curriculum. In addition, parents could participate in their own August open house at Windsor Middle School. There, parents were able to visit each of their child's teachers for approximately 15 minutes to hear presentations on curriculum and behavioral expectations and to ask questions.

Instruments

Two major instruments, that were part of a larger battery of assessments, were utilized for this study. The Piers-Harris Children's Self-Concept Scale (Piers, 1984) is a brief self-report measure that allows adolescents to rate their self-concepts. Piers-Harris was selected over other prominent self-concept measures because of its simplicity and its global self-concept assessment with embedded domain-specific features. The measure defines self-concept as a stable set of self attitudes that reflect one's behaviors and attributes. The scale measures the students' conscious self-perceptions. Five sub-scales will be used in this study to assess students' physical appearance and attributes, popularity, happiness and satisfaction, anxiety, and intellectual and school status. The measure is intended for use with students in grades 4-12 with internal consistency coefficients ranging from .88 to .93. Moderate relationships are reported with other measures of self-concept with estimates of content, criterion-related, and construct validity deemed acceptable (Geske, 1985).

The Modified Classroom Climate Instrument was created by Fraser in 1982. The instrument contains 25 items that are represented by five, five item scales that include personalization, participation, independence, investigation, and differentiation. Typical questions from each subscale include the following (Fraser, 1982):

- a) personalization: The teacher talks with each student.
- b) participation: Students ideas and suggestions are used during class discussions.
- c) independence: Students choose their partners for group work
- d) investigation: Students find out the answers to questions from textbooks rather than from experiments or "real-life" activities.
- e) differentiation: Different students do different work.

Adolescents respond to each of the 25 questions on a 1-5 scale (almost never, seldom, sometimes, often, very often). Internal consistencies are reported between .69 and .85.

Procedures

All fifth grade students at Sixth Street Elementary School and Howard Elementary School were asked to participate in the Spring of 2003 and the Spring of 2004. After distributing consent packets through the fifth grade teachers at both schools, returned forms were gathered and organized. The researcher returned to each elementary school in May, 2003 and May, 2004 to administer the survey packet to those students with parental consent. At Sixth Street Elementary, students gathered as one large group in the auditorium to complete the survey. At Howard Elementary, participating students were moved to one classroom to complete the survey.

Prior to distributing the survey, the research thanked students for participating and discussed the purpose of the study. Students were reminded that there were no wrong answers, that their honesty was important, and that there responses were confidential. Beginning with the demographics page, students were guided through the directions for each survey. An opportunity for questions followed. As the students completed their responses to the surveys independently, the researcher monitored their progress and double-checked their scoring forms to ensure that there was no missing data. The entire data collection process was completed in under one hour, with some students finishing in as quickly as 30 minutes. The process was repeated in the fall of the respective sixth grade year for the two cohorts of students.

Data for this study were used to form two cohorts of elementary school students who participated in a middle-school transition program. Additional schools were included in the transition program, however, there were not a significant number of students in either of the two schools that would be powerful enough to include as their own group in the analyses. In addition, students in the additional two schools did not cleanly fall into the two main school instructional environments that are being explored in the current study. Data from two years of the transition project were collapsed to increase the sample size. Data from observations of the activities both within the classrooms as well as a review of transition activities conducted by the school counselors and administration did not suggest a qualitatively different experience with regard to the transition program for students over the two years of the study. Thus, the data were collapsed across both years.

CHAPTER 4

RESULTS

The purpose of this study was to investigate the effects of different organizational structures on young adolescents' self-concept and perceptions of the classroom environment across the transition to middle school. First, means and standard deviations for the subscales of the Piers-Harris Inventory and the Modified Classroom Climate Inventory were calculated for both the end of fifth grade and the beginning of sixth grade time points. Next, analyses of variance were computed to identify significant between-group differences for the fifth grade data point. Then, repeated measures tests were used to determine levels of interaction between the two elementary school cohorts and across the transition to middle school. The statistical analyses of the data in this study were computed using Statistical Program for the Social Sciences (SPSS, Inc, 2004).

Means and Standard Deviations

Means for each of the school groups on measures of the six subscales of Piers-Harris Self-concept Scale are shown in Table 3 (spring of fifth grade) and Table 5 (fall of sixth grade). The six subscales include physical appearance and attributes, behavior, intellectual and school status, anxiety, popularity, and happiness and satisfaction. Each question required a true or false response, which were subsequently coded as a 1 for true responses and 0 for false responses. Means for each of the school groups on measures of the five subscales of the Modified Classroom Climate Scale are shown in Table 4 (spring of fifth grade) and Table 6 (fall of sixth grade). The five subscales include personalization, participation, independence, investigation,

Means and Standard Deviations for Each School on the Piers-Harris Self-concept Scale from the

	Descriptive Statistics				
School	Mean	SD	F	р	
Physical Appearance/Attributes					
Howard	.44	.11	6.63	.01	
Sixth Street	.39	.12			
Behavior Scale					
Howard	.39	.10	.055	.81	
Sixth Street	.39	.11			
Intellectual and School Status					
Howard	.45	.10	1.43	.23	
Sixth Street	.43	.10			
Anxiety					
Howard	.61	.12	3.45	.07	
Sixth Street	.57	.12			
Popularity					
Howard	.35	.12	.43	.51	
Sixth Street	.34	.14			
Happiness and Satisfaction					
Howard	.54	.16	2.71	.10	
Sixth Street	.50	.15			

Spring of the Fifth Grade for Howard (N=68) and Sixth Street Elementary (N=57)

Means and Standard Deviations for Each School on the Modified Classroom Climate Scale from

