

ABSTRACT

Title of dissertation: CHARACTERISTICS OF CLASSROOM
CONTEXTS, SELF-PROCESSES, ENGAGEMENT,
AND ACHIEVEMENT ACROSS THE TRANSITION
FROM MIDDLE SCHOOL TO HIGH SCHOOL

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The central purposes of this study were to determine the impact of high school transition on the experience of the 93 participating students (33 males, 60 females, 72 Caucasian, 17 African-American, 2 Asian, and 2 mixed-race) with respect to perceived changes in context (i.e. teacher support, teacher values) and self-processes (i.e. concerns regarding competence, relatedness and autonomy, hassles and uplifts) and changes in engagement (i.e. interest, effort, learning and performance goals) and outcome (GPA) across the transition to ninth grade, and to identify concerns about the transition to high school held by students at the conclusion of eighth grade and of

ninth grade. This study also explores whether these variables differ for high and low performing students in eighth and in ninth grade. Based on Connell and Wellborn's (1991) model of self-systems, findings suggest that: participants perceived their eighth grade teachers as having placed higher value on their work and of holding higher expectations for students' academic achievement than their ninth grade teachers, participants reported expending more effort to pay attention in class and to pursue performance goals, as well as experiencing fewer competence-related hassles as eighth graders than as ninth graders. High achieving eighth grade students reported greater interest their classes, fewer relatedness hassles, more total uplifts, greater effort to do well in class, higher perceptions of their teachers' expectations for academic success, and feeling more supported by their teachers than did low achieving eighth graders. High achieving ninth grade students reported significantly fewer overall hassles and relatedness hassles than their low achieving counterparts. Students did not suffer a significant decline in GPA from eighth to ninth grades. Connell and Wellborn's identification of competence, relatedness, and autonomy as three essential psychological needs requiring satisfaction for students' success in the school context were reflected in that almost all of eighth graders' and ninth graders' transition-related concerns could be reliably categorized in accordance with their model. Implications of findings with respect to students' high school transition experience, as well as implications for schools' transition-related practices are discussed.

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ENGAGEMENT, AND ACHIEVEMENT ACROSS THE TRANSITION
FROM MIDDLE SCHOOL TO HIGH SCHOOL

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Dissertation submitted to the Faculty of the Graduate School of the
University of Maryland, College Park in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy
2007

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Acknowledgements

The path to the completion of this dissertation has been, in the words of Paul McCartney, a “long and winding road.” It has been, however, a road paved with good fortune and with the opportunity to develop relationships with several quite remarkable people. I offer my deepest thanks and appreciation to Dr. Allan Wigfield, Dr. Patricia Alexander, Dr. Ann Battle, Dr. William Strein, and Dr. Roger Azevedo for their insight, encouragement, and support. Through their thoughts, comments, and questions, they have contributed mightily to this work and have had a huge hand in its successful outcome.

I am deeply indebted to Alexis Ymon Williams for her countless hours of assistance in so many aspects of this work. Her kindness, expertise, and reassurance were so important during the many periods of uncertainty encountered during this project. Many thanks to Dr. Gilbert Austin and Dr. Gary Brager for helping to unravel statistical mysteries, as well as for their kindness and their patience. Further, I appreciate greatly the cooperation of the students, teachers, and administrators of the schools involved in this study.

The opportunity to complete this dissertation under the direction of Dr. Kathryn Wentzel has been one of the highlights of my career in education. Simply stated, I could not have been more fortunate than to have worked with Dr. Wentzel on an earlier study of her own and then to have the benefit of her mentorship on this dissertation. I have learned more from Dr. Wentzel than I could ever eloquently, or even adequately, express. Her dedication to making schools better places for students

and for teachers is inspirational. To be sure, Dr. Wentzel's scholarship and dedication to her field are impressive. It was her ability to guide without directing, however, that enabled me to recognize and to understand my strengths and my weaknesses, to help me grow both professionally and personally, and to enable me to recognize the inextricable link between research and practice. Without Dr. Wentzel's expertise, encouragement, and her remarkable power not to become exasperated with me (or at least not to show it), this dissertation would not have been possible.

Finally, and most importantly, without the love, support, and understanding of my family, this dissertation would not have been written. To my daughters, Jill and Susan, thank you for understanding my spending many hours in class, researching, and, ultimately, writing this dissertation. My wife, Christine, is truly the driving force behind this work. She has, without complaint, provided so much encouragement, endured my frustrations, and has loved me more than I deserve over the many years of work on this degree. Her willingness to stick with me and to serve as a constant source of inspiration and motivation were, without doubt, the essential factors to the completion of this dissertation. Chris is the light and the love of my life.

TABLE OF CONTENTS

Acknowledgements.....	ii
Table of Contents.....	iv
List of Tables.....	vii
List of Figures.....	viii
Chapter 1: Introduction.....	1
The Imperative to Study High School Transition.....	1
Theoretical Model to Study High School Transition.....	6
Application of Connell and Wellborn’s Model.....	9
Structure: Students’ Perceptions of Teacher Expectations and Values.....	11
Involvement: Students’ Perceptions of Emotional Support	11
Self-Processes: Concerns about Competence, Relatedness, and Autonomy.....	12
Research Questions.....	13
Definition of Terms.....	15
Chapter 2: Review of the Literature.....	17
Difficulties during School Transition.....	18
The Junior High/Middle School Transition.....	20
Impact on Academic Performance and Social Functioning.....	20
Impact on Low Achieving and Minority Students.....	24
Conclusions from Junior High/Middle School Transition Studies.....	26
Longitudinal Studies of High School Transition in Predominantly Poor and Minority School Districts.....	29
Conclusions from Longitudinal High School Transition Studies in Predominantly Poor and Minority School Districts.....	34
Longitudinal Studies of High School Transition in Suburban School Districts....	34
Experimental Studies of High School Transition.....	37
Conclusions from Experimental Studies of High School Transition.....	42
Connell and Wellborn’s Self-Systems Model.....	44
Application of Connell and Wellborn’s Model in School Transition Studies.....	48
Context: Involvement – School.....	48
Context: Involvement – Teachers.....	53
Context: Structure - Teachers’ Expectations and Values.....	57
Autonomy Support.....	61
Self-Processes: Students’ Concerns.....	62
Relations Among Variables.....	68
The Current Study.....	71
Chapter 3: Method.....	74
Participants.....	74
Procedure	79
Variables and Measures.....	81
Student Outcome Measures.....	81
Classroom Context Measures.....	84
Self-Process Measures.....	86

Chapter 4: Results.....	88
Descriptive Statistics.....	89
Changes in Context and Self-Processes	107
Changes in Engagement.....	108
Eighth Graders' Concerns About the Transition to High School.....	109
Ninth Graders' Concerns About the Transition to High School.....	121
Changes in Academic Outcomes.....	123
Differences Between High and Low Performing Students in 8 th and 9 th Grades...	124
Chapter 5: Discussion of Findings.....	133
Perceived Changes in Context and Self-Processes.....	135
Changes in Engagement and Academic Outcomes.....	138
Eighth Graders' Concerns.....	139
Ninth Graders' Concerns.....	143
Comparison of Eighth and Ninth Grade Students' Concerns.....	145
Changes in GPA.....	147
Perceptions of Teacher Expectations, Teacher Values, and Teacher Support, Uplifts, Hassles, Engagement and Motivation of High and Low Performing Students.....	148
Utility of Connell and Wellborn's Model.....	151
Contributions of Middle School Transition Studies to Studies of High School Transition.....	156
Strengths, Limitations, and Directions for Future Research.....	159
Conclusions.....	163
Appendices.....	165
References.....	180

LIST OF TABLES

1.	Comparison of Time 1 and Time 2 Schools	77
2.	Reliability Coefficients and Descriptive Statistics for Study Variable	90
3.	Comparison of Participating 8 th Grade Students to Non-Participating 8 th Grade Students	92
4.	Comparison of Male and Female 8 th Grade Students	97
5.	Comparison of Male and Female 9 th Grade Students	100
6.	Intercorrelations among Variables – 8 th Grade	103
7.	Intercorrelations among Variables – 9 th Grade	105
8.	Comparison of Variables across 8 th and 9 th Grade	110
9.	Definitions of Concerns Terms by Category	114
10.	Students' 8 th and 9 th Grade Concerns Categorized by Competence, Relatedness, and Autonomy	117
11.	Comparison of High and Low Achieving 8 th Grade Students	125
12.	Comparison of High and Low Achieving 9 th Grade Students	130

LIST OF FIGURES

- | | | |
|----|--|---|
| 1. | Connell and Wellborn's (1991) self-systems model | 9 |
|----|--|---|

Chapter 1: Introduction

Introduction

Even a cursory glance at data for students in their transition year from junior high or middle school to their first year of high school suggests that ninth graders, as a group, are at risk for declines in academic performance and attendance (Alspaugh, 1998; Barone, Aguirre-Deandreis, & Trickett, 1991; Felner, Primavera, & Cauce, 1981; Gillock & Reyes, 1996; Reyes & Hedeker, 1993; Roderick & Camburn, 1999; Seidman, Aber, Allen & French, 1996). Further, ninth graders appear to experience a perceived loss in positive teacher-student relations and, predictably, an accompanying decline in perceived school social support (Barber & Olsen, 2004; Isakson & Jarvis, 1998; Seidman et al., 1996). Why, then, do a significant number of ninth graders exhibit declines in academic achievement? And, concomitantly, why has the need to understand why ninth graders suffer significant declines in these aspects of school performance grown to a heretofore unreached level of imperative?

The Imperative to Study High School Transition

Although success in high school has been linked to a number of positive academic, intellectual, and financial outcomes, recent national and state legislation has served to elevate the need for examination of students' high school experiences. Several accountability measures, upon which school ranking and categorization are based—heretofore either non-existent or not imbued with great significance—may well now drive instructional programs and may portend a host of rewards or sanctions for high schools. For example, although dropout and graduation rates have historically been issues of general concern for high school leaders, their significance

has vaulted rather dramatically owing to the inception of mandates contained in both federal and state initiatives. Mandates of accountability dictated by the No Child Left Behind Act (NCLB) and by the Maryland State Department of Education (MSDE), call for each Maryland high school to record a dropout rate under 3% to meet the state standard for a satisfactory rating. Further, NCLB requires high schools to achieve a graduation rate of 90% or better to meet the standard for adequate yearly progress. According to 2005 MSDE data, Maryland high schools did not meet either target as the dropout rate was 3.69%; the graduation rate was 84.83% (Maryland State Department of Education, 2005). The consequences of not meeting standards can be severe, as will be discussed. In light of findings that students who drop out of high school generally make the decision during the freshman and sophomore years and that students who do not realize success during their freshman year are at significant risk for continued failure and for dropping out of high school, a signal is generated indicating the need to examine the nature of potential risk for students in the transition to high school (Roderick & Camburn, 1993; Wattenberg, 1977).

Additionally, one may not need to look further for the imperative to study high school transition issues than the May 2004 vote by the Maryland State Department of Education that requires high school students in the class of 2009 and beyond to pass *Maryland High School Assessments* (HSAs) in order to receive a high school diploma. These end-of-course, content-specific exams in English, American government, biology, and algebra are administered—in total or in part, depending on the school system sequence of courses—to ninth graders. To date, results of “no-fault” administration of these assessments relative to students’ success have not been

encouraging. A report of the 2005 HSA administration, released by the Maryland State Department of Education (2005) shows a 66.4 % pass rate in American government, a 58.8 % pass rate in Algebra I, a 57.4 % pass rate in English, and a 57.6 % pass rate in biology. Even if one were to use the American government HSA—with the highest pass rate—as a gauge, fully one-third of Maryland high school students would be in jeopardy of a diploma denied.

To be sure, myriad factors may contribute to students' lackluster performance on HSAs, and, equally certain is the fact that school systems across the state would scramble to marshal the resources required to provide remedial coursework for thousands of needy students. Schools seriously below state standards and declining, however, become eligible for state intervention, or reconstitution. Now that these high stakes exams have become a prime factor in the award of a Maryland high school diploma, it is essential to determine, in turn, what factors predict risk for low performance as students make the transition to ninth grade.

Concomitantly, the mandates of accountability dictated by NCLB call for the administration of a reading and a math assessment to tenth graders nationwide. According to 2005 data released by the Maryland State Department of Education, 49% of Maryland high school students were rated basic (not passing) on the state's NCLB math test in geometry. Forty-two percent of the state's tenth graders scored a basic rating on the state's NCLB assessment in reading (Maryland State Department of Education, 2005).

Should students' performance in ninth grade reflect a downward trend and should the trend develop into a downward spiral as Roderick and Camburn (1999)

suggested, schools and school systems are placed, potentially, at risk for a host of sanctions included in the sweeping NCLB legislation. Corrective Action—as it is titled in Maryland—could include replacing school staff, adopting a new curriculum, decreasing school-level management authority, and extending the school day or year. Schools not making adequate yearly progress after one year of Corrective Action will be identified for Restructuring—this may involve replacing all or most of the school staff, contracting with a management company to operate the school, or reopening the school as a public charter school. In fact, the Maryland State Department of Education announced in March, 2006 a plan to initiate a state takeover of seven middle and four high schools in the city of Baltimore.

Do the differences in school size, philosophy, and organization between middle and high school require transitional skills beyond the ken of thirteen to fourteen year old adolescents? At first blush, it is important to note the several differences in school and programmatic structures that ninth graders must navigate successfully in the transition from middle to high school. Middle schools, in general, are housed in smaller physical plants and serve fewer students than high schools. As such, middle schools generally serve a more homogeneous—at least geographically—population. Therefore, it is possible that the smaller confines of a middle school provide a sense of security that is threatened when the young adolescent moves to a larger high school. Further, a cornerstone of middle school philosophy is the teaching team. In this pattern of organization, groups of middle school students generally travel as units to English, social studies, science, and math classes and are taught by a common team of core area teachers. In theory, this practice is designed to permit the

team of teachers not only to coordinate implementation of students' academic programs, but to gain and to share knowledge and insight into each student. Hence, effective teaching teams communicate with students, parents, and colleagues relative to students' academic, social, and personal development. Middle school advisory programs are designed to have counselors and teachers interact with students to guide them through the stress and anxieties of coping with their development of academic, as well as personal and social skills (Carnegie Task Force on the Education of Young Adolescents, 1989; Mac Iver, 1990; Mac Iver & Epstein, 1991; National Middle School Association, 2003).

The notion of teaching teams and advisory programs is all but dashed when the student enters the traditional high school. For most eighth graders, the comfort of moving with classmates from English to social studies, to science, and to math has been an accepted and, perhaps, reassuring routine since sixth grade. In fact, sharing homeroom time—often including advisory activities designed to build students' academic, social, and personal skills—is a key factor in the middle school experience. In ninth grade, the class or group movement idea is replaced by unique and independent students' schedules. Traditional high school structure does not place high priority on replicating the middle school experience. Ninth graders, owing largely to the more diverse nature of the high school program, may find themselves in multiple classes with familiar classmates only by happenstance. Moreover, the teaching team organization—key to implementation of middle school philosophy—is replaced with a departmental structure insensitive to interdepartmental and, perhaps, interpersonal professional communication. These changes are likely to evoke in students a

decreased sense of school social support, increased difficulty with respect to what is expected of them in their new school surroundings, and an increased level of challenge to be successful on a daily basis.

Theoretical Model to Study High School Transition

Largely absent in school transition literature is the employment of a theoretical base, or model, upon which to build. To be sure, a model would serve as a means to a systematic exploration of school transition. Moreover, it would provide a basis upon which to formulate research questions and to interpret findings. The roots of a school transition theoretical framework may, however, be discerned in Eccles et al. (1993), which addressed issues of junior high/middle school transition. Eccles et al. (1993) suggested that if the social environments in the typical junior high school do not meet the psychological needs of the young adolescent, one can predict a decline in motivation, performance, interest, and behavior. The remedy was to view the junior high school transition, optimally, as an issue of stage-environment fit. That is to say the school must be structured or be restructured to meet the needs of the student—as opposed to a philosophy of person-environment fit in which the student is expected to adapt to the structure and organization of the school. Although their research was conducted exclusively on junior high school age participants, Eccles et al. provided a foundation for thought regarding the potential application of this philosophy to the high school transition context.

Connell and Wellborn (1991) presented a theoretical model of self-system processes that is similar to, although more specific than Eccles et al., that is useful for examining more specifically factors that impact upon students during school

transition. (See Fig. 1). Antecedents of Connell and Wellborn's model may be discerned in work offered by several theorists—most notably Deci (1980), Deci and Ryan (1985), Harter (1983a, 1983b), and White (1959) in which, broadly stated, the roles of context and self-concept were explored in relation to competence and outcomes.

Although not necessarily developed to study school transition, Connell and Wellborn's model is premised on the notion that people have fundamental psychological needs for competence, relatedness, and autonomy. Connell and Wellborn (1991) defined competence as the need to experience oneself as capable of producing desired outcomes and avoiding negative outcomes; autonomy as the experience of choice in initiation, maintenance, and regulation of activity and the experience of connectedness between one's actions and personal goals and values, and relatedness as encompassing the need to feel securely connected to one's social context and the need to experience oneself as worthy and capable of love and respect.

Central to Connell and Wellborn's model is the notion that when psychological needs are met in particular venues such as school, engagement will occur and will be manifested in positive affect, behavior, and cognition. The supposition inherent in Connell and Wellborn's model is that students in transition who feel competent, autonomous, and related with respect to their school context will develop engagement relative to their new school environment and, consequently, develop and exhibit skills and abilities leading to success. Conversely, for students not achieving positive perceptions of competence, autonomy, and relatedness, thus

placing themselves at risk for disaffection, adjustment of the school context may be required to increase opportunities for successful transition.

Connell and Wellborn identify three components that characterize context — structure, involvement, and autonomy support. Structure is defined as the amount and quality of information students possess to be successful in the school environment. Connell and Wellborn cite students' perceived ability to assess correctly the amount of effort required to do well or to avoid failure, as well as their ability to understand and to follow school rules. Essential as well, and central to the current study, is students' accurate perception of their teachers' expectations—and the consequences for not meeting said expectations.

The structure component of context is directly related to the self-system process of competence—in which the student queries whether he or she knows what is required to succeed in school and whether he or she has the requisite skills necessary for success. Involvement is defined in terms of the degree of the school's interest in, and emotional support for, students. The involvement component of structure is linked to the self-process of relatedness in which students determine the degree of satisfaction derived from interpersonal relationships, as well as the extent to which they receive school social support.

The final component of structure, autonomy support, relates to choice and the opportunity to connect action and goals. Connell and Wellborn link autonomy support to autonomy self-process characterized by students' desire to succeed in school owing to intrinsic motivation. Although autonomy support has been studied empirically, it lies beyond the primary focus of this study—that of the contextual factors structure

and involvement, as will be defined and outlined below. The autonomy support component of context will not be addressed in this study based on the assumption that ninth-grade students, in their acclimation to high school, are more immediately and deeply concerned with issues arising from teachers' expectations and values and changing interpersonal relationships than with issues stemming from matter of autonomy.

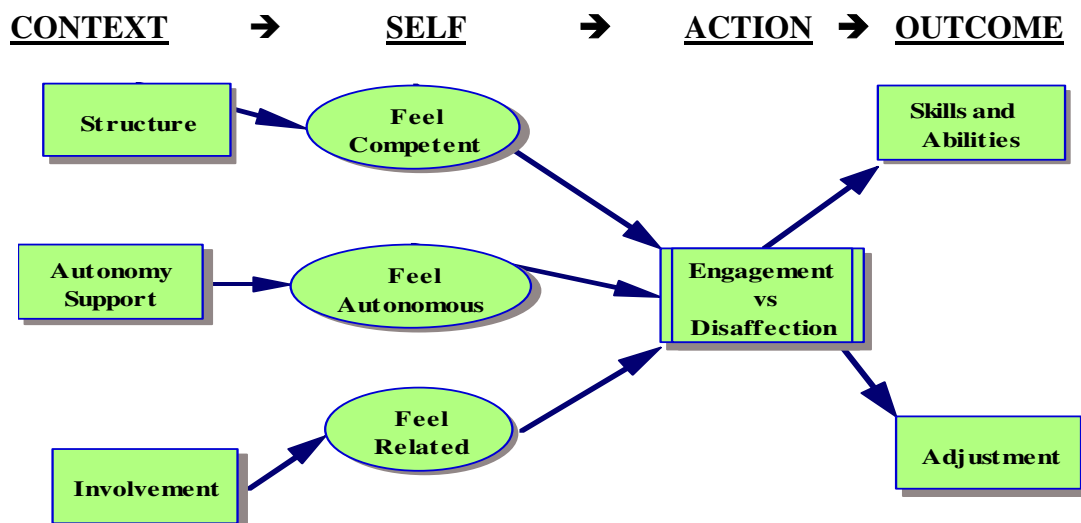


Figure 1. Connell and Wellborn's (1991) self-systems model.

Application of Connell and Wellborn's Model to a Study of High School Transition

Connell and Wellborn's model was not developed with respect to high school transition. However, it is useful for understanding ways in which changes in school contexts might influence student outcomes. For instance, changes in structure encompassing increased academic rigor, higher teacher expectations for academic performance, teacher grading systems, and the inception of exit exams required for graduation might have an impact on students' sense of their competence and, in turn, impact engagement and academic outcomes. Similarly, changes in involvement

precipitated by the change from a middle school to a high school environment may take its toll on students' perceptions of the quality of their teacher relationships and cause them to question the degree to which they believe the school provides sufficient social and emotional support. It is essential, therefore, to explain and to interpret just how identified aspects of the model's framework and selected terms have been applied to the instant study of high school transition.

The significance of changes in school-related structure and involvement in the lives of young adolescents is explored in the current two-year longitudinal study. Framed within the model offered by Connell and Wellborn (1991), students' self-processes, engagement, and outcomes are examined across the transition from eighth grade to ninth grade. Specifically, students' perceptions of their teachers' expectations for achievement and their teachers' values as reflected by the importance placed on the teaching of content are examined as beliefs related to structure. Students' perceptions of the degree of emotional support teachers provide are examined as beliefs related to involvement. The salience of self-processes in the form of threats to perceived competence, relatedness, and autonomy are examined within the context of students' expressed concerns about the transition to high school and through reports of uplifts and hassles. Students' level of engagement is examined with respect to expenditure of effort to pay attention in class, effort to do well in class, interest in schoolwork, as well as the pursuit of learning and performance goals. Finally, student outcome is measured by GPA.

Structure: Students' Perceptions of Teacher Expectations and Values

Teachers' expectations and values are important to study across the transition to high school. As middle and high school structure may differ significantly, it is important to understand what, if any, impact on students' perceptions occurs in the progression from eighth to ninth grade. Teachers set and communicate their expectations and standards for students' level of academic achievement (e.g., test performance, class participation, homework completion), their classroom behavior (e.g., following school and classroom rules, cooperation with teacher and with classmates), as well as for students' level of effort expended to work and to learn to the student's full potential (Wentzel, 2002). Ninth graders might perceive their high school teachers to have more focused expectations for students' academic achievement, behavior, and effort owing to the need to earn sufficient credits to progress to tenth grade as well as the need to achieve successfully on course-specific high school assessments. In turn, these perceptions might predict changes in engagement and achievement.

Involvement: Students' Perceptions of Emotional Support

Similarly, students' perception of emotional support is a potentially important variable. Differences in school structure from eighth to ninth grade may move students from a perch of perceived support to an uncertain sea of change. Students who perceive support from their teachers during their transition to ninth grade may exhibit greater levels of engagement than those who do not. The significance of emotional support for understanding risk factors associated with transition is found in the few experimental studies contained in the high school transition literature (Felner,

Favazza, Shim, Brand, Gu, & Noonan, 2001; Felner, Ginter, & Primavera, 1982; Reyes, Gillock, & Kobus, 1994; Reyes & Hedeker, 1996; Weinstein, Soulé, Collins, Cone, Melhorn, & Simontacchi, 1991).

Although these studies do not directly assess emotional support as a theoretical base, each is predicated on the notion that a recreation of key support aspects of middle school in a high school setting would bring positive results relative to students' levels of academic achievement, attendance rate, and perceptions of school social support. Interventions in these studies included segregating ninth graders in a separate wing of the high school building, creating teaching teams, and providing additional counseling services—essentially attempting to recreate critical support elements of students' middle school experience (Felner, Favazza, Shim, Brand, Gu, & Noonan, 2001; Felner, Ginter, & Primavera, 1982; Reyes, Gillock, & Kobus, 1994; Reyes & Hedeker, 1996; Weinstein, Soulé, Collins, Cone, Melhorn, & Simontacchi, 1991). The assumption implicit in these experimental studies is that students who feel related to school and who believe that the school cares for and about them, are more likely to adopt positive goals and values, thus leading to engagement in the school setting.

Self-Processes: Concerns About Competence, Relatedness, and Autonomy

Self-processes are important to examine as a function of school transitions because concerns are likely to heighten surrounding students' perceptions of their competence, relatedness, and autonomy. Understanding concerns is important because it may shed light on anxieties and fears over unmet needs experienced by students during high school transition. These anxieties and fears may well impede a

healthy transition and positive outcomes. Students' concerns about the transition will be collected through students' reports of uplifts and hassles as well as by means of student narratives. It is suggested that expressions of students' concerns may reflect perceptions of unmet needs or of perceived threats to students reaching the necessary level of engagement.

