

School Climate and Connectedness for African American Students with and without Disabilities

Kari L. Smith

BSW, Arizona State University, Tempe, 1996
MSW, University of Illinois, Urbana-Champaign, 1999
MA, Concordia University, River Forest, 2008

THESIS

Submitted as partial fulfillment of the requirements
for the degree of Doctor of Philosophy in Special Education
in the Graduate College of the
University of Illinois at Chicago, 2017

Chicago, Illinois

Defense Committee:

Dr. Elizabeth Talbott, Chair and Advisor
Dr. Michelle Parker-Katz
Dr. Marie Tejero Hughes
Dr. Richard Van Acker
Dr. Fabricio Balcazar, Disability and Human Development

ACKNOWLEDGEMENTS

I would like to thank my family and my thesis committee members, Dr. Elizabeth Talbott (Chair and Advisor), Dr. Fabricio Balcazar, Dr. Michelle Parker-Katz, Dr. Marie Tejero Hughes, and Dr. Richard Van Acker for their support throughout this process. I would also like to thank the administrators who allowed me to conduct my research in their schools and for being supportive throughout my time there, the staff members who supported me and completed the surveys, and the parents/guardians of the student participants who allowed their students to participate in my research study. Finally, I would like to thank the student participants for sharing their perceptions.

TABLE OF CONTENTS

<u>CHAPTER</u>	<u>PAGE</u>
I. SCHOOL CLIMATE AND CONNECTEDNESS FOR AFRICAN AMERICAN STUDENTS.....	1
A. School Climate.....	2
B. School Connectedness.....	3
1. Emotional/affective components of school connectedness.....	5
a. African American students' emotional/affective connection to school.....	6
C. Risks for African American Students Within Schools.....	8
D. Risks for Students with Disabilities.....	11
E. African American Student Racial-Ethnic Identity Development and Connectedness.....	12
1. Racial-ethnic identity development and African American students with disabilities.....	15
2. Racial-ethnic connectedness.....	16
F. Theoretical Framework.....	17
G. Research Questions.....	21
II. REVIEW OF THE LITERATURE.....	23
A. School-Level Factors: Licensed Professional Staff Members' Perspectives of School Climate.....	24
B. Individual-Level Factors: Students Perspectives of School Climate.....	25
1. Individual-level factors: Students' perspectives of school climate and connectedness.....	31
2. Individual-level factors: Students' perspectives of school climate and racial-ethnic identity development.....	33
C. Individual-Level Factors: Students' Perspectives of School Connectedness.....	34
1. Students perspectives of school connectedness and gender/racial differences.....	37
2. Types of connection to school: Emotional/affective and behavioral....	47
a. Students with disabilities and emotional/affective connection to school.....	52
b. Teachers' perspectives of African American students' emotional/affective and behavioral connection to school	59
c. Teachers' and students' perspectives of emotional/affective and behavioral connection to school.....	62
d. Students' perspectives of an emotional/affective connection to school.....	66
D. Racial-Ethnic Connectedness for African American Students.....	70
III. METHODS.....	76
A. Participant Characteristics.....	76
1. Licensed professional staff members	76
2. Students.....	77
B. Sampling Procedures.....	81

TABLE OF CONTENTS (continued)

<u>CHAPTER</u>	<u>PAGE</u>
1. Setting.....	81
2. Schools.....	82
3. Measures.....	84
a. School climate.....	84
b. School connectedness.....	87
c. Racial-ethnic connectedness.....	88
C. Procedures.....	89
1. Institutional Review Board approval, consent and recruitment.....	89
2. Survey administration and compensation.....	92
3. Data screening.....	93
IV. RESULTS.....	95
A. Data Analysis Plan.....	95
1. Research question 1: Correlational analysis.....	96
2. Research question 2: Correlational analysis.....	100
3. Research question 3: Multiple regression.....	100
V. DISCUSSION.....	102
A. Correlations Between African American Students' Perceptions of School Climate and Connectedness.....	103
B. School Climate as a Predictor for African American Students' School Connectedness.....	104
1. Individual-level variables as predictors of school connectedness for African American students.....	106
C. Strengths.....	108
D. Limitations.....	110
E. Implications for Future Research.....	115
VI. CITED LITERATURE.....	120
VII. APPENDICES.....	142
A. Appendix A: Student Information Form.....	143
B. Appendix B: Survey Cover Page.....	144
C. Appendix C: Institutional Review Board Approval Notice: Amendment.....	145
D. Appendix D: Institutional Review Board Approval Notice: Continuing Review.....	147
E. Appendix E: Teacher Consent Form.....	149
F. Appendix F: Teacher Presentation Outline.....	152
G. Appendix G: Certified Staff Reminder.....	153
H. Appendix H: Parent/Guardian Flyer.....	154
I. Appendix I: Parent/Guardian Consent.....	155
J. Appendix J: Student Assent Form.....	159
VIII. VITA.....	161

LIST OF TABLES

<u>Table</u>	<u>PAGE</u>
I. Licensed Professional Staff Members' Demographic Characteristics.....	77
II. Student Demographic Characteristics.....	79
III. Mean Scores and Standard Deviations for GPA and Participation in Extracurricular Activities.....	81
IV. School Demographic Data.....	83
V. Mean Scores and Standard Deviations on the <i>ASC-T</i>	86
VI. Mean Scores and Standard Deviations on the <i>ASC-S</i> , <i>SCS</i> , and <i>REI</i>	89
VII. Mean Scores and Standard Deviations on the <i>ASC-S</i> , <i>SCS</i> , and <i>REI</i> for Students With and Without Disabilities.....	89
VIII. Correlations Among Predictor Variables.....	99
IX. Summary of Regression Analysis for Variables Predicting Students' Perceptions of School Connectedness	101

LIST OF FIGURES

<u>Figure</u>		<u>PAGE</u>
1.	A visual depiction of school climate, school connectedness, and school and individual characteristics.....	4
2.	Timeline of the recruitment process	92
3.	The scatterplot showing licensed professional staff members' perceptions of school climate and students' perceptions of school climate.....	97
4.	The scatterplot showing the linear relationship between students' perceptions of school climate and connectedness.....	98

Summary

For many African American students and students with disabilities, perceptions of a positive school climate at the school-level can foster a positive connection to school at the individual-level. A positive school climate can contribute to students' connection to school and to the development of licensed professional staff members' and students' positive morale within the school. In other words, school climate is the environment in which connectedness occurs. Research shows that as students advance in grades from elementary to middle school, their perceptions of school climate and of their connection to school may decline. African American students, and specifically African American males and students with disabilities may be more likely to feel disconnected from school than their White counterparts. African American students may feel that their teachers hold low academic expectations for them yet, having a strong emotional/affective or behavioral connection to school may buoy them against teachers' perceptions of low expectations.

Guided by a developmental systems theory, I examined the correlations between licensed professional staff members' perceptions of school climate and African American students' with and without disabilities perceptions of school climate at three racially-ethnically diverse, suburban middle schools. I examined school climate by surveying 70% of the licensed professional staff members ($n = 141$) at each school and by having all 84 student participants complete a school climate survey.

In addition to examining school climate data at the school level from the perspectives of licensed professional staff members, I explored individual-level variables for African American students with and without disabilities, including students' perceptions of school climate, school connectedness, and students' racial-ethnic connectedness.

Summary (continued)

I collected demographic data including students' gender, disability status (i.e., whether a student has a high incidence disability), hours of participation in extracurricular activities, number of discipline referrals, and academic achievement (i.e., grade point average) as well.

My goal was to determine whether African American students' individual characteristics were correlated with their perceptions of school climate and connectedness. Results suggested a significant relationship between African American students' perceptions of school climate and their feelings of connectedness to school. In addition, African American students' perceptions of school climate predicted their perceptions of school connectedness. The findings from this study illustrate that for African American middle school students with and without disabilities, there is a significant and predictive relationship between school climate and connectedness.

I. School Climate and Connectedness for African American Students

Providing positive educational environments where all students can learn and develop is a major educational concern, particularly for African American students with and without disabilities, given the reported achievement gap, and the social-emotional and academic risks members of these groups may face in schools (The Achievement Gap Initiative at Harvard University, 2011; Gabriel, 2010; Schott Foundation, 2010). Often, American schools fail to provide the necessary academic and social-emotional support needed to prevent academic and behavioral failure for African American students, particularly males and students with disabilities (Noguera, 2012). Schools need to be responsive to all students' developmental needs to reduce the risks of academic and behavioral failure and to improve school climate. A school climate that fosters the development of students' social-emotional growth and an emotional/affective connection to school through positive student-teacher relationships is a fundamental element of successful middle schools (Cowan, Vaillancourt, Rossen, & Pollitt, 2013; Jackson & Davis, 2000; National Forum to Accelerate Middle-Grades Reform, 2006).

The structure of a middle school, including the division of students into teams, homeroom/advisory periods, and extracurricular activities can assist in providing a climate where students' social-emotional growth and connection to school can flourish. Positive relationships between teachers and students have been shown to positively affect African American students' development within the school setting resulting in positive emotional/affective and behavioral outcomes for students (Bonny, Britto, Klostermann, Hornung, & Slap, 2000; Klem & Connell, 2004; McNeely & Falci, 2004; McNeely, Nonnemaker, & Blum, 2002; Nasir, Jones, & McLaughlin, 2011; Nichols, 2008; Resnick et al., 1997; Whitlock, 2006; Wilson, 2004).

School Climate

School climate is the “global assessment” of an entire school’s environment (McNeely, Whitlock, & Libbey, 2010, p. 268). By global assessment, McNeely and colleagues (2010) are referring to the overall school climate in which learning and relationships grow and develop. School climate is intimately tied to the school network in a developmental systems framework and includes students, teachers, the relationships between the students and the adults, and individual students’ perceptions of their connection to school (Ford & Lerner, 1992; Perkins, 2006). It is the environment created through the interaction of relationships between individuals in the school and is unique to the school setting including the type of school (e.g., elementary, middle, or high school) (Perkins, 2006). School climate involves students’ and teachers’ perceptions of the relationships between the students and adults in the school, facilities, school safety, parental involvement within the school, perceptions of and responses to bullying behavior, as well as individual student characteristics such as racial-ethnic connectedness and disability status (i.e., whether a student has a high incidence disability) (Perkins, 2006, 2007).

All stakeholders within the school, including the adults and the students, are responsible for the overall school climate within the school (Perkins, 2007). Prior research has shown that African American students have stressed the importance of student-teacher relationships in their perceptions of whether a school had a positive school climate (Slaughter-Defoe & Glinert-Carlson, 1996). An increased connection to school for individuals can affect their perceptions of school climate and can improve African American students’ achievement, student-teacher relationships, and attendance rates, particularly in this national climate of high stakes testing and Common Core State Standards (Blum, 2005; Blum & Libbey, 2004; Brown, Higgins, Pierce, Hong, & Thoma, 2003; Decker, Dona, & Christenson, 2007; Murray & Greenberg, 2000;

Murray & Naranjo, 2008; Prelow, Bowman, & Weaver, 2007; Thompson, 2002; Wingspread, 2003).

School Connectedness

School connectedness is defined as the individual student's perception that the adults within the school care about, respect, and trust him or her (Barber & Schluterman, 2008; Blum, 2005; Blum & Libbey, 2004; Bonny et al., 2000; Ford & Lerner, 1992; McNeely et al., 2010; Nasir et al., 2011; Whitlock, 2003, 2006). It includes emotional/affective and behavioral features such as being prepared for class and having positive relationships with teachers. According to Waters, Cross and Shaw (2010), students' perceptions of school connectedness are embedded within their perceptions of the school's climate. An individual student's feelings of school connectedness can assist this same individual in developing a positive perception of school climate. A key feature of students' perceptions of an emotional/affective connection to school is a supportive environment (i.e., positive adult-student relationships and a safe school environment) in conjunction with licensed professional staff members' high academic expectations for students (Blum & Libbey, 2004). This definition illuminates the dynamic qualities of school connectedness, school climate, and an individual's characteristics, all of which are important features within a developmental systems framework (Ford & Lerner, 1992). When these feelings are supported and replicated for the majority of students within the school environment, this can lead to a positive school climate. The relationship between licensed professional staff members' perceptions of school climate, individual students' perceptions and characteristics is illustrated in Figure 1.

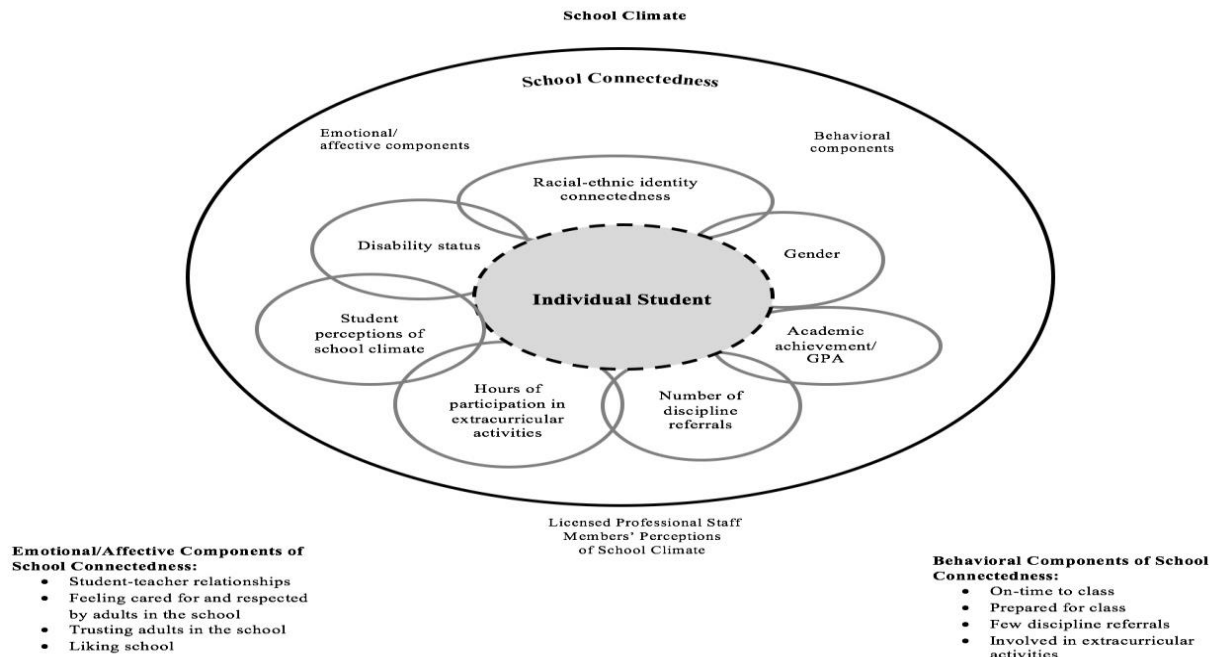


Figure 1. A visual depiction of school climate, school connectedness, and school and individual characteristics. Adapted from “A distributed model of special education leadership for individualized education program teams,” by E. Talbott, D. Mayrowetz, D. M. Maggin, and S. E. Tozer, 2016, *Journal of Special Education Leadership*, 29 (1), p. 26. Copyright 2016 by the Council of Administrators of Special Education.

There are four factors that can increase school connectedness: 1) care, concern and emotional support from adults; 2) belonging to a positive peer group; 3) student and teacher commitment and engagement in school; and 4) school environment, including the physical and social environment of the school (Centers for Disease Control and Prevention [CDC], 2009). Researchers have found that when students report a positive connection to school and their teachers, belong to a positive peer group, are invested in school, feel safe at school, and have opportunities to be socially and emotionally engaged at school, they tend to have positive perceptions of school climate (CDC, 2009; Midgley, Feldlaufer, & Eccles, 1989). When students feel connected to school, they tend to report more positive ratings of school climate (Bonny et al., 2000; Klem & Connell, 2004; Libbey, 2004; McNeely et al., 2002; McNeely & Falci, 2004; McNeely et al., 2010; Prelow et al., 2006; Whitlock, 2006; Wilson, 2004).

Connection to school for African American youth with and without disabilities at all grade levels has been shown to have positive emotional/affective and behavioral outcomes (Bonny et al., 2000; Deshler et al., 2004; Hamre & Pianta, 2001; Libbey, 2004; McMahon, Parnes, Keys, & Viola, 2008; Midgley et al., 1989; Murray & Malmgren, 2005; Nasir et al., 2011; Roeser & Eccles, 1998; Stewart, 2007; Storz, 2008; Thompson, 2002; Whitlock, 2006; Wilson, 2004). Students' perceptions of connectedness to school have been linked to their decreased participation in risky behavior and have been shown to improve their sense of belonging (i.e. students feeling as if they fit in at school, that teachers liked them, and that they had friends) (Nichols, 2008; Resnick et al., 1997; Whitlock, 2006). Students' feelings of being connected to school have been associated with decreased physical and relational aggression, indicating that when students felt safe at school, they were less likely to commit violent acts (Wilson, 2004). School connectedness is also linked to increased academic performance (Bonny et al., 2000). Finally, students with increased connection to school have performed better in school (Bonny et al., 2000).

Emotional/affective components of school connectedness. Researchers have examined emotional/affective and behavioral components when operationalizing school connectedness. Students have an emotional/affective connection to school when they feel respected, cared for, and trusted by adults in the school (Bonny et al., 2000; Klem & Connell, 2004; Libbey, 2004; McNeely et al., 2002; McNeely et al., 2010; McNeely & Falci, 2004; Prelow et al., 2006; Whitlock, 2006; Wilson, 2004). In turn, students need to feel as if they can trust the adults in the school. While trust is a significant component of a student's perceptions of school connectedness, it is not the only aspect. Examples of an emotional/affective connection to school are that students report liking school, have strong relationships with teachers and peers, feel a

sense of belonging and safety at school, and/or view school as important to their future (Nasir et al., 2011). Also, the manner and tone in which students discuss their connection to school has an overall positive feel, indicating a positive affect in regard to school (Nasir et al., 2011; Whitlock, 2006). Students who demonstrate a behavioral connection to school tend to exhibit the behavioral qualities of being prepared for class, arriving to class on-time, few discipline referrals, and/or tend to complete homework (Nasir et al., 2011). They also tend to be students who are involved in extracurricular activities.

African American students' emotional/affective connection to school. Findings from prior school connectedness research have suggested that when students feel as if the adults in the school care about them, they feel more connected to school (Bonny et al., 2000; Libbey, 2004; Roeser & Eccles, 1998; Storz, 2008; Thompson, 2002; Whitlock, 2006; Wilson, 2004). Also, researchers have found that students of different genders, ethnicities and students with disabilities attending the same schools as their counterparts, can have vastly different perspectives of school climate and connectedness (Bonny et al., 2000; Brown et al., 2003, Deschler et al., 2004, Marcus, Gross, & Seefeldt, 1991; McNeely et al., 2002; Thompson, 2002; Way, Reddy, & Rhodes, 2007; Whitlock, 2006). African American students and students with disabilities were more likely to report the most negative experiences in school (Thompson, 2002). Students receiving special education services were more likely to report feeling disconnected from school, and students' perceptions of teacher support has been significantly associated with negative perceptions of school climate for sixth grade students (Brown et al., 2003; Garibaldi, 1992; Perkins, 2006; Way et al., 2007). Overall, it has been shown that males held the most negative perceptions of school and that African American students in sixth through tenth grades reported a higher degree of negative school climate (Ding & Hall, 2007).

African American students' feelings of their relationships with teachers are likely based on how teachers interact with them. Some teachers may interact with African American students in ways that suggest inferior status, such as holding low expectations, calling on them less, and giving them fewer choices in work because of their racial-ethnic background (Kagan, 1990; Marcus et al., 1991). Holding low expectations for students can sever students' emotional/affective connection to adults within the school and may lead to student disengagement in the academic environment because students feel as if their teachers do not believe in them (Kagan, 1990). Additionally, teachers have rated students from different racial-ethnic backgrounds differently on measures of student engagement, social-emotional development, and problem behavior and have rated their relationships with students from different racial-ethnic backgrounds to lack closeness (Decker et al., 2007; Hamre & Pianta, 2001; Murray & Greenberg, 2000; Murray & Naranjo, 2008).

Teachers rated their relationships with African American elementary students as being fraught with increased levels of conflict and decreased levels of closeness in a study conducted by Murray and colleagues (2008) that examined teacher and child ratings of student-teacher relationships. Teachers rated themselves as giving more emotional support to Hispanic students than to African American students (Murray et al., 2008). Positive relationships built on trust and respect between students and staff members can be the difference between success and failure and can buffer the risk African American students' face within schools beginning at young ages (Brown et al., 2003; Pianta, 1999; Steele, 2004; Talbott & Cushing, 2011). Further, regarding trust in relationships with teachers, approximately a third of students surveyed did not feel they could trust their teachers and of those who stated this, one-third were African American (Perkins,

2006). Also, a third of African American students surveyed did not feel their teachers respected them or were fair (Perkins, 2006).

Both the emotional/affective and behavioral components of school connectedness are important for school success and for reducing risks, such as increased rates of suspension, expulsion and dropout rates, for African American male students (Noguera, 2012). Furthermore, if students do not feel supported when transitioning between schools, they may experience increased feelings of alienation and feelings of disengagement from school (Juvonen, 2007). School connectedness, the student-teacher relationship, and students' perceptions of school and teacher support continue to be important as students transition from elementary to middle and high school. School connectedness can impact student achievement and engagement in at-risk behaviors, making this a critical topic to study for African American middle school students with and without disabilities (Bonny et al., 2000; Brown et al., 2003; Ding & Hall, 2002; McNeely et al., 2002; Wilson, 2004).

Risks for African American Students Within Schools

According to Ferguson (2010, as cited in Gabriel, 2010), many African American students are at a disadvantage prior to even entering the schoolhouse doors due to increased environmental risks, such as living in low income communities with fewer resources, and the ongoing battle of racism which can negatively affect their identity development (Gabriel, 2010). However, schools should not be absolved from their role in educating and supporting the development of African American students simply because of the risks they may face (Ferguson, 2003). Too many American schools, including racially-ethnically diverse schools located in socio-economically stable communities, fail to provide the necessary academic, social-

emotional, and behavioral support necessary for African American students with and without disabilities to succeed (Diamond, 2006; Noguera, 2012).

Lack of necessary supports for African American students to be successful within the learning environment may contribute to lower graduation rates and an academic achievement gap between African American students, particularly males, and their White counterparts (Gregory, Skiba, & Noguera, 2010; Noguera, 2012). The academic achievement gap between African American students with and without disabilities and their White counterparts continues to be an area of concern for school districts, even when African American students attend the same high-performing schools as their White peers (Diamond, 2006; Ferguson, 2002). Even when African American students may attend the same diverse suburban schools as their White counterparts, African American students' experiences may be quite different in terms of access to quality, differentiated instruction, feelings of belonging within the school, and student-teacher interactions (Diamond, 2006).

During the middle school years, students may experience declines in motivation, achievement, and perceived school connectedness (Eccles & Roeser, 2011; Loukas et al., 2016; Niehaus et al., 2012; McNeely et al., 2002). An examination of the research finds that African American students and boys who have lower than average IQ scores in kindergarten are more likely to have ongoing academic and behavioral challenges through eighth grade (Hamre & Pianta, 2001). For African American males, declines in motivation and negative perceptions of school climate can be more pronounced. African American females may experience declines in motivation and may hold negative perceptions of school climate as well (Garibaldi, 1992; Simmons, Black, & Zhou, 1991). Dislike of school is associated with students' feelings of being disconnected from school and can increase as students' progress through the grades, becoming

more prevalent during middle school (Ding & Hall, 2007; Eccles & Roeser, 2011; Midgley et al., 1989). Upon the transition to junior high, African American males are more likely to experience declines in grades and increases in problem behavior compared to White males (Simmons et al., 1991). Also, boys report feeling less connected to school than girls (Akos & Galassi, 2004; Booth et al., 2014).

Both African American male and female students are likely to be over-represented in exclusionary practices such as suspension and expulsion (Losen & Skiba, 2010; Skiba, Michael, Nardo, & Peterson, 2002; US Department of Education, 2014). African American students are suspended and expelled from school at rates which are three times higher than their White counterparts (Losen & Skiba, 2010; Skiba et al., 2002; US Department of Education, 2014). African American females are suspended at rates higher than those of females of any other race or ethnicity (US Department of Education, 2014). In fact, in a report completed by Losen and Skiba (2010), suspension rates for African American females were reportedly higher than suspension rates for Hispanic or White males. In comparison to females, suspension rates for African American males in the State of Illinois were 13.95% compared to 3.61% for White males in 2013 (Schott Foundation, 2015).

Repeated suspension from school is a risk factor for dropping out of high school for students and African American male students in particular (Toldson, 2014). Furthermore, African American males are more likely to be suspended from school than other racial-ethnic groups and are less likely to graduate from secondary school (Losen & Skiba, 2010; Schott Foundation, 2010). African American male graduation rates fell behind the graduation rates of White male students for the 2012-2013 school year, the most recent year for data (Schott Foundation, 2015). Nationally, the graduation rate for African American males was 59% in

comparison to 80% for White males. The graduation rate for African American males in Illinois was also 59% compared to 85% for White males (Schott Foundation, 2015).

Risks for Students with Disabilities

Likewise, students with disabilities are more likely than students without disabilities to be suspended and to dropout from school, both of which can contribute to African American male students' perceptions of being disconnected from school (Grady & Bost, 2014; US Department of Education, 2014). African American male students with disabilities are more likely to repeat a grade, receive special education services, to be suspended from school, and to be identified with a disability, which decreases the likelihood that they will enroll in honors classes (Toldson, 2014). Not only are African American students and students with disabilities likely to be over-represented in exclusionary disciplinary practices, they are also falling behind their white counterparts in graduation rates.

According to research commissioned by the US Department of Education, National Center for Education Statistics (Kena et al., 2016), African American students with disabilities had the lowest graduation rate (55%) and highest rate of exiting high school by receiving an alternate certificate (i.e., not meeting the same standards to receive a high school diploma) based on data from the 2012-2013 school year. African American students with disabilities had the highest dropout rates (41.7%) based on the *27th Annual Report to Congress* (2007) (US Department of Education). Concerns remain with the dropout rate for students with disabilities even though there has been a noticeable decrease in the dropout rate for students identified with emotional disabilities (ED) (US Department of Education, 2015). Still, the dropout rate for students identified as ED was the highest at 35.2% compared to 17.6% for other health impairment, 18.1% for learning disability, and 13.4% for speech-language impairment (US

Department of Education, 2015). The combination of lower graduation rates and higher dropout rates for African American students leaves a long-lasting impact and increases the risk that they will become a part of the school-to-prison pipeline (Noguera, 2003; Schott Foundation, 2010; Taylor, 1991; Wald & Losen, 2003).

In addition to high suspension and low graduation rates, African American students' perceptions of racial discrimination by their teachers can undermine their social-emotional development and make them feel disconnected from school (Graham, 2001; Hudley & Graham, 2001; Oyserman, Brickman, & Rhodes, 2007; Oyserman, Gant, Ager, 1995; Steele, 2004, Taylor, 1991). African American middle schoolers who had lower scores on relationship and connectedness scales were more likely to receive lower scores on social-emotional measures completed by both students and teachers indicating that they either had fewer or more negative interpersonal relationships at school (Murray & Greenberg, 2000). Lack of positive interpersonal relationships for African American students can contribute to feelings of being disconnected from school, may affect students with disabilities more significantly, and may impact how African American students feel about the overall school climate (Pham & Murray, 2016).

