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Examining Academic Engagement Among Elementary Students: The Role Of Parent-Child And Teacher-Student Relationships

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EXAMINING ACADEMIC ENGAGEMENT AMONG ELEMENTARY STUDENTS: THE ROLE OF PARENT-CHILD AND TEACHER-STUDENT RELATIONSHIPS

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DEDICATION

This work is dedicated to my husband, Scott,

and my family, without whom this would

not be possible.

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER 1

Examining Academic Engagement Among Elementary Students: The Role of Parent-Child and Teacher-Student Relationships

Introduction

Interest in examining student engagement levels among school-aged children has risen dramatically over the past two decades. With a growing emphasis on standardized testing across the field of education, students are experiencing heavier workloads than ever before, leaving many feeling bored and disconnected from the school environment (Conner & Pope, 2013). According to the 2009 High School Survey of Student Engagement (HSSSE), which was administered to 42,754 high school students across the United States, approximately 50% of students indicated that they feel bored in class on a daily basis. These students cited a vast array of potential explanations for this lack of engagement in school, including receiving material that was not interesting (81.3%) or relevant to them (46.1%), as well as a lack of interaction with their teacher (35%) (Yazzie-Mintz & McCormick, 2012, p. 752). As there is a well-documented correlation between levels of student engagement and school success, it is critical that we explore the underlying factors that contribute to enhancing student engagement in the classroom (Klem & Connell, 2004).

The study of student engagement is considered to have significant implications for educators and policymakers alike. The construct of academic engagement itself is thought to serve as a major contributing factor to subsequent levels of student motivation, learning and development, making it an important tool for learning (Appleton, Christenson, Kim & Reschley, 2006). When it comes to student dropout rates, levels of student engagement are largely viewed as the main theoretical model to understanding and intervening with potential dropouts and encouraging school completion (Furlong & Christenson, 2008; Simons-Morton & Chen, 2009;

Skinner, Furrer, Marchand & Kindermann, 2008). In addition, engagement has a widespread influence with relevancy for students of all races, ethnicities and gender (Appleton, Christenson, Kim & Reschley, 2006).

On an individual level, students with higher rates of engagement in the classroom often experience a wide range of positive academic, social, emotional and behavioral outcomes. According to the National Research Council and Institute of Medicine (2004), engagement in the classroom has a direct correlation with student levels of self-competence, personal values, goals, and social connectedness to peers and teachers. Engagement has also been found to both improve one's academic performance and validate positive expectations about one's academic abilities (Skinner, Zimmer-Gembeck & Connell, 1998), and frequently serves as a good predictor of long-term achievement (Connell, Spencer & Aber, 1994). In addition, having a high level of student engagement is thought to serve as a protective factor against anti-social behavior, substance use, risky sexual behavior and association with deviant peer groups among children and adolescents (Simons-Morton & Chen, 2009; O'Farrell & Morrison, 2003).

Specific predictors to levels of student engagement are most often viewed as being heavily influenced by both environmental and contextual factors. Although a definitive link has yet to be made, researchers have attributed numerous environmental variables as having a significant correlation to engagement, including the school climate and classroom environment (Simons-Morton & Chen, 2009). However, one of the biggest contextual attributions to academic engagement has been cited as the quality of social relationships that children develop with their parents, teachers and peers (Fredricks, Blumenfeld & Paris, 2004). Wentzel's (1999) influential work on academic engagement suggested that levels of perceived social support from key relationships (i.e. teachers, parents) serve to support levels of student learning. In fact, levels of

relatedness to key social support systems are thought to be so influential that they have been correlated with increased levels of student effort, persistence and participation in school, variables that are generally perceived as notable aspects of the construct of engagement (Furrer & Skinner, 2003).

Building on Wentzel's work, Furrer and Skinner (2003) explored levels of relatedness between children and significant relational figures in their environment, including parents, teachers and peers, as well as levels of child perceived self-control. Results from their study indicate that children with higher levels of relatedness to key social figures frequently displayed increased levels of behavioral and emotional engagement in the classroom above and beyond levels of perceived self-control. Additionally, children with higher levels of relatedness at the start of the school year were found to demonstrate significantly increased levels of engagement by the end of the school year. When comparing results across parent, teacher and peer relatedness, levels of parent-child relatedness were found to have the greatest impact on academic engagement (above that of peer relatedness), and teacher-child relatedness was found to have a primary correlation with levels of child emotional engagement in the classroom (Furrer & Skinner, 2003). Based on these findings, it appears that the relationships that children have with their parents and teachers make unique, yet equally important, contributions to their overall levels of academic engagement.

Theoretical Framework – Developmental Systems Theory

As a construct, academic engagement is widely viewed as being malleable to various contextual settings, or systems, that bidirectionally interact with one another in a child's life (Fredricks, Blumenfeld & Paris, 2004). This framework, which was originally inspired by Urie Bronfenbrenner's 'bioecological theory,' emphasizes the integrated roles that multiple

environmental contexts play within human development (Lamb & Bornstein, 2011, p.40). Rooted in Bronfenbrenner's seminal work, researchers Rimm-Kaufman and Pianta (2000) outlined the Ecological and Dynamic Model of Transition, which states that children's interactions with their home, school, peers and neighborhood creates a dynamic network of bi-reciprocal relationships that influence their transition to school in both direct and indirect ways. From this perspective, the interconnectedness of relationships between the child's inherent individual characteristics and their encounters with various environmental contexts continuously develop and change over time through a transactional process (Rimm-Kaufmann & Pianta, 2000).

This transactional process is thought to begin early on for children, occurring initially through their interactions at home with their parents. As children enter preschool or Kindergarten, their ecological dynamics are shifted to accommodate newly developing relationships with their teachers. During transitional periods, Rimm-Kaufmann and Pianta (2000) assert that the quality of these relationships is correlated to levels of school competence and risk. Specifically, parents and teachers who maintain frequent contact with the child, share mutual goals and provide consistent emotional and developmental support to the child have been found to contribute to positive transitional outcomes, whereas poor parent-child and teacher-child relationships often enhance the child's susceptibility to risk. As research suggests that the relationships between the child and their home and school contexts become patterned over time, it becomes increasingly clear that the quality of these relationships serve as a critical component of a child's academic success (Rimm-Kaufmann & Pianta, 2000).

Parent-Child Relationships and Student Engagement

The quality of the relationship that exists between parents and their children has been correlated with a range of factors that are thought to uniquely influence academic engagement. Maccoby and Martin (1983) suggest that children who feel a high sense of relatedness to their parents often enter the classroom with an increased level of motivation, a willing attitude and desire to concentrate. In addition, parents who exhibit an interest in their child's well being are more likely to raise children who are more engaged in their studies (Murray, 2009) and have an enhanced probability of graduation success from high school (Englund, Engeland & Collins, 2008). In turn, when children perceive their parents as valuing their education and maintaining high expectations for their academic success, they are more likely to feel interested, engaged and confident in their academic skills (Fan & Williams, 2010).

Researchers have attributed much of the quality of the parent-child relationship to the parenting styles that mothers and fathers maintain. When considering one's parenting style, parents who exhibit an authoritative style have been found to be positively associated with school engagement and achievement among children (Steinberg et al., 1994). Darling and Steinberg (1993) note that the specific goals that parents with effective parenting styles communicate to their children (i.e. do well in school), in combination with providing specific opportunities to achieve these goals (i.e. resources/supports, etc.), may serve to increase their academic performance and competency. Similarly, the overall level of parental quality has been found to impact the self-system processes of children that impact factors of engagement, including aspects of perceived competence and skills of self-regulation to tasks (Skinner et al., 1998).

Additional components of parenting style, including parental involvement and discipline, have also been cited as contributing factors to levels of academic engagement for children. Parents who demonstrate high levels of involvement and interest in their child's education have been found to positively impact rates of effective school engagement, educational goals and achievement among their children (Paulson, 1994). However, parents must maintain a delicate balance of involvement for their children, as parental autonomy support has been found to yield aspects of motivational attitudes (i.e. self-regulation skills, competence, adjustment, etc.), all of which are thought to be necessary for academic engagement (Grolnick & Ryan, 1989). In contrast, when there are low levels of parental involvement (Murray, 2009), or ineffective discipline practices (DeBaryshe, Patterson & Capaldi, 1993), children are less likely to be engaged in their schoolwork.

Teacher-Student Relationships and Student Engagement

Although it remains clear that a supportive and stable relationship between a parent and their child leads to increased levels of student engagement, it appears that a similar bond between a teacher and a child can also demonstrate significant implications for levels of academic engagement. Decker, Dona and Christenson (2007) explored the relationship between students and their classroom teacher from both the students' and teachers' perspective. Based on their results, teacher reports of their relationships with students had a positive correlation with both student and teacher ratings of social skills and the subsequent level of academic engagement. Similarly, student ratings of the emotional quality of the teacher-student relationship displayed a positive correlation between the amount of time spent on task and a negative correlation with the number of behavioral referrals received (Decker et al., 2007).

Children's engagement in academic activities have been shown to be directly influenced by both their perceptions of teachers, as well as their teachers' actual behaviors. Research by Skinner and Belmont (1993) suggests that children's behavioral engagement is the result of the students' perceptions of the teacher's level of structure. For example, teachers who provide clear expectations, contingent responses and strategic help are more likely to have students who are effortful and persistent in their work. Additionally, the authors argue that emotional engagement for children can be determined by the teacher's level of involvement in the classroom, as teachers who are warm, caring and affectionate have been shown to result in children who feel happier and more enthusiastic in class (Skinner & Belmont, 1993). In contrast, teachers who are controlling, critical (Wentzel, 2002), or have conflictual relationships with their students (Ladd & Burgess, 2001) most often result in children with low levels of engagement and academic achievement.

The classroom environment that teachers cultivate in the school setting has also shown to have significant implications for the quality of the teacher-student relationship and academic engagement. Researchers consistently suggest that when children feel a sense of connectedness and belonging to the classroom, they are more likely to participate and engage in classroom activities (Wentzel, 1997). Pianta, Stuhman and Hamre (2002) suggest that high-quality classrooms that are warm, child-centered, and supportive of autonomy, as well as contain teachers who offer constructive feedback, ask open-ended questions and provide differentiated instruction are most likely to produce children who demonstrate high levels of on-task behavior, social competence and competence in literacy and math. Similarly, research by Birch and Ladd (1997) suggests that when teachers create classrooms that allow children to maintain autonomy,

(as characterized by low levels of dependence on the teacher) their students often exhibit higher levels of engagement and positive school attitudes in the classroom.

Limitations of Past Research and Purpose of this Study

Based on the current literature, it becomes increasingly evident that the relationships that children develop with their parents at home and classroom teachers at school hold a significant impact on levels of academic engagement. However, much of the current research focuses primarily on one of these contexts (i.e. parent-child relationship or teacher-student relationship) and its impact on academic engagement and achievement. From a developmental systems perspective, one could argue that the interactional influence of both the parent-child relationship and teacher-student relationship explains levels of academic achievement, as mediated by levels of academic engagement.

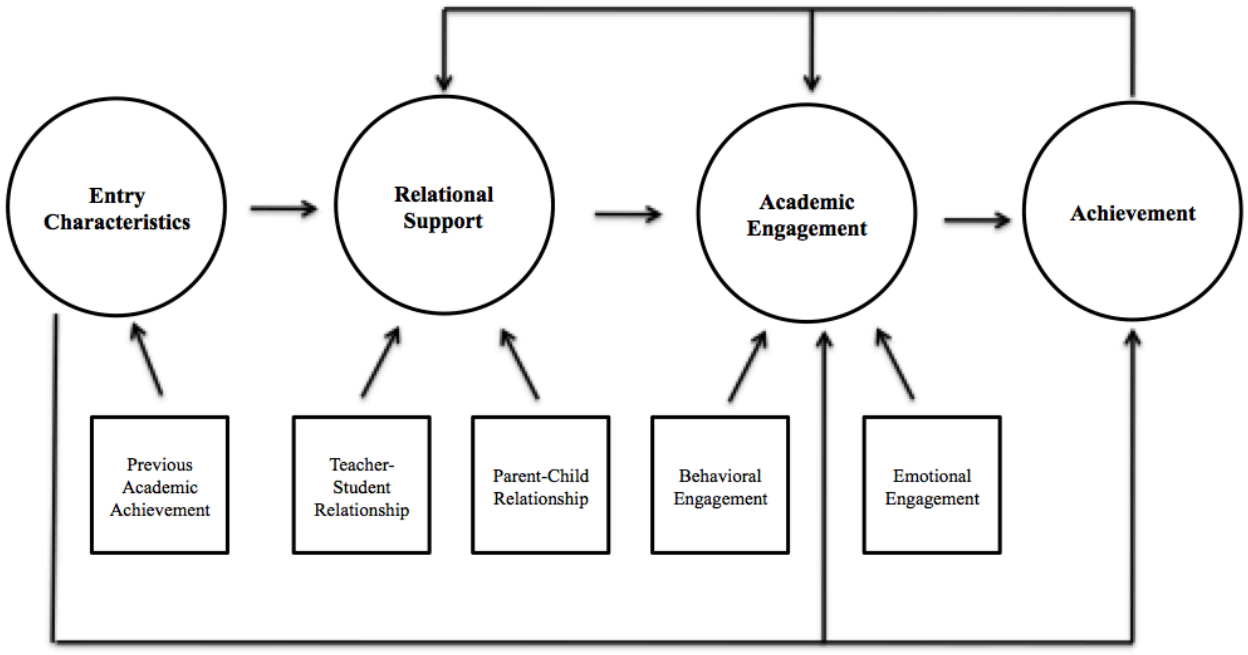


Figure 1. Proposed model for the interactions of child entry characteristics, relational support, academic engagement and student achievement. Latent constructs are shown in ellipses and observed variables are shown in rectangles.

In order to explore this interaction, the present study will attempt to determine whether this bidirectional pathway is significant (see Figure 1). In addition, when children have active relationships with both their parents and classroom teachers, the present study will explore whether the teacher-student relationship is independently correlated to levels of academic achievement, as mediated by levels of academic engagement.

Research Questions

The purpose of this study is to examine parent-child relationships, teacher-student relationships and academic engagement as important variables for academic achievement. The following research questions were explored:

1. Is relational support (teacher-student relationships and parent-child relationships) related to academic engagement in school?
2. What is the role of previous academic achievement and academic engagement in current academic achievement?
3. After controlling for previous academic achievement, are the two relational supports (parent-child relationships and teacher-student relationships) correlated with academic achievement, as mediated by academic engagement?

It was hypothesized that the relational support will influence academic engagement, and that both relational supports (teacher-student relationships and parent-child relationships) would be related to behavioral and emotional engagement. It was also hypothesized that the previous academic achievement and academic engagement would be associated with current academic achievement. Finally, it was hypothesized that teacher-student relationships and parent-child relationships would be correlated with academic achievement, as mediated by emotional and behavioral engagement.

CHAPTER 2

Literature Review

Engagement

Much of the research on the study of engagement has centered on efforts to best define and describe the construct itself. Initially, engagement was widely viewed as a unidimensional construct that primarily emphasized behavior (Yonezawa et al., 2009). However, current literature has evolved towards a more multidimensional, or 'meta' approach, encompassing a variety of cognitions, behaviors and emotions that are studied simultaneously, rather than as separate, unrelated constructs (Li & Lerner, 2013). According to Skinner, Kindermann & Furrer (2009),

> "Engagement refers to the quality of a student's connection or involvement with the endeavor of schooling and hence with the people, activities, goals, values and place that compose it." (p. 494).

These behaviors are most often viewed as discrete actions geared towards academic effort, including tasks of time spent on homework, paying attention, asking and answering questions and being prepared for class (Friedman, 1994). When children are highly engaged in their academics, they frequently participate in tasks that are challenging to them, initiate action when given the opportunity and display intense effort and concentration when learning. In addition, children who are positively engaged in their schoolwork are typically viewed as happy, enthusiastic and genuinely curious in learning (Skinner & Belmont, 1993).

Although researchers continue to debate the exact number of dimensions that encompass engagement, they generally range from two to four variants, including behavioral, emotional, cognitive and academic engagement. The behavioral dimension of engagement in school

typically includes aspects of effort, attendance, attention in class, and participation in class and school activities. The emotional dimension, in contrast, measures students' feelings about school, peers and teachers (Simons-Morton & Chen, 2009), as well as levels of interest, identification, belonging, and a positive attitude about learning. When the cognitive dimension is viewed as a separate facet, it is most frequently utilized to measure levels of self-regulation, learning goals, investment in learning (Appleton, Christenson & Furlong, 2008), self-efficacy, motivation and aspirations (Simons-Morton & Chen, 2009). Finally, a fourth dimension that has been described as an independent aspect of engagement by Christenson and colleagues involves academic engagement, which is noted as the amount of time a student spends doing schoolwork, the number of credits the student has accrued and the amount of homework completed (Furlong & Christenson, 2008).

As the nature of engagement consists of primarily latent constructs regarding the thoughts, feelings and behaviors of students, researchers struggle in their efforts to create a concise definition that improves its conceptual clarity (Fredricks, Blumenfeld & Paris, 2004). The proposed study is heavily influenced by Furrer and Skinner's (2003) research on relatedness to key social figures and its impact on academic engagement, and their model was selected as the basis for defining the construct of engagement. Skinner and her colleagues indicate that high-quality learning consists of both behaviors and emotions, including exertion, persistence, interest and enjoyment, which ultimately reflect one's motivation to master academic material. The behavioral dimension includes student effort, attention and persistence during both the initiation and execution of academic tasks. The emotional dimension emphasizes affective states, such as enthusiasm, interest and enjoyment, which are critical to sustained interest and involvement in learning activities. The model also includes a component for negative engagement, entitled

disaffection, which Skinner et al. describe as specific behaviors and emotions that reflect maladaptive motivational states. Behavioral disaffection concerns observed levels of passivity and withdrawal from participation in learning activities. Similarly, emotional disaffection includes feelings of boredom, anxiety and frustration in the classroom (Skinner et al., 2008).