In summary, the current study examines students' perceptions of structure by means of students' perceptions of teacher expectations and values and involvement through students' perceptions of teachers' emotional support. Moreover, the study captures adolescents' self-processes as expressed by concerns regarding competence, relatedness, and autonomy, and their self-reports of uplifts and hassles as they conclude their final year in middle school as eighth graders and again at the conclusion of their first year in high school. Ostensibly, the purpose of the study is to determine if declines in student achievement can be predicted by students' perceptions of classroom contextual factors and self-processes in their transition from middle school to high school.

Research Questions

1. What are the changes in perceived context and self-processes across the transition from eighth to ninth grade?

Perceived context will be assessed by students' perceptions of teachers' expectations and values and perceptions of teacher support. Self-processes will be assessed by students' self-reported concerns about competence, relatedness and autonomy as well as by uplifts and hassles. It is predicted that students' perceptions of teachers' expectations and values and their perceptions of teacher support will

change as students progress from eighth to ninth grade. It is also predicted that students' perceptions of their self-processes will change as students progress from eighth to ninth grade.

2. What are the changes in engagement and academic outcomes across the transition from eighth to ninth grade?

Engagement will be measured by effort to pay attention in class, effort to do well in class, learning and performance goals, and interest; outcome will be measured by grade point average (GPA). It is predicted that students' level of engagement and academic outcome will change as students progress from eighth to ninth grade.

3. What are eighth graders' concerns about the transition to high school?

It is expected that eighth graders' concerns about the transition to high school can be categorized into competence, relatedness, and autonomy.

4. What are ninth graders' concerns about the transition to high school and how do they compare to the concerns of eighth graders?

It is predicted that the concerns of ninth graders' concerns, as those of eighth graders', about the transition to high school can be categorized into competence, relatedness, and autonomy.

5. Are students at risk for a decline in GPA during the transition from eighth to ninth grade?

It is expected that some, but not all, students are at risk for a decline in GPA as they progress from eighth to ninth grade.

6. Are students' perceptions of teacher expectations, teacher values, teacher support, students' reports of uplifts and hassles, students' reported level of

interest, effort to pay attention in class, effort to do well in class, and pursuit of learning goals and performance goals related to differences, as measured by GPA, between higher and lower performing students in eighth and in ninth grade?

It is predicted that higher and lower performing students in eighth grade and in ninth grade will differ in their reports on these variables.

Definition of Terms

The following is a list of the key constructs as defined in the current study.

1. Achievement – student academic performance as measured by students' grade point average (GPA).
2. Competence – experiencing oneself as capable of producing desired outcomes and avoiding negative outcomes (Connell & Wellborn, 1991).
3. Relatedness - feeling securely connected to the social surround and the need to experience oneself as worthy and capable of love and respect (Connell & Wellborn, 1991).
4. Autonomy - the experience of choice in initiation, maintenance, and regulation of activity and the experience of connectedness between one's actions and personal goals and values (Connell & Wellborn, 1991).
5. Concerns – worries expressed by students relative to normative transition. In this study, concerns are operationalized by students' self-generated concerns, as well as by uplifts and hassles (Kanner et al., 1981).
6. Context - students' perceptions of structure (teachers' expectations, values) and involvement (social-emotional support; Connell & Wellborn, 1991).

7. Engagement - motivational outcomes reflected in effort to pay attention in class, effort to do well in class, the pursuit of learning and performance goals, and interest in class.
8. Teacher expectations – standards of performance set by teachers with respect to student achievement and conduct.
9. Teacher values – the degree to which teachers convey commitment to their content and to student achievement.
10. Transition – normative school progression, i.e. from elementary to middle school; from middle school to high school.

Chapter 2: Review of the Literature

The literature review to follow points to several issues relative to why ninth graders may be at risk in their transition to high school. In general, studies of transition to middle and to high school present evidence indicating potential for declines in grade point average and in attendance for young adolescents (Alspaugh, 1998; Barone, Aguirre-Deandreis & Trickett, 1991; Crockett et al., 1989; Eccles & Midgley, 1989; Felner, Primavera & Cauce, 1981; Gillock & Reyes, 1996; Midgley et al., 2002; Reyes & Hedeker, 1993; Roderick & Camburn, 1999; Seidman et al., 1994; Seidman et al., 1996; Simmons, Blyth & Carlton-Ford, 1983; Simmons & Blyth, 1987). In addition, the literature suggests that some students experience concern relative to their ability to be successful academically (grades and work load), socially (developing and maintaining relationships with peers and faculty), and with respect to their autonomy (pursuing personal interests and extracurricular activities in the school context) (Akos, 2002; Barber & Olsen, 2004; Berndt & Mekos, 1995; Eccles et al., 1993; Elias, et al., 1985; Gilchrist et al., 1988; Isakson & Jarvis, 1998; Mitman & Packer, 1982; Schulenberg et al., 1984; Seidman et al., 1996; Wigfield & Eccles, 1994). Finally, a theoretical framework with respect to the relationship between and among school context and self-processes, interest, effort to pay attention in class, effort to do well in class, and the pursuit of learning and performance goals, and outcomes, heretofore not employed in high school transition studies, suggests that changes in students' perceptions of school context and self-processes may impact students' school success (Connell & Wellborn, 1991).

In the following section, literature on the transition to junior high and middle school will be reviewed first. These transition studies, born of the shift from junior high school organization to implementation of the middle school concept, provide an important foundation as well as insight regarding issues inherent in school transition. Indeed, themes, issues, and concerns relative to junior high/middle school transition echo strongly in an examination of high school transition. Next, studies of the transition to high school will be described, including experimental interventions designed to mitigate against potential downfalls during the transition period.

Difficulties During School Transition

Employing a broad view, school transition literature identifies two primary reasons why children have difficulty making normative school progression. Alvidrez and Weinstein (1993) suggest that children may lack the necessary skills, knowledge, or ability to successfully navigate the transition. They posit that increased focus on academic achievement and the potential perception of higher demands by teachers may bring to the fore students' deficits relative to academic requirements for success—whether the transition is from elementary to middle or middle to high school. Simply stated, not possessing sufficient or requisite academic knowledge and skills contributes to students' academic woes as they progress to their next level of school. Although without explicit mention by Alvidrez and Weinstein, Connell and Wellborn's (1991) model can readily be discerned with reference to the structure component of context.

Additionally, Alvidrez and Weinstein (1993) state that the literature identifies adolescents who find the transition so disconcerting that their ability to function

successfully is significantly impaired. They suggest that the shift in school context may simply be too much for some students to bear. Normative transition to middle or to high school requires students to leave behind a world filled with familiarity and to trade it for a context replete with unknowns and uncertainties. Students during transition must jettison a context of confidence and comfort relative to established peer and teacher relationships, knowledge of the school physical environment, familiarity with school rules and expectations for behavior. Generally, students embark on a transition to a larger, more demanding school organization. The middle school student, for example, departs a school context with a focus on school social support—student and teacher teams, advisories, and, in general, a smaller and more geographically homogeneous student body—to a high school context that may be perceived to be much less personal and caring. This issue raises questions regarding the effectiveness of students’ coping skills to mitigate against perceived threats to feelings of relatedness in their new school context. The link to Connell and Wellborn’s involvement component of school context is apparent.

These themes—of students’ academic and social competencies, as well as the impact of race and socioeconomic status—are recurrent in studies of junior high/middle school and high school transition. Preparatory to a discussion of high school transition, it is essential to broaden the scope to encompass the larger issue of school transition and to establish, at least in skeletal form, that school transition at junior high/middle school and high schools levels, presents potential for risk of declines in student achievement. The melding of junior high and middle school studies in the next sections, however, is not meant to mislead relative to the

significant differences between these two school structures. Middle schools serve students from grades 6 through 8 and, in brief, are anchored in a philosophy that employs student and teacher teams, advisories, and clear concern for students' academic, personal, and social development. The traditional junior high school served students in grades seven through nine. Generally, junior high school organization was more aligned with the current traditional high school structure—that of academic departments, as opposed to teaching teams. Most telling was the relative absence of programs and practices focusing on students' social and personal growth.

The Junior High/Middle School Transition: Impact on Academic Performance and Social Functioning

Seminal studies of school transition centered on comparisons of students in K-8, 9-12 schools to those in K-6, 7-9, 10-12 settings (Blyth, Simmons & Carlton-Ford, 1983; Simmons & Blyth, 1987). Simmons & Blyth (1987), in their longitudinal study of students in the Milwaukee public schools, suggested that transition to junior high school had a negative effect upon students of both genders, but especially girls. Their contention was that students in a K-8 school organization fared better in grades seven and in grade ten than their junior high school counterparts. These researchers contended that the junior high transition was ill-timed, given the several transitions young adolescents faced at this age—specifically, the onset of puberty and dating. Although this study was designed to measure the efficacy of school organizations for young adolescents, it carried weight for two main reasons: It suggested that adolescents undergoing multiple developmental changes while also changing schools are likely to suffer negative outcomes relative to school; further, data collected

indicated that negative consequences of multiple transitions extended into grades nine and ten.

Simmons and Blyth were unable to examine the issue of transition to high school as their sample size dwindled. Moreover, a key factor in junior high school transition for females, the onset of puberty, was no longer a critical factor by grade ten, two years post transition. However, although findings were not readily applicable to high school transition, the data suggested that school transition, in and of itself and regardless of level, may result in negative effects for adolescents. Specifically, Simmons and Blyth pointed to the difference in the nature of elementary and secondary schools relative to size, the idea of changing classes and, perhaps, classmates frequently during the school day, the number of teachers a student would have during each day, and the practice of tracking as potentially causal factors in a child's downward academic trend during transition to junior high school.

The Transitions at Early Adolescence Project and its successor, the Michigan Study of Adolescent Life Transitions study (MSALT), provided data for a series of studies focused on the transition from elementary to middle school. Midgley and Feldlaufer (1987) suggested that a developmental mismatch was readily apparent as students made a transition from elementary to junior high school. They forwarded the idea that the mismatch can be linked to negative changes in student behaviors and beliefs over the transition to junior high school. As part of a larger two-year longitudinal study, students from 12 middle income communities within a 50 mile radius of Detroit participated. Students in the 2,210 predominantly white sample were

surveyed in sixth grade and in seventh, following their progression to junior high school. Although this study focused primarily on students' experiences in junior high school math classrooms with respect to classroom decision making, the researchers claimed support for their notion of the developmental mismatch that occurs between students who are maturing and the junior high school classroom environments provided. Specifically, Midgley and Feldlaufer (1987) suggested that students' motivation, beliefs, and attitudes towards math deteriorated over the transition to junior high school towards math.

Further analysis of data gathered from The Transitions at Early Adolescence Project was offered by Feldlaufer, Midgley and Eccles (1988) with respect to the impact of the relationship between teachers and students across the transition from elementary to junior high school. Students perceived their junior high math teachers as less caring, less friendly, and as grading them less fairly than their sixth grade elementary school teachers. Feldlaufer, Midgley and Eccles (1988) suggested that the deterioration of the quality of teacher-student relationships during the transition to junior high school had an adverse impact on students' academic motivation. In an additional study employing data from The Transitions at Early Adolescence Project, Feldlaufer, Midgley and Eccles (1989) concluded students' perceptions of teacher support was a key element in students' achievement, or lack thereof, as they progressed to seventh grade junior high school math classrooms. Findings of this study held that students who perceived their junior high school math teacher as more supportive than their sixth-grade teacher expressed more positive attitudes and beliefs regarding the value of math. Conversely, those students who moved to a seventh

grade math teacher perceived as less supportive than their sixth grade teacher reported declines in their attitudes and beliefs about their math experience. Central to the conclusions of this study, however, was the researchers' clear statement of the importance of the nature of the junior high school classroom environment, as well as the inextricable link between student-teacher relationships and its effect on motivation in seventh-grade junior high school math achievement. As will be discussed in a following section, this and other studies employing data from The Transitions at Early Adolescence Project provided significant support for use of a stage-environment fit model as a means to explore and to understand the transition to junior high/middle school.

Wigfield and Eccles (1994) and Wigfield, Eccles, and Mac Iver (1991) employing data from The Transitions at Early Adolescence Project, built upon the findings of Simmons et al. (1983). These longitudinal studies were comprised of some 1,850 students from 12 low to middle income communities who made the transition from sixth grade in elementary school to seventh grade in junior high school. These researchers reported that students' self-esteem decreased significantly across the transition. Students' competency beliefs in mathematics and English, as well as in their social and athletic abilities decreased immediately following the transition to junior high school.

Findings by Eccles, Lord and Buchanan (1996) based on data gathered in the Michigan Study of Adolescent Life Transitions study (MSALT) also indicated support that the transition to junior high school is fraught with potential peril for young adolescents. They suggested, however, that declines in students' school

motivation and self-esteem were not inevitable, but were associated with the nature of junior high school classrooms. Specifically, Eccles et al. (1996) contended that most students experienced a negative change in their classroom experiences in the transition to junior high school. Their examination of students' academic success prior to transition also led to the conclusion that junior high school transition is especially negative for low achieving students.

Crockett, Petersen, Graber, Schulenberg and Ebata (1989) posited that school transition brings negative effects relative to students' grade point averages. Although their study focused on the impact of the timing and number of school transitions experienced in their sample of 253 students from two middle class suburban school districts, Crockett et al. concluded that a strong negative relationship exists between school transitions and grades. With respect to grades, students making the transition to seventh grade suffered a decline in academic performance. These findings added fuel to the argument that school transition is rife with risk for adolescents' academic functioning. Minimal impact, however, was reported relative to decrements to students' sense of social competence.

The Junior High/Middle School Transition: Impact on Low Achieving and Minority Students

Few studies of the junior high/middle school transition focused on low achieving and minority students. However, Seidman, Allen, Aber, Mitchell and Feinman (1994) reported on their longitudinal study of the transition to junior high school by 580 predominantly minority adolescents (161 African-American, 146 white, 273 Latino) in Baltimore, Washington, D.C., and New York City. Declines in

self-reported grade point average and in self-esteem were experienced along with increased daily hassles. Further, self-report measures reflected decreases in perceptions of school social support and in participation in extracurricular activities. Curiously, however, students in this study reported increased academic and social efficacy expectations after the transition to junior high school. This appears inconsistent with Eccles et al. (1993) regarding students' declining sense of math competence following transition. Although these two studies are not directly comparable, it may be important to note that in Seidman et al. (1994), students reported that they could master the difficult academic and social challenges that were before them.

Simmons, Black and Zhou (1991) examined junior high school transition with a focus on African-American students in the Milwaukee Public Schools. In their longitudinal study, 512 students (88 African-American males, 92 African-American females, 175 white males, 157 white females) were studied in their transition from sixth- grade in a K-6 elementary school to seventh grade in junior high school. Simmons and her colleagues reported African-American boys and girls demonstrated a greater decrease in grade point average, as well as a greater decrease in positive attitudes towards school than their white peers. Gutman and Midgely's (1999) study of 62 African-American students echoed findings of Simmons, et al. (1991) but, curiously, did not find that parental involvement, school belonging, and perceived teacher support had an impact on students' grades across the transition from elementary to middle school. These researchers suggested that the absence of impact

may have been due to reforms undertaken in the middle school to create a smaller and more intimate learning environment.

Although data were not provided relative to participants' grade history, Eccles and Midgley (1989) and Eccles, Midgley, Wigfield, Buchanan, Reuman, Flanagan and Mac Iver (1993) also suggested that the junior high school transition resulted in a negative change for all students; they reported the transition to be particularly difficult for low achieving students.

Conclusions from Junior High/Middle School Transition Studies

The attempt to draw meaningful conclusions from findings presented in studies of junior high/middle school transition is hindered by several significant factors. First and, perhaps, most obvious, is the relatively small number of studies of this period in the life of a young adolescent. Further, inconsistencies abound relative to sample characteristics, differences between and among school structures and organization, methods, and findings. Specifically, samples in the aforementioned studies were drawn from urban, suburban, rural school settings and systems; socioeconomic background ranged from affluent to poor (in several cases, socioeconomic status was not reported at all). A strength of this range of characteristics is that it may suggest that a broad base of students is at risk for potential downturns at times of normative school transition. However, because of the small number of studies, ability to draw conclusions regarding single groups is limited.

General conclusions also are difficult to draw because of the conglomeration of school progression patterns across studies. For example, one finds samples of

students in schools employing a K-8, 9-12 pattern, others in a K-6, 7-9, 10-12 arrangement, and still others reflecting a K-5, 6-8, 9-12 organization. Differences between and among these varying school organization patterns may have a significant impact on students' success during transition, as school philosophies, instructional practices, and expectations for student achievement may vary. In addition is the fact that given the time period in which several of the studies were conducted, middle school philosophy and organization were not yet forces in educational programs for young adolescents. It is important to recall that several studies cited were primarily concerned with the comparison of school performance characteristics of students in K-8, 9-12 and K-6, 7-9, 10-12 schools. Middle school organization, with its attendant structure of teaching teams, advisories, and other programs designed to provide social as well as academic support to students in grades 6, 7, and 8, could not have been considered as mitigating agents in these high school transitions.

These studies of junior high/middle school transition did not employ intervention or experimental designs. Several studies attempted to compare students in different transitional situations—those in K-8 schools, those in a K-5, 6-8 progression, as well as students in a K-6, 7-9 organization. The lack of experimental interventions, however, prevents conclusions concerning cause and effect.

Moreover, absent in junior high/middle school transition studies, especially with respect to the drop in academic performance, was the consideration of higher curricular and teacher expectations. Expanding this notion, several junior high/middle school transition studies documented decrements in grade point average and attendance—yet, no study offered sound and definitive analysis as to why grades and

attendance suffered in the transition. The absence of explanatory variables (e.g., changing teacher expectations, higher expectations for content mastery) in these studies reflects the fact that the body of work does not appear to be born of a theoretical framework. Save for Eccles et al. (1993) discussed below, the literature is silent concerning the application of theory to the study of junior high/middle school transition.

Still, the value of this body of junior high and middle school research cannot be underestimated. Taken collectively, and with an appropriate proviso relative to generalization, studies of junior high and middle school transition suggested that potential threats to students' academic performance, as well as to their sense of academic and social competencies, to some degree, were present. Longitudinal studies have been employed to provide a degree of evidence of decrements in grades and attendance. Finally, findings with respect to the transition to junior high school resulting in negative effects upon a significant segment of young adolescents did, indeed, lead the way to determine what, if any, extensions could be applied to high school transition. Clearly, these studies gave direction to the development of queries relative to high school transition.

In the following section, studies of high school transition are offered. Initially, longitudinal studies of the challenges of transition faced by poor and minority students are explored. Next, the potential peril of high school transition for non-minority and suburban/rural are presented. Finally, experimental studies in which the ninth grade experience is altered are discussed.

Longitudinal Studies of High School Transition in Predominantly Poor and Minority School Districts

In this section, four studies that focused primarily on low income African-American and Hispanic students attending large urban school districts are reviewed. Generally, the success of students' transition to high school was measured by their academic performance, as reflected in grade point average. Each of the four studies presents strong evidence of a decline in students' grades as they entered high school. Although not comparable in every aspect, these studies, taken as a whole, presented findings that low income minority students were at risk for declines in academic performance in the transition to high school.

Roderick and Camburn (1999) provided a somber and sobering statistical picture of the impact of ninth-grade transition in a study of Chicago high school students. Their study informed relative to the downward trajectory of high school achievement following the first semester of the ninth-grade year. These researchers examined the school records of some 27,612 Chicago public school students entering grade nine in the 1992-93 school year. Eighth grade data relative to grades and attendance were unavailable as the school system did not record these data centrally. Hence, this study did not address student outcomes over the transition from eighth to ninth grade. The sample was predominantly minority (56% African-American, 28% Hispanic) and socioeconomically disadvantaged. Forty-two percent of the sample failed at least one major subject (English, math, social studies, science) in the first semester of ninth grade; fully 24% failed two major courses and 14% failed three or more. Second semester achievement analysis revealed that a student's chance for

grade recovery was one in three. Further, this study suggested that the percentage of students failing at least one major course in grade ten was greater than grade nine, thus charting a downward spiral that resulted in approximately half of the sample dropping out. Males were found to be at greater risk of failing two or more major classes; Hispanics were found to have higher rates of failure overall.

In a seminal study of high school transition, Felner, Primavera and Cauce (1981) reported findings of high school transition for 250 randomly selected students in three northeastern cities. Their predominantly non-white sample from lower income families was described as representative, relative to gender and ethnicity, of the overall population in three selected high schools. The researchers selected grade point average (GPA) and attendance as criterion variables. The transition to high school, as demonstrated by these findings, was fraught with potential downturns for students. Comparing school attendance from eighth grade to ninth, the percentage of participants who were absent 20 days or more rose from 23% in eighth grade to 45% in ninth grade. Concomitantly, the percentage of participants who achieved less than a C average increased from 22% to 40%. This study also reported that white students fared better than their black counterparts with respect to GPA. No significant differences were found, however, for gender or racial background with respect to attendance. Although the absence of empirical data prevented the authors from reporting causes for declines in academic performance and school attendance, they suggested that high schools invest in restructuring and organizational reforms that would lead to more positive student outcomes. Given the trend data supplied in this study, the need to address issues facing ninth grade students was acute.

The work of Seidman, Aber, Allen and French (1996) provided an important example of studying the bridge between the academic and affective aspects of the transition to high school. Their longitudinal study of 330 predominantly poor students from Baltimore, Washington, D.C., and New York City placed focus on student reports of engagement and perceptions of school social support in the transition to high school. Specifically, the authors sought to measure the impact of high school transition on self-esteem, students' perception of the school context, and to determine if perception of the high school context was influenced by race, gender, or ethnicity. Participants in the study attended elementary-only or elementary-junior high schools, depending upon their jurisdiction.

Although not the primary focus of the study, Seidman et al. reported that GPA declined. Seidman and his colleagues contended that the self-esteem decrements relative to high school transition did not seem to be on par with those suggested with transition to junior high school. Nonetheless, this study suggested that both rising disengagement and a decline in perception of school social support occurred in the high school transition; neither race nor gender were reported to have a unique impact. Moreover, this study reported a decline in participation in extracurricular activities from eighth to ninth grade. The researchers offered that a developmental mismatch provided the most comprehensive and accurate explanation of the findings reported. Interestingly, however, they suggested that efforts should be focused at the junior high school level—consistent with their belief that transition impact was far greater at that level. The authors contended that the transition to high school represented the second change in secondary school context for adolescents. The potency of such a

change, it was forwarded, was mitigated by students' initial transition to junior high school.

Gillock and Reyes (1996) studied the high school transition for predominantly poor, urban minority students entering a large Chicago high school. As part of a larger longitudinal study, self-report data were collected at the middle of students' eighth grade year and at the end of grade nine. All participants in this study attended K-8 elementary schools and, as such, were making their first transition to a secondary school. Data collected included self-reports of students' perceptions of school and self; also collected were indicators of students' academic performance—from school transcripts. This study reported a steady deterioration of academic performance and an increase in absence in ninth grade. Although the small sample size ($n = 46$) restricted the generalizability of findings, this study suggested students' perceptions of their teachers related to their self-perceptions and to their academic performance. These researchers suggested that high school teacher behavior, and how that behavior is perceived by ninth graders, may be a key contributing role to student's academic success. This study posed the notion that if teachers of ninth grade students were perceived as harsh graders, as authoritarian in demeanor, and as uncaring relative to the development of positive relationships with students, the result may well be in lowered student self-esteem, self-efficacy, and in a decline in academic performance. This study did not include variables to measure the potential impacts of other context variables.

Amidst the few studies of high school transition of poor minority students stands an ethnographic study. Newman, Lohman, Newman, Meyers and Smith (2000)

provided a description of 29 high ability, low-income, urban, minority students participating in The Ohio State University's Young Scholars Program. The intent of the study was to identify factors associated with academic success in the ninth-grade transition. Students were members of a select group of students in that participation in the Youth Scholars Program required maintenance of a 3.0 GPA. Further, participants were required to attend a summer institute, from one to three weeks, on the college campus for six summers. Given these two considerations, one must proceed with caution relative to the generalizability of the findings. Nonetheless, this study attempted to address the challenges students face relative to issues in their transition to high school: perceptions of the academic environment, perceptions of teachers and the school setting, the role of family, and the role of peers.

Among their conclusions, Newman and her colleagues pointed to the importance of the pivotal role played by teachers and the quality of student-teacher interaction for students' success—especially among low-performing students. This group of students reported that high school teachers were not as supportive as their eighth grade teachers. Moreover, students perceived that higher standards and demands were set by ninth grade teachers. Newman et al. offered that students interpreted higher teacher expectations as teachers' indifference and non-support. The key role of families, especially that of mothers, was noted in the study's findings, prompting the admonition for high schools to initiate programs to foster family involvement in school life, both academic and extracurricular. Further, the authors suggested that peer relationships play a key role in students' academic success in grade nine. This study suggested that high schools devise means to assist students in

developing coping skills to successfully navigate the transition to ninth grade.

Although no empirical data were reported, Newman, et al. suggested that students who are low achievers in grade nine fall into three groups: those who have become alienated from school, those who have faced serious challenges—family or academic, and those who get caught up in the social excitement of high school and lack the self-discipline to remain focused on academics. While the reported outcomes of this study may provide important descriptive information—as it is one of the very few ethnographic studies—one is reminded of the unique characteristics of the sample and, therefore, the inherent difficulty of generalizing the findings.