African American Student Racial-Ethnic Identity Development and Connectedness

Just as having an emotional/affective connection to school has positive outcomes for students, a lack of an emotional/affective connection to adults within a school can have negative results. Lack of an emotional/affective connection to school can increase African American students' risk for school disengagement, academic failure, school dropout, and can impact their ability to develop a positive racial-ethnic identity (Graham, 2001; Gregory et al., 2010; Hudley & Graham, 2001; Oyserman et al., 1995, 2007; Steele, 2004; Toldson, 2014). For African American adolescents, creating positive racial-ethnic and academic identities may be challenging

due to negative academic stereotypes they may face within the school (Graham, 2001; Hudley & Graham, 2001; Oyserman et al., 1995, 2007; Steele, 2004). In fact, some youth may become more connected to their racial-ethnic group because they view that connection as supportive and a way to overcome the discrimination they may face (Altschul et al., 2006; Simmons et al., 1991; Wong et al., 2003). Having a strong racial-ethnic identity for African American students can serve as a protective factor, particularly during transition times, such as from middle to high school (Altschul et al., 2006; Eccles, Wong, & Peck, 2006; Oyserman, Bybee, & Terry, 2003; Oyserman et al., 1995; Pianta, 1999; Simmons et al., 1991; Wong et al., 2003)

An African American student's feelings of connection to his or her racial-ethnic group can help minimize the perceived effects of negative teacher perceptions and teacher discrimination (Oyserman et al., 2007; Wong et al., 2003). A strong connection to one's racial-ethnic identity has been associated with increased academic achievement in that it can guard youth from declines in academic achievement (i.e., grades) during the transition from middle to high school and may protect African American youth from the overall risks they may experience in schools (Altschul et al., 2006; Eccles et al., 2006; Oyserman et al., 1995, 2003; Pianta, 1999; Simmons et al., 1991; Wong et al., 2003).

Racial-ethnic identity is a developmental process, and the ethnic identity with which students' associate has implications for their overall development (Cross & Phagen-Smith, 2001; Nasir et al., 2009). As with any type of development, identity development is dynamic and context-specific, similar to the development of a connection to school and student-teacher relationships (Nasir et al., 2011). An African American adolescent's racial-ethnic connectedness may change as s/he continues through adolescence and is exposed to a variety of contexts (e.g., school, home, church), demonstrating that various contexts can either positively or negatively

affect development as understood in a developmental systems framework (Cross & Phagen-Smith, 2001; Ford & Lerner, 1992; Gay, 1994).

Identity development occurs over time, and the identity an adolescent begins adolescence with may not be the one with which s/he leaves (Cross & Phagen-Smith, 2001; Phinney, 1989; Phinney & Tarver, 1988). Identity development for African American youth can be quite complex because it involves the development of an identity independent of their caregivers, a racial-ethnic identity, gender identity, and may also include development of an identity as a student with a disability (Gay, 1994; Nasir et al., 2009; Rogers, Scott & Way, 2015; Seaton, Sellers, & Scottham, 2006; Umaña-Taylor et al., 2014). Also, racial-ethnic identity can affect other identities with which the adolescent associates (i.e. academic identity) and can serve as a positive and protective factor for a student's social-emotional development and connection within the school level (Eccles et al., 2006; Oyserman et al., 2007).

According to Phinney (1989), the understanding and development of a racial-ethnic identity for African American youth begins during adolescence. Cross and Phagen-Smith (2001) assert that many African American youth begin adolescence with a positive, negative, or little or no consideration of their racial-ethnic identity. They suggest the process of identity development for African American youth is linear for some in that some African American youth may begin and end adolescence with an Afrocentric identity including an understanding of ethnicity and black culture (Cross & Phagen-Smith, 2001). Other African American youth may begin with one racial-ethnic identity based on available models at home and end adolescence with an identity based on models outside of the home, such as in school (Cross & Phagen-Smith, 2001). Cross and Phagen-Smith (2001) suggest the struggle for African American youth during adolescence is one of "authentication of Black ideas, values, and beliefs" and deciding the importance of these

things to their identity (p. 255; Oyserman, 2005). Additionally, ethnic identity for African American adolescents may not be the primary issue, but rather, gender and disability status may be more salient and play an integral part in identity development for some African American youth (Cross & Fhagen-Smith, 2001; Reynolds & Pope, 1991; Rogers et al., 2015; Umaña-Taylor et al., 2014). A positive disability identity can serve similar functions as a positive racial-ethnic identity and can protect individuals with disabilities from stereotypes associated with having a disability (i.e., similar to being African American, such as low expectations) (Dotterer, McHale, & Crouter, 2009; Mpofu & Harley, 2006).

Racial-ethnic identity development and African American students with disabilities.

The body of research on racial-ethnic identity development for African Americans with disabilities is quite small (Alston, Bell, & Feist-Price, 1996; Mpofu & Harley, 2006). Identity development for African American students with disabilities can follow a linear or cyclical process as suggested by Cross and Fhagen-Smith (i.e., entering & exiting adolescence with either the same or different racial-ethnic identity) (2001). An individual who self-identifies as being an individual with a disability may view his or her disability as part of his or overall identity (Mpofu & Harley, 2006).

An individual who understands that s/he is a person with a disability may not consider the disability to be a part of his or her identity, meaning that for some African Americans creating a disability identity is “disability specific” (Alston et al., 1996, p. 13; Mpofu & Harley, 2006, p.17). For African American students, the age at which an individual is identified with a disability can affect the individual’s development of a disability identity, such that those with congenital disabilities may be more likely to incorporate a disability identity as part of their other identities (Alston et al., 1996; Mpofu & Harley, 2006). Individuals who are identified with

certain disabilities such as, learning and emotional disabilities, may not view their disabilities as connected to their other identities particularly if they view that there is a stigma attached to their disability, such as behavioral challenges (Alston et al., 1996; Mpofu & Harley, 2006).

Racial-ethnic connectedness. Racial-ethnic connectedness involves feeling a positive sense of belonging to one's racial-ethnic group, its history and traditions (Altschul et al., 2006; Oyserman et al., 2003, 2007; Oyserman, Harrison, & Bybee, 2001). Overall, African American adolescents who considered their racial-ethnic identity to be important also placed a high level of importance on achievement in school and seemed to be protected from the effects of perceived racial discrimination (Eccles et al., 2006). African American males who indicated a strong sense of connection to their racial-ethnic group were predicted to have improved grades, increased study times, and improved self-reported attendance, all evidence of a behavioral connection to school (Eccles et al., 2006; Oyserman et al., 2003). African American females who had a strong racial-ethnic identity also had a strong sense of community and felt that their individual achievements benefitted the African American community as a whole. In contrast, a strong sense of community may also decrease study time for girls (Oyserman et al., 2003). Further examination of the link between racial-ethnic identity and connection to school for African American students with and without disabilities is necessary to better understand how individual factors affect perceptions of school connectedness.

Identity development (including racial-ethnic, gender, and/or disability identity), developing a sense of connection to one's racial-ethnic group, and beginning to understand how one's racial-ethnic group relates to society are critical tasks for African American youth during adolescence (Erikson, 1968; Oyserman et al., 2007). Identity development is an ecological process that is ongoing and can change based on the context (i.e. home and school environments)

(Nasir et al., 2009; Rogers et al., 2015). The critical tasks outlined above are best understood within a developmental systems framework (Ford & Lerner, 1992). I argue that the school network, due to the amount of time adolescents spend in school, is an important social context in which to examine perceptions of school climate and connectedness for African American students with and without disabilities given the risks this population faces (Simmons et al., 1991; Wong et al., 2003).

Theoretical Framework

Next to the home environment, schools are the most important context in which adolescents develop, including social-emotional development (Luster & McAdoo, 1995). The role of schools in students' academic, social-emotional and identity development make it a crucial location for examining the climate in which these developmental processes occur (Eccles & Roeser, 2011; Murray & Pianta, 2007; Myers & Pianta, 2008; Nichols, 2008). Other factors such as organization of school (i.e. K-8, junior high or middle school) and location of school (urban, suburban, or rural) can also influence an adolescent's development within the school context; however, it is the student's connection to school that is the most salient (Bronfenbrenner, 1979; Collins & Steinberg, 2007; Ford & Lerner, 1992).

Based on the information above, it is critical to understand school climate and student connectedness within a framework that considers ecological processes, the school context, individual student characteristics, including disability, racial-ethnic connectedness, gender, and the associations between these characteristics (Bronfenbrenner, 1979; Collins & Steinberg, 2007; Ford & Lerner, 1992; Lerner & Castellino, 2002). In conceptualizing school connectedness and the relationship to theory and development, developmental systems theories illustrate the nested nature of these school- and individual-level constructs.

Developmental systems theory (DST) posits that human development occurs within context and is guided by the interactions between the individual and the climate within which s/he interacts. Developmental systems theory illuminates the importance of the school context and the effect the school climate has on students' development. Equally, developmental systems theory provides a framework for understanding the effect individual student characteristics have on individual students' perceptions of school connectedness. The interactions between licensed professional staff members and students, as well as individual student characteristics, are nested within the school (Collins & Steinberg, 2007; Lerner & Castellino, 2002). The emphasis of DST on the dynamic and contextual features of development & identity, understanding of individual differences, importance of change, and the consideration of direct (e.g., the school) and indirect factors (e.g., school board's policies affecting teachers) that influence development make this framework ideal for examining the perceptions African American middle school students with and without disabilities have of school climate and connectedness.

School connectedness has both emotional/affective and behavioral components, and the theoretical underpinnings of this construct can be found in attachment (Bowlby, 1969), ecological systems (Bronfenbrenner, 1977, 1979), and developmental systems (Ford & Lerner, 1992; Lerner & Castellino, 2002) theories. Fundamentally, developmental systems theory is grounded in an ecological perspective. The guiding principles of ecological theories include an understanding that systems (i.e., environments where people interact and that influence their development) affect one another. A change in one system affects change and development in another (Collins & Steinberg, 2007).

Adolescent development is influenced by the school context (Ford & Lerner, 1992). Ford and Lerner's (1992) theory of developmental systems closely addresses school connectedness

within the framework of multiple developmental contexts, a key one for middle school students being the climate of the school. DST allows researchers to consider school factors in conjunction with individual student characteristics. School-level factors include licensed professional staff members' perceptions of school climate. Individual student characteristics are located at the individual-level and include: racial-ethnic connectedness, disability status, gender, individual students' perceptions of school climate, individual students' perceptions of school connectedness, academic achievement, hours of participation in extracurricular activities, and number of discipline referrals (Ford & Lerner, 1992; Lerner & Castellino, 2002). Refer to Figure 1 for an illustration of the relationships between these school- and individual-level variables for the present study.

Notably, during the adolescent years, students change schools from elementary to middle school and begin to interact within a larger environment. This change from an elementary environment where students are with a single teacher all day to a middle school environment, where students interact with many teachers and other professional staff members throughout the day, can affect the development of student-teacher relationships and contribute to the disengagement of students (Decker et al., 2007; Eccles & Midgley, 1989; Eccles & Roeser, 2011; Juvonen, 2007). The ability to develop positive interpersonal relationships within a school is affected by the school's climate (i.e., staff & students) (Way et al., 2007). In fact, students who experience a positive climate at school have reported increased emotional/affective and behavioral connection to school (Murray & Pianta, 2007; Nasir et al., 2011; Perkins, 2007).

Developmental systems theory considers the relational qualities of development, as relationships are viewed as dynamic, having plasticity, reciprocal, and lasting across time (Lerner & Castellino, 2002). Relationships between the adults and students in the school are the

basis of individual students' perceptions of school connectedness, are the foundation upon which learning can occur, and are the link between the individual child and the school context (Ford & Lerner, 1992; McNeely et al., 2010). They are critical to developing an emotional/affective connection to school (Ford & Lerner, 1992; McNeely et al., 2010; Whitlock, 2006).

Relationships within the school network can change and develop across time due to factors at the individual-level, such as trust and respect, both of which are emotional/affective aspects of school connectedness (Ford & Lerner, 1992; Lerner & Castellino, 2002). Relationships are not stagnant; rather, they grow and develop and are influenced by the school's climate. Development of relationships is affected by the school environment as well as individual student characteristics, such as gender, ethnicity, and disability status, thus illuminating the reciprocity within relationships (Ford & Lerner, 1992; McNeely et al., 2010; Whitlock, 2006). There is reciprocity in both DST and school connectedness, meaning that individual characteristics and school climates can affect whether positive perceptions of connectedness to school and relationships can develop. Given this information, I believe that the DST framework is ideal to guide an examination of the perceptions African American middle school students with and without disabilities have of school climate and connectedness.

Examination of the role of African American students' connectedness to school, along with disability and gender, within the context of school climate is an area that has yet to be explored. More attention needs to be paid to African American middle school students' perceptions of school climate and connectedness given the potential for them to experience declines in motivation and engagement, lack of trust, and negative relationships with some of their teachers (Garibaldi, 1992; Simmons et al., 1991). Furthermore, the risk that African American students with and without disabilities may experience within high-performing,

racially-ethnically diverse middle schools supports the need for an investigation of this population (Eccles & Roeser, 2011; Juvonen, 2007; McNeely et al., 2002; Murray & Zvoch, 2010; Simmons et al., 1991). For African American students, the potential to hold negative perceptions of school and engage in risky behaviors as they transition to middle school that can result in suspensions from school, can continue the segregation of this population from the learning environment and can negatively affect students' connection to school (Ding & Hall, 2007; Garibaldi, 1992; Simmons et al., 1991).

The current research literature lacks studies specifically examining the correlations between African American middle school students with high incidence disabilities and African American middle school students without disabilities, their perceptions of school climate and connectedness and multiple school- and individual-level characteristics. As students transition between multiple classes and multiple teachers, examination of affective/emotional and behavioral aspects of school connectedness for African American middle school students with and without disabilities nested within the larger school climate is critical. For African American students with and without disabilities, the transition from elementary to middle school has been documented as a time where declines in motivation, engagement, achievement, and perceived school connectedness have been observed thereby making middle school an ideal time to examine school climate and connectedness for this group of students (Eccles & Roeser, 2011; Juvonen, 2007; McNeely et al., 2002; Murray & Zvoch, 2010; Simmons et al., 1991).

Research Questions

I posed the following research questions to explore the perceptions African American students with and without disabilities have of school climate, school connectedness and racial-ethnic connectedness:

Research Question 1: What are the correlations between the broader perspectives of school climate, at the school-level as reported by licensed professional staff members', and the perspectives African American students' with and without disabilities have of school climate at the individual-level?

Research Question 2: What are the correlations between licensed professional staff members' perceptions of school climate and African American students' perceptions of school climate, school connectedness, disability status, racial-ethnic connectedness, gender, grade point average, hours of participation in extracurricular activities, and number of discipline referrals?

Research Question 3: Which of the school-level variables (i.e., licensed professional staff members' perceptions of school climate) and/or individual-level variables (i.e., students' perceptions of school climate, disability status, racial-ethnic connectedness, gender, grade point average, hours of participation in extracurricular activities, and number of discipline referrals) predict African American students' perceptions of school connectedness?

II: Review of Literature

The present study was guided by a developmental systems theory, the literature reviewed in this chapter, and with the understanding of the risks African American students', both with and without disabilities, likely face within schools. Guided by my research questions and developmental systems theory, the literature reviewed in this section includes research from 1989 to present. While the focus of my study is on African American middle school students with and without disabilities, I do include literature conducted with students within elementary and high school settings, research on students of other racial-ethnic backgrounds (e.g., White, Latino, Asian), and research including teachers' perspectives of school climate and connectedness. In this literature review, I examine literature in accordance with the themes outlined in the introduction and divided by school-level and individual-level factors. I begin this review with an examination of the school-level, that is, research on teachers' perspectives of school climate. Next, I examine individual-level factors, beginning with students' perspectives of school climate, then review students' perspectives of school climate and their own connectedness to school, and review students' perspectives of school climate and students' own racial-ethnic identity development and connectedness. I then examine students' perspectives of school connectedness with respect to gender and racial-ethnic differences, types of connection to school, and literature relevant to students with disabilities. Then, I review research examining teachers' perspectives of African American students' connection to school and teachers' and students' perspectives of school connectedness. I conclude the chapter with a review of the research related to racial-ethnic connectedness for African American students.

School-Level Factors: Licensed Professional Staff Members' Perspectives of School Climate

Perkins (2007) conducted a national study examining licensed professional staff members' (e.g., teachers and administrators) perspectives of school climate. School climate was defined as the learning environment created through the interaction of relationships in the school and involved the setting and emotional atmosphere. Thirteen school districts representing 13 states, including Louisiana, Illinois, California, and Arizona participated in this study. The school districts were members of the National School Board Association's Council of Urban Boards of Education (CUBE). Teacher surveys were distributed to CUBE member districts and included 127 schools, of which 45 were elementary, 33 middle, 20 high schools, 12 K-8, five pre-K-8, two preschools, one family center, one 1-8 school, one 2-8, one K-7, one pre-K-12, and one school with pre-K and grades 6-8 (Perkins, 2007). Approximately 4,700 teacher surveys were returned. Teacher sample demographics included: 76.6% females, 23.3% males, 12.1% African American, 73.4% White, 11.5% Hispanic, 0.5% Native American, 1.8% Asian American, and 0.3% other ethnicities. Administrators were also surveyed, and 267 principals and assistant principals participated in the study. Administrator sample demographics included: 63% females, 37% males, 26.4% African American, 58.6% White, 14.6% Hispanic, and 0.4% Asian (Perkins, 2007).

Teachers rated the extent to which they believed students trusted teachers in the school, the extent to which individual teachers respected students, the extent to which teachers were fair to students, cared whether students in the school were successful, and the extent to which teachers collaborated to foster a supportive climate for students attending the school (Perkins, 2007). The majority of teachers and administrators (78.2%) strongly agreed or agreed that students trusted teachers at the school. A small minority of teachers (7.4%) disagreed or strongly

disagreed that students trusted teachers. Over 95% of teachers (96%) strongly agreed or agreed that they respected the students in their school. A very small minority of teachers (2.1%) strongly disagreed or disagreed that students respected teachers. Nearly 92% of teachers strongly agreed or agreed with the statement that teachers cared whether the students at the school were successful. Approximately 4% of teachers strongly disagreed or disagreed that they cared whether students were successful. Over half of the teachers (59.7%) strongly agreed or agreed with the statement that teachers were not fair to some students attending the school. Close to 22% of teachers (21.5%) strongly disagreed or disagreed with the statement regarding fairness. Teachers overwhelmingly (91.3%) agreed with the statement that teachers worked to foster a supportive climate at the school for students. Overall, the teacher and administrator survey results were positive indicating a majority of teachers and administrators believed students were affectively/emotionally connected to school because they believed students trusted them.

Teachers were asked to respond to the statements that students in the school will be successful because of their race and that racial barriers no longer exist in the United States. Over 50% of teachers and administrators either strongly disagreed or disagreed with the statement that some students in their school will be successful due to their race. The majority of teachers (75.3%) either strongly disagreed or disagreed with the statement that racial barriers no longer exist in education. Only 11.5% of teachers either strongly agreed or agreed with the statement.

Individual-Level Factors: Students' Perspectives of School Climate

In addition to examining licensed professional staff members' perspectives of school climate, Perkins (2006) also examined students' perspectives of school climate in a CUBE national study which included many of the schools that participated in the latter teacher study. Student surveys were distributed to a total of 108 schools and included 40 elementary, 26

middle, 28 high, and 14 K-12 schools (Perkins, 2006). The student sample included 61% students who received free and reduced lunch, 50.8% females, and 49.2% males. The sample included 32% African American students, 25% White students, 29.6% Hispanic students, 2.5% Native American students, 6.8% Asian American students, and students from other racial-ethnic backgrounds comprised 2.2% of the sample. Students in fourth through 12th grades completed the survey with students in fourth through sixth grades comprising 23.7% of the sample. Students in seventh and eighth grades were 30% of the sample while high school students, grades 9-12, comprised the remaining 46.3% of the sample (Perkins, 2006).

Participants responded to items in five areas of school climate that included emotional/affective and behavioral components: Safety, Bullying, Trust, Respect, and Ethos of Caring, Racial Self-Concept, and overall School Climate (Perkins, 2006). In regard to affective measures of school climate, 23.3% of all students did not feel they could trust their teachers and of those who stated this, 32% were African American. In regard to teacher fairness, approximately 35% of all students surveyed did not believe their teachers were fair to everyone. The majority of students who did not believe their teachers were fair to everyone were in grades 9-12 (43%), and 33% of them were in seventh and eighth grades. Nearly 20% of students in grades 4-6 did not believe their teachers were fair. For African American students, close to 34% strongly agreed or agreed that their teachers were fair to everyone, and close to 43% of students strongly disagreed or disagreed with this statement. Thirty-two percent of African American students did not feel their teachers respected them (Perkins, 2006). Results from this study demonstrate that students' perspectives of school climate can be affected by their perceptions of teacher trust, respect, and fairness.

Students' perceptions of school climate are not only associated with their perceptions of teacher fairness, trust of teachers, and school safety, but have also been found to be associated with students' grades. Hopson et al. (2014a) used a subset of data from the *School Success Profile* to examine the effects of school climate, students' perceptions of supports, and behavioral norms. The subset included middle school students attending 43 schools in four states. The sample was 49.1% male, 43.9% African American, 6.4% Hispanic, 42.1% White, and 7.6% other racial-ethnic backgrounds. Students in sixth grade comprised 30.6% of the sample, and students in seventh grade comprised 35.1% of the sample. Students in eighth grade comprised 34.2% of the sample. School climate in this study was comprised of students' reports of connectedness (e.g., "I enjoy going to this school") and the quality of relationships between students and staff (Hopson et al., 2014a, p. 201).

A correlation between students' perceptions of school climate and grades was found in this study (Hopson et al., 2014a). Students' perceptions of safety were significantly correlated with grades, as were high parental expectations, safe neighborhoods, and positive behavior. Interestingly, students attending schools perceived as having a more positive climate tended to report less positive behavior, demonstrating that a more in-depth examination of student behavior in conjunction with school climate is necessary (Hopson et al., 2014a).

Students' perceptions of school climate at the individual-level can be affected by reforms occurring at the school-level (Way et al., 2007). Way, Reddy, and Rhodes (2007) used data from a longitudinal study to examine the role of educational environment and reform on students' perceptions of school climate. Researchers surveyed 1,451 students in sixth, seventh, and eighth grades from 22 middle schools. Approximately 54% of the sample was female, and the majority of the participants were White (91%). Ethnic minorities were almost absent from participation in

this study. Students completed measures of school climate, teacher support, peer support, student autonomy, behavior problems, clarity of school rules, self-esteem, emotional status, and demographic characteristics (Way et al., 2007). The *School Climate Scale* was comprised of emotional/affective and behavioral measures of school climate including: teacher and peer support (emotional/affective), student autonomy (emotional/affective and behavioral), and clarity of school rules (emotional/affective). Students responded to statements on teacher support, which included how often teachers helped, took a personal interest in them, and how well students interacted with and helped each other at school. Researchers investigated students' feelings about the rules at school and whether they were involved in decision-making at school, including how class time was spent. For behavioral measures, students were asked to rate how often they got in trouble at school, lied, and were aggressive towards others. Students responded to statements related to their like of self using a self-esteem measure, and emotional status was determined by a depression inventory.

Students were relatively positive about both peer and teacher support at the start of sixth grade (Way et al., 2007). However, students' perceptions of student and teacher support decreased as students progressed through middle school. Females reported increased teacher and peer support and more opportunities for participating in decision-making in comparison to males at the start of sixth grade. Female students' perceptions of peer support declined as they progressed through middle school. Sixth-grade students from lower SES backgrounds were more positive in their perceptions of teacher support than students from higher SES backgrounds. Males reported higher incidences and increased behavior problems at the start and throughout middle school. In sum, the perceptions of school climate declined for students throughout their years of middle school (Way et al., 2007).

Students, including elementary and middle school students, can sense changes in climate, and this can affect their feelings at the individual-level, including their perceptions of their relationships with teachers (Slaughter-Defoe & Glinert-Carlson, 1996; Way et al., 2007). The effects of developing positive student-teacher relationships on school climate is important at all levels, including elementary (Slaughter-Defoe & Glinert-Carlson, 1996). Slaughter-Defoe and Glinert Carlson (1996) conducted a study of urban, third-grade African American ($N = 1000$) and Latino students ($N = 260$), attending Comer Schools in Chicago to investigate students' perceptions of school climate. Students completed questionnaires during interviews with researchers. African American children, in both years one and two of the study, stressed the importance of teacher-student relationships in regard to developing a positive school climate. Students indicated that an emotional connection to teachers was important to their overall perceptions of school climate (i.e., teachers who cared for them and were available to help and comfort them). In year one of the study, African American students perceived school climate more negatively than Latino students (Slaughter-Defoe & Glinert-Carlson, 1996).

Comparably, Ding and Hall (2007) found that males, and African American males in particular, reported the most negative perceptions of school. An individual student's like of school is an emotional/affective aspect of school connectedness found at the individual student-level in a nested framework. Ding and Hall (2007) analyzed data from the 1998 *Health Behavior of School-Aged Children* study in which surveys were administered to seventeen thousand racially-ethnically diverse students in grades 6-10 to determine whether there were differences in perceptions of school between male and female students (Ding & Hall, 2007). The final sample size for analysis included 15,686 students with the majority being female (53%). African American students comprised 17% of the sample. Overall, males held the most negative

perceptions of school. African American males and females reported an increased level of negative school environments (i.e., feeling as if school rules were unfair and that they did not belong) in comparison to White students at all grade levels. Students who reported higher levels of school dislike tended to have lower levels of school achievement, and dislike of school increased as students progressed in grades, up to eighth grade. Also, students' perceptions of teacher caring decreased as students progressed in grades and were likely linked to whether they felt their teachers cared for them (Ding & Hall, 2007).

Findings from a study conducted by Wilson (2004), found that students' perceptions of school climate can be linked to school safety, specifically aggression. School climate scales in this study included emotional/affective and behavioral items related to students' feelings/attitudes towards school, knowledge and perceived fairness of discipline policies, student-teacher relationships, respect for authority, and physical condition of the school. As school climate improved, relational aggression between students declined demonstrating an inverse relationship between perceptions of school climate and relational aggression (Wilson, 2004).

The studies reviewed in the previous section examined licensed professional staff members' (mainly teachers) and students' perspectives of school climate and the effects of school-level reform on students' perspectives of school climate (Ding & Hall, 2007; Hopson et al., 2014a; Perkins 2006, 2007; Slaughter-Defoe & Glinert-Carlson, 1996; Way et al., 2007; Wilson, 2004). When examining school climate, it is imperative to gather the insights from those who interact within the school on a daily basis to gain a comprehensive picture of a school's climate (Hopson et al., 2014a; Perkins, 2006, 2007; Slaughter-Defoe & Glinert-Carlson, 1996; Way et al., 2007; Wilson, 2004). Since research has shown that African American students may

report negative perceptions of school climate, understanding how school-level and individual-level factors affect the perceptions African American students and students with disabilities have with respect to school climate and connectedness is key (Ding & Hall, 2007; Perkins, 2006).

Individual-level factors: Students' perspectives of school climate and connectedness.

In addition to examining the relationship between students' perceptions of school climate and aggression, Wilson (2004) investigated correlations between students' perceptions of school connectedness and aggression. School connectedness scale items included students' like of school, belief that teachers listened to and cared for students, and the belief that students were treated fairly if they broke school rules. Student connection to school was a strong predictor of decreased aggression and victimization at school in this study. Students' perceptions of school connectedness were found to be negatively related to physical and relational aggression. In fact, individuals' perceptions of school connectedness had an inverse relationship with relational aggression for students in middle and high school settings. Students considered to be connected to school, even in negatively rated school climates, reported that they were less likely to be involved in, or victims of, aggression in this study (Wilson, 2004).