Although research by Skinner et al. cites that the four dimensions of engagement and disaffection are closely related, empirical evidence indicates that they are structurally distinguishable from one another (Furrer, Skinner, Marchand & Kindermann, 2006). The emotional and behavioral dimensions of engagement are thought to work together and tend to be shaped by similar environmental factors; yet, each maintain their individual stability in terms of measurement and have not been found to directly influence one another (Skinner et al., 2008). Based on Deci and Ryan's work on the Self-Determination Theory (1985) and Harter's research on motivation (1978), Skinner et al. hypothesized that engaged emotions (i.e. interest, enthusiasm) fuel engaged behaviors (i.e. effort, persistence). In addition, emotions have been predicted to serve a role in the loss of engagement and, ultimately, subsequent levels of emotional and behavioral disaffection (Skinner et al., 2008).

Predictors of Engagement

Originally framed as a model of motivation and perceived control Skinner, Wellborn, and Connell (1990) created one of the first empirical models to explain the development of engagement in the classroom. The authors cited a link between levels of contextual and environmental relations, such as interactions with teachers, parents, and peers, and levels of perceived competence, which result in patterns of action and academic performance outcomes. Perceived control was thought to consist of three major components, including strategy beliefs (what is required to do well in school - effort, ability, luck, etc.), capacity beliefs (perception of

one's ability to attain specific academic goals) and control beliefs (whether or not one actually can do well in school).

To assess their conceptualized motivational model, Skinner et al. (1990) administered measures of perceived control, capacity beliefs, control beliefs and perceived teacher context to students in grades 3-5, as well as a 10-item measure of engagement versus disaffection to students' classroom teachers. Math and reading achievement data were gathered through classroom grades and the Stanford Achievement Test. Results from their data analysis supported Skinner et al.'s conceptualized model of perceived control impacting levels of academic achievement, where students who maintained high levels of intrinsic competence in their abilities were reported by their teachers to have higher levels of active engagement in the classroom and increased overall levels of academic achievement. Teachers were also found to have a direct influence on levels of student motivation, as teachers who held a positive perception of their students had students who held higher levels of perceived control in their individual abilities (Skinner, Wellborn & Connell, 1990).

Skinner et al.'s (1990) research is one of many studies throughout the literature to demonstrate a significant link between levels of classroom engagement and academic achievement. Connell, Spencer and Aber (1994) explored the correlation between perceived parental support, engagement and academic outcomes among three separate groups of at-risk African American students ages 10-16. Their results suggested that, over time, children who perceived higher levels of social support from their parents maintained higher levels of academic engagement in school, and, as a result, more frequently exhibited greater positive educational outcomes, including higher levels of attendance, math and reading achievement scores greater than 70% on standardized assessments, and an overall grade point average equivalent to a "B" or

higher. Similarly, Marks (2000) found that students who reported higher levels of academic engagement demonstrated increased levels of authentic work production (i.e. asking questions, maintaining a genuine interest in learning, etc.) and increased levels of school success.

In addition to enhancement in academic achievement, students with increased levels of positive emotional and behavioral engagement have also been found to display a wider range of protective factors against deviant peers, substance use, and antisocial behavior. Simons-Morton and Chen (2009) explored the longitudinal relationship between authoritative parenting practices and levels of school engagement, conduct problems, substance use, school adjustment, deviant peer associations, parental involvement, monitoring and expectations and overall academic achievement among middle school students. All constructs were assessed using a range of questionnaires administered to students, with achievement being reported through student's indication of their GPA. After extensive data analysis, Simons-Morton and Chen (2009) noted that their results were consistent with existing literature on engagement; students who were found to be better adjusted to school tend to exert increased effort in their schoolwork and exhibit lower levels of problem behaviors (i.e. association with deviant peers, substance use, etc). In comparison, students who reported increased rates of conduct problems, association with deviant peers and usage of harmful substances (i.e. cigarettes, alcohol) were not found to demonstrate high levels of academic engagement in school. Additionally, Simons-Morton and Chen (2009) reported that their study was one of the first to reveal a significant correlation between authoritative parenting practices and levels of student engagement over an extended period of time.

It appears quite consistent throughout the research that student engagement is a critical component to attaining academic success in school. However, for students who remain

unengaged or have higher levels of emotional and/or behavioral disaffection in school, they often become increasingly susceptible to school dropout by the time they reach high school. Data from the 2009 High School Survey of Student Engagement (HSSSE) revealed that by the time students reach high school, approximately 21% of students surveyed indicated that they had considered dropping out of school at least "one or two times," with an estimated 7% citing that they had considered it "many times" (Yazzie-Mintz & McCormick, 2012, p. 753). According to Bridgeland, DiIulio and Morison (2006), students who drop out of school undergo a slow process of disengagement throughout the course of their educational career. In fact, even students who successfully obtain their high school diploma have been demonstrated to undergo a similar process throughout their transition from elementary to secondary school of slowly decreasing levels of motivation, positive attitudes towards school (Roeser & Eccles, 1998) and relatedness to their teachers (Hamre & Pianta, 2001).

To date, much of the research on the quality and quantity of levels of student engagement have centered on the transitions between elementary and middle school. A recent study by Gehlbach, Brinkworth and Harris (2012) investigated the relationships between middle school students and their classroom teachers over the course of an entire school year. Students were surveyed at the beginning and end of their year, assessing the quality of the teacher-student relationship, student outcomes (i.e. academic achievement; self-efficacy; homework completion, effort), social perception accuracy and perceived similarity to their teachers. Their results provided support for the theory of disengagement over the course of one's school career, displaying a clear decline over the course of the school year across the students' perception of their relationships with their classroom teachers, as well as in levels of social and academic motivation in school.

Being a highly multi-faceted construct, academic engagement is heavily influenced by several environmental and relational factors. Within the school environment itself, researchers have found that students who are enrolled in smaller-sized classrooms or have small-sized student cohorts exhibit higher levels of engagement than students enrolled in larger-sized classrooms or schools. It has been hypothesized that students may be better able to form closer relationships with their teachers in environments where there are fewer people involved (Fredricks et al., 2004). In addition, when students feel a sense of relevancy to the curriculum (Yazzie-Mintz, 2007), are exposed to lessons that are more interactive in nature (i.e. involve hands on projects) (Brush & Saye, 2008), have schools that utilize alternative scheduling (i.e. block scheduling) (Zepeda & Mayers, 2006), or have a critical voice in the school rules and policies (Joselowsky & Aseltine, 2009), they are more likely to demonstrate increased levels of engagement in school.

However, one of the most significant predictors of engagement among students that is consistent across the literature involves the quality of their relationships with key figures, including their parents, teachers and peers. Theories of relatedness (Connell & Wellborn, 1991; Furrer & Skinner, 2003) and belongingness (Ostermann, 2000) suggest that children are more likely to be engaged in school when they have highly supportive and caring teachers and peers in their learning. Similarly, children who feel a sense of being accepted, valued, included and encouraged by others have been linked to ratings of engagement and in the decision to drop out of school (Osterman, 2000).

According to Furrer and Skinner (2003), relatedness should serve as a key predictor of engagement. The researchers hypothesized that when children feel special and significant to key social figures (i.e. parents, teachers, peers), they are more likely to have increased levels of

'energized behavior,' including effort, persistence and participation. In turn, these behaviors are thought to trigger positive emotions, such as interest and enthusiasm, and curb more negative emotions of anxiety and boredom. For children who lack a sense of relatedness to others, Furrer and Skinner (2003) indicate that they are likely to demonstrate a lack of involvement in instructional tasks, and more frequently report feelings of boredom, worry and frustration. As a result, these children begin to develop a pattern of disaffection, resulting in a potential lifelong struggle to remain engaged in activities of learning, socialization and development in school.

Impact of Parent and Teacher Relatedness on Engagement

From a social development perspective, adults serve as a model for children to learn about themselves, as well as how they should interact and engage with others to fit in with societal norms. Children who share positive relationships with nurturing and supportive adults have been shown to demonstrate greater internalization of the expectations and goals that are highly valued by adults (Grusec & Goodnow, 1994). Similarly, in the school setting, Wentzel (1999) argues that children who are highly engaged are more likely to display higher levels of academic achievement as a direct result of valuing to attain the goals that their teachers and peers maintain.

Historically, Bowlby's (1980) research on attachment appears to mirror these findings, as his work is premised on the notion that building a supportive relationship with a significant caregiver is critical for child development. According to Bowlby, an individual's relationship with their parents can be described as an 'internal working model.' This model encompasses the child's conception of attachment figures based on the quality and frequency of their interactions with their parents, as well as with the feedback that they receive from infancy through adolescence (Lamb & Bornstein, 2011) For school-aged children who spend the majority of their

day within the confines of the school environment, a significant caregiver could be viewed as both a parent or a classroom teacher (Resnick et al., 1997).

When children are able to develop a positive relationship with at least one of their significant caregivers, findings suggest that they are able to achieve long lasting effects in regards to their level of engagement in the classroom. A critical finding from Furrer and Skinner's (2003) aforementioned study suggests that children who were found to display high levels of relatedness not only started the school year off with higher levels of engagement than children with lower levels of relatedness, but were able to demonstrate elevated levels of engagement at the end of the school year. In contrast, children who initiated the year with lower levels of relatedness were found to show a slow decline in their levels of engagement over the course of the year. The authors hypothesized that the disengagement caused by feelings of rejection or lack of support from key caregivers likely interfered with their ability to participate in instructional tasks, leading to a cascading effect of decreases in social support, which, as a result, further exacerbated feelings of disaffection in school.

When considering the nature of a child's relationship with their significant caregivers, researchers most often cite three major components as influencing their overall quality, including levels of autonomy support, structure and involvement. According to Connell and Wellborn (1991), all three components are required to develop a social context that fits the basic psychological needs of children, which, in turn, promotes levels of student engagement. Autonomy support is defined as the amount of freedom a child is allotted to determine his or her own behavior. When teachers or parents provide a lack of autonomy support, the resulting behavior is coercion, or feeling forced to behave in a specific manner that is opposite to their desired interests. Structure concerns the amount of information provided within an

environmental context to indicate how children can effectively achieve a desired outcome. Environments lacking structure are thought of as being chaotic, in contrast. Finally, involvement includes the quality of the relationship that one maintains with their teachers, parents and peers. When children feel a lack of involvement in their relationships with others, the resulting effect is rejection or neglect.

Despite the critical role that relational figures appear to play in a child's academic success, current research examining both parent-child relationships and teacher-student relationships concurrently and their impact on student engagement appears to be very limited. Lynch and Cicchetti (1997) were one of the first to explore the link between connectedness to parents and teachers and its impact on the ease of adapting to the school environment across the transition from elementary to middle school. The study sampled 1,226 students in grades 2 through 8, using the Relatedness Questionnaire to assess feelings of emotional quality and psychological proximity seeking towards students' teachers, parents, friends and classmates. Results from the data analysis indicated that the majority of students reported optimal or adequate levels of relatedness towards their mothers (67.5%), best friends (78.5%) and classmates (60.7%). In contrast, the majority of students reported higher levels of disengagement with their classroom teachers, as less than half of the students sampled cited an optimal or adequate relationship (39.2%) with their teacher. When viewing patterns of relatedness across grade level, results supported the slow decline in the teacher-student relationship over time, as students in grades 2-5 reported having a higher sense of relatedness with their teachers (57.4%) than students in grades 6-8 (27.1%). Interestingly, the patterns of relatedness with their mothers appeared to have remained fairly consistent throughout elementary (70.9%) and middle school (65.2%).

Although Lynch and Cicchetti's (1997) work suggests that children report higher levels of relatedness towards their parents over time, more current research has also demonstrated support for the teacher-student relationship as impacting motivation and achievement in school. A longitudinal study by Hamre and Pianta (2001) reported that a positive relationship with one's teacher lead to higher rates of student adjustment and served as a protective factor against an at-risk home environment. In addition, Wu, Hughes and Kwok (2010) suggest that when students viewed their relationship with teachers as average to good, they were more engaged in the classroom and had higher levels of achievement over the course of three years than students who rated their relationships with their teachers as low.

However, as Wentzel (2002) argues, it may be that children who share positive, warm and supportive relationships with their parents are less prone to develop emotional distress at school and, as a result, are able to develop closer relationships with their classroom teachers and peers and have higher levels of motivation to engage in instructional tasks. As a result, the determination over whether the child's parents or teachers may exhibit greater influence on levels of academic engagement remains to be unseen. What continues to remain clear, though, is the notion that the presence of both a supportive parent and classroom teacher can make a significant difference in a child's life, in terms of their interest, motivation, and ability to engage in the classroom instruction.

Parent-Child Relationships

Because parents serve as the initial key relational figure in a child's life, one could argue that their influence likely has the greatest impact on their child's developmental success. Although children are exposed to numerous relational figures throughout their lives, Furrer and Skinner (2003) note that parents hold a unique role in their child's level of engagement in school,

when compared to teachers or peers, as the quality of their care often primes students for learning and the development of relationships with others. In fact, parental quality has been found to shape an individual's self-system processes, including perceived competence and self-regulatory style, which are thought to serve as key predictors to motivation in school (Skinner et al., 1998; Deci & Ryan, 1985). As a result, children with dependable, cohesive and secure parental relationships have been suggested to develop closer ties to teachers, display higher levels of academic motivation in the classroom, have greater levels of school adjustment and performance outcomes in reading and mathematics and tend to exhibit fewer problem behaviors (Furrer & Skinner, 2003; Walker, 2008; Simons-Morton & Chen, 2009).

Research on parenting suggests a number of interpersonal variables that impact the overall quality of the parent-child relationship. De Bryun, Dekovic' and Meijnen (2003) cite that parental role strain, or the difficulty to fulfill one's obligatory 'role' as an individual (i.e. student, parent, etc.), has a significant impact on the nature of the relatedness between parents and children. In a child's emergence towards adolescence, De Bryun et al. argue that they become faced with a number of different pressures from various environmental figures, including a desire to obtain greater independence, explore romantic relationships, juggle activities with their peers, and maintain demands from their parents to achieve good grades in school. In order to explore the impact of parental role strain, De Bryun et al. (2003) administered questionnaires to adolescents enrolled in middle school. Surveys included students' perception on role strain experienced with their school, teachers, peers and parents, mentor perceived levels of academic engagement (measured as attentiveness, disrespect and sociability) and academic achievement, as measured by GPA. Their findings suggested that both teacher and parent role strain had a significant impact on academic engagement. It was theorized that parental role strain most

accurately reflects an authoritarian parenting style, supporting the research that high levels of parental coerciveness and control, combined with a lack of warmth and support, leads to lower levels of academic engagement and achievement in school (De Bryun et al., 2003).

In addition to role-strain, levels of parental engagement and overall familial socio-economic status (SES) have also been found as having a significant impact on the quality of the parent-child relationship. Research suggests that parental engagement is so vital to the outcome of the parent-child relationship that it plays a larger role than factors of parental education, family structure, ethnicity or socio-economic background (Harris & Goodall, 2008). Parental engagement is thought to originate from their values towards education, their goals or aspirations for their children and their enthusiasm for their own experiences of education. Despite this notion, psychologists seem to agree that socio-economic status contributes to a significant portion of the overall parent-child relationship. When considering SES, parents of middle-class families are more likely to have an extensive social network, have greater financial resources to enroll their children in extracurricular activities, use vocabulary that is similar to that of teachers, view teachers and school staff as equals and have access to reliable transportation to attend meetings and drive their children to school and activities. In contrast, parents of a lower SES may hold several jobs, making it difficult to find appropriate childcare, attend after-school activities, help their child with school work and serve as an available source of support (Harris & Goodall, 2003). In addition, research suggests that parents of a lower SES are more likely to maintain negative views and attitudes towards school and have lower levels of educational attainment (Raey, 2000).

However, one of the largest determining factors of the parent-child relationship quality that is most consistently agreed upon across the literature is parenting style. In Baumrind's

(1971) classic research on parenting styles, who closely studied and observed children interacting with their parents, Baumrind argues that significant cognitive and social distinctions can be determined among children as early as preschool. Based on her work, three major parenting styles were developed, including authoritarian, authoritative and permissive. Baumrind cites that parents who maintained an authoritative style were observed to make developmentally appropriate demands on their children and controlled behavior as necessary, while interacting in a response, effective and communicative manner with their children. Parents who emphasized demandingness and high levels of control, yet lacked the balance of affection and open communication, were categorized as authoritative. The third style, permissive, involved parents who made few demands on their children and lacked control over their behavior; yet, highly emphasized open levels of communication and affection (Walker, 2008).

In order to differentiate between each parenting style, Baumrind indicated three major themes that exist within the relationship between parents and their children, including levels of behavioral control, autonomy support and responsiveness. When viewed from this framework, authoritarian parents lacked the high level of communication required to explain the demandingness placed on the child, as well as inhibited a sense of autonomy development within the child through a series of forced coercion. In addition, permissive parents lacked the behavioral control and demandingness necessary to teach children limitations and provide a sense of structure within the parent-child relationship. However, she indicated that balance was attained through an authoritative parenting style, where parents demonstrated high levels of behavioral control to provide structure and autonomy support to encourage the child to develop into their own, with the added benefit of being both responsive and communicative to model and express warmth, empathy and care (Walker, 2008).

Research on all three parenting styles consistently suggests that children of authoritative parents appear to have the greatest academic, social and emotional outcomes. Steinberg et al. (1994) found authoritative parenting practices were positively associated with school engagement and achievement among children, as well as greater parental participation in their child's academic success. Similarly, Paulson (1994) compared parenting styles and resulting levels of maternal and paternal demandingness, responsiveness and involvement on levels of academic achievement among early adolescents. Their findings indicated that higher levels of parental control and responsiveness are significantly correlated to achievement. However, the greatest predictor of academic achievement was parental involvement, where parents who maintained high levels of positive involvement in their child's lives were found to have children with increased levels of achievement.