Conclusions from Longitudinal High School Transition Studies Transition in Predominantly Poor and Minority School Districts

These studies provide a jumping-off point regarding high school transition. While it may be said that findings suggested potential peril relative to high school transition, even a modicum of scrutiny leads one to question the generalizability of the findings. First, very few studies of this type have been conducted. Second, the feasibility of generalizing to all poor, urban, minority populations, as well as to all ninth grade students should be questioned. For example, students arrived at their respective high schools with a variety of elementary, junior high, and middle school experiences. Hence, their educational histories with respect to school structures and expectations were not readily comparable.

Longitudinal studies of high school transition in suburban school districts

In contrast to the urban school systems in the aforementioned studies, Alspaugh (1998) presented findings of a decline in academic performance in the transition to ninth grade in rural school systems. Alspaugh reported findings from 16 predominantly rural and small town Missouri school districts. Although no descriptive statistics were provided relative to the racial composition of the sample, Alspaugh did state that the percentage of students receiving free and reduced meals in the three districts studied ranged from 28.8% to 40.5%. Regardless of previous school organizational patterns, Alspaugh's participant group experienced a mean achievement loss in grade nine, as measured by the Missouri Mastery and Achievement Tests in the areas of reading, math, science, and social studies.

Declines in GPA and attendance in the transition from eighth to ninth grade were also reported by Barone, Aguirre-Deandreis and Trickett (1991). The 82 participants in this study attended suburban Washington, D.C. middle and high schools. The sample was almost equally divided between male and female, 59% black, 28% white, and 10% Hispanic. When comparing students' GPAs between grades 8 and 9, Barone et al. reported 73.1% experienced a decline, with 20.6% showing a drop of 1.0 (a full letter grade) or more. With respect to attendance, 65.6% of students recorded increased absences when comparing records between grades 8 and 9. Moreover, 15.6% showed a decline of more than 10 days over their previous school year's absences. Barone and his colleagues reported that race was not an important factor with respect to change in grade point average or attendance.

Isakson and Jarvis (1998) reported statistically significant declines in GPA

and attendance in their relatively small (n=41), upper middle class homogeneous sample. Students attended a university-affiliated K-8 laboratory school. The study examined a combination of adjustment variables including GPA, attendance, and students' sense of school membership. These researchers reported a significant drop in GPA from 3.5 in eighth grade to 3.1 in ninth. Isakson and Jarvis cautioned that the seemingly small decrease takes on increased significance in light of the fact that students at that school are highly motivated and grade-oriented. Students reported increased stress at the beginning of ninth grade (not statistically significant, however) but the stress level decreased over the course of the year. Support from friends increased over the transition; school social support did not decrease. The researchers attributed this stability of support to the unique nature of this group. The group moved en masse to the ninth grade; hence, relationships were virtually undisturbed.

Finally, a five-year longitudinal study by Barber and Olsen (2004) revealed that students making the transition from eighth to ninth grade reported that they liked school less, received lower support from teachers and administrators, experienced less monitoring from teachers, lower classroom autonomy, less involvement in school activities, lower self-esteem, and higher depression. However, students' GPAs and attendance data were not a focus of the authors. This study tracked a rather homogeneous sample of 662 students (71% white, 84% middle income, 46% Mormon).

A lone study that attempted to elicit students' concerns shortly after the transition to ninth grade can be found in Brown and Armstrong (1982). These researchers offered results from their study addressing students' concerns as they

transitioned from eighth grade to a 1,000 student girls' high school in suburban London. Clearly, this is a geographical jump from previously referenced studies. Therefore, differences in communities, school structure, organization, and pedagogical practices may, indeed, confound attempts at comparison. It is presented, however, as one of the very few studies that sought to capture students' concerns at the age of high school transition. At the beginning of their first year of high school, the sample of 173 girls was asked to write an essay about their feelings on entering secondary school. Students' concerns at the beginning of the school year, and monitored through subsequent contact, revealed issues relating to academic competence (tests, tackling new subjects, doing homework), relatedness (not having friends, strict teachers) and school rules, personal safety, and disciplinary matters (being late, detentions, fear of being bullied).

Taken as a whole, the studies above suggest that factors may be at play that work to the detriment of all students in their transition to ninth grade, regardless of race or socio-economic status. Studies reference adverse impact on GPA and attendance, as well as on self-esteem and perceptions of school social support.

Experimental Studies of High School Transition

Although not present in junior high/middle school transition studies, several high school transition studies are based on experimental design. Despite the fact that most focus on poor minority students, a separate section is warranted for comprehensive discussion of high school transition, as experimental design studies may lead to more definitive conclusions.

Felner, Ginter and Primavera (1982) reported on the Transition Project involving 59 experimental group and 113 control group students in a large urban high school that served a predominantly poor and minority student body. The premise of the intervention was that students' downward trajectory could be addressed and, perhaps, arrested through the creation of an environment perceived by students as positive. The project was designed to increase the amount of social support perceived by students, to develop positive teacher-student relationships, to increase students' sense of accountability and reduce their feelings of anonymity, and to facilitate access to important school transition information—school rules and regulations, for example. Experimental group students were scheduled such that their four major subject classes (English, social studies, math, and science) were taken only with other experimental group students. Hence, their peer group size, at least in these academic areas, was greatly reduced. It was anticipated that a sense of peer support and a sense of belonging would result. Further, these experimental group classes were to be located in a particular area of the building, in an attempt to create a sense of proximal community. Control group students' classes were spread across the building. Teachers volunteered to teach experimental group classes as well as to serve as guidance counselors to experimental group students. As such, these teachers developed not only relationships characterized as teacher-student, but also counselor-student.

Inherent in its design, one can discern, perhaps faintly, the resonance of a school within a school or, in current parlance, a smaller learning community, for experimental group students. Further, the configuration of teachers' assignments bore

similarity to a teaching team, thus applying the team approach—a cornerstone of middle school philosophy—to the high school setting. Utilizing homeroom teachers as counselors, in the same vein, was reminiscent of at least one variation of a middle school advisory program.

Short-term results proved promising as the experimental group GPA showed significantly higher academic performance and lower absenteeism than the control group at the end of grade nine. Moreover, Felner and his colleagues reported that experimental students' self-concepts (scholastic, peer, family and general self-concept) remained stable whereas control group students showed marked declines on scholastic, peer, and general self-concept indices. Finally, Felner et al. reported students' perceptions of a school's social climate on three general dimensions: a relationship dimension which included subscales in involvement, affiliation, and teacher support; a personal development dimension with subscales in task orientation and competition; a system maintenance dimension with subscales in order and organization, rule clarity, teacher control, and innovation. Of these, experimental group students reported higher levels of perceived social support from teachers. Hence, Felner et al. concluded that experimental group students enjoyed a far more successful transition to high school than their control group counterparts. The study, however, did not indicate whether the intervention was continued for experimental group students as they entered grade 10, nor is there mention of whether the intervention was offered to the following year's ninth graders. Hence, it is impossible to determine, from this study's findings, if the successes claimed were short- or long-term.

The design and the implementation of this study evokes a series of cautions: consideration must be given to the notion that the higher GPAs for experimental group students might have been attributed to teachers' expectations that these students would do better; the control groups' lower GPA simply may have been the result of greater absenteeism; experimental students' self-reports of self-concept and social climate ratings may have been influenced by the special treatment their group received. Further, more favorable results on measures administered might have been influenced by any special characteristics of the teachers of experimental group students, as an argument could be forwarded that teachers who volunteered for this project exhibited greater compassion, dedication, or superior teaching skills than their non-volunteer counterparts. And, finally, one could question the effectiveness of the counseling component of the intervention. Homeroom teachers served as students' counselors—yet these teachers were neither certificated in counseling, nor did they receive any training in school counseling. This study was not reported to be based on a theoretical model, although implicit in the design was the idea that greater school academic and social support would result in a more positive transition to high school.

In a subsequent study, Felner, Favazza, Shim, Brand, Gu and Noonan (2001) provided longitudinal data for Transition Project participants. In discussion of longitudinal results, however, the characteristics of schools implementing the intervention were not mentioned. Felner, et al. reported that experimental group students were more likely to maintain academic performance and achievement levels than were control group students. Experimental group students were less likely to

experience social-emotional-, behavioral-, and substance abuse-related difficulties. Moreover, experimental group students were 40-50% less likely to drop out of high school than those in control groups. Although more likely to remain in school, the experimental group students did not exhibit increases in levels of academic achievement.

A replication of the Felner et al. (1982) study, to a degree, can be found in Reyes and Hedeker (1996). The Dropout Prevention Program devised by a group of teachers at an inner city Chicago high school bore close resemblance to the earlier Felner study. Homeroom teachers for the experimental group served as counselors and experimental group students shared English, social studies and math classes with fellow participants. This program included an additional component—a feedback system to keep parents informed of students’ progress was implemented. The impact of this intervention program was nil as both experimental and performance group students’ performance, relative to academic achievement and attendance deteriorated significantly over the ninth- grade year. The researchers concluded that, given the highly stressed circumstances of these predominantly poor, urban, minority youth, a stronger intervention was necessary to facilitate the transition to high school.

Reyes, Gillock and Kobus (1994) designed an intervention study to assist a predominantly poor, urban, minority sample of students attending a K-8 elementary school with their transition to high school. As part of the High School Transition Project, both experimental and control group students received an orientation session relative to high school transition. Experimental group students, however, were matched with tenth- grade students at a local high school, where mentees and mentors

met for various transition-oriented activities. Findings from this study revealed deterioration in perceptions of high school and in academic performance for both experimental and control groups at the end of their ninth grade year.

An intervention focused on changing classroom and school environment for at-risk ninth graders and on raising expectations for performance and motivation was reported by Weinstein, Soulé, Collins, Cone, Melhorn and Simontacchi (1991). These researchers reported a collaborative intervention program in which ninth graders in the lowest performing English track were assigned. The experimental group consisted of 158 students over two years, the control group of 154 students. The experimental group population did not reflect that of the general school population in that African-American students were over-represented. Initially, 14 faculty members agreed to participate in the project; the group consisted of ten teachers, a counselor, a dean, the principal, and an assistant principal—each with ten or more years of experience working with low-achieving students. Personnel changed in year two of the intervention program. Most notably, the principal, assistant principal, dean, and counselor were replaced. The program, essentially, created a school within a school and a teaching team—sharing common students and common planning time—for at-risk (as defined by eighth grade academic achievement measures) ninth graders. GPA was considered only in English and social studies classes. The researchers reported significantly higher GPAs for experimental students in these areas than non-participating students. These gains, however, were dashed when students entered tenth grade. The intervention program had no impact on students' rate of attendance.

Conclusions from Experimental Studies of High School Transition

The experimental studies cited may provide a degree of helpful information with respect to understanding the potential pitfalls faced by students during their high school transition. For example, it is readily apparent that participant groups in the experimental studies cited were predominantly poor, urban, minority students. Even allowing for differences within and between groups, students engaged in the interventions hardly reflected the rainbow of high school students nationwide—culturally, racially, geographically, or socioeconomically. In addition, while one may posit that the transition to high school predicts risk for some students; elements that produce risk are ill-defined and uncertain. Indeed, the absence of sufficient numbers of experimental studies flavors any discussion of the generalization of causal process. The apparent disparity of previous school structures experienced by participants also makes it difficult to draw general conclusions. Those participants who attended a K-8 elementary school made their first school transition as they entered high school; for others who attended a K-5 elementary school, 6-8 middle school tandem, high school was their second such transition. Therefore, questions arise relative to the degree to which ninth grade experiences may be compared.

In sum, the literature points to the need for continued, focused study of the transition to high school. Common, however, is the notion that providing additional social supports for ninth grade students in the forms of smaller units, teaching teams, and mentoring is central to successful transition. It is possible that further success in documenting and, hence, understanding students' transition to high school depends on

the application of more specific theoretical guidelines. The section that follows examines one such theoretical model, by Connell and Wellborn (1991), and offers its utility to understand better students' transition to high school.

Connell and Wellborn's Self-Systems Model

Interestingly, each of the high school transition studies cited herein, to a degree, supports Connell and Wellborn's notions concerning context and its influence on perceptions of competence, relatedness, and autonomy, is central to understanding successful transition. The creation of smaller learning communities for ninth grade students, with dedicated teams of teachers and counselors to address students' academic progress and support, as well as means to bolster opportunities for positive relations between students and teachers served as the foundation for intervention in Felner et al. (1982), Reyes et al. (1994), and Reyes and Hedeker (1996), and Weinstein et al. (1991). Indeed, the several studies of junior high/middle school transition cited earlier also point directly to the potential negative impact of changes in school context on academic performance (e.g. Crockett et al., 1989; Eccles & Midgley, 1989; Midgley et al., 2002; Seidman et al. 1994; Simmons & Blyth, 1987; and Simmons, Blyth & Carlton-Ford, 1983), as well as social-emotional functioning (e.g. Akos, 2002; Berndt & Mekos, 1995; Eccles et al., 1993; Elias et al., 1985; Gilchrist et al., 1988; Mitman & Packer 1982; Schulenberg et al., 1984; and Wigfield & Eccles, 1994). Apparently, creating special school environments for ninth graders within the context of the school has been recognized in the few extant studies as a path worthy of pursuit relative to successful high school transition. Viewing these studies through the lens of Connell and Wellborn's model and designing further study

employing this model may be significant in developing a more comprehensive and coherent understanding of threats to successful transition to high school.

Connell and Wellborn's (1991) model (see Fig. 1) is useful for understanding the nature of high school transition, in that it has the capacity to serve as an organizing framework for issues recurring in transition literature. Several issues and notions that weave their way through the literature are captured and anchored in Connell and Wellborn's model. For the sake of clarity, a re-statement and definitions of applicable terms from Connell and Wellborn's model as they apply to the current study is appropriate at this juncture. Connell and Wellborn identify three components—structure, involvement, and autonomy support—that characterize context.

Structure refers to the “amount, clarity, and quality of information regarding expectations and consequences” (Connell & Wellborn, 1991, p.54). For purposes of the current study, structure was defined more narrowly to include teachers' expectations and teachers' values concerning academic performance. The quality of information students possess regarding their teachers' expectations and values—and the consequences for not meeting said expectations and for incorrectly assessing teachers' values may influence their need to experience competence. The structure component of context is directly linked to the self-system process of competence—in which the student queries whether he or she knows what is required to succeed in school and whether he or she has the requisite skills necessary for success. Connell and Wellborn defined competence as the need to experience one's self as capable of

producing desired outcomes and avoiding negative outcomes. In the current study, students' expressions of their perceptions of competence are captured in self-reports of concerns as well as of uplifts and hassles. During the transition to high school, students' sense of competence may be strained in light of the demands of a multiplicity of new teachers in an entirely new environment. Frequently, high school course content is regarded as more demanding and challenging than that of middle school. Gone are the academic supports provided by middle school teaching teams, replaced by an instructional model in which teachers may have little inter-departmental contact regarding students. Further, students may perceive increased academic demands and stricter grading practices on the part of ninth grade teachers, giving rise to students' concerns about their academic competence. Typically, students from multiple middle schools converge in an entirely new academic world in ninth grade, requiring them to adjust not only with respect to amounts and degrees of classwork, homework, and exams, but also to navigate a new and, perhaps, foreboding physical plant. Students embarking on their high school career may well question their ability to develop, or to maintain, the skills necessary for success.

The involvement component of context refers to students' perceptions of connectedness to, or bonding with, school—as reflected in their perceptions of support from teachers and from students' self-reports of concerns and of uplifts and hassles. Involvement is defined in terms of the degree of the school's interest in, and emotional support for, students. In the Connell and Wellborn model, the involvement component of context is linked to the self-process of relatedness in which students determine the degree of satisfaction derived from interpersonal relationships, as well

as the extent to which they receive school social support. Consideration must be given to potential threats to students' sense of connectedness in the transition to high school. Opportunities to develop new relationships and to maintain existing friendships may be threatened in the new school context. Moreover, developing positive relationships with one or with multiple teachers may be perceived as daunting during the period of transition high school. A new social setting that may require the re-definition of existing friendships and the formation of new relationships may shake the security of a student's peer group. The new context may demand an entirely new set of relationships with teachers and administrators.

Autonomy support refers to the experience of choice in initiation, maintenance, and regulation of activity and the experience of connectedness between one's actions and personal goals and values. Autonomy support is not addressed in the current study.

Although Connell and Wellborn's model was not specifically developed to study school transition, it is premised on the notion that people have fundamental psychological needs for competence, relatedness, and autonomy. Central to Connell and Wellborn's model is the notion that when psychological needs are met in particular venues such as school, engagement will occur and will be manifested in positive affect, behavior, and cognition. The supposition inherent in Connell and Wellborn's model is that students in transition who feel competent, autonomous, and related with respect to their school context will develop engagement relative to their new school environment and, consequently, exhibit skills and abilities leading to success. Needs may be fulfilled in accordance with students' perceptions of context.

Conversely, for students not experiencing positive perceptions of competence, autonomy, and relatedness, thus placing themselves at risk for disaffection, adjustment of the school context may be required to increase opportunities for successful transition.

Application of Connell and Wellborn's Model in School Transition Studies

Although Connell & Wellborn's (1991) self-systems model has not served as a theoretical base for a study of high school transition, its key elements have been employed in numerous studies focusing on students' perceptions of context and of self-processes and their impact on engagement and, in turn, on competent outcomes. Although the bulk of this literature addresses perceptions of context and self-processes of elementary and middle school students, the consistency of findings leads to an extension of application to high school environments. In the section that follows, research employing Connell and Wellborn's model with respect to the involvement and structure components of context are presented.

Context: Involvement - School

Involvement, as evidenced through students' perceptions of social support, has been reported as one of three elements essential to human growth and development—competence and autonomy comprising the balance (Connell & Wellborn, 1991; Deci, Vallerand, Pelletier, & Ryan, 1991; Ryan, 1995). Recalling Connell and Wellborn's (1991) model, involvement, as measured by students' perceptions of support from teachers, or lack thereof, is one of three factors that leads to engagement—or to disengagement. Engagement has been viewed as a pathway to positive academic outcomes and has been reported to improve performance and

students' expectations for long-term academic success and for completion of high school (Connell, Spencer, & Aber, 1994; Furrer & Skinner, 2003; Skinner et al., 1998).

Students may be particularly vulnerable relative to feelings of support or abandonment during the period of transition to high school. It is important to recall that in middle school, students were the recipients of tangible means of social support. Two pillars of middle school philosophy, the teaching team and home-base advisory, figured prominently in an emotional support capacity (Carnegie Task Force on the Education of Young Adolescents, 1989; Mac Iver, 1990; Mac Iver & Epstein, 1991; National Middle School Association, 2003). Through effectively implemented home-base advisory programs, middle school students receive a powerful message from their teachers and from their school regarding support—academic, to be sure, but with emphasis on emotional support. Moreover, as effective middle school teaching teams include a guidance counselor along with content area teachers, students' academic as well as social-emotional growth and progress, or lack thereof, are noted and addressed. The shift to high school finds the young adolescent in an entirely new social environment, perhaps without benefit of strong continuing peer group identity and, perhaps, without any perceived emotional support from teachers in their new environment. The perceived comfort, confidence, and support, perhaps present in their former context, takes flight upon the finish of middle school.

A significant body of literature addresses the connection between students' perceptions of school social support and positive academic outcomes. In her review article, Osterman (2000) stated that students who felt connected to their school

environment exhibited several characteristics: they had more positive attitudes towards school and, thus, were more likely to be engaged and successful in school pursuits and perceive themselves to be more competent and autonomous. Relationships with teachers outweighed peer and family support on students' engagement. Further, Osterman asserted that it is important for students to experience a sense of connection from pre-school through high school. Ryan and Powelson (1991) posited that students who perceive support from, and connection to, their educational environment are likely to be highly motivated. They asserted that the need for school bonding is "fundamental to the educational process and motivation for engagement in school activities" (Ryan and Powelson, 1991, p. 53).

Captured under the banner of involvement (Connell, 1990), perceived social support (Wentzel, 1999), connectedness (Weiner, 1990), and belonging (Goodenow, 1993), these terms generally refer, in a school context, to students' views of whether the interpersonal environment is trustworthy and inviting or hostile and alienating. The literature, however, delineates two directions with respect to reporting the impact of school relatedness on students. Studies concerning students' feelings of belonging to their school are discussed first; studies regarding students' sense of connection to their teacher(s) follow.

Goodenow and Grady (1993), in their study of 301 predominately Hispanic and African-American middle school students in two Northeastern city schools, investigated the hypothesis that students' sense of belonging would be related to their school motivation, expectations for success, and the value of academic work. Their results suggested that students who had a strong sense of connection to their school

were more likely to be positively motivated and academically engaged than students who did not experience a sense of belonging. Conversely, Goodenow and Grady contended that students who did not develop a feeling of belonging in a school setting may experience decreased motivation, diminished engagement, academic failure, and, perhaps, withdrawal from school.

Furrer and Skinner (1993) reported similar findings in their study of a subset (n=641, 95% Caucasian) of a larger longitudinal sample of students in grades three through six. Children's sense of connection to school was found to be an important contributing factor to their level of engagement and to subsequent high levels of achievement. Further, Furrer and Skinner asserted that students with a high degree of connection to school not only began the school year with a higher level of engagement, but that the level of engagement grew over time. From this, Furrer and Skinner suggested that this connection may be linked to positive trajectories for students' academic success. Conversely, children who did not perceive themselves as belonging to their school environment become frustrated and alienated—resulting in depressed academic progress.

Anderman's (1999) longitudinal study of 444 ethnically and economically diverse students from three Michigan school districts measured, among other factors, students' perceptions of school belonging as they began their sixth grade year in middle school. Findings suggested that students' perceptions of connectedness to school were an important predictor of students' affect. Students whose self-reports indicated that they felt part of their new school were happier, more enthusiastic and less angry, bored, and frustrated when compared to their fifth grade experience.

Anderman and Anderman (1999) reported their findings in a longitudinal study of 606 fifth-grade students from 21 elementary schools spanning four ethnically and economically diverse school districts across their transition to one of ten middle schools. After controlling for additional variables such as demographics and social relationships, findings from this study suggested that students' sense of school belonging was an important factor in adjusting to a new school, following normative school transition. These researchers found that when measuring students' perceptions of their sense of connectedness to their new middle school, those who felt accepted, or "a part of" their school environment were likely to be more positively motivated towards academic achievement. Significant as well is the suggestion that students' social concerns, including their sense of belonging, may be an important predictor of success in their transition to a middle school environment.

Roeser, Midgley, and Urdan (1996) attempted to examine aspects of the middle school environment and their relationship to motivation and achievement. The theoretical model employed in this study reflected a degree of similarity to the aforementioned model offered by Connell and Wellborn (1991) in that it measured the impact of context on self-processes and outcomes. Roeser and his colleagues predicted that students' perceptions of their feelings of school belonging would be positively linked to their grades. Their sample consisted of 296 eighth grade students who attended a middle school near an unspecified major metropolitan area. The sample was neither ethnically nor economically diverse as only 13% were minority and 6% reported incomes below the poverty level. Findings from this study were

significant in that they suggested a relationship between students' perceptions of connection to their school and individual effort and improvement. Further, these researchers found that students who felt positively connected to their school environment were disposed to positive perceptions of relationships with their teachers. Further, students who held positive perceptions of connectedness to their school also felt more academically efficacious. Finally, Roeser et al. found a direct relationship between students' perceptions of school belongingness and students' end-of-year grades. The study concluded that students' sense of connectedness is an important factor relative to achievement.

Although the sample in a study presented by Battisitch et al. (1995) consisted of elementary school students in grades three through six in six geographically diverse school districts (n=4,515), findings reported were consistent with the several middle school studies presented. Students' sense of connection to school was positively linked to attitudinal, motivational, and behavioral outcomes. Students who viewed their school environment as caring and supportive saw themselves as connected and were willing to accept the school's norms and values. Smerdon's (2002) analysis of tenth-grade students (n=11,807) suggested that high school students with a history of poor middle school grades and low perceptions of middle school relatedness were likely to report low levels of high school connectedness.

Context: Involvement - Teachers

Students' perceptions of their relationships with teachers have also been found to a significant factor in their sense of school belonging. Studies by Wentzel (1997, 1998, 2002) in suburban middle schools found strong relationships between perceived

support and motivational outcomes including that teacher caring was a prime factor in students' academic effort. In her 1997 study of 375 eighth grade students in a mid-Atlantic state, Wentzel found a significant relationship between students' perceptions of their teachers as caring and students' efforts toward academic achievement. Results of Wentzel's (1998) study of mid-Atlantic region sixth-grade students (n=167; 92% Caucasian) suggested the centrality of the teacher in student academic outcomes. Finally, in Wentzel's (2002) study of 452 students in two racially and economically diverse middle schools, students' perceptions of relatedness to their teachers were related to engagement and interest in classroom pursuits.

Ryan et al. (1994) investigated if students' representations of relationships to teachers could predict academic motivation and self-esteem. This study of 606 seventh- and eighth-grade middle school students from suburban Rochester, New York also included students' representations of relationships with parents and friends. Ryan et al. suggested that students who developed a sense of connectedness to their teachers were likely to perceive positive teacher emotional support and, in turn, experience greater engagement in their school endeavors.

