The Relationship between Middle School Students' College-Going Beliefs and Sense of Belonging in School

Jamie L. Steiner

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The Relationship between Middle School Students’ College-Going Beliefs and Sense of Belonging in School

Abstract

Although there is an abundance of research on middle school counseling, college readiness and belonging, there is a gap in the research regarding middle school students and attempts to correlate their sense of belonging to college-going beliefs. Research identifies eighth grade as a critical time in a student’s education in which they make important post-secondary decisions. The research stressed that a student’s academic achievement was not only influenced by intellectual abilities, but by their school climate. The purpose of this mixed methods study was to identify a correlation between school-based factors, specifically a student’s sense of belonging, and college-going beliefs. One hundred eighty-four eighth-grade students from a diverse suburban middle school were surveyed on their college-going beliefs as well as their sense of belonging. In addition, focus groups were facilitated to further explore how students felt about their school environment and post-secondary planning. The findings showed a significant statistical correlation between students’ sense of school belonging and college-going beliefs. This is significant because it begins to address the void in the research identifying how school based factors are related to students’ college-going beliefs. Focus group data also enhanced quantitative findings by highlighting how students who described a positive sense of belonging in school had strong intentions and higher confidence for attending college after high school. The results of this research will help educators improve programs, develop stronger relationships with students and strengthen the curriculum to better prepare students for high school and beyond.

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The Relationship between Middle School Students’ College-Going Beliefs and Sense of Belonging in School

By

Jamie L. Steiner

Submitted in partial fulfillment of the requirements for the degree

Ed.D. in Executive Leadership

Supervised by

Dr. Ronald Valenti

Committee Member

Dr. Christopher Griffin

Ralph C. Wilson, Jr. School of Education
St. John Fisher College

August 2011
Dedication

This research is dedicated to the students who made it possible. You are a guiding light, and the reason I chose to enter the field of school counseling. You inspire me every day to help make a difference in every one of your lives. Thank you. I would also like to thank my committee, Dr. Valenti and Dr. Griffin for their support and guidance. I appreciate the time and understanding you both provided during some particularly challenging times. To my mom and dad for always believing in me and instilling that “can do” attitude. Your encouragement has taught me the value of an education and to never give up no matter what. To my husband Eric and our beautiful son Matthaus, words cannot express what you mean to me and how very proud you both make me. Eric, I am forever grateful for your constant patience, encouragement, support, love, and strength. You truly are my foundation. I would not have been able to achieve this milestone without you by my side.
Biographical Sketch

Jamie Steiner is currently a school counselor at a suburban public school in New York State. Mrs. Steiner attended Marymount College from 1995 to 1999 and graduated with a Bachelor of Arts degree in Psychology in 1999. She attended Fordham University from 1999-2002 and graduated with a Master of Science degree in Education, Counseling and Personnel Services in 2002. She came to St. John Fisher College in the summer of 2009 and began doctoral studies in the Ed.D. Program in Executive Leadership. Mrs. Steiner pursued her research on students’ college-going beliefs and sense of belonging in school under the direction of Dr. Ronald Valenti and Dr. Christopher Griffin and received the Ed.D. degree in 2011.
Abstract

Although there is an abundance of research on middle school counseling, college readiness and belonging, there is a gap in the research regarding middle school students and attempts to correlate their sense of belonging to college-going beliefs. Research identifies eighth grade as a critical time in a student’s education in which they make important post-secondary decisions. The research stressed that a student’s academic achievement was not only influenced by intellectual abilities, but by their school climate. The purpose of this mixed methods study was to identify a correlation between school-based factors, specifically a student’s sense of belonging, and college-going beliefs. One hundred eighty-four eighth-grade students from a diverse suburban middle school were surveyed on their college-going beliefs as well as their sense of belonging. In addition, focus groups were facilitated to further explore how students felt about their school environment and post-secondary planning. The findings showed a significant statistical correlation between students’ sense of school belonging and college-going beliefs. This is significant because it begins to address the void in the research identifying how school based factors are related to students’ college-going beliefs. Focus group data also enhanced quantitative findings by highlighting how students who described a positive sense of belonging in school had strong intentions and higher confidence for attending college after high school. The results of this research will help educators improve programs, develop stronger relationships with students and strengthen the curriculum to better prepare students for high school and beyond.
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Chapter 1: Introduction

Introduction

President Barack Obama has requested that every student plan to attend at least one year or more of college or career training. He has set a new national goal that by the year 2020 America will once again have the highest proportion of college graduates in the world (James, 2009). Many of the fastest-growing jobs that require a high school diploma, pay above the poverty line for a family of four, and provide opportunities for career advancement, require knowledge and skills comparable to those expected of a first-year college student (ACT, 2008). In 1974, 13% of adults 25 years or older had attended four years of college, whereas in 2004, 28% had. The data also demonstrate the extent to which having such a degree pays off: average earnings in 2008 totaled $83,144 for those with an advanced degree, compared with $58,613 for those with a bachelor's degree only. People whose highest level of attainment was a high school diploma had average earnings of $31,283 (United States Census Bureau, 2010).

Graduating from high school is no longer sufficient for future success (National Governors Association, 2010). Unemployment rates for individuals without some college training have nearly doubled in one year. In 2008, college graduates earned on average twice as much as high school graduates; a difference that has increased since 1980. By 2012, 53% of jobs in the United States workforce will require post-secondary education and training.
There is a collective need to produce an additional 3 million college graduates to meet the growing work force (National Governors Association, 2010).

As early as middle school, a great number of students are expressing motivation to attend college. However, there is a great discrepancy between their expressed intentions and actual continuation to college. With the pressures of high stakes testing, graduation rates, and college attendance rates, educators and students are experiencing high levels of stress and frustration trying to achieve these goals (ACT, 2008). There is a strong body of research which identified school based factors such as a student’s sense of belonging as having an impact on motivation and overall academic achievement (Osterman, 2000; Wentzel, 1997; Goodenow & Grady, 1993). However, there is a gap in the research linking the possible correlation between a student’s college-going intentions and sense of school membership or belonging. The intention of this study is to investigate this possible relationship in order to develop strategies that can better prepare all students to fulfill their post-secondary goals.

**Problem Statement**

Although there is an accumulation of research on middle school counseling, college readiness and belonging (Goodenow 1993a, 1993b; Goodenow and Grady, 1993; Osterman, 2000), there is a gap in the research regarding middle school students and attempts to correlate their sense of belonging to college readiness. A recent national survey by Harris Interactive (Great Schools Staff, 2010), indicated that while 92% of seventh and eighth graders reported they were likely to attend college, 68% had little or no information regarding which classes to take to prepare for it. Since schools invest a great deal of time and money on various resources and interventions, feedback from
students could provide useful data to all stakeholders regarding the evaluation of those resources (Freiberg, 1998). The ACT’s Forgotten Middle (2008) research report examines the specific factors that influence college and career readiness for middle school students and how these factors impact student educational development. The report suggests that eighth grade is a critical defining point for students in the college and career readiness process. It is so important that if students are not on target for college and career readiness by the time they reach this point, the impact of meeting them is irreversible (ACT, 2008). The research also highlighted that the level of academic progress achieved by eighth grade may have a larger impact on college readiness than progress achieved in high school (ACT, 2008).

This research will highlight student goals and post-secondary plans as well as students’ perception of belonging and how those needs are being addressed in school. Smyth (2006) described a lack of attention to gaining feedback from students in order to improve teaching and learning. Shields (2004) explained this point as follows:

When children feel they belong and find their realities reflected in the curriculum and conversations of schooling, research demonstrated repeatedly that they are more engaged in learning and that they experience greater school success. The research shows that the benefits extend beyond the specific conversation to increased academic self-concept and increased involvement in school life. Unless all children experience a sense of belonging in our schools, they are being educated in institutions that exclude and marginalize them, that perpetuate inequity and inequality rather than democracy and social justice (p. 122).
This research will enable students to be “citizens rather than tourists in their school, as they realize they have an opportunity to participate in shaping their education process” (Freiberg, 1998, p. 24). Students may feel more closely connected to their school environment when educators take the time to encourage discussion and listen to their feedback about the school climate. By learning about the results of the quantitative and qualitative data from surveys and focus groups, educators may become better equipped at designing programs to help middle school students become better prepared for the transition to high school and college.

**Theoretical Rational**

**Maslow’s hierarchy of needs.** Maslow’s (1970) theory of intrinsic motivation was discussed extensively by educators in the 1970s (Booker, 2007; Noddings, 2006). The key idea was similar to what Dewey (1975) had already promoted in progressive education, which challenged the prevailing “carrot and stick” theory, which was that teachers must offer clear external rewards and punishments to get students to do what they want. Dewey (1900) argued that the creation of a caring and supportive school community can satisfy a student’s need for academic achievement and belonging. Maslow’s (1970) framework of basic needs (Figure 1.1) emphasized belonging as essential to the development of all human relationships. If a student’s biological needs such as food and shelter are not satisfied, he or she may struggle to satisfy the next need in the hierarchy, love and belonging. Noddings (2005) asserted that caring and supportive relationships in school may provide children with a strong foundation that can help them progress to the next level of the hierarchy, self-esteem. When this progression does not occur, the research indicated that the student often underperformed and was
disengaged from school (Onchwari, Ariri-Onchwari & Keengwe, 2008; Osterman, 2000). The research supports Maslow’s theory that the struggle for a student to satisfy basic needs could certainly have a negative effect on their education experience if they are not provided the opportunity to develop caring and trusting relationships at school (Osterman, 2000; Wentzel, 1997). The goal for educators is to “maintain intrinsic interest” in order to encourage and prolong student engagement (Noddings, 2005).

![Abraham Maslow Hierarchy of Needs](image)

*Figure 1.1. Adapted from Motivation and Personality (2nd Ed) (1970), Harper & Row, NY.*

**Statement of Purpose**

The purpose of this mixed methods study was to identify whether a relationship existed between a student’s college-going self-efficacy and sense of belonging in school. Two surveys, the College-Going Self-Efficacy Scale (Gibbons, 2005) and the Psychological Sense of School Membership survey (Goodenow, 1993a) were administered to all eighth graders in a diverse suburban middle school to identify a statistical correlation between college-going beliefs and sense of belonging. Focus groups
were facilitated to further explore what student beliefs about their school climate were as well as their thoughts about the transition to high school and subsequent college plans.

The goal of this research is for educators to gain a better understanding of how school-based factors such as a student’s sense of belonging may impact their post-secondary goals. School counselors and administrators can also use this data to develop early intervention planning for those students who exhibit lower expectations regarding their ability to be successful in school and attend college. The results of these surveys and focus groups will be shared with various stakeholders to enhance interventions that best support academic success and college enrollment for all students (Dimmitt, Carey, & Hatch, 2007).

**Research Questions**

The following questions will be addressed in the research:

1. Is there a correlation between eighth grade-students’ sense of belonging in school and their college-going self-efficacy?
2. Are there significant differences between demographic groups in both sense of belonging in school and college-going self-efficacy?
   2a. between male and female students at this school
   2b. between students who received free lunch and those that did not
   2c. between Hispanic male students and White male students
   2d. between Hispanic female students and White female students
3. What do eighth graders say they know and say they need to know about high school requirements and post-secondary planning?
4. How do eighth graders describe factors related to their sense of belonging in
their school climate?

5. Based on the results of this mixed methods research, what interventions can school counselors and other educators at this school implement to better prepare middle school students for the transition to high school and beyond?

**Significance of the Study**

Research indicated that eighth grade is a critical time in a student’s education in which they make important post-secondary decisions (ACT, 2008). The decisions made in middle school directly affected college preparation and enrollment (ACT, 2008; Wimberly & Noeth, 2005). A student’s academic achievement was not only influenced by intellectual abilities, but by their school environment (Capps, 2003; Osterman, 2000; Noddings, 1992). Students who perceived a greater sense of belonging and membership in school showed increased academic motivation, had less behavioral problems and had higher academic achievement (Capps). Students who reported a stronger sense of belonging in school perceived themselves to be more competent and had higher levels of intrinsic motivation (Osterman). Therefore, by identifying a direct relationship between a student’s perception of their school environment and post-secondary plans can help educators improve programs, and strengthen the curriculum to better prepare students for high school and beyond.

Possible recommendations from this research may be the development of workshops and other professional development activities for school staff on promoting a positive school culture, the creation of mentoring programs and classes for college preparation in middle school, specific training for school counselors which encourages students to enroll in more challenging coursework, and facilitating parent information
sessions in middle school that discuss transitioning to high school and college planning.

**Definition of Terms**

**Caring.** Noddings (1992) defined caring as relating to and communicating with others. Caring educators were described in the research as individuals who complimented, advised, listened, showed concern, provided a safe and secure environment and were fair to their students (Hayes, Ryan, & Zseller, 1994).

**College.** Refers to any post-secondary education leading to a degree or certification (i.e., associate’s or bachelor’s degree, or trade certification), (Gibbons, 2005).

**College-going self-efficacy.** One’s belief in their ability to pursue and complete college (Gibbons, 2005).

**College readiness.** “An acquisition of the knowledge and skills a student needs to enroll and succeed in credit-bearing, first-year courses at a post-secondary institution, such as a two- or four-year college, trade school or technical school. Simply stated, readiness for college means not having to take remedial courses in college” (ACT 2008, p. 1).

**High school requirements.** A high school senior who fulfills the New York State requirements for a high school diploma.

**Post-secondary planning.** Preparing for any type of school or training beyond the high school level i.e., community college, four-year university, vocational training program (www.thinkcollege.net).

**School climate.** Koth, Bradshaw, and Leaf (2008) defined school climate as “shared beliefs, values, and attitudes that shaped interactions between students, teachers,
and administrators and set the parameters of acceptable behavior and norms for the school” (p. 96).