Based on these findings, it appears that the influence of a parent extends well beyond the confines of the home environment. In the classroom, parental involvement has been correlated with appropriate classroom behavior and academic engagement, while autonomy support has been found to yield positive motivational attitudes (i.e. self-regulation, competence, adjustment) (Grolnick & Ryan, 1989) and intrinsic motivation (Ginsberg & Bronstein, 1993). Overall, when children have supportive parents that are both highly involved in their academic studies and hold mastery-oriented goals, they are more likely to feel highly engaged with their studies (Murray, 2009), graduate from high school (Englund et al., 2008), and complete a successful transition to higher education or work (Vasalampi, Salmela-Aro, & Nurmi, 2009). By comparison, parent-child relationships containing low levels of autonomy support, structure and competence have been found to leave children feeling less engaged with school (Murray, 2009) and more likely to drop out of high school, even if they are doing well academically (Englund et al., 2008).

However, as it seems that the presence of a caring adult, be it a parent or teacher, can make a significant difference in a child's level of engagement in school (Anderson, Christenson, Sinclair & Lehr, 2004), the question remains - can a teacher serve as an key relational figure for children and demonstrate a significant impact on levels of classroom engagement beyond the contribution of parent-child relationships?

Teacher-Student Relationships

For children in school, teachers serve as a unique relational figure in their lives, having the potential to help meet their developmental needs and ensure that the classroom is a safe environment for them to create meaningful and influential connections with non-parental authority figures. In this sense, teachers can serve as a secondary attachment figure to provide elements of safety and trust, as well as to become a central role model by protecting at-risk children from experiencing increasing levels of behavioral and psychological problems (Way, Reddy & Rhodes, 2007). Masten and Reed's (2002) research on resilience highlights this notion, suggesting that a strong bond to a competent and caring adult (not specifically a parent) can serve as a critical asset for children.

Despite the notion that teachers tend to take a more transient role in a child's life than parents, research suggests that the teacher-child relationship is not only meaningful and predictive of later life outcomes, but often displays the same patterns of interactions that are observed in parent-child relationships (Pianta & Steinberg, 1992). For children who have a negative relationship with their parents, a classroom teacher can often create the opportunity to model and develop a positive relational style that is different from the relationships that children have formed with their parents (Howes, Hamilton & Philipsen, 1998).

In elementary school, the role of a positive teacher-student relationship has been demonstrated to influence a range of significant outcomes, including student school behavior, academic achievement, school adjustment, retention and promotion decisions in Kindergarten and levels of aggression (Birch & Ladd, 1997; Hughes, Cavell & Wilson, 2001). The development of a high-quality teacher-child relationship early on in one's academic career has been found to establish a positive foundation for academic success, including enhanced social skills, receptive language and basic reading awareness in preschool and kindergarten, eventually leading to the development of more positive work habits and higher levels of academic engagement in elementary school (Burchinal et al. 2002).

As key relational authority figures, teachers often play a primary attachment role in the lives of students. A recent study by Booth, Kelly, Spieker and Zuckerman (2003) compared the mother-child and teacher-child attachment levels for a sample of children at 24 months of age. Booth et al. found a significant correlation between the safe-haven/secure-base composite score, indicating that a secure attachment can generalize from mothers to teachers in preschool. In a similar study by O'Connor and McCartney (2006), it was suggested that insecure children had lower quality relationships with their teachers than securely attached children throughout early childhood. Interestingly, this study also argues that a child's relationship quality with their teachers at 54 months was a stronger predictor of kindergarten and first grade teacher-child relationships than levels of maternal attachment.

As teachers have the potential to serve as primary attachment figures to students, many contemporary psychologists have also argued that the nature and quality of the teacher-student relationship may also be viewed through the lens of the various parenting styles. After observing several 6th grade classrooms, research by Patrick, Turner, Meyer and Midgley (2003) indicates

that three major classroom categories could be discerned, including supportive, nonsupportive and ambiguous. Supportive classroom environments contained teachers who upheld high expectations for learning, as well as demonstrated humor and respect towards their students. Nonsupportive environments included the use of extrinsic motivation for learning (i.e. tangibles), used authoritarian control and allotted the expectation that children may potentially cheat or behave inappropriately. The ambiguous type included inconsistent attention towards students, opposing methods of classroom management and held low expectations for learning. Results from their work indicated that the supportive environment (i.e. authoritative parenting style) promoted an open learning environment and interest in learning at greater levels than the nonsupportive (i.e. authoritarian) or ambiguous (i.e. permissive) environments.

In line with Patrick et al.'s (2003) research, Walker (2008) compared Baumrind's three parenting styles to teacher behavioral orientations. The study assessed 700 students in grades 5-8 and included classroom observations, teacher interviews and student performance on standardized assessments, as well as questionnaires to assess students' perception of teaching style, mastery versus performance orientation, engagement, and self-efficacy beliefs over the course of one school year. Classifications were determined based on levels of teacher demandingness and responsiveness, as well as mastery versus performance orientation. Walker (2008) notes that significant differences could be seen across the classrooms by the end of the school year, where students in the authoritarian classroom (high demandingness, low responsiveness) reported greater self-handicapping and lower academic self-efficacy and a defensive stance towards learning. Students enrolled in permissive classrooms (low demandingness, high responsiveness) were found to exhibit lower gains in academic achievement. Overall, Walker (2008) cites that authoritative teaching styles (balance of high

demandingness, high responsiveness) were found to display the most positive outcomes of the three, and accurately reflected the research on outcomes for children of each parenting style.

Although there appears to be a consensus among the literature that the teacher-student relationship can be compared to parenting styles, researchers posit a wide-range of constructs by which to measure the overall relational quality. Jerome, Hamre and Pianta (2009) explored the teacher-student relationship utilizing terms of closeness, dependency over the course of Kindergarten through 6th grade. Under these conditions, a balance of increased closeness and dependency, with low levels of conflict, would serve as an ideal relationship quality, similar to the authoritative parenting style.

However, as this study is based heavily off of Furrer and Skinner's (2003) model of academic engagement, their relational descriptors of structure, autonomy support and competence will be utilized to help describe the teacher-student relationship quality. According to their theory, based from Connell and Wellborn's (1991) work on self-determination, teachers similar to 'authoritative' parenting style would have high levels of structure, autonomy support and competence, while 'authoritarian' teachers would have high levels of structure, with low levels of autonomy support and competence. In contrast, 'permissive' style teachers would provide high levels of autonomy support and competence, with low levels of structure.

The quality of the teacher-child relationship is influenced, in part, by characteristics of the child, including their gender, temperament and level of effortful control (defined as the ability to activate an appropriate response in a situation where an inappropriate response is desired). When it comes to gender, research suggests that teachers typically view their relationships with girls more positively than those with boys, as girls tend to be more interested in creating intimacy and sharing in their relationships, in contrast to boys, who tend to be more

activity-oriented (Hamre & Pianta, 2001). In terms of the child's temperament, adolescents who have low levels of shyness (i.e. less likely to withdraw from unfamiliar people or other environmental stimuli) have been found to develop stronger relationships with their teachers. The literature suggests that shyer adolescents, in comparison, are less likely to form relationships with their teachers, as they often struggle to initiate or encourage interactions with their teachers (Rudasill, 2011). Finally, for children with low levels of effortful control, studies suggest that they are more likely to display externalizing or acting out behaviors than their more regulated peers. As a result, these individuals tend to demonstrate higher levels of teacher-child conflict (Rudasill & Rimm-Kaufman, 2009).

While there are many academic benefits for students who maintain a positive relationship with their teacher, research suggests that students who struggle to develop a close and meaningful teacher-student relationship often display conversely negative academic, social/emotional and motivational outcomes. Hamre and Pianta (2001) suggest that teacher-student conflict is consistently related to lower grades in math and English. Due to a lack of feeling accepted, these students are also more prone to display poor work habits, low levels of frustration tolerance, are rated as less cooperative by their peers and have higher rates of externalizing behaviors in preschool, leading to higher rates of childhood aggression in later elementary school (Hughes, Cavell & Wilson, 2001). As a result of their weak bond with their teacher, these students have also demonstrated higher levels of disengagement from school and feelings of alienation (Murdock, 1999). When this cycle persists throughout the child's academic career, they become significantly more at risk for dropping out of school (Fine, 1991).

Concluding Remarks

An extensive review of the literature reveals that the relationships that children maintain with their parents and classroom teachers plays a significant role in their levels of academic engagement. Although researchers agree that a clear link can be found between student engagement in the classroom and levels of academic achievement, where student engagement is thought to serve as a mediator between various predictors and subsequent levels of achievement, the impact of the various specific predictors that are thought to influence engagement continue to remain unclear (Dotterer & Lowe, 2011). As engagement is thought to gradually decrease over a child's educational career, an exploration of the influence of the parent-child and teacher-student relationship, particularly throughout elementary school, would greatly contribute to our understanding of the predictive pathway that these variables play on levels of engagement and academic achievement.

CHAPTER 3

Method

Participants

The pool of potential participants in this study was approximately 613 students from a rural school district in Michigan: 3rd (n=215), 4th (n=208) or 5th (n=190) grade. Projected community data from 2012 suggests a median income of $44,950, with 88.1 percent of residents having attained an educational level of high school graduate or higher (United States Census Bureau, 2010). The potential participants were drawn from two of the three elementary schools in the district that contained students in Kindergarten through 5th grade. The school district reported a fall 2013 enrollment of approximately 4,365 students, with 71.8% eligible for free or reduced lunch. Ethnicity groups from the participating students at the selected elementary school are based on Spring 2013 data from the Michigan Department of Education. According to the results, approximately 66% of students were identified as Caucasian/White, 24% as Black/African American, 5% as Hispanic, 2% as Asian, 2% as multi-race and 1% as American Indian (Center for Educational Performance and Information, 2013).

The final sample for the study included 354 participants. The proportion of students was fairly even across all three grades, with 33% of students indicating a current enrollment in the 3rd grade, 36% in the 4th grade and 31% in the 5th grade. Of the 354 participants, approximately 53% identified as female, while 47% identified as male. In terms of ethnicity, 62% of participants were identified as Caucasian/White, 26% as Black/African American, 3% as Hispanic, 2% as Asian/Pacific Islander and 7% as other. Approximately 46 students did not participate in the study due to parent/student decline or absence from school.

Measures

The instruments utilized in this study included a demographic form, the Teacher as a Social Context Questionnaire (Belmont, Skinner, Wellborn & Connell, 1992), the Engagement vs. Disaffection with Learning measure (Skinner et al., 2009), and the Parents as a Social Context Questionnaire (Skinner, Johnson & Snyder, 2005). In addition, previous and current student achievement data from the district database using Pearson's AIMSweb curriculum-based measurement system were obtained.

Demographic Form. A demographic form was utilized for this study. Students were asked to provide information regarding their age, grade, gender and name. Their responses were provided through forced choice, when appropriate.

Teacher-Student Relationships. The short form of the Teacher as Social Context Questionnaire (TASC-SF) (Belmont et al., 1992) was utilized to assess the teacher-student relationship quality from the students' perspective. The TASC examines three major dimensions of teacher context, as determined by Harter's (1981) motivational model, including *involvement*, *structure* and *autonomy support*. The TASC-SF consists of 24 total items, including 8 items for each of the three dimensions, to explore both positive and negative interactions between students and teachers. Each of the three dimensions are further broken down into four subscales for a total of 12 subscales (two items per subscale). *Involvement* includes levels of affection, attunement, dedication of resources and dependability. *Structure* is determined by offering clear expectations, consistent contingencies for behavior, and adequate help, all of which serve to enhance subsequent levels of student competence. This subscale is measured through levels of contingency, expectations, help/support and adjustment/monitoring. Finally, teacher *autonomy support* is expressed in allowing children the opportunity to engage in their learning activities, as

well as providing connections between instruction and student interests. *Autonomy support* is measured through student perceived levels of choice, control, respect and relevance. Examples of items include: "My teacher likes me" (*Affection*); "My teacher treats me fairly" (*Contingency*); "My teacher doesn't give me a chance to choose anything about my classwork" (*Choice*); "My teacher doesn't listen to my opinion" (*Respect*). Students were asked to rate all TASC-SF items based on how frequently they occur in their relationship with their teacher on a 4-point Likert Scale (1=Not at all true, 2=Not very true, 3=Sort of true, 4=Very true). The TASC-SF has been reported to be valid and reliable, based on reports from the TASC technical manual. Alpha coefficients for each of the 12 subscales were reported to range from .54 (*Attunement*) to .77 (*Respect*). Additionally, the reported alphas for each scale include the following: Teacher Involvement (α=.80), Teacher Provision of Structure (α=.76), and Teacher Provision of Autonomy Support (α=.79). To calculate TASC scores for the variables examining the negative aspects of teacher-student relationships (Negative Involvement, Negative Structure and Negative Autonomy Support), responses were reverse-coded. Overall scale scores are computed from averaging the scores of relevant items. The alpha coefficient for this scale was α= .90. Internal reliabilities for the subscales were calculated using Cronbach's alpha. The results were as follows: Involvement α = .84, Structure α = .70 and Autonomy Support α = .72.

Student Classroom Engagement. The Engagement vs. Disaffection with Learning, student report scale examines levels of academic engagement in the classroom setting (Skinner, Kindermann & Furrer, 2009). The measure is comprised of four major scales, including *Behavioral Engagement*, *Behavioral Disaffection*, *Emotional Engagement* and *Emotional Disaffection*, for a total of 20 items (five items per scale) to determine overall levels of student academic engagement. Items of *behavioral engagement* assess aspects of effort, attention and

persistence in learning activities (i.e. "I try hard to do well in school"; "When I'm in class, I listen very carefully"), while items for *behavioral disaffection* examine lack of effort and withdrawal from learning activities (i.e. "I don't try very hard in school"; "When I'm in class, I think about other things"). In contrast, items of *emotional engagement* explore levels of motivated involvement in learning activities (i.e. "Class is fun"; "When we work on something in class, I get involved"), while *emotional disaffection* taps into student emotions indicating motivated withdrawal or alienation during learning activities (i.e. "When I'm in class, I feel worried"; "Class is not all that fun for me") (Skinner et al., 2009). Students are asked to respond to items using a Likert-type scale, ranging from 1=Not At All True, to 4=Very True. In developing the measure, Skinner et al. (2009) assessed students across grades 3-6 in both the fall and spring of one school year. A reliability coefficient for the composite scale was $r = .92$ for the end of the school year, and the internal consistency reliabilities for the student report measures were found to be moderate to high at $r = .70$ or above (Behavioral Engagement $\alpha = .77$, Emotional Engagement $\alpha = .76$, Behavioral Disaffection $\alpha = .57$, Emotional Disaffection $\alpha = .66$). Internal consistency for the overall Engagement vs. Disaffection scale was reported as $\alpha = .86$. Test-retest reliability measures between the fall and spring measure of $r = .62$ indicated a moderately high level of stability. A modest degree of convergence was reported between the student and teacher reports in their ratings of engagement and disaffection, with an average of $r = .30$. When compared to other individual and environmental sources of motivation, Skinner et al. (2009) report that Pearson correlations indicated construct validity levels that were positively related to levels of engagement, including learning goals ($r = .66$), high levels of coercion among teachers ($r = -.70$) and mastery reactions ($r = .60$). To calculate the scores for the negative aspects of student engagement (Emotional Disaffection and Behavioral Disaffection), the responses were

reverse-coded. Cronbach's alpha values were computed for each of the subscales to determine their internal reliability for this study. The results were as follows: Behavioral Engagement α = .68, Emotional Engagement α = .79, Behavioral Disaffection α = .61 and Emotional Disaffection α = .79. Cronbach's alpha for the Student Engagement vs. Disaffection scale was determined to be α = .89.

Parents As Social Context Questionnaire. The Parents as Social Context Questionnaire (PASC), developed by Skinner et al. (2005), examines various aspects of one's parenting style and its subsequent impact on the overall quality of the parent-child relationship. The Child Report of Parenting Measure contains questions assessing six dimensions of parenting gathered from several decades of research on parenting style, including *warmth* versus *rejection*, *structure* versus *chaos* and *autonomy support* versus *coercion*. Aspects of *warmth* include expression of affection, love, appreciation and regard, emotional availability, support and genuine caring, while *rejection* includes hostility, aversion, over reactivity, and communicated negative feelings of criticism and disapproval. *Structure* encompasses maintaining clear expectations, firm maturity demands, predicable and consistent rules and provision of information about pathways to reach desired outcomes, while *chaos* includes inconsistent, erratic, arbitrary behavior and expectations, as well as interfering the pathway of a desired goal. Finally, *autonomy support* includes allowing children the freedom of expression/action and encouraging children to attend, accept and value the preferences and opinions of themselves and others, while *coercion* includes restrictive and intrusive over controlling, as well as demanding strict obedience from children. Skinner et al. (2005) cite that the PASC's theoretical framework is rooted in the Self-System Model of Motivational Development, which indicates that when parents interact with their children in ways that allow them to experience feelings of relatedness, competence and

autonomy, their children are able to engage more constructively with their parents and display more appropriate methods of socialization with key figures (i.e. teachers, peers). Prior to completing the PASC, students were asked to indicate with whom they primarily reside (i.e. mother, aunt, father, grandfather, etc.) and to respond to the questions about "mother" and "father" in regards to these relational figures. Although data examining the child's rating of their relationship with both their mother and father were reported separately, the two ratings were combined and averaged to create a parent scale across all six dimensions

The PASC contains a total of 48 items, 24 assessing the child's perspective of their relationship with their mother and 24 assessing the child's perspective of their relationship with their father. Skinner et al. (2005) indicate that additional caregivers (i.e. grandparents) can serve as a 'mother' or 'father' in the child's rating on the PASC. A total of four items are asked to assess each of the six domains. Examples of items include: "My mother thinks I'm special" (*Warmth*); "My father thinks I'm always in the way" (*Rejection*); "When I want to do something, my mother shows me how" (*Structure*); "My mother gets mad at me with no warning" (*Chaos*); "My father trusts me" (*Autonomy Support*); "My father says "no" to everything" (*Coercion*). All items are rated on a 4-point Likert scale, with 1=Not at all True to 4=Very True. Skinner et al. (2005) have assessed the measure on students across both the elementary and secondary level in both a derivation sample and several replication samples. Internal reliabilities for each of the six dimensions were reported to range from α= .78 (*Chaos*) to α= .88 (*Warmth*). In addition, correlations among the six dimensions were indicated as moderate to high in magnitude, ranging from r= .42 to .79. The three positive aspects of parenting (*warmth, structure, autonomy*) were cited as displaying the highest pattern of interrcorrelation, ranging from r= .71 to .79. Similar to the TASC, overall scale scores are computed from averaging the scores of relevant items. To

calculate the scores for the negative aspects of parent-child relationships (Coercion, Rejection and Chaos), the responses were reverse-coded. In this study, the alpha coefficient for the PASC was α = .93. Internal reliabilities were also calculated for each of the subscales in the PASC for this study and yielded the following results: Warmth α = .80, Rejection α = .75, Structure α = .78, Chaos α = .74, Autonomy Support α = .74 and Coercion α = .80. A summary of the internal consistencies for all of the study scales is reported in Table 2 below.

