THE EFFECTS OF SELF-DETERMINATION, IDENTIFICATION WITH SCHOOL, AND

SCHOOL CLIMATE ON MIDDLE SCHOOL STUDENTS' ASPIRATIONS

FOR FUTURE EDUCATION

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ABSTRACT

The purpose of this study was to explore the effects of self-determination, identification with school, and school climate on student aspirations for ongoing and future education. This study sought to answer the following research questions: (1) What are the relationships between student self-determination, identification with school, and perceptions of school climate? (2) How do ethnicity, socioeconomic status, gender, and self-determination affect students' aspirations for ongoing and future education? (3) How do ethnicity, socioeconomic status, gender, and identification with school affect students' aspirations for ongoing and future education? And (4) How do ethnicity; socioeconomic status, gender, and school climate affect students' aspirations for ongoing and future education?

The first question was answered using bivarate correlation. Questions 2 through 4 were answered using three hierarchical multiple regression procedures. The research design used survey research and quantitative analyses to determine factors that most influence middle school students' aspirations for future education. The unit of analysis was 458 eighth grade students in one southern school system. Survey results provided evidence that the students' demographic variables of gender and ethnicity were significant predictors of their aspirations for future education. Self-determination explained 15% of the variance, identification with school explained 10% of the variance, and climate explained 3% of the variance in students' aspirations for ongoing and future education over and above the effects of ethnicity, gender, and socioeconomic status.

This study contributes to the knowledge base by exploring the effects of all three variables: self-determination, identification with school, and school climate on student aspirations for future education. Furthermore, this study offers preliminary evidence of the effects of student self-determination, identification with school, and school culture on student aspirations for future education. Creating a school culture to encourage increased self-determination and identification with school represents an area that is malleable and can result in increased educational aspirations and commitment to academic success. Administrators interested in improving the school culture should focus on early identification of at-risk students and promote program development that encourages active participation from students and families, positive teacher-student relationships, and opportunities for students to develop knowledge and skills that promote a sense of self-determination and identification with school.

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CHAPTER I

INTRODUCTION

A large number of students leave school before graduating. More are physically present in the classroom but mentally absent; they fail to invest themselves fully in the experience of learning (Ryan & Patrick, 2001). Middle school is the bridge that connects elementary school and high school. Eighth grade serves as the point in students' educational careers in which they begin to develop plans for secondary and postsecondary education (Kinderman, 2007). Considerable research has shown a decline in motivation and performance for some children as they move from elementary school into middle school and on into high school (Eccles & Midgley, 1989). Often it is assumed that this decline is caused largely by physiological and psychological changes associated with puberty and therefore is inevitable. This assumption has been challenged, however, by research that demonstrated the nature of motivational change in middle school depends on characteristics of the learning environment in which students find themselves (Midgley, 1993).

During their first two decades in school, students spend approximately 15,000 hours in the classroom (Rutter, Maughan, Mortimore, & Ouston, 1979). Thus, school represents a primary socializing influence that has an enormous effect on the course of people's lives and, in turn, on society (Deci, Vallerand, Pelletier, & Ryan, 1991). Deci et al. (1991) state self-determination, as applied to the realm of education, is concerned with promoting students' self interest in learning, valuing education, and confidence in their own capacities and attributes.

Statement of the Problem

The school is a complex social system (Hoy & Hoy, 2009) that includes factors that affect students and their motivation for future schooling. Unfortunately, as children grow their motivation for learning frequently declines. This research examined possible factors that contribute to this decline. Despite the body of research on student motivation and factors affecting their future success, few studies directly address a combination of middle school students' motivation and other factors that reflect declines in student learning (Anderman, 2002; Eccles & Midgley, 1989; Roeser, Midgley, & Urdan, 1996). The researcher proposes that a combination of motivational factors, such as self-determination along with identification with school and student perceptions of school climate, play a major role in determining students' secondary and future educational path outcomes.

Significance of the Problem

This research has significance for determining factors most likely to influence middle school students' academic success, especially in identifying their secondary and postsecondary school plans. It is important to determine the underlying problem that supports students in identifying their goals or reasons for staying in school and pursuing future educational opportunities. A number of students decide to give up on learning and leave the school setting. As stated above, these potential dropouts, and some who choose to stay in school, fail to invest themselves fully in the experience of learning (Ryan & Patrick, 2001). During the transition years from primary to middle school, children face a broad range of demands such as a more complex school structure, more rigid academic standards, higher teacher expectations, and increased pressure from peers than in primary school (Meyer & Turner, 2003). Therefore, a

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study of factors that influence middle school students' self-determination, identification with school, and school climate is timely.

Purpose of the Study

The purpose of this research was to investigate the perceptions of middle school students about motivation, a sense of school belonging, and school climate to determine their perceived influence on students' future secondary school and postsecondary school plans in their transition year before high school. Such research can add support to the literature on student motivation for staying in school at least through secondary education and students' aspirations in seeking a college education, rather than dropping out of school. In addition, this study could help middle school educators' focus their efforts to motivate and retain a student's desire to succeed to the best of their abilities in the pursuit of becoming a lifelong learner.

Research Questions

1. What are the relationships between student self-determination, identification with school, and perceptions of school climate?

2. How do ethnicity, socioeconomic status, gender, and self-determination affect students' aspirations for ongoing and future education?

3. How do ethnicity, socioeconomic status, gender, and identification with school affect students' aspirations for ongoing and future education?

4. How do ethnicity, socioeconomic status, gender, and school climate affect students' aspirations for ongoing and future education?

Conceptual Framework

A theory is simply an idea that can be tested. The large body of research on motivation theory has several strands. Some authors have studied "intrinsic" and "extrinsic" motivation (Ryan & Deci, 2000), while others have examined students' "goal orientations" (Kaplan & Maehr, 2007). The researcher made the decision to select some motivation factors, while rejecting others. The rationale for this delimitation is that attempting to use all the motivation factors found in the literature would extend the boundaries of this study beyond what can be managed for a dissertation. Literature reviews on motivation are normally separated into specific single streams such as self-efficacy or self-determination (e.g., Ryan &Deci, 2000, Pintrich & De Groot, 1990), yet few consider other factors such as the influence that self-determination, identification with school, and school climate, along with ethnicity, socioeconomic status, and gender (e.g., Anderman, 2003; Bauch & Goldring, 2000; Sui-Chu & Williams, 1996) have on students' interests in pursuing education. This study goes beyond motivation as a single factor and includes other factors that might have greater or lesser effects on students' pursuit of ongoing education.

Figure 1 provides a visual conceptual framework for this study. The researcher focused on three independent variables: self-determination (Ryan & Deci, 2000), identification with school (Voelkl, 1997), and school climate (Van Horn, 2003). The dependent variable in this research focuses on students' aspirations about their future and continuing education as measured by an item taken from the Educational Longitudinal Study of 2002. This single item response allowed students to indicate their future aspirations such as continuing their education through secondary and postsecondary school or dropping out. The research design used survey research and quantitative analyses in seeking factors that most influence the aspirations of these students

based on the three research questions. The three independent variables are self-determination, identification with school, and school climate. The dependent variable measured the aspirations of ongoing and future education. The control variables are student gender, ethnicity, and socioeconomic status (SES). Prior research has suggested that there is a relationship between student gender (Akos & Galassi, 2004), ethnicity (Phelan, Davidson, & Cao, 1991), and socioeconomic status (Evan, 2004), and the three independent variables (student self-determination, identification with school, and school culture); therefore, these three variables were included in this study as control variables.
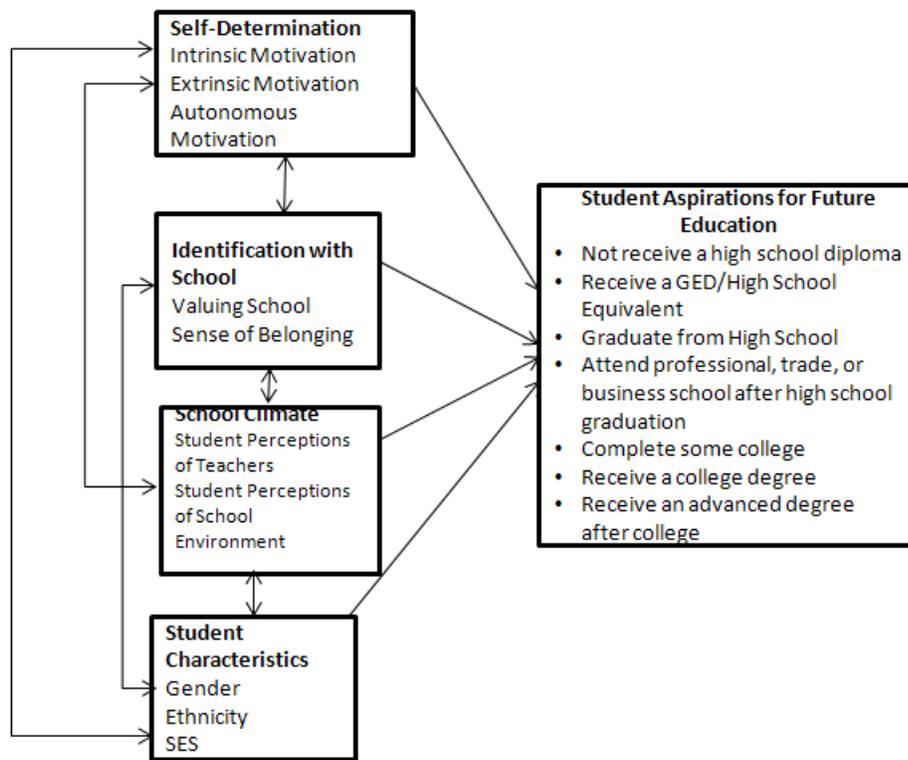
Figure 1. Conceptual framework for determining the influence of motivation and other factors on students' future educational plans.

The literature review addressed self-determination theory as it pertained to how self-determination is used in this study. The review addressed "identification with the school" as it pertains to the motivational theory of self-concept (Wigfield & Karpathian, 1991). The review included literature on school climate and its relationship to student gender, ethnicity, and socioeconomic status. These characteristics play a role in students' motivation to succeed in their pursuit of continuing education and deciding not to drop out of school. The researcher theorized that those students who have a strong sense of self-determination and perceive the school climate positively are more likely to have higher expectations for themselves in pursuing additional education than their counterparts. Conversely, while students may be highly motivated and self-determined, they may become discouraged in an environment that they perceive as providing poor support for their endeavors and therefore make it more difficult for them to succeed in school, which could lead to their dropping out. Student characteristics such as gender, ethnicity, or socioeconomic status may play a role in student expectations for continued education.

Research Site and Sample

The research for this dissertation was conducted in a county in the southeastern United States, which covers 315 square miles and is composed of three cities. The average family size is 3.2 with a median household income of $58,801. The county's population is comprised of three major ethnic groups: White (83.3%), African American (14.3%), and Hispanic (3.9%). The growth of the population has affected the school district significantly. In the last 5 years, the school district's student population has increased 36% from 20,459 in the fall of 2003 to the present enrollment of 27,890 students. Currently, the system consists of 18 elementary schools, 7 middle schools, 5 high schools, and 3 off-campus alternative learning sites.

The participants in this study were 496 eighth grade students (ages 13 to 15) from three middle schools. The sample includes students from gifted education, regular education, and special education. The rationale behind sampling only the eighth grade students was that they are in the transition year between middle and high school and are deciding their path to secondary education.

Definitions of Terms

Belongingness--The psychological need individuals have to be an accepted member of a group (Voelkl, 1997).

Causality--The principle of or relationship between cause and effect (Ryan & Deci, 2008).

Competence--The need to experience one's self as capable of producing desired outcomes and avoiding negative outcomes (Dickinson, 1995).

Dropout--A student who withdraws from high school after having reached the legal age to do so (Finn, 1998).

Extrinsic motivation--Student motivation for learning that comes from extrinsic or external means; encouraging on-task behavior with the promise of reward, praise, or avoidance of punishment (Greene & Lepper, 1974).

Goals--The purpose toward which an endeavor is directed (Ames & Archer, 1988).

Identification with school--Involving a sense of belonging and a valuing of school and school-related outcomes (Voelkl, 1997).

Intrinsic motivation--Student motivation for learning that comes from internal factors such as curiosity and enjoyment (Deci & Ryan, 1985).

Locus of causality--Whether the individual perceives the cause of success or failure to lie with internal (relating to oneself) or external (environmental/ situational) factors (Nichols, 2008).

Motivation--The reason or reasons for engaging in a particular behavior, especially human behavior as studied in psychology (Pintrich & De Groot, 1990).

Positive school climate--Positive school climate is defined as students' perceptions of safety, trust, respect, fairness, high expectations, and a welcoming atmosphere (Perkins-Gough, 2008).

Relatedness--The need to feel securely connected to the social surroundings and to experience oneself as worthy and capable of love and respect (Rumberger, 1995).

School climate--Environmental characteristics of schools, such as the physical structure of a school building or "space," and the interactions among students and teachers (Osterman, 2000).

Self-determination--Directional issue toward a goal proposing that all basic psychological needs are inherent in human life (Chandler & Connell, 1987).

Self-concept--The composite of ideas, feelings, and attitudes that individuals have about their own identity, worth, capabilities, and limitations (Bandura, 1980).

Theory--A tested and testable concept which is used to explain an occurrence.

Assumptions and Limitations

The research study suggested several assumptions and limitations. These include the following:

1. Students participating in the research study were representative of middle school students. They had beliefs and opinions similar to other middle school students.

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2. Students answered questions and responded honestly to the survey instruments.

3. The student characteristics examined play a role in the process by which students develop a sense of identification with school and represent a part of the motivational process and future success in education.

4. The research was based on students attending three middle schools in one specific county in the southeastern United States. Data collected from middle school students in other counties or states may yield different results.

5. Prior school experiences may have influenced student motivation.

6. The research only contained one dependent variable with one answer.

Researcher Positionality

The researcher is a middle school science teacher but does not work in the schools that were included in this sample. The number of participants was limited due to the presence of only three middle schools in the school district included in this study.

Practical Applications

This research study has practical implications for administrators and teachers of eighth grade students who are interested in creating an environment that is conducive of increased student success and retention. Voelkl (1997) suggested that students who are nonparticipatory and not engaged in the classroom need to be identified by teachers or specialists in the early grades. In addition, administrators and teachers will benefit by learning what aspects of the school learning environment contribute to positive student motivation. Roeser et al. (1996) found that students who feel positive about teacher-student interactions are more emotionally secure,

competent, and feel less self-conscious and worried about failure. Lastly, this study adds to the

literature on student motivation because it examined specific components shown to have a strong

influence on students and their desire to persevere and remain successful in school.