Applegate (1981) reported results of her study of two separate samples of secondary school students (n=78, n=673) regarding their perceptions of teacher support. Applegate suggested that students see teachers as causative agents who shape students' attitudes and behaviors in the school setting. Applegate's findings revealed students' perceptions of teacher support to be particularly important during periods of transition to junior high and high school. Rosenfeld et al. (2000), however, claimed that while perceived teacher support is a factor in promoting positive school

outcomes, it is not effective as a single factor—only in tandem with perceived support from family and from friends does teacher support carry weight.

Strong evidence of the relationship between and among students' perceptions of their connection to teachers, engagement, and achievement was provided by Klem and Connell (2004). Their sample was comprised of elementary (n=1,846) and middle school (n=2,430) students from a single urban school district. Klem and Connell reported that students who perceived their teachers as caring were likely to report higher levels of engagement in school. Further, Klem and Connell posited that higher levels of engagement resulted in higher attendance and test scores, reporting “links between teacher support, student engagement, and academic performance and commitment hold for both elementary and middle school students, providing further support for an indirect link between student experience of support and academic performance through student engagement” (p. 270). Middle school students, for example, were three times more likely to report engagement if they perceived their teachers to be highly supportive; elementary students were 89% more likely to report engagement if a perception of high teacher support was present. With respect to achievement, elementary students with high levels of self-reported engagement were 44% more likely to achieve at high levels than average students. At the middle school level, self-reported engaged students were 75% more likely to achieve at high levels when compared to average students. Conversely, elementary students who reported low levels of engagement were twice as likely to be disaffected as average students;

68% of middle school students reporting low levels of engagement were likely to be disaffected.

Application of Connell and Wellborn's (1991) model to the engagement of minority students was offered in studies by Tucker et al. (2002) and by Brewster and Bowen (2004). Tucker et al. (2002) reported results from a sample of 117 African-American students in grades one through twelve who responded to a questionnaire concerning teacher context, self, and engagement. This study reported that students' perceptions of teacher relatedness and teacher involvement had a strong and direct effect on their engagement. When teachers were interested in, and involved with, students, higher levels of engagement resulted. Brewster and Bowen studied 633 Latino students—189 attended middle school, 444 attended high school, 65% free and reduced meals—from a total of 53 middle and high schools in 10 states. Results presented provide a clear picture of the centrality of teachers perceived as supportive regarding students' engagement. A direct relationship existed between perceived levels of teacher support and students' levels of perceived school meaningfulness. Moreover, teacher support was reported to be more powerful than parental support with respect to decreasing levels of problem behavior. Muller's (2001) study of a longitudinal sample of 6,007 at-risk students suggested a link between students' perceptions of relationships with teachers and engagement. Although Muller cautioned that her study was unable to establish a causal relationship between student-teacher relations and academic achievement, student reports reinforce the positive impact on engagement achieved through students' perceptions of supportive relationships with teachers. Gutman and Midgley (2000), however, reported that

neither perceived teacher support nor feelings of school belonging could predict changes in grade point average across the transition from elementary to middle school in their single district sample (n=97) of poor (84%), African-American (42%) students.

Roeser and Eccles (1998) found that strong teacher emotional support resulted in students' decreased anger from seventh grade to eighth grade. Roeser, Eccles, and Sameroff (1998) reported positive and supportive student-teacher relations were found to increase students' academic values. Students who perceived teachers as providing academic and social support were less likely to report alienation towards school.

Although the literature offers two branches of the relatedness tree—feeling positively connected to the school in general and feeling positively connected to teachers—the link between and among students' connectedness experiences, engagement, and outcomes is compelling. The current study builds upon this body of literature in that it examines students' perceptions of belonging as a factor in the successful or unsuccessful transition from middle to high school.

Context: Structure - Teachers' Expectations and Values

Much of the literature on teachers' expectations and effects on student achievement streams from the work of Rosenthal and Jacobson (1968), in which the notion of teachers' self-fulfilling prophecies for the achievement of students was advanced. It is important to recall that Connell and Wellborn's definition of teachers' expectations and values, as categorized in the structure component of context as depicted in their model, is much broader than the manner in which this issue is treated

in the literature. Although the direct impact of teachers' expectations on students' achievement has been an issue of contention, evidence has been offered to suggest a link between how teachers communicate their expectations for student achievement and resulting student behaviors. Brophy and Good (1970) outlined a model with respect to the formation, implementation, and impact of a self-fulfilling prophecy scheme in classrooms. Brophy and Good maintained that a four-step process charted a present and future course for students. First, from a variety of sources, teachers form differential expectations for students' achievement and behavior. As a result, teachers acted differently towards students, in accordance with their expectations for students' achievement. Teachers' expectations for students' achievement and behavior would be communicated to, and internalized by, students. Students' perceptions of their abilities would be shaped and would either serve to motivate or to decrease opportunities to learn. Over time, students who perceived high expectations from their teachers will perform at such a level, while students who perceived a low level of expectation from teachers would experience continued declines in achievement. Proctor (1984) reported that students for whom teacher expectations for achievement were low received fewer opportunities to learn, were offered simplified curricula, and had fewer demands placed on them with regard to classwork, homework, and academic effort. Further, Proctor posited that low-achieving students' classroom treatment by teachers reinforced their level of achievement. For example, low-achievers were asked fewer questions and were afforded less wait time than high-achieving students—while receiving less praise and more criticism.

Weinstein et al. (1987) reported findings from a study of 30 teachers and 579 students in 12 urban and ethnically mixed elementary schools in two school districts. Students as young as six years old were aware of differential treatment of high and low achieving students. Further, Weinstein and her colleagues suggested that as students progressed through elementary grades, differences in teacher treatment of high and low performing students had a greater effect on students' self-expectations. Kuklinski and Weinstein (2000) reported that some third-grade students perceived differential teacher treatment in their classroom relative to teachers' expectations for student achievement. Third graders indicated that high achievers received more positive feedback, greater autonomy, and met higher expectations for achievement. These researchers reiterated that students as young as first grade were susceptible to the effects of teacher expectations. Further, it was claimed that students' susceptibility could be predictive of increased or decreased student outcomes. Additional evidence of students' ability to discern teachers' expectations was offered by Babad, Bernieri, and Rosenthal (1991). Employing 151 Israeli students and teachers, ranging from fourth-grade students to experienced elementary school teachers, short video clips of a teacher-student interaction were viewed. Babad, et al. reported that after as few as ten seconds of hearing or seeing a teacher, even the youngest students proffered correct responses regarding whether the teacher was talking about, or to, a high or low achieving student. Further, the student judges on Babad et al.'s panel were able to form an opinion as to which students were loved by the teacher.

Kester and Letchworth (1972) reported findings of a study of 150 seventh-grade students of average ability. In their study, teachers' expectations had no impact on students' achievement or attitudes towards school. However, it was reported that teachers had more positive and friendly interactions with students perceived as high achieving. Luce and Hoge (1978) studied 104 third and fourth graders in school located in lower-middle to middle class neighborhoods in Ottawa. Mixed results were reported in that no link between teachers' expectations and student achievement were found. However, these researchers reported links between teacher and student behaviors and achievement. Lower-achieving students received higher levels of criticism and warning relative to behavior; higher achieving students received higher levels of work-related and procedural interactions with teachers.

Finally, Madon, Jussim, and Eccles (1997), in their analysis of Michigan Study of Adolescent Life Transition data, studied 98 teachers and 1,539 predominately white students from 12 school districts in southeastern Michigan. They reported that although the impact of self-fulfilling prophecies is often small, it has a powerful effect among African-American and lower socioeconomic status students. Battle (1957) reported negative outcomes for students when there was a mismatch between students' and teachers' values. In his sample of 88 students and four teachers from a northwest Indiana public high school, Battle found that students suffered in two ways. First, he suggested that declines in student achievement appear as the result of the negative student-teacher interactions that resulted from a values mismatch. Further, if the student believed he or she was being treated, or graded, unfairly by the teacher, achievement deteriorated further.

Murdock, Anderman, and Hodge (2000) presented findings from their longitudinal study of 238 students (50% male, 72% Caucasian, 28% African-American, 22% free/reduced lunch) from a mid-Atlantic school district. Data were collected from the sample at the conclusion of seventh and ninth grade. It revealed that teachers' communication of expectations and values were received much more positively by students as ninth graders. As ninth graders, students claimed that they felt more respected and cared for by teachers. However, Murdock, et al. offered that this apparent shift in students' attitudes toward their teachers' expectations and values may have been born simply of students' increased maturity or of their readjusted expectations relative to teacher treatment of students.

Autonomy Support

The third component of structure in Connell and Wellborn's model is that of autonomy support—referring to opportunity for initiative and the exercise of choice in the school setting. Although autonomy support is not addressed in the current study, the literature does reference this aspect of Connell and Wellborn's model as it relates to successful school outcomes. Miserandino (1996) reported on findings from her study of engagement and motivation of students who have low perceptions of competence or autonomy. In her sample of 77 third and fourth grade above-average students from a suburban elementary school, Miserandino found that students who reported a low level of autonomy or of competence are also likely to experience anxiety, anger and boredom in school. Further, these students were likely to demonstrate withdrawal behaviors and, ultimately, a decline in performance. To the contrary, students who reported high levels of autonomy support were more engaged

in classroom activities. Green et al. (2004), reported on a study of high school students (n=220) from a suburban Midwest high school. These students' perceptions of high levels of autonomy support from the English teachers were positively related to motivation, engagement, and to grades.

Self-Processes: Students' Concerns

Connell and Wellborn's model considers not only context variables, but also self-processes with respect to students' levels of engagement and of outcomes. Especially when applied to a period of school transition, capturing students' concerns within the framework provided by Connell and Wellborn may prove useful to understand, and, perhaps, to address, those issues that may impede successful school transition. In the current study, students' self-reported uplifts and hassles, as well as concerns narratives relative to competence, relatedness, and autonomy are presented.

Although not based directly on Connell and Wellborn's model, it is interesting to note the several junior high/middle school studies that reported students' concerns relative to the transition from elementary school. Connell and Wellborn's categories of competence, relatedness, and autonomy weave their way through these studies' reports of students' concerns. Mitman and Packer (1982), for example, surveyed 208 participating students five weeks into their seventh grade school year. Students were presented with a list of 32 potential concerns and asked to rate how important the concerns (great concern, small concern, no concern at all) were in the past and how important the concerns were currently—in their fifth week of junior high school. The concerns list was culled from the open-ended written responses from the junior high school's seventh graders when questioned about their transition from sixth to seventh

grade, written comments from sixth graders prior to their transition, comments from elementary school principals about their perceptions of sixth graders' worries regarding transition, sixth grade teachers' perceptions of sixth graders' worries regarding transition, and interviews with parents of sixth graders.

It is unclear why the researchers asked students in their fifth week of junior high school to respond to their pre-transition concerns but results of the survey asking students to rank their current concerns suggested that seventh graders' concerns were primarily centered on school related competence. Concerns about getting work done on time, the difficulty of schoolwork, and having too much homework topped the list of their greatest concerns. In fact, a concern about dating was the only one not associated with school related competence appearing in the top 10 concerns. Nonetheless, the researchers categorized students' concerns as difficulty of schoolwork, less control, negative peer, newness of junior high, privacy, and friends.

Berndt and Mekos (1995) conducted a study in which 101 students were interviewed relative to their perceptions of the transition to junior high school. Students were questioned on three occasions: during the spring of their sixth grade year (pre-transition), during the fall of their seventh grade year and during the spring of their seventh-grade year (post-transition). Initially, students were asked to respond to three questions: 1) "How do you feel about moving to junior high school?" 2) "What do you like most about moving to junior high school?" and 3) "What do you dislike most about moving to junior high school?" These questions were appropriately reworded when asked during subsequent interviews.

Students' responses, both positive and negative, were reliably categorized into: peer relationships (making new friends, meeting new people), academics (school work, specific subjects, teachers, homework), school environment (facilities, rules, disciplinary procedures), independence (get to do more things independently), and victimization (bullying by older students, theft of personal property). When tallied, the number of positive comments made by sixth-grade students about their upcoming transition to junior high school exceeded negative comments, leading these researchers to posit that although adolescents expected the junior high school transition to be stressful, they viewed the change as positive. Those students for whom the transition was not positive, it was suggested, were students who had behavioral or academic problems in elementary school. Hence, Berndt and Mekos stressed the necessity of identifying not only the positive and stressful factors of junior high school transition, but those students whose elementary school performance may signal difficulty across seventh grade transition. Generalizing this study's findings may be difficult, however, as the sample was only described as predominantly white and residing in a town of 50,000 population; no information about socioeconomics was provided.

In a similar study, Gilchrist, Schinke, Snow, Schilling, and Senechal (1988) reported on their sample of 606 middle to lower socioeconomic status students enrolled in 10 elementary schools in two suburban districts in the state of Washington. The sample was roughly divided by gender and was predominantly white (77%) with African-Americans (8%) comprising the largest minority group. Gilchrist et al. however, disaggregated neither data nor results with respect to race or

gender. Definite anxiety about moving to junior high was indicated by 22% of the sample; an additional 66% reported moderate anxiety. A substantial percentage of the sample (36%) rated concerns about social pressures—using drugs and cigarettes, engaging in risky behaviors at the behest of friends—as primary concerns in the transition to junior high school. Twenty-nine percent of this sample reported anticipating issues with their new school relative to getting lost, being late, not being able to do the work, and getting bad grades.

Akos (2002) sought to address middle school transition issues in his study of students in a large, rural southeastern school district. An attempt was made to discern specific concerns students had about middle school and the aspects of middle school students saw as positive and negative. His sample was comprised of a student population that was 59% white, 37% black, 53% female, 47% male—45% received free or reduced price lunch. Akos conducted this study in four phases. In Phase I, administered in January of students' fifth-grade year, 331 students submitted 555 questions about going to middle school. Akos reports that 28% of the questions concerned rules and procedures, 16% were on student schedules, 11% addressed physical education class, and 9 % related to academic expectations. The balance of the questions (with no single topic comprising more than 5% of the balance) referred to issues of lockers, extracurricular programs, recess, and teachers. In Phase II, administered in May of students' fifth-grade year, the same 331 students were asked to identify concerns about moving to middle school. Students cited older students, homework, using one's locker, and getting good grades as their primary concerns. Students saw making new friends, physical education class, using a locker, changing

classes, and getting good grades as potential positives of middle school. Forty-five percent of fifth graders saw the transition to middle school as “fun,” 14% characterized the change as “exciting,” 11% referred to the change as “cool.” Only 9% chose “hard” or “scary” to portray their feelings.

Shortly after the beginning of sixth grade (post-transition), 103 randomly selected students expressed concerns about personal safety and academic success. By Phase IV (December of sixth grade year), students’ concerns focused on competence and relationships. This study reports that fifth graders are very much concerned about knowing the rules and procedures of middle school—suggesting that competence is central to the young adolescent’s worries about the transition to sixth grade. Although Akos reported the demographic composition of his sample, he neither disaggregated data nor attempted to report on any differentiated findings based on race.

As part of a three-year longitudinal study, Schulenberg, Asp and Petersen (1984) interviewed students both pre- and post-junior high school transition. In the pre-transition interviews, Schulenberg et al. reported almost one-third of their 147 student sample cited grades and homework as their greatest concern about middle school. Relationships with teachers, changes in school structure, and popularity were, to a far lesser extent, on their minds as well.

Unique to middle school transition studies was an attempt by Elias, Gara, and Ubriaco (1985) to identify middle school stressors from the perspectives of both middle school administrators and students; their study included results from their study of 41 middle school principals, vice principals, and special services personnel and 158 sixth grade students. The student group of 80 boys and 78 girls from a

community described as blue-collar had been attending middle school for four weeks. Administrators and students were from a central New Jersey county described as encompassing a wide range of socioeconomic and ethnic groups. A list of 28 potential stressors was developed—the study does not speak to details relative to the development of the items—and presented to the sample of administrators and students. The stressor list included items such as having to travel a great distance to school, not being able to find one's way around school, being sent to the vice principal's office, having difficulty with homework, not getting along with teachers, being subjected to peer pressure and to harassment by other kids, and drinking alcohol. Students were asked to rate the extent each was a problem for them (no problem, small problem, large problem). Administrators were asked to estimate the percentage of children affected by the problem and to indicate the time of year the problem was most acute.

Interestingly, administrators and students reported different perceptions of stressors. More difficult schoolwork, tougher teachers, and higher expectations for academic performance were viewed by administrators as the most severe sources of stress for children. Students, however, rated conflicts with authority at the top of their list—being sent to the vice principal's office; arguing with teachers, coming to class unprepared, getting into fights, substance abuse, and missing friends from elementary school rounded out students' concerns. This study suggests that perceptions of students' stressors over the transition to middle school differ significantly from administrators'. Moreover, it is suggested that the time of the school year may influence which stressors are foremost in students' minds. Finally, help networks may

be misperceived by administrators. Whereas teachers and parents were reported by administrators as most helpful to students during transition, students reported their ties to friends as most important.

With respect to the transition concerns of high school students, Akos (2004) reported on the responses of ninth graders (n=320) from one predominantly Caucasian high school in a high performing southern school district. These students identified homework, social and organization changes—such as not having friends in class, riding the school bus, and getting lost in their new school—as the three most significant concerns. Conversely, students identified looking forward to increased freedom/autonomy, meeting new people, and the variety of lunch and extracurricular opportunities.

Relations Among Variables

Evidence to support Connell and Wellborn's model with respect to relations between and among students' perceptions of competence, engagement, and academic outcome can be found in the several longitudinal studies that follow. The impact of students' perceived level of academic competence on successful school transition was reported by Harter et al. (1992). In this middle school transition study, Harter and her colleagues anticipated that subgroups in the sample of 463 students undergoing a transition from elementary to middle school, would perceive themselves as less competent in their new school, others would perceive themselves as more competent, and still others would report no change in their perceived competence across their school transition. Findings show that about 50% of students reported no change in perceived competence, whereas the balance reported significant increases or

decreases in their perceived competence. Harter et al. suggested that students who perceived competence declines in their transition to middle school also experienced a decline in motivation—which, they posit, causes further declines in perceived competence. This study suggested that the transition to a new school was anxiety-laden for students—not knowing how they would perform in a new school with new peers and new teachers. This forced students to reevaluate perceptions of their academic competence. Several studies of the transition to junior high/middle school also reported decreased perceived levels of competence (Alspaugh, 1998; Cantin & Bovin, 2004; Eccles & Midgely, 1995; Schulenberg et al., 1984; Seidman et al., 1984; Simmons & Blyth, 1987).

Wong, Wiest, and Cusick (2002) stated the importance of providing an environment for students in which their perceptions of competence may grow. These researchers asserted that students with positive perceptions of competence often became more engaged, tried harder, and increased school performance.

Roeser and Eccles (1998) provided insight regarding the relationship between middle school students' sense of academic competence and school success. Reporting results from a longitudinal study of some 1,046 students from 23 middle schools in a single school system, Roeser and Eccles presented findings that students' poor perceptions of academic competence and the value of school pointed to poor achievement, truancy, and anger at both seventh and eighth grade levels. They also suggested that students who expressed positive perceptions of emotional support from teachers were also positive relative to their feelings of academic competence and in their regard for educational values. Finally, Roeser and Eccles addressed the impact

of school context. They contended that unless American secondary schools took on the characteristics of smaller and caring learning communities, desired levels of teacher-student relationships would not be realized.

Roeser, Eccles, and Sameroff (1998), built upon the work of Connell and Wellborn (1991) and Eccles and Midgely (1989) by examining how students' perceptions of their school context were related to changes, academic and emotional in their same- school progression from seventh to eighth grade. In fact, the theoretical model underpinning this study was reminiscent of Connell and Wellborn's (1991) model in that it depicted, in part, the relationship of school context, referred to as school psychological environment, on factors referred to as support of competence, support of autonomy, and quality of relationships. Significant in this study was the reinforcement of the notion regarding the importance of perceptions of school context on student outcomes. Their racially mixed sample (n=1041; 66% African-American, 51% male) consisted of students attending each of 23 middle schools serving a countywide Maryland school district. This study yielded a number of significant findings relative to students' perceptions of competence and relatedness with respect to achievement. First, students' perceptions of their competence and relatedness were linked to engagement and outcomes. Students who viewed themselves as competent in the school context exhibited positive self-esteem. Moreover, their perceptions of competence protected them against potential emotional and behavioral difficulties. Students who perceived themselves to be competent were likely to experience positive changes in motivation over time and in achievement at the end of their

eighth-grade year. Students who did not perceive themselves as competent were more likely to be disposed to feelings of anger, sadness, and hopelessness.

Wong, Wiest, and Cusick (2002) presented findings that support the idea that students' perceptions of relatedness to teachers are a significant predictor of perceived competence, motivation and achievement. This study's sample included both sixth grade (n=135, 65 male, 70 female; 2.2% African-American, 14.1% Asian-American, 21.5% Hispanic, 57% Caucasian, 5.2% other) and ninth grade (n=91; 32 male, 59 female; 1% African-American, 12.1% Asian-American, 13.2% Hispanic, 71.4% Caucasian, 2.2% other) students from a large southern California school district. Wong et al. reported that perceived academic competence was, among the variables considered, the strongest predictor of students' willingness to try hard and to perform at a higher academic level.

The Current Study

The current study has the potential to make significant contributions to help educators gain greater understanding of the potential for peril for students as they progress from middle school to high school. It is clear to both researchers and practitioners alike that a segment of virtually every high school's freshmen class carries significant risk as the group traverses the transition to high school. What also becomes clear is that this persistent, perennial problem has been studied neither abundantly nor systematically. Yet, ninth graders face increasing demands for academic achievement required by federal and state mandates. Critically important is the need to know why some ninth graders may suffer declines in academic achievement when they enter high school. Essentially, the question that begs is why

are some students at risk for an academic downturn, while others aren't?

The experimental studies of high school transition described herein, although helpful with respect to understanding issues of ninth grade experience, present limited utility in the absence of theoretical underpinning. The current study employs such a theoretical base in that Connell and Wellborn's (1991) model provides a useful and much-needed framework for this and for future studies of the students' transition to high school. Quantitative data was collected with respect to students' perceptions of context variables (i.e. structure: teacher expectations, teacher values; involvement: teacher support). Self-processes will be expressed by means of students' concerns regarding competence, relatedness, and autonomy. These will be addressed quantitatively by means of self-reports of uplifts and hassles and qualitatively by means of students' narratives. Capturing students' own words relative to their high school transition experience may provide valuable insight relative to potential threats to self-processes and perceptions of their competence, relatedness, and autonomy. These data, framed in Connell and Wellborn's model, may allow clear and compelling issues to emerge relative to risk factors in students' first year of high school. Moreover, capturing students' concerns both at the end of eighth grade and ninth grade may provide insight relative to if and how students' worries change or remain stable.

The current study has potential to "tell the story" of students relative to their academic and psychological experiences during a period of transition. Often, transition studies have identified poor and minority students, the instant case focuses

on the high school transition experience of predominately, a white middle-class group of ninth grade students.

Finally, the current study permits the opportunity to explore the experiences of students who may be at risk for declines in achievement in ninth grade. In turn, educational leaders and practitioners may be able to develop and to implement interventions to arrest and, hopefully, to prevent high school transition-related declines in students' academic achievement.

Chapter 3: Method

Participants

Time 1

The Time 1 participants consisted of 160 eighth-grade students enrolled in a mid-Atlantic region sixth- through eighth-grade middle school. School data for the 2003-2004 school year reported a total student enrollment of 652, with a daily attendance rate of 95.7%. Twenty-seven percent of the school's students were from minority groups, 15.3% of the school's enrollment received free and reduced meals. Maryland School Assessment (MSA) data for the 2003-2004 school year revealed that 40.3% of the school's eighth-grade students were reading at an *advanced* level, 37% at a *proficient* level; 21.4%, at the *basic* level, did not meet the state standard for reading proficiency. In math, MSA 8 data showed that 25.5% of the school's eighth-grade students scored at the *advanced* level, 40.3% at the *proficient* level, and that 34.3% *basic* level students did not meet the state standard. With respect to No Child Left Behind performance requirements, the school met the standard for adequate yearly progress in all categories (MSDE, 2005).

Of the 160 students in the Time 1 sample there were 68 males, 92 females; 121 Caucasian, 33 African-American, 4 mixed-race, and 2 Asian; these demographic data were reported by the teachers in whose classes surveys were administered. Data were gathered in late May, 2004 from eight regular education and inclusive eighth grade social studies classes ranging from standard level to gifted and talented; no self-contained special education social studies classes were included. Social studies classes were selected owing to the fact that all eighth grade students were enrolled in

social studies and that the two eighth grade social studies teachers were willing to have their classes participate in the study. Of the two teachers who were assigned the eighth grade social studies classes, one taught five classes; the other three.

Time 2

The Time 2 sample—the study’s longitudinal sample—consisted of 93 students who were part of the Time 1 sample from a mid-Atlantic region high school that served grades nine through twelve. Of the Time 1 sample of 160 students: 22 moved from the area, 17 enrolled in magnet or other zoned schools, 11 were absent on the day of Time 2 survey administration, 9 enrolled in non-public schools, 4 were on expulsion, and 4 chose not to participate. Of the 93 students in the longitudinal sample there were 33 males, 60 females, 72 Caucasian, 17 African-American, 2 Asian, and 2 mixed-race. Results of independent t-tests indicated that among all study variables, a statistically significant difference was found only on the effort to pay attention in class variable, with participants reporting greater effort to pay attention in class than non-participants (see Table 3).