Table 2

Cronbach's Alpha Coefficients for Study Scales

	N of Items	Cronbach's α
Teacher as Social Context	24	.90
Total Involvement	8	.84
Total Structure	8	.70
Total Autonomy Support	8	.72
Student Engagement vs. Disaffection	20	.89
Behavioral Engagement	5	.68
Emotional Engagement	5	.79
Behavioral Disaffection	5	.61
Emotional Disaffection	5	.79
Parent as Social Context	48	.93
Warmth	8	.80
Rejection	8	.75
Structure	8	.78
Chaos	8	.74
Autonomy Support	8	.74
Coercion	8	.80

District Assessment Data. Reading and Math achievement data was gathered from the AIMSweb Curriculum-Based Measurement (CBM) system to serve as measures of previous and current student achievement. The AIMSweb CBM is an individually administered assessment that is conducted a minimum of three times by a classroom teacher. The assessments vary in

length, subject matter and duration, and span from Kindergarten through 12th grade. The AIMSweb CBM is administered in the fall, winter and spring terms of each school year. Reading achievement was assessed using the Reading-CBM (R-CBM), a measure of oral reading fluency skills with grade level text. Math achievement was examined using the Math - Computation (M-COMP) measure, which examines basic math calculation skills. Student performance on the R-CBM and M-COMP measures from the Spring 2013 served as District Reading and Math measures of Previous Academic Achievement. Student scores on the Winter 2014 benchmark measures of the R-CBM and M-COMP served as measures of current academic achievement.

Pearson provided an updated technical manual for the AIMSweb CBM measures in 2012. For the R-CBM measure, the median reliability was cited as *r*= .97, with strong long-term test-retest reliability around *r*= .94 and an interrater reliability of *r*= .99. The criterion validity of the R-CBM was estimated as approximately *r*=. 70 for grades 3-5, when compared to several state achievement assessments (i.e. North Carolina End of Grade Test; Illinois Standards Achievement Test). For the M-COMP measure, the median alternate-form reliability was noted to be *r*= .88. Criterion validity was determined with the Group Mathematics Assessment and Diagnostic Evaluation (G-MADE), and reportedly ranged from *r*= .73-.84 (Pearson Technical Manual, 2012).

Data Collection Procedures

Information regarding all procedures implemented and measures utilized in this study was submitted to the Human Investigations Committee at Wayne State University prior to data collection. Letters of support were be secured from the school district prior to the implementation of the study.

After the approval from the HIC, the parents of each student were mailed an information sheet at least two weeks before the data collection began. This sheet documented the purpose of the study, procedure, risks and benefits, as well as informed them of confidentiality. In addition, parents were provided with the contact information of the principal investigator to ask questions. A tear-off sheet was included as part of the information sheet to allow parents the option to refuse consent of their child's participation in this study.

In order to encourage student comfort and decrease the likelihood of potential interruptions during the recruitment and survey administration process, teacher classrooms served as the sole location for data collection for this study. Each teacher was notified of the procedures of the study prior to data collection. Their input was included as part of the process to ensure minimal interruptions to the students' instructional time. During the data collection process, the principal investigator visited each classroom on the assigned date and time to inform the students about the nature of the study. The classroom teacher was dismissed prior to discussion of the study. A script was utilized to explain the purpose and directions of the study to students. In addition, all students were provided with one leisure activity (i.e. word search puzzle) to perform independently, if they desire, after they have completed the designated questionnaires. Students who are indicated as not participating were identified and asked to engage in a quiet, independent activity (i.e. work on the independent activities; read a book, etc).

Students were reminded that their participation in the study was entirely voluntary and they were allowed to skip any items or terminate their participation in the research study at any time. It was also stated to students that their participation would not be relayed to their classroom teacher and would not impact their academic performance, relationship with the district staff, or interactions with this researcher in any way. The students were provided with a pencil as a small

reward (regardless of their participation) at the end of the research. Students who chose to participate in the study were asked to provide assent to the principal researcher prior to beginning the study. Students were asked to complete the demographic form before starting the survey packet. The questionnaires took approximately 20-30 minutes to answer and were completed in one single session. The principal investigator collected all of the forms at the end of each session and answered any remaining questions by the students.

To ensure participant confidentiality, all student forms were number coded. The students' participation numbers were created by taking the last four digits of the students' identification number and combining it with a unique code developed by the principal investigator. Once the students' responses from their surveys were recorded by the principal investigator, the unique code names and tear-off sheets were delivered to a district employee, who recorded the students' AIMSweb scores onto a separate database located on a password protected flash drive. The district employee was instructed to record only the unique code names and the students' scores on the AIMSweb Spring 2013 and Winter 2014 assessments. Once this data was complete, the district employee shred the student tear off sheets containing their unique code name and first and last names. The electronic database was destroyed at the time of acceptance by the research committee.

Data Analysis Procedures

Student data was collected and entered into a computer database. Please see Table 3 for a list of the research questions and corresponding statistical methods.

Table 3

Research Questions, Hypotheses, and Statistical Analyses

Research Questions and Hypotheses	Variables	Statistical Analysis
Research Question 1: Are both teacher-student relationships and parent-child relationships related to academic engagement in school?		
H_1: Both teacher-student relationships and parent-child relationships will predict academic engagement in school.	Criterion Variable: Academic Achievement Predictor Variables: Teacher-Student Relationship Parent-Child Relationship Mediating Variable: Behavioral and Emotional Engagement	Hierarchical Regression Analysis
Research Question 2: What is the role of previous academic achievement and academic engagement in current academic achievement?		
H_2: Previous academic achievement and academic engagement will predict current academic achievement.	Criterion Variable: Academic Achievement Predictor Variables: Previous Academic Achievement Behavioral and Emotional Engagement	Hierarchical Regression Analysis
Research Question 3: After controlling for previous academic achievement, are the two relational supports (parent-child relationships and teacher-student relationships) related to academic achievement, as mediated by academic engagement?		
H_3: Both parent-child relationships and teacher-student relationships will be related to academic achievement, as mediated by academic engagement.	Criterion Variable: Previous Achievement Predictor Variables: Teacher-student relationship Parent-child relationship Mediating Variable: Behavioral and Emotional Engagement	SEM

CHAPTER 4

Results

This chapter details the results of the statistical analyses that were conducted to explore each of the four outlined research questions from this study. The present study aimed to analyze whether a correlation exists between academic achievement and levels of relational support (parent-child, teacher-student), academic engagement and previous student achievement. Inferential statistics were used to test the research questions. A criterion alpha level of .05 was used to determine statistical significance.

Preliminary Analyses

Participants' previous achievement data was collected using their scores from the district's Spring AIMSweb Oral Reading Fluency and Math Computation Curriculum-Based Measurements from the 2012-2013 school year. Preliminary data analyses revealed missing data for both AIMSweb spring measures in Oral Reading Fluency and Math Computation (District Reading Measure missing, n = 58, 16.4%; District Math Measure missing, n = 65, 18.4%). Missing data for achievement scores was addressed using the Multiple Imputation procedures in SPSS. The Multiple Imputation procedures provide an analysis of patterns of missing data and allow for the creation of multiple versions of the data set that contain their own set of imputed values (IBM Software Group, 2011). Statistical analyses using this data were either gleaned from the pooled dataset or averaged across all five versions of the data set. Table 4 provides descriptive information in regards to previous achievement scores.

Table 4

Descriptive Statistics of Academic Achievement Scores (N=354)

	N	*M*	*SD*	Minimum	Maximum
Previous Academic Achievement					
District Reading Assessment	354	119.66	39.41	12.00	260.00
District Math Assessment	354	45.88	16.79	2.00	94.46
Current Academic Achievement					
District Reading Assessment	354	120.02	39.69	7	228
District Math Assessment	354	37.62	16.69	0	73

Note: District Reading Assessment includes scores from the Spring 2013 and Winter 2013 measures of the AIMSweb Oral Reading Fluency assessment. District Math Assessment includes scores from the Spring 2013 and Winter 2013 measures of the AIMSweb Math Computation assessment.

Students' current achievement was assessed using students' scores on the district's Winter AIMSweb Oral Reading Fluency and Math Computation Curriculum-Based Measurements from the 2013-2014 school year. Similar to the Previous Achievement Scores, missing data was indicated across both the AIMSweb Winter Oral Reading Fluency and Math Computation measures (District Reading Assessment missing n=18, 5.1%; District Math Assessment n=11, 3.1%). As a result, Multiple Imputation procedures were also used to address these missing values.

Variables addressing parent-child relationships, teacher-student relationships and classroom engagement (see Table 5) were also used in this study. Pearson correlations for the study variables are provided in Table 6. Significant correlations were found across all areas of the parent-child relationship (autonomy, coercion, structure, chaos, warmth and rejection), the teacher-student relationship (involvement, structure and autonomy support) and academic engagement (behavioral engagement, emotional engagement, behavioral disaffection and emotional disaffection) at p<.01. Measures of previous reading achievement (AIMSweb Oral Reading Fluency Spring 2013), previous math achievement (AIMSweb Math Computation

Spring 2013) and current reading achievement (AIMSweb Oral Reading Fluency Winter 2013) were only found to be significantly correlated with rejection (a measure of the parent-child relationship) and behavioral disaffection (a measure of academic engagement) at $p<.01$ and $p<.05$. In contrast, current math achievement (AIMSweb Math Computation Winter 2013) was found to be significantly correlated with all areas of the parent-child relationship, teacher-student relationship, academic engagement and subsequent measures of achievement, with the exception of warmth (a measure of the parent-child relationship).

Table 5

Descriptive Statistics of Parent-Child Relationship, Teacher-Student Relationship, and Student Engagement

	N	*M*	*SD*	Minimum	Maximum
Parent-Child Relationship					
Autonomy	316	3.50	0.47	1.63	4.00
Coercion	320	3.02	0.66	1.00	4.00
Structure	315	3.41	0.54	1.75	4.00
Chaos	328	3.03	0.62	1.13	4.00
Warmth	330	3.82	0.35	2.25	4.00
Rejection	328	3.39	0.58	1.50	4.00
Teacher-Student Relationship					
Teacher Involvement	332	3.36	0.62	1.13	4.00
Provision of Structure	330	3.38	0.53	1.13	4.00
Autonomy	327	3.49	0.58	1.38	4.00
Student Engagement					
Behavioral Engagement	336	3.66	0.40	1.60	4.00
Emotional Engagement	337	2.04	0.61	1.00	3.80
Behavioral Disaffection	337	2.96	0.61	1.20	4.00
Emotional Disaffection	339	3.01	0.78	1.00	4.00

Table 6

Pearson Correlations for Study Scales

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Autonomy																	
2. Coercion	.54**																
3. Structure	.65**	.46**															
4. Chaos	.51**	.70**	.47**														
5. Warmth	.63**	.42**	.59**	.38**													
6. Rejection	.57**	.62**	.43**	.66**	.49**												
7. Involvement	.28**	.20**	.32**	.32**	.35**	.26**											
8. Structure	.24**	.20**	.28**	.36**	.27**	.34**	.76**										
9. Autonomy	.26**	.29**	.30**	.36**	.27**	.30**	.74**	.73**									
10. Bh. Eng.	.34**	.34**	.36**	.35**	.19**	.26**	.46**	.40**	.45**								
11. E.Eng.	.30**	.22**	.37**	.27**	.31**	.20**	.59**	.55**	.54**	.57**							
12. B. Disaf.	.30**	.34**	.29**	.37**	.20**	.34**	.40**	.38**	.44**	.47**	.45**						
13. E. Disaf.	.31**	.37**	.29**	.38**	.25**	.33**	.60**	.57**	.62**	.49**	.68**	.62**					
14. Prev. Read.	.01	.01	-.03	.09	-.01	.20**	.01	.12*	-.01	-.04	-.01	.15**	.10				
15. Prev. Math	.03	.08	-.05	.06	-.06	.19**	-.10	-.01	-.06	-.02	-.04	.14*	.04	.43**			
16. Curr. Read.	.10	.05	.03	.09	.10	.25**	.04	.13*	.01	.01	-.01	.19**	.11	.91**	.47**		
17. Curr. Math	.12*	.22**	.14*	.15**	.07	.18**	.14*	.15**	.20**	.14*	.14**	.28**	.30**	.25**	.30**	.32**	

Note. **p*<.05; ***p*<.01. Above abbreviations are as follows: 9. Autonomy Support. 10. Behavioral Engagement. 11. Emotional Engagement. 12. Behavioral Disaffection. 13. Emotional Disaffection. 14. Previous Reading Achievement. 15. Previous Math Achievement. 16. Current Reading Achievement. 17. Current Math Achievement.

To examine the gender and grade differences in perceived student engagement, a 2X3 MANOVA was conducted (Table 7). The equality of covariance matrices was supported at $p>.05$.

Table 7

Multivariate Analysis of Variance: Dependent Variables by Grade and Gender

Source	Pillai's Trace	*F* Ratio	*DF*	η^2
Grade	.05	2.07*	8/640	.03
Gender	.03	2.64*	4/319	.03
Gender x Grade	.02	.70	8/640	.01

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

The results of the main effects of grade, F (8, 640) = 2.07, $p < .05$, $\eta^2 = .03$ and gender, F (4, 319) = 2.64, $p <.05$, $\eta^2 = .03$, were both found to be statistically significant. The effect sizes for grade and gender were small. The interaction effect between grade and gender was not found to be statistically significant, F (8, 640) = .70, $p > .05$, $\eta^2 = .01$. To determine which of the dependent variables were contributing to the statistically significant main effects of gender and grade, the between subjects analyses were obtained. Table 8 presents results of this analysis.

Significant grade differences were found in three of the engagement scores: for Behavioral Engagement, F (2, 322) = 4.44, $p < .05$, $\eta^2 = .03$; for Emotional Engagement, F (2, 322) = 3.35, $p < .05$, $\eta^2 = .02$; for Behavioral Disaffection, F (2, 322) = 4.07, $p < .05$, $\eta^2 = .02$. No gender difference was found for Emotional Disaffection, F (2, 322) = 2.94, $p > .05$, $\eta^2 = .02$. The post hoc analyses indicated that fifth grade students (M=3.57, SD=.42) reported lower levels of Behavioral Engagement than third grade (M=3.71, SD=.38) and fourth grade students (M=3.70, SD=.37). Similarly, fifth grade students (M=3.15, SD=.72) reported lower levels of Emotional

Engagement than third grade (M=3.37, SD=.67) and fourth grade students (M=3.37, SD=.66). Results for Behavioral Disaffection indicate significantly lower levels between fifth grade students (M=2.87, SD=.64) and fourth grade students (M=3.09, SD=.55), while fourth grade students had a significantly lower levels than third grade students (M=2.94, SD=.62). In terms of Emotional Disaffection, fifth grade students (M=2.85, SD=.77) reported lower levels than fourth grade students (M=3.10, SD=.79). Levels of Emotional Disaffection for third grade students (M=3.06, SD=.79) did not significantly differ from levels for fourth or fifth grade students. Significant gender differences were only found in levels of Behavioral Disaffection, where males (M=2.89, SD=.05) had lower levels than females (M=3.03, SD=.05).

The significant grade differences for the students were found for Behavioral Engagement, $F(2, 322) = 4.44$, $p < .05$, $\eta^2 = .03$, for Emotional Engagement $F(2, 322) = 3.35$, $p < .05$, $\eta^2 = .02$, and for Behavioral Disaffection $F(2, 322) = 4.06$, $p < .05$, $\eta^2 = .03$]. Fifth graders reported lower scores on the Behavioral Engagement (average of -0.15 from third graders and -0.14 from fourth graders), Emotional Engagement scales (average of -0.22 from third and fourth graders) and on the Behavioral Disaffection scale (average of -0.07 from third and -0.22 from fourth). Results are provided in Table 8 below.

Table 8

Gender and Grade Differences in Academic Engagement: Means and SD

	Gender				Grade					
	Male		Female		3		4		5	
	M	SD	M	SD	M	SD	M	SD	M	SD
B. Engagement	3.65	.40	3.67	.40	3.71_{a}	.38	3.70_{b}	.37	3.57_{ab}	.42
B. Disaffection	2.89_{a}	.60	3.03_{a}	.61	2.94_{a}	.62	3.09_{ab}	.55	2.87_{b}	.64
E. Engagement	3.23	.75	3.35	.62	3.37_{a}	.67	3.37_{b}	.66	3.15_{ab}	.72
E. Disaffection	2.99	.82	3.02	.77	3.06	.79	3.10_{a}	.79	2.85_{a}	.77

Note: The same subscripts indicate a significant difference at $p < .01$, except a significant difference between 4th and 5th in Behavioral Disaffection ($p < .05$).