CHAPTER II

REVIEW OF LITERATURE

Introduction

The review of literature is organized as follows: (1) introduction, (2) motivational

concepts, (3) self-determination theory, (4) identification with schools, (5) school climate, (6)

student and school characteristics, and (7) summary. The research supports the notion that

motivation as a single variable is insufficient in determining middle school students' orientation

toward high school and their postsecondary school plans. Rather, other factors such as school

climate contribute more than motivation alone.

The primary focus of this review of literature is to provide a context for the present study.

It focuses on concepts that define the motivation variables used in this study: self-determination,

and identification. The researcher believes that literature from these motivational streams of

research, along with school climate (an environmental variable), are the most likely reasons to

explain what most influences students in middle school in their decisions about dropping out of

school or pursuing future secondary schooling, and students' postsecondary school plans. These

decisions are crucial as students make the transition from middle to secondary schooling.

Motivational Concepts

There have been few major trends in the scientific study of motivation, which had its

origin around 1930. According to Graham and Weiner (1996), the general shift has been from

the creation of all-encompassing, broad theories to a focus on narrower, more bounded

"mini"-theories and the analysis of specific aspects of motivated behavior. Graham and Weiner stated that a second trend in the field of motivation has been a shift in the types of theories and principles proposed. They suggested the trend formulates from conceiving of the person as machinelike, without conscious awareness or volition and controlled by environmental forces to perceptions of individuals, decision makers, information processors, and self-determining. The change was part of the shift in psychology away from mechanistic views and toward cognitive views of the dynamics of behavior (p. 64).

The field of motivation research addresses multiple motivational theories and provides a number of concepts and measures suitable for determining middle school students' level of motivation. Table 1 displays a number of motivation theories found in the literature.

Table 1

Motivational Theories

Theory	Reference	Definition
Self-determination	Ryan & Deci (2008)	A formal theory that defines intrinsic and varied extrinsic sources of motivation; provides a description of the respective roles of intrinsic and extrinsic motivation in cognitive and social development; explains individual differences.
Self-regulation	Bandura (1989)	Self-regulation refers to the use of processes that activate and sustain thoughts, behaviors, and affects in order to attain goals.
Attribution	Heider (1958)	Attribution theory is concerned with the way individuals interpret events and how this relates to their thinking and behavior.
Goal orientation	Pintrich (2002)	This theory explains individuals' learning and performance on academic tasks in school settings.

Self-determination Theory

Self-determination is a more recent development in motivational research (LaGuardia &

Ryan, 2002). Research in this area suggests that students in middle schools actually experience

fewer opportunities for self-determination than they did in elementary school (Midgley &

Feldlaufer, 1987). When students' developmental needs are not well met in classrooms, their

interest in and valuing of academic work can suffer. Pintrich and De Groot (1990) found that

students who were internally motivated to gain knowledge of the subject and thought that their

schoolwork was attention-grabbing were more engaged in trying to grasp the subject. The

researchers sampled 173 seventh grade students from a predominately White, small city school

district in southeastern Michigan. The students responded to a self-report questionnaire

developed by Pintrich and De Groot (1990) that included 56 items on student motivation,

cognitive strategy use, and management effort. They concluded that self-determination has an

effect on students' perceptions that the educational work in which they are engaged is motivating

and worth learning. Using a meta-analysis research, Ryan, Koestner, and Deci (2001) determined

that the motivation of an individual changes through the years from extrinsic motivation in the

early years of a child's education, for example, to more intrinsically motivated factors in the

middle and later years of adolescent education as early as 2 to 3 years. They conducted a meta-

analysis involving a hierarchical approach in which the results of 128 experiments were

examined in two separate meta-analyses. The first of the experiments involved 101 studies,

which used a free-choice behavioral measure of intrinsic motivation, and the second involved 84

studies that used self-reported interest as a dependent variable. The researchers concluded

through re-visitation of the results from past empirical research that the undermining of intrinsic

motivation by tangible rewards was less effective for younger children than for older students, and enhancement by verbal rewards was stronger for younger children than for older students.

Self-determination research embodies intrinsic, extrinsic, and autonomous motivation research (Chandler & Connell, 1987). Lepper, Iyenger, and Corpus (2005) examined an ethnically diverse sample consisting of 797 mid-western children in Grades 6 through 8. They found that it is not whether a child is intrinsically or extrinsically motivated, but the extent/ amount of motivation reflected in students' actions which determined academic success. Shih (2008) stated that the contention of self-determination theory is that when students learn out of personal interest and personal relevance, they are more fully engaged in schoolwork, both behaviorally and emotionally.

Intrinsic Motivation

The internal factors of motivation such as needs, interests, and enjoyment are referred to as intrinsic motivation. Ryan (1995) stated that the construct of intrinsic motivation describes a natural inclination toward assimilation, mastery, spontaneous interest, and exploration. It is essential to cognitive and social development and it represents a principal source of enjoyment and vitality throughout life. Watts and Caldwell (2008) researched this explanation using Larson's (2000) conceptualization of social development and intrinsic motivation as a guide. When they surveyed 377 students (ages 13 -15) from eastern Massachusetts using the *Free Time Motivation Scale for Adolescents*, they found that initiative was related positively to internalized forms of motivation and negatively related to amotivation. Watts and Caldwell (2008) concluded that intrinsic motivation is explained as doing an activity for its inherent satisfaction rather than for some separable consequence. Intrinsic motivation exists in the relationship between

individuals and activities. Ryan and Deci (2000) found through research based on ideas from Harter (1978) and de Charmes (1968) that people are motivated intrinsically by events that appeal to their interests, and also hold uniqueness and some type of aesthetic value. A study by Koestner, Ryan, Bemieri, and Holt (1984) supported the contention that acknowledging conflicting feelings helps facilitate self-determination. In their study, 6- and 7-year-old children worked on an interesting painting activity with limits set to require that the children's work must be neat. Observation results from the qualitative study showed that students acknowledging their feelings (of not wanting to be so neat) helped maintain the intrinsic motivation for painting in spite of the limits. The students who did not acknowledge their feelings did not want to paint and thus showed no signs of intrinsic motivation. The researchers found from their interviews with students that those who felt less disappointment and frustration were more intrinsically motivated than those students who showed fewer actions of disappointment and frustration. Vansteenkiste, Lens, and Deci (2006) concluded from a study of 138 middle school children in Flanders, Belgium, that intrinsic motivation supports a higher persistence for self-achievement in the learning process.

Burton, Lydon, D`Alessandro, and Koestner (2006) demonstrated the importance of distinguishing between intrinsic motivation and identified self-regulatory styles pertaining to the psychological well-being of students. Participants included 241 school children attending schools in Toronto and Ontario, Canada. Burton et al. (2006) found that intrinsic motivation was associated with psychological well-being, independent of academic performance.

Extrinsic Motivation

In contrast to intrinsic motivation, defined as "internal" by Ryan and Deci (2000), extrinsic motivation is a construct that pertains whenever an activity is done in order to obtain an external reinforcement from an external source. Extrinsic motivation thus contrasts with intrinsic motivation because an action is done for a reward not for personal satisfaction.The definition of extrinsic motivation, according to Vallerand, Koestner, and Pelletier (2008), implies that behaviour is being regulated primarily by an external locus of causality and that individuals in such circumstances are unable to be self-determining. A study by Greene and Lepper (1974) asked 73 children, in individual sessions, to engage in an activity of high initial interest, either for its own sake or in order to obtain an extrinsic reward. Subsequently, children who had undertaken the target activity as a means to some end showed less intrinsic interest in this activity, as measured later in the classrooms, than control subjects who either had received the same reward unexpectedly or had engaged in the activity without expectation or receipt of extrinsic rewards. The researchers concluded that extrinsic motivation may be useful in working with younger children but becomes less important as adolescents gain greater understandings about themselves and the environment around them.

Autonomous Motivation

According to self-determination theory, extrinsic motivation is variably controlled. Through the process of internalization, initially controlled behaviors can become autonomous (Vanteenkiste, Zhou, Lens, & Soenens, 2005).

According to Deci and Ryan (2008), autonomous motivation comprised both intrinsic motivation and the types of extrinsic motivation in which people have identified with the value

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of an activity and ideally will integrate it into their sense of self. When autonomous motivation

occurs, an experience of making a conscience choice or endorsing one's own actions is the

result. In autonomy supportive contexts, an individual in a position of authority takes the other's

perspective, allows opportunities for self-initiation and choice, provides a meaningful rationale

for requirements, and acknowledges the other's feelings while minimizing the use of pressures

and demands (Deci, Eghrari, Patrick, & Leone, 1994). Deci et al. (1991) summarized contextual

factors that support student autonomy including features such as the provision of choice over

type of task and amount of time allotted to each. These are factors associated with students'

feeling of self-determination. Anderman and Midgley (1997) stated that the use of extrinsic

rewards, the imposition of deadlines, and an emphasis on evaluations detract from a feeling of

self-determination and lead to a decrease in intrinsic motivation.

Controversies in the Literature about Self-determination Theory

It would be difficult in one dissertation to elaborate on the range that self-determination

theory covers; therefore, only the issues related to student learning are discussed here. Self-

determination theory indicates that the use of extrinsic rewards can undermine intrinsic

motivation if the rewards are perceived as controlling. Extrinsic motivation compromises the

need for autonomy. Self-determination theorists such as Deci and Ryan, advocate that rewards

should not be used to motivate students. However, reward systems are omnipresent in every level

of school, and are most often linked to behavioural management programs and policies.

The literature in opposition to self-determination raises a number of issues in relation to

student psychological needs (Elliot, McGregor, & Thrash, 2002) and their interrelationships

(Little, Hawley, Heinrich, & Marsland, 2002). Elliot et al. (2002) argued for a reconsideration of

the need for a competence construct. They argued against Deci and Ryan's (1985) original

conceptualization, stating it was too limiting and suggested that this idea applies only for young

children. Elliot et al. (2002) suggested that a broader conception, which includes a desire for

past-referential and other-referential competence as well as task-referential competence, would

combine theoretical ideas on the need for achievement and be a more useful conceptualization.

For example, views about ability change with age such that secondary school children may be

expected to hold somewhat different conceptions about school than primary school-aged

children.

Finally, questions have been asked about the relationship and balance between basic core

psychological needs and optimal well-being. Sheldon and Niemiec (2006) argued that optimal

well-being is experienced if needs are balanced, yet much of self-determination theory appears to

be premised on the particular importance of the need for autonomy. Vallerand, Lens, and Deci

(2008) stated that there has been little research that has focused on the consequences of thwarting

one or more psychological needs. If the need for autonomy has a connective relationship with the

needs for competence and relatedness, further exploration is needed. This relates to the

population of eighth grade students participating in this research in particular because realities of

the 21st century classroom would appear to make it impossible for students to be intrinsically

motivated all the time; however, self-determination theory has taken out extrinsic motivation by

offering the possibility of autonomous extrinsic motivation as a positive reinforcer.

According to Gagne and Forest (2008), self-determination theory is a theory to human

motivation and personality that uses traditional methods while employing meta-theory, which

highlights the importance of humans' evolved inner resources for personality development and

behavior regulation. Therefore, motivated actions are self-determined to the extent that they are engaged in volitionally and endorsed by one's sense of self.

La Guardia and Ryan (2002) stated that school is the central domain in which most teens engage in task development. Self-determination theory suggests that if teens can feel autonomy, competence, and the sense of belonging, they will experience more intrinsic motivation to learn; they will more deeply value and engage in school-relevant tasks, and they will experience greater well-being (La Guardia & Ryan, 2002).

Identification with Schools

Psychological research has dealt extensively with self-concept and its significance as a mediating variable for academic performance and social competence (Byrne, 1996; Markus & Wurf, 1987). In their study of 512 students in Grades 7, 9, and 11 in a Greek city, Dermitzaki and Efklides (2002) found that adolescents do not construe their academic self-concept according to their abilities but according to their performance in school and others' response to it. The results of the researcher's confirmatory factor analysis showed that academic self-concept is a distinct construct from academic achievement and cognitive abilities. Fredricks, Blumenfeld, and Paris, (2004) claimed that identification with the school is a strong predictor of motivation that explains more about keeping kids interested in school, than all other motivational factors found in the literature. Voelkl (1997) stated that identification with school represents the extent to which a student has bonded with the school and incorporated it as a significant part of his or her self-concept and lifestyle.

Based on the literature, Finn (1989) argued that identification with school encourages students to reflect on themselves and on their own social positioning. Such approaches allow

students to know themselves and their relationships to others in increasingly complex and sophisticated ways. Identification with school, as described by Voelkl (1997), means to value school and school related outcomes and to a have a sense of belonging to school. Identification occurs when students internalize feelings that they "belong" in school, both that they are a part of the school environment and that school is an important aspect of their own experience. Identification with school occurs over time if the youngster continues to participate in classroom and school activities (Finn & Voelkl, 1993).

Concept of Identification

The concept of identification has been used by social scientists in several ways but usually involves an "affinity target." During the childhood and adolescent years, when schooling plays such a predominant role in youngsters' everyday lives, school may become central to the individual's self-view. In a study of children from Grades 3-6, Furrer and Skinner (2003) supported this concept in research on children's sense of relatedness, which is vital to their academic motivation. In their study of how children relate to school, a sample was equally divided by gender and included 641 children in Grades 3-6. The children attended elementary school in a suburban-rural school district comprised of mostly middle-class and working-class families. Approximately 95% of the families were Caucasian, and the remaining 5% were Hispanic, African American, Asian, mixed race, or other ethnicities. The findings of this study, combined with other work on relatedness, led to the conclusion that a child's sense of relatedness plays an important role in his or her academic motivation and performance. Personal adjustment to the institution may be reflected in attitudes toward school including being motivated to do well academically, feeling comfortable in school, and exhibiting acceptable (or unacceptable)

personal and social behaviors in the classroom such as self-initiation of work and conformity to rules and regulations (Voelkl, 1997).

School Membership

Wehlage (1989) claimed that school membership takes place when "students have established a social bond between themselves, the adults in the school, and the norms governing the institution" (p. 10). Students develop a bond based primarily on relationship formation. The psychological sense of school membership is the students' perception that others in the school, especially adults, are there for them and that they count in the school. Sense of belonging or membership in school can be defined as the extent to which students feel personally accepted, respected, included, and supported by others in the school social environment (Goodenow, 1993). Mitchell (2004) stated that the strength of the bonds that the student develops with school personnel is dependent upon the extent to which the student feels supported and able to experience positive interactions and to establish ongoing positive relationships with key significant others in the school environment. The strength of this sense of membership heavily influences students' commitment to school and the acceptance of educational values (Goodenow & Grady, 1993). The concept of belonging in school applies not only to the acceptance of the school by students, but also the students' perception that educators and peers in the school care for them.