A positive school climate can contribute to fewer student emotional and behavioral concerns and can serve as a protective factor against emotional concerns according to Loukas, Suzuki, and Horton (2006) and Wang, Selman, Dishion, and Stormshak (2010). Loukas et al. (2006) examined school connectedness as a mediator of school climate in a study conducted in three middle schools in a suburban Texas school district. The students were involved in two waves of the study, and wave two occurred one year after wave one. Student participants were between the ages of 10 and 14 years old, and the majority were female (51%). The majority of the sample was comprised of White students (77.2%), and the remaining sample was 16.2%

Hispanic and 2.5% African American. Students responded to school climate measures that examined students' perceptions of fighting at school, closeness of students, and the level of competition between students. The school climate measure in this study also included students' perceptions of their levels of satisfaction with their classes and whether they felt their classes were fun. Students responded to items addressing their levels of safety, closeness of interpersonal relationships, and feelings of belonging at school. Students' levels of conduct problems and depressive symptoms were also examined (Loukas, Suzuki, & Horton, 2006).

Students who had higher school satisfaction scores reported more positive relationships with classmates, had higher levels of school connection and fewer conduct problems (Loukas et al., 2006). School connectedness was a predictor for conduct problems at wave two but not depressive symptoms at that same time, illustrating that school connectedness did not influence students' level of depressive symptoms in this study. In fact, students who experienced a stronger connection to school were protected against developing conduct problems.

Wang et al. (2010) examined three waves of longitudinal data to investigate students' perceptions of school climate and their own connectedness to school while in sixth grade and the effect on future problem behaviors in seventh and eighth grades. The study was conducted in eight middle schools in the Pacific Northwest (Wang, Selman, Dishion, & Stormshak, 2010). A total of 677 middle school students participated in this study, and the majority of the sample was female (54%). Students of European American (76%), Asian/Pacific Islander (5%), Hispanic (4%), African American (1%), and other racial-ethnic backgrounds participated in this study. Students self-reported problem behavior in seventh and eighth grades by answering questions asking how many times they handled a weapon, skipped school, and stole something. Students' perceptions of school climate were also surveyed and centered on their feelings towards rule-

following behavior, importance of school to self and peers, peer relationships, and student-teacher relationships (Wang et al., 2010).

Students' perceptions of a positive school climate and positive student-teacher relationships were associated with a lower probability of future problem behaviors (Wang et al., 2010). Students who reported a positive school climate during sixth grade were less likely to engage in problem behaviors in the seventh and eighth grades. The reverse was not true, in that, problem behaviors in sixth grade did not predict students' perceptions of school climate in seventh or eighth grades. Gender was not observed as a moderating factor with regard to students' perceptions of school climate, student-teacher relationships, or student engagement in problem behaviors. These findings illustrate the importance of creating positive school climates including student-teacher relationships, particularly as students enter middle school, to reduce students' potential future engagement in problem behaviors.

Individual-level factors: Students' perspectives of school climate and racial-ethnic identity development. Booth and colleagues (2014) examined adolescents' racial-ethnic identity development in conjunction with middle and high school students' feelings of school. The sample was comprised of 49.3% male and 50.4% female participants. Student participants were in eighth through 11th grades, and the majority (29.1%) of students were in the ninth grade, while 25.3% were in eighth grade. Student participants completed surveys that included measures of self-esteem, racial-ethnic identity, school attitude, school climate, and school connectedness. A subsample of 38 students participated in individual interviews to further investigate students' perceptions of school climate (Booth et al., 2014).

With regard to school climate, White students, particularly White females, expressed the most positive perceptions of school climate in a study conducted by Booth et al. (2014). African

American males held the second most positive perceptions of school climate in this study. Multiracial males and African American females held the most negative perceptions of school climate, yet in the interviews, female students discussed school more favorably than male students. Females with stronger racial-ethnic identities tended to express more positive perceptions of school climate in this study, yet this was not statistically significant. Overall, there was a weak yet statistically significant, positive correlation between racial-ethnic identity and perceptions of school climate for males (Booth et al., 2014).

African American and Hispanic students expressed a significantly stronger sense of racial-ethnic identity than White and Multiracial students, and African American males expressed a stronger racial-ethnic identity than White males (Booth et al., 2014). African American females also expressed a stronger racial-ethnic identity than Multiracial and White females. Findings indicated a weak, but statistically significant positive correlation between ethnic identity and self-esteem for males, indicating that the likelihood was small that males with strong racial-ethnic identities would report higher levels of self-esteem. This was not the case with females in that females with stronger racial-ethnic identities had higher levels of self-esteem (Booth et al., 2014). Students' perceptions of school climate can affect their overall satisfaction with school and can be linked to their perspectives of school connectedness as shown in the studies in the previous section (Loukas et al., 2006; Wang et al., 2010; Wilson, 2004).

Individual-Level Factors: Students' Perspectives of School Connectedness

Researchers have used nationally representative datasets to examine students' perspectives of school connectedness and the effects on other individual-level factors such as social-emotional outcomes, gender, racial-ethnic background, types of connection to school, and students' participation in extracurricular activities (Bonny et al., 2000; McNeely et al., 2002;

Resnick et al., 1997; Thomas & Smith, 2004; Thompson, Iachan, Overpeck, Ross, & Gross, 2006). Bonny et al. (2000) used an adapted version of the school connectedness scale used in a national study of adolescent health (*Add Health*) to attempt to identify factors that were correlated with students' connection to or disconnection from school. The school connectedness scale examined adolescents' experiences of caring and feelings of belonging at school, perceptions of feeling close to people at the school, like of school, perceptions that teachers treated students fairly at school, and feelings of safety at school. Participating schools were part of a longitudinal, school-based intervention and were chosen due to their high rates of school failure, teen pregnancy, or child abuse (Bonny et al., 2000).

The final sample consisted of 1,959 students in grades 7-12 attending public, urban and suburban schools. The sample was comprised of 45% male, 55% female, 61% White, and 33% African American participants with a median age of 15 years of age. Students enrolled in special education classes specifically for students identified as E/BD and developmental delay were excluded from this study (Bonny et al., 2000). Scores on the school connectedness measure were positively correlated with improved academic performance, perceived health, and participation in extracurricular activities. Students who reported feeling disconnected from school reported more visits to the nurse, cigarette use, and alcohol use than students who reported feeling connected to school (Bonny et al., 2000). Students who attended school in suburban schools reported being more connected to school than students in urban schools. African American students reported feeling less connected to school than their White counterparts, and boys reported feeling more connected to school than girls.

Findings from the Bonny et al. (2000) study aligned with previous research conducted by Resnick et al. (1997). The Resnick et al. (1997) study examined the *Add Health* longitudinal data

from 1994-1995 and included a random sample of 80 high schools from the larger sample of every high school with an 11th grade in the United States. In addition to the high schools, the largest feeder school, usually a middle school that fed into a particular high school, participated in the study. The total number of schools in the final sample used for analysis was 134. Student participants completed surveys in school during year one of the study and were interviewed in their homes during the second year of the study. Students listened to questions through earphones and entered their responses directly into a computer during the in-home interviews. Survey items included questions about drug and alcohol use, sexual activity, criminal behavior, use of health services, family dynamics, decision-making, and peers. School administrators completed a survey to assess availability of health services, school policies, school environment, and school characteristics during years one and two of the study, but those results were not shared.

School connectedness was defined as a student's belief that teachers treated him or her fairly, that a student felt close to school staff, and that a student felt a part of the school, the same definition used in the Bonny et al. (2000) study (Resnick et al., 1997). School connectedness was associated with lower levels of depression and with decreased suicidal thoughts for all students. Also, higher levels of connectedness to school were associated with lower levels of violence, lower levels of cigarette and alcohol use, less frequent marijuana use, and delay in students' first sexual experience for all students. Overall, students' perceptions of being cared for at school were shown to positively impact adolescent at-risk behavior (Resnick et al., 1997). The studies reviewed in the previous section highlight the protective qualities school connectedness can have on decreasing students' engagement in problem and at-risk behaviors (Bonny et al., 2000; Resnick et al., 1997; Wang et al., 2010; Wilson, 2004). In addition to the protective effects that

being connected to school can have on students, research has shown that individual student characteristics, such as gender and racial-ethnic background, can affect students' perspectives of school connectedness.

Students' perspectives of school connectedness and gender/racial-ethnic differences.

Gender differences have been found when investigating students' perspectives of school connectedness, students' feelings of racial discrimination, and externalizing and internalizing behaviors (e.g., anger behavior and depressive symptoms) (Dotterer et al., 2009; Loukas et al., 2016; Loukas & Pasch, 2013; Niehaus et al., 2012; Thomas & Smith, 2004). Gender differences were found between feelings of racial discrimination, school engagement, and the role of racial-ethnic identity in a study by Dotterer et al. (2009). Links between perceived racial discrimination, school engagement, and the protective properties of a strong racial-ethnic identity were investigated. The sample included 148 African American adolescents in two large, eastern cities (Dotterer et al., 2009). Study participants were 53% male and 47% female and were in grades 6-12. Students attended public or charter schools (74%) or private/parochial schools (26%), and the majority of student participants attended schools that were 50% minority. Thirty percent of students attended schools that were comprised of over 90% of students from minority backgrounds. Researchers conducted in-home interviews with youth to examine their experiences with racial discrimination (i.e., frequency and feelings of discrimination by peers and teachers), connectedness to their racial-ethnic group, feelings of being connected to school, and grades. In-home interviews were also conducted with the participants' parents and examined the extent to which parents provided opportunities for racial socialization (i.e., providing or reading African American history books to their child and talking to their child about racism).

Students' experiences with discrimination were significantly and negatively related to students' perceptions of connection to school but were not related to students' grades, highlighting that students who reported more frequent experiences with racial discrimination also reported lower levels of feeling connected to school (Dotterer et al., 2009). Students' age and parents' level of education were also significant predictors of students' feelings of connection to school; younger adolescents and students whose parents had higher levels of education reported higher levels of school connectedness (Dotterer et al., 2009).

Racial socialization was a significant and positive predictor of how students felt about their performance at school (i.e., school self-esteem). Students who felt more prepared to deal with bias at school reported higher levels of school self-esteem (Dotterer et al., 2009). Racial-ethnic identity was also a predictor of students' perceptions of school self-esteem, and students with stronger racial-ethnic identities reported higher levels of school connectedness. A strong racial-ethnic identity promoted connectedness to school for males, regardless of their experiences with discrimination, in this study. This study illustrates the protective factors of a strong racial-ethnic identity for African American adolescents, and African American males in particular (Dotterer et al., 2009).

A similar study by Eccles, Wong, and Peck (2006) examined the protective factors of a strong racial-ethnic identity against feelings of racial discrimination and decreased academic self-concept and achievement. Student participation in this longitudinal study began in seventh grade and ended following the completion of their eighth-grade year (Eccles et al., 2006). The subsample of participants, of which the discussion below is based upon, consisted of 629 African American adolescents. Fifty-three percent of the participants were male and 47% were female. All participants lived near the District of Columbia. Students reported their perceptions of racial

discrimination by peers and teachers, connection to their racial-ethnic group, importance of doing well in school, academic achievement, and whether students believed there would be barriers to success due to discrimination. Students' parents also participated in this study and were asked their perceptions of racial discrimination at their jobs and in their community (i.e., how often they felt they were treated differently because of their racial-ethnic background) (Eccles et al., 2006).

Adolescents who had a strong racial-ethnic identity also had a strong sense of doing well in school (Eccles et al., 2006). In contrast, students who perceived racial discrimination from teachers had decreased levels of confidence in their academic abilities and in their feelings of the importance of school. As African American students' connection to their racial-ethnic identity increased, smaller decreases were noted in students' perceptions of their academic abilities, even with higher levels of perceived discrimination. This finding illustrates that a strong racial-ethnic identity can protect against perceived racial discrimination and can protect against declines in academic motivation and achievement for African American students (Eccles et al., 2006).

Thomas and Smith (2004) examined gender and racial-ethnic differences between expressions of anger and connection to school in a national study of adolescents from 47 states and the District of Columbia. Students' expression of anger (i.e., whether anger was expressed externally or internally), how they felt about school, whether they brought weapons to school, relationships with classmates and family members, fairness of school discipline procedures, and general perceptions of adult fairness toward students were some of the items examined in this study. The sample consisted of 282 students, of which 123 were boys and 158 were girls. The age range of the sample was from seven to 19 years of age, with a mean age of 15.3 years of age. Over 170 White, 109 Black, Hispanic, and youth from other racial-ethnic backgrounds

participated in this study. Boys scored higher on externalizing anger behaviors than girls, and fewer boys reported liking school. In fact, 40% of African American boys reported that school “felt like jail” (Thomas & Smith, 2004, p.141). Responses to open-ended statements showed that students felt that teachers did not address bullying at school causing students to feel less safe at school.

Studies conducted by Loukas, Cance, and Batanova (2016) and Niehaus et al. (2012) illustrated gender differences, protective aspects, and highlighted the dynamic nature of students’ perceptions of school connectedness. Loukas et al. (2016) and Niehaus et al. (2012) conducted longitudinal studies of students’ perceptions of connection to school for students beginning in sixth grade. Close to 300 students participated in the Loukas et al. (2016) study, and 50.3% were female, 74% were White, 17.6% were Hispanic, and 3.4% were African American. Loukas et al. (2016) used the *Add Health* school connectedness scale to measure suburban, middle school students’ perceptions of school connectedness over the course of their three-year middle school career in Texas. Overall, girls experienced higher levels of school connectedness than boys at the start of sixth grade and at all three points in this study. Students who reported higher levels of depressive symptoms and/or externalizing behaviors also reported lower levels of school connectedness. School connectedness declined for both boys and girls over the course of the three years of middle school in this study (Loukas et al., 2016).

Students’ reports of connection to school can protect students from the potentially negative effects of transitioning to middle school (Niehaus, Rudasill, & Rakes, 2012). Niehaus et al. (2012) included 330 sixth grade students attending two, large, urban middle schools located in the Midwest. Data were collected during the fall, winter, and spring of students’ sixth grade year. The majority of student participants were African American (58%), while 35% were White, and

7% were Hispanic, Asian, or of other racial-ethnic backgrounds. Students' connection to school, particularly, students' satisfaction with school and their perceptions of their relationships with adults were investigated. Students' perceptions of school connectedness declined significantly during the sixth-grade year independent of gender or school attended (Niehaus et al., 2012). Girls, overall, reported higher levels of school connectedness at the beginning of sixth grade similar to findings from Loukas et al. (2016). Girls also had higher scores than boys on measures of academic success and behavior at the end of their sixth-grade year, demonstrating that by the end of the school year, the negative effects of transitioning to sixth grade seemed less apparent for girls. Findings from this study indicated that school connectedness changes over time and can be affected by other school and individual characteristics, such as gender (Niehaus et al., 2012).

As an individual-level variable, school connectedness can protect middle school students from conduct problems and symptoms of depression (Loukas & Pasch, 2013). Loukas and Pasch (2013) examined the effects of school connectedness for middle school boys and girls to determine whether the effects varied by gender. Participants attended three suburban, Texas middle schools and were in the sixth and seventh grades at time of participation in wave one, and in seventh and eighth grades in wave two, a year later. Forty-seven percent of the participants were male, 76% were White, 16% were Hispanic, and 3% were African American. Conduct problems, depressive symptoms, overt victimization, and social anxiety were determined by students' self-report on multiple scales (e.g., *Children's Depression Inventory* and *Social Experience Questionnaire*, etc.) (Loukas & Pasch, 2013).

Girls' ratings of their connection to school served as a protective factor from feelings of social anxiety and the effects of overt victimization (Loukas & Pasch, 2013). Overt victimization

was defined as the frequency with which students reported being bullied, hit, beat up, or yelled at by other students. Higher scores on the overt victimization scale for girls predicted more depressive symptoms at wave two, yet higher scores on the overt victimization scale did not predict symptoms of depression for boys. Girls' feelings of a positive connection to school protected them from increased conduct problems when they reported frequent experiences of overt victimization (Loukas & Pasch, 2013). While gender differences have been observed in the studies reviewed above, gender differences were not found in a study conducted by Witherspoon et al. (2009).

Connectedness was explored within various contexts (i.e., connection to family, school and community) for a group of racially-ethnically diverse sixth-grade students in the northeast (Witherspoon, Schotland, Way, & Hughes, 2009). The total number of participants was 437, and 49% were female, 29% were Chinese American, 26% were White, 23% were African American, and 11% were either Dominican or Puerto Rican. The sample was part of a larger, mixed methods study to examine how multiple contexts influence adolescents' adjustment. School connection was defined as school belonging, that is, feeling a part of the school. Students who reported negative relationships with their parents also reported lower grades except White students. African American students reported high levels of family connection and below average connection to school in comparison to students of other racial-ethnic backgrounds (Witherspoon et al., 2009).

McNeely et al. (2002) examined the links between students' perceptions of their connection to school and school- and individual-level characteristics to determine whether school-level variables were linked to individual reports of connectedness to school. National data from over 71,000 students in seventh through 12th grades attending 127 public and private

schools were used for analysis. The racial-ethnic background of study participants was 15% African American, 12.2% Latino, and 51.8% female. The majority of the schools were in suburban areas (59.6%) yet schools from rural areas also participated (18.6%). School size was over 600 students with the class size being approximately 22 students per class (McNeely et al., 2002).

School factors such as school size, class size, location of school (i.e., urban, suburban, or rural), public or private school, racial-ethnic composition of the student population, and percent of students not participating in extracurricular activities were examined to determine whether there was a link between these factors and students' perceptions of their connection to school (McNeely et al., 2002). Findings indicated that students' reports of their connection to school were lowest in schools that were racially-ethnically diverse. As school size increased, a small decrease was noted in students' reports of school connectedness. Over 80% of students in this study participated in extracurricular activities and as student participation in extracurricular activities increased, school connectedness increased. Overall, students felt connected to school; however, African American and female students reported feeling less connected to school than did their Latino and White counterparts.

Similarly, Goodenow (1993) examined students' reports of school belonging and membership, now considered connectedness, within suburban and urban middle schools and junior high schools in the Northeast. The goals of the three studies were to develop a brief scale measuring students' perceptions of school belonging, to identify students considered to be at-risk, and to examine the correlations between students' behavior, academic achievement, and feelings of belonging. Study one was comprised of all the students in the middle school and included 234 males and 220 females. While Goodenow (1993) did not ask students specifically

about their racial-ethnic backgrounds, the majority of the school population was White. Asian American, African American, and Hispanic students participated in the study and comprised 7% of the sample per teacher report. Students receiving special education services comprised 7% of the sample for study one. Study three was conducted in the same school as study one, and participants included 312 males and 294 females for a total of 611 participants. Information regarding participants' racial-ethnic background and whether students received special education services was not available for study three.

Study two was conducted in two urban junior high schools and included 158 males and 130 females. In the larger junior high in study two, the sample was comprised of 45% African American, 16% Hispanic, 33% White, and 1% Asian student participants. Racial-ethnic background was not identified for the remaining student participants in this school. The majority of study two participants at the second school were Hispanic (75%), while 7% were African American, 15% were White, and 1% were Asian. Information regarding the number of student participants who received special education services was not available for study two (Goodenow, 1993).

Goodenow (1993) predicted that students attending the suburban schools would report significantly higher levels of school connectedness than students attending the schools located in the urban areas, and this hypothesis was confirmed. The average school belonging scores for the suburban schools was significantly higher than the combined scores of the urban schools. Furthermore, in study one, only 59 students attending school in the suburban area reported a sense of school belonging at the scale midpoint (i.e., 3.00) or below, while 138 students attending school in the urban area did. When considering the suburban students alone, Goodenow (1993) predicted that students who lived in the suburban community longer, would

report higher levels of school belonging, and this was confirmed. Students new to the community scored significantly lower than long-term residents of the community on the school belonging scales. Examination of students' length of residence in the urban communities was not significant for this group of students (Goodenow, 1993).

Goodenow (1993) predicted that there would be grade level effects on students' perceptions of their belonging to school with respect to students' length of residence in a community, yet this was not confirmed. Students' perceptions of school belonging were not significantly correlated to their grade level for either students living in the suburban or urban areas. More specifically, no interaction was found between grade level and length of residence for students living in either the suburban or urban communities (Goodenow, 1993).

Goodenow (1993) hypothesized that racial-ethnic minorities and students receiving special education services would report lower levels of school connectedness, yet these hypotheses were not confirmed. Neither students' racial-ethnic background nor disability status influenced their sense of belonging at school, yet student membership in the majority racial-ethnic group in a school was associated with significantly higher levels of school connectedness when there was an actual majority racial-ethnic group in the school. No significant differences were observed between racial-ethnic groups when examining students' perceptions of belonging to school in the one school in which no single racial-ethnic group had a clear majority (Goodenow, 1993).

Differences in perceptions of school belonging between males and females were observed, with females reporting higher levels of belonging across settings (i.e., urban and suburban) (Goodenow, 1993). Measures of school belonging were only slightly associated with measures of effort and behavior yet, a stronger correlation between academic achievement (i.e.,

grades) and feelings of belonging at school was found. Findings from this study illustrate that feelings of belonging/connectedness within a school are dynamic, can be affected by individual characteristics, and are a function of the person within his or her environment (Goodenow, 1993).

Thompson et al. (2006) found that younger students reported feeling higher levels of school connectedness. Researchers examined associations between students' reports of school connectedness and student, school and community characteristics. Student participants in this study were in the sixth through 10th grades and attended public and private schools in the United States. The total sample size was 13, 207. The survey items in this study included items related to belonging, being treated fairly, feeling safe, and having peer relationships at school. Higher ratings on the school connectedness scale indicated a higher level of connectedness to school. Results indicated that school connectedness was higher among younger students, Hispanic students, female students, students from two-parent households, and students who did well in school (i.e., based on student self-reports). In addition, students' reports of higher levels of participation in extracurricular activities, (i.e., students involved in a club at least one day per week) predicted greater levels of students' perceptions of connection to school for student participants. For African American students, connectedness to school was not associated with an individual student's racial-ethnic background. Students reported higher levels of school connectedness in schools with relatively wealthy students and in communities with fewer renters. Additionally, parental involvement in school predicted students' school connectedness in this study (Thompson et al., 2006).

Gender and racial-ethnic differences with respect to students' perceptions of school connectedness were observed in some studies (Goodenow, 1993; Loukas et al., 2016; Loukas &

Pasch, 2013; Niehaus et al., 2012). While some studies found that girls reported higher levels of school connectedness (Goodenow, 1993; Loukas et al., 2016; Loukas & Pasch, 2013; Niehaus et al., 2012), findings from a study conducted by Witherspoon et al. (2009) did not support this when students' reports of connection within various settings were examined.

Goodenow (1993) and McNeely et al. (2002) found that school setting can have an effect on students' perspectives of school connectedness. Goodenow found that students attending suburban schools reported higher levels of connectedness, and McNeely et al. (2002) found that school connectedness was lowest for African American and female students attending racially-ethnically diverse schools. In contrast, Goodenow (1993) found that neither racial-ethnic background nor disability status (i.e., whether a student had a disability) influenced students' feelings of school connectedness. Similarly, Thompson et al. (2006) found that connectedness to school was not associated with African American students' racial-ethnic background.

Types of connection to school: Emotional/affective and behavioral. As the research literature on school connectedness continues to grow, researchers have delved into defining the construct by the subtypes of connection that students may experience (Nasir et al., 2011; Whitlock, 2006). Nasir et al. (2011) utilized case studies to examine the emotional/affective and behavioral components of students' perceptions of school connectedness in a predominantly African American high school located in an urban area on the west coast. Two weekly focus groups of students, who were considered to be connected to or disconnected from school, were held for nine weeks. Findings from the focus groups allowed Nasir et al. (2011) to categorize student connection into four quadrants. The connected group of students included 11 African American students (six males and five females). The disconnected group of students included eight African American students and one Asian student (four males and five females). The

majority of the participants were in the 11th grade. Researchers also conducted case studies of seven students, all of whom were African American, and six who participated in the focus groups. In addition to focus groups, Nasir et al. (2011) reviewed academic records, observed student interactions during various times of the day, informally interviewed students, interviewed teachers, and surveyed students. This was a two-year, longitudinal study (Nasir et al., 2011).

The surveys and operational definition of school connectedness in this study were constructed from existing school connectedness scales (e.g., Finn, 1993; Resnick, 1997) and included emotional/affective and behavioral aspects (Nasir et al., 2011). School connectedness in this study included students' feelings of belonging to school, opinions of school, and whether students are prepared for and on time to class. Researchers surveyed a small sample of 120 students of which the majority, 66%, were African American. Twelve percent of the student participants were Asian, 9% were multi-ethnic, 8% were Latino, 49.5% were male, and 50.5% were female. Of the student survey participants, 31% were freshmen, 18% were sophomores, 29% were juniors, and 22% were seniors. The researchers did not share information as to whether students with disabilities participated in this study (Nasir et al., 2011).

Two categories of school connection, interpersonal and institutional connection, were identified by Nasir et al. (2011) in this study. Interpersonal connection was defined as students' relationships with school staff and included the emotional/affective components of school connectedness. Institutional connection included students' attitudes and behaviors in regard to their role as students and is the behavioral component of school connectedness. Researchers then divided students into four quadrants based on the focus group data: high interpersonal and high institutional connection; high interpersonal and low institutional connection; low interpersonal

and low institutional connection; and low interpersonal and high institutional connection (Nasir et al., 2011).

Overall, students considered to be high in institutional and interpersonal connection were students who were emotionally/affectively and behaviorally connected to school (Nasir et al., 2011). Students who were connected to school tended to be higher achieving students. Achievement and academic identity were two separate subscales in this study. For the achievement scale, students responded to statements on whether they have been on the honor roll within the past two years and whether they failed any classes that school year. Academic identity was determined by students' responses to emotional/affective and behavioral statements related to the importance of school, value students placed on grades, whether students took school seriously, and students' perceptions of whether they were good students. For students in this study, achievement was significantly correlated to institutional connection and both interpersonal and institutional connection were significantly correlated to academic identity. In general, students in this study who were found to be institutionally connected to school graduated from high school, attended school more regularly, and failed fewer classes than students who were not found to be institutionally connected to school based on data compiled from an exit exam (Nasir et al., 2011).

Researchers used data from the observations and focus group sessions to illustrate a student who fell into each quadrant. A study participant who had high institutional and interpersonal connection was a student who was involved in many extracurricular activities, utilized resources offered to her in school (e.g., teachers and the college and career center), attended school regularly, had a strong relationship with at least one staff member, and had a high grade point average (3.8 over her high school career). Students considered to have high

institutional and low interpersonal connection believed school was important but had few, if any, interpersonal relationships at school. A student considered to have low institutional and high interpersonal connection was a student who had poor grades yet was well-liked by students and staff. A student considered to have low institutional and low interpersonal connection was a student who rarely attended school, did not have connections to staff or peers, had poor grades, and was often forgotten by school staff. All students considered to have low institutional and interpersonal connection reported having failed at least one class. Findings from this study illustrate the emotional/affective and behavioral qualities and academic outcomes of students' connection to school given this small, predominantly African American sample (Nasir et al., 2011).

Similarly, Whitlock (2006) used focus groups and surveys to investigate students' perceptions and types of school connectedness for eighth, 10th, and 12th grade students attending schools in three different school districts. The setting for this study was a suburban community located on the fringe of a larger city. The majority of the sample was White (83%) with similar numbers of boys (49%) and girls (51%) participating in the study. The racial-ethnic backgrounds of other participants were not shared. A little more than half of the participants reported feeling connected to school (Whitlock, 2006). Younger students (i.e., students in eighth and 10th grades) reported feeling more connected to school, and girls were more likely to feel connected to school than boys. This finding is similar to Nichols (2008), who also found that girls felt they belonged (i.e., fit in at school, teachers liked and helped them, and they had friends) more than boys.