**School community.** Ormrod (2000) defined community as a “sense that teachers and students have shared goals, were mutually respectful and supportive to one another’s efforts, and believed that everyone makes an important contribution to classroom learning” (p. 602).

**Sense of belonging.** Capps (2003) defined sense of belonging as “the extent to which a student feels personally accepted, respected, included, and supported by others, especially teachers, and other adults in the school environment” (p.4). School belonging was investigated through various indicators such as the existence of peer and teacher relationships (Nichols, 2006; Faircloth & Hamm, 2005).

**Student engagement.** Newman (1992) defined engagement as “the student’s psychological investment in as well as effort directed toward learning, understanding, or mastering the knowledge, skills or crafts that academic work is intended to promote” (p. 12).

**Chapter Summary**

This dissertation is organized into five chapters. Chapter 1 provides an introduction to the topic and relevance of the study. Chapter 2 is a review of the relevant literature on middle school student college-going beliefs, perceptions of their school environment, and the potential impact this may have on their post-secondary planning. It also discusses the current interventions for students, as well as how these are important to a student’s education. Chapter 3 is a description of the methodology that was used in this study. It includes a description of the research questions, participants, the instruments
used in data collection and analysis. The results of this study are presented in Chapter 4.

Finally, the discussion and interpretation of the findings are discussed in Chapter 5.
Chapter 2: Review of the Literature

Introduction and Purpose

The goal of this mixed methods study was to identify whether a relationship existed between student sense of belonging in school and college-going beliefs. The research literature connects a student’s sense of school belonging to engagement and motivation (Goodenow 1993a, 1993b; Goodenow & Grady, 1993; Osterman, 2000). This chapter examines the literature and theory regarding student sense of belonging in school and college awareness and readiness in middle school. The review begins with a brief overview of the theoretical context of student belonging and motivation. It then focuses on the importance of post-secondary planning during middle school as well as the role each educator plays in promoting a sense of belonging and college-going culture, particularly for students from disadvantaged backgrounds. The chapter is divided into the following sections: (a) theoretical framework: belonging, motivation, care and social capital; (b) the importance of post-secondary planning in middle school; (c) the role of the educator in promoting a sense of belonging and college-going culture. The chapter concludes with a summary as well as a logical model developed by the researcher that synthesizes the theory and research literature discussed.

Topic Analysis

Goodenow was one of the first researchers to study the relationship between level of belonging in school and academic engagement (Nichols, 2006). Through her research with students in two diverse, urban, middle schools, she identified a
relationship between sense of belonging, motivation, and academic achievement (Goodenow, 1993; 1993a; & 1993b). This research found that a student’s sense of belonging had a statistically significant impact on motivation as well as on effort towards school work. This challenged the perception that student disengagement and poor performance were caused solely by personal issues. Findings indicated that the school environment directly contributed to student disengagement over and above the issues of family and peers (Nichols, 2006; Osterman 2000; Patrick, Anderman, & Ryan, 2002; Wentzel 1997). These studies helped to further support the relationship between greater school connectedness and higher academic achievement. It was also evident in the research that a caring teacher, counselor, or administrator who showed interest and commitment to the advancement of a student’s education was influential to that student’s personal and academic growth (Gandera & Bial, 2001, Noddings, 2006; Osterman, 2000; Wentzel, 1997). It was recommended that schools with larger percentages of underserved students needed to implement early intervention plans with a supportive and caring approach that linked education with college and career planning (Wimberly & Noeth, 2005). For example, the perceptions of school belonging, educational aspirations, and academic self-efficacy among African American male high school students were examined. It was reported that when students felt they were being encouraged and supported in school, their self confidence in their academic ability increased (Uwah, McMahon & Furlow, 2008). In another study, both high and low academic performers were identified among Latino high school students. After further analysis of student feedback, the researchers concluded that sense of school belonging was the only statistical predictor of student academic grades (Ma, 2003).
Theoretical framework. Several theories contribute to a strong foundation and framework in supporting the connection between student sense of belonging and academic engagement (Herzberg (1959); Maslow (1962); Noddings (1992); Putnam, 2000). In addition to Maslow’s Hierarchy of Needs, Care Theory, Two-Factor Theory and Social Capital theory support and enhance the theoretical framework of this study. Each theory is described in more detail regarding its relation to student sense of belonging, motivation and post-secondary planning.

**Herzberg’s two-factor theory of motivation.** While Maslow’s (1962; 1970) theory of motivation focused on levels of need, it did not elaborate on whether or not those needs could be satisfied intrinsically or extrinsically. This distinction was addressed by psychologist, Frederick Herzberg. Both extrinsic and intrinsic motivators are identified in order to promote a greater sense of belonging and college planning. An intrinsic motivator for students would be getting good grades and attending college. Herzberg described intrinsic motivators as “gaining status, assuming responsibility, and achieving self-actualization” (Herzberg, 1968). In order to reduce student disengagement, extrinsic motivators in the school environment, such as policies, procedures, supervision, and school climate may need to be examined. According to Herzberg, satisfaction depends on motivators, while dissatisfaction is the result of hygiene factors. He defined motivators as intrinsic, and hygiene factors as extrinsic. Examples of motivators included: achievement, recognition (for achievement), the work itself, responsibility and advancement (Herzberg, 1959). He also identified hygiene factors as salary, supervision, interpersonal relations, policy and administration (p.113). Based on Herzberg’s research, possible intrinsic or internal motivators for students might
be recognition for completing homework or extra credit, the satisfaction of completing the work itself, the opportunity to take an honors course, and/or having positive feelings about school in general. Examples of extrinsic or “hygiene” factors that may motivate students might be good relationships with peers, teachers and administrators, and satisfaction with getting good grades. It would be important for schools to identify both the intrinsic and extrinsic motivators that may help students achieve academically and plan for college.

**Care theory.** Noddings (2006) supported Maslow’s (1962) theory and stressed that while belonging is a “critical step” in the hierarchy of needs, students need to feel they are cared for in order to feel as though they belong. The primary motivation for caring is through an individual’s intentions and a true understanding of the person being cared for (Mayeroff, 1971): “To care for someone, I must know who he is, what his powers and limitations are, what his needs are, and what is conducive to his growth” (p. 9). To care for a person requires empathy, the ability to understand that individual and to be “present” with them. Mayeroff stressed that a person cannot care for another without understanding the “world the way the one cared for sees it”. Noddings’ (1992) theory of the ethic of care stated that care is basic in human life - individuals want to be cared for. Her theoretical view on caring in school is illustrated through four basic actions: adults modeling caring relationships in the school, engaging children in informal dialogue and formal instruction in “core values” (i.e., caring, respect, and responsibility), encouraging children to practice the ethic of care in service to others and confirming a commitment to caring by reinforcing it at all levels of the school environment. The importance for the action of care to be incorporated throughout the school curriculum is
emphasized throughout care theory. This included students learning to care for themselves, for their “inner circle”, for strangers and distant others, for animals, plants, the earth, and for ideas. Noddings (2005) discussed the relational and reciprocal nature of caring in the following manner:

It is not enough to hear the teacher’s claim to care. Does the student recognize that he or she is cared for? Is the teacher thought by the student to be a caring teacher? When we adopt the relational sense of caring, we cannot only look at the teacher. This is a mistake that many researchers make today. They devise instruments that measure to what degree teachers exhibit certain observable behaviors. A high score on such an instrument is taken to mean that the teacher cares. But the students may not agree (p. 2).

Educators that promoted a caring school environment and encouraged respectful, supportive relationships within the school helped to increase overall attendance rates and academic engagement (Noddings, 2005; Osterman, 2000; Wentzel, 1997; Wilkins, 2008). School-based factors that often motivated at-risk students were identified as school climate, academic environment, discipline and relationships with teachers (Wilkins, 2008). In a report by the National Research Council (2004), it was shown that a student’s sense of school belonging directly impacted academic and social engagement. There is also a body of literature which suggests that learning is affected by interpersonal and social factors (Baumeister & Leary 1995; Deci & Ryan, 1987; Osterman, 2000; Ryan & Deci, 2000; and Vygotsky, 1986). The perceptions of students that dropped out of high school described school as an uncaring environment which directly contributed to them dropping out (Alexander, Entwistle & Kabani, 2001; Wentzel, 1997). The research
indicated that students who felt positive about their school environment during middle school, reduced their dropout chances in as much as half (Alexander, Entwistle & Kabani, 2001). It was clear that increased connection to the school environment, through supportive interactions with peers and teachers, resulted in increased academic achievement (Bosworth; 1995; Gibbons & Borders, 2010; Osterman, 2000; Uwah, et al., 2008; Wentzel, 1997).

**Social capital theory.** Plank and Jordan (2001) defined social capital as: “A resource available to a person that exists in the structure of relations among people and which facilitates certain actions or activities” (p. 950). Its history can be traced to the eighteenth and nineteenth centuries and is connected with thinkers such as de Tocqueville, Weber, Locke, and Rousseau (Putnam, 2000). In 1916, Hanifan, a State school supervisor and superintendent, chose the term social capital to refer to “goodwill, fellowship, mutual sympathy, and social intercourse among a group of individuals and families” (Woolcock & Nerayan, 2000, p. 227). The importance of community participation was described as:

> Those tangible substances [that] count for most in the daily lives of people: namely good will, fellowship, sympathy and social intercourse among the individuals and families who make up a social unit … If [an individual comes] into contact with his neighbor, and they with other neighbors, there will be an accumulation of social capital, which may immediately satisfy his social needs and which may bear a social potentiality sufficient to the substantial improvement of living conditions in the whole community’ (Woolcock & Nerayan, p. 227).

Putnam (2000) pointed out that when students experience high social capital there
is also increased academic achievement. These relationships are particularly important during adolescence, when students are becoming more independent from parents and family, often relying more on relationships with peers for support and advisement (Weiland, 1994). Baumeister and Leary (1995) emphasized that the need to belong was a “fundamental human motivation” and that individuals desire to “form social relationships, resist disruption of those relationships, and have the need to experience positive interactions with others” (p. 500). Their research demonstrated that when individuals did not feel they belonged, they often experienced a variety of negative outcomes including “emotional distress, various forms of psychopathology, increased stress, and increased health problems such as effects on their immune system” (p. 500).

The research provided examples of how social capital helped to form networks of resources which guided and monitored student progress (Stanton-Salazar & Dornbusch, 1995). An example of a social capital resource was the advisement students receive for the college admissions process. Students received assistance from the school in researching colleges, developing a college list and preparing applications. In addition, parents were provided relevant resources to learn about financial aid opportunities. These were identified as “manifestations” of social capital that influenced post secondary enrollment. Social Capital Theory illustrated how these resources were available only when relationships were established to provide information and guidance that supported students in achieving their goals (Stanton-Salazar & Dornbusch, 1995).

Yamamura, Martinez, and Saenz, (2010) examined the meaning and significance of college readiness among teachers, counselors, parents, students, and superintendents in an ethnically and socioeconomically diverse school. Their results revealed how these
stakeholders felt both an individual and collective responsibility for college readiness. They expressed the need for improved college readiness planning so that all students would increase the college-going rates of that region. As a group or network, the stakeholders described their commitment to a collective responsibility for helping students by parents showing family support and encouragement to attend college. Teachers and administrators also showed great effort in supporting all students. Students showed an increase in their responsibility by seeking out college information and resources. Students and families would benefit from the opportunity to develop relationships with educators who can provide relevant information and resources about high school and post-secondary planning. The school is an excellent resource for many students navigating this process.

**Post-secondary planning in middle school.** A national survey (Great Schools Staff, 2010), indicated that while 92% of seventh and eighth graders reported they were likely to attend college, 68% had little or no information regarding which classes to take to prepare for it. Several researchers stressed the importance of preparing for college as early as middle school. Gullat and Jan (2003) stated:

> Connecting middle schools more explicitly to the college aspirations of their students, and combining academic intervention with college preparatory information...equalize[s] the pre-college preparation experience for more students at an earlier age. This evolution is extremely important, not only because of its implications for policy (and thus funding), but because it marks an important attempt to uncover what is fundamental about when and why a student aspires to,
prepares for, applies to, and enrolls in a postsecondary institution (p. 9-10).

In order to further develop college-preparation skills, it was recommended that interventions begin no later than seventh grade and continue throughout high school (Gibbons, 2005; Oesterreich, 2000; Radcliffe & Stephens, 2008). The U.S. Department of Education (1999), the National Association of Secondary School Principals (1996) and the National Association of College Admission Counseling (1999) recommended that students begin planning for college as early as the sixth grade. A report by ACT (2008) indicated that “under current conditions, the level of academic achievement that students attain by eighth grade has a larger impact on their college and career readiness by the time they graduate from high school than anything that happens academically in high school” (p. 2). The data from their study were compiled from test results taken in eighth grade and in high school from over 216,000 graduating seniors in 2005. Even with these recommendations, many schools included in the research had not implemented early post-secondary planning processes. For example, some high school students had not begun the post-secondary planning process until junior or senior year. This was considered too late to better align high school course selection with post-secondary planning (ACT, 2008; Rojewski and Yang, 1997; Uwah, McMahon, and Furlow, 2008).

In order to better address the gap between middle school student aspirations for college and actual enrollment, it would behoove schools to begin the planning process early, starting in middle school.