	Descriptive Statistics			
School	Mean	SD	F	р
Personalization				
Howard	3.72	.80	2.18	.14
Sixth Street	3.48	.95		
Participation				
Howard	3.53	.83	.30	.59
Sixth Street	3.45	.75		
Independence				
Howard	2.10	.68	7.37	.01
Sixth Street	2.44	.70		
Investigation				
Howard	3.01	.81	3.66	.06
Sixth Street	2.73	.79		
Differentiation				
Howard	2.59	.75	.22	.64
Sixth Street	2.53	.80		

the Spring of the Fifth Grade for Howard (N=68) and Sixth Street Elementary (N=57)

Means and Standard Deviations for Each Group on the Piers-Harris Self-concept Scale at the Beginning of Sixth Grade for the former Howard (N=68) and Sixth Street Elementary (N=57)

Groups

	Descriptive Statistics			
School	Mean	SD	F	р
Physical Appearance/Attributes				
Howard	.50	.13	.29	.59
Sixth Street	.48	.14		
Behavior Scale				
Howard	.49	.14	.41	.52
Sixth Street	.51	.13		
Intellectual and School Status				
Howard	.54	.14	.00	.98
Sixth Street	.54	.12		
Anxiety				
Howard	.51	.16	.17	.68
Sixth Street	.50	.14		
Popularity				
Howard	.47	.16	.06	.81
Sixth Street	.48	.23		
Happiness and Satisfaction				
Howard	.56	.20	1.55	.22
Sixth Street	.52	.15		

Means and Standard Deviations for Each Group on the Modified Classroom Climate Scale at the Beginning of Sixth Grade for the former Howard (N=68) and Sixth Street Elementary (N=57)

Groups

		Descrip	tive Statistics		
School	Mean	SD	F	р	
Personalization					
Howard	3.73	.70	.03	.86	
Sixth Street	3.71	.75			
Participation					
Howard	3.62	.72	.43	.52	
Sixth Street	3.70	.72			
Independenc					
Howard	2.30	.59	1.20	.28	
Sixth Street	2.18	.60			
Investigation					
Howard	3.16	.75	.00	.95	
Sixth Street	3.15	.79			
Differentiation					
Howard	2.52	.74	2.03	.16	
Sixth Street	2.33	.78			

and differentiation. Each subscale score ranged from 1 to 5, with 1 meaning that students almost never experienced that particular aspect of classroom climate and 5 meaning that they almost always perceived that particular element of the classroom climate as present.

Analyses between the two elementary schools, Sixth Street and Howard, suggest that across the self-concept measure students in the two schools perceived themselves to be quite similar with regard to self-concept with one exception. The one difference found at the end of the fifth grade year was for physical appearance (F(1, 123)=6.63, p=.01). Students at Howard Elementary had higher ratings of their physical appearance than students at Sixth Street Elementary. When considered within the larger construct of self-concept, this one difference does not seem as integral to a successful transition to middle school. Analyses of differences between the two schools at the end of fifth grade on aspects of the classroom climate indicated one difference on independence (F=7.37, p=.01). Students at Sixth Street Elementary reported higher ratings of independence in the classroom. This may be explained by the self-contained nature of the fifth grade classrooms at Sixth Street Elementary where students may have had the opportunity to develop independence because of their relationships with just one teacher in just one environment.

Data collected from the fall of the sixth grade year were analyzed to compare students from the two elementary school organizational structures once they had transitioned into the middle-school environment. One-way analyses of variance were performed on both the selfconcept measure and the classroom environment measure. Results indicated no significant differences at the beginning of sixth grade for the students grouped by their former elementary schools on the self-concept measure (Table 5) or the classroom environment (Table 6).

Repeated Measures

Because this study is a longitudinal investigation of two cohorts across the transition to middle school, a repeated measures design allows one to examine differences between the groups and over a two different data collection points. Table 7 shows the multivariate test for significance using Wilk's Lambda for the effect of time on each subscale of the Piers-Harris Self-Concept Scale. Table 8 shows the multivariate test for significance using Wilk's Lambda for the effect of time on each subscale of the Modified Classroom Climate Scale.

Analyses that measure change across time from the end of the fifth grade to the beginning of sixth grade indicate that with the exception of adolescents' self-ratings on happiness, there were significant time effects from fifth to sixth grade. For self-ratings on appearance, behavior, popularity, and intellectual and school status, as adolescents moved from fifth grade to sixth their perceptions of self increased. For the anxiety subscale, anxiety decreased over time as adolescents moved from fifth to sixth grade.

Time by Organizational Structures Analyses

Data across time from the fifth to the sixth grade regarding ratings on classroom climate suggest that adolescents perceive their participation and their investigation to significantly increase as they move across schooling environments. However, there was no significant time effect on differentiation, independence, and personalization. While time effects are important to examine, separate analyses of the interaction between the two school organizational structures by time were conducted. Only one significant interaction was found for independence [F(1, 123)=11.7, p=.00] where students who had attended elementary school at Howard Elementary rated their classrooms in middle school as fostering more independence ($M_{TI}=2.10, M_{T2}=2.30$) than did students at Sixth Street ($M_{TI}=2.44, M_{T2}=2.18$) where ratings on independence declined.

Repeated Measures Tests for Significance from Fifth to Sixth Grade on the Piers-Harris Self-Concept Scale for the former Howard (N=68) and Sixth Street Elementary (N=57) Groups (Wilk's Lambda)

Factor	F	р
Appearance	26.55	.00
Behavior	61.83	.00
Popularity	46.70	.00
Happiness	1.32	.25
Intellect	56.70	.00
Anxiety across	28.41	.00

Repeated Measures Tests for Significance from Fifth to Sixth Grade on the Modified Classroom Climate Scale for the former Howard (N=68) and Sixth Street Elementary (N=57) Groups (Wilk's Lambda)

	ANOVA		
School	F	р	
Differentiation	3.40	.07	
Participation	4.46	.04	
Independence	.17	.09	
Investigation	12.54	.01	
Personalization	1.86	.18	

Summary

Data from these analyses suggest that while there were significant differences from fifth grade to sixth grade, that there was only one time by group interaction effect. Thus, one can surmise that despite the different organizational structures experienced in fifth grade, ratings on self-concept and classroom climate appear to be similar when students successfully transition to a middle school environment that supports the developmental needs of young adolescents.