A comparison of the Time 1 and Time 2 samples revealed similarities relative to gender in that the Time 1 sample consisted of 57% female, the Time 2 sample, 65%; the Time 1 sample was comprised of 23.5% minorities, the Time 2 sample was 24%. Federal privacy constraints prevented the identification of students receiving free and reduced meals for both the Time 1 and Time 2 sample.

School data for the 2004-2005 school year reported a ninth-grade enrollment of 329 and a total student enrollment of 1457. The school’s daily attendance rate was 95%. Twenty-eight percent of the school’s students were from minority groups,

10.5% of the school's enrollment received free and reduced meals. MSA 10 reading achievement scores for the 2003-2004 school year revealed that 39.4% of the school's tenth grade students were reading at an *advanced* level, 31.3% at a *proficient* level; 29.3% scored *basic* and did not, therefore, meet the state standard for reading proficiency. In math, the MSA in grade ten geometry data showed that 17.2% of the school's tenth-grade students scored at the *advanced* level, 42.9% at the *proficient* level, and that 39.9% scored at the basic level, not meeting the state standard. With respect to No Child Left Behind performance requirements, the school met the standard for adequate yearly progress in all categories. Although no comparative data existed for student performance in eighth grade on the four Maryland High School Assessments (HSAs) administered to ninth grade students, the following scores were reported for the ninth-graders' pass rates: English-50.2%, American government-67.5%, biology-66.1%, algebra-36.6%. Table 1 presents school demographic data relative to the comparability of Time 1 and Time 2 schools.

Community demographic data applied to both the middle and high schools as they serve the same general population. These data revealed a 1999 mean household income of \$53,601 and a mean family income of \$67,005. Census data also reported occupations of this population as 45.1% management and professional, 27.2 sales and other retail, and 13.1 service (U.S. Census Bureau, 2000).

Table 1

Comparison of Time 1 and Time 2 Schools

Variable	Time 1	Time 2
Grades	6-8	9-12
Enrollment	652	1457
Percent minority	27	28
Percent FARMS	15.3	10.5
Percent special education	14.9	11.3
Percent mobility	15.9	21.7
Average daily attendance	95.7	95.0
Percent teachers Advanced	43.8	62.3
Professional Certificates		
Percent teacher Standard	43.8	29.0
Professional Certificates		
Percent teachers with	9.4	4.3
Conditional Certificates		
Percent classes not taught	22.3	19.9
by highly qualified		
teachers		
Maryland School	40.3% Advanced	39.4% Advanced
Assessment – Reading	37.0% Proficient	31.3% Proficient
	21.4% Basic	29.3% Basic

Table 1 - continued

Comparison of Time 1 and Time 2 Schools

<u>Variable</u>	<u>Time 1</u>	<u>Time 2</u>
Maryland School	25.5% Advanced	17.2% Advanced
Assessment – Math	40.3% Proficient	42.9% Proficient
Maryland School	34.3% Basic	39.9% Basic
Assessment – Math		
Maryland High School	No reportable data	English – 50.2% passed
Assessment		Am. Gov't – 67.5% passed
		Biology – 66.1% passed
		Algebra I – 36.6% passed
Adequate yearly progress	All categories met	All categories met

Procedure

Time 1

Permission forms (Appendix A) were secured from the parents/guardians of 77% of students eligible for participation in the study. Data collection was conducted in late May 2004 during students' social studies class by a research assistant from the Department of Human Development, University of Maryland, College Park; two high school seniors provided assistance relative to the distribution and collection of survey materials. Classroom teachers were present during the time students completed surveys. Each of the two teachers of eighth-grade social studies participated by responding to surveys pertaining to their students. As demonstrated in the wording of survey items, students were to attribute responses about teachers to their eighth-grade teachers in general, not specifically to their social studies teacher. The research assistant was responsible for the collection of materials and, in conjunction with the researcher, for ensuring proper coding and identification of respondents. A pizza party was offered as an incentive for both the return of parent permission forms and for successful completion of survey administration.

Time 2

Consent for students ($n = 93$) in the Time 1 sample included permission to participate in Time 2 survey administration. Unlike the Time 1 administration, the Time 2 sample was not accessible through a single subject area. Rather, ninth graders were dispersed across both core and elective areas over the course of the school day.

Class lists of ninth grade students were reviewed to ensure that those students eligible for membership in the longitudinal sample would be identified and included. The high school's organization—that of a four period/semester scheme—did not allow the researcher to assume that, for example, all of the Time 2 sample would be enrolled in a particular ninth grade subject class at the time of survey administration. In an attempt to maximize efficiency and to minimize disruption to the school, surveys were conducted in early June 2005, during ninth grade English, social studies, science, and math classes by a research assistant from the Department of Human Development, University of Maryland, College Park; two high school seniors provided assistance relative to the distribution of survey materials. Classroom teachers were present during the time surveys were completed by their students. In all, surveys were administered in classes taught by sixteen different teachers. Each of the teachers completed surveys for enrolled students in his or her respective class during the period student surveys were administered. As demonstrated in the wording of survey items, students were to attribute responses about teachers to their ninth grade teachers in general, not specifically to the teacher of the class in which the survey was administered.

Injection of potential bias or conflict regarding Time 2 data collection was a consideration owing to the fact that the researcher was the principal of the Time 2 school. The research assistant, therefore, was responsible for the survey administration and for the collection of materials. In conjunction with the researcher,

the research assistant participated in ensuring proper coding and identification of both student and teacher respondents.

Description of measures

Overview

Student data with respect to engagement in class—interest, effort to pay attention in class, effort to do well in class, pursuit of learning and performance goals, students' perceptions of teachers' expectations, values, and support, uplifts, and hassles were gathered by means of student self-reports. Student achievement data were reported by grade point average (GPA) from students' transcripts.

Student Outcome Measures

Student adjustment was assessed in two ways: students' engagement in class and GPA. Interest in class was assessed in three ways. Students' general interest in classroom activities was assessed with the 10-item School Motivation Scale (Ford & Tisak, 1982). Sample items include: "I usually enjoy being in this class;" "I really don't learn much in my classes;" "Sometimes I wish that I didn't have to go to my classes;" "At least some of the topics are fun," and "I really don't care what happens in my classes;" "So far, my classes have been pretty good this year;" Responses were made on 5-point scales, 1 = False and 5 = True. Internal consistency (Cronbach's alpha) for this scale at Time 1 was .79; at Time 2 internal consistency was .78. This scale is presented in Appendix B. A score on this variable was obtained by summing each student's responses and calculating the mean score. Wentzel (1998) reported a mean for this scale of 36.65 and internal consistency (Cronbach's alpha) of .84. With respect to construct validity, Wentzel reported significant correlations of class interest

to school related interest ($r = .35, p < .001$), and to mastery goal performance ($r = .15, p < .05$). Further, as would be predicted, Wentzel found class interest to be significantly correlated to perceived teacher support ($r = .23, p < .01$) and to GPA at the sixth grade level ($r = .24, p < .001$).

Academic effort to pay attention in class and effort to do well in class were assessed by asking students for each academic subject (English, mathematics, social studies, science): "How often do you really pay attention during each of these classes?" (effort to pay attention in class) and "How often do you really try in each of these classes?" (effort to do well in class). Responses were made on 5-point scales, 0 = never to 4 = always. For each question, responses were averaged across the four subject areas. Appendix C contains survey items for the effort to pay attention in class variable; Appendix D for the effort to do well in class variable. A score on these variables was obtained by summing each student's responses and calculating the mean score. Internal consistency (Cronbach's alpha) for the effort to pay attention in class scale at Time 1 was .72; at Time 2 internal consistency was .79. Internal consistency (Cronbach's alpha) for this scale at Time 1 for the effort to do well in class scale was .79; at Time 2 internal consistency was .78. Wentzel (1997) reported significant correlations of these two scales at the sixth grade level ($r = .46, p < .001$), and eighth grade level ($r = .69, p < .001$). Further, academic effort, as measured by these scales, was significantly correlated to students' GPA at the sixth grade level ($r = .36, p < .001$) and at eighth grade level ($r = .18, p < .001$). No report of internal consistency was provided.

Academic goals were assessed by asking students how often they tried to earn positive evaluations of their work (see Wentzel, 1993). Learning goals were assessed with a four item subscale that asked about efforts to learn and to master subject matter. Subscale items included: “How often do you try to learn things that are difficult?” and “How often do you try to learn new things in your classes because it’s a challenge?” Responses were made on 6-point scales, 1 = Never and 6 = Always. A score on this variable was obtained by summing each student’s responses and calculating the mean score. Internal consistency (Cronbach’s alpha) for this scale at Time 1 was .79; at Time 2 internal consistency was .77. Performance goals were assessed by a five item subscale that asked about efforts to perform in class. Subscale items included: “How often do you try to show your teachers how smart you are in classes?” and “How often do you try to learn something in your classes just to get a good grade?” Responses were made on 6-point scales, 1 = Never and 6 = Always. A score on this variable was obtained by summing each student’s responses and calculating the mean score. Internal consistency (Cronbach’s alpha) for this scale at Time 1 was .70; at Time 2 internal consistency was .74. Wentzel (1993) reported a Cronbach’s alpha of .77 for the learning goals subscale and .78 for the performance goal subscale. Appendix E contains the learning goals scale; Appendix F contains the performance goals scale.

Students’ grade point average data were obtained from student files and were computed as the mean of students’ final grades in English, social studies, math, and science. An examination of correlations among final grades in English, social studies, math, and science confirmed the appropriate use of combined scores to form a GPA

composite in both eighth and ninth grades as a measure of student outcome. Eighth grade final grades in English, social studies, math and science were all significantly correlated at the $p < .001$ level: English-social studies, .80; English-math, .64, English-science, .71; social studies-math, .78; social studies-science, .76; math-science, .72. Ninth grade final grades in English, social studies, math and science were all significantly correlated at the $p < .001$ level: English-social studies, .72; English-math, .49, English-science, .72; social studies-math, .39; social studies-science, .69; math-science, .59.

Classroom Context Measures

Structure: Expectations to perform well academically were assessed with three items from Wentzel, Battle, and Looney's (2006) Measure of Teacher Expectations for Learning subscale. Sample items are: "Teachers expect me to do my very best," and "Teachers expect me to learn new things." Responses were made on four-point scales, 1 = Always and 4 = Never. Internal consistency (Cronbach's alpha) for this scale at Time 1 was .75; at Time 2 internal consistency was .82. This scale is presented in Appendix G. Wentzel et al. reported internal consistency (Cronbach's alpha) of .74 with sixth and eighth grade samples. Student perceptions of teachers' expectations were significantly correlated with interest in class ($r = .67, p < .001$), and with student's perceptions that teachers provide help ($r = .66, p < .001$).

Students' perceptions of teachers' values were assessed by asking students to respond to Feldlaufer, Midgley, and Eccles' (1988) Teacher Classroom Environment Measure's (TCEM) the Teacher-Values 3-item subscale: "Teachers try to make their classes interesting;" "Teachers like their subjects;" and "Teachers tell us why their

subjects are important.” Responses were made on 4-point scales, 1 = not very often and 4 = very often. A score on this variable was obtained by summing each student’s responses and calculating the mean score. Internal consistency (Cronbach’s alpha) for this scale at Time 1 was .67; at Time 2 internal consistency was .59. Wentzel (2002) reported a mean of 3.22; internal consistency (Cronbach’s alpha) was .68. Further, Wentzel reported scores on this scale as significantly correlated to interest in class ($r = .45, p < .001$), mastery orientation ($r = .22, p < .001$), and to high expectations for academic performance ($r = .32, p < .001$). Appendix H contains items on this scale.

Involvement: Perceived support from teachers was measured by the teacher social support subscale (Appendix I) of the Classroom Life Measure (Johnson, et al., 1985). The 3-item scale assesses perceived social support from teachers; sample items are: “My teachers like me about as much as they like other students;” “My teachers care about my feelings;” and “My teacher really cares about me.” Responses are made on a 5-point scale, 1 = Never and 5 = Always. A score on this variable was obtained by summing each student’s responses and calculating the mean score. Internal consistency (Cronbach’s alpha) for this scale at Time 1 was .83; at Time 2 internal consistency was .84. The internal consistency of this measure was reported to be .80 (Johnson et al. 1985) and .81 (Wentzel 1998). Wentzel (1998) reported significant correlations between student perceptions of teachers’ social support and school-related interest ($r = .39, p < .001$), mastery goal orientation ($r = .18, p < .01$), class interest ($r = .23, p < .01$), and GPA ($r = .36, p < .05$).

Self-Process Measures

Concerns about the transition to high school were measured in two ways.

First, students were asked to generate a list of concerns they had about the transition to high school (Time 1, 8th grade) and ongoing concerns about high school after their first year (Time 2, 9th grade). The writing prompt for the Time 1 administration read: “Next school year, you will begin ninth grade in high school. Please use the spaces below to list 4 things that you are thinking about or that concern you about your move to high school.” Then, in four unnumbered spaces students could list additional concerns. The prompt read: “If you have additional concerns, please list them here.” The Time 1 student concerns form is presented in Appendix J.

The first writing prompt for the Time 2 administration read: “You are almost at the completion of ninth grade. Please use the spaces below to list 4 things that you thought about or that concerned you during this school year.” Students were invited to list additional concerns in two unnumbered remaining spaces. Finally, students were asked to respond to the following prompt: “What concerns do you have about school as you think about moving into tenth grade next year?” Four numbered spaces followed. The Time 2 student concerns form is presented in Appendix K.

Second, concerns were assessed with school-related hassles and uplifts items from the Kanner et al. (1981) Daily Hassles scale and Uplifts scale. Students were given a list of events and asked if each happened within the last month and if so, how they felt about them. Responses on the Hassles scale were made on a 4-point scale, 1 = didn’t happen and 4 = “I felt very bad.” A score on this variable was obtained by summing the number of times each student’s responses indicated that an item didn’t

happen and calculating the mean score. Further, the Hassles scale was categorized into hassles regarding students' sense of competence and students' sense of relatedness. Appendix L contains survey items for the Hassles scale variable. Sample items contained in the Hassles scale were: "Kids at school teased you."; "You were punished for something you didn't do," and "You got punished when you did something wrong." Although no report of internal consistency could be found, Kanner et al. (1987) reported significant correlations between hassles and anxiety ($r = .60, p < .001$), distress ($r = .43, p < .001$), friendship support ($r = -.22, p < .001$), perceived social competence ($r = -.27, p < .001$), and general self-worth ($r = -.32, p < .001$).

Responses on the Uplifts scale were made on a 4-point scale, 1 = didn't happen and 4 = "I felt very good." A score on this variable was obtained by summing the number of times each student's responses indicated that an item didn't happen and calculating the mean score. Further, the Uplifts scale was categorized into uplifts regarding students' sense of competence and students' sense of relatedness. A score on this variable was obtained by summing each student's responses and calculating the mean score. Appendix M contains survey items for the Uplifts scale variable. Sample items contained in the Uplifts scale were: "You got a good mark at school;" "You won a game," and "You found something you had lost." Although no report of internal consistency could be found, Kanner et al. (1987) reported significant correlations between uplifts and distress ($r = -.38, p < .001$), friendship support ($r = .27, p < .001$), perceived social competence ($r = .29, p < .001$), and general self-worth ($r = .26, p < .001$). Appendix M contains the uplifts scale.

Chapter 4: Results

This chapter presents the results of this study, corresponding to the research questions. The six questions explored in this study are as follow:

1. What are the changes in context and self-processes across the transition from eighth to ninth grade?
2. What are the changes in engagement and academic outcomes across the transition from eighth to ninth grade?
3. What are eighth graders' concerns about the transition to high school?
4. What are ninth graders' concerns about the transition to high school and how do they compare to the concerns of eighth graders?
5. Are students at risk for a decline in GPA during the transition from eighth to ninth grade?
6. Are students' perceptions of teacher expectations, teacher values, and teacher support, students' reports of uplifts and hassles, students' reported level of interest in class, effort to pay attention in class, effort to do well in class, and of pursuit of learning goals and performance goals related to differences, as measured by GPA, between higher and lower performing students in eighth and in ninth grade?

First, descriptive statistics highlighting correlations and mean differences of key variables will be presented. Next, results from dependent t-tests relative to changes in context and self-processes across the transition from eighth to ninth grade will be presented. Following, changes in engagement and academic outcomes across the transition to high school are discussed. Concerns of eighth-grade students as they

anticipated their transition to high school will then be presented, followed by concerns expressed by students one year later as they reflected on their ninth-grade experience; a chi-square analysis of students' concerns is presented. Results from a dependent t-test are then presented regarding changes in students' GPA across the transition from eighth to ninth grade. Finally, independent t-test results are presented to determine whether changes in context, self-processes, and engagement are related to differences between higher and lower performing students in eighth and ninth grades.

Descriptive Statistics

Results from descriptive statistics are presented in this section. Cronbach's alpha, mean, standard deviation, and range for each study variable are presented in Table 2. Cronbach's alphas reveal a moderate to high degree of internal consistency for each variable both at Time 1 and at Time 2. To determine if the 93 participating students were representative of the 160 eighth students in the Time 1 school, independent t-tests were conducted. As reported in Table 3, participants and non-participants differed only in that participants reported greater effort to pay attention in class (participants \underline{M} =3.06, \underline{SD} =.57; non-participants \underline{M} =2.86, \underline{SD} =.68), fewer relatedness hassles (participants \underline{M} =3.61, \underline{SD} =1.36; non-participants \underline{M} =1.69, \underline{SD} =1.39), as well as more total uplifts (participants \underline{M} =2.09, \underline{SD} =2.67; non-participants \underline{M} =3.06, \underline{SD} =2.36) and competence uplifts (participants \underline{M} =1.17, \underline{SD} =1.29; non-participants \underline{M} =1.69, \underline{SD} =1.39).

Table 2

Reliability Coefficients and Descriptive Statistics for Study Variables

Variable	α	<u>M</u>	<u>SD</u>	Range	α	<u>M</u>	<u>SD</u>	Range
Time 1					Time 2			
Hassles - total	na	8.40	2.91	1.00-15.00	na	8.02	2.83	2.00-15.00
Competence	na	1.89	1.26	0.00-5.00	na	1.58	1.20	0.00-5.00
Relatedness	na	3.61	1.36	0.00-5.00	na	3.41	1.33	0.00-5.00
Uplifts - total	na	2.09	2.35	0.00-11.00	na	2.13	2.26	0.00-14.00
Competence	na	1.17	1.29	0.00-5.00	na	1.29	1.26	0.00-6.00
Relatedness	na	0.51	.88	0.00-4.00	na	.34	0.74	0.00-5.00
Interest in class	.79	3.40	.69	1.00-5.00	.78	3.32	.70	1.40-4.90
Teacher support	.83	3.40	1.00	1.00-5.00	.84	3.33	.79	1.00-5.00
Teacher values	.67	2.06	.72	1.00-4.00	.59	2.25	.69	1.00-3.67
Teacher expectations	.75	1.37	.59	1.00-4.00	.82	1.67	.74	1.00-4.00
Effort - pay attention in class	.72	3.06	.57	1.25-4.00	.79	2.90	.65	1.50-4.00

Table 2 - continued

Reliability Coefficients and Descriptive Statistics for Study Variables

Variable	α	<u>M</u>	<u>SD</u>	Range	α	<u>M</u>	<u>SD</u>	Range
Effort - do well in class	.79	3.40	.65	.00-4.00	.78	3.25	.70	0.75-4.00
Learning goals	.79	3.65	1.03	1.00-6.00	.77	3.82	1.01	1.00-5.75
Performance goals	.70	3.36	.94	1.00-6.00	.74	3.66	.97	1.60-5.80

Table 3

Comparison of Participating 8th Grade Students to Non-Participating 8th Grade Students

Variable	N	Mean	SD	t	p	d
GPA						
Participants	93	2.90	.85	.75	.19	.21
Non-Participants	67	2.71	.93			
Hassles - total						
Participants	93	7.88	2.67	1.28	.20	.21
Non-Participants	67	7.34	2.55			
Competence-participants	93	1.89	1.26	.21	.83	.03
Competence-nonparticipants	67	1.85	1.16			
Relatedness-participants	93	3.61	1.36	1.97	.05*	1.40
Relatedness-nonparticipants	67	1.69	1.39			
Uplifts - total						
Participants	93	2.09	2.67	-2.58	.01*	.38
Non-Participants	67	3.06	2.36			
Competence-participants	93	1.17	1.29	-2.40	.02*	.39
Competence-nonparticipants	67	1.69	1.39			
Relatedness-participants	93	0.52	0.88	-1.28	.20	.21
Relatedness-nonparticipants	67	0.69	0.76			

Table 3 - continued

Comparison of Participating 8th Grade Students to Non-Participating 8th Grade Students

Variable	N	Mean	SD	t	p	d
Interest in class						
Participants	93	3.39	.69	1.87	.07	.29
Non-Participants	67	3.19	.68			
Teacher support						
Participants	93	3.40	1.00	.79	.43	.13
Non-Participants	67	3.27	1.07			
Teacher values						
Participants	93	2.06	.72	-1.18	.24	.19
Non-Participants	67	2.19	.65			
Teacher expectations						
Participants	93	1.37	.59	-.99	.32	.36
Non-Participants	67	1.14	.68			
Effort to pay attention in class						
Participants	93	3.06	.57	1.95	.05*	.32
Non-Participants	67	2.86	.68			

Table 3 - continued

Comparison of Participating 8th Grade Students to Non-Participating 8th Grade Students

Variable	N	Mean	SD	t	p	d
Effort to do well in class						
Participants	93	3.39	.65	1.22	.22	.20
Non-Participants	67	3.25	.75			
Learning goals						
Participants	93	3.65	1.03	1.37	.17	.22
Non-Participants	67	3.41	1.03			
Performance goals						
Participants	93	3.36	.94	.95	.34	.15
Non-Participants	67	3.22	.89			

* $p < .05$; ** $p < .01$; *** $p < .001$

As the sample was comprised of 60 females and 33 males, independent t-tests were conducted to determine if students differed, with respect to the variable employed, by sex at the eighth or ninth grade levels. As shown in Table 4, eighth grade male and female participants differed only in that females reported greater interest in classroom activities (eighth grade males $\underline{M}=3.16$, $\underline{SD}=.76$; eighth grade females $\underline{M}=3.52$, $\underline{SD}=.63$) and perceived higher expectations for academic performance than eighth grade males (eighth grade males $\underline{M}=1.58$, $\underline{SD}=.80$; eighth grade females $\underline{M}=1.26$, $\underline{SD}=.40$). Further, female participants had a higher eighth grade GPA than their male counterparts (eighth grade males $\underline{M}=2.54$, $\underline{SD}=1.00$; eighth grade females $\underline{M}=3.10$, $\underline{SD}=.69$). Results of independent t-tests on the target variables for ninth grade participating male and female students found that students differed by gender only in that females reported greater interest in classroom activities (ninth grade males $\underline{M}=3.09$, $\underline{SD}=.81$; ninth grade females $\underline{M}=3.45$, $\underline{SD}=.60$), greater effort to pay attention in class (ninth grade males $\underline{M}=2.63$, $\underline{SD}=.63$; ninth grade females $\underline{M}=3.04$, $\underline{SD}=.62$), and greater effort to achieve learning goals (ninth grade males $\underline{M}=3.54$, $\underline{SD}=1.20$; ninth grade females $\underline{M}=3.97$, $\underline{SD}=.87$) than male participants. Female ninth grade participants posted a higher mean GPA than male ninth grade participants (ninth grade males $\underline{M}=2.57$, $\underline{SD}=1.06$; ninth grade females $\underline{M}=3.00$, $\underline{SD}=.76$). These results are presented in Table 5. Finally, mean GPA of the 93 participants at Time 1 was 2.90; the mean GPA of the entire Time 1 school eighth grade (160 students) was 2.83.

Several of the study variables were significantly correlated for eighth graders, as reported in Table 6. Students' GPA was significantly correlated with perceptions

of teachers' expectations for academic success, perceptions of teachers' social support, interest in classroom activities, effort to do well in class, and relatedness hassles. Moreover, students' interest in classroom activities was significantly correlated with their perceptions of teachers' values, perceptions of teachers' expectations, their effort to pay attention in class, and their effort to do well in class. Students' perceptions of teachers' social support, their perceptions of teachers' values, as well as their perception of teachers' expectations to do well academically were significantly correlated to both their effort to pay attention in class and their effort to do well in class.

At the ninth grade level, students' GPA was significantly correlated to students' perceptions of teachers' expectations to do well academically, effort to do well in class, as well as reporting fewer relatedness hassles and more relatedness uplifts. Perceptions of teachers' social support were significantly correlated to students' effort to do well in class. Students' level of interest in class, perceptions of teachers' values, and perceptions of teachers' expectations to do well academically were significantly correlated to effort expended to effort to pay attention in class and effort to do well in class. Students' learning goals were significantly correlated to performance goals, effort to pay attention in class, perceptions of teachers' values, interest in class, total uplifts, as well as having fewer total and competence hassles. These data are reported in Table 7.