Components of Identification with School

Sense of belonging. Identification with school has been conceptualized as involving a sense of belonging and a valuing of school and school-related outcomes (Voelkl, 1997). Students

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who fail to identify with school often experience a host of challenges including behavioral problems, social and emotional withdrawal, and academic failure. Using the *Identification with School Questionnaire*, Voelkl (1997) sampled 1,335 African American and White eighth-grade youngsters in 104 urban, suburban, rural, and inner-city schools across the state of Tennessee. From her results, Voelkl (1997) concluded that students demonstrating high academic achievement and active involvement in the learning process are likely to identify with school, while students who have experienced repeated school failure and who do not participate actively in the classroom are not likely to respond with a feeling of identification and perhaps will further respond with total withdrawal from school.

In addition, these students are at risk for delinquency as well as dropping out of school (Finn, 1989; Finn & Voelkl, 1993; Voelkl, 1997). Students who develop a sense of belonging tend to express the belief that they are an integral part of school and that they are accepted, valued, and included (Mitchell, Forsyth, & Robinson, 2008). According to Mitchell (2004), empirical research from scholars such as Finn (1989), Voelkl (1997), Fordham (2000), and Steele (1999) thus far have attempted to explain this failure to identify with school as the result of cultural expectations, prior experience with success in school, the structural environment of the school, the regulatory environment of the school, stereotype threat, poverty, and peer-pressure. Much of the literature on identification with school and on dis-identification has focused on differences in the academic performance of minority groups, particularly African Americans, as compared with the majority (Mitchell, 2004). Finn (1989) described identification with school as having two components: a feeling of belongingness, and a belief that success in school is connected to future life goals.

Skinner and Belmont (1993) suggested in their research pertaining to the dimensions of teacher behavior (i.e., involvement, structure, autonomy support), that children's behavioural and emotional belongingness in a school increases because of teachers who offer guidance, modeling, and sincere praise to build strong relationships. According to Finn (1989), belongingness is an internal sense that one is an important part of the school environment; and that school is an important element in one's personal experiences. Valuing refers to appreciation of success in school-relevant goals. Voelkl (1997) expanded the concept of valuing to include the recognition of the school as both a valued social institution and as a tool for facilitating personal advancement. According to Voelkl, failure to identify with school results when students do not value school and school-related outcomes and thus do not develop a sense of belonging. Students do not have a sense of belonging or valuing of school, do not feel like an accepted member, and have little or no sense of fitting in. He or she may not feel comfortable or adequate in the school setting, may fail to incorporate school into his own self-definition, or may feel anger or hostility toward school and would rather be in a setting other than school. He or she also may have little feeling of commitment and may be distrustful and suspicious of the institution and those who represent it. This lack of identification with school affects both the sense of belonging and valuing of the school in a negative manner.

Anderman (2003) identified the construct of belonging as an important psychological variable in a study of 132 schools. From those schools, a large sample of students ($N = 90,118$) completed in-school questionnaires. Anderman (2003) found that when an individual's need for belonging was met, positive outcomes occurred. Within schools, a perceived sense of school belonging is related to enhanced motivation, achievement, and attitudes toward school.

Anderman and Anderman (1999) examined changes in personal task and ability goal orientations during the middle-school transition. The results of surveying 138 middle school students showed that school belonging was related to an increase in personal task goals and to a decrease in personal ability goals across the middle-school transition. Newman, Lohman, Newman, Myers, and Smith (2000) interviewed urban adolescents making the transition into ninth grade. One of the factors distinguishing successful from non-successful transitions was that high achieving middle-school students who made a successful transition into high school reported having friends who supported their academic goals. Anderman (2003) noted that peer support was an important aspect in a student's sense of school belongingness. Singh, Chang, and Dika (2010) stated that school belonging develops as a student experiences positive interactions with peers, teachers, and other members of the community.

Social Influences

A component part of identification with school is an approach to understanding social influences on school motivation and on the students' subjective sense of school belonging. Goodenow (1993) found that among 353 sixth-, seventh-, and eighth-grade middle school students, feelings of belongingness in their school positively affected their motivation for school, effort, level of participation, and eventual achievement in school. Students' sense of belonging in the school or classroom was associated with the extent to which they felt personally accepted, respected, included, and supported by others, especially teachers and other adults in the school social environment. Goodenow (1993) concluded that the findings underscore the importance of belonging and the interpersonal support needed to foster academic motivation and achievement. When people, especially children or adolescents, feel they are related, connected, and an

important member of a group of others, they are more likely to internalize the values of those individuals and or institutions (Deci, Vallerand, Pelletier, & Ryan, 1991).

Solomon, Watson, Battistich, Schaps, and Delucchi (1996), using data gathered from 743 students in a program that compared classes from Grades 4, 5, and 6, examined the relative effects of program status, sense of community, and their interactions. With respect to academic attitudes, they found a significant relationship between sense of community and fondness for school, achievement motivation, and intrinsic academic motivation. The strongest relationship across grades was between sense of community and keenness for school. A positive social climate may have particularly strong constructive effects for those students at greatest risk for academic, emotional, and behavioral difficulties (Kuperminic, Leadbeater, & Blatt, 2001).

Participation-Identification Model

Another component of identification with school is the participation-identification model. Finn (1997) described a developmental sequence that begins with classroom participation in the primary grades and is related to belongingness. The model suggests that unless students identify with the school to at least a minimal extent, feel that they belong as part of the school, and believe themselves to be welcomed, respected, and valued by others, they may begin the gradual disengagement process of which officially dropping out of school is the final step. Finn (1997) described the sequence of events through which early forms of nonparticipation are maintained through the years and which may develop into more severe forms of attendance issues or dropping out. Research on dropouts has consistently shown that a host of negative school-related experiences serves as powerful precursors to the decision formally to leave school. For example, students who drop out of school are more likely than other students to have poor school

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performance, disruptive behaviors, poor attendance, negative attitudes toward school, and early school failure (Rumberger, 1995).

The Participation-Identification model also demonstrates that identification with school begins with a willingness to respond to the teacher and to participate in learning activities. As long as early participation is accompanied by some extrinsic rewards for success, a sense of belonging can develop. The influence of performance rewards plus the increased identification with school serve to perpetuate active participation in the classroom and the school environment (Finn, 1997). Students who perceived higher levels of autonomic support provided by teachers also reported more adaptive patterns of learning. Learning, according to Finn, increases measurably when students are self-determined and when school members feel safe, valued, cared for, engaged, and respected.

Belongingness and Environment

The relationship between belongingness and environment was explored in a study by Nichols (2008) describing how students were motivated to achieve based on the social environment of the school they attended. This study took place in a small charter middle school during its first year of operation. Participants in this study included 45 students from a small town in Texas. The researcher verbally administered a slightly altered version of Goodenow's 18-item *Psychological Sense of School Membership* (PSSM). Nichols found that for a social environment to be conducive to achievement, some of the following factors had to be present: positive relationships between students and educators, positive relationships between students and peers, and opportunities and activities that encouraged these relationships. Nichols found that even students who were new to the school viewed the social environment as a positive

experience. Increased emphasis on social interactions in high school may create an environment where fitting in and belonging serves as an added source of pressure. It follows that because high school is a new environment for the adolescent, a sense of belongingness or feeling of school membership may indeed be lower than it was when the student was in middle school, at least during the transition period (Isakson & Jarvis, 1998). Thus, they concluded, schools represent a primary socializing influence that has an enormous effect on the course of people's lives, and in turn, on society.

Recent research by Shih (2008) explored how a person's value and belongingness, along with their social ability were connected with the surrounding environment. Shih surveyed 343 Taiwanese students from 12 classes in three middle schools. She found that these Taiwanese students were socialized to identify with the value of school. The students from the three middle schools shared a common thread with the school environment. Shih stated that students not only value the school but socially feel a sense of belongingness.

Belongingness and Student Attitudes

The component of belongingness and student attitudes demonstrated by Haladyna and Thomas's (1979) empirical research concluded that students' attitudes toward school in general, as well as toward specific academic domains, such as mathematics, science, and art, decrease as children get older. According to Eccles and Midgley (1989), research shows that declines in motivation during adolescence are associated with contextual/environmental factors, and that motivation is not merely a function of pubertal changes. Total alienation from school may, of course, deny the person entry to society and a future means of earning a living. If the school's contextual environment is perceived as threatening to their sense of self-esteem, and/or if the school faculty is considered to be untrustworthy, student ability to adopt mainstream beliefs regarding

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schooling could be significantly impaired (Mitchell, 2004). Even seemingly slight shifts in engagement within the school setting may prove problematic. School investment during the middle grades may have serious and enduring effects on shaping career patterns and life choices. This lack of investment all too often leads to dropping out of school before graduation, which is disturbing, if not frightening; consequently, we are left to ponder how much of the decline in motivation is attributable to factors over which the school has a significant degree of control (Anderman & Maehr, 1994).

A study by Anderman (2003) found that a school climate in which educators showed respect toward students helped to create a sense of belongingness with the school. Anderman's purpose was to examine the change in students' sense of school belonging over sixth and seventh grades. The study consisted of seven middle schools in a southeastern state. The sample included 618 students. The survey was composed of 130 questions and consisted of 5-point Likert-type scale questions. The results suggested that as the students' tenure at middle school increased, their sense of belongingness decreased due to the increase of isolation and rigor of the educational setting.

School Climate

Safety, trust, respect, fairness, high expectations, and a welcoming atmosphere are aspects of a positive total school climate. The No Child Left Behind Act (NCLB) of 2001 has significantly increased the pressure to improve student achievement. Waters, Marzano, and McNulty (2004) reported that effective school leadership can create conditions that foster student achievement. This includes school climate, leadership, and quality instruction are frequently associated with effective schools.

According to Deci and Ryan (1985), early adolescents actively attempt to find meaning of their middle school experiences in terms of their needs for competence and relatedness. Roeser et al. (1996) stated that student's academic success and acceptance of school norms is greatly influenced by the way that the principal, teachers, and other professionals in the school interact with and relate to them. They surveyed 296 eighth grade students to examine the role of personal achievement goals and feelings of school belonging in mediating the relation between perceptions of the school psychological environment and school-related beliefs, affect, and achievement. The researchers concluded that middle school environments that are perceived as supportive, caring, and emphasizing individual effort and improvement are related to a more adaptive pattern of cognition, affect, and behavior than are middle school environments that are perceived as less supportive and emphasizing relative ability and competition. These perceptions of the school environment are thought to shape students' own school-related beliefs, affect, and behavior (Anderman &Wolters, 2006).

Factors in School Climate

According to Hoy (2003) school climate has become a global construct that researchers often use loosely to group together studies of school environment, learning environment, learning climate, sense of community, leadership, and social climate. This broad application reveals both the strength and weakness of school climate studies but it suffers from a lack of clear definition. Hoy (2003) stated that the terms "climate" and "culture" are often used interchangeably in the literature. However, a clear distinction between the two can be made by emphasizing that "culture" consists of shared values and assumptions, whereas "climate" is defined by shared perceptions of behavior (Hoy, 2003).

The factors that encompass a school's climate are extensive and complex. As a result, an identification of the following factors on the influence of school climate include the following: the number and quality of interactions between adults and students (Kuperminc et al., 2001); students' and teachers' perception of their school environment, or the school's personality (Johnson, Johnson, & Zimmerman, 1996); environmental factors (such as the physical buildings and classrooms, and materials used for instruction); academic performance (Johnson & Johnson, 1993); feelings of safeness and school size (Freiberg, 1998); and feelings of trust and respect for students and teachers (Manning & Saddlemire, 1996).

Environmental Factors

Additionally, school climate can significantly influence the school's environment. As Freiberg (1998) noted, "School climate can be a positive influence on the health of the learning environment or a significant barrier to learning" (p. 23). When students find a meaningful role in their school, they are less likely to engage in disruptive behavior than students who feel out of place and are deprived of individualized involvement (Stephens, 1995). Anderman (2003) suggested support for the hypothesis by stating adolescents will feel less alienated from educational settings that emphasize personal effort, improvement, and mastery than those who do not. Researchers have agreed that by establishing a supportive and inclusive environment, schools may be able to foster and support student perceptions of belonging and thereby increase student engagement and achievement (Goodenow, 1993; Osterman, 2000; Voelkl, 1996, 1997).

Teacher perceptions of school climate. Skinner and Belmont (1993) suggested that teachers who offer guidance, modeling, and sincere praise build strong relationships that affect

the students' motivation to achieve. They empirically measured the effects of teacher perceptions on student behavior during the course of a school year. The researchers examined the effects of three dimensions of teacher perception (involvement, structure, and autonomy support) on children's behavioral and emotional engagement. The sample consisted of 144 students from a rural suburban school district in upstate New York. Students were read 29 questions on a 4-point Likert-type scale by interviewers in both the fall and the spring. They concluded that a positive teacher perspective toward students would optimize student motivation and achievement in school.

Student perceptions of school climate. When students, as well as parents, educators, and community members, walk into a school, they quickly begin to form judgments about the school. Samdal, Nutbeam, Wold, and Kannas, (1998) surveyed students ages 13 to 15 from four different countries (Finland, Latvia, Norway, and Slovakia). The research was based on how students' perceptions of and experiences in the schools influence the development of their self- esteem, self-perception, and health behaviors. They concluded that attention not only needs to be given to classroom teaching materials but also to the quality of student's' school experiences and the quality of the climate of the school. Students who have a positive view of the school and classroom climate are better motivated and achieve more according to their ability level than those who are not very satisfied with school (Voelkl, 1995). Attending school can be frightening for students, and this apprehension can adversely affect students' perceptions of their schools' climate and learning outcomes. Therefore, research has shown that providing a positive and supportive school climate for students is important for a smooth and easy transition throughout the school years (Freiberg, 1998).

Conceptually, students' satisfaction with school is linked to the construct of quality of life. The affective component of this construct is indicated by immediate emotional responses such as happiness, enjoyment of school, and a sense of well-being at school (Osterman, 2000). Characteristics associated with a positive view of school are student participation and responsibility for school life, and a good relationship with teachers (Good & Brophy, 1996). Goodenow (1993) looked at the influence of classroom belonging on student expectations for success and intrinsic value of academic subjects as well as effort and achievement in a suburban White middle-class school. Goodenow used data from three studies involving 1,366 students in Grades 5 to 8 from one suburban middle school and two urban junior high schools. Factor analyses identified three factors of belongingness: positive relationships with classmates, teacher support, and general sense of belonging. The students' notion of autonomy and control was formed by regulations, the framework for the activities in school, and the responsibilities they are given. Each school had a set of rules guiding the behavior of the students, or teachers, and school activities. The fairness and relevance of these regulations, and the extent to which the students were allowed to participate in their development and interpretation, were likely to influence the way they adjust to the school environment, and consequently, how they felt about school (Samdal et al., 1998). Students were more motivated to learn when they were able to succeed at tasks they found interesting that would widen their capacities. Engaged students also tend to have better school attendance and lower drop-out rates (Finn, 1989, 1992).

Students' relationships with teachers may be the most important element in determining whether students perceive the climate as being positive. If students feel that they are cared for and are allowed to participate actively in discussions and planning of the classroom program,

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poor academic performance may have a less important influence on their perceptions of the school's climate (Soloman, Battistich, & Schaps, 1996).