CHAPTER 5

IMPLICATIONS AND DISCUSSION

As adolescents face the challenge of changing schooling environments, the need to examine successful transitions to middle school becomes more important. Given some of the foundational literature on the negative outcomes associated with transition, there is a need to create transition programs that target the developmental needs of the middle school learner (Wigfield & Eccles, 1996). Included in this chapter is a summary of the study, a discussion of the results generated by this study, implications of findings, and directions for future research on middle school transition.

Summary

The purpose of this study was to examine the effect of different organizational structures on young adolescents' perceptions of self-concept and classroom climate across the transition to middle school. The rationale for this study is based on a review of the existing literature on middle school transitions, young adolescents, developmentally appropriate practices, and practical experiences. The literature suggests that the transition to middle school can be challenging for young adolescents, and can lead to general declines in motivation (Eccles & Midgley, 1989), self-concept (Anderman & Midgley, 1997; Seidman et al., 1994) and achievement (Alspaugh, 1998; Seidman et al., 1994) for some young adolescents . The underlying reasons for these declines are widely debated as being either the timing of the transition (Blyth, Simmons, & Carlton-Ford, 1983), or the developmental mismatch between young adolescents and their environment (Eccles & Midgley, 1989). In terms of classroom climate, researchers suggest students' perceptions of the classroom climate (Feldlaufer et al., 1988; Oldfather & McLaughlin, 1993), of the number of opportunities for input in classroom decisions (Midgley & Feldlaufer, 1987), and of their relationships with teachers (Eccles & Midgley, 1990) all decline after the transition to middle school.

In order to improve the experiences of young adolescents in middle school, prominent researchers in middle-level education advocated structural changes, such as advisory and teaming, and instructional changes such as integrated, real-life lessons and opportunities for student choice, to meet the unique needs of young adolescents (Jackson & Davis, 2000). The research suggests that the necessary structural changes are in place; however, the instructional changes are not occurring as frequently (Jackson & Davis, 2000). A recent study (Eccles & Midgley, 1990) indicative of transition research conducted in a middle-school model, as opposed to a junior high model, supports the positive effects of structural changes. Researchers noted an increase in self-esteem and positive student-teacher relationships immediately after the transition to middle school (Barber & Olsen, 2004).

Presently, many efforts to ready elementary students for the middle school environment and cluster them by ability groups in reading and math, involve departmentalizing instruction for students as young as eight years of age. These attempts at replicating a middle school environment occur without the structural changes proposed by the middle-school field and at a developmentally inappropriate age. Efforts to investigate the impact of this potential developmental mismatch and its impact on the transition to middle school are missing from the existing research literature.

This study was conducted with 125 participants from two elementary schools who transitioned into a common middle school. The participants from each elementary school for two subsequent years formed a cohort of students whose data were analyzed collectively. Data collection points included spring of the fifth-grade year and fall of the sixth-grade year. These two cohorts represented two distinct organizational structures: Sixth Street Elementary School students were largely self-contained for their fifth grade year, whereas Howard Elementary School students changed classes for each of their five core subjects. The students responded to survey questions regarding their perceptions of self-concept and classroom climate. The students were all participants in a larger study on the transition from elementary school to middle school.

Data from this survey were collected using the Piers-Harris Self-Concept Scale and the Modified Classroom Climate Inventory. The Piers-Harris Self-Concept Scale assessed students' perceptions of their self-concept in five domains: popularity, happiness and satisfaction, intellect and school status, anxiety, and behavior (Geske, 1985). The Modified Classroom Climate Inventory (Fraser, 1982) assessed students' perceptions of the classroom climate in terms of personalization of instruction, participation in classroom-decisions, independence, opportunities for investigation, and differentiated instruction.

These surveys were used to investigate the two research questions in this study: (a) How do different organizational structures in fifth grade affect students' perceptions of self-concept across the transition to middle school? and (b) How do different organizational structures in fifth grade affect students' perceptions of the classroom climate across the transition to middle school? Differences between the fifth and sixth grade cohorts were analyzed using analysis of variance. Repeated measures were used to analyze the effect of instructional structure and time once the cohorts were combined.

Discussion of Results

The following section includes a discussion of the results for each subscale in both the Piers- Harris Self-concept Scale and the Modified Classroom Climate Inventory. Because the Piers-Harris Self-Concept Scale uses six subscales to examine students' perceptions of their selfconcept, each of the subscales will be discussed separately. Similarly, the results of the Modified Classroom Climate Inventory will be discussed by addressing each subscale separately.

Self-Concept: Physical Attributes and Appearance

The results of this study show that students in a departmentalized instructional structure had significantly higher perceptions of their physical attributes and appearance than did students in a self-contained setting. After transitioning into middle school, the adolescents experienced significant increases in their perceptions of their appearance, however, the significant differences between the two different organizational structures no longer remained. While the majority of research on transition would suggest that one would find a decline in the adolescents' self-perceptions, the data may be suggesting that a supportive structure which meets the developmental needs of adolescents may account for the positive increase in students' ratings. In addition, these data might also be explained as supporting the positive effects of the middle school concept which asserts the necessity of addressing students academic and social needs. *Self-Concept: Popularity*

Prior to the transition to middle school, students in the two different elementary schools did not experience significant differences in their perceptions of their own popularity. Following the transition to middle school, there was an overall significant increase in students' perceptions of their popularity; however, there were no significant differences between the groups of students from the respective elementary schools. This again is inconsistent with the majority of literature of school transition from elementary to middle school where one would expect declines in popularity. This finding may be attributed to the nature of the middle school into which students transitioned. It is important to note that this study, which parallels the Barber and Olsen (2004) study, as conducted in a true middle school, whereas most of the literature on transition has been conducted in junior high schools.