In addition to the survey data, Whitlock (2006) held focus groups to further delve into individuals' perceptions of school connectedness. Items from the survey to which students either

agreed or strongly agreed were used to begin the focus group discussions. As expected, students identified factors that supported school connectedness such as students' perceptions of school policies and procedures. The results of the focus groups aligned with the results of the surveys, in that students could identify adult and institutional factors that either supported or hindered school connectedness. Whitlock divided the focus group findings into four thematic domains, which included institutional (i.e., school factors), interpersonal (i.e., student-staff relationships), school curricula (i.e., relevance of curriculum), and academic pressure (i.e., quantity of work and focus on state tests or students' futures).

Individual student characteristics are sometimes the most salient for high school students when considering a student's perspectives on school connectedness, (Stewart, 2007). The importance of individual student characteristics was highlighted in a study conducted by Stewart using data from a national, longitudinal dataset. The sample was comprised of 1, 238 African American students attending 546 high schools. The majority of the sample was female (52%). Students reported their grade point average and effort. Effort included level of commitment to school, care of school, and involvement in school (i.e., emotional/affective and behavioral components of school connectedness). Students were asked whether they felt teachers cared for them, the level of importance they placed on their peers' level of commitment to school, the extent to which their parents/guardians were involved in school, how often they discussed school with their parents/guardians, and school social problems (i.e., how often an issue such as tardiness, racial-ethnic conflict, and violence were a problem). In addition to students, school staff members provided information on school social problems, school size, percentage of students receiving free/reduced lunch, level of cooperation among staff members, and their level of commitment to prevent students from dropping out of school (Stewart, 2007).

Students' feelings of being connected to school yielded a significant and positive relationship with grade point average in this study (Stewart, 2007). Level of commitment, care of, and feelings towards school positively and significantly affected students' grade point average. In other words, students who were committed to their schoolwork and put forth effort tended to be students with higher grade point averages. Additionally, having friends who were also committed to school was a significant predictor for grade point average.

Students with disabilities and emotional/affective connection to school. Few research studies examining students' perceptions of their connection to and experiences at school have included students with disabilities (Brown et al., 2003; Pham & Murray, 2016; Thompson, 2002). The studies reviewed in the next section included students with disabilities and investigated their perceptions of school connectedness, teacher support, and experiences at school (Brown et al., 2003; Deshler et al., 2004; McMahon et al., 2008; Murray et al., 2008; Murray & Greenberg, 2000; Murray & Malmgren, 2005; Murray & Naranjo, 2008; Pham & Murray, 2016; Svetaz et al., 2000; Thompson, 2002). In general, findings indicated that students with disabilities reported increased feelings of alienation and more negative experiences than their general education counterparts (Brown et al., 2003; McMahon et al., 2008; Thompson, 2002).

Pham and Murray (2016) investigated the reported alienation students with disabilities may experience in school and students' perceptions of their social relationships with adults and peers, life satisfaction, problem behavior, and school connectedness; all individual-level variables in a nested model. The sample of 228 students was comprised of 65% male and 35% female participants, with 50% White, 8% African American, 22% Hispanic, 4% Native American, 2% Asian/Pacific Islander, 8% multiracial, and 6% did not specify their racial-ethnic

background. Students were identified with the following disabilities: 73% learning disabilities; 8% autism; 7% emotional/behavioral disabilities; 5% other health impairment; 4% intellectual disabilities; and 4% other disabilities, including multiple disabilities. Student participants attended one of 10 public high schools in seven school districts from four states. School districts were located in rural areas and towns near cities in the Midwest, Northwest, Southwest, and Northeast regions. Fifty-eight percent of students spent 80% or more of their school day within general education, and 27% spent less than 40% of their school day within general education. There were teacher participants in this study as well (total = 17). The majority of the teachers were female (15), and two teacher participants were male. The teachers in this study taught between 4 to 32 years with the mean years teaching being 14 years. Fourteen teachers were White, one was African American, one was Hispanic, and one was Asian (Pham & Murray, 2016).

Students responded to surveys examining their relationships with peers and adults, including parents/guardians, teachers, and other adults. Students completed life satisfaction, problem behavior, and school connectedness surveys as well. With regard to life satisfaction, students rated their level of satisfaction with family life, friends, themselves, school, and life in general. Teachers rated students' problem behaviors including externalizing, internalizing, bullying, hyperactivity, inattention, and characteristics of autism (e.g., inflexibility). Students responded to statements examining like of school and participation in class discussions on the school connectedness measure (Pham & Murray, 2016).

Life satisfaction and problem behavior were examined to better understand the social adjustment of adolescents with disabilities. Students with learning and intellectual disabilities reported higher levels of life satisfaction than students with other health impairments (Pham &

Murray, 2016). Not surprisingly, students with learning disabilities were also identified as having significantly fewer problem behaviors than students with emotional/behavioral disabilities, but they were also found to have fewer problem behaviors than students with intellectual disabilities, other health impairments, and autism. Students with emotional/behavioral and intellectual disabilities had a lower frequency of problem behaviors than students identified with other disabilities, including multiple disabilities.

A correlation between components of student-teacher relationships (i.e., trust, communication and alienation) and school connectedness was found (Pham & Murray, 2016). In fact, these relationship variables were the only ones correlated with students' perceptions of school connectedness, and all were significant. Students who reported higher levels of trust and communication in their relationships with teachers also reported higher levels of school connectedness. The reverse was also true in that students who reported higher levels of alienation in their relationships with adults also experienced lower levels of school connectedness. The findings from this study illustrate how the student-teacher relationship, an emotional/affective component of school connectedness, can serve as a protective factor for adolescents with disabilities (Pham & Murray, 2016).

Brown et al. (2003) examined feelings of alienation, the opposite of feelings of being connected to school, among students of different ethnic groups using a student survey administered to 222 students in grades 9-12. Students attended two large high schools in the Southern United States. The sample was 51% female, 46% male, 40% White, and 49% African American. Approximately 31% of students stated they received special education services. Alienation was defined as having four emotional/affective and behavioral components: powerlessness (emotional/affective), meaninglessness (emotional/affective), normlessness

(emotional/affective), and estrangement (behavioral) (Brown et al., 2003). These components included feelings typically associated with disconnection from school: lack of control over one's life, inability to see the importance of school in one's future, engagement in rule-breaking behavior, and social isolation (Brown et al., 2003; Dean, 1961 as cited in Brown et al., 2003). Based on student reports, all students experienced some degree of disconnection or alienation from school, yet students who received special education services, males, and White students reported feeling alienated to a greater degree (Brown et al., 2003). Findings from this study demonstrates the differences in feelings of alienation between students with and without disabilities, students of different genders, and students from different racial-ethnic backgrounds.

Similarly, Thompson (2002) found that African American students' experiences differed based on the level of academic support they received (e.g., honors or special education services). Thompson conducted interviews and administered surveys in her study of high school students in urban school districts in California to examine students' experiences at the elementary, middle, and high school levels. Data from 271 students attending seven high schools in five school districts comprised the subsample of only African American students. The larger sample included over 1,900 students of diverse backgrounds (i.e., African American, White, and Hispanic). Twenty-eight African American high school seniors participated in interviews. Sixteen females and twelve males attending four schools in two different districts participated in the interviews. Differences were found between students who were placed in various academic tracks such that students who were gifted tended to report more positive school experiences than students who were in lower academic tracks or who received special education services.

Teachers, in a qualitative study conducted by Murray and Naranjo (2008), were identified by students as a source of support. This study sought to examine factors linked to high school

graduation rates for African American students with learning disabilities in high-risk, urban communities. All student participants were African American, identified with learning disabilities, and as students from low income backgrounds. A total of eight males and three female students participated in the study. Eight of the 11 students interviewed stated they were able to get assistance from adults within the school when needed. Most importantly, all students felt teachers provided an important source of emotional support, and in fact, many students identified the same two special education teachers as being most supportive. In identifying the qualities that made students feel these teachers were supportive, students stated that the teachers were caring, helpful, held high expectations for them, were involved with the students during their duration in high school, and advocated for them, all emotional/affective aspects of student connectedness. Four students stated they could form a strong bond with a teacher regardless of race indicating that for these students, race was not a barrier to developing a strong student-teacher relationship (Murray & Naranjo, 2008).

Deshler et al. (2004) included students with disabilities in two studies examining teacher-student interactions which were conducted in nine public high schools (i.e., three urban, three suburban, and three rural). Students were classified into three groups: students with disabilities, students considered to be at-risk (i.e., students who earned a failing grade in a class), and general education students. The group of students identified with disabilities ($n = 150$) were mostly male (61%), and included Hispanic/Latino (22.1%), African American (13.3%), and low income (25.6%) students. The general education ($n = 280$) and at-risk student ($n = 197$) groups included 47% males, 9.5% African American, 1% Hispanic/Latino, and 6.7% low income students. A total of over 500 students participated in some part of the study. Researchers observed students both in and outside of the classroom to determine the number of interactions students had with

teachers to gain a picture of a typical day for a high school student with a disability. Fifty-three students were observed, 26 were students with disabilities and 27 were general education students. Researchers also collected information from students' records, including age, race, gender, standardized test scores, grades, and discipline information. Teachers initiated more contacts with students with disabilities than students who did not have disabilities demonstrating teachers provided more individual attention and opportunities to foster an emotional/affective connection to school for students with disabilities in this study. Also, students with disabilities initiated more interactions with teachers than students without disabilities (Deshler et al., 2004).

McMahon et al. (2008) examined students' perceptions of school connectedness for a sample of racially and ethnically diverse, urban youth with disabilities. The study was comprised of 136 students in fifth through 12th grades in Chicago. The students transitioned to new schools because their school closed. The sample consisted of equal participation from both males and females (49%), with gender for 2% of the participants listed as unknown. Participants were 82% African American, 12% Hispanic, 2% White, and 4% whose racial-ethnic backgrounds were unknown. Student participants ranged in age from 11 to 20, with a median age of 17 years old. With regard to disability status, 23% were identified without disabilities or with a mild speech-language disability, 19% were identified with mild learning or emotional disabilities, 40% were identified with moderate disabilities (e.g., cerebral palsy or traumatic brain injury and required daily nursing services and/or a wheelchair-accessible setting). Nine percent of the sample was identified with severe disabilities (e.g., severe intellectual or physical disability), required daily nursing services, and a wheelchair-accessible setting.

Findings from this study indicated that school stressors, such as students' interpersonal relationships at school and competitiveness between students, were associated with students'

feelings of school connectedness, feelings of academic self-efficacy (i.e., confidence in academic abilities), and feelings of being satisfied at school (McMahon et al., 2008). Results indicated that students who felt more connected to school, reported fewer school-related stressors. Higher levels of school connectedness predicted higher levels of academic self-efficacy, feelings of being satisfied at school, and lower rates of depression. Although the results of this study were not presented by ethnicities or disabilities, the authors assert that the model supports the role of school connectedness in predicting school experiences for racially-ethnically diverse students with disabilities. McMahon et al. (2008) assert that for students transitioning between schools, their perceptions of school connectedness can influence the outcomes associated with students' success at school.

Students with learning disabilities have been found to have increased risks for negative behavior and emotional concerns (e.g., feeling lonely, depressed, and moody) even when connectedness to family and school suggested positive effects for students with these same concerns. Svetaz, Ireland, and Blum (2000) analyzed a subsample of data for students with learning disabilities drawn from the *Add Health* study. The students with learning disabilities in this study were more likely to be African American or Hispanic and male. Having a learning disability increased the odds that a student would have thoughts of suicide and have prior emotional concerns. Students with learning disabilities more frequently reported emotional concerns, initiated sexual intercourse at a younger age, and repeated a grade. Boys with learning disabilities were twice as likely to report attempting suicide. Further, students with learning disabilities were more likely to report involvement in violent behaviors and to report carrying weapons (Svetaz, Ireland, & Blum, 2000).

The studies reviewed above emphasize that African American students and students with disabilities attending the same schools as their general education peers can have vastly different experiences within the same school potentially causing increased levels of alienation and emotional concerns for African American students and students with disabilities (Brown et al., 2003; Nasir et al., 2011; Pham & Murray, 2016; Svetaz et al., 2000; Thompson, 2002). A positive connection to school, that can be developed through positive interactions with teachers, can affect students' academic self-efficacy and lower symptoms of depression (Deshler et al., 2004; McMahon et al., 2008). One way to decrease feelings of alienation that some African American students and students with disabilities may experience in schools is to focus on the development of a positive emotional/affective connection to school for students, especially as they transition to a new school setting (Ding & Hall, 2007; Eccles & Roeser, 2011; McNeely et al., 2002; Nasir et al., 2009, 2011). A positive emotional/affective connection to school can affect students' perceptions of school connectedness, and teachers' perspectives of students' behavior and connection to school have been included to examine the effects of student-teacher relationships on outcomes for students (Hamre & Pianta, 2001; Murray et al., 2008; Murray & Malmgren, 2005). The lasting effects of positive student-teacher relationships are identified in the next section (Decker et al., 2007; Hamre & Pianta, 2001).

Teachers' perspectives of African American students' emotional/affective and behavioral connection to school. Positive student-teacher relationships are a strong component of students' emotional/affective connection to school. Just as positive student-teacher relationships can contribute to a positive emotional/affective connection to school for students, negative student-teacher relationships can contribute to negative outcomes for students' development (Hamre & Pianta, 2001). In a study by Hamre and Pianta (2001), children who had

elevated levels of conflict with their kindergarten teachers had more discipline infractions in the upper elementary years. The sample included 179 kindergarten students, 51% were boys and 49% were girls. Forty percent of the sample was African American and 60% was White (Hamre & Pianta, 2001).

Boys who were overly dependent on their teachers in kindergarten demonstrated more behavior problems in the upper elementary and middle school years. Girls who had positive relationships with teachers in kindergarten tended to have positive work habits in lower elementary and fewer discipline referrals in upper elementary. Teachers' rating of relationship quality with students in kindergarten were more closely linked to boys' disciplinary referrals in upper elementary than girls, in that if teachers reported poor relationships with boys, the boys were more likely to have a higher number of discipline concerns in the upper elementary grades. Even though teachers reported more negative relationships with African American students than with White students, this finding requires additional exploration since negative teacher perceptions of their relationships with African American students were not a significant predictor of future problem behaviors in this study. Since middle school can be a challenging time for students due to the transition from a smaller building to a larger building with more teachers, behavior problems due to poor student-teacher relationships can make this time even more challenging for some students. Thus, a more current and appropriate (i.e., previous use with adolescents) measure of African American students' perceptions of their connectedness to school at this level would be warranted (Eccles & Roeser, 2011; Hamre & Pianta, 2001). Findings from this study confirmed the dynamic quality of relationships leading to students' connection to school (Hamre & Pianta, 2001). Student-teacher relationships can affect students' grade point averages when students participate in a specific intervention (Murray & Malmgren, 2005).

Murray and Malmgren (2005) found an effect on grade point average in an intervention study including teachers. The intervention was designed to improve student-teacher relationships and the overall social-emotional and academic development of individual students attending an urban school. The intervention consisted of weekly meetings between teachers and selected students, increased teacher praise, and phone calls to students each month. Eight teachers (e.g., English, Math, Science, and Social Studies) participated. Forty-eight low income African American students in ninth through 12th grades, of whom 75% were male and 31% were receiving special education services, participated in the study.

Findings from this study indicated that only grade point average was affected by the intervention. Although the intervention did not positively affect students' social-emotional adjustment in school, members of the intervention group demonstrated increased behavioral engagement in school as determined by teacher ratings (i.e., student appeared attentive in class). This suggests that more time spent with teachers can increase students' behavioral connection to school as indicated by improved grades and attentiveness in class. Only teacher measures were used, that is, no measures examining the effectiveness of the intervention from the students' perspective were utilized (Murray & Malmgren, 2005).

Elementary and secondary students have been included in investigations of students' emotional/affective connection to school and in research identifying characteristics of a positive connection with their teachers (Marcus et al., 1991; Midgley et al., 1989; Roeser & Eccles, 1998; Storz, 2008). Some researchers have used this information to examine where the perspectives are similar and where they differ in order to provide recommendations on improving students' connection to school (Decker et al., 2007; Klem & Connell, 2004; Murray et al., 2008; Murray & Greenberg, 2000).

Teachers' and students' perspectives of emotional/affective and behavioral connection to school. Researchers have included both teachers' and students' perspectives when examining the emotional/affective and behavioral components of the construct, such as relationships with teachers, student engagement in school, and long-term effects of positive student-teacher relationships. Klem and Connell (2004) used a longitudinal dataset to examine relationships, including school connectedness, between teacher support, student engagement and achievement using measures of teacher support and engagement from both the students' and teachers' perspectives. Data were obtained from students and teachers at six elementary schools and three middle schools within one urban school district. The elementary sample included students in third through fifth grades of whom 81% were African American, 9% were White, and 10% were Hispanic. The majority of students in the elementary sample qualified for free and reduced lunch (85%). Gender was almost evenly divided with 51% males and 49% female participants. A total of 1,846 students participated in the study at the elementary level, and of those, 1,750 had teacher and student data.

The secondary sample included students in sixth through eighth grades of whom 49% were male, 51% female, 44% African American, 39% White, 16% Hispanic, and 1% were of other racial-ethnic backgrounds (Klem & Connell, 2004). In the secondary sample, 58% of students were eligible for free and reduced lunch. A total of 2,430 students participated in the study at the secondary level, and 1,347 of the students had corresponding teacher data. The teacher support measure included items in which students rated statements targeting the emotional/affective components of school connectedness, that is, fairness, care/concern of students, and teacher expectations. Student engagement measures were completed by both students and teachers and included items examining the extent to which students paid attention,

demonstrated effort in school, were prepared for class, went beyond teacher expectations, and believed doing well in school was important (i.e., affective and behavioral components of school connection) (Klem & Connell, 2004).

Results indicated that approximately one-third of middle school students were emotionally and behaviorally disconnected from school (e.g., were unprepared for class, inattentive in class, and did not believe school was important) (Klem & Connell, 2004). Elementary students reported increased levels of teacher support compared to middle school students. Middle school students who had increased levels of teacher support had increased levels of school engagement and were about 75% less likely to be disconnected from school. Teacher reports of students' engagement were a stronger predictor of students' academic success in this study, possibly because teacher reports were based on observations of student behavior while student reports included behavioral, cognitive, and emotional aspects (Klem & Connell, 2004). These findings align with research which has shown that as students' progress in grade levels, disengagement in school is more likely to occur (Eccles & Roeser, 2011; Klem & Connell, 2004; Loukas et al., 2016; McNeely et al., 2002; Niehaus et al., 2012).

Murray et al. (2008) investigated perceptions of student-teacher relationships from both the students' and teacher perspectives in their study of 157 kindergarten students. This study was conducted in a large, urban school district in the Midwest, and the majority of student participants in the sample were African American (59%). The remaining sample was 26% Hispanic, 7% White, 3% Asian American, and 4% mixed racial-ethnic background. The sample was comprised of 53% female and 47% male students. There were 12 teacher participants, all of whom were female, eight were White, two were Hispanic, one was African American, and one was Asian. Nine of the teachers held Masters degrees or higher, and their teaching experience

ranged from 5 to 31 years. The researchers examined the affective/emotional components of connectedness by asking students about their perceptions of teacher support (i.e., whether teachers helped them). The scales the teachers completed were similar to the student scales in that, teachers were asked to indicate how often they helped students and whether their students liked attending school or made up excuses to go home from school (Murray et al., 2008).

In this study, teachers rated themselves as having more positive relationships with students of their same racial-ethnic background (Murray et al., 2008). Teachers also indicated that students of their same racial-ethnic background liked school more than students whose racial-ethnic background differed from their teachers. In addition, teachers reported that they provided higher levels of support to Hispanic students than to African American students. Students who perceived higher levels of support from their teachers had more positive feelings of school than students who perceived lower levels of teacher support. Students and teachers who reported conflictual relationships reported more negative perceptions of the student-teacher relationship.

Decker, Dona, and Christenson (2007) examined the affective quality of student-teacher relationships from both the students' and teachers' perspectives to determine whether the quality of the relationships were associated with academic and behavioral outcomes. Researchers utilized multiple measures, including rating scales, teacher and student reports, and observations, to determine relationship quality and whether student and teacher perceptions were aligned (Decker et al., 2007). For example, if both the teacher and student reported a positive or negative relationship, the relationship was aligned. If one reported a positive relationship and the other did not, then a lack of alignment was evident, demonstrating a lack of reciprocity in the relationship.

This study was one of few to specifically focus on behaviorally at-risk African American students who were not receiving special education services. Forty-four students (26 males and 18 females) in kindergarten through sixth grade participated. All student participants were African American, and none were receiving special education services but were at-risk for referral for problem behavior. Twenty-five teachers (i.e., 2 males, 23 females; 23 White, and 2 African American) also participated in this study located in two suburban and three urban elementary schools in the Midwest (Decker et al., 2007).

Overall, students defined their relationships with teachers as positive and stated they wanted to be closer to their teachers. Students' ratings of the student-teacher relationship were more positive than teacher ratings. Positive outcomes for students were evident in achievement, social skills, and engagement in class when teachers also reported positive relationships with these same students. In addition, the student-teacher relationship was important in predicting social-emotional outcomes rather than academic outcomes for students (Decker et al., 2007).

Findings from the Decker et al. (2007) study correspond to research conducted by Murray and Greenberg (2000). Murray and Greenberg (2000) found that positive student-teacher relationships and engagement in school were linked to positive social-emotional outcomes (e.g., students feeling more competent in school and having a higher frustration tolerance). In the Murray and Greenberg (2000) study, students who self-reported, and were rated by teachers, as being connected to teachers and school also felt more competent in their abilities to complete academic tasks. Participants in the Murray and Greenberg (2000) study were students in fifth and sixth grades who were part of a longitudinal study and were attending elementary schools in the Northwest. A total of 289 participants, 56.7% males, 43.3% females, 38.8% students of color, 61.2% White, 33.2% identified as having mild/moderate disabilities, and 66.8% were general

education students, comprised the sample. In contrast, students who were more anxious and had poor relationships with teachers reported having more behavioral challenges and higher levels of depression and anxiety. Interestingly, both teachers and students viewed their relationships similarly when examined using emotional/affective and behavioral measures (Murray & Greenberg, 2000).

Students' perspectives of an emotional/affective connection to school. In addition to increased opportunities to develop an emotional/affective connection to school for students with disabilities, increased student-teacher contact time has been linked to student performance and perception of teacher support for junior high and middle school students (Midgley et al., 1989). Midgley, Feldlaufer, and Eccles (1989) examined students' perceptions of teacher support and attitudes towards math in their two-year study investigating the impact of transition from elementary to junior high school on adolescents' attitudes towards math. Teacher support, as defined in this study, identified students' beliefs of teachers' caring, friendliness, and fairness (Midgley et al., 1989). This definition of teacher support is linked to school connectedness as it includes the critical component of caring. Perception of math was identified by students' responses to surveys. Students responded to items to measure their interest in completing math assignments, in math in general, and in the amount of time they spent on math assignments. Twelve school districts located in middle class communities in the Midwest participated in this study, and 90% of the student population in these districts was White (Midgley et al., 1989). Approximately 2,500 students participated in the study by completing surveys. Additionally, fifth- and sixth-grade math teachers from the school districts participated in the study.

Findings from this study demonstrated students who felt their teachers supported them showed minimal change in their perceptions of math specifically in relation to their attitudes

toward math (e.g., interest in math, time spent doing math and importance of math) (Midgley et al., 1989). Decreased perceptions of math from sixth to seventh grades were reported by students who did not feel their teachers supported them. The most negative perceptions of math were reported by students who believed their teachers did not support them. Students, who rated their teachers as less supportive in year one and more supportive in year two, showed an increase in their attitude towards math. The opposite was also true in that students', who rated their teachers as more supportive in year one and less supportive in year two, showed declines in their attitudes towards math. These findings demonstrate that students' perceptions of teacher support can influence students' perceptions of math (Midgley et al., 1989). A student's perception of teacher support can also affect a student's feelings of teacher treatment (Marcus et al., 1991; Storz, 2008).

A study conducted by Storz (2008) used focus groups to examine students' perceptions of school and teacher quality that either promote or hinder student success. Storz (2008) examined data from over 250 students attending four, urban middle schools (i.e., sixth, seventh, and eighth grades). Specifically, students were asked to describe the types of teachers and practices that either promoted or hindered their success in school. The majority of the student participants were African American. All students interviewed discussed having teachers who cared for and respected them. Students discussed the high teacher turnover rate within their schools and the effect on their education (i.e., students believed they were receiving a subpar education due to the high teacher turnover rate).

Another theme discovered in this study included the effect of lack of student-teacher relationships on students' behavior in school (Storz, 2008). For example, students who did not believe their teachers cared for or respected them discussed acting out in school. The importance

of respect was a common theme discussed in all student interviews. Findings from this study aligned with prior research in that students felt teachers had low expectations and did not care for them (Garibaldi, 1992; Marcus et al., 1991). Students felt the lack of teacher care combined with a lack of resources provided them with an inferior education in comparison to their suburban counterparts (Storz, 2008).

Similarly, African American students attending school in an affluent suburban district in the Mid-Atlantic region felt teachers treated them differently from White students in a study conducted by Marcus et al. (1991). Both African American and White fifth-grade students were surveyed regarding their perceptions of teacher treatment (Marcus et al., 1991). Students responded to survey items asking how teachers made them feel when they did not have the correct answer, whether teachers spent time helping students, and whether teachers made students feel good about trying hard. Forty African American, and forty White students participated in the study (i.e., 20 males and 20 females of each ethnic group).

In this study, African American males believed their teachers held low expectations for them, did not trust them, and frequently gave them negative feedback (Marcus et al., 1991). African American males in this same study believed their teachers often disciplined them for not trying or listening, and African American male fifth-grade students felt teachers had a lack of faith in their abilities, no matter how hard they tried. Significant differences were noted between African American males and females on their perceptions of teacher treatment with African American males feeling more negative about how teachers treated them, and African American females reporting that teachers offered them additional time and support (Marcus et al., 1991). African American females reported the greatest sense of trust of all groups in this study (Marcus et al., 1991).

Roeser and Eccles (1998) used interviews, surveys, and document reviews to examine adolescents' psychological functioning and perceptions of how teachers felt about them during the middle school years. Participants were part of a larger, longitudinal study and included over 1,000 African American and White students (i.e., 67% African American and 33% White) with equal numbers of males and females included in the sample. Boys and African American students reported higher self-esteem, and boys and African Americans reported higher levels of anger. By the end of eighth grade, students who felt their teachers held them in positive regard were predicted to have positive academic self-concepts. If students felt their teachers believed they were good students, their perceptions of the value of education and their self-esteem increased. Also, students' beliefs that their teachers cared for them were related to a decrease in truancy (Marcus et al., 1991; Roeser & Eccles, 1998).