Research Question 1. Are both teacher-student relationships and parent-child relationships related to academic engagement in school?

Hypothesis 1. Both teacher-student relationships and parent-child relationships will be related to academic engagement in school.

A hierarchical regression analysis was used to test whether teacher-student relationships and parent-child relationships significantly predicted academic engagement in school. All four aspects of academic engagement were explored in separate hierarchical regression analyses, including Behavioral Engagement, Emotional Engagement, Behavioral Disaffection and Emotional Disaffection. As reported in Table 6, both parent child relationship and teacher student relationship were significantly associated with engagement scores, with their correlation coefficient ranging from .20 to .62. Given a wealth of data supporting the importance of parent-child relationships, the six dimensions of the parent-child relationship (Autonomy, Coercion, Structure, Chaos, Warmth and Rejection) were entered first as predictors. Next, the three dimensions of the teacher-student relationship (Autonomy, Structure and Involvement) were entered as predictors.

The results for Behavioral Engagement indicate that the six dimensions of the parent-child relationship explains approximately 19% of the variance, F (6,255) = 11.09, p<.01. When the three dimensions of the teacher-student relationship were added to the model, it explained an additional 15% of the variance, F (9,252) = 15.38, p<.01, R^2_{adj} = .33. The parent-child variables of Structure (β =.15, p < .01) and Autonomy (β = .20, p < .05) were found to significantly contribute to the model, whereas the teacher-student variable of Involvement (β = .37, p < .01) was the only significant predictor.

For Emotional Engagement, the parent-child relationship explains approximately 14% of the variance, F (6,256) = 7.86, p<.01, while the teacher-student relationship variables explains an additional 27% of the variance, F (9,253) = 20.87, p<.01, R^2_{adj} = .41. In this model, the parent-child variable of Structure (β =.26, p < .01) and the teacher-student variables of Involvement (β =.31, p < .01) and Structure (β =.23, p < .01) were found to significantly contribute to the model.

For Behavioral Disaffection, the parent-child relationship explained approximately 14% of the variance, F (6,256) = 8.10, p<.01, while the teacher-student relationship explained an additional 10% of the variance, F (9,253) = 9.90, p<.01, R^2_{adj} = .23. For this model, only the teacher-student relationship dimension of Involvement (β =.22, p < .05) was found to significantly contribute to the model. No parent-child relational dimensions were reported as statistically significant.

For Emotional Disaffection, the parent-child relationship explained approximately 16% of the variance, F (6,257) = 9.01, p<.01, while the teacher-student relationship variables explained an additional 31% of the variance, F (9,254) = 26.65, p<.01, R^2_{adj} = .47). The teacher-student relationship dimensions of Involvement (β =.32, p < .01) and Autonomy (β =.20, p < .05) were found to significantly contribute to the model. No parent-child dimensions were reported as

statistically significant. Based on these results, hypothesis 1 was partially supported, as the teacher-student relationship was found to have a significant contribution to academic engagement. A summary of the results is included in Table 9.

Table 9

Hierarchical Linear Regression Analysis

Summary of Hierarchical Regression Analysis for Variables predicting Academic Engagement

Predictor	β	Adjusted R^2	ΔR^2	*F*
Behavioral Engagement				
Step 1. Parent-Child Relationship		.19		11.09**
Warmth	-.13			
Rejection	-.03			
Structure	.15**			
Chaos	.07			
Autonomy	.20*			
Coercion	.14			
Step 2. Teacher-Student Relationship		.33	.15	15.38**
Involvement	.37**			
Structure	-.03			
Autonomy	.09			
Emotional Engagement				
Step 1. Parent-Child Relationship		.14		7.86**
Warmth	.09			
Rejection	-.02			
Structure	.26**			
Chaos	.09			
Autonomy	.07			
Coercion	-.01			
Step 2. Teacher-Student Relationship		.41	.27	20.87**
Involvement	.31**			
Structure	.23**			
Autonomy	.07			
Behavioral Disaffection				
Step 1. Parent-Child Relationship		.14		8.10**
Warmth	-.03			
Rejection	.11			
Structure	.11			
Chaos	.15			
Autonomy	.06			
Coercion	.09			
Step 2. Teacher-Student Relationship		.23	.10	9.90**
Involvement	.22*			
Structure	-.01			
Autonomy	.15			

Emotional Disaffection				
Step 1. Parent-Child Relationship		.16		9.01**
Warmth	.02			
Rejection	.07			
Structure	.07			
Chaos	.16			
Autonomy	.06			
Coercion	.15			
Step 2. Teacher-Student Relationship		.47	.31	26.65**
Involvement	.32**			
Structure	.14			
Autonomy	.20*			

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

Research Question 2. What is the role of previous academic achievement and academic engagement in current academic achievement?

Hypothesis 2. Previous academic achievement and academic engagement will be associated with current academic achievement.

Hierarchical Regression Analysis was also used to test the role of previous academic achievement and academic engagement with current academic achievement. Two separate analyses were conducted to examine the reading and math achievement. The current academic achievement (AIMSweb Reading Winter Score (ARWS) for reading achievement or AIMSweb Math Winter Score (AMWS) for math achievement) was entered as an independent variable. Previous academic achievement (AIMSweb Reading Spring Score (ARSS) for reading achievement or AIMSweb Math Spring Score (AMSS) for math achievement) was entered in the first step, while the four dimensions of academic engagement were entered as predictor variables in step 2.

For current reading achievement, the results indicated that previous reading achievement explains approximately 82% of the variance, $R^2_{adj} = .82$, F (1, 265) = 1200.21, $p<.01$. The addition of academic engagement explained no additional variance. Previous reading

achievement (ARSS) was the only predictor variable found to significantly contribute to the model (β =.91, p < .00).

Results for current math achievement reveal that previous math achievement explains 8% of the variance, F (1, 265) = 25.09, p<.01, while the addition of academic engagement explains additional 8% of the variance (R^2_{adj} = .16, F (1, 265) = 11.15, p<.01). Predictor variables found to significantly contribute to the model include previous math achievement (β =.30, p < .01) and Emotional Disaffection (β =.34, p < .01).

Based on theses results, it appears that previous academic achievement in both reading and math is significantly associated with current academic achievement. However, academic engagement does not appear to make a significant contribution to current academic achievement for reading achievement. When considering math achievement, Emotional Disaffection is the only dimension of academic engagement to have a significant correlation with current academic achievement. As a result, hypothesis 2 appears to be false. A summary of the results is provided in Table 10 below.

Table 10

Summary of Hierarchical Regression Analysis for Student Engagement predicting Current Academic Achievement

Predictor	β	Adjusted R^2	ΔR^2	*F*
Predicting Current Reading				
Step 1.ARSS	.91**	.82		1200.21**
Step 2.		.82	.00	240.60**
Behavioral Engagement	.04			
Emotional Engagement	-.05			
Behavioral Disaffection	.03			
Emotional Disaffection	.00			
Predicting Current Math				
Step 1. AMSS	.30**	.08		25.09**
Step 2.		.16	.08	11.15**
Behavioral Engagement	.06			
Emotional Engagement	-.08			
Behavioral Disaffection	-.03			
Emotional Disaffection	.34**			

*$p < .05$; **$p < .01$. ARSS=AIMSweb Reading Spring Score; AMSS=AIMSweb Math Spring Score.

Research Question 3: After controlling for previous academic achievement, are the two relational supports (parent-child relationships and teacher-student relationships) related to academic achievement, as mediated by academic engagement?

Hypothesis 3. Both parent-child relationships and teacher-student relationships will be related to academic achievement, as mediated by academic engagement.

Structural Equation Modeling (SEM) was used to address this question. SEM is thought to be an appropriate tool to measure latent variables, where the construct has a causal influence on the observed variables. In contrast to MANOVA, SEM methods have been found to provide error-free measures of the latent variables of teacher-student relationships, parent-child relationships and student engagement through the elimination of the random error measurement for the observed variables associated with latent variables (Dimitrov, 2006). Additional advantages include flexibility of assumptions in cases of non-normal data, freedom to create

comprehensive models using multiple mediators/moderators and the ability to compare model fit across groups of subjects.

A measurement model was developed to display the proposed interactions between the latent variables parent-child relationship, teacher-student relationship, academic engagement and the observed variable of student current and previous academic achievement. The sample size (*N=354*) was adequate for this analysis. The AMOS 19 Maximum Method of Estimation was used to evaluate the model. Model fit was determined by entering to the initial conceptualization in Figure 1 (See page 8). The resulting model and corresponding path coefficients are shown in Figure 2.

Figure 2.

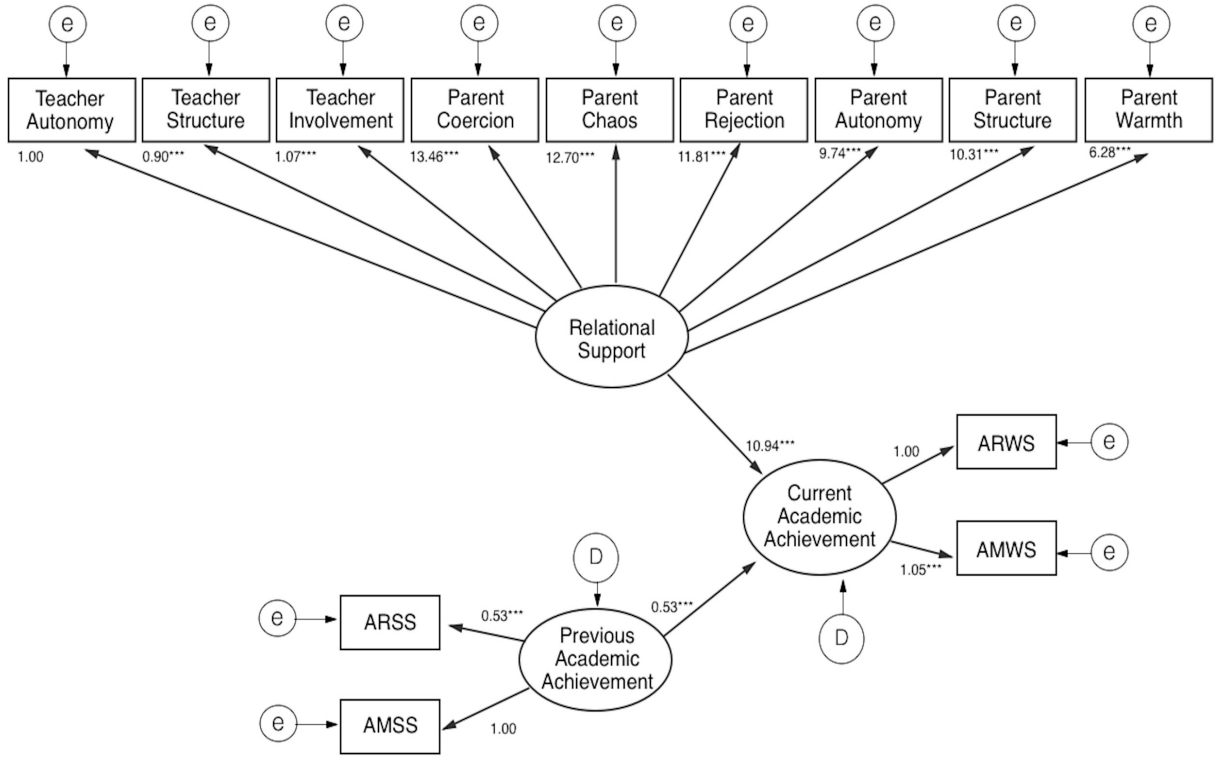


Figure 2. Potential model for the interactions of teacher-student relationships, parent-child relationships, classroom engagement, and student achievement. Latent constructs are shown in ellipses and observed variables are shown in rectangles. *$p < .05$. ** $p < .01$. ***$p < .001$.

Goodness-of-Fit indices for this model were viewed as poor, with a Comparative Fit Index *(CFI)* of .67. The Root Mean Square Error of Approximation *(RMSEA)* was also poor, with a value of 0.18. Tests of model deviance using Relative Chi-square *(CMIN/df)* indicated a significant effect, $\chi^2(61) = 71.95$, $p < .001$. However, it is notable that this metric is often found to be significant when sample sizes are over 200 (Garson, 1984).

Regression weights were indicated across each of the pathways in Figure 2. The majority of the parings were significant at $p < .001$. It is noteworthy, though, that the pathway between previous academic achievement and the AIMSweb math spring score (AMSS) and the pathway between current academic achievement and the AIMSweb reading winter score (ARWS) were non-significant. Because of the poor fit of the proposed model, an alternative model was also tested (Figure 3)

Figure 3.

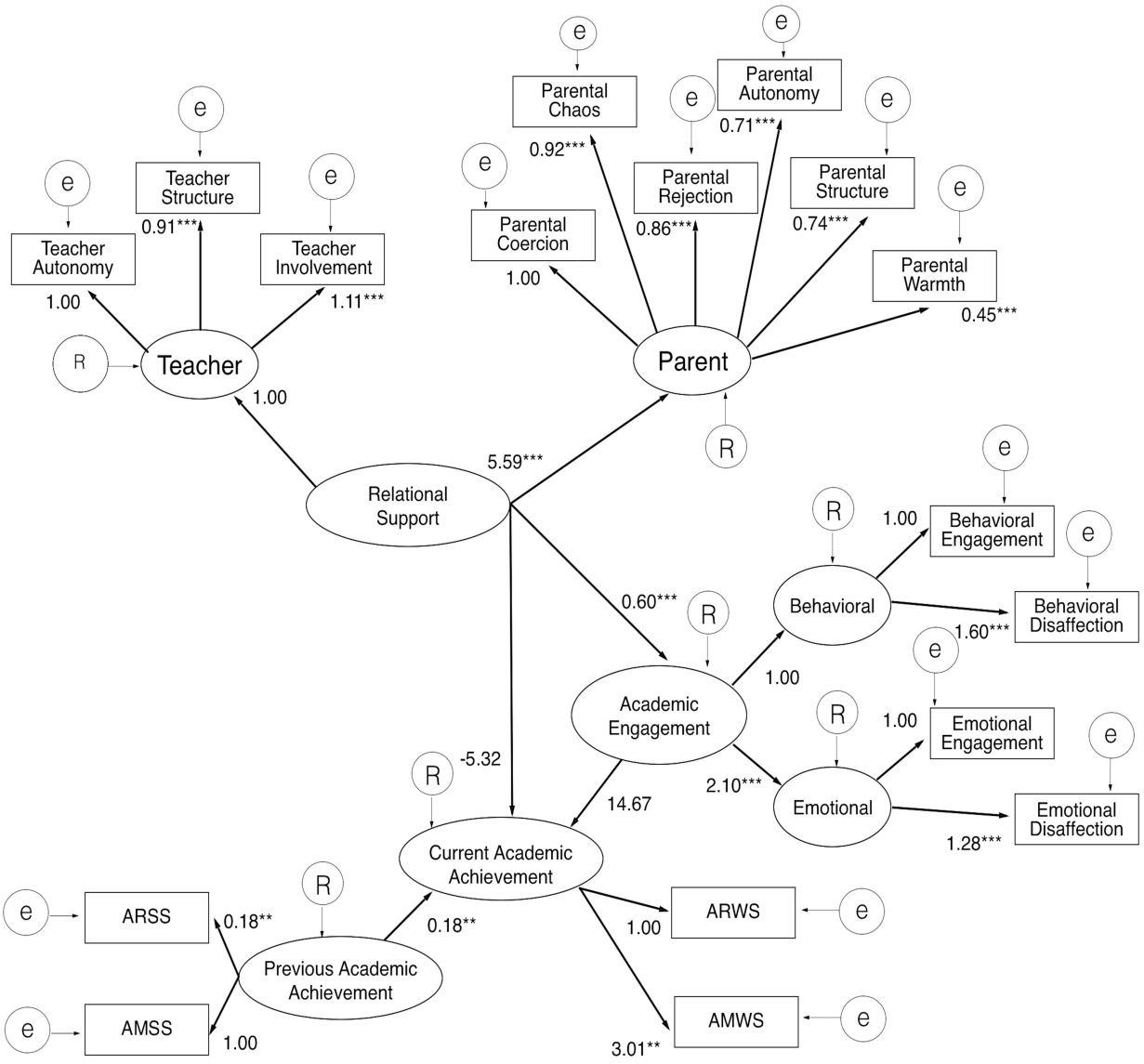


Figure 3. Confirmed model for the interactions of teacher-student relationships, parent-child relationships, classroom engagement, and student achievement. Latent constructs are shown in ellipses and observed variables are shown in rectangles. *$p < .05$. ** $p < .01$. ***$p < .001$.

Goodness-of-Fit indices for this model were viewed as poor, with a Comparative Fit Index *(CFI)* of .872. However, the overall model fit for this version was significantly improved from the model proposed in Figure 2. The Root Mean Square Error of Approximation *(RMSEA)* was also poor, with a value of 0.101. Tests of model deviance using Relative Chi-square *(CMIN/df)* indicated a significant effect, $\chi^2(109) = 22.51$, $p < .001$. Standard regression weights

associated with the model are indicated in Figure 3. The majority of pathways were found to be significant at $p < .01$ or $p < .001$.

Based on the models proposed in Figure 2 and 3, it appears that the proposed hypothesis that both the parent-child relationship and teacher-student relationship would be related to current academic achievement via a mediational effect of academic engagement was not supported in the current sample.

CHAPTER 5

Discussion

The purpose of this study was to explore academic engagement and academic achievement among elementary-aged students and examine the role of students' relationships with teachers and parents in academic engagement. This chapter presents the results of the analyses for the three proposed research questions.

The first research question examined whether teacher-student relationships and parent-child relationships were related to academic engagement in school. Based on previous literature investigating the impact of relational support on academic engagement, it was anticipated that both teacher-student relationships and parent-child relationships would have a significant association on levels of academic engagement. Results from the hierarchical regression analysis indicated that both teacher-student relationships and parent-child relationships predicted all four dimensions of academic engagement. More importantly, a different set of relationship dimensions were associated with academic engagement.