Self-Concept: Happiness and Satisfaction

Students' perceptions of happiness and satisfaction remained stable prior to and after the transition to middle school. There were no significant differences between the two organizational structures either before or after the transition. In addition, the move to middle school did not appear to affect either positively or negatively the students' perceptions of their own happiness and satisfaction. This finding supports the idea that students in this particular sample are transitioning into a middle school that meets their developmental needs. The majority of the literature conducted on transition to middle schools would suggest a decline in students' happiness and satisfaction with school.

Self-Concept: Intellect and School Status

The results of this study indicate students' perceptions of their intellect and school status increase significantly across the transition to middle school. Organizational structures in elementary school do not appear to impact students' self-concept in this domain, as there were no significant differences between the groups in either fifth or sixth grade. However, the educational significance of a finding that suggests adolescents have such a significantly positive increase in their perceptions of their intellectual and school status as they enter middle school should not be understated. Indeed, the majority of the literature would suggest that intellectual and school status should decline following the transition. Such a positive finding is important given the

social pressures and increasingly early marginalization from school that is currently being witnessed in environments for young adolescents. This finding contributes evidence to the merits of the elementary to middle-school transition programs and the middle school concept.

Self-Concept: Anxiety

According to the results of this study, the transition from elementary to middle school is marked by a decrease in anxiety for students regardless of the instructional structure of the elementary school setting. While the difference between the self-contained elementary school students and the departmentalized elementary school students approached significance prior to the transition, there were no significant differences between the cohorts after the transition to middle school. These data suggest that despite the type of instructional environment from which students transition, as they move to middle school that has a strong transition program, anxiety decreases.

Self-Concept: Behavior

Data analyses suggested that adolescents, across the transition from elementary to middle school, reported higher perceptions of their behavior. However, no interaction was found as students moved from different instructional environments to the middle school environment. One of main tenets of the transition program that the students participated in focused on school behavior and expectations of appropriate behavior in middle schools. Changes in schooling environments often have a dichotomous effect by either encouraging adolescents to withdraw or to challenge authority as a means of testing the boundaries of their new environments. Data from this investigation suggest that adolescents from both types of elementary school instructional environments made a smooth transition from the elementary to the middle school as a result of the transition program.

Self-Concept Summary

The results of this study do not support the first hypothesis that indicated that adolescents from self-contained environments would have a better transition into middle school. Over the six domains of self-concept that were investigated in this study, the data suggest that the groups of adolescents had positive increases in their self-perceptions as they entered middle school (including a reduction in anxiety). This finding is contrary to the literature that has focused on elementary to junior high school transition (Seidman et al, 1994; Eccles et al, 1989) but supports the recent research conducted by Barber and Olsen (2004) that had shown positive effects on school transition when there is a strong and developmentally appropriate support structures in place. While one would have expected adolescents from the self-contained environment to have more successful ratings of their transition to middle school, it might be that the elementary school instructional structure is irrelevant in the presence of an appropriate transition program and a middle school environment that uses the middle school concept to meet all of the developmental needs of young adolescents.

Classroom Climate: Personalization

Repeated measures analyses indicated that students' perception of how personalized their classrooms were did not vary from fifth to sixth grade. In both the fifth and sixth grade environments, adolescents generally perceived their classrooms to be personalized with a rating between sometimes and often. There was no time effect for personalization. This finding was surprising when comparing the ratings of elementary school students in the departmentalized and the self-contained organizational structures. One would hypothesize that students in the self-contained environment would have provided more positive ratings that those elementary school students in the departmentalized structures. What is promising about these findings is that

students from both organizational structures perceived their middle school to be similarly personalized to their elementary school. This finding also supports the need for middle schools to be responsive to the needs of the young adolescent by creating a personalized, welcoming, and supportive environment.

Classroom Climate: Participation

According to this study, students perceive the classroom climate as providing more opportunities for them to participate in decision-making processes after the transition to middle school. Students from both types of elementary school organizational structures did not differ in their perceptions of participation in the middle-school environment. In fact, once students arrived in middle school their ratings of participation increased, thus highlighting the benefits of the instructional practices associated with the middle-school model with regard to the engagement of young adolescents. This finding counters the research literature which generally suggests that students find fewer opportunities to participate in schooling environments for young adolescents (Feldlaufer, Midgely, & Eccles, 1988).

Classroom Climate: Independence

The results of this study suggest that students in a self-contained setting perceive themselves as having significantly more independence in the classroom than students in a departmentalized setting prior to the transition to middle school. Generally, these two groups of fifth grade students had quite low ratings of independence in their elementary school classrooms. When examining the results after the transition, there is no significant decrease in perceptions of independence as a function of time. However, it is interesting to note that sixth-grade students from the self-contained elementary setting do perceive themselves as having significantly less independence than the students from the elementary school departmentalized setting once the transition to middle school. In order to contextualize this finding, it is important to note that these data were collected close to the beginning of the sixth grade year when students were still negotiating their new environment. This finding may be explained by lack of opportunity to learn routines and when and where to exercise independence. Future research that follows students later into their transition year may help shed light on this finding.