**College planning for the under-represented student population.** In 2006, the national average for students continuing to college directly from high school was 61.6% (National Information Center for Higher Education Policymaking and Analysis, 2010).
The rates for certain subgroups of this population were even lower, particularly first-generation students, students from low-income households, and certain ethnic minorities (Lohfink & Paulsen, 2005). While the research showed that most minority students indicated an intention to attend college, there was a discrepancy between intention and actual attendance. For example, a study by Johnson and Perkins (2009) reported that 85% of African American and Hispanic high school students in one district indicated that they planned to attend college. However, the average college placement for this district was 37%. Another study of career and college needs of a diverse group of ninth graders revealed that 73% reported they planned to go to college, yet the college placement for the district was only 48% (Gibbons, Borders, Wiles, Stephan, & Davis, 2006). Low-income, academically-prepared high school graduates scoring in the top quartile on achievement tests attended college at the same rate as high-income graduates scoring in the bottom quartile (Advisory Committee on Student Financial Assistance, 2001). The path to college among socioeconomically disadvantaged eighth graders was characterized as “hazardous” in a study which identified how pre-service teachers created a college-going culture for at-risk middle school students (Radcliffe & Stephens, 2008). By the twelfth grade, only 285 out of 1,000 eighth graders from the lowest socioeconomic backgrounds had earned minimum college qualifications. By the end of their senior year, only 215 had applied to four-year colleges or universities. Two years after high school graduation, only 144 had enrolled at a four-year institution. The authors described disadvantaged students’ “path to college as not only perilous but also unfair” (Radcliffe & Stephens, 2008, p. 4). On a national basis, 278 out of 1,000 eighth graders who were academically strong, graduated from high school, and applied to a four-year institution,
enrolled in one. However, only 79 low-SES students who met the same criteria attended a four-year institution. Compared with equally college-qualified high school graduates from upper-SES backgrounds, a lowest-SES high school graduate was 22 percent less likely to apply to college (Radcliffe & Stephens, 2008).

Although a larger proportion of Hispanics are attending college, Hispanic enrollment still remained much lower than enrollment of White students in college (Yamamura, Martinez, & Saenz, 2010). To increase the likelihood of Hispanic students enrolling in college, the Commission on the Educational Excellence of Hispanic Americans recommended setting new and higher expectations for Hispanic students by helping parents navigate the educational system, developing educational partnerships, and implementing nationwide awareness on college preparation. Other recommendations included reinforcing high quality teaching, initiating a “research agenda” on Hispanic student education, and ensuring full access to college for Hispanics (Yamamura, Martinez, & Saenz, 2010).

**College readiness.** Conley (2010) identifies four essential skills that can assist students in the college preparation and enrollment process: content knowledge and basic skills, core academic skills, non-cognitive or behavioral skills, and “college knowledge” or the ability to effectively search for and apply to college. Conley urges schools to set clear benchmarks for each. He suggested that these can be developed based on existing data and testing systems within the school. Yet he also recommended that districts and states develop new data systems that provide information on the college outcomes of their graduates and link high school performance with college outcomes (p. 185). Conley stressed that meeting these demands of college require “behavioral, problem-solving and
coping skills that allow students to successfully manage new environments and the new academic and social demands of college” (p. 190). Strategies that support Conley’s college readiness skills are cited in the research as developing valid and measureable indicators of college readiness, adding post-secondary outcomes to the data-reporting process, helping high school educators build college readiness preparation into the curriculum, and supporting the engagement of all students by developing classroom environments that promote the acquisition of college readiness skills (Roderick, Nagaoka, & Coca, 2009). In addition, professional development for all school staff is also highly recommended in order to develop and sustain a college-going culture (Conley, 2007; 2008; 2010; Roderick, Nagaoka, & Coca, 2009). “Clear expectations must be set in order to promote and reward the efforts of teachers, administrators, and counselors on improving college readiness and supporting the college planning process for all students” (Conley, 2010, p. 185).

A seven-year study about building a college culture investigated how mentoring, technology access, campus visits, parent involvement, and tutoring impacted at-risk middle school students’ college aspirations and eventual success gaining college acceptance (Radcliffe & Stephens, 2008). This study followed a student cohort starting in their sixth grade year. Data were collected from surveys, interviews, written reflective statements, and student academic measures to evaluate the result of developing a college-going culture. Results suggested that campus visits, and mentoring with pre-service teachers may have been related to improvements in at-risk middle school students’ perceptions of college. These students had more positive perceptions of college than students in the study's comparison groups, including the honor roll student group. The
goals achieved for students in this study were: to understand the nature of college, to recognize that a college education may be important to future success, to gain positive perceptions and aspirations about college, and to prepare academically for college admission.

**Financing a college degree.** In the United States, each higher education level tends to be associated with an increase in salary (Carnevale, 2008). Even though an individual’s salary increases with their education, the costs of financing a college degree cannot be ignored, especially for those students and families from lower socioeconomic backgrounds. A study by Avery and Kane (2004) found that low-income and first-generation students did not “engage effectively” in a college search. It was difficult for them to select the types of colleges they wanted to attend as well as the range of options that were available to them and how much they would be expected to pay for college. A report released by the Education Trust, titled "Priced Out: How the Wrong Financial-Aid Policies Hurt Low-Income Students" indicated that financial-aid policies benefited students from wealthy backgrounds, rather than helping those with the greatest financial need (Lynch, Engle & Cruz, 2011). After grants and aid, the report indicated that low-income students paid a higher proportion of their family income for tuition than other students. It was determined that the low-income student must come up with more than $11,000 a year to attend a four-year public or private nonprofit college. This is equivalent to nearly 72 percent of their family income. Middle-class students financed 27 percent of their family income, and high-income students’ contributed 14 percent (C Adams, 2011). The report urged politicians, colleges and universities to provide more assistance in supporting programs that affect the neediest students.
Students would also benefit from learning about college costs, grants, loans, and scholarships, as well as encouragement to save (C Adams, 2011). The recommendations were based on focus-group and survey research of about 2,250 parents and students nationwide. The study found that 46 percent of parents knew the cost to attend a public college in their home state. In addition, knowledge about certain types of federal grants depended on level of education and ethnicity. While 82 percent of African-Americans and 81 percent of Caucasians said they knew about the program, just 44 percent of Latino parents did. While most parents and students understood the importance of college, this lack of information was described as a barrier that is difficult for many families to overcome (C Adams, 2011). Recommendations from the report included parents and staff working with middle schools to begin the college process early. Middle schools could provide workshops and materials to parents about college costs and the importance of taking the right preparatory classes. High school counselors could also help by discussing financial-aid programs and the importance of saving early for college.

**Role of the educator in developing a college-going culture.** Research indicated that minority and low-income students relied heavily on their teachers and non-familial adults in making post-secondary plans (Bloom, 2007; Stanton-Salazar, 2001; Stanton-Salazar & Dornbusch, 1995; Hill, 2008). Leadership and advocacy are key components that help to ensure equity in working with all students to promote college and career readiness (Burtnett, 2010). Angus (2006) emphasized how school leaders must develop a deeper understanding of “the way we are constructing young people.” Smyth (2006) points out that education must “make a difference in the lives of the most disadvantaged students.” Education leaders have a responsibility to ensure that this is happening.
**Role of the school counselor.** School counselors can be considered a significant resource throughout a student’s education. According to the American School Counselor Association (2005), school counseling programs have a positive impact on students, parents, teachers, administrators, boards of education, counselor educators, post-secondary institutions, and the community. Examples of school counselor skills include “monitoring data to facilitate student improvement, ensuring academic planning and support for every student, motivating every student to seek a wide range of substantial, post-secondary options, including college, and supporting the academic and social preparation necessary for students’ success in the workforce” (ASCA, 2005, p.18-19).

School counselors must become “intentional about establishing such relationships with all students” and in particular students from underserved backgrounds, who may not necessarily seek advisement (Uwah, et al., 2008). Uwah, et al. argued that school counselors should be guided by the core belief that all students “can learn and can achieve post-secondary and career readiness”. Counselors can demonstrate that belief by actively encouraging students to become involved in their schools. School counselors can utilize the relationships they develop with students to help them become involved in extracurricular activities within the school, such as clubs, sports teams, or academic teams, or in community-school partnership organizations. In creating a school community of support and engagement, Uwah, et al. suggested that school counselors invite individual or groups of underserved and underperforming students for a discussion about their overall schooling experiences. Day-Vines and Day-Hairston (2005) devised the following questions to guide school counselors in their quest for understanding:

“What is your personal experience as a member of this school or community?”; “What
particular challenges do you face?” and “What can school personnel do to help improve situations for you and other students in this school?” These questions encourage students to share their experience with their counselor, which could inspire a greater sense of belonging in school. Uwah stresses how this “may be a vital component of keeping many underserved students in school and increasing academic success” (p. 300).

Key components of college and career readiness for counselors to implement include identifying college aspirations, academic planning for college, extracurricular engagement, college and career exploration, college and career assessment, college affordability planning and transition planning from middle to high school and college enrollment (Burtnett, 2010). Data should be used by counselors to identify inequities, “develop measurable goals, inform practice and demonstrate accountability within the key components” (Dimmitt, Carey & Hatch, 2007, p. 3).

Roderick, Nagaoka and Coca (2009) stressed that:

“Districts and schools must combine the resources and support to increase capacity within schools with the signals and incentives that reinforce both student and teacher behaviors that build college readiness” (p. 203).

Conley (2007, p. 26) also supported this by stating:

In addition to cognitive strategies and important content knowledge, students need specialized information in order to access the college admission system. Schools are responsible to make this information available to all students, not just those who seek it out.

Possible interventions that schools could implement with high numbers of first generation college-goers were (Conley, 2007, p. 27):
• Requiring all students to apply to at least one college during the fall semester of their senior year.

• Helping students prepare a resume that includes their extra-curricular activities and awards/recognitions.

• Assisting students and their families with the financial aid system.

• Understanding the “tiered nature” of postsecondary education in the US and how some institutions are more demanding and selective in their admissions processes, while others are more open and accept essentially all applicants.

• Understanding that different kinds of colleges appeal to different kinds of learning styles and interests and that the majors a college offers is an important element in picking a college.

• They need to know all of the various deadlines and required paperwork, such as letters of recommendation or transcripts.

• They need to know the role of admissions tests, such as the SAT and ACT, as well as Advanced Placement, and International Baccalaureate.

Many students don’t even attempt to apply or give up because they become overwhelmed by this process. Conley suggests breaking these processes down into smaller steps may make it easier. This may even help to increase the number of applications to college.

A study titled, “Can I Get A Little Advice Here? How an Overstretched High School Guidance System Is Undermining Students’ College Aspirations” published by Public Agenda for the Bill and Melinda Gates Foundation, included data that described student perceptions of their guidance counselors as unhelpful. This research included
responses from more than 600 students who had some form of higher education experience. The study found that students who received limited counseling and advisement in school were more likely to delay college attendance. While the majority of lower income and less educated parents had high educational aspirations for their children, they did not receive enough practical information regarding the college preparation and application process. For many of these students, access to a “skilled and knowledgeable” guidance counselor was crucial. Therefore, a better quality of college advisement counseling may have had more of a positive effect on a student’s education and post-secondary plans. However, college counseling was just one of the several job duties school counselors were required to do. Most of a counselor’s time was spent on dealing with issues such as discipline, scheduling and other administrative tasks within the high school (Ahlburg, McCall, & Na 2002). In addition, many of the schools in the study had high counselor-student ratios which also limited student interactions with their counselor. Schools may need to clearly define what the role of their guidance department and counselors are and how these roles best contribute to the social, emotional, academic and post-secondary needs of all students.

Counselors may want to focus on early data collection to identify those students who may be disengaged from school. Their needs should be determined early so that students who leave middle school unprepared for high school are supported with evidence-based initiatives and results that promote post-secondary planning and readiness (Dimmitt, Carey & Hatch, 2007). School counselors must work collaboratively to develop a consistent and “personalized school experience” and help all students realize how the transition into high school connects to the transition to college and work
(Kemple, Herlihy, & Smith, 2005). In particular, students who were not college-bound felt that counselors had higher levels of responsibility for their college readiness. King (1996) noted that high school seniors from low-income backgrounds who consistently received advisement from a high school counselor regarding postsecondary plans had more definitive plans to attend college. Meeting college qualifications in high school motivated low-income high school students to search for information about college at higher rates than their equally qualified upper-income peers (Berkner & Chavez, 1997). In addition, college qualified low-income students were more likely to discuss financial aid with high school counselors, teachers, and college representatives than were their middle-income and high-income peers.

Plank and Jordan (2001) revealed that students from low socioeconomic backgrounds were less likely to attend four year colleges, partly because they reported a lack of support in preparing for college entrance exams and the application process. Therefore, schools can play a central role in helping all students plan for college. It was evident in the literature that counselors have a professional responsibility to help all students learn about and plan for post-secondary enrollment. Students often look for advisement from a trusted adult in school, like a counselor, to guide them through this process.

**Role of the teacher.** Child psychologist, Urie Bronfenbrenner (1979) stressed that instilling a sense of belonging in teaching strengthened the teacher's relationship with students and actively involved all students in the classroom. Bronfenbrenner emphasized that before children feel connected to their school, they must first develop a genuine relationship with their teacher. Teachers usually have the most contact with students than
any other staff member. They can be an important source of security and stability for students (Bronfenbrenner). This is especially true for students who may feel rejected and unheard in the school environment (Brendtro, 2006).

Bosworth (1995) conducted research that directly asked middle school students how they defined caring educators. The students in her study identified helpfulness as the main theme in a caring relationship, as well as respect and kindness. Caring educators were also described as being “involved, polite and concerned” with student achievement. The results of Bosworth’s (1995) research revealed that regardless of age, race, or gender, students had a clear and “multi-dimensional” understanding of what care was. Bosworth recommended that this understanding could serve as a benchmark for engaging students in activities that may enhance their education experience and goals.

Wentzel’s (1997) research on motivation in middle school and student perceptions of their school environment suggested that a student’s perceived support from teachers had the most direct link to academic and social engagement, even over parental and peer support. The main question in this study was: “Does perceived caring from teachers predict student academic effort?” The results of the research indicated that there was a significant positive correlation between student perceived caring from teachers and student academic effort. One might argue that other circumstances affected student motivation. However, an earlier study by Wentzel and Asher in 1995 found that students without friends, but who were well liked by teachers, were highly motivated to achieve academically. This research stressed the importance and benefits of developing supportive relationships with students in order to promote academic engagement.