In the context of parent-child relationships, both structure and autonomy were found to make a significant contribution to levels of behavioral engagement. Interestingly, the dimension of structure was the only parent-child relationship aspect significantly associated with students' emotional engagement. Although the overall construct of the parent-child relationship significantly explained some of the variance in levels of behavioral and emotional disaffection, no specific dimensions were found to have an independent level of significance. These findings are consistent with current research, which suggest that the parent-child relationship is correlated with overall student engagement (Skinner, Johnson & Snyder, 2005; Martin, Marsh, McInerney, Green, & Dowson, 2007) and most strongly correlated with behavioral engagement (Furrer &

Skinner, 2003; Estelle & Purdue, 2013). However, it is surprising that the parent-child relationship dimension of warmth was not significantly correlated with academic engagement and, similarly, that autonomy was only correlated with behavioral engagement, as current literature asserts that all three aspects of the parent-child relationship are important to student academic engagement (Grolnick & Ryan, 1989; Skinner, Wellborn, & Connell, 1990; Skinner & Belmont, 1993; Skinner, Zimmer-Gembeck, & Connell, 1998; Skinner, Johnson & Snyder, 2005). A second unexpected finding regarding the parent-child relationship was its sole influence on levels of behavioral and emotional engagement over that of disaffection. Intuitively, it seems that if parents have an influence on whether or not their child is engaged in school, they should subsequently influence their child's lack of engagement, or disaffection, as well. This finding is contrary to existing literature, which suggests that the parent-child relationship has a significant contribution to both engagement and disaffection in school (Skinner, Johnson & Snyder, 2005).

In the context of teacher-student relationships, the aspect of involvement was a significant predictor of all four dimensions of academic engagement (Behavioral Engagement, Emotional Engagement, Behavioral Disaffection and Emotional Disaffection). Additionally, the teacher-student relationship dimension of structure was found to have a significant association with levels of emotional engagement, while the dimension of autonomy was a significant predictor of emotional disaffection.

Research has long pointed to the importance of a strong relationship with both parents and teachers and its impact on academic outcomes (Connell & Wellborn, 1991; Lynch & Cicchetti, 1992; Wentzel, 1998). However, this finding provides a unique perspective on the role of teachers in the development of levels of student academic engagement. Current research presents mixed findings on the specific influence of teacher-student support, ranging from

having the greatest influence on students' level of emotional engagement (Furrer & Skinner, 2003) or behavioral engagement (Estelle & Perdue, 2013) to presenting a significant impact on both (Skinner & Belmont, 2003; Martin et al., 2007; Skinner et al., 2008). As discussed above, the parent-child relationship plays a significant role in levels of student behavioral and emotional engagement. After the contribution of parent-child relationships was considered, teacher involvement emerged as a significant predictor of student engagement and disengagement. Findings from the present study highlight the importance of teacher involvement in classroom engagement. Beyond that of the parent-child relationship contribution, teacher involvement serves as an independent contributor to student emotional and behavioral engagement, as well as emotional and behavioral disaffection. The majority of literature on student engagement has examined the influence of the parent-child relationship and teacher-student relationship on emotional and behavioral engagement separately from one another. Of the current research that has examined both the contributions of parents and teachers to student engagement, this is the first study to provide direct evidence that the teacher-student relationship impacts engagement and disaffection beyond what the parent-child relationship contributes. In addition, this study is the first to report on the comprehensive nature of teacher involvement across levels of both student engagement and disaffection. Unlike the parent-child relationship, which was found to only influence student behavioral and emotional engagement outcomes, teacher involvement can influence whether their students are engaged in the classrooms, or whether they are behaviorally or emotionally disengaged with school.

Research question two examined the role that previous academic achievement and academic engagement had in current levels of academic achievement. It was hypothesized that previous academic achievement and academic engagement would be associated with current

academic achievement. Levels of previous and current academic achievement were both measured using students' performance on standardized district assessments in reading and math. Results of the study suggest that, while previous academic achievement appears to be significantly associated with current academic achievement, overall academic engagement does not have a significant correlation to levels of current academic achievement. When examining the four individual dimensions of academic engagement, Emotional Disaffection was the only dimension to have a significant correlation to levels of current academic achievement in both reading and math.

Intuitively, it makes sense that previous academic achievement would be significantly correlated with levels of current academic achievement. However, the finding that academic engagement was not significantly correlated with current academic achievement is inconsistent with the existing literature (Connell, Spencer & Aber, 1994; Marks, 2000; Furrer & Skinner, 2003). It may be that the measures used in this study to assess math and reading achievement were not adequate predictors of current achievement. Although the AIMSweb measures have been found to display high validity and reliability, it is important to remember that they are curriculum-based measurements, which serve as a time-limited sample of a student's performance (Pearson Technical Manual, 2012). As a result, they may not consistently be a true indicator of a student's current level of achievement and can be subject to variability based on student motivation (i.e. mood, level of interest) and the quality of the testing environment (i.e. free of distractions, administrator training).

Research question three explored whether parent-child and teacher-student relationships were related to academic achievement, as mediated by academic engagement. Previous academic achievement was controlled for in this analysis. Results of SEM did not provide a strong support

for the mediational model, due to lack of relationship between engagement and academic achievement. The mediation pathway of engagement has been proposed as a likely mechanism for the relationship between factors of relatedness (parent-child/teacher-student relationships) and academic achievement (Furrer & Skinner, 2003). Similar to the findings in question 1, the present mediation model proposed in question 3 supported the notion that relational support is significantly correlated to levels of academic engagement. As the current literature base strongly supports the relationship between academic engagement and academic achievement, this lack of mediation may be a result of an inadequate measure of academic achievement, as discussed above.

Throughout this analysis, interesting findings were noted across gender and grade. In terms of gender, males displayed lower levels of Behavioral Disaffection than females. This finding is unique, as current research suggests that males and females are often consistent in their levels of academic engagement (Skinner et al., 2008). This may suggest that males are more likely to demonstrate behaviors of distraction, withdrawal, and passivity in the classroom than their female counterparts. However, this finding may be limited to upper-level elementary-aged students (grades 3-5).

An analysis of grade-related findings supports the current literature that, over time, students appear to gradually decrease in their levels of academic engagement (Roeser & Eccles, 1998; Gelbach, Brinkworth & Harris, 2012; Skinner et al., 2008). In the present study, students enrolled in the 5th grade indicated significantly lower levels of academic engagement across all four constructs from that of third or fourth grade students. Similarly, fourth grade students displayed lower levels of behavioral disaffection than third grade students.

Summary

The present study provides a unique contribution to research on the role of parent-child relationships, teacher-student relationships and academic engagement on levels of academic achievement among elementary-aged students. Both parent-child and teacher-student relationships were found to impact academic engagement. It was shown that parents have an influence on the development of emotional and behavioral engagement through the establishment of structure and autonomy support at home. This finding mirrors the plethora of research on positive parenting styles, where elements of high structure and autonomy best fit with an authoritative approach (Skinner, Johnson & Snyder, 2005). Students who share a relationship with their parents that include clear academic expectations, provision of resources/support, maintenance of a consistent schedule and an environment encouraging freedom of expression are often linked with behaviors of interest, motivation and confidence in the classroom, all critical in emotional and behavioral engagement (Steinberg, 1993; Steinburg et al., 1994; Fan & Williams, 2010).

Teacher-student relationships were found to make a unique contribution to academic engagement from that of the parent-child relationship. Unlike the parent-child relationship, it was shown that teachers who exhibit high levels of affection, sympathy, dependability and attention to students are more likely to influence the level of emotional and behavioral engagement they exhibit in school. Emotional engagement was also found to have an association with teachers who provide clear expectations, consistent responses, help and support and differentiation of teaching strategies, while emotional disaffection was shown to be influenced by levels of teacher demandingness, respect, choice and relevance. Similar to the research on parenting styles, it appears that teachers who display a relational style high in responsiveness and low in

demandingness fare the best outcomes for student academic engagement (Patrick et al., 2003; Jerome, Hamre & Pianta, 2009).

Overall, the findings from this study support the current literature regarding relational support and academic engagement. However, the influence of the teacher-student relationship appears to be an essential component of a child's interest and motivation in the classroom at the elementary level. Despite this, lack of association between engagement and academic achievement in this study dampens the above findings.

Limitations of the Study and Directions for Future Research

The present study explored the influence of parent-child and teacher-student relationships and academic engagement on academic achievement from the students' perspective. As a result, only one side of the relationship was examined. Without additional feedback from parents and teachers, it is unclear whether the students' perceptions of their relationships at home and school with these key social figures can be corroborated.

A second limitation concerns the use of curriculum-based measurements as the sole indicator of reading and math achievement. In the present study, only one measure of reading (Oral Reading Fluency) and math (Math Computation) were used to serve as an indictor of previous and current academic achievement. It is thought that these two measures did not provide a strong enough depiction of previous and current achievement, as they were not consistently correlated with the measures of relational support and engagement and likely inhibited the goodness-of-fit in the proposed mediation model. Existing literature examining the impact of engagement on levels of academic achievement most often use student grades, either via self-report or from student records, for reading and math as a measure of achievement (Furrer & Skinner, 2003; Skinner, Connell & Wellborn, 1990). Although the AIMSweb curriculum-

based measurements were found to have good validity and reliability (Pearson Technical Manual, 2012), additional measures regarding student performance outcomes may have enhanced the overall data on previous and current academic achievement for this study.

A third key limitation of this study is the nature of the sample assessed. Students in the current sample were predominately Caucasian and from a lower to middle class socio-economic status. Additionally, the present study only explored patterns of relatedness, engagement and academic achievement among elementary-aged students in grades 3-5. Researchers should bear this in mind, as these results may not accurately generalize to other populations or age groups.

Results of the present study provide several possibilities for future research. The proposed mediation model of engagement between parent-child and teacher-student relationships and academic achievement appears to be consistent with current research. If the previous and current academic achievement measures were expanded to include additional indicators of students' reading and math skills (i.e. Grade Point Average), the proposed model may find adequate support. If significant, the mediation model could be expanded to include other age groups (early elementary/adolescents), as well as explore more diverse populations in regards to socio-economic status and ethnicity. As peers can also serve as a key social figure alongside teachers and parents, would their relationship have a unique impact on academic engagement and achievement? If all three social figures contribute to academic engagement, is one more critical for the overall academic success for students?

Implications for Practitioners and Educators

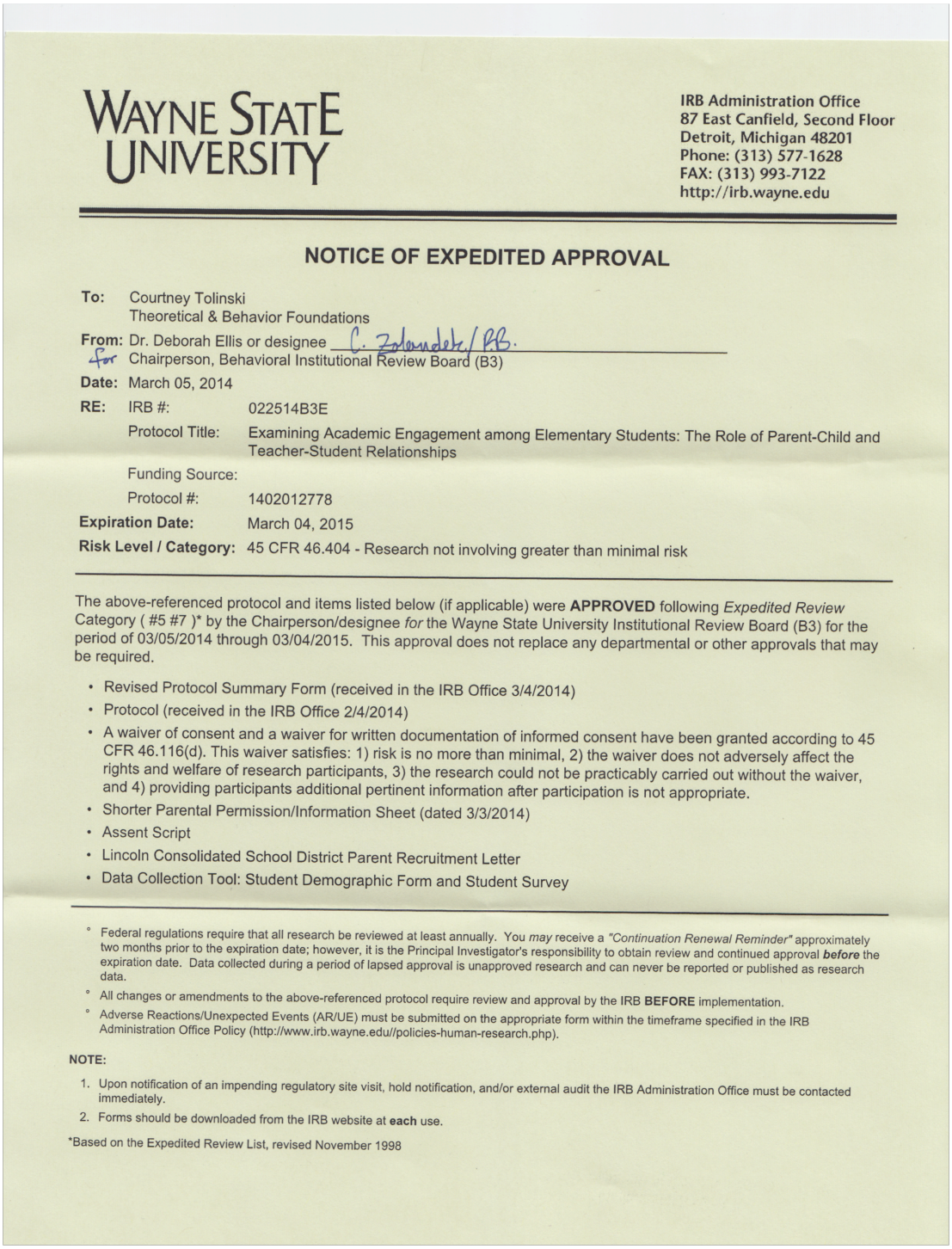
The enhancement of academic engagement is a critical topic in the field of education. With the growing rates of student dropout and gradual decrease in motivation and interest from the elementary level to the secondary level, it has become increasingly important to examine the

factors that influence academic engagement in order to successfully intervene. Although many are aware of the impact that a positive relationship with a parent or teacher can serve on a child, greater emphasis must be made on increasing the quality of these relationships. As we face the growing pressure to bridge achievement gaps among students and decrease the school drop out rates across the nation, educators and policy holders must look closer at where we are spending our efforts – shifting our focus away from a strong emphasis on standardized assessment and, instead, emphasizing the enhancement of the resources and quality of relational support that our schools and community are providing for our students.

As schools work towards the effort in developing student engagement, educators and parents must be provided with a better awareness of their role in student outcomes. With school psychologists often serving as leading members of academic and behavior intervention teams in the schools, their knowledge of the present research findings may aid in helping parents and teachers understand the importance of developing a positive relationship with students. However, direct training and support, including discussion of healthy communication styles and the creation of a structured, yet, warm home or classroom environment, must be provided to parents and teachers to help them attain the skills necessary to cultivate a supportive and attentive relationship with children. Support from outside mental health and community agencies may also aid in providing assistance to families to help address this issue. Overall, it is crucial that a collaborative effort is maintained with an emphasis on early intervention support in students' educational careers to decrease the risk of decline or dropout later on.

APPENDIX A

Human Investigation Committee Approval



WAYNE STATE UNIVERSITY

IRB Administration Office
87 East Canfield, Second Floor
Detroit, Michigan 48201
Phone: (313) 577-1628
FAX: (313) 993-7122
http://irb.wayne.edu

NOTICE OF EXPEDITED APPROVAL

To: Courtney Tolinski
Theoretical & Behavior Foundations

From: Dr. Deborah Ellis or designee C. Zolondek/BB.
for Chairperson, Behavioral Institutional Review Board (B3)

Date: March 05, 2014

RE: IRB #: 022514B3E

Protocol Title: Examining Academic Engagement among Elementary Students: The Role of Parent-Child and Teacher-Student Relationships

Funding Source:

Protocol #: 1402012778

Expiration Date: March 04, 2015

Risk Level / Category: 45 CFR 46.404 - Research not involving greater than minimal risk

The above-referenced protocol and items listed below (if applicable) were **APPROVED** following *Expedited Review* Category (#5 #7)* by the Chairperson/designee *for* the Wayne State University Institutional Review Board (B3) for the period of 03/05/2014 through 03/04/2015. This approval does not replace any departmental or other approvals that may be required.

- Revised Protocol Summary Form (received in the IRB Office 3/4/2014)
- Protocol (received in the IRB Office 2/4/2014)
- A waiver of consent and a waiver for written documentation of informed consent have been granted according to 45 CFR 46.116(d). This waiver satisfies: 1) risk is no more than minimal, 2) the waiver does not adversely affect the rights and welfare of research participants, 3) the research could not be practicably carried out without the waiver, and 4) providing participants additional pertinent information after participation is not appropriate.
- Shorter Parental Permission/Information Sheet (dated 3/3/2014)
- Assent Script
- Lincoln Consolidated School District Parent Recruitment Letter
- Data Collection Tool: Student Demographic Form and Student Survey

° Federal regulations require that all research be reviewed at least annually. You *may* receive a *"Continuation Renewal Reminder"* approximately two months prior to the expiration date; however, it is the Principal Investigator's responsibility to obtain review and continued approval ***before*** the expiration date. Data collected during a period of lapsed approval is unapproved research and can never be reported or published as research data.

° All changes or amendments to the above-referenced protocol require review and approval by the IRB **BEFORE** implementation.