Classroom Climate: Investigation

Students in a departmentalized structure perceived themselves as having more opportunities for investigative learning than did students in self-contained structures. These results were approaching significance for fifth-grade students. After the transition to middle school, students from both cohorts perceived a significant increase in the number of investigative learning opportunities, however differences between the two cohorts of students were not present. This finding supports the middle school concept that advocates for students to have opportunities to learn through exploration, inquiry learning, and investigation as opposed to rote learning.

Classroom Climate: Differentiated Instruction

The results of this study suggest that students do not experience varying degrees of differentiated instruction based on the organizational structures they experience in elementary school. Similarly, students' elementary structures appear to have no effect on their perceptions of differentiated instruction at the middle school level. Furthermore, students perceive a near-significant decrease in the amount of differentiated instruction they experience after transitioning to middle school. This finding may be explained by an emphasis in the middle school on participation and group approaches to learning and instruction. In addition, students' perceptions of decreases in personalization may be tied to decreased perception of differentiated instruction.
Finally, as these were collected at the beginning of the year, it could also be the case that teachers had not differentiated instruction as they were still assessing students' needs and learning styles.

Classroom Environment: Summary

Across the subscales of the classroom climate measure, students appear to perceive the environment of their middle classrooms as less malleable than their self-concept. What is important, however, is that sixth-grade students seem to perceive the middle school classroom environment much like they did the elementary school classroom environment. Future research that follows students for a longer period of time after the transition to middle school and through middle school may provide helpful data on the congruence or incongruence of the middle school environment with regard to students' needs.

Implications

The implications of this work for educators, university professors, administrators, and counselors are numerous. First and foremost, this study updates an increasingly dated transition literature. The snapshot of students' perceptions of self-concept and perceptions of climate in a school adhering to the philosophy of the National Middle School Association is invaluable, as much of the pre-existing research was conducted in junior high schools. Furthermore, this study provides additional support for the findings of Barber and Olson (2004) that suggested that students transitioning into a present-day middle-school setting may actually experience increases in self-concept. Because both studies occurred in middle-school settings with small teams of teachers and students, and with support structures such as student advisory, they may lend credence to the positive benefits of successful implementation of a middle-school philosophy.

The findings of this study also suggest the positive benefits of moving into a setting that meets the developmental needs of young adolescents. Regardless of the instructional structure of students' elementary school setting, the implementation of developmentally appropriate middle-school structures appears to benefit students positively in terms of both self-concept and perceptions of classroom climate. For administrators, professors, and educators, the potential power of a middle school model as an avenue for meeting the needs of young adolescents should continue to be celebrated.

In terms of organizational structures, these findings suggest that the type of instructional structure used in fifth grade may not be as significant in self-concept as is the type of middle school structures into which students transition. With the exception of physical appearance, which was significantly higher for the departmentalized cohort, and anxiety which approached being significantly lower for the self-contained group, there were no significant differences in self-concept between the two cohorts. After the transition to middle school, five of the six subscales of self-concept increased, while happiness and satisfaction did not change significantly.

In accordance with the previous transition research, the results found in terms of students' classroom climate perceptions suggest that structural changes are occurring at the middle school level without the necessary instructional changes. The self-contained students were approaching a significantly higher perception of independent opportunities prior to middle school and the departmentalized group perceived significantly more opportunities for investigation. After the transition to middle school, students experienced positive increases in only two of the five subscales on the Modified Classroom Climate Inventory. Two subscales showed no significant change over time: differentiation of instruction and personalization. For students in the self-

contained cohort, opportunities for independence significantly decreased. Clearly, this implies that instructional strategies at both the elementary and middle school level are not consistently meeting the needs of young adolescents.

Limitations

One major limitation must be considered when interpreting the findings of this study. The attrition of students limited the size of the population sample in this study. In any longitudinal study of students, it is likely that the sample size will decrease due to a number of factors beyond the researcher's control. For example, a number of students never transitioned into Windsor Middle School due to moving to another school within and outside of the district, home-schooling, and private-schooling. In addition, absenteeism during the survey administration dates also posed a problem. Data from participants who only completed one of the two administrations of the survey packet were purged from the analysis. As a result, sample size dropped from approximately 170 to 125.

Future Research

While this study provides some preliminary evidence at the potentially positive power of the middle school model in improving self-concept and perceptions of the classroom climate across the transition to middle school, additional research is needed. Additional data points at both the end of the sixth grade year and the beginning of the seventh grade year would allow researchers to investigate the nature of increases in self-concept and perceptions of classroom climate. This would allow researchers to investigate the nature of the trend in each domain and provide insight as to whether the positive increases are temporary, fixed or increasing throughout middle school. Future research might also include qualitative student interview data. This would provide insight into students' perceptions of self-concept and classroom climate in both types of organizational structures, and perhaps would allow the researcher to focus exclusively on differences between the two groups of elementary school students and the impact across the transition to middle school. Furthermore, researcher observations of the classroom environments, both quantitative and qualitative, would provide a second perspective on the developmental appropriateness of each instructional setting.

It is also critical to continue investigating the impact of different organizational structures on children and young adolescents in both elementary and middle school settings. This research suggests that the organizational structures at the middle level are significant in increasing students' self-concept during the transition to middle school. Unfortunately, the data also suggests that students' perceptions of classroom climate are not improving significantly across the transition. Additional, in-depth research is needed as to the developmentally appropriate nature of instruction and thus, the classroom climate that is found in typical elementary and middle schools. While it is certainly unlikely that a one-size-fits-all organizational structure exists, researchers must continue investigating how school structures impact the type of instruction and climate used by teachers of young adolescents.