In terms of instructional practices, teachers who facilitated involvement of all
students in class discussions and activities were likely to promote a strong sense of belonging (Wentzel, 1997). Activities that promoted a sense of belonging were having students develop class rules, and providing options with regard to academic assignments. Subsequently, when students felt that their teachers set high expectations for academic achievement and were available to help them, their sense of belonging and engagement increased (Osterman, 2000; Wentzel, 1997; Bosworth, 1995).

Teachers viewed college readiness as a multi-faceted process with an emphasis on collective responsibility between parents, students, teachers, educators, and community members (Stanton-Salazar & Dornbusch; Radcliffe & Stephens, 2008). Teachers understood their responsibility not as individuals but as part of a more complex system of educational stakeholders (Yamamura, Martinez & Saenz, 2010). For students who were not college-tracked, teachers still felt the need to develop the academic skills of every student to successfully attend a college, if they chose to do so. Teachers were also cautious in not assuming that all students would attend a four year school. One teacher shared that improving college readiness for those who are not on the four year college track may be as “simple as widening the definition of college to include two year college and technical schools” (p. 140).

**Role of the education leader.** Researchers emphasized (Angus, 2006; Cook-Sather, 2006; Smyth, 2003) that school leaders must include student voices, student interests and students’ lives in their leadership approach. Angus (p. 370) goes on to state:

To comply with the interest of schooling, the young person has to have some personal connection to the school, a stake in what the school is perceived to offer, and a sense of the worthwhileness of the schooling experience. The young person has to decide
to comply with the school experience and school staff, rather than reject and resist them. The starting point for facilitating such decision making by young people is likely to be when the school, its teachers, and leaders reach out to such children, move to meet them rather than expecting them to adjust to the entrenched school and teacher paradigms, and attempt to engage them in relevant and interesting school experiences in which they can recognize themselves, their parents and their neighbors.

Leadership in diverse schools with high success rates was described as an environment where teachers and students were encouraged to work collaboratively, further developing a student’s academic skills as well as building stronger relationships (Smyth, 2006). Smyth stressed that leaders should “promote the educational professionalism of their colleagues and the inclusion of students rather than following the dictates of managerial control” (p. 372).

Angus (2006, p. 372) stressed that in order for students to become more engaged, leaders must:

- Apply democratic and transformative leadership. Such environments are dynamic rather than static…Such leadership arises not from coercion and manipulation, but from relational collaborative, participatory processes. The importance of the relational nature of schooling generally, and particularly of the student-teacher relationship is a key theme in leadership. We must try to understand how education as a social institution systematically acts to disadvantage certain types of people. Then we are obliged, as principled educators, to take the sort of moral stance and do something about it. School leadership means being prepared to buck the rules, to challenge the status quo, to put relationships at the center of
everything and to worry more about engaging young people in schooling than managing their behavior.

School leaders have a responsibility in creating a college-going culture. It is important that the appropriate needs assessments are administered to develop a starting point from which to continue. The College Board’s report titled, “Connecting Students to College Success” (2006) recommended that schools form a committee in order to manage this process. The goal for both large- and small-scale ideas and programs is to “shift the school from one whose goal is that students graduate from high school to one where students continue their education after high school” (College Board, 2006, p. 6):

Creating a college-going culture requires a change in attitude on a global scale. As a school, behave as if you expect all students to achieve at a high level, actively work to remove barriers from learning, and teach students and families how to help themselves. Work collaboratively with all school personnel, offering adequate training and support that promotes high expectations and high standards for all students. Challenge the existence of low-level and unchallenging courses, and debunk negative myths about who can and who cannot achieve success in rigorous courses. As a school leader, it is important to outline how the program will impact the school and what is expected from the faculty. Everyone must be kept informed, “focused on the same goal, and speaking the same college language” (p. 6).

**Chapter Summary**

A review of the literature on college planning and belonging in middle school revealed that students’ experiences were an important component of high school
completion and post-secondary planning (Altenbaugh, et al, 1995; Balfanz, et al, 2007; Gullat & Jan, 2002; Putnam, 2000). Students were motivated to learn in school environments that they perceived as supportive and caring (Noddings, 2005). A high sense of belonging was important because it encouraged and inspired students to be engaged both personally and academically (Osterman, 2000). The care, understanding, and commitment exhibited toward students (especially students from disadvantaged backgrounds) may have been the most important influence on their academic performance and post-secondary goals (Radcliffe & Stephens, 2008; Roderick, et al, 2009).

Research on students’ sense of belonging has psychological and educational importance and is considered by many educational leaders and organizations to be a critical concern facing our students and schools (Griffin, 2008; Osterman, 2000; Maslow, 1970). In addition, the importance of fostering the post-secondary aspirations of all students has roots in early progressive education and philosophy (Noddings, 1992; Dewey, 1900). In order for graduation and college attendance rates to increase, all students must be supported socially and academically throughout their education. Students need to construct an overall plan for college preparation, one that ensures that they will develop the necessary skills in a progressively more “complex fashion” over four years (Conley 2007; 2010). Students need to take the responsibility to utilize the information presented to them on college, academic and financial requirements and to discuss this information with adults in their lives who may be able to help them. Not all students have supportive family environments, but support can come from other resources, and students should be encouraged to seek out advisement from educators to
prepare for high school and college (Putnam, 2000). “Young people need personal contact and guidance to know how to become, and believe they are capable of being, college-ready” (Conley, 2007, p. 28).

Figure 2.1 was created by the researcher to highlight the research on belonging and college-going beliefs in support of theories by Maslow (1962); Herzberg (1959) and Noddings (1992). It is clear that students who felt like they belonged in school had higher academic achievement as well as higher college-going beliefs (Gibbons, 2005; Osterman, 2000; Wentzel, 1997). When students felt good about their academic achievement, it increased their academic self-efficacy, which in turn helped increase their college-going self-efficacy and could possibly lead to successful graduation from high school and subsequent enrollment in college (Conley, 2007; Gibbons, 2005). The model identifies belonging as a foundation for student achievement and subsequent college enrollment.

Chapter 3 will explain the mixed methods research design that guided this study. It includes descriptions of the research context, participants, and data collection and analysis procedures.
Figure 2.1. Logical Model for Relationship between Student Belonging and College-Going Beliefs.
Chapter 3: Research Design Methodology

Introduction

The purpose of this concurrent mixed methods study was to identify a possible correlation between student perceptions of belonging in school and college-going self-efficacy. One hundred eighty-four eighth-grade students at a diverse, suburban middle school completed the Psychological Sense of School Membership survey (Goodenow, 1993a) and the College-Going Self-Efficacy Scale (Gibbons and Borders, 2010), (Appendix C and Appendix D). After quantitative analysis of the surveys, focus groups provided qualitative data regarding student perceptions of belonging in school as well as their college-going beliefs (Appendix F).

Research Context

This study was conducted due to a gap in the research regarding middle school students’ perceived sense of belonging and its possible correlation to college-going self-efficacy. In addition, student perceptions were often minimized in the research (Angus, 2006; Cook-Sather, 2006; Lindquist, 2010; Smyth, 2006). Dewey called for teachers to “listen to students and to be alive to their thinking, affect and learning” (Smyth, 2006, p. 282). Since schools continue to invest a great deal of time and money on various resources and interventions, including feedback from students may provide useful data to all stakeholders regarding the evaluation of those resources (Freiberg, 1998).

The following questions were addressed in this research:

1. Is there a positive correlation between eighth-grade students’ sense of
belonging in school and their college-going self-efficacy at a diverse, suburban middle school in New York State?

2. Are there significant differences between demographic groups in both sense of belonging in school and college-going self-efficacy?
   
   2a. between male and female students at this school
   
   2b. between students who received free lunch and those that did not
   
   2c. between Hispanic male students and White male students
   
   2d. between Hispanic female students and White female students

3. What do eighth graders at this school say they know and need to know about post-secondary planning?

4. How do eighth graders at this school describe factors related to their sense of belonging in their school climate?

5. Based on the results of this mixed methods research, what interventions can school counselors and other educators implement to better prepare middle school students for the transition to high school and beyond?

**Research Design.** Mixed methods research uses both quantitative and qualitative approaches to build on possible relationships which can improve the overall strength of a study (Creswell, 2007). In this study, survey results provided quantitative data regarding student perceptions of belonging and college-going beliefs. The focus groups enriched the quantitative results regarding student beliefs about their school environment and planning for college. An analysis of the correlation between the two surveys was conducted through the use of the SPSS, Version 16.0, which is a computer program used for statistical analysis. Coding methods were used to analyze the qualitative data from
each focus group.

**Setting.** Located in southern Westchester County, about 20 miles north of New York City, this middle school serves approximately 600 ethnically and socio-economically diverse students in grades 6 through 8. The community is a destination point for families immigrating from the Caribbean and Latin America, and home to families who have resided there for generations. In 2008, the district was selected by the Magellan Foundation to represent one of three exemplary New York State high schools to have programs and practices that lead to high graduation and low drop-out rates. The high school was among the top 40 from over 640 schools to reach benchmark graduation rate standards and was one of five exemplary high schools chosen for in-depth research, study, and visitation by the Magellan Foundation. In 2009, the United States Department of Education featured the school on their website “Doing What Works” as one of five schools nationally identified as putting best practices in action to achieve graduation (http://www.dww.ed.gov/). Eighty-nine percent of the students from the class of 2009 continued their studies in higher education. At the time of this study, approximately 23% of the district’s students were learning English as a second language. The dominant native language for English Language Learners was Spanish.

**Population.** The school had an enrollment of approximately 600 students in grades 6-8. The ethnic and racial make-up of the student population was approximately 58% Hispanic, 35% White, 5% Black, and 1% Asian. Thirty-three percent of the students qualified for the free lunch program based on their socioeconomic status. The administrative staff was a principal and an assistant principal. Two school counselors, a psychologist, and part time social worker represented the pupil support staff. The
instructional staff was represented by approximately 50 teachers and teaching assistants.

**Research Participants**

All 205 eighth-grade students attending the middle school were selected to take both surveys during their social studies class. Twenty-one students did not complete the surveys due to various reasons such as absence from school the day the surveys were administered. In addition, students who were newcomers to the United States were not able to take the surveys because of their lack of fluency in the English language. After the results of the surveys were analyzed, 20 of the 184 students were selected through purposive sampling to participate in focus group interviews. Students were selected based on their scores on the two surveys. For example, one focus group included seven students who scored below the mean score on the PSSM and the CGSES surveys. The focus group sample was made up of ten Hispanic students, six White students, one Black student, one Asian student, and two multiracial students.

**Data Collection Instruments**

The researcher was the primary instrument for all data collection and analysis. Prior to collecting any data, a letter from the researcher was sent to all parents of eighth graders in both English and Spanish (Appendix A). This letter provided parents and students details about the study and the opportunity to opt out of the research. Two hard copies of the surveys were administered by the researcher concurrently to all eighth graders during social studies classes. A prepared script was read to students regarding the details and instructions of each survey (Appendix B). Survey administration occurred on one day during one period of all eighth grade social studies classes. After quantitative analysis of the surveys was completed, four focus groups were facilitated by the
researcher. The focus groups were conducted during third period for 45 minutes. They were digitally recorded and transcribed for coding purposes.

The confidentiality of each student was protected by assigning a numerical value to each survey instead of the student’s name. This numerical value was used for each student participating in the focus groups. The researcher relied on this coding procedure so that valuable demographic information could be included in the analysis and presentation of the data.

**Surveys.** The two surveys on student perceptions of belonging in school (Appendix C) and college-going self-efficacy (Appendix D) were chosen because they were identified in the research as valid and reliable instruments for gathering this type of quantitative data, specifically for a diverse population of middle school students (Gibbons, 2005; Goodenow, 1993a).

*Psychological sense of school membership instrument (PSSM).* This survey was developed by Carol Goodenow (1993a) of Tufts University. It was designed to measure the level of belonging that a student experiences at school. Goodenow was one of the first researchers to survey students of various backgrounds and ages about their level of school membership. Goodenow’s research on belonging also indicated a significant relationship between middle school students’ beliefs about their level of membership in school and their expectations for success in academic tasks (Nichols, 2006).

The PSSM consists of 18 questions that are answered on a five-point Likert scale with choices ranging from “not at all true” (1) to “completely true” (5). The instrument was tested on both urban and suburban samples and with students of several ethnic and
racial groups. Construct validity was achieved through several group comparisons and correlations such as recentness of student enrollment, school attendance, school location (urban versus suburban), and student social status, motivation, and grades. Overall, students with higher school membership were found to be more motivated, had more positive self-concept, felt greater school satisfaction, had higher academic performance, and reported greater school commitment, more positive teacher-student relations, and lower social-emotional distress (Nichols, 2006).

**College-going self-efficacy scale.** A review of the literature was conducted to identify existing measures of college-going self-efficacy that included both college attendance and college persistence and that was appropriate for middle school students. The CGSES was designed by Melinda Gibbons (2005) of the University of Tennessee to measure college-going beliefs of middle school students. Items on the CGSES were created to identify the influences on college attendance and college persistence for middle school students specifically. Considering a middle school student’s developmental stage, questions were designed to be general, easily understandable and brief while still focusing on the various influences on their college-going beliefs (Gibbons & Borders, 2010). 14 items in the survey relate to college attendance and 16 items relate to college persistence. College attendance items reflected financial issues (e.g., “I can find a way to pay for college”); issues related to ability (e.g., “I can get good grades in my high school math classes”); family-related issues (e.g., “I can have family support for going to college”); decision-making skills (e.g., “I can choose a good college”); as well as one overall item, “I can go to college after high school.” These items were indicative of the themes identified in the research on college attendance beliefs. Students responded to the
prompt, “How sure are you about being able to do the following” using a four-point Likert scale (1 = not at all sure, 2 = somewhat sure, 3 = sure, 4 = very sure). College persistence items reflected financial questions (e.g., “I could pay for each year of college”); ability items (e.g., “I could do the class work and homework assignments in college classes”); family items (e.g., “I could get my family to support my wish of finishing college”); and life skills (e.g., “I could set my own schedule while in college”). Two overall items about persistence were included (e.g., “I could fit in at college”). Again, these items were based on themes that Gibbons and Borders (2010) identified through analysis of previous research on college persistence. Gibbons and Borders reported that the results of three-phase testing of the CGSES provided consistent evidence for the scale’s reliability and validity. Internal consistency results were adequate across three different samples of middle school students, including a large and diverse group. Test retest reliability was reported by the researchers.