° Adverse Reactions/Unexpected Events (AR/UE) must be submitted on the appropriate form within the timeframe specified in the IRB Administration Office Policy (http://www.irb.wayne.edu//policies-human-research.php).

NOTE:

1. Upon notification of an impending regulatory site visit, hold notification, and/or external audit the IRB Administration Office must be contacted immediately.
2. Forms should be downloaded from the IRB website at **each** use.

*Based on the Expedited Review List, revised November 1998

APPENDIX B

Letters of Support

Lincoln Consolidated School District
8970 Whittaker Road
Ypsilanti, MI 48197
Ph: (734) 484-7000 ♦ Fax: (734) 484-7014

January 10, 2014

Courtney Tolinski, M.A.
WSU College of Education
5424 Gullen Mall
Detroit, MI 48202

Dear Mrs. Tolinski,

I am writing this letter of support in regards to the dissertation study you described on the impact of the relationships that parents and teachers maintain with students and its effect on levels of academic engagement and achievement. With the growing rates of student drop out occurring across the nation, we understand that the exploration of how the relationships that parents and teachers have with students can make a significant impact on increasing levels of student engagement and motivation in school.

We understand that the study involves student surveys and requires access to student achievement data. In addition, we are aware that you will obtain approval for this research by the Human Investigations Committee at Wayne State University prior to any data collection and that you will abide by our district's procedures and requirements for conducting research with students.

We look forward to working with you in helping to make a significant impact to the scientific inquiry. Please let us know if we can be of further assistance.

Sincerely,

Lila Mitchell

Lila Mitchell
Principal
Bishop Elementary School
Lincoln Consolidated School District

Lincoln Consolidated School District
8970 Whittaker Road
Ypsilanti, MI 48197
Ph: (734) 484-7000 ♦ Fax: (734) 484-7014

January 13, 2014

Courtney Tolinski, M.A.
WSU College of Education
5424 Gullen Mall
Detroit, MI 48202

Dear Mrs. Tolinski,

I am writing this letter of support in regards to the dissertation study you described on the impact of the relationships that parents and teachers maintain with students and its effect on levels of academic engagement and achievement. With the growing rates of student drop out occurring across the nation, we understand that the exploration of how the relationships that parents and teachers have with students can make a significant impact on increasing levels of student engagement and motivation in school.

We understand that the study involves student surveys and requires access to student achievement data. In addition, we are aware that you will obtain approval for this research by the Human Investigations Committee at Wayne State University prior to any data collection and that you will abide by our district's procedures and requirements for conducting research with students.

We look forward to working with you in helping to make a significant impact to the scientific inquiry. Please let us know if we can be of further assistance.

Sincerely,

David Northrop

David Northrop
Principal
Brick Elementary School
Lincoln Consolidated School District

APPENDIX C

Parent Permission Form

Examining Academic Engagement among Elementary Students: The Role of Parent-Child and Teacher-Student Relationships

Shorter Parental Permission/Research Informed Consent/Information Sheet Template
Title of Study: *Examining Academic Engagement among Elementary Students: The Role of Parent-Child and Teacher-Student Relationships*
Researcher's Name: *Courtney Tolinski, M.A.*

Purpose:
You are being asked to allow your child to be in a research study at their school that is being conducted by Courtney Tolinski, a doctoral student from Wayne State University to examine how relationships between students and their parents and teachers can impact their motivation and achievement in school. Your child has been selected because he or she is enrolled in a 3rd, 4th or 5th grade classroom and has a relationship with his or her general education teacher.

Study Procedures:
If you decide to allow your child to take part in the study, your child will be asked to fill out a 30-minute survey about their relationship with their teacher and parents. They will also be asked about their interest in daily activities and their thoughts about their behavior in class. Students will have the option to discontinue their participation in the study at any time.

Once the survey is completed, no further information will be needed from your child. His or her semester grades and AIMSweb scores will be provided by the district. Copies of the survey are available for you to view in the main office. They may also be requested by contacting Mrs. Tolinski at the contact information below.

Benefits: There may be no direct benefits for your child; however, information from this study may benefit other people now or in the future.

Risks: There are no known risks at this time to your child for participation in this study.

Please note that the following information must be released or reported to the appropriate authorities if at any time during the study there is a concern that:

- Child abuse has occurred,
- There is concern that your child has intent to harm him/herself or others.

There may also be risks involved from taking part in this study that are not known to researchers at this time.

Costs: There are no costs to you or your child to participate in this study.

Compensation: You or your child will not be paid for taking part in this study.

Confidentiality: All information collected about your child during the course of this study will be kept confidential to the extent permitted by law.

- Your child will be identified in the research records by a code name or number. Information that identifies your child personally will not be released without your written permission.

Examining Academic Engagement among Elementary Students: The Role of Parent-Child and Teacher-Student Relationships

Voluntary Participation /Withdrawal:
Your child's participation in this study is voluntary. You are free to withdraw your child at any time. Your decision about enrolling your child in the study will not change any present or future relationships with Wayne State University or its affiliates, your child's school, your child's teacher, your child's grades or other services you or your child are entitled to receive.

Questions:
If you have any questions about this study now or in the future, you may contact Courtney Tolinski at the following phone number (734) 545-0103. If you have questions or concerns about your rights as a research participant, the Chair of the Institutional Review Board can be contacted at (313) 577-1628. If you are unable to contact the research staff, or if you want to talk to someone other than the research staff, you may also call (313) 577-1628 to ask questions or voice concerns or complaints.

Participation:
If you do not contact the principal investigator (PI) within a 2-week period to state that you do not give permission for your child to be enrolled in the research trial, your child will be enrolled into the research. You may contact the PI by email (ctolinski@wayne.edu), phone (734-545-0103) or by returning the tear off sheet below to the PI, principal or your child's teacher.

Examining Academic Engagement among Elementary Students: The Role of Parent-Child and Teacher-Student Relationships

Optional Tear Off

If you do not wish to have your child participant in the study, you may fill out the form and return it to your child's teacher.

I do not allow my child _____to participate in this research study.
Name

_____
Printed Name of Parent

_____ _____
Signature of Parent Date

APPENDIX D

Recruitment Script

Good Morning/Afternoon Students,

My name is Courtney Tolinski and I am a research assistant at Wayne State University.

Today I am here to talk to you about a research project that I am working on that is concerned with your relationship with your teacher and parents and how it might impact your feelings about school. This information will help parents and school staff to better understand how to help students like you.

The survey will ask your thoughts about your parents, teacher and also about yourself as a student. Questions that ask about your parents will ask about your thoughts on both your mother and father. If you do not have a mother or father, please circle or fill in the person who you live with or who you consider as a mother or father. If there is no one you view as a mother or father, you may skip that section. All of the questions should take about 30-45 minutes.

No one at school, including your teacher, will be able to see your answers to the questions. The sheet where your name is written will be separated from your responses so they cannot be tied to you.

Forms about the project have already been mailed to your parents. They had the option to refuse your participation in the study. I will be coming around to give the survey to those of you who will be participating. If you do not wish to fill out a survey, please turn your survey face down and I will collect it. You don't have to complete the survey if you don't want to, or you can stop the survey at any time. You will not be treated differently by anyone if you choose not to participate.

You can choose to stop your participation at any time. Please do not put your name or anything else that may cause others to know who you are anywhere but the line on page 1. Raise your hand if you need my help at any time, or if you are finished.

If you are not participating, you may begin working on the free-activity sheet. If you like, you may read silently instead. Are there any questions about the survey? (Answer if yes).

(Pass out surveys)

It is very important that you do not discuss the survey or your answers with other students or staff. If you have any questions or concerns, please come see me or talk to an adult at school.

Thank you very much for your time.

APPENDIX E

Student Demographic Form and Student Survey

Student Demographic Form and Student Survey

Parent-Child Relationships, Teacher-Student Relationships and Student Achievement

Courtney Tolinski, MA

Graduate Student/Principal Investigator

My Age: 7 8 9 10 11 12 **My Grade:** 3rd 4th 5th

(Circle One)

I am a Girl I am a Boy

My Race (Ethnicity) is: Black or African American
Hispanic
Caucasian or White
Asian or Pacific Islander
American Indian or Alaskan Native
Other: _____

My First Name is: _____

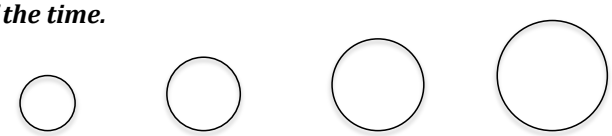
My Last Name is: _____

These questions ask how you feel about your mother.

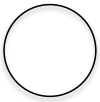
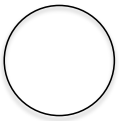
If you *do not* live with your mother, whom do you live with? (Circle one)

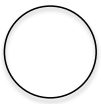
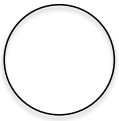
Grandmother Aunt Older Sister Other: _____

Please answer the following questions about your mother or the person you circled/wrote above. Circle the number that is true most of the time.



	Not at all True	Not Very True	Sort of True	Very True
1. My mother lets me know she loves me.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
2. Sometimes I wonder if my mother likes me.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
3. When I want to do something, my mother shows me how.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
4. When my mother makes a promise, I don't know if she will keep it.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
5. My mother trusts me.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
6. My mother is always telling me what to do.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
7. My mother enjoys being with me.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
8. My mother thinks I'm always in the way.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
9. When I want to understand how something works, my mother explains it to me.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
10. When my mother says she will do something, sometimes she doesn't really do it.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*

Circle the number that is true most of the time.	 **Not at all True**	 **Not Very True**	 **Sort of True**	 **Very True**
11. My mother accepts me for myself.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
12. My mother bosses me.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
13. My mother is always glad to see me.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
14. My mother makes me feel like I'm not wanted.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
15. If I ever have a problem, my mother helps me to figure out what to do about it.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
16. My mother keeps changing the rules on me.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
17. My mother lets me do the things I think are important.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
18. My mother think there is only one right way to do things--her way.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
19. My mother thinks I'm special.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
20. Nothing I do is good enough for my mother.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
21. My mother explains the reasons for our family rules.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
22. My mother gets mad at me with no warning.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*

Circle the number that is true most of the time.	 **Not at all True**	 **Not Very True**	 **Sort of True**	 **Very True**
23. My mother tries to understand my point of view.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
24. My mother says "no" to everything.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*

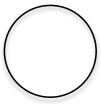
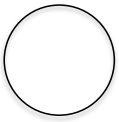
These questions ask how you feel about your father.

If you *do not* live with your father, whom do you live with? (Circle one)

Grandfather Uncle Older Brother Other: _____

Please answer the following questions about your father or the person you circled/wrote above.

Circle the number that is true most of the time.				
1. My father lets me know he loves me.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
2. Sometimes I wonder if my father likes me.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
3. When I want to do something, my father shows me how.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
4. When my father makes a promise, I don't know if he will keep it.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
5. My father trusts me.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
6. My father is always telling me what to do.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*

Circle the number that is true most of the time.	 **Not at all True**	 **Not Very True**	 **Sort of True**	 **Very True**
6. My father is always telling me what to do.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
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11. My father accepts me for myself.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
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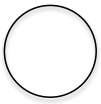
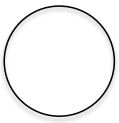
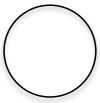
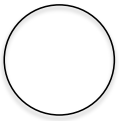
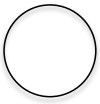
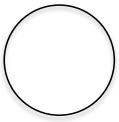
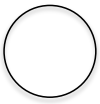
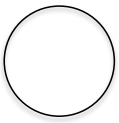
16. My father keeps changing the rules on me.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
17. My father lets me do the things I think are important.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*

Circle the number that is true most of the time.	 **Not at all True**	 **Not Very True**	 **Sort of True**	 **Very True**
18. My father think there is only one right way to do things--his way.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
19. My father thinks I'm special.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
20. Nothing I do is good enough for my father.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
21. My father explains the reasons for our family rules.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
22. My father gets mad at me with no warning.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
23. My father tries to understand my point of view.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
24. My father says "no" to everything.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*

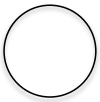
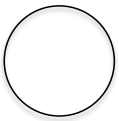
These questions ask about your teacher.				
Circle the number that is true most of the time.				
1. My teacher listens to my ideas.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
2. My teacher just doesn't understand me.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
3. Every time I do something wrong my teacher acts differently.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*

Circle the number that is true most of the time.	 **Not at all True**	 **Not Very True**	 **Sort of True**	 **Very True**
3. Every time I do something wrong my teacher acts differently.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
4. My teacher spends time with me.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
5. My teacher makes sure I understand before she/he goes on.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
6. My teacher talks about how I can use the things we learn at school.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
7. If I can't solve a problem, my teacher shows me different ways to try to.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
8. My teacher talks with me.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
9. I can't depend on my teacher for important things.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
10. My teacher doesn't tell me what she/he expects of me in school.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
11. My teacher checks to see if I'm ready before she/he starts a new topic.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
12. My teacher likes me.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*

Circle the number that is true most of the time.	 **Not at all True**	 **Not Very True**	 **Sort of True**	 **Very True**
13. My teacher is always getting on my case about schoolwork.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
14. I can't count on my teacher when I need him/her.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
15. My teacher doesn't make it clear what he/she expects of me in class.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
16. My teacher knows me well.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
17. My teacher gives me a lot of choices about how I do my schoolwork.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
18. It seems like my teacher is always telling me what to do.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
19. My teacher keeps changing how he/she acts towards me.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
20. My teacher doesn't listen to my opinion.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
21. My teacher doesn't give me a choice about my schoolwork.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
22. My teacher really cares about me.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
23. My teacher doesn't explain why what I do in school is important to me.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*

Circle the number that is true most of the time.	 **Not at all True**	 **Not Very True**	 **Sort of True**	 **Very True**
24. My teacher shows me how to solve problems myself.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*

These questions ask how you feel about school.				
1. I try hard to do well in school.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
2. I enjoy learning new things in class.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
3. When we work on something in class, I feel discouraged.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
4. In class, I do just enough to get by.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
5. When I'm in class, I listen very carefully.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
6. In class, I work as hard as I can.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
7. When I'm in class, I feel bad.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
8. Class is fun.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
9. When I'm in class, I feel worried.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
10. When we work on something in class, I get involved.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*

Circle the number that is true most of the time.	 **Not at all True**	 **Not Very True**	 **Sort of True**	 **Very True**
11. When I'm in class, I think of other things.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
12. When we work on something in class, I feel interested.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
13. Class is not all that fun for me.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
14. When I'm in class, I just act like I'm working.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
15. When I'm in class, I feel good.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
16. When I'm in class, my mind wanders.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
17. When I'm in class, I participate in class discussions.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
18. When we work on something in class, I feel bored.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
19. I don't try very hard at school.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*
20. I pay attention in class.	*1 Not at all True*	*2 Not Very True*	*3 Sort of True*	*4 Very True*

You Are Done!

Thank You For Your Help!

REFERENCES

Anderson, A.R., Christenson, S.L., Sinclair, M.F. & Lehr, C.A. (2004). Check & Connect: The importance of relationships for promoting engagement with school. *Journal of School Psychology, 42*, 95-113. doi: 10.1016/j.jsp.2004.01.002

Appleton, J.J., Christenson, S.L., & Furlong, M.J. (2008). Student engagement with school: Critical conceptual and methodological issues of the construct. *Psychology in the Schools, 45*(5), 369-386. doi: 10.1002/pits.20303

Appleton, J.J., Christenson, S.L., Kim, D., & Reschley, A.L. (2006). Measuring cognitive and psychological engagement: Validation of the student engagement instrument. *Journal of School Psychology, 44*, 427-445. doi: 10.1016/j.jsp.2006.04.002

Baumrind, D. (1971). Current patterns of parental authority. *Developmental Psychology Monograph, 4*(1), 1-103. doi: 10.1037/h0030372

Belmont, M., Skinner, E., Wellborn, J., & Connell, J. (1992). Teacher as social context (tasc). Two measures of teacher provision of involvement, structure, and autonomy support. (technical report). Rochester, NY: University of Rochester.

Birch, S.H., & Ladd, G.W. (1997). The teacher-child relationship and children's early school adjustment. *Journal of School Psychology, 35*(1), 61-79. doi: 10.1016/s0022-4405(96)00029-5

Booth, C.L., Kelly, J.F., Spieker, S.J., & Zuckerman, T.G. (2003). Toddlers' attachment security to child-care providers: The safe and secure scale. *Early Education and Development, 14*(1), 83-100. doi: 10.1207/s15566935eed1401_6

Bowlby, J. (1980). *Attachment and loss: Loss, sadness and depression, Vol. 3*. New York, NY: Basic Books.

Bridgeland, J. M., DiIulio, J. J., Jr., & Morison, K. B. (2006). *The silent epidemic: Perspectives of high school dropouts.* Washington, DC: Civic Enterprises.

Brush, T., & Saye, J. (2008). The effects of multimedia-supported problem-based inquiry on student engagement, empathy, and assumptions about history. *The Interdisciplinary Journal of Problem-Based Learning, 2*(1), 21–56. doi: 10.7771/1541-5015.1052

Burchinal, M. R., Peisner-Feinberg, E., Pianta, R., & Howes, C. (2002). Development of academic skills from preschool through second grade: Family and classroom predictors of developmental trajectories. *Journal of School Psychology, 40*(5), 415−436. doi: 10.1016/s0022-4405(02)00107-3

Center for Educational Performance and Information. (2013). *Race and ethnicity*. Retrieved 11/12/2013, from Center for Educational Performance and Information, www.michigan.gov/cepi

Connell, J.P., Spencer, M.B., & Aber, J.L. (1994). Educational risk and resilience in African-American youth: Context, self, action and outcomes in school. *Society for Research in Child Development, 65*(2), 493-506. doi:10.2307/1131398

Connell, J. P., & Wellborn, J. G. (1991). Competence, autonomy and relatedness: A motivational analysis of self-system processes. In M. Gunnar & L. A. Sroufe (Eds.), *Minnesota Symposium on Child Psychology: Self processes and development* (Vol. 23, pp. 43–77). Chicago: University of Chicago Press.