REFERENCES

- Alspaugh, J. W. (1998). Achievement loss associated with the transition to middle school and high school. *Journal of Educational Research*, *92*(1), 20-25.
- Anderman, E. M., & Midgley, C. (1997). Changes in achievement goal orientations, perceived academic competence, and grades across the transition to middle-level schools. *Contemporary Educational Psychology*, 22, 269-298.
- Anderman, L. H., & Anderman, E. M. (1999). Social predictors of changes in students' achievement goal orientations. *Contemporary Educational Psychology*, 25, 21-37.
- Atwell, N. (1987). *In the middle: Reading, writing, and learning with adolescents* (1st ed). Montclair, NJ: Boynton/Cook.
- Barber, B. K., & Olsen, J. A. (2004). Assessing the transitions to middle and high school. *Journal of Adolescent Research*, 19(1), 3-30.
- Blyth, D. A., Simmons, R. G., & Carlton-Ford, S. (1983). The adjustment of early adolescents to school transitions. *Journal of Early Adolescence*, *3*, 105-120.
- Buchanan, T. K., Burts, D. C., Bidner, J., White, V. F., & Charlesworth, R. (1998). Predictors of developmental appropriateness of the beliefs and practices of first, second, and third graders. *Early Childhood Research Quarterly*, 13(3), 459-483.
- Burts, D. C., Hart, C. H., & Charlesworth, R. (1990). A comparison of frequencies of stress behaviors observed in kindergarten children in classrooms with developmentally appropriate versus developmentally inappropriate instructional practices. *Early Childhood Research Quarterly, 5*, 407-423.

- Charlesworth, R. (1998a). Developmentally appropriate practice is for everyone. *Childhood Edcuation*, 74(5), 274-282.
- Charlesworth, R. (1998b). Response to Sally Lubechs's "Is developmentally appropriate practice for everyone?" *Childhood Education*, 74(5), 293-298.
- Deci, E. L. (1975). Motivational processes affecting learning. *American Psychologist*, 41(10), 1040-1048.
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York, NY: Plenum.
- Eccles, J. S., & Midgley, C. (1989). Stage-environment fit: Developmentally appropriate classrooms for young adolescents. In C. Ames & R. Ames (Ed.), *Research on motivation in education* (Vol. 3, pp. 139-186). New York: Academic Press.
- Eccles, J. S., & Midgley, C. (1990). Changes in academic motivation and self-perception during adolescence. In R. Montemayor, G. R. Adams, & T. P. Gullotta (Eds.), *From childhood to adolescence: A transitional period* (pp. 134-155). Newbury Park, MA: Sage.
- Eccles, J. S., Midgley, C., Wigfield, A., Miller Buchanan, C., Reuman, D., Flanagan, C., et al. (1993a). Development during adolescence: The impact of stage environment fit on young adolescents experiences in schools and in families. *American Psychologist*, 48(2), 90-101.
- Eccles, J. S., & Wigfield, A. (1997). Young adolescent development. In J. L. Irvin (Ed.), What current research says to the middle level practitioner (pp. 15-28). Columbus, OH: National Middle School Association.

- Eccles, J. S., Wigfield, A., Flanagan, C., Miller, C., Reuman, D., & Yee, D. (1989). Selfconcepts, domain values, and self-esteem: relations and changes at early adolescence. *Journal of Personality*, 57(2), 238-310.
- Eccles, J. S., Wigfield, A., Midgely, C., Reuman, D., Mac Iver, D., & Feldlaufer, H. (1993b).
 Negative effects of traditional middle schools on students' motivation. *Elementary School Journal*, 93(5), 553-574.
- Feldlaufer, H., Midgely, C., & Eccles, J. S. (1988). Student, teacher, and observer perceptions of classroom environment before and after transition to junior high school. *Journal of Early Adolescence*, 8(2), 133-156.
- Feldlaufer, H., Midgley, C., & Eccles, J. S. (1988). Student, teacher, and observer perceptions of the classroom environment before and after the transition to junior high school. *Journal* of Early Adolescence, 8(2), 133-156.
- Fraser, B. (1982). Development of short forms of several classroom environment scales. *Journal* of Educational Measurement, 19(3), 221-227.
- Geske, P. J. (1985). Review of Piers-Harris Self-concept Scale. In J. V. Mitchell, Jr. (Ed.), *The ninth* mental measures yearbook. Lincoln, NE: Buros Institute of Mental Measurements.
- Jackson, A. W., & Davis, G. A. (2000). *Turning Points 2000*. New York: Teachers College Press.
- Mac Iver, D. J., & Epstein, J. L. (1993). Middle grades research: Not yet mature, but no longer a child. *Elementary School Journal*, *93*, 519-533.
- Midgley, C. & Edelin, K. C. (1998). Middle school reform and early adolescent well-being: The good news and the bad. *Educational Psychology*, *33*(4), 195-206.

- Midgley, C., & Feldlaufer, H. (1987). Students' and teachers' decision-making fit before and after the transition to junior high school. *Journal of Early Adolescence*, 7(2), 225-241.
- Midgley, C., Feldlaufer, H., & Eccles, J. S. (1988). The transition to junior high school: Beliefs of pre- and post-transition teachers. *Journal of Youth and Adolescence*, *17*(6), 543-562.
- Midgley, C., Feldlaufer, H., & Eccles, J. S. (1989). Student/Teacher relations and attitudes toward mathematics before and after the transition to junior high school. *Child Development*, 60, 981-992.
- Oldfather, P., & McLaughlin, H. J. (1993). Gaining and losing voice: A longitudinal study of students' continuing impulse to learn across elementary and middle level contexts. *Research in Middle Level Education Quarterly*, 17(1), 1-25.

Piaget, J., & Inhelder, B. (1969). The psychology of the child. New York, NY: Basic Books.