Table 4

Comparison of Male and Female 8th Grade Students

Variable	N	Mean	SD	t	p	d
GPA						
Males	33	2.54	1.00	-3.15	.002**	.65
Females	60	3.10	.69			
Hassles - total						
Males-total	33	8.24	2.95	-.38	.71	.08
Females-total	60	8.48	2.91			
Competence-male	33	1.97	1.19	.43	.66	.10
Competence-female	60	1.85	1.30			
Relatedness-male	33	3.30	1.45	-1.65	.10	.35
Relatedness-female	60	3.78	1.29			
Uplifts - total						
Males-total	33	1.85	2.65	-.72	.47	.15
Females-total	60	2.21	2.18			
Competence-male	33	.97	1.26	-1.12	.26	.24
Competence-female	60	1.28	1.30			
Relatedness-male	33	.42	1.00	-.75	.46	.16
Relatedness-female	60	.57	.81			
Interest in class						
Males	33	3.16	.76	-2.52	.01*	.51
Females	60	3.52	.63			

Table 4 - continued

Comparison of Male and Female 8th Grade Students

Variable	N	Mean	SD	t	p	d
Teacher support						
Males	33	3.13	1.23	-1.93	.06	.39
Females	60	3.54	.81			
Teacher values						
Males	33	2.07	.89	.03	.98	.01
Females	60	2.06	.62			
Teacher expectations						
Males	33	1.58	.80	2.54	.01*	.50
Females	60	1.26	.40			
Effort to pay attention in class						
Males	33	3.01	.61	-.52	.61	.12
Females	60	3.08	.54			
Effort to do well in class						
Males	33	3.27	.81	-1.38	.17	.28
Females	60	3.46	.54			
Learning goals						
Males	33	3.48	1.09	-1.18	.25	.26
Females	60	3.74	.99			

Table 4 - continued

Comparison of Male and Female 8th Grade Students

Variable	N	Mean	SD	t	p	d
Performance goals						
Males	33	3.28	.94	-.55	.58	.13
Females	60	3.40	.94			

* $p < .05$; ** $p < .01$; *** $p < .001$

Table 5

Comparison of Male and Female 9th Grade Students

Variable	N	Mean	SD	t	p	d
GPA						
Males	33	2.57	1.06	-2.05	.04*	.47
Females	60	3.00	.76			
Hassles - total						
Males-total	33	7.78	2.79	-.59	.59	.13
Females-total	60	8.15	2.87			
Competence-male	33	1.70	1.33	.69	.49	.15
Competence-female	60	1.52	1.13			
Relatedness-male	33	3.12	1.29	-1.57	.12	.34
Relatedness-female	60	3.57	1.33			
Uplifts - total						
Males-total	33	2.12	2.70	-.02	.98	.00
Females-total	60	2.13	2.00			
Competence-male	33	1.24	1.30	-.27	.78	.06
Competence-female	60	1.32	1.24			
Relatedness-male	33	.45	.97	1.06	.29	.21
Relatedness-female	60	.28	.58			

Table 5 - continued

Comparison of Male and Female 9th Grade Students

Variable	N	Mean	SD	t	p	d
Interest in class						
Males	33	3.09	.81	-2.43	.02*	.51
Females	60	3.45	.60			
Teacher support						
Males	33	3.30	.74	-3.01	.76	.05
Females	60	3.34	.82			
Teacher values						
Males	33	2.38	.73	1.32	.19	.29
Females	60	2.18	.67			
Teacher expectations						
Males	33	1.77	.81	1.00	.32	.21
Females	60	1.61	.71			
Effort to pay attention in class						
Males	33	2.63	.63	-3.03	.003**	.66
Females	60	3.04	.62			
Effort to do well in class						
Males	33	3.12	.80	-1.41	.16	.29
Females	60	3.33	.64			

Table 5 - continued

Comparison of Male and Female 9th Grade Students

Variable	N	Mean	SD	t	p	d
Learning goals						
Males	33	3.54	1.20	-1.96	.05*	.44
Females	60	3.97	.87			
Performance goals						
Males	33	3.58	1.13	-.54	.59	.12
Females	60	3.70	.88			

* $p < .05$; ** $p < .01$; *** $p < .001$

Table 6

Intercorrelations Among Variables – Eighth Grade

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Overall GPA															
2. Hassles-total	.22*														
3. Hassles-competence	-.17	.63***													
4. Hassles-relatedness	.48***	.73***	.17												
5. Uplifts-total	-.22*	.04	.10	-.03											
6. Uplifts-competence	-.15	.09	.15	.06	.89***										
7. Uplifts-relatedness	-.10	-.04	-.06	-.01	.81***	.53***									
8. Interest in class	.36***	.32**	.18	.26*	-.31**	-.23*	-.21*								
9. Teacher social support	.37***	.27**	.01	.43***	-.29**	-.17	-.25*	.48***							
10. Teacher values	.00	-.14	-.08	-.12	.11	.08	.09	-.36***	-.38***						
11. Teacher expectations	-.39***	-.22*	.00	-.34***	.13	.01	.14	-.34***	-.49***	.49***					
12. Effort-attention in class	.13	.44***	.24*	.35***	-.18	-.14	-.07	.49***	.31**	-.34***	-.28**				

Table 6 - continued

Intercorrelations Among Variables – Eighth Grade

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
13. Effort-do well in class	.28**	.31**	.12	.37***	-.25*	-.17	-.09	.50***	.29**	-.27**	-.40***	.68***			
14. Learning goals	.27	.25*	.25*	.11	-.28**	-.22*	.19	.61***	.23*	.35***	-.19	.56***	.60***		
15. Performance goals	.17	-.11	-.09	-.08	-.34***	-.31**	-.23*	-.28**	.03	-.14	-.12	.30**	.43***	.44***	

Note. n=93. Variables 10 and 11 are reverse-scored;

* $p < .05$; ** $p < .01$; *** $p < .001$

Table 7

Intercorrelations Among Variables – 9th Grade

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. GPA															
2. Hassles-total	.23*														
3. Hassles-competence	-.14	.63***													
4. Hassles-relatedness	.39***	.74***	.15												
5. Uplifts-total	-.12	.22*	.31**	.03											
6. Uplifts-competence	-.04	.17	.18	.07	.90***										
7. Uplifts-relatedness	-.21*	.17	.35***	-.05	.81***	.60***									
8. Interest in class	.13	.19	-.03	.19	-.31**	-.33***	-.28**								
9. Teacher social support	-.10	.18	-.02	.23*	-.08	-.11	-.14	.20							
10. Teacher values	-.04	-.08	.06	-.03	.09	.11	.03	-.19	-.26*						
11. Teacher expectations	-.23*	-.20	.07	-.19	.05	-.03	.16	-.18	-.26*	.48***					
12. Effort-attention in class	.07	.21*	-.02	.28**	-.09	-.13	-.03	.50***	.17	-.22*	-.24*				

Table 7 - continued

Intercorrelations Among Variables – 9th Grade

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
13. Effort-do well in class	.21*	.11	-.15	.24*	-.04	-.02	-.11	.28**	.27**	-.18	-.28**	.55***			
14. Learning goals	-.07	.20	.13	.09	-.02	-.12	.02	.52***	.19	-.27**	-.14	.43***	.36***		
15. Performance goals	-.04	.08	.06	-.06	-.01	-.12	.06	.43***	.05	-.15	-.12	.27**	.18	.71***	

Note. n=93. Variables 10 and 11 are reverse-scored

* $p < .05$; ** $p < .01$; *** $p < .001$

Changes in Context and Self-Processes

Question 1: What are the changes in context and self-processes across the transition from eighth to ninth grade?

Dependent t-tests were employed to determine changes in context and self-processes from the end of eighth grade to the end of ninth grade. The decision to employ dependent t-tests in research question 1 was appropriate in that dependent t-tests measure whether the scores of an interval-like ordinal variable differ at two points in time for the same subjects. The criteria for use of dependent t-test was met in that the present sample is a representative sample from a larger grade, there are two interval-like ordinal variables with the same score design, a single variable measured twice for the same subjects, and there is a target value of the variables which may be used to compare the mean of differences across time (Ritchey, 2000). An omnibus test was not applied to answer research question 1, as it would not provide the specificity of results achieved by application of dependent t-tests. In essence, employing dependent t-tests permits a more revealing and helpful analysis in that specific variables can be paired to determine if mean differences exist between Time 1 and Time 2 measures. Alpha level was set at the .05 level of significance to control for Type 1 error. Students' perceptions of their teachers' expectations for academic performance differed significantly from eighth to ninth grades. Students perceived their eighth-grade teachers as having higher expectations for academic success than they did their ninth-grade teachers. Additionally, a statistically significant difference was found with respect to students' perceptions of their teachers' values.

Results indicate that as eighth graders, students perceived teachers to have placed higher value on their subject matter than they perceived their ninth grade teachers. No significant difference was found regarding perceptions of teacher support received from their eighth and ninth grade teachers. Finally, with the exception of eighth graders reporting a statistically significant higher number of competence-related hassles than ninth graders, no significant differences were found relative to changes in students' reports of hassles and uplifts from eighth to ninth grade. Table 8 presents data for these variables.

Changes in Engagement

Question 2: What are the changes in engagement and academic outcomes across the transition from eighth to ninth grade?

As for Question 1, dependent t-tests were employed to determine changes in engagement and academic outcome from the end of eighth grade to the end of ninth grade.

Results of a dependent t-test suggested no significant difference regarding students' interest in classroom activities between eighth and ninth grades. However, a significant difference was found with respect to students' effort expended to learn (as reflected by their reports of paying attention during class) between eighth and ninth grades. Students reported expending greater effort to pay attention in class in their classes as eighth graders than as ninth graders. Eighth grade students also placed greater emphasis on pursuing performance goals than as ninth graders. No significant difference was found relative to students' effort to do well in classes; nor was a

difference found regarding students' pursuit of learning goals from eighth to ninth grades. Table 8 presents data for these variables.

Eighth Graders' Concerns About the Transition to High School

Question 3: What are eighth graders' concerns about the transition to high school?

A total of 269 unique responses were gathered from the 93 student sample. The range of eighth graders' concerns was 0-9, with a mean of 3.08 concerns expressed per student. Connell and Wellborn's (1991) model was employed as a base to assign students' responses to one of three categories: concerns about competence, concerns about relatedness, and concerns about autonomy. Responses not falling into these categories were considered to be uncodable.

In this study, competence was defined as experiencing oneself as capable of producing desired outcomes and avoiding negative outcomes, relatedness as feeling secure in one's social surroundings and the need to experience oneself as worthy and capable of love and respect, and autonomy was defined as the experience of choice in initiation, maintenance, and regulation of activity and the experience of connectedness between one's actions and personal goals and values (Connell & Wellborn, 1991).Uncodable responses could not be assigned to any of the aforementioned categories. The researcher and the research assistant independently placed concerns of eighth graders into one of three categories—concerns about competence, concerns about relatedness, and concerns about autonomy. Results were

Table 8

Comparison of Variables across 8th and 9th Grades

Variable	N	Mean	SD	t	p	d
GPA						
8 th grade	93	2.90	.85	1.60	.11	.09
9 th grade	93	2.82	.89			
Hassles						
8 th grade-total	93	8.40	2.91	.38	.25	.13
9 th grade-total	93	8.02	2.82			
Competence-8 th	93	1.89	1.26	1.97	.05*	.25
Competence-9 th	93	1.58	1.20			
Relatedness-8 th	93	3.61	1.36	1.50	.14	.15
Relatedness-9 th	93	3.41	1.33			
Uplifts						
8 th grade-total	93	2.09	2.35	-.15	.89	.02
9 th grade-total	93	2.13	2.26			
Competence-8 th	93	1.17	1.29	-.79	.44	.09
Competence-9 th	93	1.29	1.26			
Relatedness-8 th	93	.52	.88	1.50	.14	.22
Relatedness-9 th	93	.34	.75			

Table 8 - continued

Comparison of Variables across 8th and 9th Grades

Variable	N	Mean	SD	t	p	d
Interest in class						
8 th grade	93	3.39	.69	1.0	.29	.10
9 th grade	93	3.32	.70			
Teacher support						
8 th grade	93	3.40	.99	.59	.55	.08
9 th grade	93	3.33	.79			
Teacher values						
8 th grade	93	2.05	.72	-2.62	.01*	.28
9 th grade	93	2.25	.69			
Teacher expectations						
8 th grade	93	1.37	.59	-3.85	.001***	.45
9 th grade	93	1.67	.74			
Effort to pay attention in class						
8 th grade	93	3.06	.57	2.33	.02*	.28
9 th grade	93	2.89	.65			
Effort to do well in class						
8 th grade	93	3.39	.65	1.83	.07	.21
9 th grade	93	3.25	.70			

Table 8 - continued

Comparison of Variables across 8th and 9th Grades

Variable	N	Mean	SD	t	p	d
Learning goals						
8 th grade	93	3.63	1.02	-1.78	.08	.21
9 th grade	93	3.82	1.01			
Performance goals						
8 th grade	93	3.33	.92	-3.06	.003**	.35
9 th grade	93	3.66	.97			

* $p < .05$; ** $p < .01$; *** $p < .001$

compared and a kappa of .71 was determined. Responses that resulted in coding disagreements were subsequently discussed; agreement was reached on the categorization of responses in question.

To determine more specifically students' worries regarding the transition to high school, concerns were reviewed further to determine the emergence of subcategories within the broader banners of competence, relatedness, and autonomy. Examples of competence subcategories included concerns about: maintaining good grades and managing workload, adjusting to a new school, qualifying for extracurricular activities, and balancing multiple demands.

Relatedness subcategories included concerns about: friendships, being accepted, having classes with friends, and liking teachers. Autonomy subcategories included concerns about: freedom and privileges, having fun, and curricular decision making. Kappa was not computed for this process. Table 9 presents subcategories and definitions of students' concerns.

Eighth-graders' concerns about competence outweighed their concerns about relatedness and autonomy by a wide margin –162 concerns, fully 60% of responses, were expressed about competence, 65 concerns (24%) spoke to issues of relatedness, 23 (9%) reflected concerns about autonomy; 19 responses (7%) were uncodable. Table 10 presents the concerns expressed by eighth grade students.

Table 9

Definitions of Concerns Terms by Category

Term	Definition
Competence	
Grades, workload	Concerns regarding the ability to maintain good grades and to manage volume of work
Adjusting to new school	Concerns regarding the ability to navigate a new physical plant; finding classes
Extracurricular activities	Concerns regarding the ability to qualify, academically and athletically, for extracurricular activities
Balancing multiple demands	Concerns regarding the ability to manage time efficiently and effectively; not being overwhelmed
Having competent teachers	Concerns regarding teachers following sound pedagogy and their knowledge of content
Safety	Concerns regarding threats to personal safety; fights, crowded hallways, exposure to drugs

Table 9 - continued

Definitions of Concerns Terms by Category

Term	Definition
Disciplinary difficulties	Concerns regarding getting into trouble with teachers and administrators based on conduct
Boredom	Concerns regarding not being challenged or interested in classroom activities
Relatedness	
Friendships	Concerns regarding the ability to make new friends; to maintain existing friendships
Being accepted	Concerns regarding how ninth graders will be treated by upperclassmen; being teased
Having classes with friends	Concerns regarding being scheduled for classes with friends; not knowing anyone in classes
Liking teachers	Concerns regarding the ability to relate to teachers; feeling supported by teachers
Siblings/parents	Concerns regarding attending the same school as an older sibling; family problems

Table 9 - continued

Definitions of Concerns Terms by Category

Term	Definition
Autonomy	
Freedom/privileges	Concerns regarding the ability to manner of dress; lunch choices
Having fun/personal time	Concerns regarding the ability to engage in interesting after school activities; concerns about time for one's social life in and out of school
Unnecessary rules/restrictions	Concerns regarding the restrictive nature of school and teacher rules
Earning money	Concerns regarding the ability to maintain a part time job
Middle school fit	Concerns regarding the ability adjust to 4 period high school organization from 7 period middle school
Curricular decision making	Concerns regarding the ability to choose classes of personal interest
Transportation	Concerns regarding the ability to find transportation to and from school
Uncodable	Nature of concern rendered precluded categorization

Table 10

Students' 8th and 9th Grade Concerns Categorized by Competence, Relatedness, and Autonomy

	<u>End of 8th Grade Concerns</u>		<u>End of 9th Grade Concerns</u>	
	Number	Percent	Number	Percent
Total concerns	269	100	280	100
By category				
Self-Process				
Competence	162	60	164	58
Relatedness	65	24	48	17
Autonomy	23	9	37	13
Uncodable	19	7	31	11

Table 10 - continued

Students' 8th and 9th Grade Concerns Categorized by Competence, Relatedness, and Autonomy

	<u>End of 8th Grade Concerns</u>		<u>End of 9th Grade Concerns</u>	
Within category				
Competence				
Grades, workload	88	54	106	64
Adjusting to new school	31	19	6	4
Extracurricular activities	16	10	6	3
Balancing multiple demands	12	7	2	1
Having competent teachers	9	6	13	8
Safety	4	2	22	13
Post high school decisions	2	1	4	2
Disciplinary difficulties	0	0	2	1

Table 10 - continued

Students' 8th and 9th Grade Concerns Categorized by Competence, Relatedness, and Autonomy

	<u>End of 8th Grade Concerns</u>		<u>End of 9th Grade Concerns</u>	
Boredom	0	0	2	1
Relatedness				
Friendships	24	35	23	48
Being accepted	19	29	6	12
Having classes with friends	11	17	4	8
Liking teachers	8	12	8	15
Siblings/parents	3	5	5	10
Schoolwide social issues	0	0	3	6
Autonomy				
Freedom/privileges	10	43	12	32
Having fun/personal time	8	35	10	27

Table 10 - continued

Students' 8th and 9th Grade Concerns Categorized by Competence, Relatedness, and Autonomy

	<u>End of 8th Grade Concerns</u>		<u>End of 9th Grade Concerns</u>	
Unnecessary restrictions/rules	2	9	6	16
Earning money	1	4	1	3
Better/worse fit than middle school	1	4	2	5
Curricular decision making	1	4	5	13
Transportation	0	0	1	3

Ninth-Graders' Concerns About the Transition to High School

Question 4: What are ninth graders' concerns about the transition to high school and how do they compare to the concerns of eighth graders?

A total of 280 unique responses were gathered from students in ninth grade. The range of ninth graders' concerns was 0-5, with a mean of 3.13 concerns expressed per student.

The researcher and the research assistant independently categorized concerns into one of three categories—concerns about competence, concerns about relatedness, and concerns about autonomy. Uncodable responses could not be assigned to any of the aforementioned categories. Results were compared and a kappa of .96 was determined. It is suggested that the ninth grade concerns kappa was influenced by the researcher's and the research assistant's familiarity with the categorization process. Following discussion, agreement was reached on the categorization of responses in question.

Ninth-grade students' concerns were reviewed further to determine placement in existing subcategories, or to identify the emergence of additional subcategories within the broader banners of competence, relatedness, and autonomy. Independently, the researcher and research assistant assigned each student concern to a subcategory within the larger categories of concerns of competence, relatedness, autonomy, and uncodable.

The researcher and the research assistant independently placed concerns of eighth graders into one of three categories—concerns about competence, concerns

about relatedness, and concerns about autonomy. Coding disagreements were subsequently discussed; agreement was reached on the categorization of responses in question. No kappa was computed for this process.

Ninth graders' concerns about competence outweighed their concerns about relatedness and autonomy by a wide margin –164 concerns, fully 58% of responses, were expressed about competence, 48 concerns (17%) spoke to issues of relatedness, 37 (13%) reflected concerns about autonomy, and 31 (11%) responses were uncodable (see Table 10).

To determine if there was a relationship between the content of students' concerns from eighth grade to ninth grade, an analysis of content was performed. First, a chi-square analysis was performed on the categories of competence, relatedness, autonomy, and uncodable.

Chi-square analyses of subcategories within the categories of competence, relatedness, and autonomy were performed as well. Results suggest that eighth graders' competence, relatedness, and autonomy concerns regarding high school transition were related to their competence, relatedness, and autonomy concerns expressed at the end of ninth grade ($X^2 [3, N = 549] = 8.50, p < .05$). A within-category chi-square analysis of the competence category suggested that students' concerns regarding high school transition were related to their concerns expressed at the end of ninth grade ($X^2 [8, N = 321] = 44.08, p < .001$). Within the relatedness category, however, chi-square analysis suggested that students' concerns regarding high school transition expressed at the end of eighth grade were not related to their

relatedness concerns expressed at the end of ninth grade ($X^2 [5, N = 110] = 11.07, p > .05$). Similarly, a within-category analysis of autonomy concerns suggest students' concerns regarding high school transition expressed at the end of eighth grade are not related to their autonomy concerns expressed at the end of ninth grade ($X^2 [5, N = 59] = 2.67, p > .05$).

Changes in Academic Outcomes

With an alpha level of .05, results of a dependent t-test did not reveal a statistically significant change in GPAs for the sample across the transition from eighth to ninth grade (see Table 8). Of the 93 participants, the GPA of 22 students increased, 42 GPAs decreased, and 29 GPAs remained unchanged—this report reflects any change in GPA and is not predicated on degree of movement. Changes in GPA for the participants were not statistically significant. Contrary to the original hypothesis that students' GPA would decline significantly there was, in fact, a decline of only .08 (on a 0-4 scale) between the end of eighth grade and the end of ninth grade.

To understand better factors that might influence students' GPAs in both eighth and ninth grades, an analysis of study variables as they apply to the highest and lowest performing eighth and ninth grade participating students is reported. In order to capture extremes in GPA and to maintain meaningful size of subgroups, three subgroups were formed for each grade level—high, middle, and low performers, based on GPA. Results of independent t-tests of higher and lower performing students in eighth and in ninth grade are reported in the next section.

Differences Between Higher and Lower Performing Students in Eighth and in Ninth Grades

To detect differences between students whose GPA ranked in the top third and the bottom third in eighth in ninth grade, independent t-tests were employed for the following variables: interest in class, perceptions of teacher support and teacher values, effort to pay attention in class, effort to do well in class, learning and performance goals. Further, reports of hassles and uplifts were reported as total hassles, competence hassles, relatedness hassles, total uplifts, competence uplifts, and relatedness uplifts. Differences between higher and lower GPA eighth grade students are presented in Table 11.

Each of the eighth grade higher and lower GPA groups consisted of 31 students. GPAs in the high group ranged from 3.50 to 4.00, on a 0-4 scale; the mean GPA for this group was 3.77. GPAs for the low performing group ranged from 0.75 to 2.50; the mean GPA for this group was 1.90. With an alpha of .05 (G. Austin, personal communication, October 10, 2006), independent t-test results suggested higher GPA students reporting greater interest their classes, fewer relatedness hassles, more total uplifts, greater effort to do well in class, higher perceptions of their teachers' expectations for academic success, and feeling more supported by their teachers than did lower GPA students. No significant differences between eighth grade higher and lower GPA groups were found, however, with respect to total hassles, competence uplifts, relatedness uplifts, perceptions of teacher values, effort to pay attention in class, pursuit of learning goals, and pursuit of performance goals.

Table 11

Comparison of Higher and Lower GPA 8th Grade Students

Variable	N	Mean	SD	t	p	d
Hassles - total						
Lower GPA	31	7.84	3.24	1.14	.26	.29
Higher GPA	31	8.71	2.77			
Competence						
Lower GPA	31	1.39	1.29	-2.55	.01*	.65
Higher GPA	31	2.16	1.09			
Relatedness						
Lower GPA	31	2.97	1.28	3.83	.001***	.97
Higher GPA	31	4.23	1.31			
Uplifts - total						
Lower GPA	31	3.00	1.45	-2.06	.04*	.52
Higher GPA	31	1.68	3.27			
Competence						
Lower GPA	31	1.58	1.71	-1.74	.08	.44
Higher GPA	31	.97	.95			
Relatedness						
Lower GPA	31	.71	1.16	-.65	.52	.16
Higher GPA	31	.55	.77			

Table 11 - continued

Comparison of Higher and Lower GPA 8th Grade Students

Variable	N	Mean	SD	t	p	d
Interest in class						
Lower GPA	31	3.13	.78	-3.0	.004**	.76
Higher GPA	31	3.65	.58			
Teacher support						
Lower GPA	31	2.96	1.2	-2.31	.03*	.61
Higher GPA	31	3.56	.72			
Teacher values						
Lower GPA	31	2.01	.91	-1.09	.28	.27
Higher GPA	31	2.22	.63			
Teacher expectations						
Lower GPA	31	1.53	.83	2.3	.03*	.58
Higher GPA	31	1.17	.30			
Effort to pay attention in class						
Lower GPA	31	3.00	.65	-.59	.56	.15
Higher GPA	31	3.09	.53			
Effort to do well in class						
Lower GPA	31	3.23	.81	-2.37	.02*	.61
Higher GPA	31	3.62	.41			

Table 11 - continued

Comparison of Higher and Lower GPA 8th Grade Students

Variable	N	Mean	SD	t	p	d
Learning goals						
Lower GPA	31	3.65	.93	.26	.80	.07
Higher GPA	31	3.58	1.04			
Performance goals						
Lower GPA	31	3.50	.79	1.75	.09	.45
Higher GPA	31	3.06	1.17			

* $p < .05$; ** $p < .01$; *** $p < .001$

When adopting a more conservative alpha of .01, however, significant differences were found only for the variables of competence hassles, related hassles, and interest in class.

The ninth grade higher GPA group was comprised of 29 students whose GPA ranged from 3.50 to 4.00; the mean GPA for this group was 3.72. The lower GPA ninth grade group was comprised of 33 students whose GPA ranged from 0.00 to 2.50; the mean GPA for this group was 1.83. Of the 29 students in the higher GPA group for ninth grade, 21 were also in the top GPA group for eighth grade. Further, of the 33 students in the bottom GPA group for ninth grade, 26 were in the bottom GPA group in eighth grade. Interestingly, one student catapulted from the lower GPA eighth grade group to the higher GPA ninth grade group.