Findings from the studies reviewed above indicate that an individual student's emotional/affective and behavioral connection to school, including positive student-teacher relationships, can predict behavioral outcomes for students and can protect students from participating in at-risk behaviors (Bonny et al., 2000; Brown et al., 2003; Ding & Hall, 2002; Hamre & Pianta, 2001; Loukas & Pasch, 2013; McMahon et al., 2008; McNeely et al., 2002; Pianta, 1999; Resnick et al., 1997; Wilson, 2004). Unfortunately, research has also shown that African American students and students with disabilities are likely to have more negative perceptions of school climate and connectedness (Brown et al., 2003; Eccles & Roeser, 2011; Furlong et al., 2011; Klem & Connell, 2004; Marcus et al., 1991; McNeely et al., 2002; Perkins, 2006; Slaughter-Defoe & Glinert-Carlson, 1996; Thompson, 2002; Witherspoon et al., 2009). Declines in perceptions of school climate and in perceptions of the student-teacher relationship are particularly evident as students' progress in grade levels and transition between school

settings (i.e., elementary to middle school) (Ding & Hall, 2007; Eccles & Roeser, 2011; Klem & Connell, 2004; McNeely et al., 2002; Midgley et al., 1989; Perkins, 2006; Wang et al., 2010; Way et al., 2007; Whitlock, 2006). For African American students and students with disabilities, this decline may be even more pronounced when considering the risks they may face within the school system (Garibaldi, 1992; Simmons et al., 1991; Wong et al., 2003). Research has shown that students' connection to their racial-ethnic group may protect them from declines in perceptions of school climate and student-teacher relationships as they transition across school settings (Altschul et al., 2006; Booth & Gerard, 2014; Dotterer et al., 2009; Eccles et al., 2006; Oyserman et al., 1995, 2003, 2007; Simmons et al., 1991; Wong et al., 2003). The literature reviewed in the next section examines the research relevant to racial-ethnic connectedness for African American students (Altschul et al., 2006; Booth et al., 2014; Oyserman et al., 2001, 2003; Nasir et al., 2009).

Racial-Ethnic Connectedness for African American Students

A belief that school achievement is part of having a strong racial-ethnic identity for African American students can protect African American students from negative perceptions others may have of them as students (Oyserman et al., 1995, 2003). African Americans were significantly higher than Latino students on measures of racial-ethnic identity (REI) connectedness, embedded achievement, and awareness of racism in a study conducted by Altschul et al. (2006). This study included 139 eighth-grade students (98 African American and 41 Latino students) attending three low-income urban middle schools. Students completed surveys to gain their perceptions of racial-ethnic identity connectedness, embedded achievement, and awareness of racism. Grade reports were collected by the researchers at four points over two school years (i.e., eighth and ninth grades) to determine whether racial-ethnic identity changed

over time and was correlated with students' grades. African American girls had significantly better grades than African American boys in the fall of eighth grade (Altschul et al., 2006).

Racial-ethnic connectedness involves feeling a positive sense of belonging to one's racial-ethnic group, its history, and traditions (Altschul et al., 2006; Oyserman et al., 2001, 2003, 2007). Embedded Achievement is the belief that one's achievement is part of being a member of one's racial-ethnic group (Altschul et al., 2006; Oyserman et al., 1995). An awareness of racism can also be helpful for African American youth in schools because this awareness can provide them with an understanding of how others may perceive them as learners (Oyserman et al., 1995, 2003).

Nasir et al. (2009) examined students' racial-ethnic identity and academic development within the school setting. They conducted a qualitative research study in an urban high school with the goal of understanding students' ethnic and academic development within the context of school. To this end, they also explored students' connection to school using focus groups, observations, interviews of case study students, teacher interviews, and surveys. There were 20 primarily African American participants in the focus groups (11 connected and 9 disconnected). An additional 121 students, 68 African American, participated in the survey. Findings indicated that some students who had strong school identities (i.e., participated in extracurricular activities or in-school work programs) had strong racial-ethnic identities. In fact, being African American included having a strong connection to school for some students (Nasir et al., 2009).

During focus groups, students who identified as African American articulated two forms of being African American (Nasir et al., 2009). Participants described the first African American identity as being a gang member, tough, and disconnected from school. Participants described the second African American identity as being connected to school, the community, and one's

cultural background. Both identities, as described by students, included popular clothing styles and certain language patterns (i.e., language patterns associated with African Americans).

Students who were connected to school and were achieving academically were offered opportunities that other students were not, such as having a key to the college and career center, being invited to meetings with college admissions counselors, and gaining support in writing college essays and applications. Nasir et al. (2009) purport that the identities the students articulated were ones that were available to the students in the school, locally, and in the media. The authors suggest that the students' ability to have both a strong racial-ethnic and an academic identity was due to the urban location of the school.

Oyserman et al. (2003) examined the effects of gender and racial-ethnic identity on student involvement in school for students attending schools in high poverty areas using a close-ended measure of racial-ethnic identity. The *Close-Ended Racial-Ethnic Identity Scale* was used to determine whether racial-ethnic identity had three components (i.e., connectedness, embedded achievement, and awareness of racism). Two eighth-grade cohorts consisting of 132 African American students (64 males and 68 females) participated in the study at both times (i.e., fall and spring). Connectedness to one's racial-ethnic group was positively correlated to hours spent studying, improved grades, improved self-reported attendance, and increased use of strategies for academic success for males (Oyserman et al., 2003).

Similarly, a racial-ethnic identity in conjunction with an awareness of racism also supported feelings of academic efficacy for boys in a study conducted by Oyserman, Harrison, and Bybee (2001). This study included African American male (48%) and female (52%) eighth grade students attending a middle school located in a high-poverty, urban area. Participants were administered measures of academic efficacy and racial-ethnic identity during the beginning and

end of their eighth-grade year. Participants also self-reported grades using a nine-point scale (0 = mostly Fs and 8 = mostly As). Researchers used Eccles' (1993) *School Efficacy Scale* to determine academic efficacy. Using a Likert-type scale, student participants responded to items such as how often they finished homework by deadlines, met teacher expectations, and remembered information presented in class (Eccles, 1993; Oyserman et al., 2001). Racial-ethnic identity was measured by student responses to items such as, "I feel a part of the Black community," "Because I am Black, others may have negative expectations of me," and "I have a lot of pride in what members of my community have done and achieved" (Oyserman et al., 2001, p. 381). Even though racial-ethnic connectedness can support feelings of academic efficacy for African American students, no significant effect was found when the results were examined at two different points in the study, demonstrating that the effects of achievement and awareness were only apparent at the beginning of the school year (Oyserman et al., 2001). With respect to racial-ethnic connectedness, findings have shown that connectedness to one's racial-ethnic group has many positive effects for African American students, particularly males such as students' reports of increased study time, use of academic strategies for success, improved grades, and improved attendance (Altschul et al., 2006; Oyserman et al., 2001, 2003).

The research literature has shown that connectedness to one's racial-ethnic group can protect students from negative perceptions others may have in relation to their racial-ethnic group (Dotterer et al., 2009; Oyserman et al., 1995, 2001, 2003; Simmons et al., 1991). In addition to racial-ethnic connectedness, school connectedness, including an emotional/affective and behavioral connection to school, can protect African American students from risks within the school setting (Altschul et al., 2006; Ding & Hall, 2007; Eccles & Roeser, 2011; McNeely et al.,

2002; Midgley et al., 1989; Nasir et al., 2009, 2011; Oyserman et al., 1995, 2001, 2003; Phinney & Tarver, 1988; Pianta, 1999; Simmons et al., 1991; Wong et al., 2003).

Examination of the research literature pertaining to students with disabilities and African American students' emotional/affective and behavioral connection to school yielded the following results: students can identify factors that support and/or hinder an emotional/affective connection to school, specifically teacher support (Marcus et al., 1991; Murray & Naranjo, 2008; Storz, 2008); African American students and students with disabilities have felt alienated from school (Brown et al., 2003; McMahon et al., 2008; Pham & Murray, 2016; Thompson, 2002); and students who felt connected to school demonstrated decreases in risky behaviors and were predicted to have an increased academic self-concept (Bonny et al., 2000; Hamre & Pianta, 2001; Loukas et al., 2006; Loukas & Pasch, 2013; McMahon et al., 2008; Midgley et al., 1989; Pianta, 1999; Resnick et al., 1997; Roeser & Eccles, 1998).

Students with disabilities have been observed to have increased amounts of interaction with their teachers (Deshler et al., 2004; Midgley et al., 1989), yet in some studies, students with disabilities reported more negative feelings in the student-teacher relationship and in their school experiences overall (Brown et al., 2003; Nasir et al., 2011; Pham & Murray, 2016; Thompson, 2002). Additionally, researchers have studied emotional/affective and behavioral connection to school for African American students to examine the long-lasting effects teacher perceptions can have on students, to combat students' negative feelings of student-teacher relationships, and to promote students' social-emotional development (Hamre & Pianta, 2001; Murray & Malmgren, 2005).

Students' perceptions of school climate and connectedness are essential to understanding the nested nature of the two constructs and can provide educators information on how to better

support students in school at both the individual- and school-levels. While there is clear evidence that students' perspectives of school climate, connectedness, and racial-ethnic connectedness can have lasting outcomes for African American students with and without disabilities, the link between school climate and connectedness with respect to individual and school-level factors for these groups of students remains unclear (Altschul et al., 2006; Decker et al., 2007; Ding & Hall, 2007; Eccles & Roeser, 2011; Hamre & Pianta, 2001; McNeely et al., 2002; Midgley et al., 1989; Murray & Malmgren, 2005; Nasir et al., 2009, 2011; Oyserman et al., 1995, 2001, 2003; Phinney & Tarver, 1988; Pianta, 1999; Simmons et al., 1991; Wong et al., 2003).

III. Methods

Participant Characteristics

Licensed professional staff members. All licensed professional staff members at each school were invited to participate in the current study with the goal of obtaining participation from at least 70% of the licensed professional staff members at each school. This included teachers, administrators, occupational therapists, social workers, speech-language pathologists, and school psychologists who completed school climate surveys. I gathered basic demographic information from these individuals, including gender, ethnicity, total number of years in education as a licensed professional staff member, and the highest education level attained. Data describing these participants are summarized in Table 1. The majority of licensed professional staff members (99%) across all schools spoke English at home with two licensed professional staff members indicating that they spoke Spanish or both English and Spanish at home (.01%). Two licensed professional staff members' survey responses were not included in analysis because they did not fully complete the survey.

Table 1

Licensed Professional Staff Members' Demographic Characteristics

N (%)				
School	1	2	3	Total
Participants	23 (16%)	60 (43%)	58 ¹ (41%)	141 (100%)
Gender ²				
Male	8 (36%)	22 (37%)	16 (27%)	46 (32.6%)
Female	14 (64%)	38 (63%)	43 (73%)	94 (66.7%)
Ethnic background				
African American	4 (17%)	8 (13%)	10 (17%)	22 (15.6%)
White	19 (83%)	45 (75%)	46 (78%)	109 (77.3%)
Hispanic	0	0	2 (3)	2 (1.4%)
Asian	0	4 (7%)	0	4 (2.8%)
Other ³	0	3 (5%)	1 (2%)	4 (2.8%)
Total years in education				
1-5	8 (35%)	13 (22%)	6 (10%)	27 (19.1%)
6-10	9 (39%)	20 (33%)	11 (19%)	40 (28.4%)
11-15	1 (4%)	10 (17%)	22 (37%)	32 (22.7%)
16-20	2 (9%)	5 (8%)	11 (19%)	18 (12.8%)
> 20	3 (13%)	12 (20%)	9 (15%)	24 (17.0%)
Highest education level attained				
Bachelor's	8 (35%)	9 (15%)	4 (7%)	21 (14.9%)
Master's	15 (65%)	51 (85%)	53 (90%)	118 (83.7%)
Doctorate	0	0	2 (3%)	2 (1.4%)

¹There were 60 surveys started but 58 completed at School #3.

²There was one missing value for gender.

³Participants identified other racial-ethnic background as "mixed," "bi-racial," and "multi-cultural."

Students. African American students with and without disabilities were eligible to participate in this study if they were students in the sixth, seventh, and eighth grades at the participating schools. I collected demographic information such as gender, ethnic background, age, grade level, disability status and name of disability/exceptional characteristic, special

education placement, grade point average (GPA), number of discipline referrals, level of participation in extracurricular activities, and with whom the students lived from the surveys (see Table 2 and Appendices A and B). The student participants ranged in age from 11-14 years old at the time of participation in the study. The participants were well distributed across each grade level. Ninety-five percent of the participants lived with their parents, while close to four percent lived with extended family. Data regarding with whom students lived were missing for 1.2% of students. Disability status was determined by whether a student was identified with a disability at the time of study participation. A student was considered to have a mild or moderate disability if s/he was receiving special education services for disabilities including learning disability, speech/language impairment, emotional/behavioral disability, other health impairment (specifically Attention Deficit Hyperactivity Disorder, ADHD), and intellectual disability.

I obtained students' grade point average and number of discipline referrals from a licensed professional school staff member, who accessed this information from the district's student information system (see Tables 2 and 3). Although two students were missing discipline information and were not included in the analysis of the number of discipline referrals, the majority of students who participated in this study had few discipline referrals. The mean number of discipline referrals for students with disabilities was 0.83 ($SD = 1.71$). The mean number of discipline referrals for students without disabilities was 0.36 ($SD = 1.10$). The mean number of discipline referrals for males was 0.71 ($SD = 1.55$), and the mean number of discipline referrals for females was 0.04 ($SD = 0.20$). Additional discipline information is included in Table 2.

Table 2

Student Demographic Characteristics

N (%)		1	2	3	Total
School					
Participants		12 (14.3%)	48 (57.1%)	24 (28.6%)	84 (100%)
Gender					
	Male ¹	12 (100%)	33 (68.8%)	13 (54.2%)	58 (69%)
	Female	0	15 (31.3%)	11 (45.8%)	26 (31%)
Ethnic background					
	Black	9 (75%)	46 (95.8%)	24 (100%)	79 (94%)
	Biracial	3 (25%)	2 (4.2%)	0	5 (6%)
Age					
	11	1 (8.3%)	9 (18.8%)	3 (12.5%)	13 (15.5%)
	12	4 (33.3%)	10 (20.8%)	5 (20.8%)	19 (22.6%)
	13	5 (41.7%)	19 (39.6%)	12 (50%)	36 (42.9%)
	14	2 (16.7%)	10 (20.8%)	4 (16.7%)	16 (19%)
Grade					
	6	4 (33.3%)	17 (35.4%)	6 (25%)	27 (32.1%)
	7	5 (41.7%)	14 (29.2%)	10 (41.7%)	29 (34.5%)
	8	3 (25%)	17 (35.4%)	8 (33.3%)	28 (33.3%)
Years at School					
	1	4 (33.3%)	22 (45.8%)	4 (16.7%)	30 (36.6%)
	2	3 (25%)	12 (25%)	12 (50%)	27 (32.9%)
	3	3 (25%)	14 (29.2%)	8 (33.3%)	25 (30.5%)
	5 ²	2 (16.7%)	--	--	--
Disability status					
	Yes ³	4 (33.3%)	15 (31.3%)	5 (20.8%)	24 (28.6%)
	No	8 (66.7%)	33 (68.8%)	19 (79.2%)	60 (71.4%)
Exceptional characteristic ⁴ (i.e., name of disability)					
	Learning Disability	2 (16.7%)	7 (14.6%)	3 (12.5%)	12 (14.3%)
	Speech-Language	1 (8.3%)	1 (2.1%)	0	2 (2.4%)
	Emotional Disability	0	0	1 (4.2%)	1 (1.2%)
	Other Health Impairment	1 (8.3%)	5 (10.4%)	1 (4.2%)	7 (8.3%)
Special education placement ⁵					
	Speech Only	1 (8.3%)	0	0	1 (1.2%)
	Resource ⁶	2 (16.7%)	10 (20.8%)	5 (20.8%)	17 (20.2%)
	Instructional ⁷	1 (8.3%)	3 (6.3%)	0	4 (4.8%)
Number of discipline referrals ⁸					
	0	5 (41.7%)	38 (79.2%)	23 (95.8%)	66 (78.6%)
	1	1 (8.3%)	5 (10.4%)	1 (4.2%)	7 (8.3%)
	2	1 (8.3%)	3 (6.3%)	0	4 (4.8%)
	4	0	1 (2.1%)	0	1 (1.2%)
	5	1 (8.3%)	1 (2.1%)	0	2 (2.4%)
	6	2 (16.7%)	0	0	2 (2.4%)

¹Only males were recruited from school #1. Recruitment of female students began at school #2.²Two students responded 5 years even though the schools are middle schools with three grade levels. It is possible that the students also included the years they attended at the elementary school when they responded.³Two female students with grade point averages below a 2.0, 1.43 and 1.75 respectively, were categorized as having disabilities, although they were not formally designated as such to add additional students to the students with disabilities category.

⁴The two female students who were added to the students with disabilities categories were not assigned an exceptional characteristic.

⁵The two female students who were added to the students with disabilities categories were not assigned a special education placement.

⁶Students spending 49% or less of their school day with a special education teacher/receiving special education services are considered to have a Resource placement.

⁷Students spending 50% or more of their school day with a special education teacher/receiving special education services are considered to have an Instructional placement.

⁸There were two students missing discipline information.

I determined level of participation in extracurricular activities by adding the total number of hours per week that each student participated in extracurricular activities as reported by the students (see Table 3). Overall, the mean number of hours for participation in extracurricular hours for students was 6.49 ($SD = 6.30$). The mean number of hours of participation in extracurricular activities for males was 5.87 ($SD = 5.61$), and the mean number of hours of participation in extracurricular activities for females was 7.69 ($SD = 7.39$). The mean GPA for all students was 2.90 ($SD = 0.79$), was 2.86 ($SD = 0.84$) for males, and the mean GPA for females was 3.00 ($SD = 0.68$).

Table 3

Mean Scores and Standard Deviations for GPA and Participation in Extracurricular Activities

	School #1			School #2			School #3		
	<i>n</i>	<i>M</i>	SD	<i>n</i>	<i>M</i>	SD	<i>n</i>	<i>M</i>	SD
GPA	12	3.11	0.78	48	2.64	0.86	24	3.31	0.36
Extracurricular Activities	12	5.17	4.93	43 ¹	6.55	6.95	21 ²	6.83	5.39

¹Five students were missing number of hours of participation in extracurricular activities at school #2, of which three students stated they did not participate in extracurricular activities.

² Three students were missing number of hours of participation in extracurricular activities at school #3.

Sampling Procedures

Setting. I conducted the research in three middle schools located outside of a large metropolitan city in the Midwest. Two of the three schools (Schools #2 and #3) were part of the same school district. School #1 was located in the town bordering Schools #2 and #3. I recruited schools that were as similar as possible with regard to demographics, middle school structure, and philosophy. Structurally, all schools followed guidelines of the Association of Middle Level Education's *This We Believe* characteristics of successful middle schools, such as assigning students to interdisciplinary teams, giving students opportunities to explore various classes within the content areas, and emphasizing a positive school climate (Association of Middle Level Education, 2010).

Schools. The school was the main unit of recruitment, and I established criteria related to the diversity of the student population, percent of students receiving special education services, and the location of the school for inclusion in this study. I established criteria due to the lack of studies, as noted in chapter two, conducted in diverse school districts outside of major cities. Setting the minimum percentage of African American students at 25% and the percentage of students with disabilities at 9% in each participating school allowed me to have a sampling pool from which to draw. I first contacted schools located in counties in northern Illinois that met the criteria for inclusion in this study. I then expanded the area of recruitment to schools in central Illinois, as well as, two districts that met the criteria for inclusion in the study outside of the state of Illinois.

I screened schools for inclusion in the study based on information from the *2013 Illinois School Report Card* (Illinois State Board of Education, 2017), the year in which I began to recruit schools (i.e., 2012-2013 school year). School district data were obtained from available public information (e.g., ISBE website) to gather school information including the total enrollment, percent of African-American students, percent of low income students, percent of students with disabilities receiving special education services, teacher retention rate, and principal turnover rate. According to the *Illinois School Report Card*, the teacher retention rate is the three-year average of teachers who return to work at a particular school (Illinois State Board of Education, 2017). All participating schools in this study had at least 90% of teachers return to work at the same school (see Table 4). Principal turnover rate is the number of different principals at a school over the last six years, and the maximum principal turnover rate for the three participating schools was two (Illinois State Board of Education, 2017). Demographic information for the participating schools is listed in Table 4.

Table 4

School Demographic Data¹

School	1	2	3
Total enrollment	300	900	900
Percent of students by racial-ethnic background:			
White	20	52	54
Black	51	31	27
Hispanic	17	5	5
Other racial-ethnic groups ²	12	12	15
Percent low income	31	27	25
Percent of students with disabilities	18	17	19
Percent teacher retention rate ³	92	91	91
Principal turnover rate	1	2	2

¹All numbers, except teacher retention and principal turnover rates are from the 2013 School Report Card (www.isbe.net).

²Other racial-ethnic groups includes Asian and students from two or more racial-ethnic groups.

³Teacher retention and principal turnover rates are from the 2014 School Report Card; the first year this information was reported.

In order to provide the context within which school climate was measured, I reviewed the available 5Essentials data. All schools participated in the 5Essentials school climate and culture survey for the 2014-2015 school year, the only school year in which all three schools had 5Essentials data (University of Chicago [U of C], Urban Education Institute, n.d.a; University of Chicago [U of C], Urban Education Institute, n.d.b). The 5Essentials survey is based on research that indicates that there are five components that predict student success: effective leaders, supportive environment, collaborative teachers, involved families, and ambitious instruction (U of C, Urban Education Institute, n.d.b). The goal of the 5Essentials survey is to provide school districts with information on their organizational culture and climate to support school improvement. The overall 5Essentials score summarizes a school's performance on the survey using the following descriptors: well organized, organized, moderately organized, partially organized, and not yet organized (U of C, Urban Education Institute, n.d.a). According to the 5E results, schools #1 and 3 were moderately organized, and school #2 was well organized for

improvement. Areas of strength for all schools were in instruction (Illinois State Board of Education, 2017).

Measures

School climate. School climate is the global environment, including the emotional atmosphere, created through the interaction of relationships between the adults and students in the school (McNeely et al., 2010; Perkins, 2006). I assessed school climate using parallel measures at both the school- and individual-levels (Perkins, 2006, 2007). I assessed school climate at the school-level by surveying 70% of each school's licensed professional staff members, and I assessed school climate at the individual-level by surveying the participating students. I established a response rate of 70% from licensed professional staff members based on previous school climate literature which reported response rates from 70% to 94% and to obtain an assessment of school climate at the school-level (Slaughter-Defoe & Glinert Carlson, 1996; Way et al., 2007). I surveyed licensed professional staff members (e.g., administrators, school psychologists, teachers, social workers, etc.) at the three middle schools about their perceptions of school climate. I obtained the minimum 70% response rate from licensed professional staff members at all three schools.

I assessed licensed professional staff members' perceptions of school climate using the *American School Climate Survey-Teacher Version (ASC-T)*, and I converted it to an online survey (Perkins, 2006). The *ASC-T* includes affective and behavioral items and assesses staff members' perspectives in eight areas: bullying, expectations of student success, influence of race, professional climate, professional development, parental involvement, safety, and trust, respect, and ethos of caring (Perkins, 2006).

Licensed professional staff members responded to survey items using a Likert scale assessing the respondent's perspective of the climate at his or her school (Perkins, 2006, 2007). Participants rated items from one to five, with 1 being *strongly disagree* and 5 being *strongly agree*.

Administration of the *ASC-T* took between five to seven minutes. The maximum possible score on the *ASC-T* was 125, and the lowest possible score was 25. The mean score and standard deviation for all licensed professional staff member participants on the *ASC-T* was 96.16. The mean scores and standard deviations per school are listed in Table 5. Internal consistency of this measure was $\alpha = .69$ for the current sample and in the questionable range (George & Mallery, 2011; Gliem & Gliem, 2003). Information on the internal consistency of this measure from previous studies was not available.

Table 5

Mean Scores and Standard Deviations on the ASC-T

School	<i>n</i>	<i>M</i>	SD
1	23	92.00	9.94
2	60	97.15	7.62
3	58	96.78	7.23

All student participants completed a packet of three surveys for this study starting with the survey cover page, then they completed the school climate survey, the school connectedness survey, and last, a racial-ethnic connectedness measure. All the measures were aligned to ensure parallel constructs were measured (Nasir et al., 2011; Oyserman, 2005; Perkins, 2006). Student participants completed a comparable school climate measure. I surveyed students to obtain their perceptions of school climate using the *American School Climate Survey-Student Version* (ASC-S). Students responded to statements in five areas on the ASC-S: safety, bullying, trust, respect, and ethos of caring, racial self-concept, and general school climate (Perkins, 2006). The ASC-S uses a Likert scale with 1 being *strongly disagree* and 5 being *strongly agree*. The maximum score possible on the ASC-S was 125, and the lowest possible score was 25. The mean score for all student participants on the ASC-S was 99.21 ($SD = 9.10$). Mean scores and standard deviations for the ASC-S per school are listed in Table 6. Internal consistency for this measure for the present study was $\alpha = .76$ and considered acceptable (George & Mallery, 2011; Gliem & Gliem, 2003). Information on the internal consistency of this measure from previous studies was not available.

School connectedness. School connectedness, from the individual student perspective, links the individual student to the school-level in a developmental systems framework (Ford & Lerner, 1992). It is the individual student's perception that the adults within the school care about, respect, and trust him or her and includes emotional/affective and behavioral aspects. The measures utilized in this study were specifically designed to measure these constructs and have been used with African American students and students in suburban communities (Barber & Schluterman, 2008; Blum, 2005; Blum & Libbey, 2004; Bonny et al., 2000; Ford & Lerner, 1992; McNeely et al., 2010; Nasir et al., 2011; Whitlock, 2003, 2006).

I assessed students' connection to school using the *Student Connection Scales (SCS)* (Nasir et al., 2011). This scale assessed emotional/affective, academic, and behavioral connection to school based on students' reports. This scale was created by Nasir et al. (2011), is based on multiple scales found within the research literature, and has been used specifically with African American students (e.g., Finn, 1993; Resnick et al., 1997). Students self-report their attendance, work completion, importance of doing well in school, whether students consider themselves to be good students, and how often they take school seriously on this scale (Nasir et al., 2011). Student responses on the scale can range from 1-5 with 1 being *not at all* or *none* and 5 being *a lot*, *always*, or *very* (Nasir et al., 2011). The maximum score possible on the *SCS* was 177, and the lowest score possible was 37. The mean score for all student participants on the *SCS* was 140.80 ($SD = 11.90$). Mean scores and standard deviations for the *SCS* per school are listed in Table 6. Nasir et al. tested each subscale for inter-item reliability using Cronbach's alpha to yield the following: interpersonal connection $\alpha = .76$, $n = 107$; institutional connection $\alpha = .65$, $n = 99$; and academic identity $\alpha = .73$, $n = 108$ (Nasir et al., 2011). Internal consistency of this measure for the current study was $\alpha = .82$ and considered good (George & Mallery, 2011; Gliem

& Gliem, 2003). In addition to school climate and school connection measures, I used a survey to assess student's level of connection to their racial-ethnic identity.

Racial-ethnic connectedness. I used the *Close-Ended Racial-Ethnic Identity Scale (REI)* to examine students' racial-ethnic connectedness (Oyserman, 2005; Oyserman et al., 2001, 2003, 2007). The *REI* is a brief survey to examine students' racial-ethnic connectedness and awareness of racism as a member of his or her ethnic group (i.e., feelings of being treated differently because of being African American) (Oyserman, 2005; Oyserman et al., 2001, 2003, 2007). Items on this scale assess students' level of connectedness to his or her ethnic group. Responses on the *REI* can range from 1 to 5, with 1 being *strongly disagree* and 5 being *strongly agree*. The maximum possible score on the *REI* was 60, while the lowest possible score was 12. The mean score for all student participants on the *REI* was 43.83 ($SD = 6.79$). Mean scores and standard deviations for the *REI* per school are listed in Table 6. The *REI* was moderately reliable in previous studies conducted by Oyserman et al. (2007). In goodness-of-fit tests, the *REI* was a good fit for both younger and older African American adolescents, males and females (Oyserman et al., 2007). Internal consistency of this measure for the current study was $\alpha = .75$ and in the acceptable range (George & Mallery, 2011; Gliem & Gliem, 2003).