- Piers, E. V. (1984). Piers-Harris children's self-concept scale: Revised manual. Los Angeles, CA: Western Psychological Services.
- Rice, F. P. (1999). *The Adolescent: Development, Relationships, and Culture* (Ninth ed.). Boston: Allyn and Bacon.
- Schunk, D. H. (2000). *Learning Theories: An Educational Perspective*. Upper Saddle River, New Jersey: Merrill.
- Seidman, E., Allen, L., Aber, J. L., Mitchell, C., & Feinman, J. (1994). The impact of school transitions in early adolescence on the self-system and perceived social context of poor, urban youth. *Child Development*, 65(2), 507-522.
- SPSS. (2004). SPSS for Windows, Rel. 13.0.1. Chicago, IL: SPSS, Inc.
- Stipek, D. (1993). Is child-centered education really better? *Advances in Early Education and Day Care*, *5*, 29-52.

- Urdan, T., & Midgley, C. (2003). Changes in the perceived classroom goal structure and pattern of adaptive learning during early adolescence. *Contemporary Educational Psychology*, 28(4), 524-551.
- Wampler, R. S., Munsch, J., & Adams, M. (2002). Ethnic differences in grade trajectories during the transition to junior high. *Journal of School Psychology*, 40(3), 213-237.

Wigfield, A., & Eccles, J. S. (1996). Development between the ages of 11 and 25. In R. C. Calfee (Ed.), *Educational Pyschology Handbook* (pp. 148-185). New York: Simon and Schuster.

APPENDIX A

CONSENT FORMS

Parental Consent Form

I, _______ give my consent for my child to participate in the research titled "Examining Transition Experiences from Elementary to Middle Schools", that is being conducted by Ms. Audra Drechsler and Dr. Stacey Neuharth-Pritchett, Department of Elementary Education at the University of Georgia, (706) 542-8253. I understand that this participation is entirely voluntary; my child can withdraw consent at any time without penalty and have the results of the participation, to the extent that it can be identified as my child s, returned to me, removed from the research records, or destroyed. The following points have been explained to me:

- 1. The reason for the research is to document how adolescents perceive their transition from elementary to middle schools with regard to academics, peer relationships, and interactions with adults in schools. The benefits that I may expect from the research include a report to be shared with me regarding the outcomes of the study. I also understand that this research will provide my child s teachers with a general profile of students in my child s school.
- 2. The procedures are as follows: I understand that my child will participate in one testing sessions each year from fifth grade to eighth grade lasting between 15 and 20 minutes. I understand that my child will be tested at times that are convenient for my child during non-academic times in schools such as lunch or ENCORE time.
- 3. I understand that all data collected on my child will be confidential and that no data will ever be reported with my child s name associated with it. I understand that my child s teacher will not see his/her personal results but rather only a general profile of types of students in my child s school. The results of this participation will be confidential, and will not be released in any identifiable form without my prior consent, unless otherwise required by law. I understand that my child s participation or nonparticipation will have no impact on their school grades.
- 4. Because students will be rating their comfort with their peer relationships and academic progress, there may be the potential for discomforts or stress. If my child feels the need to ask for assistance with these feelings, my child will be referred to the school counselor.
- 5. No risks are foreseen.
- 6. The investigator will answer any further questions about the research, now or during the course of the project and can be reached at (706) 542-8253.

I understand the procedures described above. My questions have been answered to my satisfaction, and I agree to participate in this study. I have been given a copy of this consent form.

Audra Drechsler Telephone: (706) 542-4244 Email: aud@arches.uga.edu	Signature	Date
Stacey Neuharth-Pritchett Telephone: (706) 542-8253 Email: sneuhart@coe.uga.edu	Signature	Date
Name of Participant	Signature	Date

Additional questions or problems regarding your rights as a research participant should be addressed to Chris A. Joseph, Ph.D. Human Subjects Office, University of Georgia, 606A Boyd Graduate Studies Research Center, Athens, Georgia 30602-7411; Telephone (706) 542-3199; E-Mail Address IRB@uga.edu

Teacher Consent Form

I, ________ consent to participate in the research titled "Examining Transition Experiences from Elementary to Middle Schools", that is being conducted by Ms. Audra Drechsler and Dr. Stacey Neuharth-Pritchett, Department of Elementary Education at the University of Georgia, (706) 542-8253. I understand that this participation is entirely voluntary; I can withdraw at any time without penalty and have the results of my participation, to the extent that it can be identified as mine, returned to me, removed from the research records, or destroyed.

The following points have been explained to me:

- 1. The reason for the research is to document how adolescents perceive their transition from elementary to middle schools with regard to academics, peer relationships, and interactions with adults in schools. The benefits that I may expect from the research include a report to be shared with me regarding the outcomes of the study. I also understand that this research will provide my school district and its teachers with a general profile of the students as the enter and exit middle school.
- 2. The procedures are as follows: I understand that I will participate in an interview lasting between 45 and 60 minutes.
- 3. I understand that all data collected will be confidential and that no data will ever be reported with my name associated with it. I understand that my school district will not see my personal results but rather only a general profile of perceptions of the types of students in my school. The results of this participation will be confidential and will not be released in any identifiable form without my prior consent, unless otherwise required by law. I understand that my participation or nonparticipation will have no impact on my employment with Barrow County Public Schools.
- 4. Because I will be completing a survey on my students, there may be the potential for discomfort or stress. I am aware that the school counselor is available should I need assistance.
- 5. No risks are foreseen.
- 6. The investigator will answer any further questions about the research, now or during the course of the project and can be reached at (706) 542-8253.

I understand the procedures described about. My questions have been answered to my satisfaction, and I agree to participate in this study. I have been given a copy of this consent form.