Conner, O.J., & Pope, D.C. (2013). Not just robo-students: Why full engagement matters and how schools can promote it. *Journal of Youth and Adolescence, 42,* 1426-1442. doi: 10.1007/s10964-013-9948

Crozier, G., & Davies, J. (2007). Hard to reach parents or hard to reach schools? A discussion of home–school relations, with particular reference to Bangladeshi and Pakistani parents. *British Educational Research Journal, 33*(3), 295–313. doi: 10.1080/01411920701243578

Darling, N., & Steinberg, L. (1993). Parenting style as context: An integrative model. *Psychological Bulletin, 113*(3), 487-496. doi:10.1037/0033-2909.113.3.487

DeBaryshe, B.D., Patterson, G.R., & Capaldi, D.M. (1993). A performance model for academic achievement in early adolescent boys. *Developmental Psychology, 29*(5), 795-804. doi: 10.1037/0012-1649.29.5.795

De Bruyn, E.H., Deković, M., & Meijnen, G.W. (2003). Parenting, goal-orientations, classroom behavior, and school success in early adolescence. *Journal of Applied Developmental Psychology, 24*(4), 393-412. doi: 10.1016/s0193-3973(03)00074-1

Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior.* New York: Plenum Press.

Decker, D.M., Dona, D.P., & Christenson, S.L. (2007). Behaviorally at-risk African American students: The importance of student-teacher relationships for student outcomes. *Journal of School Psychology, 45*(1), 83-109. doi: 10.1016/j.jsp.2006.09.004

Dimitrov, D.M. (2006). Comparing groups on latent variables: A structural equation modeling approach. *Work: Journal of Prevention, Assessment & Rehabilitation. 26*(4), 429-436. doi: 1051-9815/06

Dotterer, A.M., & Lowe, K. (2011). Classroom context, school engagement and academic achievement in early adolescence. *Journal of Youth and Adolescence, 40*(1), 1649-1660. doi: 10.1007/s10964-011-9647-5

Englund, M. M., Egeland, B., & Collins, W. A. (2008). Exceptions to high school dropout predictions in a low-income sample: Do adults make a difference? *Journal of Social Issues, 64*(1), 77-94. doi:10.1111/j.1540-4560.2008.00549.x

Fan, W., & Williams, C.M. (2010). The effects of parental involvement on students' academic self-efficacy, engagement and intrinsic motivation. *Educational Psychology, 30*(1), 53-74. doi: 10.1080/01443410903353302

Fine, M. (1991). *Framing dropouts: Notes on the politics of an urban public high school.* Albany, N.Y.: State University of New York Press.

Fredricks, J.A., Blumenfeld, P.C., & Paris, A.H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research, 74*(1), 59-109. doi: 10.3102/00346543074001059

Friedman, I. A. (1994) Conceptualizing and measuring teacher-perceived student behaviors: disrespect, sociability, and attentiveness. *Educational and Psychological Measurement, 54*(4), 949–958. doi: 10.1007/978-1-4614-2018-7_17

Furlong, M.J. & Christenson, S.L. (2008). Engaging students at school and with learning: A relevant construct for *all* students. *Psychology in the Schools, 45*(5), 365-386. doi: 10.1002/pits.20302

Furrer, C., & Skinner, E. (2003). Sense of relatedness as a factor in children's academic engagement and performance. *Journal of Educational Psychology, 95*(1), 148-162. doi: 0.1037/0022-0663.95.1.148

Furrer, C., Skinner, E., Marchand, G., & Kindermann, T. (2008). Engagement and disaffection in the classroom: Part of a larger motivational dynamic? *Journal of Educational Psychology, 100*(4), 765-781. doi: 10.1037/a0012840

Gehlbach, H., Brinkworth, M. E., & Harris, A. D. (2012). Changes in teacher-student relationships. *British Journal of Educational Psychology, 82*(4), 690-704. doi:10.1111/j.2044-8279.2011.02058.x

Ginsberg, G. S., & Bronstein, P. (1993). Family factors related to children's intrinsic/extrinsic motivational orientation and academic performance. *Child Development, 64*(5), 1461–1474. doi: 10.2307/1131546

Grolnick, W.S., & Ryan, R.M. (1989). Parent styles associated with children's self-regulation and competence in school. *Journal of Educational Psychology, 81*(2), 143-154. doi: 10.1037/0022-0663.81.2.143

Grusec, J. E., & Goodnow, J. J. (1994). Impact of parental discipline methods on the child's internalization of values: A reconceptualization of current points of view. *Developmental Psychology, 30*(1), 4-19. doi: 10.1037/0012-1649.30.1.4

Hamre, B.K., & Pianta, R.C. (2001). Early teacher-child relationships and the trajectory of children's school outcomes through eighth grade. *Child Development, 72*(2), 625-638. doi: 10.1111/1467-8624.00301

Harris, A., & Goodall, J. (2008). Do parents know they matter? Engaging all parents in learning. *Educational Research, 50*(3), 277-289. doi: 10.1080/00131880802309424

Harter, S. (1978). Effectance motivation reconsidered: Toward a developmental model. *Human Development, 21*(1), 36-64. doi: 10.1159/000271574

Howes, C., Hamilton, C. E., & Philipsen, L. C. (1998). Stability and continuity of child caregiver and child–peer relationships. *Child Development, 69*(2), 418–426. doi: 10.1111/j.1467-8624.1998.tb06199.x

Hughes, J. N., Cavell, T. A., & Willson, V. (2001). Further support for the developmental significance of the quality of the teacher–student relationship. *Journal of School Psychology, 39*(4), 289-301. doi:10.1016/S0022-4405(01)00074-7

IBM Software Group (2011). IBM SPSS Missing Values 20. Retrieved from http://slatetmp.it.utk.edu/newsletter_monthly/2014_06/IBM_SPSS_Missing_Values.pdf

Jerome, E.M., Hamre, B.K., & Pianta, R.C. (2009). Teacher-child relationships from kindergarten to sixth grade: Early childhood predictors of teacher-perceived conflict and closeness. *Social Development, 18*(4), 915-945. doi: 10.1111/j.1467-9507.2008.00508.x

Joselowsky, F., & Aseltine, E. (2009). *Students as co-constructors of the learning environment: Building systemic approaches for youth engagement. Youth engagement case studies.* Washington: Youth on Board and the Academy for Educational Development (AED).

Klem, A.M., & Connell, J.P. (2004). Relationships matter: Linking support to student engagement and achievement. *Journal of School Health, 74*(7), 262-273. doi:10.1111/j.1746-1561.2004.tb08283.x

Ladd, G. W., & Burgess, K. B. (2001). Do relational risks and protective factors moderate the linkages between childhood aggression and early psychological and school adjustment? *Child Development, 72*(5), 1579-1601. doi:10.1111/1467-8624.00366

Lamb, M.E., & Bornstein, M.H. (Eds.). (2011). *Social and Personality Development: An advanced textbook.* New York, NY: Psychology Press.

Li, Y., & Lerner, R. M. (2013). Interrelations of behavioral, emotional and cognitive school engagement in high school students. *Journal of Youth and Adolescence, 42*(1), 20-32. doi: 10.1007/s10964-012-9857-5

Lynch, M., & Cicchetti, D. (1997). Children's relationships with adults and peers: An examination of elementary and junior high school students. *Journal of School Psychology, 35*(1), 81-99. doi: 10.1016/s0022-4405(96)00031-3

Maccoby E.E., & Martin, J.A. (1983). Socialization in the context of the family: Parent-child interaction. In P.H. Mussen & E.M. Hetherington (Eds.), *Handbook of child psychology: Vol. 4. Socialization, personality and social development* (4th ed.). New York: Wiley.

Martin, A.J., Marsh, H.W., McInerney, D.M, Green, J. & Doswon, M. (2007). Getting along with teachers and parents: The yields of good relationships for students' achievement motivation and self-esteem. *Australian Journal of Guidance & Counseling, 17*(2), 109-125. doi: 10.1375/ajgc.17.2.109

Masten, A. S., & Reed, M. G. (2002). Resilience in development. In S. R. Snyder, & S. J. Lopez (Eds.), *The handbook of positive psychology*. Oxford University Press.

Murdock, T. B. (1999). The social context of risk: Status and motivational predictors of alienation in middle school. *Journal of Educational Psychology, 91*(1), 62–75. doi: 10.1037/0022-0663.91.1.62

Murray, C. (2009). Parent and teacher relationships as predictors of school engagement and functioning among low-income urban youth. *Journal of Early Adolescence, 29*(3), 376-404. doi: 10.1177/0272431608322940

NCS Pearson, Inc. (2012). *Aimsweb Technical Manual.* Bloomington, MN: Pearson Education, Inc. Retrieved from https://aimsweb.pearson.com/downloads/AIMSweb_TM.pdf

National Research Council and Institute of Medicine. (2004). Engaging schools: Fostering high school students' motivation to learn. Washington, DC: The National Academies Press.

O'Conner, E., & McCartney, K. (2006). Testing associations between young children's relationships with mothers and teachers. *Journal of Educational Psychology, 98*(1), 87-98. doi: 10.1037/0022-0663.98.1.87

O'Farrell, S.L., & Morrison, G.M. (2003). A factor analysis exploring school bonding and related constructs among upper elementary students. *California School Psychologist, 8,* 53-72.

Osterman, K. F. (2000). Students' need for belonging in the school community. *Review of Educational Research, 70*(3), 323–367. doi: 10.2307/1170786

Patrick, H., Turner, J. C., Meyer, D. K., & Midgley, C. (2003). How teachers establish psychological environments during the first days of school: Associations with avoidance in mathematics. *Teachers College Record, 105*(8), 1521–1558. doi: 10.1111/1467-9620.00299

Paulson, S.E. (1994). Relations of parenting style and parental involvement with ninth-grade students' achievement. *Journal of Early Adolescence, 14,* 250-267. doi: 10.1177/027243169401400208

Pianta, R. C., & Steinberg, M. (1992). Teacher-child relationships and the process of adjusting to school. *New Directions for Child and Adolescent Development, 1992*(57), 61-80. doi:10.1002/cd.23219925706

Pianta, R.C., Stuhlman, M.W., & Hamre, B.K. (2002). How schools can do better: Fostering stronger connections between teachers and students. *New Directions for Mental Health Services, 2002*(93), 91-107. doi: 10.1002/yd.23320029307

Reay, D. (2000). A useful extension of Bourdieu's conceptual framework? Emotional capital as a way of understanding mothers' involvement in their children's education?. *Sociological Review, 48*(4), 568–85. doi: 10.1111/1467-954x.00233

Resnick, M. D., Bearman, P. S., Blum, R. W., Bauman, K. E., Harris, K. M., Jones, J., et al. (1997). Protecting adolescents from harm: findings from the national longitudinal study on adolescent health. *Journal of the American Medical Association, 278*(10), doi: 10.1001/jama.1997.03550100049038.

Rimm-Kaufmann, S.E., & Pianta, R.C. (2000). An ecological perspective on the transition to kindergarten. *Journal of Applied Developmental Psychology, 21*(5), 491-511. doi:10.1016/S0193-3973(00)00051-4

Roeser, R. W., & Eccles, J. S. (1998). Adolescents' perceptions of middle school: Relation to longitudinal changes in academic and psychological adjustment. *Journal of Research on Adolescence, 8*(1), 123-158. doi: 10.1207/s15327795jra0801_6

Rudasill, K. M. (2011). Child temperament, teacher–child interactions, and teacher–child relationships: A longitudinal investigation from first to third grade. *Early Childhood Research Quarterly, 26*(2), 147-156. doi:10.1016/j.ecresq.2010.07.002

Rudasill, K. M., & Rimm-Kaufman, S. E. (2009). Teacher–child relationship quality: The roles of child temperament and teacher–child interactions. Early Childhood Research Quarterly, 24(2), 107-120. doi:10.1016/j.ecresq.2008.12.003

Simons-Morton, B., & Chen, R. (2009). Peer and parent influences on school engagement among early adolescents. *Youth & Society, 41*(1), 3-25. doi:10.1177/0044118X09334861

Skinner, E. A., & Belmont, M.J. (1993). Motivation in the classroom: Reciprocal effects of teacher behavior and student engagement across the school year. *Journal of Educational Psychology, 85*(4), 571-581. doi: 10.1037/0022-0663.85.4.571

Skinner, E. A., & Belmont, M. J. (1993). Motivation in the classroom: Reciprocal effects of teacher behavior and student engagement across the school year. *Journal of Educational Psychology, 85(*4), 571-581. doi:10.1037/0022-0663.85.4.571

Skinner, E., Furrer, C., Marchand, G., & Kindermann, T. (2008). Engagement and disaffection in the classroom: Part of a larger motivational dynamic? *Journal of Educational Psychology, 100*(4), 765-781. doi: 10.1037/a0012840

Skinner, E., Johnson, S., & Snyder, T. (2005). Six dimensions of parenting: A motivational model. *Parenting: Science and Practice, 5*(2), 175-235. doi: 10.1207/s15327922par0502_3

Skinner, E., Kindermann, T., & Furrer, C. (2009). A motivational perspective on engagement and disaffection: Conceptualization and assessment of children's behavioral and emotional participation in academic activities in the classroom. *Educational and Psychological Measurement, 69*(3), 493-525. doi: 10.1177/0013164408323233

Skinner, E.A., Wellborn, J.G., & Connell, J.P. (1990). What it takes to do well in school and whether i've got it: A process model of perceived control and children's engagement and achievement in school. *Educational Psychology, 82*(1), 22-32. doi: 10.1037//0022-0663.82.1.22

Skinner, E. A., Zimmer-Gembeck, M. J., & Connell, J. P. (1998). Individual differences and the development of perceived control. *Monographs of the Society for Research in Child Development, 63*(2/3), i-231. doi:10.2307/1166220

Steinberg, L.L., Darling, S.D., Mounts, N.S., Dornbusch, S.M. (1994) Over-time changes in adjustment and competence among adolescents from authoritative, authoritarian, indulgent, and neglectful families. *Child Development, 65*(3), 754-770. doi: 10.2307/1131416

United States Census Bureau. (2010). Community facts. Retrieved from http://factfinder2.census.gov/faces/nav/jsf/pages/community_facts.xhtml

Vasalampi, K., Salmela-Aro, K., & Nurmi, J.E. (2009). Adolescents' self-concordance, school engagement, and burnout predict their educational trajectories. *European Psychologist, 14*(4), 332-341.

Walker, J.M. (2008). Looking at teacher practices through the lens of parenting style. *Journal of Experimental Education, 76*(2), 218-240. doi: 10.3200/JEXE.76.2.218-240

Way, N., Reddy, R., & Rhodes, J. (2007). Students' perceptions of school climate during the middle school years: Associations with trajectories of psychological and behavioral adjustment. *American Journal of Community Psychology, 40*(3-4), 194-213. doi: 10.1007/s10464-007-9143-y

Wentzel, K.R. (1997). Student motivation in middle school: The role of perceived pedagogical caring. *The Journal of Educational Psychology, 89*(3), 411-419. doi: 10.1037/0022-0663.89.3.411

Wentzel, K.R. (1999). Social-motivational processes and interpersonal relationships: Implications for understanding motivation at school. *Journal of Educational Psychology, 91*(1), 76-97. doi: 10.1037/0022-0663.91.1.76

Wentzel, K.R. (2002). Are effective teachers like good parents? Teaching styles and student adjustment in early adolescence. *Child Development, 73*(1), 287-301. doi: 10.1111/1467-8624.00406

Wu, J.Y., Hughes, J. N., & Kwok, O. M. (2010). Teacher-student relationship quality type in elementary grades: Effects on trajectories for achievement and engagement. *Journal of School Psychology, 48*(5), 357-387. doi: 10.1016/j.jsp.2010.06.004

Yazzie-Mintz, E. (2007). *Voices of students on engagement. A report on the 2006 high school survey of student engagement*. Bloomington, IN: Center for Evaluation and Education Policy.

Yazzie-Mintz, E., & McCormick, K. (2012). *Handbook of research on student engagement.* S.L. Christenson, A.L. Reschley, C. Wylie (Eds.). New York, NY: Spring Science + Business Media, LLC.

Yonezawa, S., Jones, M., & Joselowsky, F. (2009). Youth engagement in high schools: Developing a multidimensional, critical approach to improving engagement for all students. *Journal of Educational Change, 10*, 191–209. doi: 10.1007/s10833-009-9106-1

Zepeda, S. J., & Mayers, R. S. (2006). An analysis of research on block scheduling. *Review of Educational Research, 76*(1), 137-170. doi:10.3102/00346543076001137

ABSTRACT

EXAMINING ACADEMIC ENGAGEMENT AMONG ELEMENTARY-AGED STUDENTS: THE ROLE OF PARENT-CHILD AND TEACHER-STUDENT RELATIONSHIPS

by

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Advisor: Dr. Jina Yoon

Major: Educational Psychology

Degree: Doctor of Philosophy

The purpose of this study was to explore academic engagement and academic achievement among elementary-aged students and examine the role of students' relationships with teachers and parents in academic engagement. The participants (n=354) were students enrolled in the third, fourth or fifth grade from a rural school district in southeastern Michigan. Academic engagement varied by grade, where students in 5th grade displayed lower levels of engagement than students in the third and fourth grade. Males were also found to display increased levels of behavioral disaffection than females. Relational support was correlated with academic engagement across both the parent-child and teacher-student relationship. Aspects of involvement and autonomy within the parent-child relationship contributed to academic engagement. Controlling for parent-child relationship, teacher-student relationships made a unique contribution to all four constructs of academic engagement. Previous academic achievement was associated with current academic achievement. However, academic engagement was not correlated with current academic achievement. As a result, academic engagement did not mediate the role of parent-child and teacher-student relationships and academic achievement.

AUTOBIOGRAPHICAL STATEMENT

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