**Focus Groups.** Focus groups were included in this study to learn about the feelings and beliefs of students in order to help assess their knowledge and needs. This helped to better evaluate and enhance current interventions regarding sense of belonging and college beliefs at the middle school level. It was important that the focus groups were structured by the research questions and also allowed for open dialogue (Creswell, 2007). By purposely selecting the members for each group based on their survey scores, the researcher gained valuable insight into the students’ shared beliefs about belonging in school and college. Recording equipment was used during all focus groups. Each focus group lasted one class period or 45 minutes. Written parent and student permission was obtained before all focus groups began (Appendix E). Students were selected for each
focus group based on their scores on the two surveys. One group included students who scored below the mean score for sense of belonging and college-going self-efficacy. All focus groups were facilitated by the researcher. A script of questions related to belonging and college beliefs was used as a framework for the entire session (Appendix F). The reason for including focus groups in this research was not to generalize this study to other settings but to provide an understanding of students’ perceptions specific to this school. The reader may then “determine the extent to which findings from a study can be applied to their context” (Merriam, 2002, p. 29).

**Data Analysis**

Data were analyzed using SPSS 16.0. Descriptive analysis of the data from both surveys included means, standard deviations, and a range of scores for these variables. Demographic data were presented as well. A Pearson Correlation Coefficient was used to examine the relationship between students’ composite scores on both surveys. An Analysis of Variance was used to determine whether or not there were significant differences between demographic groups.

The recorded responses during the focus groups were transcribed and analyzed to establish patterns, themes, and discrepancies of student perceptions of belonging and college-going beliefs (Creswell, 2007). According to Strauss and Corbin (1998), procedures used to interpret and organize interview data consist of “conceptualizing and reducing data, elaborating categories in terms of their properties and dimensions, and relating through a series of prepositional statements” (p. 12). The coding technique was used to analyze the transcript data. First, main quotes or comments in the transcript were identified and flagged as similar views that the participants raised. Next, the identified
quotes were transferred onto an electronic spreadsheet in order to identify common categories. Finally, all the categories were reviewed and common themes were identified, with the exception of a few that were outliers. The regularity of the comments in each theme was used to establish key concepts. According to frequency of themes mentioned by the participants, the most important themes for college-going self-efficacy and sense of belonging were identified to highlight broader themes. When conducting a mixed methods study of this type, Moustakas (1994) recommended the utilization of a triangulation procedure to ensure “trustworthiness” and “credibility”. This mixed methods study required the researcher to study student beliefs and goals using two separate methods, surveys and focus groups.

Summary

The participants represented a sample of eighth-grade students from a single U.S. state, county and district. All of the data collected were based on student perceptions of school-based factors only. School personnel and parent input was not included nor was certain demographic information such as parent education level. This goal of this research was to inform a dialogue between academics and practitioners regarding student perceptions of their school climate as it relates to college-going self-efficacy and sense of belonging.
Chapter 4: Results

Introduction

As stated in Chapter 1, this mixed methods study was conducted due to a gap in the research regarding middle school students’ perceived sense of belonging and its possible correlation to college-going self-efficacy. In addition, student perceptions were included in order to provide further detail regarding their beliefs about belonging in school and knowledge about college. This section presents the results of this study. The results include responses to each of the research questions, data findings, and a summary of results. Tables 4.1-4.4 provide a description of the population by race/ethnicity, gender, socioeconomic status, and grade point average (on a 100 point scale). For the purposes of this study, the college-going self-efficacy scale is referenced as CGSES and the psychological sense of school membership scale is referenced as PSSM. 184 of the 205 students in the eighth grade completed both surveys. Twenty-one students did not complete the surveys for various reasons, i.e. absence from school, and limited English language proficiency. Of the 184 students who completed the surveys, 85 were male, and 99 were female. Forty-one percent of the students were Hispanic/Latino and forty-five percent were White. The remaining percent of students were of Black, Asian, or multiracial backgrounds. Forty-three percent of the students qualified to receive free or reduced lunch. The minimum and maximum scores a student could receive on the college-going self-efficacy scale and on the psychological sense of school membership scale were 30-120 for the CGSES and 18-90 for the PSSM.
### Table 4.1

**Gender**

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>85</td>
<td>46.2</td>
</tr>
<tr>
<td>Female</td>
<td>99</td>
<td>53.8</td>
</tr>
<tr>
<td>Total</td>
<td>184</td>
<td>100</td>
</tr>
</tbody>
</table>

### Table 4.2

**Race/Ethnicity**

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>n</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hispanic</td>
<td>76</td>
<td>41.3</td>
</tr>
<tr>
<td>White</td>
<td>83</td>
<td>45.1</td>
</tr>
<tr>
<td>Black</td>
<td>10</td>
<td>5.4</td>
</tr>
<tr>
<td>Asian</td>
<td>9</td>
<td>4.9</td>
</tr>
<tr>
<td>Multiracial</td>
<td>6</td>
<td>3.3</td>
</tr>
<tr>
<td>Total</td>
<td>184</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Table 4.3

*Free/Reduced Lunch Program*

<table>
<thead>
<tr>
<th>Lunch</th>
<th>N</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free</td>
<td>80</td>
<td>43.5</td>
</tr>
<tr>
<td>Pay</td>
<td>104</td>
<td>56.5</td>
</tr>
<tr>
<td>Total</td>
<td>184</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4.4

*GPA by Race/Ethnicity*

<table>
<thead>
<tr>
<th>RACE</th>
<th>N</th>
<th>Range</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hispanic GPA</td>
<td>76</td>
<td>58-94</td>
<td>81.18</td>
<td>8.514</td>
</tr>
<tr>
<td>White GPA</td>
<td>83</td>
<td>68-97</td>
<td>88.29</td>
<td>6.257</td>
</tr>
<tr>
<td>Black GPA</td>
<td>10</td>
<td>66-94</td>
<td>85.22</td>
<td>12.171</td>
</tr>
<tr>
<td>Asian GPA</td>
<td>9</td>
<td>83-97</td>
<td>91.89</td>
<td>4.608</td>
</tr>
<tr>
<td>Multiracial</td>
<td>6</td>
<td>80-90</td>
<td>84.83</td>
<td>4.085</td>
</tr>
</tbody>
</table>

**Research Questions**

The following research questions were addressed in this study:

1. Is there a correlation between eighth grade-students’ sense of belonging in school and their college-going self-efficacy?

2. Are there significant differences between demographic groups in both sense of belonging in school and college-going self-efficacy?
2a. between male and female students at this school
2b. between students who received free lunch and those that did not
2c. between Hispanic male students and White male students
2d. between Hispanic female students and White female students

3. What do eighth graders say they know and say they need to know about high school requirements and post-secondary planning?

4. How do eighth graders describe factors related to their sense of belonging in their school climate?

5. Based on the results of this mixed methods research, what interventions can school counselors and other educators at this school implement to better prepare middle school students for the transition to high school and beyond?

**Data Analysis and Findings**

**Research Question 1.** Is there a positive correlation between eighth-grade students’ sense of belonging in school and their college-going self-efficacy at a diverse, suburban middle school in New York State?

This portion of the research study focused on quantitative data, which are based on statistical analysis of the two surveys (Appendices C and D) that were administered to 184 eighth graders at the middle school. These surveys were used to identify responses to the first two research questions. Through analysis using a Pearson Correlation Coefficient and SPSS version 16.0, a positive correlation was calculated between a student’s college-going self-efficacy and sense of belonging in school. There was a positive correlation as measured by Pearson at .466 at the .01 significance level (Table 4.5). Once the correlation coefficient (r) for the sample was determined (.466), the
researcher had to determine what the likelihood was that this value occurred by chance. Prior to collecting data, researchers predetermine an alpha level, which is how willing they are to be wrong when they state that there is a relationship (Fisher & Yates 1953; Siegle, 2009). A common alpha level for qualitative research is .05. For this study, the researcher chose .01 for the alpha level. In order to determine if the \( r \) value found with the sample meets that requirement, a critical value table referenced by Siegle (2009) for Pearson’s Correlation Coefficient was used. To use the table, the researcher needed two pieces of information, the number of subjects and the correlation coefficient \( r \) from the study (.466). First the degrees of freedom (df) was determined. For a correlation study, the degrees of freedom is equal to 2 less than the number of subjects the study had. For this study data was collected from 184 students, the degrees of freedom would be 182. The researcher used the critical value table (Fisher & Yates, 1953; Siegle, 2009) to find the intersection of alpha .01 and 182 degrees of freedom. The value found at the intersection (.254) was the minimum correlation coefficient \( r \) that was needed to confidently state 99 times out of a hundred that the relationship found with the 184 subjects exists in the population from which they were drawn. Since the absolute value of the correlation coefficient was above .254, the null hypothesis (there is no relationship) is rejected. Therefore, the researcher concluded from this calculation that there was a statistically significant relationship between sense of belonging in school and college-going self-efficacy.
Table 4.5

*Pearson Correlation between College-Going Beliefs and Sense of Belonging*

<table>
<thead>
<tr>
<th>Survey</th>
<th>College-Going</th>
<th>College-Going</th>
</tr>
</thead>
<tbody>
<tr>
<td>College-Going</td>
<td>1.00</td>
<td>.466</td>
</tr>
<tr>
<td>Belonging</td>
<td>.466</td>
<td>1.00</td>
</tr>
</tbody>
</table>

*Note.* N=184. Correlation is significant at the 0.01 level (2-tailed).

It is noted that grade point average and sense of belonging as well as college-going self-efficacy are significantly related (Tables 4.6 and 4.7). Students who had higher grades tended to report a greater sense of belonging in school and were more interested in planning for college.

Table 4.6

*Correlation between GPA and College-Going Self-Efficacy*

<table>
<thead>
<tr>
<th></th>
<th>GPA</th>
<th>COLLEGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPA</td>
<td>Pearson</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>Correlation</td>
<td>.353**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>175</td>
</tr>
<tr>
<td>COLLEGE</td>
<td>Pearson</td>
<td>.353**</td>
</tr>
<tr>
<td></td>
<td>Correlation</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>175</td>
</tr>
</tbody>
</table>

**Correlation is significant at the 0.01 level (2-tailed).**
Table 4.7

*Correlation between GPA and Sense of Belonging in School*

<table>
<thead>
<tr>
<th>Correlation</th>
<th>GPA</th>
<th>BELONG</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GPA</strong> Pearson</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Correlation</td>
<td>1.000</td>
<td>.332**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>175</td>
<td>175</td>
</tr>
</tbody>
</table>

| **BELONG** Pearson|       |        |
| Correlation       | .332**| 1.000  |
| Sig. (2-tailed)   |       | .000   |
| N                 | 175   | 184    |

**. Correlation is significant at the 0.01 level (2-tailed).

**Research Question 2.** Are there significant differences between demographic groups in both sense of belonging in school and college-going self-efficacy?

The data indicated that there were not significant differences between demographic groups, except between female college-going self-efficacy and race/ethnicity (Tables 4.8 and 4.9). Through analysis of variance, there was a significant difference noted between female college-going self-efficacy and race/ethnicity at the .014 level.

2a. Male and female students at this school. Through analysis of variance, no significant differences between male and female students were noted (Table 4.9).

2b. Students who qualified for the free lunch program. Through analysis of
variance, there was not a significant difference noted between students who receive free lunch and those that do not (Table 4.10).

2c. Hispanic male and White male students. Through analysis of variance, there was not a significant difference between Hispanic male and White male students in sense of belonging or college-going beliefs as indicated by Tables 4.11 and 4.12.

2d. Hispanic female and White female students. Through analysis of variance, a significant different difference was noted between female students and race/ethnicity at the .014 level. In addition, there was not a significant relationship between female Hispanic student college-going beliefs and sense of belonging in school as indicated by a Pearson Correlation Coefficient of .216 (Table 4.16).