Audra Drechsler Telephone: (706) 542-4244 Email: <u>aud@arches.uga.edu</u>	Signature	Date
Stacy Neuharth-Pritchett Telephone: (706) 542-4244 Email: <u>sneuhart@coe.uga.edu</u>	Signature	Date
Name of Participant	Signature	Date

Additional questions or problems regarding your rights as a research participant should be addressed to Chris A. Joseph, PhD. Human Subjects Office, University of Georgia, 606 Boyd Graduate Studies Research Center, Athens, Georgia 30602-7411; Telephone (706) 542-3199; Email Address <u>IRB@uga.edu</u>

APPENDIX B

PIERS-HARRIS SELF-CONCEPT SCALE

Piers-Harris Self-Concept Scale

I am well behaved in school.	YES	NO	I am smart.	YES	NO
It is usually my fault when something goes wrong	YES	NO	I get nervous when the teacher calls on me.	YES	NO
I can trouble to my family.	YES	NO	When I grow up, I will be an important person.	YES	NO
I am good at my school work.	YES	NO	I am well behaved at YE school.		NO
I do many bad things.	YES	NO	I have good ideas.	YES	NO
I behave badly at home.	YES	NO	I am an important member of my family.	YES	NO
I often get into trouble.	YES	NO	I am good in my school work.	YES	NO
I am obedient at home.	YES	NO	I am slow in finishing my school work.	YES	NO
My parents expect too much of me.	YES	NO	I am an important member of my class.	YES	NO
I hate school.	YES	NO	I can give a good report in front of the class.	YES	NO
I am often mean to other people.	YES	NO	In school I am a dreamer.	YES	NO
I get into a lot of fights.	YES	NO	My friends like my ideas.	YES	NO
My family is disappointed in me.	YES	NO	I often volunteer at school.	YES	NO
I am picked on at home.	YES	NO	My classmates in school think I have good ideas.	YES	NO
I think bad thoughts.	YES	NO	I am dumb at most things.	YES	NO
I am a good person.	YES	NO	I forget what I learn.	YES	NO
			I am a good reader.	YES	NO

Piers-Harris, page 2

I am smart.	YES	NO	I am often sad.	YES	NO
My looks bother me.	YES	NO	I am shy.	YES	NO
I am strong.	YES	NO	I get nervous when the teacher calls on me.	YES	NO
I have pretty eyes.	YES	NO	My looks bother me.	YES	NO
My friends like my ideas.	YES	NO	I get worried when we have tests in school.	YES	NO
I have nice hair.	YES	NO	I give up easily.	YES	NO
My classmates in school think I have good ideas.	YES	NO	I am nervous.	YES	NO
I am good-looking.	YES	NO	I worry a lot.	YES	NO
I am popular with boys.	YES	NO	I like being the way I am.	YES	NO
I have a pleasant face.	YES	NO	I feel left out of things.	YES	NO
I am a leader in games and sports.	YES	NO	I wish I were different.	YES	NO
I am popular with girls.	YES	NO	I am unhappy.	YES	NO
I have a good figure.	YES	NO	I am often afraid.	YES	NO
			I cry easily.	YES	NO

Piers-Harris, page 3

My classmates make fun of me.	YES	NO	I am a happy person.	YES	NO
It is hard for me to make friends.	YES	NO	My looks bother me.	YES	NO
I am shy.	YES	NO	I am lucky.	YES	NO
I am unpopular.	YES	NO	I like being the way I am.	YES	NO
I feel left out of things.	YES	NO	I wish I were different.	YES	NO
I am among the last to be chosen for games.	YES	NO	I am unhappy.	YES	NO
My classmates in school think I have good ideas.	YES	NO	I am cheerful.	YES	NO
I have many friends.	YES	NO	I have a pleasant face.	YES	NO
People pick on me.	YES	NO	I am easy to get along with.	YES	NO
In games and sports, I watch instead of play.	YES	NO	I am a good person.	YES	NO
I am popular with girls/boys.	YES	NO			
I am different from other people.	YES	NO			

APPENDIX C

MODIFIED CLASSROOM CLIMATE INVENTORY

	Almost Never	Seldom	Sometimes	Often	Very Often
1. The teacher talks with each student.	1	2	3	4	5
2. Students give their opinions during discussions.	1	2	3	4	5
3. The teacher decides where students will sit.	1	2	3	4	5
4. Students find out the answers to questions from textbooks rather than from experiments or "real-life" activities.	1	2	3	4	5
5. Different students do different work.	1	2	3	4	5
6. The teacher takes a person interest in each student.	1	2	3	4	5
7. The teacher talks without stopping for students to ask or answer questions.	1	2	3	4	5
8. Students choose their partners for group work.	1	2	3	4	5
9. Students carry out investigations to test ideas.	1	2	3	4	5
10. All students in the class do the same work at the same time.	1	2	3	4	5
11. The teacher is unfriendly to students.	1	2	3	4	5
12. Students' ideas and suggestions are used during classroom discussion.	1	2	3	4	5
13. Students are told how to behave in the classroom.	1	2	3	4	5
14. Students carry out experiments or activities to answer questions coming from class discussions.	1	2	3	4	5
15. Different students use different books, equipment, and materials.	1	2	3	4	5
16. The teacher helps each student who is having trouble with the work.	1	2	3	4	5
17. Students ask the teacher questions.	1	2	3	4	5
18. The teacher decides which students should work together.	1	2	3	4	5
19. Students work together to study and to explain things to each other.	1	2	3	4	5
20. Students who work faster than others move on to the next topic.	1	2	3	4	5
21. The teacher considers students' feelings.	1	2	3	4	5
22. There is classroom discussion.	1	2	3	4	5
23. The teacher decides how much movement and talk there should be in the classroom.	1	2	3	4	5
24. Students carry out experiments to answer questions that puzzle them.	1	2	3	4	5
25. The teacher teaches all students the same way.	1	2	3	4	5

Modified Classroom Climate Inventory