Higher GPA ninth grade students reported significantly fewer overall hassles and relatedness hassles than their lower GPA counterparts. Lower GPA ninth graders reported fewer relatedness uplifts than higher GPA ninth grade students. A significant difference between groups was noted with respect to students' perceptions of teacher expectations to do well academically. With alpha set at .05, higher GPA students reported higher perceptions of teacher expectations than did their lower GPA counterparts. No significant differences between higher and lower GPA groups were found regarding competence hassles, total uplifts, competence uplifts, interest in class, perceptions of teacher support, perceptions of teacher values, effort to pay attention in class, effort to do well in class, pursuit of learning goals, and pursuit of performance goals. When adopting a more conservative alpha of .01, however,

significant differences were found only for the variables of related hassles, and relatedness uplifts. Differences between higher and lower GPA eighth grade students are presented in Table 12.

Table 12

Comparison of Higher and Lower GPA 9th Grade Students

Variable	N	Mean	SD	t	p	d
Hassles - total						
Lower GPA	33	7.15	2.87	2.08	.04*	.53
Higher GPA	29	8.59	2.50			
Competence						
Lower GPA	33	1.31	1.38	-1.62	.11	.42
Higher GPA	29	1.82	1.04			
Relatedness						
Lower GPA	33	2.61	1.37	4.53	.001***	1.15
Higher GPA	29	4.00	1.00			
Uplifts - total						
Lower GPA	33	2.33	2.20	-1.26	.21	.33
Higher GPA	29	1.72	1.46			
Competence						
Lower GPA	33	1.39	1.32	-.38	.71	.09
Higher GPA	29	1.28	1.10			

Table 12 - continued

Comparison of Higher and Lower GPA 9th Grade Students

Variable	N	Mean	SD	t	p	d
Relatedness						
Lower GPA	33	.52	.67	-3.05	.003**	.80
Higher GPA	29	.10	.31			
Interest in class						
Lower GPA	33	3.17	.69	-.73	.47	.19
Higher GPA	29	3.30	.66			
Teacher support						
Lower GPA	33	3.29	.82	.80	.43	.20
Higher GPA	29	3.15	.54			
Teacher values						
Lower GPA	33	2.16	.78	-.40	.69	.08
Higher GPA	29	2.22	.64			
Teacher expectations						
Lower GPA	33	1.77	.72	2.0	.05*	.51
Higher GPA	29	1.43	.60			
Effort to pay attention in class						
Lower GPA	33	2.78	.64	-.35	.73	.08
Higher GPA	29	2.83	.55			

Table 12 - continued

Comparison of Higher and Lower GPA 9th Grade Students

Variable	N	Mean	SD	t	p	d
Effort to do well in class						
Lower GPA	33	3.04	.74	-1.22	.23	.32
Higher GPA	29	3.27	.72			
Learning goals						
Lower GPA	33	3.77	.98	-.36	.72	.09
Higher GPA	29	3.67	1.10			
Performance goals						
Lower GPA	33	3.63	.98	.10	.92	.03
Higher GPA	29	3.66	.99			

* $p < .05$; ** $p < .01$; *** $p < .001$

Chapter 5: Discussion of Findings

This study seeks to expand upon extant literature relative to students' normative transition to high school—literature that suggests this as a potentially perilous time for some young adolescents. Although not abundant in number, studies suggested that irrespective of grade level, school transition poses risks for students. Studies of normative school transition at the junior high/middle school suggested that students are at risk for declines in GPA, motivation, engagement, perceptions of competence, relatedness, autonomy, self-esteem, as well as perceptions of teacher support as they progress to high school (Blyth, Simmons & Carlton-Ford, 1983; Crockett et al. 1989; Eccles et al., 1993; Eccles & Midgely, 1989; Eccles, Lord, & Buchanan, 1996; Feldlaufer, Midgely, & Eccles, 1988; Midgely & Feldlaufer, 1987; Seidman et al., 1994; Simmons & Blyth, 1987; Simmons, Black, & Zhou, 1991; Wigfield & Eccles, 1994).

Studies of the transition to high school have, in the main, reported declines in students' GPA (Alspaugh, 1998; Barone, Aguirre-Deandreis, & Trickett, 1991; Felner, Primavera, & Cauce, 1981; Gillock & Reyes, 1996; Reyes & Hedeker, 1993; Roderick & Camburn, 1999; Seidman et al., 1996). Further, studies have suggested that during the transition to high school, students experienced diminished levels of perceived school and teacher support (Barber & Olsen, 2004; Isakson & Jarvis, 1998; Seidman et al., 1996). With clear focus on poor, urban, minority students, several high school transition studies—both longitudinal and experimental—provide fodder for the argument that some aforementioned students are at risk as they begin their

high school experience (Felner et al., 1982; Felner, Primavera & Cauce, 1981; Gillock & Reyes, 1996; Newman et al., 2000; Reyes et al., 1994; Reyes & Hedeker, 1996; Roderick & Camburn, 1999; Seidman et al., 1996; Weinstein et al., 1991). Moreover, studies of suburban, more demographically diverse ninth grade students reported statistically significant declines when comparing eighth grade GPA to ninth grade GPA (Barone, Aguirre-Deandreis & Trickett, 1991; Isakson & Jarvis, 1998). Although it is difficult to draw conclusions with confidence regarding the transition to high school and its impact on students, it is difficult to ignore or to dismiss, in light of extant studies, the notion that the move from junior high or middle school to high school packs potential peril for students. The central purposes of the current study were to determine the impact of high school transition on the experience of the 93 participating students with respect to perceived changes in context and self-processes and changes in engagement and outcomes across the transition to ninth grade, to identify concerns about the transition to high school held by students at the conclusion of eighth grade and again at the conclusion of ninth grade and to determine how these concerns compare, and to determine if the participating students were at risk for a decline in GPA when comparing final grades at the conclusion of eighth grade and of ninth grade. Finally, the current study explores whether students' perceptions of teacher expectations, teacher values, and teacher support, students' reports of uplifts and hassles, and students' reported level of engagement are related to differences between higher and lower performing students in eighth and in ninth grade.

Findings from the current study suggest that students did not suffer a statistically significant decline in GPA when comparing their eighth grade and ninth grade final grades; participants perceived their eighth-grade teachers as having placed higher value on their work and of holding higher expectations for students' academic achievement than their ninth-grade teachers. Moreover, participants reported expending more effort to pay attention in class and experiencing fewer competence-related hassles as eighth graders than as ninth graders. This section presents a discussion of results for each research question.

Perceived Changes in Context and Self-Processes

Perceived changes in classroom context were measured by students' perceptions of teachers' social support, teachers' values, and teachers' expectations; self-processes were measured by students' reports of uplifts and hassles. Results of the current study relative to changes in classroom context and self-processes were not aligned with expectations. Students, as eighth graders, reported statistically significantly fewer competence hassles than they did as ninth graders, but no significant differences were found across the high school transition with respect to total hassles, relatedness hassles, and relative to total, competence, or relatedness uplifts.

This result suggests that students may have experienced a greater degree of uncertainty with respect to their competence in the high school environment than in their middle school—perhaps reflective of their concerns regarding maintaining good grades in light of perceived increased academic demands. This would be consistent

with middle school transition findings reported by Wigfield and Eccles (1994). It is also possible that the hassles and uplifts scales, with attendant subscales for competence and relatedness hassles and uplifts, did not capture effectively students' concerns regarding their transition to ninth grade. This notion will be developed more fully in a section to follow.

The absence of a statistically significant finding with respect to the students' perceptions of teacher social support was not expected. Predicted were higher students' perceptions of teacher social support in eighth grade, predicated on tenets of middle school philosophy relative to students' social, personal, and academic development and the several middle and high school studies of the centrality of teacher social support reported in Chapter 2 (Applegate, 1981; Brewster & Bowen, 2004; Feldlaufer, Midgely, & Eccles, 1988; Klem & Connell, 2004; Roeser & Eccles, 1998; Roeser, Eccles, & Sameroff, 1998; Ryan et al., 1994; Tucker, 2002; Wentzel, 1997, 1998, 2002). Further, the prediction of declines in students' perceived teacher support during normative school transition was based on findings by Alvidrez and Weinstein (1993), Barber and Olsen (2004), Feldlaufer, Midgely, and Eccles (1998), Gillock and Reyes (1996), and Newman et al. (2000), which suggested that students' perception of teacher support diminished during periods of school transition.

Although speculative, it is possible that findings suggested by Muller (2001) and Gutman and Midgely (1999) may be applicable in the current study. Muller could not establish a causal link between students' perceptions of teacher support and academic achievement. Gutman and Midgely, in their study of the transition to

middle school of predominantly poor and minority students, suggested that students' perceptions of teacher support did not predict changes in GPA. It is possible that the characteristics of this study's participants relegated perceptions of teachers' social support to an insignificant level with respect to the period of high school transition. Worthy of consideration might be the relative importance played by other significant persons in students' lives. Although peer and family relationships were not included as variables in the current study, it is possible that positive influences of these relationships relative to school social and other supports may have offset the necessity of teacher social support for successful transition.

Students perceived their eighth-grade teachers to value their content areas more so than their ninth-grade teachers. It is possible that differences in instructional methodology between middle and high school may have played a role in explaining the difference relative to this variable. Students may have interpreted the more process- and activity-oriented instructional approaches that characterize middle school pedagogy as exemplary of teachers' effort to make classes interesting and believing their subjects were important, rather than the more content-laden methodologies that tend to pervade high school classrooms.

Finally, as eighth graders, students perceived higher levels of teachers' expectations for academic success than as ninth graders. This result was expected, given the supportive nature of middle school philosophy relative to nurturing and guiding students. This result may have been the manifestation of specific successful middle school teaching team practices and advisory activities designed to

communicate expectations for academic achievement. For example, Time 1 school students and their parents meet periodically with teaching teams to review students' academic progress. In fact, the school system specifies days on which middle school students do not report; rather, these days are devoted entirely to student and parent conferences with teachers and teaching teams.

Conversely, the high school calendar has no such days specified. Additionally, middle school schedules are organized to facilitate the communication of teachers' expectations for academic achievement by means of scheduled common meeting times for teaching team members. During teaching team meetings students, individually and in small groups, meet with the teaching team to review academic progress and expectations for achievement. No such opportunity exists in the high school organization. Finally, among the objectives of the middle school's advisory program is the development of academic and study skills. It is possible that this aspect of the advisory program serves as a consistent reminder to students of their teachers' expectations for academic achievement.

Changes in Engagement and Academic Outcomes

Changes in academic engagement will be discussed in this section. Academic outcome, as reflected in students' GPAs will be treated in a separate section.

No statistically significant difference was found with respect to students' ratings of their interest in class activities as eighth graders and as ninth graders. The respective means of students' eighth and ninth grade responses correspond to the middle rating of "not sure" on the five point instrument scale. Responses may indicate

ambivalence relative to classroom activities at both grade levels or that students' classes at both grade levels were neither particularly stimulating nor boring. A statistically significant difference was reported with respect to students' effort to pay attention in class. On this variable, students, as eighth graders, reported greater effort to pay attention in class than as ninth graders. This difference may be explained by a greater sense of personal classroom accountability on the part of students as eighth graders. For example, middle school students are more likely than high school students to be required to have teachers complete daily or weekly progress reports that record, among other measures, students' degree of on task behavior during classes. These reports are characteristically carried home by students, are signed by parents, and are returned to a designated teacher. Hence, associated rewards and consequences may have resulted in students expending more effort to pay attention in their eighth grade classes than in those in ninth grade. Further, classroom activities in eighth grade may have been regarded as more compelling than in ninth grade. It is possible that higher levels of interest in eighth grade process- and activity-oriented classes may have resulted in students reporting greater expenditure of effort to pay attention in class.

Eighth Graders' Concerns

Students' concerns about their pending transition to high school were captured by self report at the conclusion of their eighth-grade year. Their concerns were first categorized into concerns about competence, relatedness, and autonomy—with Connell and Wellborn's (1991) model as a foundation. Then, students' concerns were

analyzed further to develop subcategories within each of the broader headings.

The results of students' concerns reflected a predicted distribution of responses. Poised on the brink of transition, fully 60% of students' 269 unique concerns addressed issues of competence. In essence, the students expressed thoughts relative to their ability to perform well and to achieve successfully in their new school environment was paramount. Twenty-four percent of students' responses expressed concerns about relatedness—making and maintaining friendships, being accepted in the new school setting, and liking their teachers. Only 9 percent of students' concerns addressed issues pertained to autonomy—having freedom and privileges, having fun, and being subjected to unnecessary school rules and regulations.

Students' concerns about competence were expected. It may be reasonable to speculate that students' mean eighth grade GPA is reflective of prior school achievement and success and, therefore, might be reflective of their desires and concerns regarding continued academic success. In fact, 54 percent of concerns within the competence category addressed grades and workload. It is suggested that the 93 participants were, in the main, oriented toward achieving good grades, as reflected in their eighth grade GPAs. Hence, continued concern regarding their ability to achieve successfully in ninth grade came without surprise. A smaller percentage of concerns than expected, however, were expressed regarding adjusting to a new school—only 19 percent of responses addressed this issue. It is possible that, owing to several factors, students were sufficiently familiar with the high school facility so as to allay a more significant number of concerns. For example, several Time 1

school events such as concerts, other performances, and end-of-year ceremonies take place at the Time 2 school. Although not quantified for the current study, it is possible that Time 1 students held a familiarity with the Time 2 school as it serves as a focal point for organized community youth programs. Finally, it is possible that orientation programs provided for incoming ninth graders served to provide a comfort level that offset anxiety relative to navigating through the larger Time 2 school.

Predictably, eighth-grade students expressed concerns about relatedness as they prepared for their transition to high school. Somewhat surprising, however, was that only 24% of the total concerns expressed were in this general category. A within-category analysis (see Table 10) found that making and maintaining friendships, being accepted, having classes with friends, and liking teachers were the most frequently expressed relatedness concerns of eighth graders as they thought about their transition to high school. Although clearly in their thoughts, the question begs as to why students' relatedness concerns did not emerge as more dominant. Several factors may have served to mitigate against relatedness concerns being more prominent. First, the middle school feeder pattern to the Time 2 high school may provide an important clue. It is important to factor that aside from a relatively small percentage of ninth grade students who enter the from other school systems or from non-public schools, the Time 2 high school's ninth grade was comprised of students from only three sources. The majority of the Time 2 school's ninth graders attended the Time 1 middle school—hence, the bulk of Time 2 ninth grade arrives as an intact group. As a result, it is possible that the notion of being isolated, or without many

friends or acquaintances in the Time 2 school was not a primary consideration for these students. It is possible that for Time 1 school students, the transition to the Time 2 school did not pose a perceived threat to the dissolution of friendships or to being accepted in their new environment.

Further, Time 1 school students may not be wholly unfamiliar with students from the two other middle schools (referred hereafter to as AMS and SMS for the sake of clarity) that feed part of their population to the Time 2 high school. Given the community school feeder patterns it is possible that Time 1 school students attended elementary school with students who subsequently attended AMS or SMS (a magnet school). Moreover, SMS students return to the Time 2 high school. Hence, friendships may not have been interrupted through the middle school years, thereby suppressing students' relatedness concerns in general and, specifically with respect to making and maintaining friendships.

Finally, community recreation programs are organized geographically and include youngsters who attend the Time 1 middle school as well as those who attend AMS and SMS—thus, providing opportunities for these young adolescents to develop and to maintain friendships. These factors considered in part or as a whole, may explain why the current study's sample did not report relatedness concerns in greater number as they anticipated their transition to high school.

Concerns about autonomy comprised only 9 percent of eighth graders' total concerns. This result was surprising in that, as will be discussed below, autonomy concerns were anticipated to figure more prominently according to Connell and

Wellborn's model. In the current study, however, it is apparent that students' concerns regarding having freedom and privileges in school, having fun during their personal time, and being subjected to unnecessary restrictions and rules were far outweighed by concerns relative to competence and relatedness. Students' thoughts relative to threats to their school success clearly centered on their academic performance and on relationships. The apparent low priority on autonomy concerns may have been born of students' lack of specific knowledge of the range of the Time 2 high school's activities and the degree of choice they might have experienced.

Ninth Graders' Concerns

In June of their freshman year, participating ninth grade students were asked to reflect on their high school transition experience and to list their concerns they held during the school year. Their responses will be discussed in this section and will be compared to their concerns reported as eighth graders.

Ninth graders' reports of concerns remained stable across the high school transition (see Table 10). Concerns about competence maintained its position as most prominent, with relatedness and autonomy concerns appearing in the same rank order. Chi-square analysis suggested that although the distribution of students' concerns among categories at the end of both eighth and ninth grades is similar, within-category analysis suggests that concerns are similar only for competence.

Within the competence category, concerns of ninth graders showed a degree of shift, but, in general, concerns expressed at the end of eighth grade were similar to those expressed at the end of ninth. Noteworthy is that grades and workload remained

the area of concern most frequently reported. In fact, this subcategory comprised 64 percent of the concerns expressed by ninth graders under competence, as opposed to 54 percent reported by participants as eighth graders.

Apparently, concerns relative to maintaining good grades and managing academic workload increased slightly as students reflected on their freshman year of high school. This may be explained by recalling that participating students, as evidenced by their eighth and their ninth grade GPAs, were relatively high achievers. Concerns expressed regarding grades and academic workload may be a reflection of their motivation to do well or their anxiety about not achieving academic success in high school. Consistency regarding concerns about grades and academic workload may also indicate students' recognition of increased academic demands placed on them by the ninth grade academic program. In essence, their concerns in this subcategory may be an accurate reflection of their reaction to courses that may have been more heavily content-laden and to those courses requiring students to complete High School Assessments.

Notice should be taken of the increased number of concerns ninth graders' expressed about safety, when compared to those reported as eighth graders. This may be explained by the occurrence of three physical altercations at the Time 2 school on the day prior to the administration of the ninth grade survey. Fights at the Time 2 school were rare. Therefore, an event involving physical confrontation may evoke a strong reaction amongst the student body. It is difficult to speculate whether the juxtaposition of altercations on the day prior to the collection of concerns data and

increased reports of concern about safety were related. Predictable, however, was the decrease in the concerns regarding adjusting to the new school. The data suggested that whatever apprehension participants held regarding adjusting to their new physical plant was dashed over the course of their ninth grade year.

Comparison of Eighth- and Ninth-Grade Students' Concerns

Although students' general concerns about relatedness did not differ between eighth and ninth grade reports, a significant shift of relatedness concerns was found when examining within-category concerns. Ninth-grade students reported more concerns regarding making and maintaining friendships than they did during eighth grade data collection. This may reflect not only the consistent need for students to remain connected to friends during ninth grade, but also the impact of the nature of the ninth grade organization and program. For example, the middle school organizational pattern of teams dissipates in high school. Therefore, students who, as eighth graders, traveled to English, social studies, science, and math as a group and who shared a common lunch period, found themselves less likely to find familiar faces in their classes, and perhaps, at lunch—given the nature of more unique student high school schedules. Hence, it is possible that ninth graders' concerns regarding making and maintaining friendships, diminished opportunities to share classes with, or to spend time with, friends during the school day, led to increased concern in this subcategory. Yet, concerns about having classes with friends diminished in percentage by more than half. This seemingly confounding result may be explained in that participants found themselves in classes with friends despite the opportunities for

variation in schedules. Conversely, having classes with friends may have decreased as a concern as newly formed class friendships may have filled the potential void.

Concerns about being accepted were also diminished by half when comparing reports of students as ninth graders' to those of the year prior. A reduction in the percentage of concerns in this subcategory may be attributed to participants' ability to "fit in" not only in their classes and grade level, but, also perhaps, the total school program. It is possible that participants were successful relative to relationships with their freshmen classmates, but also with sophomores, juniors, and seniors. Further, it is possible that participants reached success with respect to participation in school extracurricular activities—athletic, academic, and social.

Although the number of concerns about autonomy remained stable between eighth and ninth grade, this category presented the smallest percentage of students' reports both in eighth (9%) and ninth grade (13%). A within-category shift suggested that concerns about freedom and privileges and having fun during personal time diminished, while concerns about unnecessary rules and restrictions increased. The small numbers of concerns required to constitute a shift in these subcategories (see Table 10) render the value of speculation questionable.

The salience of results culled from an analysis of students' expressions of their eighth- and ninth-grade concerns becomes apparent when juxtaposed with findings from students' reports of hassles and uplifts. Recall that, with the exception of eighth graders reporting fewer competence hassles than as ninth graders, findings relative to relatedness hassles and uplifts were not significant. Suggested earlier was

that employing hassles and uplifts scales—even with subscales for competence and relatedness hassles as well as competence and relatedness uplifts may have been ineffective to quantify the nature and the extent of students’ sources of worries regarding their transition to high school. The qualitative manner in which students’ concerns were captured, with Connell and Wellborn’s (1991) model providing a foundation for the analysis of students’ concerns at the conclusion of both eighth and ninth grades, permitted a more robust analysis of their thoughts and considerations over time. In essence, two different methods of data collection yielded different results and, in turn, told different stories of this aspect of participants’ transition to high school.

Changes in GPA

Results of the current study suggest that the 93 participating students did not experience a statistically significant decline in GPA. Initially, this result appears to fly in the face of extant literature which would have suggested a GPA downturn for these students in ninth grade. The nature of the sample, however, may provide clues as to why this group of students did not experience a statistically significant decline in GPA.

To be sure, participants in the current study do not mirror students in the several reported longitudinal and experimental studies of high school transition (Felner, Ginter, & Primavera, 1982; Felner, Primavera, & Cauce, 1981; Gillock & Kobus, 1994; Gillock & Reyes, 1994; Newman et al., 2000; Reyes & Hedeker, 1996; Roderick & Camburn, 1999; Seidman et al., 1996; Weinstein et al. 1991). Participants

in the current study were neither predominately urban, poor, nor minority. Rather, the sample was comprised of 82% white students from relatively affluent families residing in a relatively affluent suburb of a large mid-Atlantic city. As eighth graders, participating students demonstrated their academic competence by posting a mean GPA of 2.9 on a 0-4 grade scale. It may be concluded that these students were equipped with the requisite academic skills required for success in ninth grade and, therefore, were less susceptible to potential risks posed by apparent academic demands inherent in the progression to high school.

Results from the current study suggest that students who are relatively high achievers with respect to GPA in eighth grade may not require intense academic interventions as they enter high school. The extant literature does not focus on the high school transition experience for students with characteristics of the participants in the current study. Therefore, it is unwarranted to generalize conclusions about the transition of relatively high-achieving students from middle to upper income predominately white families who attend a suburban, predominately white middle school. However, the current study does provide an opportunity to examine the transition to high school of students who have generally not been studied relative to this experience.

Perceptions of Teacher Expectations, Teacher Values, and Teacher Support, Uplifts, Hassles, and Engagement of High and Low Performing Students

Results of the current study suggest that eighth-grade higher performing participants (as measured by GPA) differed from eight- grade lower performing

participants in that high performers reported: feeling more supported by their teachers, having higher perceptions of teachers' expectations to do well academically, greater interest in classes, expending more effort to do well in class, experiencing fewer relatedness hassles, and experiencing more total uplifts than their low performing peers. Findings relative to high performing eighth grade students are generally consistent with extant studies of links between these variables and students' academic performance (Anderman & Anderman, 1999; Brewster and Bowen 2004; Brophy and Good 1970; Connell et al. 1994; Feldlaufer et al. 1989; Felner et al. 1982; Furrer & Skinner, 2003; Gillock and Reyes, 1996; Goodenow & Grady 1993; Klem and Connell, 2004; Kuklinski and Weinstein, 2000;; Muller, 2001; Newman et al., 2000; Proctor, 1984; Roeser and Eccles, 1998; Roeser et al., 1996; Roeser et al., 1998; Rosenthal & Jacobson, 1968; Ryan et al., 1994; Seidman et al., 1994; Skinner et al., 1998; Weinstein et al., 1991; Wentzel, 1997, 1998, 1999, 2002).

Although eighth graders' responses were generally in accord with extant studies, several differences between higher and lower GPA students are worthy of additional discussion. A degree of consistency may be discerned with respect to students' reports of hassles and uplifts. Although no significant difference was reported with respect to total hassles, higher GPA students experienced fewer competence and relatedness hassles than their lower GPA peers. Effect size for the difference in relatedness hassles was high and moderate for competence hassles. Moreover, higher GPA students reported more uplifts—with a moderate effect size—than their lower GPA counterparts. These findings may be significant to providing a

window into higher and lower GPA students' view of their school experiences and how those experiences might shape and influence achievement.

Although the current study must remain silent relative to any potential causative or reciprocal relationships, findings presented here may suggest further study to explore links between and among hassles and uplifts and the several additional variables for which significant differences between higher and lower GPA students were reported: interest in classes, perceptions of teacher social support, perceptions of teachers' expectations, and effort to pay attention in class, effort to do well in class, and pursuit of learning and performance goals.