Table 4.8

Means for CGSES and PSSM – Total Scores by Ethnicity/Race

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>n</th>
<th>Range</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hispanic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College</td>
<td>76</td>
<td>64-117</td>
<td>91.17</td>
<td>13.88</td>
</tr>
<tr>
<td>Belong</td>
<td>76</td>
<td>36-78</td>
<td>57.78</td>
<td>8.11</td>
</tr>
<tr>
<td>N</td>
<td>76</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College</td>
<td>83</td>
<td>64-120</td>
<td>98.51</td>
<td>12.01</td>
</tr>
<tr>
<td>Belong</td>
<td>83</td>
<td>42-75</td>
<td>59.65</td>
<td>7.23</td>
</tr>
<tr>
<td>N</td>
<td>83</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College</td>
<td>10</td>
<td>85-118</td>
<td>101.20</td>
<td>12.04</td>
</tr>
<tr>
<td>Belong</td>
<td>10</td>
<td>52-68</td>
<td>59.70</td>
<td>5.62</td>
</tr>
<tr>
<td>N</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College</td>
<td>9</td>
<td>75-115</td>
<td>98.67</td>
<td>12.01</td>
</tr>
<tr>
<td>Belong</td>
<td>9</td>
<td>50-69</td>
<td>59.67</td>
<td>6.80</td>
</tr>
<tr>
<td>N</td>
<td>9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multiracial</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College</td>
<td>6</td>
<td>77-114</td>
<td>94.33</td>
<td>15.55</td>
</tr>
<tr>
<td>Belong</td>
<td>6</td>
<td>44-68</td>
<td>57.00</td>
<td>9.63</td>
</tr>
<tr>
<td>N</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

N = 184
Table 4.9

*Mean Scores by Gender*

<table>
<thead>
<tr>
<th>Gender</th>
<th>n</th>
<th>Range</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>85</td>
<td>64-120</td>
<td>94.25</td>
<td>13.482</td>
</tr>
<tr>
<td>College</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Belong</td>
<td>85</td>
<td>36-78</td>
<td>57.66</td>
<td>8.531</td>
</tr>
<tr>
<td>N</td>
<td>85</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>99</td>
<td>64-118</td>
<td>96.57</td>
<td>13.248</td>
</tr>
<tr>
<td>College</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Belong</td>
<td>99</td>
<td>42-75</td>
<td>59.77</td>
<td>6.546</td>
</tr>
<tr>
<td>N</td>
<td>99</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

N = 184

Table 4.10 describes student scores based on their socioeconomic status. The researcher identified students who received free lunch based on their family’s socioeconomic status. While the results between groups were not statistically significant, the data were consistent with the research which indicated that those students who were from lower socioeconomic groups tended to score lower on sense of belonging in school and had lower college-going self-efficacy (Gibbons, 2005; Gibbons et al., 2006; Gibbons & Borders, 2010; Osterman, 2000).
Table 4.10

*Mean Scores by Socioeconomic Status*

<table>
<thead>
<tr>
<th>Lunch Program</th>
<th>N</th>
<th>Range</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free/College</td>
<td>80</td>
<td>64-118</td>
<td>90.44</td>
<td>13.609</td>
</tr>
<tr>
<td>Reduce Belong</td>
<td>80</td>
<td>36-75</td>
<td>57.24</td>
<td>7.710</td>
</tr>
<tr>
<td>N</td>
<td>80</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full College</td>
<td>104</td>
<td>64-120</td>
<td>99.38</td>
<td>11.850</td>
</tr>
<tr>
<td>Pay Belong</td>
<td>104</td>
<td>42-78</td>
<td>59.99</td>
<td>7.292</td>
</tr>
<tr>
<td>N</td>
<td>104</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Tables 4.11-4.14 include descriptive statistics for White and Hispanic male and female students. These results were included since they represented the majority of the student population. While mean scores for Hispanic students were lower than White students on the college-going scale, Hispanic female students scored slightly higher on sense of belonging in school than White female students.

Table 4.11

*Mean Scores for Hispanic Males*

<table>
<thead>
<tr>
<th>Survey</th>
<th>N</th>
<th>Range</th>
<th>Mean</th>
<th>SD</th>
<th>Total mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGSES</td>
<td>29</td>
<td>64-113</td>
<td>89.52</td>
<td>14.51</td>
<td>95.49</td>
</tr>
<tr>
<td>PSSM</td>
<td>29</td>
<td>36-78</td>
<td>55.59</td>
<td>10.68</td>
<td>58.79</td>
</tr>
</tbody>
</table>
Table 4.12

*Mean Scores for White Males*

<table>
<thead>
<tr>
<th>Survey</th>
<th>N</th>
<th>Range</th>
<th>Mean</th>
<th>SD</th>
<th>Total mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGSES</td>
<td>44</td>
<td>64-120</td>
<td>97.14</td>
<td>12.79</td>
<td>95.49</td>
</tr>
<tr>
<td>PSSM</td>
<td>44</td>
<td>45-75</td>
<td>59.05</td>
<td>7.15</td>
<td>58.79</td>
</tr>
</tbody>
</table>

Table 4.13

*Mean Scores for Hispanic Females*

<table>
<thead>
<tr>
<th>Survey</th>
<th>N</th>
<th>Range</th>
<th>Mean</th>
<th>SD</th>
<th>Total mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGSES</td>
<td>47</td>
<td>64-117</td>
<td>92.19</td>
<td>13.53</td>
<td>95.49</td>
</tr>
<tr>
<td>PSSM</td>
<td>47</td>
<td>47-75</td>
<td>59.13</td>
<td>5.73</td>
<td>58.79</td>
</tr>
</tbody>
</table>

Table 4.14

*Mean Scores for White Females*

<table>
<thead>
<tr>
<th>Survey</th>
<th>N</th>
<th>Range</th>
<th>Mean</th>
<th>SD</th>
<th>Total mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGSES</td>
<td>39</td>
<td>67-118</td>
<td>100.05</td>
<td>11.22</td>
<td>95.49</td>
</tr>
<tr>
<td>PSSM</td>
<td>39</td>
<td>42-72</td>
<td>59.05</td>
<td>7.15</td>
<td>58.79</td>
</tr>
</tbody>
</table>
Table 4.15 indicates that there was an overall positive correlation between male and female college-going beliefs and sense of belonging in school. However, there was a stronger positive correlation between male student college-going beliefs and sense of belonging in school than females.

Table 4.15

*Pearson Correlation between College-Going Beliefs, Sense of Belonging and Gender*

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>College-Going/Belonging</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>85</td>
<td>.566</td>
</tr>
<tr>
<td>Female</td>
<td>99</td>
<td>.348</td>
</tr>
</tbody>
</table>

*Note. N = 184. Overall correlation = .466. Correlation is significant for both males and females at the 0.01 level (2-tailed).*

Table 4.16 indicates that there was not a significant correlation between female Hispanic college-going beliefs and sense of belonging in school. This was evidenced in the focus group with students who scored higher on sense of belonging in school and lower on college-going self-efficacy. This group was made up of Hispanic females. It was evident that the students’ sense of belonging came from their relationships with friends rather than adults in the school.
Table 4.16

Pearson Correlation between College-Going Beliefs, Sense of Belonging, Ethnic and Racial Background

<table>
<thead>
<tr>
<th>Hispanic</th>
<th>N</th>
<th>College-Going/Belonging</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>29</td>
<td>.495*</td>
</tr>
<tr>
<td>Female</td>
<td>47</td>
<td>.216</td>
</tr>
</tbody>
</table>

*Note. Correlation is significant at the 0.01 (2-tailed) level for Hispanic males.

Research Questions 3 and 4

Responses to questions 3 and 4 were based on themes that emerged from the focus groups. The focus groups were included in this study to learn about the feelings and beliefs of students in order to help assess their knowledge and needs. This helped to better evaluate and enhance current interventions regarding sense of belonging and college beliefs at the middle school level. It was important that the focus groups were structured by the research questions and also allowed for open dialogue.

By purposely selecting the members for each group based on their survey scores, valuable data were collected regarding the students’ shared beliefs about belonging in school and college. Four focus groups were conducted with about five students each. Students were selected based on their scores for the College-Going Self-Efficacy Scale and the Psychological Sense of School Membership. The groups were predominately female. Ten Hispanic students, six White students, one Black student, one Asian student and two multicultural students participated in the focus group discussions. Eleven received free or reduced lunch and nine were English language learners.
Research Question 3. What do eighth graders at this school say they know and need to know about high school and post-secondary planning?

The students indicated what they know and need to know about high school requirements and post-secondary planning by emphasizing experiences and messages they received from parents, older siblings and friends. They indicated that family provided them with the knowledge about high school and college for the most part. They expressed an interest in wanting to learn more about high school and college in eighth grade. Overall, the middle school needed to provide them with more information regarding the transition to high school and the importance of college planning. Through the focus groups, it was clear that many of the students were not aware of what they did not know about high school and post secondary planning. As one student explained, “I have not heard about college. I want to learn more about college in middle school that way you know what you are going to be so you can prepare yourself.” Many spoke about what they heard from older siblings and/or parents about the importance of going to college. They expressed anxiety about not knowing what to expect in high school, but hoped for more independence. Based on their responses, the students needed more information about high school requirements as well as information regarding what a high school transcript and schedule look like and the significance of grade point average.

Many of the students expressed anxiety about moving on to high school and were not sure about what to expect. There was definitely a higher confidence level in those students who had stronger college-going self-efficacy scores. This was also evidenced by the specific schools they assumed that were going to attend, i.e., Tufts, Princeton, Columbia. Students who scored lower were more worried about receiving a rejection
letter from a school rather than which school they were actually interested in. Students who scored lower on the college-going self-efficacy scale and the school belonging assessment often reported that they planned to “take a year off” after high school. They planned to “relax, travel and come back refreshed.” This was interesting because they may have had some social and academic apprehension about college, likening it to their current environment in which they felt they did not belong. This is illustrated by one student’s comment, “I probably won’t get into the college I want. My mom and aunt say college is a lot of work. Authority figures say this.”

Students who scored lower than the mean on the college-going self-efficacy scale. For those students who scored lower on the college-going self-efficacy scale, it was clear that they preferred to stay closer to home and were not exposed to many college campuses. While they did receive messages from their parents about the importance of college, more information was lacking. These students were not entirely clear about what was required in order to graduate from high school and were not interested in taking part in extra-curricular activities. The following represents quotes to validate what the students reported on this topic.

“I’ll take a year break like maybe travel or just relax and not have to worry about school for a year, then you can go back refreshed and relaxed.”

“It depends on where I am at the time, who knows where I am going to be at that time.”

“I want to go to a community college for two years, take the classes I want, not a full day and then transfer to a college I could be accepted to.”

“I probably won’t get into the college I want to get into.”
“People think that in high school it’s going to be over because they don’t think about going to college and they quit.”

“I don’t plan to go to college after high school.”

“My mom and aunt say college is a lot of work – authority figures always say this.”

“I don’t know about high school requirements, no one ever went over them.”

“I have not heard about college.”

“If more than one chooses you, it’s going to be hard to decide which one to go to.”

“I won’t get accepted.”

“I don’t want to leave home.”

**Students who scored higher than the mean on the college-going self-efficacy scale.** Students who scored higher on the college-going self-efficacy scale knew more about how to research various colleges, what colleges they planned to attend, and messages they received from parents and siblings about the importance of a college education. In addition, they knew high school requirements and the importance of being involved in extracurricular activities, taking challenging courses and maintaining a high grade point average. It was clear that these students received positive messages about college early on and were exposed to colleges by visiting various schools or listening to feedback from other siblings who were attending college. The following quotes show great distinctions between students who were more confident about attending college.

“I definitely plan to attend college after high school.”

“I always ask my parents about college.”
“I’ve been to a lot of colleges, one in Pennsylvania, Connecticut and New York.”
“...”
“I would like to learn more about college in middle school so you can get more preparation for college.”
“I am interested in Columbia or Stanford.”
“I know the high school requirements are twenty something credits.”
“I know you need to take AP classes. That’s what my sister did.”
“Your transcript is very important, because it shows your GPA.”
“Obviously my parents want me to go to college.”
“I think the middle school needs to realize that most colleges will look at your 8th grade.”
“What you are doing now is really building up your resume to improve and to show colleges what you are worth.”

Table 4.17 summarized what students discussed regarding what they would like to know regarding high school and post-secondary planning. Students indicated that they were not sure about what was “expected” of them. They were looking forward to the independence, but needed guidance at the same time. They wanted more advisement on which courses to take and what the high school requirements are. They were unclear as to what a grade point average meant and how it was calculated. Overall, students wanted to continue their current extracurricular activities and needed information on how to become involved in other activities and/or sports.
Table 4.17

What Students Need to Know about High School and Post-Secondary Planning

<table>
<thead>
<tr>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>importance of extracurricular activities</td>
</tr>
<tr>
<td>options for taking a year off after high school</td>
</tr>
<tr>
<td>statistics for salaries based on education level</td>
</tr>
<tr>
<td>transfer information</td>
</tr>
<tr>
<td>how to research colleges by location</td>
</tr>
<tr>
<td>visits to local colleges</td>
</tr>
<tr>
<td>what is expected in college - work load</td>
</tr>
<tr>
<td>HS requirements - NYS requirements to graduate</td>
</tr>
<tr>
<td>review a transcript</td>
</tr>
<tr>
<td>review a college application</td>
</tr>
<tr>
<td>transition program for hs</td>
</tr>
<tr>
<td>what's expected in hs</td>
</tr>
<tr>
<td>typical hs schedule/day/travel to classes</td>
</tr>
<tr>
<td>parent program for transition to hs/college</td>
</tr>
<tr>
<td>dealing with rejection</td>
</tr>
<tr>
<td>why is it important to learn about college in ms</td>
</tr>
<tr>
<td>course choices in hs</td>
</tr>
<tr>
<td>summer programs to help prepare for college, i.e. writing workshop</td>
</tr>
<tr>
<td>how to arrange a college tour</td>
</tr>
<tr>
<td>requirements for different colleges</td>
</tr>
<tr>
<td>list of extracurricular activities and descriptions in hs</td>
</tr>
<tr>
<td>information about honors and Advanced Placement classes</td>
</tr>
<tr>
<td>how a GPA is calculated and what it means</td>
</tr>
<tr>
<td>career inventory to help to identify possible majors in college</td>
</tr>
<tr>
<td>information about financial aid, scholarships, grants - parent night on this topic</td>
</tr>
</tbody>
</table>

**Research Question 4.** How do eighth graders at this school describe factors related to their sense of belonging in their school environment? In research question 4, students described factors related to their sense of belonging in their school environment.

Students repeatedly stressed respectful interaction with adults as an indicator of feeling a sense of belonging. Themes included feeling comfortable approaching a teacher and/or a counselor; feeling that teachers are non-judgmental; being able to trust a teacher
or staff member; feeling like you can relate to adults in the school; knowing that teachers are always there for you, are respectful, are interested in you and care about you. Students also expressed a need for teachers to “know their strengths” and “help develop them”.