Table 6

Mean Scores and Standard Deviations on the ASC-S, SCS, and REI

	School #1			School #2			School #3		
	<i>n</i>	<i>M</i>	SD	<i>n</i>	<i>M</i>	SD	<i>n</i>	<i>M</i>	SD
ASC	12	101.58	6.80	48	100.42	7.98	24	95.63	11.28
SCS	12	141.42	9.90	48	141.69	11.39	24	138.71	13.85
REI	12	45.33	7.86	48	44.94	5.79	24	40.88	7.44

Table 7

Mean Scores and Standard Deviations on the ASC-S, SCS, and REI for Students With and Without Disabilities

	With Disabilities	Without Disabilities
Hours of Extracurricular Activities	4.54 (<i>SD</i> = 4.14)	7.19 (<i>SD</i> = 6.79)
ASC-S	99.33 (<i>SD</i> = 8.19)	99.17 (<i>SD</i> = 9.50)
SCS	138.58 (<i>SD</i> = 14.94)	141.68 (<i>SD</i> = 10.45)
REI	43.75 (<i>SD</i> = 9.74)	43.87 (<i>SD</i> = 5.27)
Number of Discipline Referrals	.83 (<i>SD</i> = 1.71)	.36 (<i>SD</i> = 1.10)
GPA	2.58 (<i>SD</i> = 0.69)	3.03 (<i>SD</i> = 0.80)

Procedures

Institutional Review Board approval, consent and recruitment. Once schools met the criteria to be included in the study, I consulted with contacts I have at local schools to discuss the study and to ask school administrators whether they were interested in participating in the study. If school administrators were interested, I requested a letter from the District to submit with the

Institutional Review Board application. I received Institutional Review Board approval on April 12, 2013 for school #1. I applied for and was granted approval from the IRB for school #2 on March 17, 2014 and for school #3 on September 4, 2015. I began to recruit licensed professional staff members from each school after I received IRB approval (see Appendices C and D).

Licensed professional staff members were sent information about the study, the link to the survey, and compensation information via email. They consented to participate in the survey online, prior to beginning the survey (see Appendix E). I also presented information about the study, the link to the survey, and compensation information at a staff meeting at school #3 to recruit additional staff participants (see Appendix F). Licensed professional staff members were given two weeks to complete the survey once the link was emailed. Follow-up emails asking licensed professional staff members to consider participating in the study were sent out as well (see Appendix G).

After recruiting and receiving surveys back from 70% of licensed professional staff members, I recruited African American students to participate in the study by gaining permission to distribute flyers to the parents/guardians of African American students (see Appendix H). I sent information, including the parent/guardian consent form (see Appendix I) through the schools' listservs, mail, and by email. Overall, recruitment took four years to gain enough student participants to conduct data analysis. My goal was to have 30 students in each group, that is, 30 African American students with disabilities and 30 African American students without disabilities for data analysis.

The timeline for my recruitment process is illustrated in Figure 2. I began recruitment in school #1 once I received IRB approval, which was during the spring semester of the 2012-2013 school year, and I recruited licensed professional staff members first. I received the minimum of

70% in responses on the school climate surveys from licensed professional staff members at school #1 and then began to recruit African American students with and without disabilities from school #1. I returned to school #1 during the fall semester of the 2013-2014 school year to recruit additional students, while at the same time, I continued to contact additional school sites to add to my study. No additional students from school #1 participated in the study following the 2013-2014 school year. Only African American male students with and without disabilities were included during the 2012-2013 and 2013-2014 school years. I attempted to return to school #1 in subsequent school years to recruit additional students but was told that it was not an ideal time and to follow-up at a later date. I followed-up multiple times but did not receive responses to my follow-up contacts.

School #2 gave approval for me to conduct my research there, and I applied and received IRB approval to include school #2 during the 2013-2014 school year. I received approval from the IRB in March of 2014 to include school #2 and began recruiting licensed professional staff members from this school. I received the minimum of 70% in responses from licensed professional staff members at school #2, then began to recruit African American male students with and without disabilities from this school. I continued recruiting students from school #2 during the 2013-2014, 2014-2015, and 2015-2016 school years. I amended the study to include African American females during the 2014-2015 school year due to the challenges in recruiting sufficient numbers of African American male students for data analysis. I received IRB approval to include African American female middle school students with and without disabilities on December 10, 2014. I received approval from a school district to add an additional school (school #3) and applied for and received IRB approval to add school #3 on September 4, 2015. I continued to recruit from school #2 and began recruiting from school #3 at the same time.

Additionally, I frequently attended special events including a Martin Luther King, Jr. Day event, mentoring club sessions, parent/guardian event, and a summer program) to recruit students. With just enough students to complete data analysis, I considered data collection complete at the end of the 2015-2016 school year.

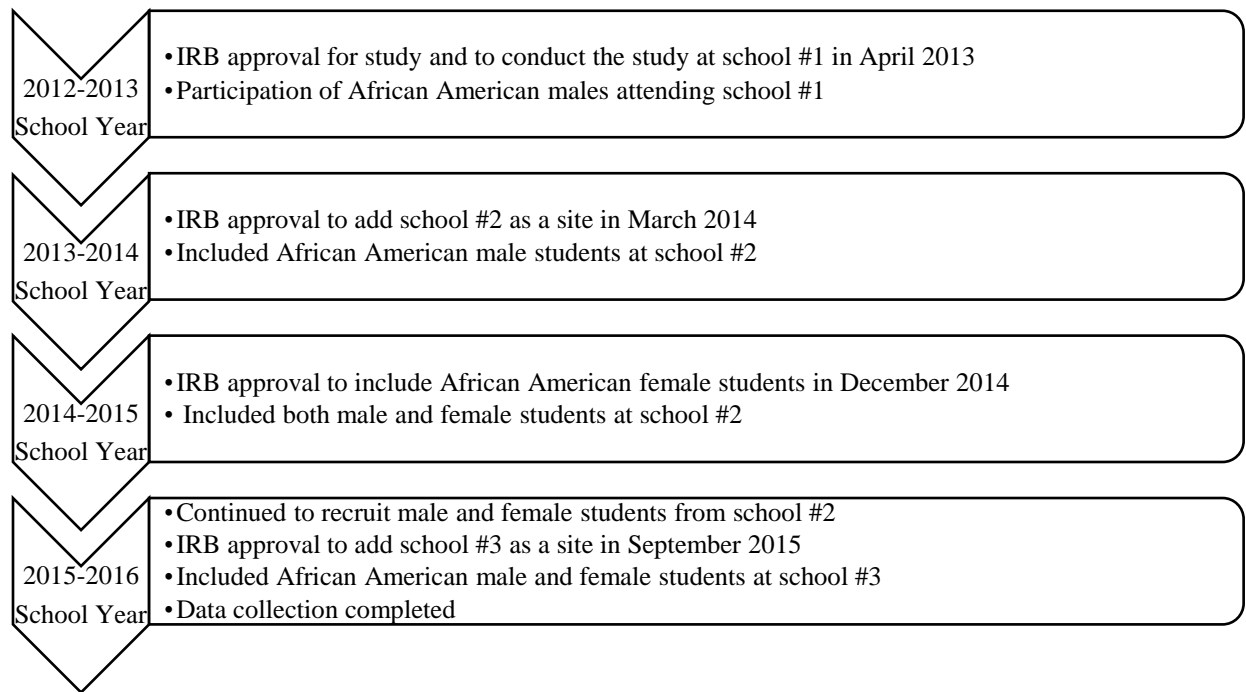


Figure 2. Timeline of the recruitment process.

Survey administration and compensation. Licensed professional staff members completed the surveys at their convenience, and completion of the *ASC-T* took between 5-7 minutes. I sent licensed professional staff members a five-dollar electronic Starbucks gift card to thank them for participating in my study if they entered their email address at the end of the survey.

Survey administration for students occurred during students' lunch, study hall, or homeroom period. Students were given assent forms to sign at the survey administration (see Appendix J). I read the surveys to all students to prevent barriers to participation due to reading ability and to be able to answer students' questions regarding definitions of words (Gorard, 2001;

McMahon et al., 2008). The administration of the surveys for students took no longer than a 40-minute class period, with completion time being closer to 20 minutes. I gave a \$10 gift card (i.e., iTunes, Google Play, or a fast food restaurant) to every student who completed all of the surveys.

Data screening. I used an online survey and data management system (i.e., Qualtrics), computer-based statistical program (i.e., SPSS), and Microsoft Excel spreadsheets to analyze and manage the data. I reviewed surveys for missing items following student completion. Once collected, the surveys were coded using the codebook I developed. I developed a codebook for both the paper and online surveys to identify values for each code (Fink, 2006; Fowler, 1993). The codebook included the questions, descriptions of codes, numerical values given to each response (e.g., 5 = *strongly agree*, 4 = *agree*, 3 = *sometimes*, 2 = *disagree*, and 1 = *strongly disagree*), including non-responses, and variables associated with the surveys (Fink, 2006). If surveys were incomplete, the missing items were pointed out to the students, and they were given the option to complete them at the time of survey completion. If students skipped items on the surveys and I did not catch the skipped item, or if a student did not wish to answer that particular item on a survey, I coded it as a 0, and the non-response did not add to the total composite score on the surveys.

Non-responses on the student information form, such as missing discipline information, were coded as 99. Additionally, I highlighted items to be reverse-coded prior to coding the survey to prevent the likelihood of missing this step. Items were reverse-coded so that higher numbers indicated a more favorable response to an item in negatively worded statements. In such instances, 1 = *strongly agree* and 5 = *strongly disagree*. Reverse-coded items were inputted using red, again, as an accuracy measure. Each variable was assigned a numerical value for purposes of inputting the information into the software program (Connolly, 2007).

Once coded, I inputted the data into an Excel spreadsheet. All data were checked at least three times to ensure information was entered correctly. Item responses for the *ASC-S*, *ASC-T*, *SCS*, and *REI* were added to obtain a composite score for each scale. Higher composite scores indicated a more positive view of school climate, a higher level of connection to school, and stronger racial-ethnic connectedness. After all data were inputted into Excel, one spreadsheet was created with the final variables. This spreadsheet was then checked for accuracy and imported into SPSS. I then ran frequency data in SPSS and Qualtrics and analyzed the frequency and descriptive data per school for each of the measures. I analyzed the data using SPSS to address each of the three research questions.

IV. Results

Data Analysis Plan

I examined univariate data, the relationships among all the variables, and students' individual characteristics (e.g., disability status and racial-ethnic connectedness) to address my research questions. I ran correlational analysis and linear regression; statistical tests which comprise the general linear model (GLM) (Johnson & Christensen, 2008; Leech, Barrett, & Morgan, 2011). In addition, I examined descriptive statistics including means and standard deviations for each of the measures (Leech et al., 2011). Key assumptions of the GLM are that there is a normal distribution, response and explanatory variables are linearly related, and the variance is the same for all responses (Dobson & Barnett, 2008). All assumptions were met for this study.

I conducted one-way ANOVA tests with pairwise comparisons to ensure that the three schools did not differ significantly on school climate for inclusion in the regression model and to ensure that significant differences in climate did not affect other variables. The one-way ANOVA tests were not significant for licensed professional staff members' perceptions of school climate (*ASC-T*), students' perceptions of school climate (*ASC-S*), or students' perceptions of school connectedness (*SCS*). The analyses for the *ASC-T*, $F(2) = 2.12, p = .12$, *ASC-S*, $F(2) = 2.81, p = .06$, and *SCS*, $F(2) = .52, p = .60$, did not show significance. The test was significant for *REI*, $F(2) = 3.39, p = .04$. Specifically, *REI* for schools #2 and #3 were slightly significant.

I used correlational analysis to determine the extent to which the variables were correlated and to explain the variance between the variables, that is, licensed professional staff members' perceptions of school climate and African American students' perceptions of school climate and school connectedness, prior to including them in the regression model (Gorard,

2001). I used a multiple regression model and included licensed professional staff members' and students' perceptions of school climate, students' perceptions of racial-ethnic connectedness, disability status (i.e., whether a student was identified with a disability), gender, number of discipline referrals, hours of participation in extracurricular activities, and academic achievement (i.e., GPA) as predictors of African American students' perceptions of their connectedness to school. All variables were entered in the model at once. I then reviewed the scatterplots and *p* levels for each variable for normality and significance.

Research question 1: Correlational analysis. I conducted a correlational analysis to examine the relationships between licensed professional staff members' and African American students' perspectives of school climate. Figure 3 is the scatterplot showing the relationship between licensed professional staff members' and students' perceptions of school climate. Licensed professional staff members' perspectives of school climate were not significantly correlated to students' perspectives of school climate. The results of the correlational analysis are presented in Table 8.

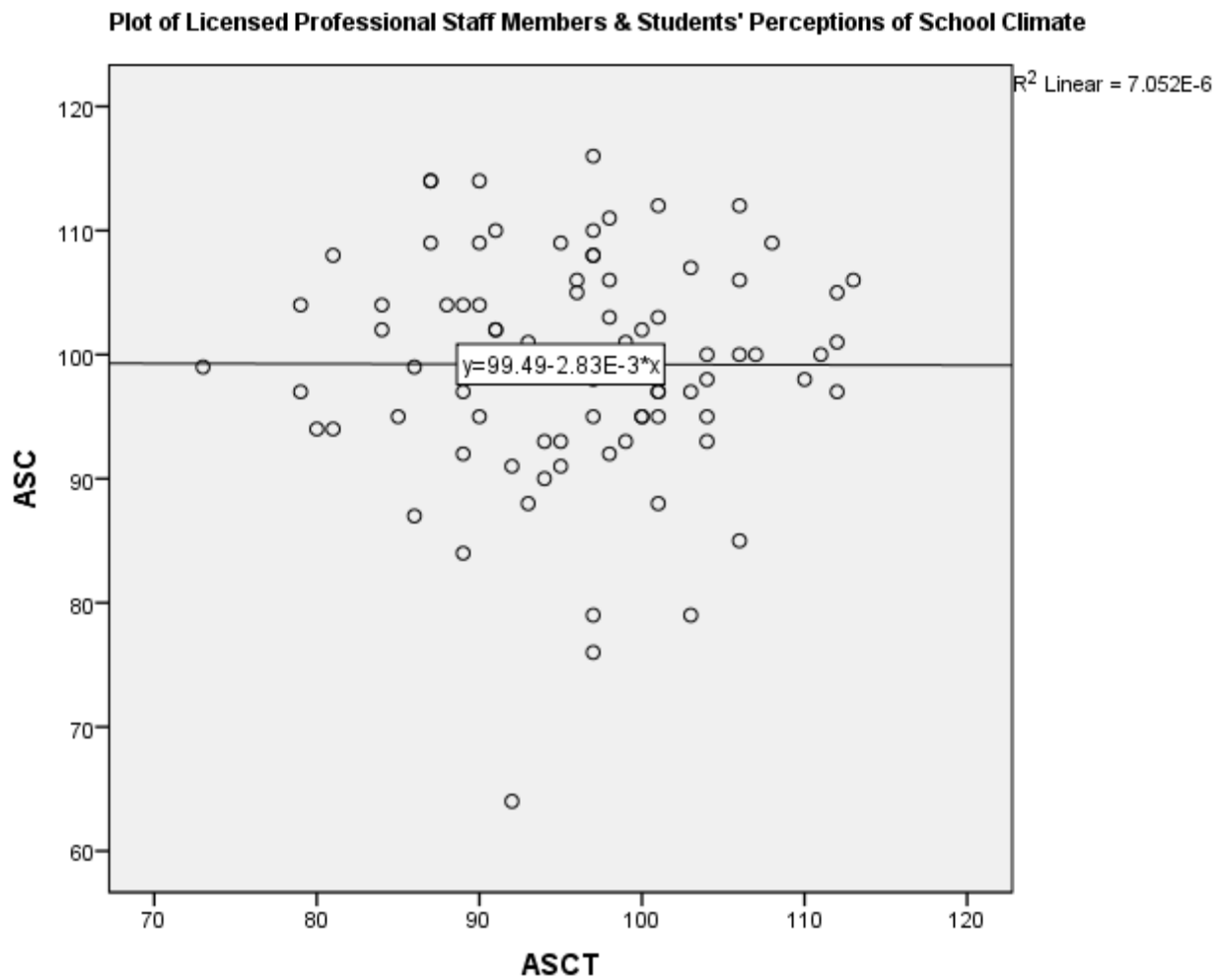


Figure 3. The scatterplot showing licensed professional staff members' perceptions of school climate and students' perceptions of school climate.

Note. ASC=American School Climate Survey-Student Version (Perkins, 2006), and ASCT=American School Climate Survey-Teacher Version (Perkins, 2006).

Students' perspectives of school climate and connectedness were significantly correlated. As students' perspectives of school climate increased, so did their individual perceptions of school connectedness. Figure 4 is the scatterplot illustrating this relationship.

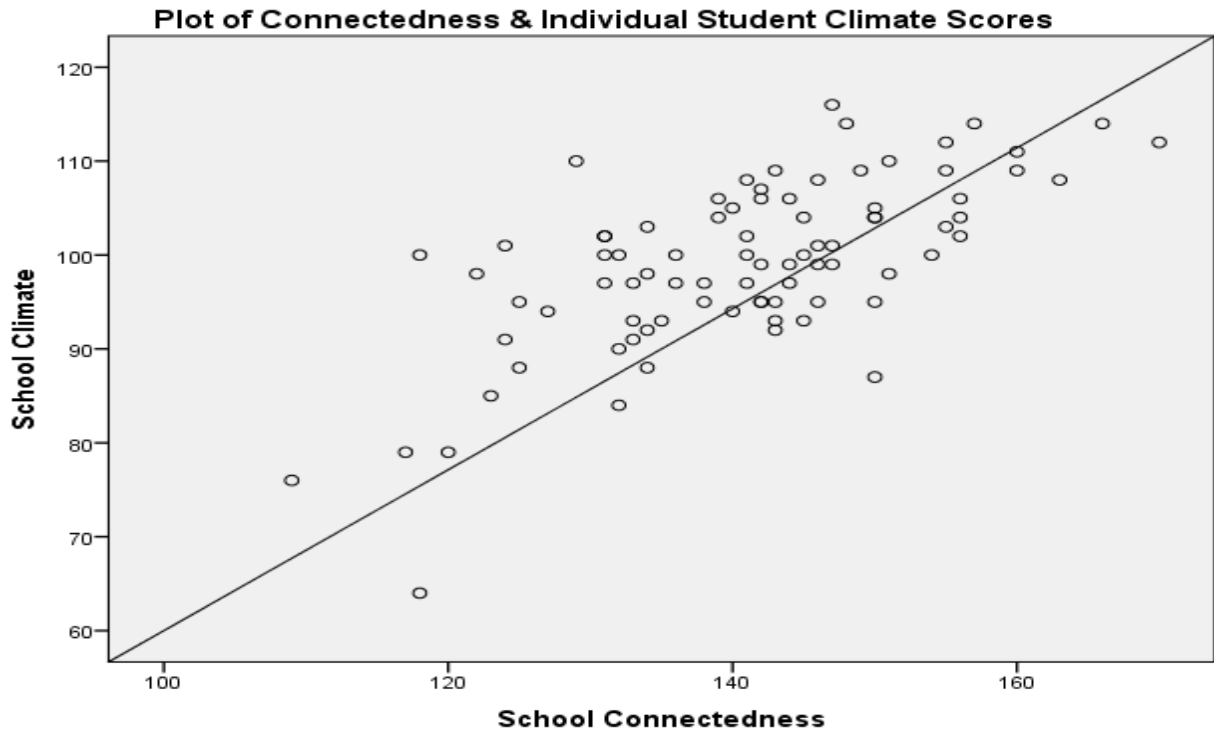


Figure 4. The scatterplot showing the linear relationship between students' perceptions of school climate and connectedness.

Table 8

Correlations Among Predictor Variables (N = 82¹)

Variable	1	2	3	4	5	6	7	8	9
1.School Connectedness	1.00	0.01	--	--	--	--	--	--	--
2.Gender	0.01	1.00	--	--	--	--	--	--	--
3.GPA	0.18	0.08	1.00	--	--	--	--	--	--
4.School Climate-Student	0.68*	0.03	0.02	1.00	--	--	--	--	--
5.Extracurricular Hours	-0.09	0.13	0.17	-0.03	1.00	--	--	--	--
6.Disability	-0.12	0.08	-0.26	0.01	-0.20	1.00	--	--	--
7.Discipline	-0.12	-0.24	-0.35	0.07	-0.15	0.16	1.00	--	--
8.Racial-Ethnic Connectedness	0.41	-0.03	-0.02	0.44	-0.08	0.00	-0.06	1.00	--
9.School Climate-Licensed Staff	-0.01	0.16	-0.18	-0.00	-0.13	0.16	-0.04	0.06	1.00
<i>M</i>	140.9	1.32	2.90	99.21	6.49	1.29	.50	43.73	95.79
<i>SD</i>	12.02	.47	.80	9.15	6.30	.46	1.32	6.82	8.65

* $p < .05$.¹The variation in sample size is because the two students missing discipline information were dropped from the model.

Research question 2: Correlational analysis. I conducted a correlational analysis to examine the correlations between licensed professional staff members' perspectives of school climate and African American students' perspectives (i.e., students' perceptions of school climate and connectedness) and individual characteristics (i.e., disability status, racial-ethnic connectedness, gender, grade point average, hours of participation in extracurricular activities, and number of discipline referrals). The results are presented in Table 8. Results ($p < 0.05$) indicated that African American students' perspectives of school climate and their connection to school were significantly correlated (0.68). Students' perceptions of school connectedness and racial-ethnic connectedness (0.41) and students' perceptions of racial-ethnic connectedness and students' perceptions of school climate (0.44) were moderately correlated. In this study, African American students who reported positive perceptions of school climate also tended to be more connected to school.

Research question 3: Multiple regression. I used multiple regression to examine which of the school- and individual-level variables predicted school connectedness among African American students with and without disabilities. I included the following variables as predictors in the model: 1) licensed professional staff members' perceptions of school climate; 2) African American students' perceptions of school climate; 3) gender; 4) academic achievement (i.e., GPA); 5) hours of participation in extracurricular activities per week; 6) disability status; 7) number of discipline referrals; and 8) African American students' racial-ethnic connectedness. Overall, the model was significant, $F(8) = 10.5$, $p = < .05$, with 54% of the variance in school connectedness explained by the predictors in the model. I found that African American students' perceptions of school climate were the only significant predictor of their perceptions of school connectedness. I provide the results of the regression analysis in Table 9.

Table 9

Summary of Regression Analysis for Variables Predicting Students' Perceptions of School Connectedness (N = 82¹)

Variable	B	SE B	β	Sig.
Gender	1.96	2.14	.077	0.37
GPA	1.93	1.32	0.13	0.16
School Climate- Student	0.81	0.12	0.62	0.00*
Extracurricular Hours	-0.24	0.16	-0.13	0.13
Disability	-2.93	2.21	-0.12	0.20
Discipline	-0.84	0.81	-0.09	0.30
School Climate- Licensed Staff	-0.01	0.12	-0.01	0.95
Racial Ethnic Connectedness	0.22	0.16	0.12	0.18
R^2	.54			
F	10.5			

* $p < .05$.

¹The variation in sample size is because the two students missing discipline information were dropped from the model.

V. Discussion

The purpose of the present study was to examine the constructs of school climate, as perceived by licensed professional staff members and students, and individual school connectedness as perceived by African American middle school students with and without disabilities. My goal was to study whether the correlations between these constructs were significant and whether variables at the individual student-level, such as disability and racial-ethnic connectedness, predicted African American students' perceptions of school connectedness. I examined the correlations between licensed professional staff members' perspectives of school climate and African American students' perspectives of school climate and connectedness.

I used both school- and individual-level variables in this study. Individual-level variables included: students' perspectives of school climate, students' perspectives of school connectedness, gender, disability status, racial-ethnic connectedness, GPA, hours of participation in extracurricular activities, and number of discipline referrals. All the individual-level variables, except for disability status, GPA, and number of discipline referrals were reported by the students. School-level variables included licensed professional staff members' perceptions of school climate, as well as school descriptive information. One hundred forty-one licensed professional staff members, and eighty-four African American students with and without disabilities in sixth through eighth grades participated in this study. The present study was conducted in three ethnically diverse middle schools located in close proximity to each other. In this chapter, I will summarize the findings, discuss strengths and limitations, and suggest future research and implications within the context of my research questions.

Correlations Between African American Students' Perceptions of School Climate and Connectedness

I conducted one-way ANOVA tests with pair-wise comparisons to determine whether the licensed professional staff members' perceptions of school climate, students' perceptions of school climate, students' perceptions of connectedness, and racial-ethnic connectedness differed significantly among the three schools to prepare to include data from all three schools in the regression model. Mean scores for licensed professional staff members' and students' perceptions of school climate were quite similar with the mean score for licensed professional staff members being 96.16 and the mean score for students being 99.21. The ANOVA tests did not detect differences between the mean scores for licensed professional staff members' and students' perceptions of climate or connectedness, thus meeting assumptions for multiple linear regression (i.e., variance is the same among variables) (Dobson & Barnett, 2008). Both licensed professional staff members and students in the schools in this study reported similarly on these constructs, and students across the three buildings had similar mean scores on the school climate and connectedness measures as well. This demonstrates that for this sample of African American students, perceptions of school climate and connectedness were similar. Overall, African American students reported positive perceptions of school climate and connectedness in this study.

The one-way ANOVA test conducted for *REI* was significant, $F(2) = 3.39$, $p = .04$, with African American students at school #2 reporting more positive perceptions of this construct than students at school #3. The mean score for *REI* for school #2 was 44.94, and the mean score for school #3 was 40.88. Overall, school #2 and school #3 are similar in many ways and why I would expect non-significant results on the ANOVA test for the *REI* measure. Both offer robust

course options, extracurricular opportunities, and students at both schools have the opportunity to participate in a weekend evening intramural sports group supervised by a local agency. During the time of this research study, school #2 offered an afterschool youth mentoring group for students during the week with staff volunteers as supervisors. Mentoring sessions sought to support students in developing a positive self-esteem, positive peer relationships, and leadership skills. Perhaps, the afterschool mentoring program at school #2 was one factor in supporting students' positive perspectives of their racial-ethnic connectedness.

African American students' perceptions of racial-ethnic connectedness and their perceptions of school connectedness were moderately correlated (0.41) demonstrating that students who reported increased levels of racial-ethnic connectedness tended to report increased levels of school connectedness. Students' perceptions of racial-ethnic connectedness and students' perceptions of school climate (0.44) were moderately correlated demonstrating that students who reported high levels with respect to their perceptions of school climate also reported high levels of racial-ethnic connectedness. Prior research has found that connection to one's racial-ethnic background can serve as a protective factor for African American students with respect to negative perceptions others may have of their racial-ethnic group and can support a strong academic identity (Altschul et al., 2006; Nasir et al., 2009; Oyserman et al., 2001, 2003). While connection to one's racial-ethnic background alone was not significant in this study, perhaps African American students' reports of racial-ethnic connectedness in conjunction with their positive perspectives of school climate together, can promote a positive connection to school for this group of middle school students.

School Climate as a Predictor for African American Students' School Connectedness

African American students' perceptions of school climate and connectedness were significantly correlated in the present study (0.68, $p > 0.05$ level). This finding is not surprising

in that students who reported more positive views of school climate were likely to report a higher level of connection to school, which aligns with previous research (Loukas et al., 2006; Slaughter-Defoe & Glinert-Carlson, 1996; Thompson et al., 2006; Wilson, 2004). Items on the school climate and connectedness scales allowed me to investigate the emotional/affective aspects of school connection, including students' perceptions of being cared for and respected by licensed professional staff members (Nasir et al., 2011; Perkins, 2006, 2007). Feelings of being cared for and respected by the adults in the school have been shown to foster a positive emotional/affective connection to school in previous research (Loukas et al, 2006; McMahon et al., 2008; Pham & Murray, 2016; Slaughter Defoe & Glinert Carlson, 1996). A positive school climate where students feel as if the teachers respect and support them can lead to increased connection to school for students (Blum, 2005; Blum & Libbey, 2004; Wilson, 2004; Wingspread, 2003).