Ryan and Patrick (2001) investigated student perceptions of the social environment of their eighth grade classroom related to changes in motivation and engagement when they moved from seventh to eighth grade. They surveyed 233 students from three ethnically diverse middle schools within two Midwestern school districts. Ryan and Patrick reported that the results of the classroom social environment explained changes in students' efficacy relating to their teacher, efficacy accomplishing their schoolwork, self-regulated learning, and disruptive behavior, even after previous motivation, engagement, achievement, and demographics were entered into the equations. Ryan and Deci (2001) stated that learners experienced less apprehension in classrooms where there was mutual respect between teachers and students than in classrooms that did not emphasize mutual respect.

Gutman and Midgley (2000) researched 62 African American families living in poverty and examined the main and interactive effects of psychological, family, and school factors on students' grade point average across the middle school transition. The research was conducted and data collected through parent and student interviews. Based on their research, Gutman and Midgley suggested that rather than focusing exclusively on either parental involvement or the school environment, the combination of both family and school factors may be most effective in supporting the academic achievement of poor African American students during the transition to middle school.

A compelling body of research underscores the importance of a school climate that includes safety, trust, respect, fairness, high expectations, and a welcoming atmosphere. Positive perceptions of students, teachers, and parents of the school's climate promote student learning,

academic achievement, school success, and healthy development, as well as effective risk prevention, positive youth development and increased teacher retention. However, these research findings are not consistently reflected in current educational policy, practice, and teacher education reform efforts (Cohen, McCabe, Michelli, & Pickeral, 2008). This gap between research and policy may be the result of failure to acknowledge the importance of school climate and inconsistency in defining the meaning of school climate (Manning & Saddlemire, 1996).

<div align="center">Student and School Characteristics</div>

Gender

Akos and Galassi (2004) found that gender plays a key role in the transitions of students in schools and may help in the adjustment of how students are motivated to learn. The students who participated in this research came from one urban middle school and one high school in a medium-sized, southeastern school district. The researchers developed the questionnaires for the sixth grade and ninth grade students to tap context-relevant considerations and student perceptions unique to each of the transitions. Their *School Transition Questionnaire* (STQ) is a retrospective measure of students' perceptions over the course of the transition and consists of a 4-point, Likert-type response format. The results of this study supported gender and race as influential variables in school transitions and highlighted potential differences in transition programming needed for different groups of students.

Simons-Morton and Crump (2003) discovered that school adjustment was lower for boys than girls, and the decline over time was greater for boys. They conducted a study on parental involvement, which included school adjustment as a factor. This finding is significant because these factors occur at an age when adjustment and commitment to school may be particularly

important for future achievement and behavior. The researchers noted that girls adjust better due to engagement and become more engaged in school than boys. They said that girls are more organized, which helps with studying, test preparation, and answering higher order thinking questions in class than boys in the transition grades. Simons-Morton and Crump suggested that engagement in school may facilitate adjustment to school thus favoring girls over boys to adjust better.

Ethnicity

Motivation research on ethnicity has been guided less by general theoretical principles than by the relationship of particular constructs to socioeconomic status. According to Graham (1994), availability of resources between Blacks and Whites can account for the explanations for the presumed motivational deficits in Blacks. A report based on the *National Educational Longitudinal Study* (NELS) showed that African American students reported less time spent on homework than Whites, but their self-ratings of trying hard in class were higher than those of White students (Ainsworth-Darnell & Downey, 1998).They reported White students exhibited higher achievement strivings than African American students. However, this may have been partly explained by differences in socioeconomic status between Whites and African American students. African American students tended to be more socially disadvantaged than White students in this study (Graham, 1994).

Phelan, Davidson, and Cao (1991) examined how 54 students from different cultural and ethnic groups navigated between their different social contexts (school, home, friends). For some students, the values of friends, parents, and school were congruous, creating smooth transitions as students moved from one context to another. For these students, social and academic goals

complemented each other, leading to high motivation and achievement. The researchers found that knowing these goals provided teachers and others with a way of thinking about their students in a more holistic way.

Socioeconomic Status

Minority and low socioeconomic status children often enter school with lower academic competencies as well as social and emotional readiness competencies (Evan, 2004). Furthermore, many of these children continue along low performance pathways throughout their school careers (National Center for Educational Statistics, 2004). Singh et al. (2010) stated school belonging, engagement, and ethnicity-based differences are also related to other individual and family-related factors. Johnson, Crosnoe, and Elder (2001) examined the literature and found a few patterns. They found that generally younger students, boys, adolescents from higher socioeconomic backgrounds, and adolescents with more authoritative parents, reported greater attachment to school or valuing of education (Steinberg, Lamborn, Dornbusch, & Darling, 1992). Additionally, they noted that students from families of higher socioeconomic status were more likely to have higher levels of school belonging and to be more engaged in school activities (Ainsworth-Darnell & Downey 1998; Smerdon 1999).

<div align="center">Summary</div>

Ashmore et al. (2004) defined early adolescence as a period of transition between elementary school and high school, which includes a heightened consciousness of up-and-coming responsibilities and adulthood. Behavioral characteristics prized by young adolescents change and comply with the rules of new relations among peers, family, and teachers within and

outside the school. Early adolescence is characterized by entry into the "junior high" or "middle school." The ages 10 to 14 form a critical period for growth and maturation as children enter pubertal years and their roles in school and society change (Ashmore et al., 2004). It is a pivotal time when students experience intense growth, as well as new ideas of identity and individualism. Many students in middle school experience bewilderment and diminutive motivation toward school, which is a result of new physical and mental changes, along with a new environment of middle schools. Early adolescents actively attempt to make meaning of their middle school experiences in terms of their needs for competence and relatedness (Deci & Ryan, 1985).

School is generally recognized as a primary institution in which adolescents learn socially appropriate behavior, develop cognitive skills, and establish patterns of early career development (Voelkl, Welte, & Wieczreck, 1999). There is a need to expand motivation research and determine the effects of self-determination theory, identification with school, and a school's climate on student success. These factors significantly affect a student's motivation, sense of belongingness, and association with school. The extent to which students are able to experience competence and autonomy determines the extent to which they believe that school is of value (Vallerand, Fortier, & Guay, 1997). According to this theoretical perspective, schools are able to create an environment that fosters a sense of relatedness, belongingness, and school membership that allows students to promote increased identification with school (Mitchell, 2004). Autonomy-supportive environments that allow for a high degree of relatedness and opportunities for students to experience competence, self-determination, and self-control will foster emotional, behavioral, and cognitive engagement and identification with school (Guay, Boivin, & Hodges, 1999).

Self-determination theory is one approach to the many different research streams on motivation that uses traditional methods while employing an idea that highlights the importance of humans' evolved inner resources (Ryan, Kuhl, & Deci, 1997). The extent to which the school environment allows students to experience feelings of competence, autonomy, and relatedness, may determine their motivation toward academic tasks and will greatly influence their potential for achievement (Vallerand, Pelltier, & Koester, 2009). Because of the functional and experiential differences between self-motivation and external regulation, a major focus of self-determination theory has been to supply a differentiated approach to motivation by asking what kind of motivation is being exhibited at any given time (Williams, Saizow, & Ryan, 1999). By considering the perceived forces that motivate a person, self-determination theory has been able to recognize distinct types of motivation such as intrinsic and extrinsic motivation, each of which has specific consequences for learning, performance, personal experience, and well-being (Deci & Ryan, 2000). According to Wild, Enzle, and Hawkins (1992), events that support elements of personal autonomy promote an intrinsically motivated orientation toward activities, characterized by enjoyment, activity engagement, exploration, and creativity.

Identification with school occurs when students internalize the feeling that they "belong" in school--both that they are a conspicuous part of the school environment and that school is an important aspect of their own experience (Finn & Voelkl, 1993). Identification with school is likely to occur over time if the student continues to participate in classroom and school activities, and if rewards for performances are forthcoming. According to Finn and Voelkl (1993), an internalization of a sense of identification can, in turn, serve to perpetuate the student's active participation in class and school.

Fostering students' social, emotional, and ethical growth also helps students grow academically. A nourishing school climate provides a vehicle to simulate this growth. A variety of conditions in addition to teacher perception, student perception, and parent perception can affect the school climate. They include academic engagement, connectedness, participation in extracurricular activities, liking school, having a student voice, positive peer relations, safety, fair and effective discipline, and teacher support (Nichols, 2008). Wild et al. (1992) reported through empirical research on teacher motivation and student achievement that the intrinsic and extrinsic motivational influences on teachers affect both teaching style and success of teaching attempts. Although researchers measured these conditions differently, students do better academically if they experience these conditions.

Gaps found in the research on how student motivation affects future success point to the need to study the effects of self-determination, identification with school, and school climate on students' motivation and aspiration for future success. No known research to date has explored the important relationship between self-determination and identification with school. By adding information to the field of student motivation from this study, educators can implement teaching and learning strategies for middle grade students that address significant factors that support student engagement.

Based on the review of literature, self-determination, identification with school, and school climate should be positively correlated with eighth grade students' perceptions of secondary and postsecondary plans for the future. Students' self-motivation can be enhanced by identification with school. The way students identify with school can be enhanced by a safe school environment in which students do not have distractions that would limit the educational value of the school.

Therefore, the literature suggests that self-determination, identification with school, and school climate are positively correlated. This review of the literature provides a basis for my research on the effects of middle school students' perceptions of identification with school, self-determination, and school culture, and on their secondary and postsecondary aspirations for ongoing and future education. This review also incorporates variables such as ethnicity, socioeconomic status, and gender because of the known relationship between these variables and the variables of interest in this study.

CHAPTER III

METHODS

The purpose of this research was to investigate the influence of self-determination, identification with school, and school climate on middle school students' future secondary and postsecondary school plans in their transition year before high school. This chapter describes the research design, research questions, a description of the setting and the sample, instrumentation, data collection procedures, and data analyses. The study sought to answer the following questions:

1. What are the relationships between student self-determination, identification with school, and perceptions of school climate?

2. How do ethnicity, socioeconomic status, gender, and their self-determination effect students' aspirations for ongoing and future education?

3. How do ethnicity, socioeconomic status, gender, and their identification with school effect students' aspirations for ongoing and future education?

4. How do ethnicity, socioeconomic status, gender, and school climate effect students' aspirations for ongoing and future education?

Description of the Setting and Population

This study took place in a rural school district in the southeastern United States. The school district is the largest employer in the county with approximately 3,900 employees. Lacking industry and public transportation, the county is considered a commuter community

because most residents travel either to the nearest major city or surrounding counties for employment. The schools in this county reflect being a commuter community with nearly 2,000 elementary students attending the After School Program each day. Students make up 20% of the county's population, while children under the age of 18 comprise 30% of the population.

The school system consists of 23 elementary schools, 8 middle schools, and 5 high schools. The schools in the southern part of the county were built in the early 1990s to early 2000s and have been updated through various renovations. The average student populations of these schools range from 900 to over 1,000 students compared to schools in other parts of the county that average 800 students per school.

The socioeconomic description of each school varies according to its location in the county. The SES of the northern part of the county is higher than that of the southern part of the county. The average percentage of students eligible for the free and reduced lunch program is 12% in the northern part of the county, while the average percentage of students eligible for the free and reduced lunch program is 30% in the southern part of the county. The average home cost in the northern part of the county is approximately $200,000, compared to $135,000 in the southern part of the county. The southern section contains older subdivisions whereas the northern section has mostly newer ones thus affecting the rate of growth and the building of new schools.

The three middle schools affected by the lack of growth in the southern section of the school district were chosen for this study. The non-White student population has doubled in the last 5 years in these three schools, faster than in other sections of the county. The percentage of non-White students enrolled in the three middle schools in the southern section of the county

averages 32%. This is compared to the middle schools in the northern section of the county that have an average non-White enrollment of 20%.

The southern section of the school system also contains the high schools with the lowest graduation rates. Three of the five high schools are located in this section of the county and receive students from the three middle schools used as the sample for the current study. The three high schools have an average graduation rate of 73.6%, compared to the schools not in the southern part with an average rate of 80%.

The three middle schools were selected for convenience. Transitional eighth-grade students were chosen as the population of interest for two reasons: (a) transitional eighth graders are likely to have a variety of perceptions about their plans for secondary and future schooling and (b) the researcher has taught the transitional eighth-grade level and has contact with teachers from the schools who teach the same age group. Student eligibility for placement in high school classes begins at the start of the eighth-grade year. Placement in a specific program path is dependent upon students' overall grades in their academic classes (math, science, language arts, and social studies) as well as the results of the mandated state testing. These placements will affect their secondary school plans and their future paths in life.

The unit of analysis for this study consisted of 496 eighth grade students. The research design used survey research and quantitative analyses indicating factors that most influence the aspirations of these students from three middle schools in one southern school system. The independent variables used in this research to measure students' aspirations for ongoing and future education are self-determination, identification with school, and school climate. The dependent variable measured students' aspirations for ongoing and future education. The control variables used in this research are gender, socioeconomic status, and ethnicity.

Sample

School A has only made adequate yearly progress (AYP) once since the school opened in early 2002. As with School B, the school has a predominately-White middle-class population of 71% and an African American population of 23%. The students are from middle-class families who are employed and commute to jobs outside the county. The percentage of students eligible for the free and reduced lunch program has increased with the change in the economy from 26% in 2010 to 41% in 2011. School A currently has a small Hispanic population (3%). The teacher to student ratio is kept relatively low (1:16) but will increase in the 2012 school year due to local and state budget cuts.

School B is the only middle school in this research to meet AYP all years in which NCLB has been implemented, although its population has become the most diverse of the three. The percentage of students eligible for the free and reduced lunch program has increased from 28% in 2010 to 49% in 2012. The economy may have played a large part in this increase. The African American population has shown a 15% increase in this year as well. Students who attend School B are from middle-class families who work and commute to jobs outside the county. School B accommodates Grades 6, 7, and 8 with an enrollment of 957. School B was built in 1993 to accommodate approximately 800 students. The teacher to student ratio is kept relatively low (1:15) but will increase in the 2012 school year due to local and state budget cuts.

Unlike the other two middle schools in the southern section, School C has not been renovated. It was first built in 1989 to accommodate 780 students. It has grown since then and now accommodates 978 students and houses 18 classroom module trailers. School C has also only made AYP once since the inception of NCLB. Its population is 78% White and 17% African American. It is the most rural of the three middle schools due to the number of large

farms nearby. The students who attend this school are from middle-class families who not only

commute outside the county to their jobs, but also tend these farms. The percentage of students

eligible for the free and reduced lunch program has grown from 29% in 2010 to 46% in 2011.

The teacher to student ratio is kept relatively low (1:16), but will increase in the 2012 school year

due to local and state budget cuts. Tables 2 and 3 contain the demographic description of the

sample schools and the eighth grades in each school.