Students stressed the following themes in terms of how to increase their sense of belonging at this middle school:

- Feeling cared for by teachers and peers
- Motivated to work to their academic potential and being recognized for doing so
- Feeling good about oneself
- Developing trusting relationships with school staff
- Being respected by school staff
- The school making learning “fun” and not “boring”

**Students who scored lower than the mean on the psychological sense of school membership scale.** Students who had lower scores on the school membership scale cited a lack of care and interest from teachers. They felt that teachers were very harsh with them because they struggled academically. They were feeling let down by teachers and school staff. There was a sense that school was boring for them. They were frustrated with being punished by teachers for “those students who didn’t care about school.” It can be inferred that many of them were giving up academically. There was a sense of frustration and hopelessness with this group. Following are quotes by the students that describe many of these feelings.

- “Whenever you try to share your opinion they really don’t go into your opinion at all, they brush it off as if it’s not something they don’t want to hear.”
- “It seems like they don’t care.”
“They get annoyed with us.”

“Teachers are not really interested in you.”

“They talk to you like you have problems.”

“There needs to be something that makes you want to come to this school; like have spirit days once a month or something.”

“Class is always the same. You are taught the same things over and over again and we’re like: we learned this yesterday.”

“The majority of time I feel accepted by friends, the teachers are a different story.”

“Some teachers are relatable, like I could see them as totally my age once.”

“I go to guidance because they’re cool.”

“Whenever I’ll answer a question or give my opinion, they completely ignore you, talk over you and talk to someone else.”

“You can tell which teachers care and which really don’t.”

“We get punished for the kids who don’t care about school.”

“All the students who don’t care should be put into a separate class.”

“Obviously they don’t enjoy school, they think it’s boring. The school should try to like make it fun for them. There could be something wrong in their home, or with friends, or just being at school, maybe we don’t see it.”

“It hurts when you need help and you stay after school and the teacher doesn’t show up.”

“You are trying your best and they still fail you.”
Students who scored higher than the mean on the psychological sense of school membership scale. Students felt that their opinions were being heard by teachers and school staff. They also felt that the teachers cared about them and supported them academically. They had no suggestions about what they would change about the middle school, except to enforce a rule about students respecting each other.

“Most kids feel like they belong here.”

“I feel like teachers care about what I say and what my opinion is.”

“My teacher always comes in early and has study sessions. If you have questions you can always email her.”

“I think we should enforce the rule about respect a little more with the students.”

“We have people we care about and who care about us.”

“Teachers listen to you when you are talking to them, they don’t just ignore you, they try to help you with your problems.”

“I don’t know what I would change about this middle school.”

Research Question 5. What interventions can school counselors and other educators at this school implement to better prepare middle school students for the transition to high school and beyond?

Students expressed an interest in learning more about college in middle school. One student even suggested taking a class on the topic, “I think the middle school should have an optional after school or before school extracurricular activity or class just telling you about the basics about college and that you really should be focused.”

Most students who participated in the focus groups received messages from their family regarding the importance of attending college. Students that indicated that their
parents attended college had higher scores on the college-going self-efficacy scale. They were also more confident about which colleges they were going to attend. In addition to students hearing about high school and college from family members, it would be beneficial for the student to hear about it from school staff. It was important for the students to develop stronger relationships with the teachers and for the teachers “to look out for their future.” The students indicated that it would be helpful for a teacher and counselor to teach a course on college preparation or career readiness. It was clear that the students knew about being involved in various extra-curricular activities in order to enhance their college applications. Students wanted to learn more about what types of activities are available and how to choose specific activities that are best suited to their interests. The students felt that high school was approaching quickly and would be over in just four years. They wanted to start “having these conversations in the middle school – to be proactive.” One student mentioned how “the school should be more college oriented.” They also recommended that “teachers should inform the kids about college.” They were looking for more communication and interest on the school’s part in helping to impart knowledge about transitioning to high school and college. Some students mentioned that “kids don’t like going to the guidance counselor.” Perhaps an exploration of why this is would address how guidance counselors can become more visible in supporting students with the transition to high school and college. Students expressed an interest in learning more about how to pursue a major and how to research a college. They expressed wanting to start early “so you sort of have an idea what you can expect when you go to college, so it won’t be overwhelming.”
Summary of Results

The quantitative data revealed a positive correlation between sense of belonging in school and college-going beliefs. The focus group data enhanced the quantitative results by further expanding upon student perceptions about their school climate and college knowledge and beliefs. It was evident in the focus group data that students who had a lower sense of belonging in school were quite unsure about their plans for college. They were much more hesitant and nervous about moving on to high school and had not thought about college. There was also a fear of rejection expressed by the students. They were afraid of being rejected by a college and did not know what to do if that happened. Most of the students in this category wanted to commute to college or attend a college very close to home. There was a fear of the unknown for these students. There was also a concern about how to pay for college. In terms of how these students described their school environment, some did not feel respected, included and supported by staff. Their sense of belonging came from relationships they had with other students.

For those students who reported stronger college-going beliefs and a greater sense of belonging in school, it was evident that they were more confident about their high school and post-secondary plans. They knew what they wanted in terms of career and college and often named specific Ivy League colleges they were interested in. These students reported positive experiences with their teachers. They understood what the high school requirements were. They were also excited about high school and were very involved in extra-curricular activities. They had many friends and received positive messages from home regarding enrolling in challenging coursework and certainly attending college.
Overall, students made it clear that they wanted more independence and wanted to develop stronger relationships with adults in this school. There were times that they did not feel that they were being listened to or treated with respect. For the most part, students expressed an interest in pursuing college, but did not fully understand high school requirements and the process of applying to college. The school should consider implementing more interventions to help middle school students plan for their transition to high school and college. This could be spearheaded through the guidance department. Currently, there is no formal guidance curriculum at this school, but the guidance department should present lessons on the transition to high school as well as post-secondary planning. In terms of school climate, the implementation of an advisory program would be a beneficial addition to the middle school. During advisory meetings topics could include college/career preparation as well as the transition to high school. It would enable staff to further develop relationships with students and that may increase their sense of belonging in school. Further recommendations are discussed in more detail in Chapter 5.
Chapter 5: Discussion

Introduction

The purpose of this mixed methods study was to identify whether a relationship exists between eighth grade students’ sense of belonging in school and their college-going self-efficacy. This research highlights students’ goals and post-secondary plans as well as their perception of belonging and how those needs are being addressed in school.

Although there is an abundance of research on middle school counseling, college readiness and belonging (Goodenow 1993a, 1993b; Goodenow & Grady, 1993; Osterman, 2000), there is a gap in the research regarding middle school students and attempts to correlate their sense of belonging to college readiness. This study begins to address the void in the existing research by identifying a positive correlation between students’ sense of belonging and college-going self-efficacy at this diverse, suburban middle school.

This chapter is divided into five sections: Introduction, Implication of Findings, Limitations, Recommendations and Conclusion. Discussion of the significance of the findings of this study is included as well as the limitations. Recommendations for future research based on the findings are outlined. This chapter concludes with a summary of the entire dissertation.

Implications of Findings

Findings from this study contribute to the research on middle school student development, transition programming, professional development for middle school staff,
leadership development for education administrators, as well as counselor training programs.

**Theoretical implications.** The research literature indicates that school climate is linked to academic achievement and performance (Bosworth, 1995; Koth, Bradshaw, & Leaf, 2008; Noddings, 2006; Osterman, 2000; Wentzel, 1997). School climate has been examined from various theoretical and methodological perspectives. This research adds to the body of literature which suggests that learning is affected by interpersonal and social factors (Baumeister & Leary 1995; Deci & Ryan, 1987; Ryan & Deci, 2000; and Vygotsky, 1986). In this research study, the researcher applies Herzberg’s theory in conjunction with Maslow, Noddings and Social Capital Theory to student sense of belonging and post-secondary beliefs. For example, recognition is expressed as an extrinsic need of many students. They indicate that it bothered them to not receive any recognition but inspired them when they did. Recognition and support externally motivates as well as intrinsically motivates students to do better academically and become more engaged in school. This intrinsic and extrinsic motivation also assists students in moving up the hierarchy of needs which in turn help them to further develop their post-secondary goals. The logical model in Figure 2.1 supports these variables in helping to guide students and educators. In terms of social capital, it is evident in the research that students benefit from developing genuine relationships with educators at their school. These relationships help students with their post-secondary planning and enrollment and develop a greater sense of belonging (ACT, 2008; Balfanz, et al. 2007; Conley, 2010; Gandara & Bial, 2001; Osterman, 2000; Putnam, 2000; Radcliffe & Stephens, 2008; Roderick et al. 2009).
**Professional practice implications.** Current research identifies eighth grade as a critical time in a student’s education in which they make important post-secondary decisions (ACT, 2008). Subsequently, the decisions made in middle school directly affect college preparation and later attendance (ACT, 2008; Wimberly & Noeth, 2005). Most college plans are made well in advance of a student’s high school graduation, usually between eighth and tenth grade (Atanda, 1999). The research stresses that a student’s academic achievement is not only influenced by intellectual abilities, but by their school environment (Capps, 2003; Noddings, 1992; 2005; Osterman, 2000). Students who perceive a greater sense of belonging and membership in school exhibited high academic motivation, had less behavioral problems and had higher academic achievement (Capps, 2003). Furthermore, children who express a sense of belonging in school perceive themselves to be more competent with higher levels of intrinsic motivation (Osterman, 2000). This research identifies a direct relationship between a student’s perception of their school environment and post-secondary plans. This may further assist educators to improve programs and strengthen the curriculum to better prepare students for high school and beyond. The results of this study may encourage educators to become more focused on instructional activities that engage middle school students and provide them with a greater sense of belonging in a caring environment, which will allow them to perform at higher academic and social levels.

**Limitations**

The participants represent a sample of eighth-grade students from a single U.S. state, county, and district. All of the data collected were based on student perceptions of school-based factors only. The results of this research are not meant to be generalized.
School personnel and parent input were not included as well as certain demographic information such as parent education level. An additional goal of this research is to inform a dialogue between academics and practitioners regarding student perceptions of their school climate as it relates to college-going self-efficacy and sense of belonging.

**Recommendations**

Recommendations from this research may be the development of an advisory program and workshops for school staff on promoting a positive school culture, the creation of mentoring programs for college preparation in middle school, specific training for school counselors which encourage students to increase the rigor of their academic programs, and facilitating parent information sessions in middle school that discuss transitioning to high school and college planning. The school may want to consider implementing a college preparatory program like GEAR UP, which has been shown to increase the chances of under-represented students enrolling and completing a college degree (Watt, Huerta & Lozano, 2007). Studies of the program show that students gain valuable information about post-secondary planning. This includes financial planning, course selection, and parent information sessions. These types of interventions help both parents and students better prepare for college and beyond. For many US schools serving disadvantaged populations, Osterman (2000) argues that discussion about student achievement rarely focuses on a student’s sense of belonging in school as well as the school’s role in instilling this. Schools with the greatest need are often the ones not having these conversations. Osterman (2000) goes on to say that, “What the research is suggesting is that the need for relatedness and autonomy are generally ignored within schools and that students with the greatest needs may be least likely to experience
belongingness or autonomy” (p. 361).

Cook-Sather (2006) recommends that school leadership place greater emphasis on a leadership style that encourages feedback from students. Smyth (2006) highlights what he regards as requirements for this type of leadership (p. 282):

- Giving students significant ownership of their learning in other than tokenistic ways.
- Supporting teachers and schools in giving up some control and handing it over to students.
- Fostering an environment in which people are treated with respect and trust rather than fear and threats of retribution.
- Pursuing a curriculum that is relevant and connects to young lives.
- Endorsing forms of reporting assessment that are authentic to learning.
- Cultivating an atmosphere of care built around relationships.
- Promoting flexible pedagogy that understands the complexity of students’ lives regardless of their problems or where they are from.

What this will require is courageous forms of leadership that fearlessly promote the importance of student ownership and student voice in respect of learning. An absence of student voice in schools leads to resistance to learning, and the way to turn this around is to place a greater policy emphasis on the relational work of schools (p. 282).

Professional development opportunities should be offered for staff regarding improving communication and listening skills as well as how to incorporate more team building activities into the school day. The guidance department should develop a
curriculum that includes classroom lessons on the transition to high school, high school requirements, and career exploration. The school may also want to consider implementing an advisory program to further develop trusting relationships between students and teachers.

Another important intervention may be to better incorporate the mission of this middle school as a “community of respect.” This is mentioned several times by students in the focus groups. Respect is very important to the students and impacts the relationship they have with their teachers. Classroom meetings could be lead by administrators and pupil support staff on promoting this mission and providing an outlet for the students to express additional concerns. Listening to what students describe as a caring and/or uncaring school environment can provide educators with a clearer understanding of strategies that promote caring in schools (Bosworth, 1995). The care, understanding, and commitment that are shown toward students may be one of the most important influences on student academic performance and engagement. This middle school might benefit from using Noddings’ (1992, pp. 22-26) theoretical view on caring in school as a framework to foster better relationships with students. The four basic actions of the theory are listed below.

1. Adults modeling caring relationships in the school.
2. Engaging children in informal dialogue and formal instruction in core values such as caring, respect, and responsibility.
3. Encouraging children to practice the ethic of care in service to others.
4. Confirming a commitment to caring by reinforcing it at all levels of the school environment.
The research emphasizes that educators must find a way to increase the number of students attending college. By doing this, all stakeholders must examine new ways to prepare students for high school and college (Conley, 2008). The research indicates that there is a lack of assessment of middle school students’ college-going beliefs. This gap can affect how school counselors provide post-secondary planning to all students.