Licensed professional staff members' perspectives of school climate were not significantly correlated with African American students' perceptions of school climate or connectedness in this study. I would expect the licensed professional staff members' and students' perspectives with respect to the school climate to be correlated because school climate is a construct at the school-level in a developmental systems framework that can affect students' perceptions at the individual-level. Additionally, I would expect that licensed professional staff members' and African American students' perspectives of school climate and students' perspectives of connectedness to be correlated because I used measures that examined similar constructs. However, it is possible that since the *ASC-S* and *ASC-T* measure similar constructs, there was no significant correlation between the *ASC-T* and *SCS* due to the nested nature of the data causing a lack of power to be observed (Osborne, 2000). Other possibilities for the lack of

significant correlation between licensed professional staff members' perspectives of school climate and African American students' perceptions of school climate and connectedness include the context within which the data were collected and the different experiences within the school's climate that licensed professional staff members and student participants can have (De Los Reyes & Kazdin, 2005). The context within which the connection to school is developed can shape one's perspectives and how s/he experiences it. In this study, licensed professional staff members and African American students with and without disabilities considered the context to be positive.

Individual-level variables as predictors of school connectedness for African

American students. I hypothesized that individual-level variables (i.e., students' perceptions of school climate, gender, GPA, hours of participation in extracurricular activities, disability status, and racial-ethnic connectedness) would predict African American students' perceptions of connectedness to school. I thought that female students, students with higher grade point averages and hours of participation in extracurricular activities, students without disabilities, and students with higher racial-ethnic connectedness would have higher levels of school connectedness, yet none did. Previous research has indicated that female students, students who participate in more extracurricular activities, students without disabilities, and students who reported high levels of racial-ethnic connectedness tend to report higher levels of connection to school (Bonny et al., 2000; Booth & Gerard, 2014; Brown et al., 2002; Goodenow, 1993; Loukas et al., 2016; Marcus et al., 1991; McNeely et al., 2002; Nasir et al., 2009, 2011; Niehaus et al., 2012; Thompson, 2002; Way et al., 2007). In this study, the mean number of hours that students participated in extracurricular activities was 6.49 ($SD = 6.30$) demonstrating that on average, students spent approximately six hours per week participating in extracurricular activities. While

participation in extracurricular activities did not predict African American students' perceptions of school connectedness in this study, perhaps because the students already had a positive perception of the school's climate and were connected to school, participation in extracurricular activities can promote a positive connection to school for many students, can decrease participation in risky behaviors, can positively affect students' grades, can support the development of positive interactions with peers and adults and can give students access to additional social contacts beyond their inner circle (CDC, 2009; Mahoney & Cairns, 1997; Mahoney, Cairns, & Farmer, 2003; National Forum to Accelerate Middle-Grades Reform, 2006; Stewart, 2007). For African American students in particular, participation in extracurricular activities has been found to decrease feelings of anxiety and worthlessness (Fredricks & Eccles 2006).

Student perceptions of school climate and connectedness were the only significant variables when considering multiple variables related to school connectedness. In other words, the isolation of the variables that comprised the *SCS* within the model did not predict school connectedness for this group of African American middle school students. Perhaps, having a racially-ethnically homogenous sample nested in three schools in similar communities, allowed the strength of the relationship between student perceptions of school climate and connectedness to be observed and to hone in on the perceptions of African American students attending racially-ethnically diverse middle schools (Thompson, 2002). Additionally, it is plausible that only African American students' perceptions of school climate were significant and that the other predictors in the model were not due to lack of power given the nested nature of the data (Osborne, 2000).

Overall, individual-level variables, other than students' perceptions of school climate, did not predict students' perceptions of school connectedness in the present study. Perhaps, when examining African American middle school students' perceptions of school climate and connectedness within an ecological model, it is the individual student's perceptions of school climate that has the largest effect on the individual variable of school connectedness, rather than multiple individual-level variables. This finding aligns with research conducted by Stewart (2007). Similarly, Stewart (2007) found that individual student characteristics, rather than school factors (e.g., level of poverty, urban location, school size, proportion of non-white students, school social problems, and school cohesion), were strongly associated with academic achievement when examining African American high school students' perceptions of their connection to school. In the present study, African American middle school students' perceptions of school climate were the only predictor of their perceptions of school connectedness. This finding demonstrates the linear relationship between the constructs of school climate and connectedness and shows that by predicting student views of school climate, connectedness can also be predicted for middle school African American students attending racially-ethnically diverse suburban schools.

Strengths

The combination of an 100% African American student sample, setting of the study, nested nature of the study, inclusion of licensed professional staff members' and students' perceptions of school climate, obtaining perceptions of school climate from 70% of licensed professional school staff members, and the use of student perceptions of connectedness and racial-ethnic connectedness, all make this study unique in its contribution to the current body of research. This study examined the relationships between a school-level variable and multiple

individual-level variables for African American middle school students with and without disabilities. My examination of school connectedness for African American middle school students with and without disabilities using a developmental systems framework highlighted the dynamic and nested nature of this construct at the individual-level for the students in this study. There is a growing body of literature that has examined the hierarchical nature of students nested in schools, fits a developmental systems theory, and is the logical next step in future school connectedness research (Ford & Lerner, 1992; Hopson et al., 2014a; Hopson et al., 2014b; Koth, Bradshaw, & Leaf, 2008; Thompson et al., 2006).

I intentionally included only African American students due to the risk African American students, and more specifically African American males and students with disabilities, likely face in schools (Noguera, 2003; Simmons et al., 1991; Svetaz et al., 2008; Wong et al., 2003). Prior research has found that connection to school can protect African American students from risk and that African American students tend to feel less connected to school, particularly as they matriculate in grade level (Altschul et al., 2006; Bonny et al., 2000; Brown et al., 2003; Ding & Hall, 2007; Eccles & Roeser, 2011; Hamre & Pianta, 2001; McNeely et al., 2002; Midgley et al., 1989; Nasir et al., 2009, 2011; Oyserman et al., 1995, 2001, 2003; Phinney & Tarver, 1988; Pianta, 1999; Simmons et al., 1991; Wilson, 2004; Wong et al., 2003).

The current study included African American students with and without disabilities (i.e., emotional disabilities, learning disabilities, speech-language impairments, and ADHD). There is a growing body of research addressing school connectedness for students with disabilities and there continues to be a need for this type of research (Brown et al., 2003; Deshler et al., 2004; McMahon et al., 2008; Murray et al., 2008; Murray & Greenberg, 2000; Murray & Malmgren, 2005; Murray & Naranjo, 2008; Pham & Murray, 2016; Svetaz et al., 2000; Thompson, 2002).

Disability status did not affect students' perceptions of school climate or connectedness in this study, in contrast to prior research that has found that students with disabilities may feel disconnected from school (Brown et al., 2003; Pham & Murray, 2016; Thompson, 2002).

School connectedness has been found to be affected by school-level characteristics, such as location and size of school, in addition to individual-level characteristics (McNeely et al., 2002; Stewart, 2007). Few studies have been conducted in racially-ethnically diverse middle schools and, in fact, students' connection to school has been found to be lowest in schools that are racially-ethnically diverse (McNeely et al., 2002). The present study was conducted in three middle schools with similar demographics that were located in neighboring communities. The percentage of African American students attending the schools was at least 25% and the percentage of students with disabilities attending the schools was at least 9%. Findings from prior research (McNeely et al., 2002) indicated that decreases in students' perceptions of school connectedness were observed as school size increased, yet even though the schools varied in size in the present study, school size did not appear to affect perceptions of school climate and connectedness.

Limitations

In addition to the strengths of this study, there are limitations. First, the sampling method in this study is a limitation. The study was exclusive to African American students attending three diverse middle schools in a Midwestern state. In other words, the sampling was not random. This sampling method also proved to be quite challenging in terms of the ability to find willing schools and districts with the desired percent of African American students to participate in the study. I initially limited my recruitment efforts to African American male students but then expanded my recruitment efforts to include African American females as well. It took four

school years to recruit enough African American student participants with and without disabilities to conduct data analysis. While I found it challenging to conduct this study due to the amount of time it took to obtain a sufficient number of student participants for data analysis, this does not lessen the importance of this type of research.

Data were collected over the course of four school years, and it is unknown as to whether licensed professional staff members' and students' perceptions of school climate and connectedness changed over the years since the data were collected at one point in time. Perceptions can change, and it is possible that both licensed professional staff members' and students' perceptions changed during this study. Of particular note is that there was a new principal when I began collecting data at school #3 (i.e., the 2015-2016 school year), and it is unknown whether the new leadership affected licensed professional staff members' and students' perceptions of school climate and connectedness. Perhaps, if I began data collection at school #3 in previous school years, I may have obtained different results with respect to school climate and connectedness.

Akin to sampling method is sample size. This study had 141 licensed professional staff participants and 84 student participants. Consequently, with such small numbers of female student participants because female participants were added later in the recruitment process, there was a noticeable impact when a few students dropped out of the study, as did in the current study. It is unknown whether the majority of the sample were licensed teachers or related services providers. In order to maintain confidentiality of survey responses, licensed professional staff members were not asked to select their role within the school, rather they affirmed that they were either a licensed teacher, administrator, social worker, speech-language pathologist, school psychologist, or occupational therapist by checking a box prior to starting the online survey.

There was an uneven distribution of African American students with and without disabilities (i.e., 28.6% students with disabilities and 71.4% without disabilities) and by gender (69% male and 31% female) in this sample. The uneven distribution of student participants limited the generalizability of the findings and the type of analyses that could be done. Findings in this study illustrate how African American middle school students at these three schools perceive school climate, connectedness, and racial-ethnic identity. Additionally, with too few members of students in each category, such as female students with disabilities and male students with disabilities, hierarchical modeling, an analysis that would truly deal with the nested nature of the data, was unable to be conducted. The nested nature of the data possibly affected the level of power observed in the correlational and regression analyses and affected the reliability of study outcomes since students are nested in schools nested within a community (Justice, 2009; Osborne, 2000). This means that participants are more homogenous within the school setting than within the population in general in terms of experiences, family background, and socioeconomic status (Osborne, 2000). Even though I gathered data on the percent of students considered to be low income at each school, I did not request information such as students' socioeconomic status or parents' educational background. Future research may wish to separate out additional individual-level factors and to analyze these characteristics in conjunction with other school- and individual-level factors to provide additional information on students' perceptions of school climate, connectedness, and racial-ethnic connectedness.

Data for this study relied mainly on self-report from licensed professional staff members and students, and I knew many of the staff members and some of the students who participated in the study. Participants may have attempted to present the school or themselves in a more favorable light for fear of potential consequences or to satisfy me, especially since I was the one

administering the surveys to the students (De Los Reyes & Kazdin, 2005; McNamara, 1994).

The desire for participants to portray themselves in a favorable light may led to informant discrepancies (i.e., differences between staff and students' perceptions) but the direction of that relationship remains unknown (De Los Reyes & Kazdin, 2005). I assigned confidential identifiers to students to lessen this. Future research conducted in schools where the researcher does not have a connection, while posing a challenge to even access the school to conduct the research, could lessen this limitation.

The way in which I conducted the research posed a limitation as did the measures I used. I chose established school climate, school connectedness, and racial-ethnic connectedness measures for use in this study. The measures I chose included items examining perceptions of school climate, connectedness, and racial-ethnic connectedness; however, there may be other items, such as measures that directly assess students' relationships with specific teachers, that were not addressed on the scales I used and may provide additional information on these constructs for African American students. Linking students to specific teachers would allow for the analysis of nested data (Osborne, 2000). Previous research on student-teacher relationships, a key element of an individual's emotional/affective connection to school, has included gathering both students' and teachers' perspectives of the student-teacher relationship but may be expanded to include perceptions of school climate in addition to the examination of student-teacher relationships (Brown et al., 2003; Decker et al., 2007; Deshler et al., 2004; Hamre & Pianta, 2001; Marcus et al., 1991; Midgley et al., 1989; Murray & Greenberg, 2000; Murray & Malmgren, 2005; Murray & Naranjo, 2008; Murray & Zvoch, 2010; Nasir et al., 2011; Pianta, 1999; Roeser & Eccles, 1998; Storz, 2008; Thompson, 2002; Whitlock, 2006).

Internal consistency information for the school climate scales was unavailable. While there are many school climate measures to choose from, finding appropriate measures that measured the constructs I was examining and that could be completed in a reasonable amount of time by both licensed professional staff members and students was a challenge (Ramelow, Currie, & Felder-Puig, 2015). In general, the most popular school climate measures tend to provide acceptable reliability information; however, validity testing is not sufficient with the majority of the measures (Ramelow et al., 2015). Future research may wish to explore the use of school climate, connectedness, and racial-ethnic connectedness measures that have acceptable reliability and validity, and that include aspects of the constructs that were not included in the measures I used in the present study.

Concerns have been noted in the measurement and interpretation of students' perceptions of school connectedness (Barber & Schluterman, 2008; McNeely & Falci, 2004; Nasir et al., 2011). There are multiple definitions and components (i.e., emotional/affective and behavioral) of school connectedness making it difficult to find one measure to examine this dynamic construct (Barber & Schluterman, 2008; Blum, 2005; Blum & Libbey, 2004; Bonny et al., 2000; Libbey, 2004; McNeely et al., 2002, 2010; McNeely & Falci, 2004; Nasir et al., 2011; Resnick, 1997; Whitlock, 2003, 2006). In the present study, I intentionally chose the Nasir et al. (2011) measure because it was constructed based on previous school connectedness research, was used with racially-ethnically diverse students, and measured the emotional/affective and behavioral components of school connectedness (Nasir et al., 2011). The Nasir et al. (2011) study highlighted concerns with predictive validity of the SCS, that is, whether asking students about their perceptions of the school environment could be used to predict similar insights as they interact within smaller contexts within the school. My study found that asking students about

their perceptions of the school's climate can predict their perceptions of school connectedness, yet it is unclear if the opposite is also true.

Implications for Future Research

Notwithstanding the limitations, there are implications for promoting positive perceptions. African American middle school students with and without disabilities can develop of school climate and connectedness. Understanding African American students' perceptions of school climate, school connectedness, and racial-ethnic connectedness with respect to school-level and individual-level factors are critical issues within the field of education, warrant additional research, and have policy and practice implications. First, in-depth knowledge of students' developmental stage and the context in which this development occurs is imperative to better support students at the middle level. The Association of Middle Level Education (2010) calls for "developmentally responsive" schools in which knowledge of the needs of young adolescents are intentionally embedded within the school's structure, curriculum, and instructional practices. Furthermore, when schools are developmentally responsive to students' needs, they support the development of protective factors against risk students may face in schools (Altschul et al., 2006; Eccles et al., 2006; Oyserman et al., 1995; Oyserman et al., 2003; Pianta, 1999; Simmons et al., 1991; Wong et al., 2003). The body of research literature would benefit from more studies conducted in middle schools with students with disabilities to better understand the effects of school- and individual-level variables on students' perceptions of school connectedness and climate. A question to be considered is whether individual- and school-level variables are affected in schools where licensed professional staff members' and students' perceptions of school climate are different.

Opportunities for students to connect in both traditional and non-traditional ways are important to develop strong connections to school. Examples of traditional opportunities include offering a diverse selection of extracurricular activities and an advisory class where connection to school, an adult, and peers is fostered (Association of Middle Level Education, 2010; Shulkind & Foote, 2009). Assigning every student to an adult mentor within the school, who checks in and out with the student, is an example of a non-traditional opportunity and gives every student the opportunity to connect with at least one adult within the school (McQuillin, Smith, & Strait, 2011). This type of program, if offered upon the transition from elementary to middle school may be one way to support a positive transition for students (Maynard, Kjellstrand, & Thompson, 2014; McQuillin et al., 2011). One example of this type of program is Check In, Check Out. This is a behavioral intervention used for Tier-two behavioral support for students where students check in and out with their assigned adult, conference, and review behavioral data. This information is then shared with the students' parents/guardians and problem-solving team. Even though this is a behavioral intervention, it may be possible to modify it such that it supports students' transition to middle school and increases students' connection to school.

Future research may seek to examine the longitudinal relationships between school connectedness, student racial-ethnic identity, and the relationship between school connectedness. Few studies have examined school climate and connectedness longitudinally to determine whether measures of school climate and connectedness are stable, given administration and staff changes (Booth & Gerard, 2014; Klem & Connell, 2004; Loukas & Pasch, 2013; Loukas et al., 2006, 2016; McNeely & Falci, 2004; Nasir et al., 2011; Niehaus et al., 2012; Rudolph, Lambert, Clark, & Kurlakowsky, 2001; Wang et al., 2010; Way et al., 2007). Longitudinal studies require

additional resources and a long-term commitment from a school district, potentially making these types of studies less appealing to school districts.

Due to the link between students' perceptions of school climate and connectedness, continual and intentional focus on these constructs is necessary. Rather than conducting one-time surveys to assess school climate and connectedness, school districts may wish to consider assessing school climate and connectedness multiple times throughout the school year. Of course, the concern for school staff is that there is never enough time to do everything that needs to be done, and completion of multiple surveys would take away from instructional time. The State of Illinois recognizes the importance of assessing school climate and in 2014 began mandating that either the 5Essentials or a similar measure approved by the state, is conducted at least biennially (Illinois State Board of Education, 2017). The 5Essentials survey identifies five indicators that positively impact school success (i.e., effective leaders, collaborative teachers, involved families, supportive environments, and ambitious instruction). Each school's results are a part of the annual *Illinois School Report Card* for the school and are available on the ISBE website. Also, with the authorization of the Every Student Succeeds Act (ESSA), state-developed accountability systems must include "at least one indicator of school quality or success, such as measures of safety, student engagement, or educator engagement" (American Federation of Teachers, n.d.).

Even though this study did not specifically examine student-teacher relationships, there were items on the *SCS* which assessed students' perceptions of trust and respect in their relationships with teachers (Nasir et al., 2011). Due to the nested nature of student-teacher relationships in students' perceptions of school connectedness in this study, these items were not singled out exclusively for study but rather, were a component of an individual student's overall

school connectedness score. Prior research has illustrated the positive outcomes that an emotional/affective connection to school can have for students: 1) students with disabilities have increased opportunities for support from teachers; 2) students' emotional/affective connection to school can influence students' grade point average; and 3) increasing African American students' opportunities for positive interactions with teachers can support an emotional/affective connection to school (Deschler et al., 2004; Hamre & Pianta, 2001; McMahon et al., 2008; Murray & Malmgren, 2005; Stewart, 2007).

Students' social, emotional, physical and academic needs must be met to ensure they can benefit from the educational environment. Schools that recognize and support this through their climate support students' developmental needs. The National School Climate Council (2007) and Centers for Disease Control and Prevention (2009) recognize this need and have presented a framework including standards and strategies to improve school climate and connectedness. There are National School Climate Standards that present a framework for schools to develop positive school climates, and the standards include a shared vision for school climate, policies to support a positive school climate, identifying and prioritizing practices related to developing a positive school climate, a supportive environment for all members of the school community, and developing norms that promote a positive school climate (National School Climate Council, 2007). The CDC (2007) developed a framework for six strategies that can promote school connectedness. The six strategies are: 1) inclusive decision-making processes that include all members of the school community; 2) providing opportunities for families to be involved in their students' school; 3) teaching students' social-emotional skills; 4) utilization of effective classroom management and teaching methods; 5) providing professional development and

support to school staff members; and 6) creating trusting and caring relationships between all members of the school community (CDC, 2009).

The current study examined the perspectives licensed professional staff members' have of school climate and the perspectives African American students with and without disabilities have of school climate and connectedness at a critical developmental time. This study was grounded in an understanding of the risk African American students face within the school setting, particularly as they matriculate to middle school. For this exclusively African American middle school student sample, students' perceptions of school climate were significantly correlated and predictive of their perspectives of school connectedness. While limitations are noted, the goals of this study were achieved and contribute to the body of school climate and connectedness research for African American middle school students attending diverse schools by identifying a link between school climate and connectedness for African American students. There is a continued need to study school climate and connectedness to facilitate the development of school environments that support the academic, physical, social and emotional development for all students.

CITED LITERATURE

- Akos, P., & Galassi, J. P. (2004). Gender and race as variables in psychosocial adjustment to middle and high school. *The Journal of Educational Research*, 98(2), 102-108. Retrieved from: <http://web.a.ebscohost.com.proxy.cc.uic.edu>. doi: 10.3200/JOER.98.2.102-108
- Alston, R. J., Bell, T. J., & Feist-Price, S. (1996). Racial identity and African Americans with Disabilities: Theoretical and practical considerations. *Journal of Rehabilitation*, 62(2), 11-15. Retrieved from: <http://www.nationalrehab.org/website/pubs/index.html>
- Altschul, I., Oyserman, D., Bybee, D. (2006). Racial-ethnic identity in mid-adolescence: Content and change as predictors of academic achievement. *Child Development*, 77(5), 1155-1169. doi: 10.1111/j.1467-8624.2006.00926.x
- American Federation of Teachers. (n.d.). *Every student succeeds act: A new day in public education*. Author. Retrieved from: http://www.aft.org/sites/default/files/essa_accountability.pdf
- Association of Middle Level Education. (2010). *This we believe: The 16 characteristics of successful schools*. Retrieved from: <https://www.amle.org/AboutAMLE/ThisWeBelieve/tabid/121/Default.aspx#122516-the-16-characteristics>
- Barber, B. K., & Schluterman, J. M. (2008). Connectedness in the lives of children and adolescents: A call for greater conceptual clarity. *Journal of Adolescent Health*, 43(3), 209-216. doi: 10.1016/j.jadohealth.2008.01.012
- Blum, R. W. (2005). A case for school connectedness. *Educational Leadership*, 62(7), 16-20. Retrieved from: <http://www.ascd.org/publications/educational-leadership/archived-issues.aspx>

- Blum, R. W., & Libbey, H. P. (2004). Executive Summary. *Journal of School Health*, 74(7), 231-232. doi: 10.1111/j.1746-1561.2004.tb08278.x
- Bonny, A. E., Britto, M. T., Klostermann, B. K., Hornung, R. W., & Slap, G. B. (2000). School disconnectedness: Identifying adolescents at risk. *Pediatrics*, 106(5), 1017-1021.
- Retrieved from:
- <http://pediatrics.aappublications.org.proxy.cc.uic.edu/content/106/5/1017.full.pdf+html>
- Booth, M. Z., Curran, E. M., Frey, C. J., Gerard, J. M., Collet, B., & Bartimole, J. (2014). Ethnic identity, gender, and adolescent attitude toward school: Adaptive perspectives in diverse settings. *Mid-Western Educational Researcher*, 26(2), 3-27. Retrieved from:
- <http://www.mwera.org>
- Booth, M. Z. & Gerard, J. M. (2014). Adolescents' stage-environment fit in middle and high school: The relationship between students' perceptions of their schools and themselves. *Youth & Society*, 46(6), 735-755. doi: 10.1177/0044118X12451276
- Bowlby, J. (1969). *Attachment and Loss* (Vol. 1, 2nd ed.). New York, NY: Basic Books.
- Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *American Psychologist*, 513-531.
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Cambridge, MA: Harvard University Press.
- Brown, M. R., Higgins, K., Pierce, T., Hong, E., and Thoma, C. (2003). Secondary students' perceptions of school life with regard to alienation: The effects of disability, gender and race. *Learning Disability Quarterly*, 26(4), 227-238. doi: 10.2307/1593636

- Centers for Disease Control and Prevention (2009). *School connectedness: Strategies for Increasing Protective Factors Among Youth*. Atlanta, GA: U. S. Department of Health and Human Services.
- Collins, W. A., & Steinberg, L. (2007). Adolescent development in interpersonal context. In N. Eisenberg (Vol. Ed.), *Handbook of Child Psychology* (1006-1067). Hoboken, NJ: John Wiley & Sons, Inc.
- Connolly, P. (2007). *Quantitative data analysis in education: A critical introduction using SPSS*. London: Routledge.
- Cowan, K. C., Vaillancourt, K., Rossen, E., & Pollitt, K. (2013). *A framework for safe and successful schools* [Brief]. Bethesda, MD: National Association of School Psychologists.
- Cross, W. E., & Fhagen-Smith, P. (2001). Patterns of African American identity development: A lifespan perspective. In C. L. Wijeyesinghe & B. W. Jackson (Eds.), *New Perspectives on Racial Identity Development*, (pp. 243-270). New York: New York University Press.
- De Los Reyes, A. & Kazdin, A. E. (2005). Informant discrepancies in the assessment of childhood psychopathology: A critical review, theoretical framework, and recommendations for further study. *Psychological Bulletin*, 131(4), 483-509. doi: <http://dx.doi.org.proxy.cc.uic.edu/10.1037/0033-2909.131.4.483>
- Decker, D. M., Dona, D. P., & Christenson, S. L. (2007). Behaviorally at-risk African American students: The importance of student-teacher relationships for student Outcomes. *Journal of School Psychology*, 45, 83-109. doi: 10.1016/j.jsp.2006.09.004
- Deshler, D. D., Lenz, B. K., Bulgren, J., Schumaker, J. B., Davis, B., Grossen, B., & Marquis, J. (2004). Adolescents with disabilities in high school setting: Student characteristics and

- setting dynamics. *Learning Disabilities: A Contemporary Journal*, 2(2), 30-48. Retrieved from: <http://www.ldam.org/>
- Diamond, J. B. (2006). Still separate and unequal: Examining race, opportunity, and school achievement in “integrated” suburbs. *The Journal of Negro Education*, 75(3), 495-505. Retrieved from <http://www.jstor.org.proxy.cc.uic.edu/stable/40026817>
- Ding, C. & Hall, A. (2007). Gender, ethnicity, and grade differences in perceptions of school experiences among adolescents. *Studies in Educational Evaluation*, 33, 159-174. doi: 10.1016/j.stueduc.2007.04.004
- Dobson, A. J., & Barnett, A. G. (2008). *An introduction to generalized linear models*, (3rd ed.). Boca Raton, FL: Chapman & Hall/CRC, Taylor & Francis Group, LLC.
- Dotterer, A. M., McHale, S. M., & Crouter, A. C. (2009). Sociocultural factors and school engagement among African American youth: The roles of racial discrimination, racial socialization, and ethnic identity. *Applied Developmental Science*, 13(2), 61-73. doi: 10.1080/10888690902801442
- Eccles, J. S., & Roeser, R. W. (2011). Schools as developmental contexts during adolescence. *Journal of Research on Adolescence*, 21(1), 225-241. doi: 10.1111/j.1532-7795.2010.00725.x
- Eccles, J. S., Wong, C. A., & Peck, S. C. (2006). Ethnicity as a social context for the development of African-American adolescents. *Journal of School Psychology*, 44, 407-426. doi: 10.1016/j.jsp.2006.04.001
- Erikson, E. H. (1968). *Identity, youth, and crisis*. New York: W. W. Norton & Company, Inc.
- Ferguson, R. F. (2002). *What doesn't meet the eye: Understanding and addressing racial disparities in high-achieving suburban schools*. Oak Brook, IL: North Regional Educational Lab.