Table 2

Demographic Characteristics of Schools in the Study

Characteristic	School A	School B	School C	Total
Grade level	6-8	6-8	6-8	NA
Enrollment	986	957	978	2921
% students eligible for free/reduced lunch	41	49	46	45.3
Gender				
% Male	52	50	54	52
% Female	48	50	46	48
Ethnicity				
% Asian	1	0	0	< 1.0
% African American	23	35	17	24.9
% Hispanic	3	5	3	3.7
% White	71	55	78	68.1
% Other	2	5	2	3.0
Teacher/student ratio	1:16	1:15	1:16	NA

Table 3

Demographic Characteristics of Eighth Grades in Schools of the Study

Characteristic	School A	School B	School C
Enrollment	283	289	279
% students eligible for free/reduced lunch	41	49	46
Gender			
% Male	60	55	53
% Female	40	45	47
Ethnicity			
% Asian	1	0	0
% African American	36	24	17
% Hispanic	4	4	3
% White	59	70	80
% Other	1	2	0
Teacher/student ratio	1:16	1:15	1:16

Instrumentation

The survey instrument was developed to measure three independent variables and one dependent variable. The survey included 28 items measuring the three independent variables: (a) a student's identification with school, from the Identification with School Questionnaire (Voelkl, 1997); (b) self-determination, from the Academic Motivational Scale (Vallerand, Pelletier, Briere, Senecal, & Vallieres 1989); and school climate, from the School Climate Survey (Bauch, 2010). The independent variables used a 4-point Likert-type scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*). A Likert scale is a psychometric scale commonly used in questionnaires. It is the most widely used scale in survey research, such that the term is used interchangeably with rating scale, although the two are not synonymous (Gall, Gall, & Borg, 2003). Table 4 contains the survey item reliabilities reported in the literature measuring the independent variables.

Table 4

Survey Items Used to Create Independent Variables

Scale	Cronbach's alpha	Survey items
Identification with School*	.84	I feel proud to be part of this school.
		School is one of the most important things in my life.
		Many of the things we learn in class are useless.
		Most of my teachers really care about me.
		Most of the time I would like to be any place other than in school.
		There are teachers or other adults in my school who I can talk to if I have a problem.
		School is one of my favorite places to be.
		People at school are interested in what I have to say.
		School is often a waste of time.
Academic Motivation (Self-determination)**	.62	I try to do well in school.
		I take satisfaction in outdoing myself in my studies.
		When I succeed in school, I feel important.
		I experience enjoyment when I am taken by talks with motivating teachers.
		I feel excitement when I am working on difficult academic activities.
		I experience fulfillment while learning new things.
		I experience satisfaction while I am surpassing myself in one of my personal accomplishments.
		My studies allow me to continue to learn about many things that interest me.
		I feel that I can act like a happy student at this school.
		I want to show myself that I can succeed in my studies.
		This school allows me to experience satisfaction in my quest for excellence in my studies.
School Climate***	.78	At this school teachers are interested in students.
		This school is like another family to me.
		Students get along well with teachers.
		There is real school spirit at this school.
		The teaching is good at this school.
		Discipline is fair at this school.
		My teachers praise my efforts and accomplishments.
		I feel safe at this school.

Note: * adapted from Voelkl (1997); ** adapted from Vallerand et al. (1998); *** adapted from Bauch (2010)

Identification with School

The first instrument adapted was the 16 items of the Identification with School questionnaire by Voelkl (1997). Identification with school involves two components: (1) student sense of belonging, and (2) valuing of school and school-related outcomes. Sample items that reflect student sense of belonging include "I feel proud of being a part of my school," "The only time I get attention in school is when I cause trouble," and "School is one of my favorite places to be." Sample items that reflect valuing of school and school-related outcomes include "School is one of the most important things in my life," "Most of the things we learn in class are useless," and "Most of the time I would like to be any place other than in school."

The researcher modified the scale for the current study to include only the 10 items that specifically apply to belonging and valuing of school and to the dependent variable (see Appendix B). The modified scale was based on the descriptors of each item. The researcher excluded questions based on what the question was asking as it pertained to the grade level being researched. Those questions excluded (e.g., "I can get a good job even if my grades are bad" and "I like to participate in a lot of school activities") did not relate to this research because students of this age cannot work, and there are no extracurricular activities available at the schools; however, they have recently allowed a limited number of clubs.

Self-determination

The second instrument adapted for use in the current study was the Academic Motivational Scale version for high school (Vallerand et al., 1992, 1993). This instrument primarily measures self-determination. The 28-item instrument is divided into seven subscales, reflecting one subscale of amotivation, three ordered subscales of extrinsic motivation (external,

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introjected, and identified regulation), and three distinct unordered subscales of intrinsic

motivation (to know, to accomplish things, and to experience stimulation). The researcher

included only the 12 items that specifically apply to self-determination (see Appendix B). The

researcher omitted the 16 motivation questions that did not pertain to this research study (e.g.,

"Honestly, I don't know; I really feel that I am wasting my time in school").

School Climate

The third instrument adapted for use in the study was validated from a study by Bauch

(2010) (see Appendix B). The instrument measures a student's perception of school climate.

Four questions include a student's perception of the school as it pertains to teachers (e.g., "The

teaching is good at this school"). Four questions pertain to the student's view of the school as it

relates to belongingness and safety (e.g., "This school is like another family to me").

Dependent Variable

The dependent variable, students' aspirations for ongoing and future education, was a

continuous variable using a 7-point single-item response. The question was used in the

Educational Longitudinal Survey of 1988 and 2002. Andelman (2004) researched the principal

indicators of student secondary and postsecondary success with the data available from the

Educational Longitudinal Survey of 1988 and 2002. Andelman's research indicated that eighth-

grade students know the characteristics for their secondary and postsecondary future. Table 5

contains the possible responses to the dependent variable. Students could choose only one

response.

Table 5

Range of Dependent Variable: Students' Aspirations for Ongoing and Future Education

Value	Response
1	Not receive a high school diploma
2	Receive a GED/high school equivalency
3	Graduate from high school
4	Attend vocational, trade, or business school after high school graduation
5	Complete some college
6	Receive a college degree
7	Receive an advanced degree after college (master's, PhD, medical, or law degree).

Control Variables

Three demographic questions (gender, socioeconomic status, and ethnicity) were used as control variables. The first question concerning gender allows students to choose whether they are (1) male or (2) female. The second question concerning socioeconomic status allows the student to choose if they are either eligible or not eligible for free and reduced lunch with a (1) "yes" or (2) "no" answer. The third control variable allows the student to pick their ethnicity. The student is to choose one of the following six: (1) White, (2) African American, (3) Native American or Alaskan American, (4) Asian, (5) Hispanic or Latino, and (6) Multiracial.

Validity and Reliability

The researcher made modifications to the wording of the items so that the majority of students at the eighth-grade level would understand all of the words used in a particular item. To assure face validity, the researcher modified the survey by asking eighth-grade students for an understanding of the words used. In some cases, the purpose of the modification was to enhance clarity by eliminating the single stem for a set of questions and incorporating it into each item. Table 6 includes the original and the modified items.

Table 6

Changes in Wording on Selected Items of Questionnaire

Original item	Modified item	Literature source
I feel proud [of being] part of [my] school.	I feel proud *to be* part of *this* school.	Voelkl (1997)
[For the pleasure that] experience when I am taken by discussions with interesting teachers.	I experience *enjoyment* when I am taken by talks with *motivating* teachers	Vallerand et al. (1992)
[For the "high" feeling that I experience while reading about interesting subjects].	*I experience fulfillment while learning new things.*	
[Because high school] allows me to experience a [personal] satisfaction in my quest for excellence in my studies.	*This* school allows me to experience satisfaction in my quest for excellence in my studies.	
Students get along with teachers.	Students get along *well* with teachers.	Bauch (2010)
My teachers praise my efforts	My teachers praise my efforts *and accomplishments*.	

Institutional Review Board

The University of Alabama Institutional Review Board (IRB) protects the rights of subjects in research studies. The IRB may review study records from time to time to be certain that people in research studies are being treated fairly and that the study is being carried out as planned. The IRB reviewed and approved this research design June 17, 2010. (See APPENDIX D)

Data Collection Procedure

The survey was administered only to students who returned signed parental consent forms. The researcher distributed 851 parental consent forms and received 496 approvals from

parents. School A received 165 signed parental consent forms, School B received 168 signed parental consent forms, and School C received 162 signed parental consent forms. This provided the researcher with a 58% response rate from parents.

The parental consent forms were distributed during the homeroom period to minimize the disruption of academic instructional time. The Board of Education and each of the three middle schools principals approved the use of the school's homeroom schedule. Homerooms were used because all schools participating used the middle school teaming concept during this time and the homerooms included students from advanced classes, regular education, and special education.

The researcher delivered the parental consent forms to each teacher at the participating middle schools. Teachers were asked to distribute the forms on Monday and collect the forms during that week. The researcher arranged with the teachers to mark students who returned the parent consent forms on a blank classroom roster and to place the forms in a folder provided by the researcher. The researcher contacted teachers daily through school district email to check the progress of the consent form collection and answer any questions. At the end of the week, the researcher revisited each teacher to collect the completed consent forms. The researcher also arranged with the principal to ensure the students' access to the computer lab on the chosen day to complete the survey.

On the day of the survey, the researcher took students from homerooms to the lab and gave them instructions on how to complete the online questionnaire. The participants took approximately 15 minutes to complete the questionnaire. The questionnaire was administered using web-based software by Qualtrics provided by the College of Education at The University of Alabama. A paper copy was available in case the computers malfunctioned. After the data

were collected, all items were downloaded into the Social Science Statistical Package (SPSS) software.

<center>Preliminary Data Analysis</center>

Surveys were completed by 491 students in the three middle schools. First, the data were examined for patterns of accuracy and completeness. Frequencies and percentages for all the questions were analyzed to determine the consistency of student responses. Only 470 of the students provided responses to the demographic questions (gender, socioeconomic status, and ethnicity) and to the dependent variable. No patterns of missing data were found to suggest that a larger number of males or females, different ethnic groups, or students of different socioeconomic status responded differently to the questionnaire items. Therefore, 21 students' responses were deleted using listwise deletion for missing data.

Second, scale scores were created from the 28 items making up the three independent variables. These 28 items used a 4-point Likert-type scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*). Ten items were adapted from the Identification with School Questionnaire (Voelkl, 1997), 10 items were adapted from the Academic Motivational Scale (Vallerand et al., 1989), and 8 items were adapted from the School Climate Questionnaire (Bauch, 2010).

Three items (Items 16, 18, and 23) were reverse scored before further computations were conducted. Scale scores were computed by calculating a mean across the scale items (Wuensch, 2009) for each student who provided responses to at least 80% of the items on each scale (i.e., 8 items on the identification with school and self-determination scales and 7 items on the climate scale). Ten of the 470 students did not respond to at least 80% of the items on one or more of the scales and were eliminated from the sample, creating a preliminary study sample of 460 students.

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The responses to the three dependent variables (school identification, self-determination, and school climate) of the 460 students were then examined for multivariate outliers through the SPSS regression procedure (Tabachnick & Fidell, 1999). The criterion for multivariate outliers is Mahalanobis distance at $p < .001$. Mahalanobis distance was evaluated as χ^2 with 3 degrees of freedom (equal to the number of variables). Two cases with a Mahalanobis distance greater than $\chi^2(3) = 16.27$ were found and removed, creating a study sample size of 458 to answer the research questions.

Students who completed the questionnaire were not asked to identify their middle school. Therefore, the demographic characteristics of the sample cannot be compared to the demographic characteristics at each school. The demographic characteristics of the final study sample are presented in Table 7.

Table 7

Demographic Characteristics of the Sample

Characteristic	*n*	%
Gender		
Male	207	45.2
Female	251	54.8
Eligibility for free/reduced lunch (SES)		
Yes	223	48.7
No	235	51.3
Ethnicity		
White	260	56.8
African American	107	23.4
Native American/Alaskan native	4	0.9
Asian	10	2.2
Hispanic/Latino(a)	34	7.4
Multiracial	43	9.4

Note. (n = 458)

To assess normality of the independent and dependent variables, measures of skewness and kurtosis were computed. Skewness and kurtosis values of 0 are indicative of a normal

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distribution, and values between -2 and +2 signify no problematic deviations from normality (Kendall, Stuart, Ord, & Arnold, 1999). All measures of skewness and kurtosis for the three independent variables were between -2 and +2. The standard deviations were also within normal parameters. According to Saliu (2011), "The data series is uniform (less dispersed, spread), therefore easier to analyze and control, if its standard deviation is less than or equal to the mean average" (para. 10). Table 8 contains the three independent scales (school identification, self-determination, and school climate) and the dependent variable (aspirations for ongoing and future education) deemed normally distributed.

Table 8

Normality Tests for Independent Variables

Independent variable	*M*	*SD*	*Range*	*Skewness*	*Kurtosis*
Identification with school	2.64	.56	1–4	-.60	.51
Self-determination	2.99	.55	1–4	-.83	1.55
School climate	2.34	.62	1–4	-.33	-.32
Aspirations for ongoing and future education	5.71	1.64	1–7	-1.47	1.23

Cronbach's coefficient alpha was used to determine the internal reliability of the scales created for each of the independent variables. Table 9 contains the values obtained. The coefficient alphas were in the high end of the possible range (0 to 1.0), suggesting that the items in each scale are measuring the same thing (Vogt, 1999).

Table 9

Reliability of the Scales of the Independent Variables

Scale	# of items	Cronbach's alpha coefficient
Identification with school	10	.84
Self-determination	10	.89
School climate	8	.85

Finally, preliminary analyses, including frequencies, percentages, means, and standard deviations, were generated to describe the dependent, independent, and control variables (Blaikie, 2003). Gender (0 = male, 1 = female) and socioeconomic status (0 = not eligible for free and reduced lunch program, 1 = eligible for the program) were coded as dichotomous variables. Ethnicity was collapsed into four categories: White, African American and multiracial, and other (Hispanic/Latino, Asian, and Native American or Alaskan Native). Students who identified themselves as multiracial were categorized as African American in this sample, following the example of Herman (2004), who found a majority of high school students who reported themselves as multiracial with Black and White parents, identified themselves as being Black (African American).

Dummy variables were created for each degree of freedom of the ethnicity control variable to avoid multicollinearity (Vogt, 1999). The degrees of freedom of the ethnicity variable was 3; therefore, two new dummy variables were created. Table 10 contains the coding scheme used. In this coding scheme, the smallest group, other (*n* = 48), is not coded but can be deduced from the coding of the other ethnicities.