Statistically significant differences between higher and lower GPA participants as ninth graders were, unpredictably, less consistent than for participants as eighth graders. It is possible that variables not included in the current study contributed to the differences between higher and lower GPA ninth grade participants. However, reports of total hassles, relatedness hassles, relatedness uplifts, and perceptions of teachers' expectations were significantly different between higher and lower GPA ninth graders. Again, drawing conclusions from these findings is unwarranted, but findings offer a suggestion for further study relative to the potential for links between these and other variables with respect to differences between higher and lower GPA ninth grade students.

Utility of Connell and Wellborn's model

One purpose of this study was to apply Connell and Wellborn's (1991) self-systems model to a study of high school transition. A theoretical framework has seldom been applied to studies of normative school transition.

Recall that Connell and Wellborn's self-system process model was predicated, in brief, upon the idea that competence, relatedness, and autonomy are fundamental psychological needs that, in tandem with key elements of the social context—provision of structure, involvement, and autonomy support—drive the development of self-processes. Essentially, Connell and Wellborn posited that students whose psychological needs were met are more likely to be engaged and to succeed academically than if these needs were unmet. Key to the current study was to determine if Connell and Wellborn's model helped to frame and, potentially, to address issues pertaining to high school transition. Connell and Wellborn's identification of competence, relatedness, and autonomy as three essential psychological needs requiring satisfaction for students' success in the school context appeared to be on target as 93 percent of eighth graders' concerns and 88 percent of ninth graders' concerns were assigned to one of these three categories by the researcher and research assistant. Connell and Wellborn's model, however, does not discern among competence, relatedness, and autonomy with respect to relative importance.

In the current study, participants expressed concerns about competence—60% of total concerns as eighth graders, 58% of total concerns as ninth graders—to a far

greater extent than concerns about relatedness or autonomy. In fact, relatedness concerns comprised 24 percent of eighth graders' responses and 17 percent of participants' responses as ninth graders. Moreover, participants' expressed concerns suggested that autonomy concerns did not figure prominently in students' thoughts either at the eighth grade or ninth grade level. Autonomy concerns accounted for 9 percent of total concerns expressed by participants as eighth graders, 13 percent by participants as ninth graders. Whether the current study's participants were representative of their wider body of peers is unknown, as students' concerns data relative to normative school transition have rarely been reported (Akos, 2002, 2004; Berndt & Mekos, 1995; Gilchrest et al., 1988; Mitman & Packer, 1982; Schulenberg et al., 1984).

Further analysis of Connell and Wellborn's model leads to discussion regarding its applicability to the current study's participants in eighth and ninth grade environments with respect to context, structure and involvement, and their corresponding self-systems of competence and relatedness. Employing GPA as the sole outcome measure, results of the current study suggested that structure and involvement variables were consistently related (see Table 6) to outcomes for eighth-grade students. One can discern correlations among several key structure and involvement variables including perceptions of teachers' social support, perceptions of teachers' expectations to achieve academically, interest in classes, effort to pay attention in class, and total hassles and uplifts to GPA (recall that autonomy support was not a variable in the current study).

In contrast to that of eighth graders, the alignment of variables with outcome was not consistently related with ninth-grade participants. For example, although students' perceptions of teachers' expectations to achieve academically, effort to pay attention in class, total hassles, relatedness hassles, and relatedness uplifts were related to the sample's GPA, two variables, students' perceptions of teachers' social support and interest in class, were not significantly correlated to ninth grade GPA. Results, therefore, suggest that the centrality of teachers and interest in class were no longer significant factors for participating ninth graders—yet, their GPAs remained relatively high and stable.

It is possible that variables not measured in the current study may explain why this occurred. Support received from peers, for example, may have been significant enough to supplant perceived teacher support as a key factor during the period of transition to high school. It is possible that the homogeneity of the sample may provide insight. Students from the Time 1 middle school comprise the largest single block of students in the Time 2 high school's ninth grade. In fact, only two other middle schools—one of them a magnet that serves students from the same community as the Time 1 school—send students to the Time 2 high school. Table 1 presents data showing a relatively low mobility rate for the Time 1 school; therefore, it may be reasonable to speculate that social support needs of participants were bolstered by their arrival as an intact group. The importance of peer relationships during periods of middle school transition and the relationship between having friends and grades have been reported (Berndt, 1979; Berndt & Keefe, 1995; Furman, 1989; Parker & Asher,

1987; Wentzel & Caldwell, 1995; Wentzel, Barr, & McNamara, 2004). Findings of these studies, and those of Isakson and Jarvis (1999) high school transition study suggested that the centrality of peer relationships during the period of high school adjustment is worthy of further study.

A second variable not included in the current study that may have had impact students' perceptions of social support is that of the role of families during the period of high school transition. It is possible that support from parents, guardians, and siblings may have a positive effect on ninth graders during their transition to high school and, thereby, lessened the centrality of the teacher in a support role. Studies of parental involvement, school transition, and school success suggested family relationships was an important variable to be explored further relative to the transition to high school (Epstein, 1987; Falbo, Lein, & Amador, 2001; Grolnick & Slowiaczek, 1994; Muller, 1993, 1995).

Finally, Connell and Wellborn's model does not capture consideration of potential demographic differences among students. Although the number of poor and minority participants in the current study was too small for statistical consideration, the high school transition experience for these students may have been different from that of the student body considered as a whole.

In addition to the myriad components entailed in normative school transition, participants in the current study experienced a change in school organization that may help to explain their reported changes in perceptions of teacher support and of interest in classes. The Time 1 middle school followed a traditional school schedule—that is,

students attended seven classes each day for a period of 50 minutes each. Students attended each class for the entire forty week school year. The Time 2 high school, however, was organized on what is commonly referred to as a 4X4 block schedule. In this scheme, students attended four eighty-five minute classes per day for the twenty week fall semester and four different classes for the same duration for the spring semester. At the conclusion of the school year, ninth grade students would have enrolled in a minimum of eight classes, but given the complexities of full and half credit course offerings, could have enrolled in as many as ten courses over the forty week school year.

Several possibilities arise with respect to students' experiences during their ninth grade year. First, it is possible that perceptions of teachers' social support declined from eighth grade as a result of twenty weeks of contact with teachers (or ten weeks in a half credit course) as opposed to a full forty weeks in eighth grade. It is possible that exposure to teachers over time influences students' perceptions of social support. Hence, ninth graders may not have sufficient time to develop relationships with their ninth-grade teachers as they had with their eighth grade teachers, resulting in lowered perceptions of teachers' support. Further, it is possible that having up to ten teachers over the course of forty week school year had a deleterious effect on students' perceptions of teachers' social support. Finally, it is possible that the advent of eighty-five minute classes in ninth grade may explain changes in students' reports of interest in their classes. Although students were not queried with respect to their reaction to the increased length of ninth grade classes, the possibility exists that this

change in instructional pattern had a negative effect on their interest in class activities. The matter of block scheduling and its effect on students and achievement is suggested as a topic for further study (e.g. Boyer, 1983; Canady, 1990; Canady & Rettig, 1995; Carroll, 1990; Cawelti, 1994; Goldman, 1983; Gunter, Estes & Schwab, 1990; Khazzaka, 1998; Nichols, 2000; Nichols, 2005; O'Neil, 1995; Salvaterra & Adams, 1995;Sizer, 1990).

Contributions of Middle School Transition Studies to Studies of High School Transition

Findings of the current study must be viewed in the larger context of previous research relative to middle and high school transition. First, the value of junior high school and middle school transition studies must be considered. The pioneering work of junior high and middle school transition researchers (e.g. Blyth, Simmons, & Carlton-Ford, 1983; Eccles, 1993; Eccles et al., 1996; Midgely & Feldlaufer, 1987; Midgely, Feldlaufer, & Eccles, 1988; Seidman et al. 1994; Simmons & Blyth, 1987; Wigfield & Eccles, 1994), taken as a whole, sent clear signals that normative progression to junior high or middle school can be a period of concern with respect to young adolescents' academic and social competencies. Relatively few in number, these studies captured a broad base of samples, ranging from affluent to poor and from rural to urban and although several of the complexities of school organizations and unique factors present in these studies were offered in Chapter 2, the recurring and linked themes of school transition and potential downturns for students cannot be ignored. From this body of work, a conceptual framework emerged—that of applying

the notion of stage-environment fit—to the organization of schools for young adolescents.

Concomitantly, studies similar in nature to the aforementioned junior high and middle school research, found that some students in their transition to high school also faced risk. Longitudinal studies (e.g. Alspaugh, 1998; Barber & Olsen, 2004; Barone et al., 1991; Isakson & Jarvis, 1999; Felner et al., 1981; Gillock & Reyes, 1996; Roderick & Camburn, 1999; Seidman et al., 1996) taken as a whole, suggested that some students, in their first year of high school suffered declines in grades and an increase in absenteeism, with additional risk for declines in self-esteem and perceived school support. A link between junior high and middle school research and high school transition studies can be found in the several high school transition experimental studies reported (e.g. Felner et al., 1982; Felner et al., 2001; Reyes et al., 1994; Reyes & Hedeker, 1996; Weinstein et al., 1991).

Each of these aforementioned studies incorporated the basic tenets of stage-environment fit theory into a reshaping of the high school environment for freshmen. In essence, each of these experimental designs contained a restructuring of the ninth grade experience to resemble middle school organization and program; these experimental designs yielded mixed results, as presented in Chapter 2. An issue of worthy of consideration that may differentiate the two transition experiences may lie in the area of social support for students. Given the organizations of middle and high schools, it appears that a host of supports await elementary students as they enter sixth grade; few, if any, such supports, it is suggested, are in place for eighth graders

as they enter high school. Worthy of exploration may be studies of the high school transition experience for those students whose ninth grade experience is one in a smaller learning community (SLC). As school systems continue to reorganize large high schools into units of fewer than 1,000 students (Lee, 2000; Ready, Lee, & Welner, 2004), determining the impact of SLCs on high school transition and the success of ninth graders takes on increased significance.

The lack of decline in GPA for students in the current study may, in part, be attributed to the attempts of the Time 2 high school to provide social support to freshmen. For example, an extensive orientation program that began early in the spring of students' eighth grade year and continued through ninth grade, may have provided support that alleviated anxiety during transition. This orientation program, in brief, included opportunities for ninth graders to become familiar with their schedules, the physical plant, school rules, expectations for deportment and achievement, a freshmen-only first day of school, and outreach to inform and to invite freshmen to participate in extracurricular activities.

Moreover, freshmen completed their class organization (election of class officers, class mascot, class colors) early in the school year and participated fully during the Time 2 school's fall spirit week activities. These activities may promote bonding between and among classes. Additionally, articulation among Time 1 and Time 2 counselors, teachers, and administrators assisted in the identification of students considered to be at risk for success in high school. These students, for example, received additional support in the form of student and teacher mentoring.

Finally, evening orientation sessions for students and parents—together and separately—were offered by the Time 2 school.

Strengths, Limitations, and Directions for Future Research

This study contributes to the literature on high school transition in several significant ways. It presents findings heretofore unreported with respect to students' high school transition experience. It is important to reiterate that studies of students' transition to high school have not been widely reported in the literature. Therefore, should findings from the few extant longitudinal and experimental studies share common threads, it may be anticipated that whole cloth conclusions may be drawn. Such may be the case with high school transition. A common element in most, but not all, high school transition studies is the relative homogeneity of samples. Participants in four of seven longitudinal studies and in every experimental study were from schools that served predominantly poor and minority ninth graders in urban settings. Hence, attempts to generalize findings to a broader population of transitioning ninth grade students are unwarranted as more diverse populations have not been widely studied. However, it is important to note that two longitudinal studies of high school transition of suburban schools with more heterogeneous samples reported declines in GPA for ninth graders.

The current study presents findings of the more seldom studied ninth grade students—predominantly white, suburban, and middle to upper middle class. Results of the current study fly in the face of research that suggests high school transition is fraught with peril with respect to declines in students' GPA, as, contrary to

prediction, no significant decline in GPA was found for participants in the current study when comparing their eighth grade final grades to their ninth grade final grades. Ironically, a strength of the current study—that of presenting findings for a heretofore largely unrepresented segment of students—is also a limitation. In the absence of concurring literature, it would be folly to generalize findings from the instant study. Clearly, additional studies are warranted to explore student achievement across the transition to high school with all segments of school populations. With respect to the current study, additional research with similar samples would be beneficial relative to understanding the high school transition experience for students with these characteristics.

The current study contributes to research on high school transition in that it framed students' transition experience in a theoretical model. Capturing students' quantitative and qualitative responses and reporting them in accordance with Connell and Wellborn's self-systems model provided an opportunity to study students' perceptions of both context and self-processes across the transition to high school. Previous experimental studies of high school transition, although helpful, present limited utility in the absence of theoretical underpinning.

Although one may discern an implied theoretical base in experimental studies, no explicit model was presented (Felner et al., 1982; Felner et al., 2001; Reyes et al., 1994; Reyes & Hedeker, 1996; Weinstein et al., 1991). The current study employs such a theoretical base in that Connell and Wellborn's (1991) model provides a useful and much-needed framework for this and for future studies of the students' transition

to high school. Connell and Wellborn's model allowed capture of students' perceptions of both context and self-processes. Quantitative data were collected with respect to students' perceptions of context variables (structure: teacher expectations, teacher values; involvement: teacher support). Self-processes were expressed by means of students' concerns regarding competence, relatedness, and autonomy. These were addressed quantitatively by means of self-reports of uplifts and hassles and qualitatively by means of students' narratives. The value of asking students to scribe their concerns relative to high school transition proved meaningful as students' unique written responses provided rich insight into not only their concerns, but how concerns shifted over the course of their transition.

A limitation of Connell and Wellborn's (1991) model became apparent during the analysis of ninth graders' data. According to the model, contextual variables including perceptions of teachers' social support, perceptions of teachers' expectations to achieve academically, interest in classes, effort to pay attention in class, and effort to do well in class, and pursuit of learning and performance goals, are linked to positive outcomes. In the current study, outcome was measured by GPA. An unexpected finding was the lack of significant correlation among three contextual variables—teachers' social support interest in class, and learning goals—to GPA in ninth grade. Further, the decision not to include an autonomy support context variable may have inhibited full analyses of students' transition experience. Finally, the selection of GPA as the sole outcome variable was to preclude from the transition experience other risk-producing factors that could contribute negatively to students'

achievement in high school. Future studies might include absenteeism and behavior variables, such as office referrals, suspension, and expulsion to capture the potential of student adjustment issues on high school transition.

Data collection methods should be considered when assessing the current study's limitations. Although both quantitative and qualitative data were collected, all data were based on self-reports. It is recommended that future studies of high school transition consider multiple means of data collection, including opportunities for teachers to offer data relative to context and engagement variables. Moreover, students' concerns data, captured in the current study through narratives, might have yielded even richer data collected through interviews.

The direction for future research concerning students' transition to high school is abundantly clear. Given the paucity of studies on this critically important aspect of young adolescents' education, the need for additional research to help understand students' high school transition experience is readily apparent. Research to date suggests that for some poor, urban, and minority students, the transition to high school is accompanied by academic downturns. Yet, students exhibiting different demographic characteristics have largely been ignored in empirical studies. This not to say that continued study of poor, urban, and minority students is unwarranted. The literature, however, is lacking in its ability to inform relative to students whose characteristics resemble those of the 93 participants in the current study.

Conclusions

At a time of ever-increasing scholastic achievement demands for high school students under federal and state mandates, the need to understand students' experiences relative to their transition to high school has never been greater. The few extant longitudinal and experimental studies of high school transition report academic downturns and increased absenteeism for ninth grade students; these studies focused almost exclusively on poor, urban, minority students. The results of the current study, however, suggest that for some students, the transition to high school is not a road rife with obstacles and danger. This statement must be viewed and interpreted, however, with caution as the results of the current study do not align with high school transition literature.

Contrary to previous studies, participants in the current study did not experience a statistically significant decline when their final grade GPA in ninth grade was compared to that in eighth grade. Students in the current study were predominantly middle class, white, and attended a suburban middle and high school. The Time 2 high school was one characterized by a relatively low dropout rate of 3% and a relatively high percentage (85%) of students continuing to two- and four-year colleges. Any tendency to generalize findings from the current study must be resisted unless or until sufficient empirical evidence is presented to confirm that the findings of the current study are not anomalous. Results of the current study should not be interpreted to mean that the study's participants were not at risk relative to high school success. One may only conclude that for this study's sample of 93 students,

the transition to high school had no statistically significant impact on GPA.

Connell and Wellborn's (1991) self-systems model was used as a theoretical model to study participants' transition to high school, providing the opportunity to capture students' perceptions of both context and self-process variables at the conclusion of eighth and ninth grade. The relationships of context and self-process variables to outcome were higher at eighth grade than at ninth grade. This study contributes to high school transition literature in that it reported results of a demographic sample not often included in extant studies. It is suggested that for students exhibiting the demographic characteristics of the current study's sample, high school transition does not portend a downturn in students' GPA. This study reinforces the need for continued study of the transition to high school if we are to meet the needs of our students in ninth grade and beyond.

Appendix A

Parent informed consent letter

MIDDLE SCHOOL

May, 2004

Dear Parents,

As part of our ongoing interest in our students' social and academic development and in providing a healthy and positive transition to high school, your child's class at Catonsville High School is participating in a research project. This project is part of our school improvement plan and is being conducted in collaboration with Dr. Kathryn Wentzel at the University of Maryland, College Park and Robert Tomback, principal, Catonsville High School. Dr. Wentzel and Mr. Tomback will provide our school with feedback that will be useful in identifying areas for improvement as students enter our high school in ninth grade.

Our students will be asked to complete a set of questionnaires in their classrooms. We will be asking them about their perceptions of peer and teacher social support, about their teachers' expectations for academic achievement, about their motivation to do well in school, and about their concerns regarding their transition to high school this past year. These questionnaires have been used in numerous studies nationwide and will provide us with important information concerning factors that promote the development of supportive classroom environments at school. The data collection should take no more than 30 minutes of class time.

Feedback from this project will be presented to our staff next fall and will be available to parents on request. However, information from individual children's questionnaires will be kept strictly confidential and will be available only to the research team. **Participation is voluntary and your child can withdraw from the study at any time. If you have any questions about this project or if you would prefer that your child not participate, please call Dr. Wentzel 301 405 2810 or you may contact her by email at wentzel@umd.edu.** Copies of the questionnaires are available in the main office if you wish to look at them.

Sincerely,

Deborah A. Bittner
Principal

Appendix B
Interest in Class Scale

How Much Do You Like Your Classes?

Directions: Please circle the number that best describes how true each statement is for you right now.

	FALSE	SOMEWHAT	NOT	SOMEWHAT	TRUE
		FALSE	SURE	TRUE	
1. I usually enjoy being in my classes.	1	2	3	4	5
2. I really don't learn much in my classes.	1	2	3	4	5
3. Sometimes I wish I didn't have to go to my classes.	1	2	3	4	5
4. At least some of the topics are fun.	1	2	3	4	5
=====					
5. I really don't care what happens in my classes.	1	2	3	4	5
6. So far, my classes have been pretty good this year.	1	2	3	4	5
7. For the most part, my classes are a waste of time.	1	2	3	4	5
8. I have discovered some new interests in my classes this year.	1	2	3	4	5
9. I wish my classes weren't so boring.	1	2	3	4	5
10. In general, I don't mind spending time in my classes.	1	2	3	4	5

Note. Items 2,3,5,7, and 9 are reverse-scored.

Appendix C

Effort to Pay Attention in Class Scale

How often do you really pay attention during these classes at school?

Circle the best answer.

	Never	Rarely	Sometimes	Often	Always
1. English	0	1	2	3	4
2. Math	0	1	2	3	4
3. Social Studies	0	1	2	3	4
4. Science	0	1	2	3	4

Appendix D

Effort to do Well in Class Scale

How often do you really try to do well during these classes at school?

Circle the best answer.

	Never	Rarely	Sometimes	Often	Always
1. English	0	1	2	3	4
2. Math	0	1	2	3	4
3. Social Studies	0	1	2	3	4
4. Science	0	1	2	3	4

Appendix E

Learning Goals

How often do you try to...?

	Never	Rarely	Some- times	Often	Most of the time	Always
1. How often do you try to learn something new in your classes, even if you don't have to?	1	2	3	4	5	6
2. How often do you try to find things to learn that are difficult.	1	2	3	4	5	6
3. How often do you try to learn new things in your classes because it's a challenge?	1	2	3	4	5	6
4. How often do you try to really understand what you're studying?	1	2	3	4	5	6

Appendix F

Performance Goals

How often do you try to...?

	Never	Rarely	Some- times	Often	Most of the time	Always
1. How often do you try to volunteer to show your work in front of your classes?	1	2	3	4	5	6
2. How often do you try to show your teachers how smart you are in your classes?	1	2	3	4	5	6
3. How often do you try to make presentations in front of your classes?	1	2	3	4	5	6
4. How often do you try to learn something in your classes just to get a good grade?	1	2	3	4	5	6
5. How often do you try to do better than the other kids in your classes?	1	2	3	4	5	6

Appendix G

Teachers' expectations subscale

What are your teachers like in your classes?

ALWAYS	OFTEN	SOMETIMES	NEVER
1	2	3	4

Teachers expect me to do my very best.

Teachers expect me to try hard.

Teachers expect me to learn new things.

Appendix H

Teacher values subscale

What are your teachers like in your classes?

ALWAYS	OFTEN	SOMETIMES	NEVER
1	2	3	4

Teachers try to make their classes interesting.

Teachers like their subjects.

Teachers tell us why their subjects are important.

Appendix I

Teacher social support subscale

What are your teachers like in your classes?

NEVER	SELDOM	SOMETIMES	OFTEN	ALWAYS
1	2	3	4	5

My teachers really care about me.

My teachers like me about as much as they like other students.

My teachers care about my feelings.

Appendix J

Time 1 Student Concerns Form

Next school year, you will begin ninth grade in high school. Please use the spaces below to list 4 things that you are thinking about or that concern you about your move to high school.

1 _____

2 _____

3 _____

4 _____

If you have additional concerns, please list them here.

Appendix K

Time 2 Student Concerns Form

You are almost at the completion of ninth grade. Please use the spaces below to list 4 things that you thought about or that concerned you during this school year.

1 _____

2 _____

3 _____

4 _____

If you have additional concerns, please list them here.

What concerns do you have about school as you think about moving into tenth grade next year?

1 _____

2 _____

3 _____

4 _____

Appendix L

Hassles Scale

WHAT'S HAPPENING?

During the last month
it happened:

CIRCLE ONE:

	Didn't felt Happen bad	OR	I didn't feel bad	I felt sort of bad	I very
1. Kids at school teased you.	1		2	3	4
2. You were punished for something you didn't do.	1		2	3	4
3. You got punished when you did something wrong.	1		2	3	4
4. Your best friend didn't want to be your best friend anymore.	1		2	3	4
5. You lost something.	1		2	3	4
6. Your mother or father was mad at you for getting a bad school report.	1		2	3	4
7. Your teacher was mad at you because of your behavior.	1		2	3	4
8. Your schoolwork was too hard.	1		2	3	4
9. You got into a fight with another kid.	1		2	3	4
10. You didn't do well in sports.	1		2	3	4
11. You didn't know the answer when a teacher called on you.	1		2	3	4
12. When the kids were picking teams you were one of the last ones to be picked.	1		2	3	4
13. You felt bored and wished there was something interesting to do.	1		2	3	4
14. You didn't like the way you looked and wished you could be different.	1		2	3	4

Appendix L - continued

15. Another kid could do something better than you could.	1	2	3	4
16. You didn't have enough privacy when you wanted it.	1	2	3	4

Note. The Competence subscale consists of items 5, 8, 10, 11, 15. The Relatedness subscale consists of items 1, 4, 6, 7, 9.

Appendix M

Uplifts Scale

WHAT ELSE IS HAPPENING?

	CIRCLE ONE:	During the last month it happened:				
		Didn't Happen	OR good	Felt OK	I felt sort of good	I felt very
1. You got a good mark at school.		1		2	3	4
2. You won a game.		1		2	3	4
3. You found something you thought you had lost.		1		2	3	4
4. Your teacher was pleased with you.		1		2	3	4
5. Friends wanted you to be on their team.		1		2	3	4
6. There was a school holiday.		1		2	3	4
7. You had a good time with friends.		1		2	3	4
8. You gave a talk at school that went well.		1		2	3	4
9. Your parents were pleased with your grades.		1		2	3	4
10. You did well at sports.		1		2	3	4
11. You made or fixed something by yourself.		1		2	3	4
12. You had fun joking with kids at school.		1		2	3	4
13. You learned something new.		1		2	3	4
14. You made a new friend.		1		2	3	4

Note. The Competence subscale consists of items 1, 2, 8, 10, 11, 13. The Relatedness subscale consists of items 4, 5, 7, 12, 14.

Appendix N

Student Assent Form

I understand the following about this research study:

- The purpose of this study is to find out what it is like to be an 8th grade student at _____ Middle School. The information will be used to help teachers and principals make middle school better places to learn and to make the move to ninth grade easier for students. This project is being conducted by the University of Maryland and _____ High School.
- I will be asked to answer a series of questions about my classes at school, such as how interesting they are, how much my classmates want me to learn, and how often I follow rules.
- I understand that my answers to these questions are completely confidential. My name will not be on the survey.
- I understand that my participation is voluntary. I can ask the researcher any questions I have about the survey, I don't have to answer any questions that I do not wish to answer and I can stop at any time.
- I understand that there are no risks in answering these questions.

☐

Check this box if you understand the above and have agreed to participate.

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