Although there is a great emphasis on high stakes testing and various strategies implemented to improve public education, students are still entering college with a lack of preparation. Students are being made aware that a post-secondary education is becoming necessary in today’s economy and will be critical in maintaining or improving their overall standard of living. The College Board’s Connecting Students to College Success (2006) report summarized what schools can do to instill a college-going culture:

- Creating a college-going culture requires a change in attitude on a global scale.
- As a school, behave as if you expect all students to achieve at a high level, actively work to remove barriers from learning, and teach students and families how to help themselves. Work collaboratively with all school personnel, offering adequate training and support that promotes high expectations and high standards for all students. Challenge the existence of low-level and unchallenging courses, and debunk negative myths about who can and who cannot achieve success in rigorous courses. When working with your community, organize activities to promote supportive structures for high standards for all students regardless of background, welcome parental involvement at all levels, and share resources with each member of the community (p. 6).
In order to promote a greater sense of belonging and academic engagement and support a college-going culture, schools should consider doing the following (Smyth, 2006, p. 282):

- Pursue a curriculum that is relevant and connects to young lives.
- Endorse forms of reporting and assessment that are authentic to learning.
- Cultivate an atmosphere of care built around relationships.
- Promote flexible pedagogy that understands the complexity of students’ lives.
- Celebrate school cultures that are open to and welcoming of students’ lives regardless of their problems or where they come from.

The researcher could continue to monitor the eighth-graders from this study throughout their high school career to see if there is a correlation between their sense of belonging, college-going beliefs and enrollment in college upon graduation from high school.

**Conclusion**

In this study, 184 eighth graders at a diverse, suburban middle school completed two surveys and participated in focus groups regarding their sense of belonging in school and college-going self-efficacy. Analysis of the data includes basic descriptive statistics and coding of focus groups to further examine the data and draw conclusions. Focus groups were included in this study to learn about the feelings and beliefs of students in order to further assess their knowledge and needs. This helped to better evaluate and enhance current interventions regarding sense of belonging and college beliefs at the middle school level. Descriptive analysis of the data from both surveys includes means, standard deviations, and a range of scores for these variables. Demographic data are
presented as well. A Pearson Correlation Coefficient was used to identify whether a relationship existed between students’ composite scores on both surveys. An analysis of variance was used in order to determine significant differences between demographic groups. Analysis of the quantitative data indicates a positive correlation between eighth graders’ sense of belonging in school and their college-going self-efficacy. The findings showed a significant statistical correlation between students’ sense of school belonging and college-going beliefs. This is significant because it begins to address the void in the research identifying how school based factors are related to students’ college-going beliefs. Focus group data also enhanced quantitative findings by highlighting how students who described a positive sense of belonging in school had strong intentions and higher confidence for attending college after high school. The students indicated what they know and need to know about high school requirements and post-secondary planning by emphasizing experiences and messages they received from parents, older siblings, and friends. They report that family provided them with the knowledge about high school and college for the most part. There was a strong interest on their part in wanting to learn more about high school and college in eighth grade. It does not seem as though the middle school provided enough information regarding the transition to high school and the importance of college planning. Through the focus groups, it was clear that many of the students were not aware of what they did not know about high school and post-secondary planning. Many spoke about what they heard from older siblings and/or parents. They expressed anxiety about not knowing what to expect in high school, but hoped for more independence. Based on their responses, the students will require more information about high school requirements as well as information regarding what a
high school transcript and schedule look like and the significance of grade point average. Many of the students expressed anxiety about moving on to high school and were not sure about what to expect. However, a higher confidence level was present in those students who had stronger college-going self-efficacy scores. This was also evident by the specific schools they assumed that were going to attend, i.e., Tufts, Princeton, Columbia. The students who scored lower on the college-going scale were more worried about receiving a rejection letter from a school rather than which school they were actually interested in. Students who scored lower on the college-going self-efficacy scale and the school belonging assessment often reported that they planned to “take a year off” after high school. They planned to “relax, travel and come back refreshed.” These students may have had some social apprehension about college, likening it to their current environment in which they felt they did not belong.

It is important for the students to develop stronger relationships with the teachers and for the teachers “to look out for their future.” It may be useful for a teacher and counselor to teach a course on college preparation or career readiness. It is clear that the students knew about the importance of being involved in various extra-curricular activities in order to enhance their college applications. The students wanted to learn more about what types of activities are available and how to choose specific activities that are best suited to their interests. The students felt that high school was approaching quickly and would be over in just four years. They wanted to start “having these conversations in the middle school – to be proactive.” Students made it clear that they wanted more independence and wanted to develop stronger relationships with adults in this school. There were times that they did not feel that they were being listened to or
treated with respect. Students expressed an interest in pursuing college, but did not fully understand high school requirements and the process of applying to college. The school could implement more interventions to help middle school students plan for their transition to high school and college. This could be spearheaded through the guidance department. Currently, there is no formal guidance curriculum at this school. It would be beneficial for the guidance department to present lessons on the transition to high school as well as post-secondary planning. In terms of school climate, the implementation of an advisory program could be a welcome addition to the middle school. During advisory meetings topics could include college/career preparation as well as the transition to high school. It would enable staff to further develop relationships with students and may increase their sense of belonging in school as well as their college-going self-efficacy.

It is evident that all stakeholders should continue to work collaboratively to develop and enhance policies that provide early interventions that aim to prepare underserved and under-represented students and their families. Since school belonging and college-going beliefs are correlated with the current 8th graders at this school, it is vital that all educators are committed to further develop their skills to implement a more caring and supportive environment in order to help all students prepare for high school and post-secondary enrollment.
References

ACT (2008) The forgotten middle: Ensuring that all students are on target for college and career readiness before high school. Iowa City, IA.


Avery, C, & Kane, T. J. (2004). Student perceptions of college opportunities: The Boston COACH program. In C.M. Hoxby, College choices: The economics of where to go, when to go, and how to pay for it (pp. 355-394). Chicago: The University of Chicago Press.


December 1, 2010

Dear Parent/Guardian:

As a doctoral student in education, I am doing research on the college process and the 8th grade student experience of school. I would like to ask for your permission for your son/daughter to take two short surveys on these topics on Monday, December 13, 2010 during their social studies class. For this study, the word “college” refers to any type of schooling after high school that could lead to a degree or vocational certification (i.e. two-year community college, four-year university or licensing for a specific trade).

Survey results will be kept confidential. Student names will not be required on the surveys. After the surveys have been completed, your child may be asked to participate, pending your approval, in a focus group in which we will further discuss their high school and post secondary plans.

Your child’s participation is entirely voluntary. Both you and your child are free to withdraw from taking the surveys at any time by contacting me at jsteiner@xxxxxxxx or xxx-xxx-xxxx.

If you have any questions, or would like to discuss this in more detail, please do not hesitate to contact me directly.

Thank you in advance for your cooperation.

Sincerely,

Jamie L. Steiner
School Counselor
1 de diciembre de 2010

Estimados Padres/Guardiánnes:

Como una estudiante haciendo mi doctorado en educación, estoy investigando el proceso de aplicar a la universidad y la experiencia que los estudiantes del octavo grado tengan en la escuela. Me gustaría pedir su permiso para que su hijo/hija tome dos encuestas breves en estos temas el Lunes, 13 de diciembre del 2010 durante su clase de estudios sociales. Para este estudio, la palabra “universidad” se refiere a cualquier tipo de educación al terminar la escuela secundaria que les podría dar una profesion o una certificación vocacional (o sea una escuela de dos años, la universidad de cuatro años o licencias para un oficio en específico).

Los resultados de encuesta serán mantenidos confidenciales. Los nombres de los estudiantes no serán requeridos en las encuestas. Después de que las encuestas hayan sido completadas, su niño puede recibir instrucciones de participar, pendiente a su aprobación en un grupo en el cual fomentaremos intercambio de opiniones sobre la escuela secundaria y la universidad.

La participación de su niño es enteramente voluntaria. Ambos usted y su niño tienen libertad de retirarse de tomar las encuestas en cualquier momento y usted se puede comunicar conmigo vía correo electrónico a jsteiner@xxxxxxxxxxxxx o por teléfono xxx-xxx-xxxx.

Si usted tiene algunas preguntas, o le gustaría hablar sobre esto en más detalle, por favor no deje de llamarme directamente.

Muchas gracias por su cooperación.

Sinceramente,

Jamie L. Steiner
Consejera de la Escuela
Appendix B

Explanation of Survey Instructions

The purpose of these surveys is to learn more about your school membership beliefs as well as your plans for college. For purposes of this study the word “college” refers to any type of schooling after high school – this could mean a four year college/university, a trade school or community college. Your answers will help us discuss high school and college planning with you.

The surveys will take about 20 minutes to complete. Please note that you do not have to participate and can stop at any time. Remember that there are no correct or incorrect answers. If you become confused about any question or need clarification, please raise your hand and I will help you. Please do not leave any answers blank. Please do not talk to others while completing the survey.

Please do not write your name on the survey. This will help to ensure that your answers are confidential. When you are finished completing the surveys, please raise your hand and I will collect them.

Thank you for your help with this study. Are there any questions before we begin?
Appendix C

Psychological Sense of School Membership Scale

<table>
<thead>
<tr>
<th>Psychological Sense of School Membership (PSSM)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Student Version</strong></td>
</tr>
</tbody>
</table>

Directions: We are interested in learning more about how students feel about their teachers and their school. Please answer the following questions by circling one number for each question.

<table>
<thead>
<tr>
<th></th>
<th>Not at all true</th>
<th></th>
<th>Completely true</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I feel like a real part of (school).</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2. People here notice when I'm good at something.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3. It is hard for people like me to be accepted here.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4. Other students in this school take my opinions seriously.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5. Most teachers at (school) are interested in me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>6. Sometimes I feel as if I don't belong here.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>7. There's at least one teacher or other adult in this school I can talk to if I have a problem.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>8. People at this school are friendly to me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>9. Teachers here are not interested in people like me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>10. I am included in lots of activities at (school).</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>11. I am treated with as much respect as other students.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>12. I feel very different from most other students here.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>13. I can really be myself at this school.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>14. The teachers here respect me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>15. People here know I can do good work.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>16. I wish I were in a different school.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>17. I feel proud of belonging to (school).</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>18. Other students here like me the way I am.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

This instrument was developed by and is the property of Carol Goodenow, Ph.D.
Appendix D

College-Going Self-Efficacy Scale

Please read each of the following questions and answer them as honestly as possible. Fill in the bubble that best describes how sure you feel about each question. There are no right or wrong answers. When answering these questions, remember that college means any type of schooling after high school (community college, four-year university).

How sure are you about being able to do the following:

1. I can find a way to pay for college
2. I can get accepted to a college
3. I can have family support for going to college
4. I can choose a good college
5. I can get a scholarship or grant for college
6. I can make an educational plan that will prepare me for college
7. I can make my family proud with my choices after high school
8. I can choose college courses that best fit my interests
9. I can pay for college even if my family cannot help me
10. I can get good grades in my high school math classes
11. I can get good grades in my high school science classes
12. I can choose the high school classes needed to get into a good college
13. I can know enough about computers to get into college
14. I can go to college after high school

If you do go to college, how sure are you about being able to do the following:

1. I could pay for each year of college
2. I could get A’s and B’s in college
3. I could get my family to support my wish of finishing college
4. I could take care of myself at college
5. I could fit in at college
6. I could get good enough grades to get or keep a scholarship
7. I could finish college and receive a college degree
8. I could care for my family responsibilities while in college
9. I could set my own schedule while in college
10. I could make friends at college
11. I could get the education I need for my choice of career
12. I could get a job after I graduate from college
13. I would like being in college
14. I could be smart enough to finish college
15. I could pick the right things to study at college
16. I could do the classwork and homework assignments in college classes
Appendix E

Focus Group Consent Form

I understand that my son/daughter will participate in a focus group meeting in the guidance office from during 3rd period on February 8, 2011 with about 5 other students. Each interview will be audio-taped and transcribed in order to maintain accuracy. I understand that my son’s/daughter’s participation is voluntary and that I or my son/daughter may stop participation at any time. The group will be facilitated by Jamie Steiner, School Counselor, who is conducting doctoral research on the topic of middle school students’ transition to high school, college planning and school membership. I understand that if my son/daughter participates in this meeting, he/she will be asked questions pertaining to their post-secondary planning and the support they receive in school. I understand that my son’s/daughter’s name will be kept confidential.

I understand that this consent may be withdrawn at any time without penalty. Questions, if any, have been answered accordingly. I understand that I can contact Jamie Steiner at xxx-xxx-xxxx for further questions about this research.

I have read and understand this consent form.

___________________________________________________________________________
Child Name and Signature

___________________________________________________________________________
Parent Name and Signature

___________________________________________________________________________
Date
Appendix F

Focus Group Questions

Thank you for agreeing to participate in this study!

The goal of this study is to learn about your plans for high school and college as well as your school membership. For this study, the word “college” refers to any type of schooling after high school that could lead to a degree. This might mean a two-year community college, a four-year university or a trade school. I am very interested in what you believe about college and about your middle school. It does not matter what your grades are or whether you want to go to college after high school. I want everyone’s opinions and thoughts.

This focus group meeting will take approximately one class period. It will be audio recorded and then I will type the interview word for word. Your names will be strictly confidential.

This discussion will help teachers and school counselors discuss college-going plans with you. In addition, the results of this study may help create programs designed to address your specific needs and questions about continuing your education. Please remember to speak clearly and to talk one at a time.

Please remember that you do not have to participate and may stop at any time.

Do you have any questions before we begin?

What do you think it means to have a strong sense of school membership or belonging?
Do you feel accepted at this school?
Do you think that most kids feel like they belong at this school?
What do you like about ABC middle school?
What would you change about ABC middle school?
Who can you or do you go to in school if you are having a problem?
Do you feel that adults in this school are interested in you?
Do you feel that adults in this school support you?
Do you plan to attend college?
How did you learn about college?
What colleges are you interested in?
What career do you want to explore when you graduate from high school/college?
Do you know what the requirements are to graduate from high school?
What, besides good grades, is needed to get into college?
What, besides good grades, is needed to graduate from college?
Have you ever been on a college campus?
Who can you go to that can help you to learn more about college?
Would you like to learn more about college in middle school?