Table 10

Coding Scheme for Ethnic Identification

Category	Dummy coding	*n*
White	1 = White, 0 = nonwhite	260
African American/multiracial	1 = AA/multiracial, 0 = nonAA/multiracial	150

Data Analyses of the Research Questions

The research questions formed a guide for determining the main analyses of the data. The student is the unit of analysis for each statistical procedure used. Analyses of variance were used to determine whether differences existed among the demographic control variables of gender, socioeconomic status, and ethnicity for each of the independent variables. These univariate analyses are presented in the results section with the results of the analyses of the research questions.

Research Question 1

1. What are the relationships among student self-determination, identification with school, and perceptions of school climate

Research Question 1 was answered using bivariate correlation and ANOVA. The results determined whether there were statistically significant relationships between the three independent variables. This analysis provided a two-tailed Pearson correlation and the significance level for each of the correlations.

Research Questions 2 through 4

2. How do ethnicity, socioeconomic status, gender, and their self-determination affect students' aspirations for ongoing and future education?

3. How do ethnicity, socioeconomic status, gender, and their identification with school affect students' aspirations for ongoing and future education?

4. How do ethnicity, socioeconomic status, gender, and school climate affect students' aspirations for ongoing and future education?

Three hierarchical multiple regression procedures were used to determine whether students' self-determination, identification with school, and school climate affected their aspirations for ongoing and future education beyond that afforded by differences in gender, socioeconomic status, and ethnicity.

Summary

The purpose of this survey research was to investigate the influence of self-determination, identification with school, and school climate on middle school students' future secondary and postsecondary school plans in their transition year before high school. Responses to an online questionnaire from 458 eighth grade students in three middle schools in a rural school district were used to determine the answers to research questions. Chapter 3 provided a description of the setting and the sample, the instrumentation used in the questionnaire, and the procedures for data collection. Frequencies and percentages were used to describe the data collected from the online questionnaire. The results of the data analysis of the research questions are provided in the next chapter. Table 11 contains a summary of the analyses used to answer the research questions.

Table 11

Analysis Used to Answer the Research Questions

Research question	Main analysis	Follow-up analyses/statistical tests
Relationship among three independent variables	Bivariate correlation	Pearson r (two-tailed)
Effect of self-determination and demographic control variables on the students' aspirations of ongoing and future education	Hierarchical regression	Contribution of control variables (demographic variables) before entry of independent variable. Change in R^2 upon entry of independent variable. Unique variance in dependent variable explained by the independent variable.
Effect of identification with school and demographic control variables on the students' aspirations of ongoing and future education	Hierarchical regression	Contribution of control variables (demographic variables) before entry of independent variable. Change in R^2 upon entry of independent variable. Unique variance in dependent variable explained by the independent variable.
Effect of school climate and demographic control variables on the students' aspirations of ongoing and future education	Hierarchical regression	Contribution of control variables (demographic variables) before entry of independent variable. Change in R^2 upon entry of independent variable. Unique variance in dependent variable explained by the independent variable.

CHAPTER IV

RESULTS

The purpose of this survey research study was to investigate the effects of self-determination, identification with school, and school climate on eighth grade students' future secondary and postsecondary school plans in their transition year before high school. The survey was constructed from the Identification with School Questionnaire (Voelkl, 1997), Academic Motivational Scale (Vallerand et al., 1989), School Climate Survey (Bauch, 2010), and an item adapted from the National Education Longitudinal Study of 2002. These items were used to measure three independent variables and one dependent variable. Three items were included as control variables: gender, eligibility for the free or reduced lunch program (socioeconomic status), and ethnicity. The study sought to answer the following questions:

1. What are the relationships between student self-determination, identification with school, and perceptions of school climate?

2. How do ethnicity, socioeconomic status, gender, and their self-determination effect students' aspirations for ongoing and future education?

3. How do ethnicity, socioeconomic status, gender, and their identification with school effect students' aspirations for ongoing and future education?

4. How do ethnicity, socioeconomic status, gender, and school climate effect students' aspirations for ongoing and future education?

Bivariate Correlational Analysis

Statistically significant moderate, positive correlations were obtained between aspirations for ongoing and future education and identification with school ($r = .34$, $p < .05$) and self-determination ($r = .42$, $p < .05$). Statistically significant low, positive correlations were obtained between aspirations for ongoing and future education and school climate ($r = .18$, $p < .05$), gender ($r = .20$, $p < .05$), and African American/multiracial ethnicity ($r = .10$, $p < .05$). Female and African American/multiracial students were more likely to have higher aspirations for ongoing and future education.

Statistically significant low, negative correlations were obtained between other ethnicities and identification with school ($r = -.17$, $p < .05$), self-determination ($r = -.14$, $p < .05$), and school climate ($r = -.17$, $p < .05$). However, a statistically significant low, positive correlation was obtained between self-determination and African American/multiracial ($r = .13$, $p < .05$). The control variables of gender and ethnicity were not statistically significantly correlated. However, statistically significant low correlations were found between socioeconomic status and White ($r = -.16$, $p < .05$) and African American/multiracial ($r = .17$, $p < .05$) students, indicating that African American/multiracial students were more likely to indicate that they were eligible for the free and reduced lunch program and White students were more likely to indicate that they were not eligible for the free and reduced lunch program. Table 12 contains the first level of analysis involved obtaining bivarate correlations of all the variables included in the study.

Table 12

Bivariate Correlations of Dependent, Independent, and Control Variables Used in the Study

	ID with school	Self-determination	School climate	Gender	SES	White	AA/MR	Other
Aspirations for ongoing and future education	.34*	.42*	.18*	.20*	-.06	-.08	.10*	.02
Id with school		.79*	.74*	.07	.06	.01	.10*	-.17*
Self-determination			.61*	.13*	.06	-.04	.13*	-.14*
School climate				-.01	.07	.13	-.03	-.17*
Gender					-.01	-.02	.04	-.02
Socioeconomic status						-.16*	.17*	.01

Note: * $p < .05$; AA = African American; MR = multi-racial

Analysis of Variance

Analysis of variance was used to determine whether differences existed among the demographic control variables of gender, socioeconomic status, and ethnicity for each of the independent variables. Independent samples *t* tests were conducted to determine whether differences in the independent variables were found between gender and SES status. Only on the self-determination scale did eighth grade males score significantly lower than eighth grade females (self-determination ($t = 2.83$, $p < .01$); identification with school ($t = 1.52$, $p > .05$); school climate ($t = .22$, $p > .05$)). No statistically significant differences were found between students who were eligible for the free or reduced lunch program and those who were not eligible for the program (self-determination ($t = 1.22$, $p > .05$); identification with school ($t = 1.28$, $p > .05$); school climate ($t = 1.43$, $p > .05$)). Tables 13 and 14 contain the independent samples *t* tests to determine whether differences in the independent variables were found between gender and SES status.

Table 13

Independent Variables by Gender

Variable	Male (*n* = 207)		Female (*n* = 251)			
	M	*SD*	*M*	*SD*	*t*	*p*
Identification with school	2.60	.57	2.68	.54	1.52	.13
Self-determination	2.91	.57	3.05	.52	2.83	< .01
School climate	2.35	.61	2.34	.63	.22	.83

Table 14

Independent Variables by Socioeconomic Status

Variable	Not eligible for the free and reduced lunch program (*n* = 235)		Eligible for the free and reduced lunch program (*n* = 223)			
	M	*SD*	*M*	*SD*	*t*	*p*
Identification with school	2.61	.60	2.68	.50	1.28	.20
Self-determination	2.96	.59	3.02	.50	1.22	.22
School climate	2.30	.63	2.39	.61	1.43	.15

An analysis of variance was used to determine whether there were significant differences in the independent variables among the students when identified by ethnicity. Significant differences were found for each independent variable (identification with school ($F_{(2, 455)} = 7.33$, $p < .01$); self-determination ($F_{(2, 455)} = 7.02$, $p < .01$); school climate ($F_{(2, 455)} = 7.65$, $p < .01$)). White and African American/multiracial students scored significantly higher than other ethnicities in their perceptions of identification with school and school climate. African American/multiracial students had significantly higher perceptions of their self-determination than did White and other ethnicity students. Table 15 contains an analysis of variance, which was used to determine whether there were significant differences in the independent variables among the students when identified by ethnicity.

Table 15

Independent Variables by Ethnicity

Scale	n	M	SD	F	p
Identification with School				7.33	<.01
White	260	2.65	.56		
African American/multiracial	150	2.73	.50		
Other	48	2.38	.65		
Self-determination				7.02	<.01
White	260	2.97	.50		
African American/multiracial	150	3.09	.54		
Other	48	2.76	.72		
School Climate				7.65	<.01
White	260	2.41	.61		
African American/multiracial	150	2.32	.59		
Other	48	2.04	.66		

Analysis of the Research Questions

The research questions formed a guide for determining the main analyses of the data. The student was the unit of analysis for each statistical procedure used. The bivariate correlation of the independent variables is found in the analysis of the first research question. Hierarchical multiple regression was used to determine the relationship between the control, independent, and dependent variables.

Research Question 1

What are the relationships among student self-determination, identification with school, and perceptions of school climate?

Research Question 1 was answered using bivarate correlation. The results determined whether there were statistically significant relationships between the three independent variables. This analysis provided a two-tailed Pearson correlation and the significance level for each of the correlations. Table 16 contains the correlation matrix of the three independent variables. Statistically significant high, positive correlations were found among the three variables.

Table 16

Correlation of Self-determination, Identification with School, and Perceptions of School Climate

	Self-determination	School climate
Identification with school	.79*	.74*
Self-determination		.61*

Note: * $p < .05$

Research Questions 2 through 4

How do ethnicity, socioeconomic status, gender, and their self-determination affect students' aspirations for ongoing and future education?

How do ethnicity, socioeconomic status, gender, and their identification with school affect students' aspirations for ongoing and future education?

How do ethnicity, socioeconomic status, gender, and school climate affect students' aspirations for ongoing and future education?

Three hierarchical multiple regression procedures were used to determine whether students' self-determination, identification with school, and school climate affected their aspirations for ongoing and future education beyond that afforded by differences in gender, socioeconomic status, and ethnicity. The first step of each analysis entered the demographic control variables (gender, eligibility for the free or reduced lunch program, and ethnicity) stepwise into the model. The second step of each analysis entered one of the independent variables of self-determination, identification with school, or school climate. The results of each hierarchical multiple regression are listed below.

Self-determination. A statistically significant relationship between students' aspirations for ongoing and future education and gender (specifically, females) was found in the first step (*F*

$(1, 456) = 18.02, p < .01, R^2 = .04$). In addition, a statistically significant relationship between students' aspirations for ongoing and future education and African American/multiracial was found in the first step ($F(2, 455) = 11.27, p < .01, R^2 = .01$). The addition of self-determination in the second step resulted in a significant increase in the proportion of variance explained in students' aspirations for ongoing and future education ($\Delta R^2 = .15, \Delta F(1, 454) = 83.69, p < .01$). Self-determination ($\beta = .39, t = 9.15, p < .01$) contributed uniquely to the explained variance of the dependent variable. The overall model of three predictors (self-determination, gender, and African American/multiracial) was significant as well ($F_{(3, 454)} = 36.77, p < .0$). The overall variance explained by the three variables was an adjusted $R^2 = .20$. Self-determination explained 19% of the variance in students' aspirations for ongoing and future education over and above the effects of ethnicity, gender, and socioeconomic status. Table 17 contains a summary of hierarchical regression analysis of self-determination as a contributing factor to students' aspirations for ongoing and future education, controlling for gender, socioeconomic status, and ethnicity.

Table 17

Summary of Hierarchical Regression Analysis of Self-determination as a Contributing Factor to Students' Aspirations for Ongoing and Future Education, Controlling for Gender, Socioeconomic Status, and Ethnicity

Step/Model		b	β	t	p
1/1	Y Intercept	5.35		47.71	< .01
	Gender (female)	.64	.20	4.25	< .01
1/2	Y Intercept	5.25		42.93	< .01
	Gender (female)	.63	.19	4.18	< .01
	African American/multiracial	.34	.10	2.09	<.04
2/3	Y Intercept	1.88		4.87	< .01
	Gender (female)	.47	.14	3.43	< .01
	African American/multiracial	.16	.05	1.07	.28
	Self-determination	1.18	.39	9.15	< .01

Note: $R^2 = .04$ for Step 1/1; $\Delta R^2 = .01$ for Step 1/2; $\Delta R^2 = .15$ for Step 2/3; adjusted $R^2 = .20$; n = 458.

Identification with school. A statistically significant relationship between students' aspirations for ongoing and future education and gender (specifically, females) was found in the first step (F (1, 456) = 18.02, $p < .01$, $R^2 = .04$). In addition, a statistically significant relationship between students' aspirations for ongoing and future education and African American/multiracial was found in the first step (F (2, 455) = 11.27, $p < .01$, $R^2 = .01$). The addition of identification with school in the second step resulted in a significant increase in the proportion of variance explained in students' aspirations for ongoing and future education ($\Delta R^2 = .10$, $\Delta F(1, 454) = 54.86$, $p < .01$). Identification with school ($\beta = .32$, $t = 7.41$, $p < .01$) contributed uniquely to the explained variance of the dependent variable. The overall model of three predictors (identification with school, gender, and African American/multiracial) was significant as well ($F_{(3, 454)} = 26.69$, $p < .01$). The overall variance explained by the three variables was an adjusted $R^2 = .15$. Identification with school explained 14% of the variance in students' aspirations for

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ongoing and future education over and above the effects of ethnicity, gender, and socioeconomic status. Table 18 contains a summary of hierarchical regression analysis of identification with school as a contributing factor to students' aspirations for ongoing and future education, controlling for gender, socioeconomic status, and ethnicity.

Table 18

Summary of Hierarchical Regression Analysis of Identification with School as a Contributing Factor to Students' Aspirations for Ongoing and Future Education, Controlling for Gender, Socioeconomic Status, and Ethnicity

Step/Model		b	β	t	p
1/1	Y Intercept	5.35		47.71	< .01
	Gender (female)	.64	.20	4.25	< .01
1/2	Y Intercept	5.25		42.93	< .01
	Gender (female)	.63	.19	4.18	< .01
	African American/multiracial	.34	.10	2.09	<.04
2/3	Y Intercept	2.81		8.02	< .01
	Gender (female)	.56	.17	3.91	< .01
	African American/multiracial	.22	.06	1.47	.14
	Identification with school	.95	.32	7.41	< .01

Note: $R^2 = .04$ for Step 1/1; $\Delta R^2 = .01$ for Step 1/2; $\Delta R^2 = .10$ for Step 2/3; adjusted $R^2 = .15$; n = 458.

School climate. A statistically significant relationship between students' aspirations for ongoing and future education and gender (specifically, females) was found in the first step ($F(1, 456) = 18.02, p < .01, R^2 = .04$). In addition, a statistically significant relationship between students' aspirations for ongoing and future education and African American/multiracial was found in the first step ($F(2, 455) = 11.27, p < .01, R^2 = .01$). The addition of school climate in the second step resulted in a significant increase in the proportion of variance explained in students' aspirations for ongoing and future education ($\Delta R^2 = .03, \Delta F(1, 454) = 16.396, p < .01$).

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School climate ($\beta = .19$, $t = 4.12$, $p < .01$) contributed uniquely to the explained variance of the dependent variable. The overall model of three predictors (school climate, gender, and African American/multiracial) was significant as well ($F_{(3, 454)} = 13.43$, $p < .01$). The overall variance explained by the three variables was an adjusted $R^2 = .08$. Climate explained 8% of the variance in students' aspirations for ongoing and future education over and above the effects of ethnicity, gender, and socioeconomic status. Table 19 contains a summary of hierarchical regression analysis of school climate as a contributing factor to students' aspirations for ongoing and future education, controlling for gender, socioeconomic status, and ethnicity.

Table 19

Summary of Hierarchical Regression Analysis of School Climate as a Contributing Factor to Students' Aspirations for Ongoing and Future Education, Controlling for Gender, Socioeconomic Status, and Ethnicity

Step/Model		b	β	t	p
1/1	Y Intercept	5.35		47.71	< .01
	Gender (female)	.64	.20	4.25	< .01
1/2	Y Intercept	5.25		42.93	< .01
	Gender (female)	.63	.19	4.18	< .01
	African American/multiracial	.34	.10	2.09	<.04
2/3	Y Intercept	4.09		13.37	< .01
	Gender (female)	.65	.19	4.29	< .01
	African American/multiracial	.35	.10	2.23	.03
	Identification with school	.49	.19	4.12	< .01

Note: $R^2 = .04$ for Step 1/1; $\Delta R^2 = .01$ for Step 1/2; $\Delta R^2 = .03$ for Step 2/3; adjusted $R^2 = .08$; (n = 458).

Summary

The students' demographic variables of gender (specifically females) and ethnicity (specifically African American/multiracial) were significant predictors of their aspirations for ongoing and future education. Each of the independent variables contributed to the explanation of variance in the dependent variable in the hierarchical regression models. Most of the variance was explained by self-determination (adjusted R^2 = .15), followed by identification with school (adjusted R^2 = .10), and, finally, school climate (adjusted R^2 = .03). A discussion of the results and conclusions and recommendations are presented in Chapter 5.

CHAPTER V

DISCUSSIONS, CONCLUSIONS, AND RECOMMENDATIONS

The purpose of this survey research study was to investigate the effects of self-determination, identification with school, and school climate on eighth grade students' aspirations for ongoing and future education. A large number of students leave school before graduating. More are physically present in the classroom but mentally absent; they fail to invest themselves fully in the experience of learning (Ryan & Patrick, 2001). Middle school is the bridge that connects elementary school and high school. Eighth grade serves as the point in students' educational careers in which they begin to develop plans for secondary and postsecondary education. This study used a non-experimental, quantitative design and a convenience sample of 496 eighth-grade students from a school district in the southeastern United States.

All students in the sample completed a survey that consisted of questions from the Academic Motivational Scale (Vallerand et al., 1998), Identification with School questionnaire (Voelkl, 1997), School Climate Survey (Bauch, 2010), and Educational Longitudinal Survey of 1988 and 2002 (Department of Education, 2002). Students also completed three questions that indicated their gender, socioeconomic status, and ethnicity.

This chapter contains the summary of the findings, limitations, theoretical implications, practical implications, recommendations for future research and summary. This study sought to answer the following questions:

1. What are the relationships between student self-determination, identification with school, and perceptions of school climate?

2. How do ethnicity, socioeconomic status, gender, and self-determination affect students' aspirations for ongoing and future education?

3. How do ethnicity, socioeconomic status, gender, and identification with school affect students' aspirations for ongoing and future education?

4. How do ethnicity, socioeconomic status, gender, and school climate affect students' aspirations for ongoing and future education?

Summary of Findings

The data from this study indicated that the independent variables were significant predictors of the aspirations for middle school students' ongoing and future success in school, especially with female and African American/multiracial students. The first level of analysis presented the relationship among three independent variables (self-determination, identification with school, and school climate) using bivarate correlation. The results indicated a positive correlation between aspirations for ongoing and future education and identification with school and self-determination, but a lower correlation between aspirations for ongoing and future education and school climate.

The data also showed that gender (specifically, female) and African American/multiracial ethnicity had a positive correlation with aspirations for ongoing and future education. Female and African American/multiracial students were more likely to have higher aspirations for ongoing and future education. The data support the growth with the African American/ multiracial population of each school. This finding supports the research by Simons-Morton and

Crump (2003) who stated that girls are more organized than boys in the transition grades. Girls' organizational skills help them with studying, test preparation, and answering higher-order thinking questions in class. Ainsworth-Darnell and Downey (1998) reported African American students place a value of self-achieving in class in order to reach higher goals for future education and beyond. The data from this research supports the findings by Ainsworth-Darnell and Downey that the African/multicultural ethnicities have higher goals for future education. In research on identification with school, Voelkl (1997) found race was significantly related to identification with school; African American students had higher levels of identification with school than did White students.

The data in the current study indicated statistically low correlations between other ethnicities and identification with school, self-determination, and school climate. Research on self-determination by Lepper et al. (2005) suggested that minority students have a stronger belief in self-determination. The researchers found in a study of different ethnic minorities that for certain ethnicities there is a stronger emphasis placed on the role of the school environment than on the familial environment in shaping children's motivational beliefs and behavior. Burton et al. (2006) also studied multiple minority students and found that self-determination was associated with a higher level of academic performance.

Statistically significant, low correlations were found between socioeconomic status and White and African American/multiracial students, indicating that African American/multiracial students were more likely to indicate that they were eligible for the free and reduced lunch program and White students were more likely to indicate that they were not eligible for the free and reduced lunch program. This supports the research by Singh et al. (2010) who stated that

ethnic-based differences are related to other individual and family-related factors such as economic status.

Research Questions 2 thru 4 used three hierarchical multiple regression procedures to determine whether students' self-determination, identification with school, and school climate affected their aspirations for ongoing and future education beyond that afforded by differences in gender, socioeconomic status, and ethnicity. Gender (females) and ethnicity (African American/ multiracial) were significant predictors of the students' aspirations for ongoing and future education. Each of the independent variables explained some of the variance in the dependent variable in each of the hierarchical regression models.

Self-determination and female African American status were significant predictors of students' aspirations for ongoing and future education. The current finding supports work by Deci and Ryan (2008), who stated that female students become more self-determined due to the maturation of intrinsic factors. Identification with school and female African American students were significant predictors of students' aspirations for ongoing and future education. This research also supports Voelkl's research with identification with schools. Voelkl (1997) found that there are statistically significant main effects of race and gender that revealed that both African American and female students reported higher levels of identification with school than did White and male students.

In addition, school climate and female African American students were significant predictors of students' aspirations for ongoing and future education. As Kaplan and Maehr (1999) suggested, African American adolescents respond positively to a school environment that they perceive to be supportive and with rules and regulations that strike them as fair. The results of the current study provided evidence of the effects of self-determination, identification with school, school climate, gender, and ethnicity on student aspirations for future and ongoing education. In

addition, the current study provided evidence that supports the student and school factors in predicting eighth grade students' aspirations for ongoing and future education.

Limitations

The students being under the age of 18 in this research was a limitation because it required a parent or guardian signature in order for them to participate. Of the parental consent forms sent out, only 58% were returned. Even though the rate was within acceptable measures, the number of student forms returned was limited due to failure of parents to give students permission to participate in the study, thus taking it out of the student's hands. The researcher was also limited by the number of schools in the southern section of the county where the research took place.

Students who participated in the survey were asked to answer all questions and respond honestly. A student may have not been truthful or felt completely comfortable answering the demographic variables (gender, socioeconomic status, and ethnicity). A student who would be considered multiracial might tend to lean toward a particular race. Students were also limited in the time allowed to take the survey. The school district where the survey was administered insisted that students only participate during homeroom, which is 25 minutes long. Students who were on a late bus or did not arrive on time may have rushed through it, not answering every question carefully. Also, students who were considered special education with modifications for reading may have been limited in fully understanding what the questions were pertaining to or may not have completely understood all of the responses to each question. Some students may have also preferred to take the test on paper instead of on a computer.

The research had a limitation on the number of schools that were in the survey as it pertained to the results of school climate. The low number of schools that participated in the survey research resulted in relative low R^2 scores for school climate. School climate is an organizational property not a student property. If school had been the unit of analysis, the findings may have been more significant. A final limitation of this study was that the survey only contained one dependent variable, which was measured by only one item.

Theoretical Implications

The researcher saw several implications after analyzing the results of this study and developed a variety of conclusions. Among these conclusions was the idea that there is no research to suggest that a combination of self-determination, identification with school, and school climate affects the aspirations of middle grade students' ongoing and future education. The current body of literature only focuses on each concept individually. Also each stream of research, even though the general shift has been from the creation of all-encompassing, broad theories to a focus on narrower theories (Graham & Weiner, 1996), underlines other such streams, making it difficult to combine them. This research contributes to the knowledge base by exploring the effects of all three variables: self-determination, identification with school, and school climate on student aspirations for future education. Future research that explores the combined effect of these factors on student aspirations for future education may assist us in decreasing the dropout rate. This study may provide a model for future researchers who are interested in exploring the effects of student self-determination, identification with school, and school culture on student aspirations for future education.

Practical Implications

Ashmore et al. (2004) stated that middle school is a pivotal time when students experience intense growth, as well as new ideas of identity and individualism. Many middle school students experience bewilderment and diminished motivation toward school, as a result of new physical and mental changes and a new environment. Accurately assessing school culture, identification with school, and student self-determination can assist administrators in removing obstacles that may prevent students from aspiring toward future educational goals.

This research study has practical implications for administrators and teachers of eighth-grade students who are interested in creating an environment that is conducive to increased student success and retention. Since No Child Left Behind has indicated that a student's eighth grade year is pivotal in terms of testing and promotion to high school, creating an environment that allows students to feel a sense of self-determination, belongingness and value, and a safe climate setting would be beneficial to educators. Brown (2004) suggested that a school's purpose, programs, and participants need to be constantly reexamined in the light of the path from reforms to outcomes to achievement. Brown also suggested that administrators can be instrumental in setting up a clearly articulated mission, high expectations for success, instructional leadership, frequent monitoring of student progress, opportunities to learn, student time on task, safe and orderly environments, and home and school relations. Administrators can also provide professional development and support for teachers and other school staff to enable them to meet the diverse cognitive, emotional, and social needs of students at every level.

This research found that boys may be at risk of school failure. Bloom and Cohen (2007) found that in a 2006 study that boys are almost twice as likely as girls to have a learning disability (10% vs. 6%) and almost 3 times as likely to have a diagnosis of ADHD (11% vs. 4%). The same study found that boys make up more than two-thirds of all students receiving special

education services. Voelkl (1997) suggested that students who are non-participatory and not engaged in the classroom need to be identified by teachers or specialists in the early grades. Administrators can set up programs with the counselors that would help students develop self-determination related knowledge and skills such as self-awareness, decision making, goal setting and attainment , assertive communication, negotiation, conflict resolution, and reflection.

Administrators and teachers will benefit by learning what aspects of the school learning environments contribute to positive student motivation. According to Hoy and Tarter (2004), teachers can lower their stress by increasing their agency through appropriate participation in decisions that affect their school life. Hoy and Tarter suggested that teachers can serve as models for each other. Principals move a school by example. They celebrate the achievements of students and faculty, especially the academic ones. An emphasis on the honor roll, national honor societies, and exemplary student work of all kinds are example of behaviors that foster academics (Hoy & Tarter, 2004). Roeser et al. (1996) found that students who feel positive about teacher-student interactions are more emotionally secure, competent, and feel less self-conscious and worried about failure. Administrators can create trusting and caring relationships that promote open communication among school staff, students, families, and communities.

This research found that African Americans and multiracial students expressed more self-determination and identification with school than the other ethnic or white populations. Ceballo, McLoyd, and Toyokawa (2004) found that when schools set up programs with more neighborhood involvement, it enabled African Americans and multiracial students to take advantage of feeling self-determined and a sense of belonging and value. Administrators can provide education and opportunities to enable families to be actively involved in their children's academic and school life such as science or math night, reading nights, and curriculum nights.

Such capitalization of the knowledge base would allow these students to have more motivation for on-going and future education and at the same time, feel as though they are valued and belong by taking ownership in their education.

Research on dropouts has consistently shown that a host of negative school-related experiences serves as powerful precursors to the decision formally to leave school. For example, students who drop out of school are more likely than other students to have poor school performance, disruptive behaviors, poor attendance, negative attitudes toward school, and early school failure (Rumberger, 1995). The U.S. Department of Health and Human Services has data indicating since 1972, dropout rates have been higher for minority youth than for White youth. In 2005, 6% of Whites ages 16 to 24 were dropouts compared with 11% of African Americans and 23% of Hispanics. Some of the causes indicated by the U.S. Department of Health and Human Services, especially for African Americans and Hispanics, for the high rate of dropouts include: gang influence, schools labeled as "drop-out factories", a high transient rate, and overcrowding. The U.S. Department of Education suggests helping reduce the drop-out rate, school class size should be reduced, fund and encourage evidence-based programs to identify students at risk of dropping out and intervene to reduce the likelihood of dropout. Intervention programs should meet the curricular, logistic, and interpersonal needs of students at risk of dropping out, and include flexible scheduling to accommodate relevant work. Administrators can set up programs with the counselors that would help students develop self-determination related knowledge and skills such as self-awareness, decision making, goal setting and attainment, assertive communication, negotiation, conflict resolution, and reflection.

Lastly, this study adds to the knowledge base on student motivation because it examines specific components shown to have a strong influence on students desire to persevere and remain successful in school.

Recommendations for Future Research

It is suggested that future studies include how test scores may affect students' self-determination, identification with school, and school climate. With No Child Left Behind mandating students in eighth grade to pass the math and reading portions as one indicator for advancement to high school, it would be beneficial to find out how this mandate affects these factors. Another area of research would be to determine how students' self-determination, identification with school, and school climate are affected by bullying. This research could include physical, mental, and cyber aspects of bullying. The data also suggest that future research should explore the effects of race on self-determination, identification with school, and school climate.

Future research should examine how self-determination, identification with school, and school climate affect special education students. This information could assist educators in understanding factors involved with special education students' aspirations for future education. Future research could also examine how the economy affects student's self-determination, identification with school, and school climate may be an area worthy of further investigation particularly in light of the number of jobs that have been lost and the increase in students receiving free and reduced lunch. A final suggestion for future research would be to conduct a longitudinal study that would follow students as they progress through secondary education and

beyond. This future research would be able to track students' aspirations and how they changed or stayed the same throughout the secondary education years and beyond.

Summary

Current education reform is designed to produce higher student motivation and achievement through a series of incentives and high-stakes tests in all levels of schooling. Unfortunately, as children grow, their motivation for learning frequently seems to shrink. Learning often becomes associated with being a chore instead of a delight. Student motivation has to do with a students' natural desire to participate in the learning process. It also represents the goals or reasons that underline their motivation and achievement in academic activities. Students want and need work that enables them to demonstrate and improve their sense of self and that will encourage them to see themselves as competent and successful human beings. Although students may be equally motivated to perform a task, the sources of their motivation may differ. Once children start school, they begin forming beliefs about their school-related successes and failures. During the transition years from primary to secondary school, children face a broad range of demands such as school structure, rigid academic standards, higher teacher expectations, and pressure from peers. Students want and need work that enables them to demonstrate and improve their view of themselves as competent and successful human beings. This is the drive toward mastery. But success, while highly valued in our society, can be more or less motivational. People who are highly creative, for example, actually experience failure far more often than success. Students also want and need work that stimulates their curiosity and awakens their desire for deep understanding. People are naturally curious about a variety of things. Students also look for and need work that will enhance their relationships with people

they care about. This drive toward interpersonal involvement is pervasive in all our lives. The sources to which children attribute their successes and failures have important implications for how they are motivated with new learning situations (Deci et al., 1991).

The goal of today's educational system is to prepare students to become successful and productive citizens. There is growing U. S. national alarm about declining high school graduation rates, especially at a time when they should be dramatically increasing in the face of global competition and the opening of trade borders (Mischel & Hoy, 2006). The problem that needs to be addressed pertains to the motivational factors that influence students in middle schools to sway from their future secondary school and postsecondary school plans in their eighth grade year of middle school. The transitions in middle school could not come at a worse time, just as the students are wrestling with their own rollercoaster of emotions and trying to find how they fit in. This research has shown that there is a need not only to motivate students to do their best but to also foster identification with school in a positive school climate. Society has changed over time and the attitude and motivation of students has changed as well. Students often say that they do not associate well with the school they attend. This research has shown that there is still hope. Even though educators are chained to testing mandates and are judged by how well students do, other factors such as student self-determination, identification with school, and school culture may play a significant part in encouraging student success and future educational aspirations. When students believe that the school climate is positive and supportive they are likely to have a sense of belonging and value of school and school-related outcomes. Students who are identified with school and have a strong sense of self-determination are more likely to succeed and to press forward to pursue future educational goals.

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APPENDIX A

STUDENT SURVEY

Student Survey

THE UNIVERSITY OF ALABAMA

Directions: Directions: Please select your answer to the corresponding question by clicking on it with the left mouse button.

1.   1. Male   2. Female

2. **Are you eligible for free and reduced lunch?**

   1. No   2. Yes

3. **What is your ethnicity**? (Please choose one of the following)

        1. White
        2. African American
        3. Native American or Alaskan Native
        4. Asian
        5. Hispanic/ Latino (a)
        6. Multiracial

4. **I feel proud to be a part of this school.**

1. Strongly Disagree   2. Disagree   3. Agree   4. Strongly Agree

5. School is one of the most important things in my life.

1. Strongly Disagree   2. Disagree   3. Agree   4. Strongly Agree

6. Many of the things we learn in class are useless.

1. Strongly Disagree   2. Disagree   3. Agree   4. Strongly Agree

7. Most of my teachers really care about me.

1. Strongly Disagree   2. Disagree   3. Agree   4. Strongly Agree

8. Most of the time I would like to be any place other than in school.

1. Strongly Disagree   2. Disagree   3. Agree   4. Strongly Agree

9. There are teachers or other adults in my school that I can talk to if I have a problem.

1. Strongly Disagree   2. Disagree   3. Agree   4. Strongly Agree

10. Most of what I learn in school will be useful when I get a job.

1. Strongly Disagree   2. Disagree   3. Agree   4. Strongly Agree

11. School is one of my favorite places to be.

1. Strongly Disagree   2. Disagree   3. Agree   4. Strongly Agree

12. People at school are interested in what I have to say.

1. Strongly Disagree   2. Disagree   3. Agree   4. Strongly Agree

13. School is often a waste of time.

1. Strongly Disagree   2. Disagree   3. Agree   4. Strongly Agree

14. I try to do well in school.

1. Strongly Disagree   2. Disagree   3. Agree   4. Strongly Agree

15. I take satisfaction in outdoing myself in my studies.

1. Strongly Disagree   2. Disagree   3. Agree   4. Strongly Agree

16. When I succeed in school, I feel important.

1. Strongly Disagree   2. Disagree   3. Agree   4. Strongly Agree

17. I experience enjoyment when I am influenced by discussions with interesting teachers.

1. Strongly Disagree   2. Disagree   3. Agree   4. Strongly Agree

18. I feel excitement when I am accomplishing difficult academic activities.

1. Strongly Disagree   2. Disagree   3. Agree   4. Strongly Agree

19. I experience fulfilment while learning new things.

1. Strongly Disagree   2. Disagree   3. Agree   4. Strongly Agree

20. I experience satisfaction when I am surpassing myself in one of my personal accomplishments.

1. Strongly Disagree   2. Disagree   3. Agree   4. Strongly Agree

21. My studies allow me to continue to learn about many things that interest me.

1. Strongly Disagree   2. Disagree   3. Agree   4. Strongly Agree

22. School is fun for me.

1. Strongly Disagree   2. Disagree   3. Agree   4. Strongly Agree

23. I want to show myself that I can succeed in my studies.

1. Strongly Disagree   2. Disagree   3. Agree   4. Strongly Agree

24. This school allows me to experience satisfaction in my quest for excellence in my studies.

1. Strongly Disagree   2. Disagree   3. Agree   4. Strongly Agree

25. At this school teachers are interested in students.

1. Strongly Disagree   2. Disagree   3. Agree   4. Strongly Agree

26. This school is like another family to me.

1. Strongly Disagree   2. Disagree   3. Agree   4. Strongly Agree

27. The teaching is good at this school.

1. Strongly Disagree   2. Disagree   3. Agree   4. Strongly Agree

28. Students get along well with teachers.

1. Strongly Disagree   2. Disagree   3. Agree   4. Strongly Agree

29. There is real school spirit at this school.

1. Strongly Disagree   2. Disagree   3. Agree   4. Strongly Agree

30. Discipline is fair at this school.

1. Strongly Disagree   2. Disagree   3. Agree   4. Strongly Agree

31. My teachers praise my efforts.

1. Strongly Disagree   2. Disagree   3. Agree   4. Strongly Agree

32. I feel safe at this school.

1. Strongly Disagree   2. Disagree   3. Agree   4. Strongly Agree

33. As things stand now, how far in school do you think you will actually get?
   (Choose One Answer)

      1. Not receive a high school diploma
      2. Receive a GED/high school equivalent degree
      3. Graduate from high school
      4. Attend professional, trade, or a business school after high school graduation
      5. Complete some college
      6. Receive a college degree
      7. Receive an advanced degree after college (master's, Ph.D., Medical, or Law degree)

APPENDIX B

SURVEY SCALES

Identification with Schools

Survey Items	Dimensions
I feel proud *to be* part of *this* school.	(B)
School is one of the most important things in my life.	(V)
Many of the things we learn in class are useless.	(V)
Most of my teachers really care about me.	(V)
Most of the time I would like to be any place other than in school.	(B)
There are teachers or other adults in my school that I can talk to if I have a problem.	(B)
School is one of my favorite places to be.	(B)
People at school are interested in what I have to say.	(B)
School is often a waste of time.	(V)

B =
Belonging; V = Value (Voelkl, 1997)

Academic Motivation

Survey Item	Dimension
I try to do well in school.	(SD)
I take satisfaction in outdoing myself in my studies.	(SD)
When *I* succeed in school, I feel important.	(SD)
I experience *enjoyment* when I take talks with *motivating* teachers.	(SD)
I feel *excitement* when I am *working on difficult* academic activities.	(SD)
I experience *fulfillment while learning new things.*	(SD)
I experience *satisfaction* while I am surpassing myself in one of my personal accomplishments.	(SD)
My studies allow me to continue to learn about many things that interest me.	(SD)
I feel that I can act like a happy student at this school.	(SD)
I want to show myself that I can succeed in my studies.	(SD)
This school allows me to experience satisfaction in my quest for excellence in my studies.	(SD)

SD = Self-Determination (Vallerand, Pelletier, Blais, Briere, Senecal & Vallieres, 1998)

School Climate

Survey Item	Dimension
At this school teachers are interested in students.	(SC)
This school is like another family to me.	(SC)
Students get along *well* with teachers.	(SC)
There is real school spirit at this school.	(SC)
The teaching is good *at this school.*	(SC)
Discipline is fair *at this school.*	(SC)
My teachers praise my efforts *and accomplishments.*	(SC)
I feel safe at this school.	(SC)

SC = School Climate (Bauch, 2010)

APPENDIX C

PARENT CONSENT FORM FOR NON-MEDICAL RESEARCH

THE UNIVERSITY OF ALABAMA
HUMAN RESEARCH PROTECTION PROGRAM
PARENT CONSENT FORM FOR NONMEDICAL STUDY

Your student is being asked to participate in a research study. This study is called "*How Components of Motivation Affect the Success of Middle School Students' Secondary and Future Education*." This study is being conducted by Jeremy Adomnik, a doctoral student with The University of Alabama. Mr. Adomnik is being supervised by Dr. Patricia Bauch, a professor at the University and chair of the dissertation committee.

What is this study about?
The purpose of this research is to investigate the influence of self-determination, identification with school, and school climate on middle school student success in planning for future secondary and post-secondary learning opportunities.

Why is this study important—what good will the results do?
Such research can add to the literature on student motivation, possibly keeping a student in school at least through secondary education and aspire to seek a college education, rather than dropping out of school. In addition, this study could help middle school educators' focus their efforts to motivate and retain students on those aspects of schooling that are the most important among a range of possibilities.

Why have I/my student been asked to take part in this study?
The survey will be given at three middles schools and will be taken by approximately 848 students. The middle schools were selected from system wide data based on graduation rates. These schools are the feeder schools for Hiram High School, Paulding County High School, and South Paulding High School.

How many other people will be in this study?
About 951 eighth grade students will be asked to participate in this study. Students from Austin Middle School, J.A. Dobbins Middle School, and South Paulding Middle School have been solicited in order to gain enough data to legitimize this study.

What will I be asked to do in this study?
Parents will be asked to read and sign this consent form allowing their student to participate in answering the questions on the survey and return it to their child's science teacher.

How much time will the study take? The survey will take approximately 15 - 25 minutes to complete.
Will being in this study cost me/my student anything? The only cost for participating in this study is the short time it will take your student to complete the survey.
Will I/my student be compensated for being in this study? There are no incentives pertaining to this research with the exception of knowing that participation will provide data that can help the school improve.

What are the risks (problems or dangers) from being this study? There are no risks associated with this research with the exception of the time used in reading, understanding, and marking responses on the questionnaire.

What are the benefits of being in this study?
There will be no benefits to the participants, however, society may benefit in that we are adding to the information bank. One major intention is to offer credible data and stimulate dialogue that looks at motivating students to continue secondary and postsecondary education.

How will my confidentiality (privacy) be protected? What will happen to the information of the study?
The investigator is conducting research with the approval of a single Institutional Review Board (IRB) form from The University of Alabama which has a moral duty and obligation to protect human subjects prior to commencement of any research study and to discontinue any protocol upon notification of irregular activity warranting such action. For your privacy, no names or student numbers will be used when identifying results. In addition, confidentiality will include no information stored, filed, or kept on any individual or school involved in this study. All respondents will be told that participation is voluntary and no adverse effect will occur because of any decision to fill out the survey or to decline to fill it out.

What are the alternatives to being in this study? Do I have other choices?
The alternative/other choice is not to participate.

What are my rights as a participant?
Taking part in this study is voluntary – it is your free choice. You may choose not to take part at all. If you start the study, you can stop at any time. Not responding to the survey will not result in any penalty or loss of any benefits you would otherwise receive.

What is the obligation of the University Institutional Review Board?
The University of Alabama Institutional Review Board (IRB) is the committee that protects the rights of people in research studies. The IRB may review study records from time to time to be sure that people in research studies are being treated fairly and that the study is being carried out as planned.

Where will the data be stored and when will it be destroyed?
Data collected from the survey will be stored in a locked file cabinet located in the investigator's home and kept for five years as required by the University. After the five years, the survey and data collected will be destroyed by paper shredding.

Who do I call if I have questions or problems?
If you have questions, please call Jeremy Adomnik at 770-443-4835 or Dr. Patricia Bauch at 205-348-1167. If you have questions or complaints about your rights as a research participant, call Ms. Tanta Myles, the Research Compliance Officer of the University at 205-348-8461.

You may also ask questions, make a suggestion, or file complaints and concerns through the IRB Outreach Website at http://osp.ua.edu/site/PRCO_Welcome.html. After participation, you are encouraged to complete the survey for research participants, which is online there, or you may ask Dr. Johann for a copy of it. In addition, you may e-mail us at participantoutreach@bama.ua.edu.

I have read and understand this consent form. I have had a chance to ask questions.

_____
Signature of Parent   Name of Student   Date

APPENDIX D

IRB APPROVAL FORM

June 18, 2010

Office for Research

Institutional Review Board for the
Protection of Human Subjects

Jeremy Adomnik
ELPTS
College of Education
The University of Alabama

THE UNIVERSITY OF

ALABAMA

R E S E A R C H

Re: IRB # 10-OR-206 "How Components of Motivation Affect the
Success of Middle School Students Secondary and Future Education"

Dear Mr. Adomnik:

The University of Alabama Institutional Review Board has granted
approval for your proposed research

Your application has been given expedited approval according to 45 CFR
part 46. Approval has been given under expedited review category 7 as
outlined below:

*(7) Research on individual or group characteristics or behavior
(including, but not limited to, research on perception, cognition,
motivation, identity, language, communication, cultural beliefs or
practices, and social behavior) or research employing survey, interview,
oral history, focus group, program evaluation, human factors evaluation,
or quality assurance methodologies.*

Your application will expire on June 17, 2011. If your research will
continue beyond this date, complete the relevant portions of Continuing
Review and Closure From. If you wish to modify the application,
complete the Modification of an Approved Protocol Form. When the
study closes, complete the appropriate portions of FORM: Continuing
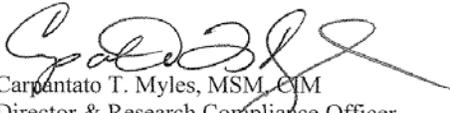Review and Closure.

Please use reproductions of the IRB approved informed consent form to
obtain consent from your participants.

Should you need to submit any further correspondence regarding this
proposal, please include the above application number.

Good luck with your research.

Sincerely,

Carpantato T. Myles, MSM, CIM
Director & Research Compliance Officer
Office for Research Compliance
The University of Alabama

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