- Ferguson, R. F. (2003). Teachers' perceptions and expectations and the Black-White test score gap. *Urban Education, 38*(4), 460-507. doi: 10.1177/0042085903038004006
- Fink, A. (2006). *How to conduct surveys: A step-by-step guide* (3rd ed.). Thousand Oaks, CA: Sage Publications, Inc.
- Finn, J. D. (1993). *School engagement & students at risk* (Publication No. NCES 93470). Retrieved from National Center for Education Statistics website:
<http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=93470>
- Ford, D. H., & Lerner, R. M. (1992). *Developmental systems theory: An integrative approach*. Newbury Park, CA: Sage Publications, Inc.
- Fowler, F. J. (1993). Survey research methods (2nd ed.). In L. Bickman & D. J. Rog (Series Eds.), *Applied Social Research Methods Series: Vol. 1*.
- Fredricks, J. A., & Eccles, J. S. (2006). Is extracurricular participation associated with beneficial outcomes? Concurrent and longitudinal relations. *Developmental Psychology, 42*(4), 698-713. doi: 10.1037/0012-1649.42.4.698
- Furlong, M. J., O'Brennan, L. M., & You, S. (2011). Psychometric properties of the Add Health school connectedness scale for 18 sociocultural groups. *Psychology in the Schools, 48*(10), 986-997. doi: 10.1002/pits.20609
- Gabriel, T. (2010, November 9). Proficiency of Black students is found to be far lower than expected. *The New York Times*. Retrieved from
<http://www.nytimes.com/2010/11/09/education/09gap.html?scp=3&sq=Proficiency+of+&st=nyt>
- Garibaldi, A. M. (1992). Educating and motivating African American males to succeed. *The Journal of Negro Education, 61*(1), 4-11. doi: 10.2307/2295624

- Gay, G. (1994). Teaching young adolescents of color. *Theory into Practice*, 33(3), 149-155.
- George, D., & Mallery, P. (2011). *SPSS for Windows step by step: A simple guide and reference. 18.0 update* (11th ed.). Boston: Allyn & Bacon.
- Gliem, J. A. & Gliem, R. R. (October, 2003). *Calculating, interpreting, and reporting Cronbach's Alpha reliability coefficient for Likert-type scales*. Paper presented at the Midwest Research-to-Practice Conference in Adult, Continuing, and Community Education, The Ohio State University, Columbus, OH.
- Goodenow, C. (1993). The psychological sense of school membership among adolescents: Scale development and educational correlates. *Psychology in the Schools*, 30(1), 79-90. doi: 10.1002/1520-6807(199301)30:1<79:AID-PITS2310300113>3.0.CO
- Gorard, S. (2001). *Quantitative methods in education research: The role of numbers made easy*. London: Continuum.
- Grady, M. & L.W. Bost (Eds.), (2014). Introduction & Executive Summary. *Decreasing dropout rates for minority male youth with disabilities from culturally and ethnically diverse backgrounds* [Monograph] (pp. v-xiii). Clemson, SC: National Dropout Prevention Center for Students with Disabilities.
- Graham, S. (2001). Inferences about responsibility and values: Implication for academic motivation. In F. Salili, C. Yue Chiu, & Y. Yi Hong (Eds.), *Student motivation: The culture and context of learning* (pp.31-59). New York: Kluwer Academic/Plenum Publishers.
- Gregory, A., Skiba, R. J., & Noguera, P. A. (2010). The achievement gap and the discipline gap: Two sides of the same coin? *Educational Researcher*, 39(1), 59–68. doi:10.3102/0013189X09357621

- Hamre, B. K., & Pianta, R. C. (2001). Early teacher-child relationships and the trajectory of children's school outcomes through eighth grade. *Child Development*, 72(2), 625-638. Retrieved from <http://www.jstor.org/stable/1132418>. doi: 10.1111/1467-8624.00301
- Hopson, L. M., Lee, E., & Tang, N. (2014a). A multi-level analysis of school racial composition and ecological correlates of academic success. *Children and Youth Services Review*, 44, 126-134. doi: 10.1016/j.childyouth.2014.05.026-0190-7409
- Hopson, L. M., Schiller, K. S., & Lawson, H. A. (2014b). Exploring linkages between school climate, behavioral norms, social supports, and academic success. *Social Work Research*, 38(4), 197-209. doi: 10.1093/swr/svu017
- Hudley, C., & Graham, S. (2001). Stereotypes of achievement striving among early adolescents. *Social Psychology of Education*, 5, 201-224. Retrieved from: <http://www.springerlink.com.proxy.cc.uic.edu/content/btb69tnpnxwyed4t/fulltext.pdf>. doi: 10.1023/A:1014438702266
- Illinois State Board of Education (2017). *Illinois report card*. Springfield, IL: Author. Retrieved from: www.isbe.net
- Jackson, A. W., & Davis, G. A. (2000). *Turning points 2000: Educating adolescents in the 21st century. A report of Carnegie Corporation of New York*. New York: Teachers College Press. Retrieved from: <http://mltei.org/cqn/Adolescent%20Development/Resources/General/TURNING%20POINTS%202000.pdf>
- Johnson, B., & Christensen, L. (2008). *Educational research: Quantitative, qualitative, and mixed approaches* (3rd Ed.). Thousand Oaks, CA: Sage Publications, Inc.

- Justice, L. (2009). Increasing your statistical edge: Dealing with nested data structures. *American Journal of Speech-Language Pathology*, 18, 210-211. doi: 10.1044/1058.0360
- Juvonen, J. (2007). Reforming middle schools: Focus on continuity, social connectedness, and engagement. *Educational Psychologist*, 42(4), 197-208. doi: 10.1080/00461520701621046
- Kagan, D. M. (1990). How schools alienate students at risk: A model for examining proximal classroom variables. *Educational Psychologist*, 25(2), 105-125. doi: 10.1207/s15326985ep2502_1
- Kena, G., Hussar W., McFarland J., de Brey C., Musu-Gillette, L., Wang, X., Zhang, J., Rathbun, A., Wilkinson Flicker, S., Diliberti M., Barmer, A., Bullock Mann, F., & Dunlop Velez, E. (2016). *The condition of education 2016* (NCES 2016-144). U.S. Department of Education, National Center for Education Statistics. Washington, DC. Retrieved from <http://nces.ed.gov/pubsearch>
- Klem, A. M., & Connell, J. P. (2004). Relationships matter: Linking teacher support to engagement and achievement. *Journal of School Health*, 74(7), 262-273. Retrieved from: <http://web.ebscohost.com.proxy.cc.uic.edu/ehost/pdfviewer/pdfviewer?vid=3&hid=18&sid=837750c2-3c5d-4052-b535-c0a3d38554e6%40sessionmgr11>. doi: 10.1111/j.1746-1561.2004.tb08283.x
- Koth, C. W., Bradshaw, C. P., & Leaf, P. J. (2008). A multilevel study of predictors of student perceptions of school climate: The effect of classroom-level factors. *Journal of Educational Psychology*, 100(1), 96-104. doi: 10.1037/0022-0663.100.1.96
- Leech, N. L., Barrett, K. C., & Morgan, G. A. (2011). *IBM SPSS for intermediate statistics: Use & interpretation* (4th ed.). New York: Routledge, Taylor & Francis Group, LLC.

- Lerner, R. M., & Castellino, D. R. (2002). Contemporary developmental theory and adolescence: Developmental systems and applied developmental science. *Journal of Adolescent Health, 31*(6, Supplement), 122-135. doi:1054-139X/02
- Libbey, H. P. (2004). Measuring student relationships to school: Attachment, bonding, connectedness, and engagement. *Journal of School Health, 74*(7), 274-283. Retrieved from: <http://web.ebscohost.com.proxy.cc.uic.edu/ehost/pdfviewer/pdfviewer?vid=3&hid=13&sid=5fb405b1-b826-4e1c-bc9f-4d54d03817bf%40sessionmgr11>. doi: 10.1111/j.1746-1561.2004.tb08284.x
- Losen, D. J., & Skiba, R. J. (2010). *Suspended education: Urban middle schools in crisis*. Retrieved from: https://www.splcenter.org/sites/default/files/d6_legacy_files/downloads/publication/Suspended_Education.pdf
- Loukas, A., Cance, J. D., & Batanova, M. (2016). Trajectories of school connectedness across the middle school years: Examining the roles of adolescents' internalizing and externalizing problems. *Youth & Society, 48*(4), 557-576. doi: 10.1177/0044118X13504419
- Loukas, A., & Pasch, K. E. (2013). Does school connectedness buffer the impact of peer victimization on early adolescents' subsequent adjustment problems? *The Journal of Early Adolescence, 33*(2), 245-266. doi: 10.1177/0272431611435117
- Loukas, A., Suzuki, R., & Horton, K. D. (2006). Examining school connectedness as a mediator of school climate effects. *Journal of research on adolescence, 16*(3), 491-502. doi: 10.1111/j.1532-7795.2006.00504.x

- Luster, T., & McAdoo, H. P. (1995). Factors related to self-esteem among African American youths: A secondary analysis of the High/Scope Perry Preschool data. *Journal of Research on Adolescence*, 5(4), 451-467. doi: 10.1111/1532-7795.ep11339076
- Mahoney, J. L., & Cairns, B. D. (1997). Do extracurricular activities protect against early school dropout? *Developmental Psychology*, 33(2), 241-253. doi: 10.1037/0012-1649.33.2.241
- Mahoney, J. L., Cairns, B. D., & Farmer, T. W. (2003). Promoting interpersonal competence and educational success through extracurricular activity participation. *Journal of Educational Psychology*, 95(2), 409-418. doi: 10.1037/0022-0663.95.2.409
- Marcus, G., Gross, S., & Seefeldt, C. (1991). Black and White students' perceptions of teacher treatment. *Journal of Educational Research*, 84(6), 363-367. Retrieved from:
<http://web.ebscohost.com.proxy.cc.uic.edu/ehost/pdfviewer/pdfviewer?vid=3&hid=12&sid=31bcd4c1-dbba-4771-926e-38efe284d6d2%40sessionmgr12>
- Maynard, B. R., Kjellstrand, E. K., & Thompson, A. M. (2014). Effects of Check and Connect on attendance, behavior, and academics: A randomized effectiveness trial. *Research on Social Work Practice*, 24(3), 296-309. doi: 10.1177/1049731513497804
- McMahon, S. D., Parnes, A. L., Keys, C. B., & Viola, J. J. (2008). School belonging among low-income urban youth with disabilities: Testing at theoretical model. *Psychology in the Schools*, 45(5), 387-401. doi: 10.1002/pits.20304
- McNamara, J. F. (1994). *Surveys and experiments in education research*. Lancaster, PA: Technomic Publishing Company.
- McNeely, C. A., & Falci, C. (2004). School connectedness and the transition into and out of health-risk behavior among adolescents: A comparison of social belonging and teacher support. *Journal of School Health*, 74(7), 284-292. Retrieved from:

<http://web.ebscohost.com.proxy.cc.uic.edu/ehost/pdfviewer/pdfviewer?vid=3&hid=104&sid=92a39ebe-7a0a-4aee-977c-020a9e9d4d17%40sessionmgr114>

McNeely, C. A., Nonnemaker, J. M., & Blum, R. W. (2002). Promoting school connectedness: Evidence from the National Longitudinal Study of Adolescent Health. *Journal of School Health*, 72(4), 138-146. Retrieved from:

<http://web.ebscohost.com.proxy.cc.uic.edu/ehost/pdfviewer/pdfviewer?vid=3&hid=104&sid=93ae396c-653c-4d6a-a85d-002fb4f44d39%40sessionmgr115>

McNeely, C. A., Whitlock, J., & Libbey, H. (2010). School connectedness and adolescent well-being. In S. L. Christenson, & A. L. Reschly, A. L. (Eds.), *Handbook of school-family partnerships* (266-286). New York, NY: Routledge.

McQuillin, S., Smith, B., & Strait, G. (2011). Randomized evaluation of a single semester transitional mentoring program for first year middle school students: A cautionary result for brief, school-based mentoring programs. *Journal of Community Psychology*, 39(7), 844-859. doi: 10.1002/jcoop.20475

Midgley, C., Feldlaufer, H., & Eccles, J. S. (1989). Student/teacher relations and attitudes toward mathematics before and after the transition to junior high school. *Child Development*, 60(4), 981-992. doi: 10.1111/1467-8624.ep9676559

Mpofu, E. & Harley, D. A. (2006). Racial and disability identity: Implications for the career counseling of African Americans with disabilities. *Rehabilitation Counseling Bulletin*, 50(1), 14-23. Retrieved from: <http://www.law.usyd.edu.au/accel/apjel.shtml>

Murray, C., & Greenberg, M. T. (2000). Children's relationships with teachers and bonds with school: An investigation of patterns and correlates in middle childhood. *Journal of*

- School Psychology*, 38(5), 423-445. Retrieved from: [https://doi-org.proxy.cc.uic.edu/10.1016/S0022-4405\(00\)00034-0](https://doi-org.proxy.cc.uic.edu/10.1016/S0022-4405(00)00034-0)
- Murray, C., & Malmgren, K. (2005). Implementing a teacher-student relationship program in a high poverty urban school: Effects on social, emotional, and academic adjustment and lessons learned. *Journal of School Psychology*, 43, 137-152. doi: 10.1016/j.jsp.2005.01.003
- Murray, C., Murray, K. M., & Waas, G. A. (2008). Child and teacher reports of teacher-student relationships: Concordance of perspectives and associations with school adjustment in urban kindergarten classrooms. *Journal of Applied Developmental Psychology*, 29, 49-61. doi: 10.1016/j.appdev.2007.10.006
- Murray, C., & Naranjo, J. (2008). Poor, black, learning disabled, and graduating: An investigation of factors and processes associated with school completion among high-risk urban youth. *Remedial and Special Education*, 29(3), 145-160. doi: 10.1177/0741932508315052
- Murray, C., & Pianta, R. C. (2007). The importance of teacher-student relationships for adolescents with high incidence disabilities. *Theory Into Practice*, 46(2), 105-112. doi: 10.1080/00405840701232943
- Murray, C., & Zvoch, K. (2010). The inventory of teacher-student relationships: Factor structure, reliability, and validity among African American youth in low-income urban schools. *The Journal of Early Adolescence*. Advance online publication. doi: 10.1177/0272431610366250
- Myers, S. S., & Pianta, R. C. (2008). Developmental commentary: Individual and contextual influences on student-teacher relationships and children's early problem behaviors.

- Journal of Clinical Child & Adolescent Psychology*, 37(3), 600-608. doi:
10.1080/15374410802148160
- Nasir, N. S., Jones, A., & McLaughlin, M. (2011). School connectedness for students in low-income urban high schools. *Teachers College Record*, 113(8), 1755-1793. Retrieved from: <http://www.tcrecord.org/library>
- Nasir, N. S., McLaughlin, M. W., & Jones, A. (2009). What does it mean to be African American? Constructions of race and academic identity in an urban public high school. *American Educational Research Journal*, 46(1), 73-114. doi:
10.3102/0002831208323279
- National School Climate Council. (2007). *National School Climate Standards: Benchmarks to promote effective teaching, learning and comprehensive school improvement*. New York, NY: Author.
- National Forum to Accelerate Middle-Grades Reform. (2006). *Schools to watch criteria*. Champaign, IL: Author. Retrieved May 1, 2011, from:
<http://www.schoolstowatch.org/what.htm>
- Nichols, S. L. (2008). An exploration of students' belongingness beliefs in one middle school. *The Journal of Experimental Education*, 76(2), 145-169. Retrieved from:
<http://web.ebscohost.com.proxy.cc.uic.edu/ehost/pdfviewer/pdfviewer?vid=3&hid=12&sid=df188a8f-451a-4ed9-879c-4dc86c8265e0%40sessionmgr12>
- Niehaus, K., Rudasill, K. M., & Rakes, C. R. (2012). A longitudinal study of school connectedness and academic outcomes across sixth grade. *Journal of School Psychology*, 50, 443-460. doi: 10.1016/j.jsp.2012.03.002

- Noguera, P. A. (2003). The trouble with Black boys: The role and influence of environmental and cultural factors on the academic performance of African American males. *Urban Education*, 38(4), 431-459. doi: 10.1177/0042085903254969
- Noguera, P. A. (2012). Saving Black and Latino boys. *Phi Delta Kappa International*, 30(20). Retrieved from:
http://www.edweek.org/ew/articles/2012/02/03/kappan_noguera.html?print=1
- Osborne, J. W. (2000). Advantages of hierarchical linear modeling. *Practical Assessment, Research and Evaluation*, 7(1), 1-4. Retrieved from:
<http://PAREonline.net/getvn.asp?v=7&n=1>
- Oyserman, D. (2005). Racial-ethnic identity and racial-ethnic self schemas. Retrieved from:
http://www.sitemaker.umich.edu/culture.self/files/racial_ethnic_identity_measures.pdf
- Oyserman, D., Brickman, D., & Rhodes, M. (2007). Racial-ethnic identity in adolescence: Content and consequences for African American and Latino youth. In A. Fuligni (Ed.), *Contesting stereotypes and creating identities: Social categories, social identities, and educational participation* (91-114). New York: Russell-Sage Foundation.
- Oyserman, D., Bybee, D., & Terry, K. (2003). Gendered racial identity involvement with school. *Self and Identity*, 2, 307-324. doi: 10.1080/15298860390232868
- Oyserman, D., Gant, L., & Ager, J. (1995). A socially contextualized model of African American identity: Possible selves and school persistence. *Journal of Personality and Social Psychology*, 69(6), 1216-1232. Retrieved from:
<http://search.proquest.com.proxy.cc.uic.edu/psycarticles/docview/614399474/fulltextPDF/137F1C902B81B9E5BDC/1?accountid=14552>. doi: 10.1037/0022-3514.69.6.1216

- Oyserman, D., Harrison, K., & Bybee, D. (2001). Can racial identity be promotive of academic efficacy? *International Journal of Behavioral Development*, 25(4), 379-385. doi: 10.1080/01650250042000401
- Perkins, Brian. (2006). *Where We Learn: The CUBE Survey of Urban School Climate*. Alexandria, VA: National School Boards Association.
- Perkins, Brian. (2007). *Where We Teach: The CUBE Survey of Urban School Climate*. Alexandria, VA: National School Boards Association.
- Pham, Y. K., & Murray, C. (2016). Social Relationships among adolescents with disabilities: Unique and cumulative associations with adjustment. *Exceptional Children*, 82(2), 234-250. doi: 10.1177/0014402915585491
- Phinney, J. S. (1989). Stages of ethnic identity development in minority group adolescents. *Journal of Early Adolescence*, 9(1-2), 34-49. doi: 10.1177/0014402915585491
- 10.1177/0272431689091004
- Phinney, J. S., & Tarver, S. (1988). Ethnic identity search and commitment in Black and White eighth graders. *Journal of Early Adolescence*, 8(3), 265-277. doi: 10.1177/0014402915585491
- 10.1177/0014402915585491
- Pianta, R. C. (1999). *Enhancing relationships between children and teachers*. Washington, DC: American Psychological Association.
- Prelow, H. M., Bowman, M. A., & Weaver, S. R. (2007). Predictors of psychosocial well-being in urban African American and European American youth: The role of ecological factors. *Journal of Youth and Adolescence*, 36(4), 543-553. doi: 10.1007/s10964-006-9038-5
- Ramelow, D., Currie, D., & Felder-Puig. (2015). The assessment of school climate: Review and appraisal of published student-report measures. *Journal of Psychoeducational Assessment*, 33(8), 731-743. doi: 10.1177/0734282915584852

Resnick, M. D., Bearman, P. S., Blum, R. W., Bauman, K. E., Harris, K. M., Jones, J., ...

Udry, J. R. (1997). Protecting Adolescents from harm: Findings from the national longitudinal study on adolescent health. *JAMA*, 278(10), 823-832. doi:

10.1001/jama.1997.03550100049038. Retrieved from:

<http://www.wiley.com.proxy.cc.uic.edu/WileyCDA/>

Reynolds, A. L. & Pope, R. L. (1991). The complexities of diversity: Exploring multiple oppressions. *Journal of Counseling and Development*, 70(1), 174-180. doi:

10.1002/j.1556-6676.1991.tb01580.x

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

<http://www.tandfonline.com.proxy.cc.uic.edu/>. doi: 10.1207/s15327795jra0801_6

Rogers, L. O., Scott, M. A., & Way, N. (2015). Racial and gender identity among black adolescent males: An intersectionality perspective. *Child Development*, 86(2), 407-424. doi: 10.1111/cdev.12303

Rudolph, K. D., Lambert, S. F., Clark, A. G., & Kurlakowsky, K. D. (2001). Negotiating the transition to middle school: The role of self-regulatory processes. *Child Development*, 72(3), 929-946. doi: 0009-3920/2001/7203-0022

Schott Foundation for Public Education (2015). *Black lives matter: The Schott 50 state report on public education and black males* (Revised 2015 report). Retrieved from:

<http://blackboysreport.org/bbreport2015.pdf>

- Schott Foundation for Public Education. (2010). *The Schott 50 state report on Black males and public education*. Retrieved from: http://blackboysreport.org/?page_id=529
- Seaton, E. K., Sellers, R. M., & Scottham, K. M. (2006). The status model of racial identity development in African American adolescents: Evidence of structure, trajectories, and well-being. *Child Development*, 77(5), 1416-1426. doi: 10.1111/j.1467-8624.2006.00944.x
- Shulkind, S. B. & Foote, J. (2009). Creating a culture of connectedness through middle school advisory programs. *Middle School Journal*, 41(1), 20-27. Retrieved from: <http://www.tandfonline.com.proxy.cc.uic.edu/>. doi: 10.1080/00940771.2009.11461700
- Simmons, R. G., Black, A., & Zhou, Y. (1991). African-American versus White children and the transition into junior high school. *American Journal of Education*, 99(4), p.481-520. Retrieved from: <http://www.jstor.org/stable/1085557>. doi: 10.1086/443995
- Skiba, R. J., Michael, R. S., Nardo, A. B., & Peterson, R. L. (2002). The color of discipline: Sources of racial and gender disproportionality in school punishment. *The Urban Review*, 34(4), 317-342. Retrieved from: <http://www.springerlink.com.proxy.cc.uic.edu/content/m1u480614844118x/fulltext.pdf>. doi: 10.1023/A:1021320817372
- Slaughter-Defoe, D. T. & Glinert Carlson, K. (1996). Young African American and Latino children in high-poverty urban schools: How they perceive school climate. *The Journal of Negro Education*, 65(1), 60-70. doi: 10.2307/2967368
- Steele, C. M. (2004). A threat in the air: How stereotypes shape intellectual identity and performance. In J. Banks & C. McGee Banks (Ed.), *Handbook of research on*

- multicultural education* (2nd ed.) (pp. 682-698). San Francisco, CA: Jossey-Bass: A Wiley Imprint.
- Stewart, E. B. (2007). Individual and school structural effects on African American high school students' academic achievement. *High School Journal*, 91(2), 16-34. Retrieved from: http://muse.jhu.edu.proxy.cc.uic.edu/journals/high_school_journal/. doi: 10.1353/hsj.2008.0002
- Storz, M. G. (2008). Educational inequity from the perspectives of those who live it: Urban middle school students' perspectives on the quality of their education. *Urban Review*, 40(2), 247-267. doi: 10.1007/s11256-008-0083-0
- Svetaz, M. V., Ireland, M., & Blum, R. (2000). Adolescents with learning disabilities: Risk and protective factors associated with emotional well-being: Findings from the National Longitudinal Study of Adolescent Health. *Journal of Adolescent Health*, 27(5), 340-348. Retrieved from: [https://doi-org.proxy.cc.uic.edu/10.1016/S1054-139X\(00\)00170-1](https://doi-org.proxy.cc.uic.edu/10.1016/S1054-139X(00)00170-1)
- Talbott, E., & Cushing, L. S. (2011). Engaging youth with disabilities in school: Building and sustaining positive relationships. In T. E. Scruggs & M. A. Mastropieri (Series Eds.), *Advances in Learning and Behavioral Disabilities: Vol. 24. Assessment and Intervention* (pp.321-339). UK: Emerald Group Publishing Limited.
- Talbott, E., Mayrowetz, D., Maggin, D. M., & Tozer, S. E. (2016). A distributed model of special education leadership for individualized education program teams. *Journal of Special Education Leadership*, 29(1), 23-31. Retrieved from: <http://www.casecec.org/resources/jsel.asp>

- Taylor, R. L. (1991). Poverty and adolescent Black males: The subculture of disengagement. In P. Edelman & J. Ladner (Eds.), *Adolescence and Poverty: Challenges for the 1990s* (pp. 139-162). Washington, D. C.: Center for National Policy Press.
- The Achievement Gap Initiative at Harvard University. (2011). *The Facts on the Gap*. Retrieved from: <http://www.agi.harvard.edu/projects/thegap.php>
- Thomas, S. P., & Smith, H. (2004). School connectedness, anger behaviors, and relationships of violent and nonviolent American youth. *Perspectives in Psychiatric Care*, 40(4), 135-148. Retrieved from: <http://search.ebscohost.com.proxy.cc.uic.edu/login.aspx?direct=true&db=cmh&AN=15911804&site=chc-live>. doi: 10.1111/j.1744-6163.2004.tb00011.x
- Thompson, D. R., Iachan, R., Overpeck, M., Ross, J. G., & Gross, L. A. (2006). School connectedness in the Health Behavior in School-Aged Children Study: The role of the student, school, and school neighborhood characteristics. *Journal of School Health*, 76(7), 379-386. doi: 10.1111/j.1746-1561.2006.00129.x
- Thompson, G. L. (2002). *African American teens discuss their schooling experiences*. Westport, CN: Bergin & Garvey.
- Toldson, I.A. (2014). Decreasing the dropout rates for African American male youth with disabilities. In M. Grady & L.W. Bost (Eds.), *Decreasing dropout rates for minority male youth with disabilities from culturally and ethnically diverse backgrounds* (pp. 28-50). Clemson, SC: National Dropout Prevention Center for Students with Disabilities.
- Umaña-Taylor, A. J., Lee, R. M., Rivas-Drake, D., Syed, M., Seaton, E., Quintana, S. M., ... Yip, T. (2014). Ethnic and racial identity during adolescence and into young adulthood: An integrated conceptualization. *Child Development*, 85(1), 21-39. doi: 10.1111/cdev.12196

University of Chicago, Urban Education Institute (n.d.a). *5essentials support center: How scores are calculated*. Chicago, IL: Author.

Retrieved from: <http://help.5-essentials.org/customer/en/portal/articles/94413-how-scores-are-calculated>

University of Chicago, Urban Education Institute (n.d.b). *5essentials survey administration manual: Prepared for the Illinois State Board of Education*. Chicago, IL: Author.

Retrieved from: <https://www.isbe.net/Documents/5E-survey-manual-2016-17.pdf>

U.S. Department of Education, Office for Civil Rights (2014, March). *Civil rights data collection data snapshot: School discipline* (Issue Brief No. 1). Washington, DC: Author.

U. S. Department of Education, Office of Special Education and Rehabilitative Services, Office of Special Education Programs. (2007). *27th Annual report to Congress on the implementation of the Individuals with Disabilities Education Act, vol. 1*. Washington, D.C.: author.

U. S. Department of Education, Office of Special Education and Rehabilitative Services, Office of Special Education Programs. (2015). *37th Annual report to Congress on the implementation of the Individuals with Disabilities Education Act*. Washington, D.C.: author.

Wald, J., & Losen, D. J. (2003). Defining and redirecting a school-to-prison pipeline. *New Directions for Youth Development*, 99, 9-15. doi: 10.1002/ym.51

Wang, M.T., Selman, R. L., Dishion, T. J., & Stormshak, E. A. (2010). A Tobit regression analysis of the covariation between middle school students' perceived school climate and behavioral problems. *Journal of Adolescence*, 20(2), 274-286. doi: 10.1111/j.1532-7795.2010.00648.x

Waters, S., Cross, D., & Shaw, T. (2010). Does the nature of schools matter? An exploration of selected school ecology factors on adolescent perceptions of school connectedness.

British Journal of Education Psychology, 80, 381-402. doi:

10.1348/000709909X484479

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

10.1007/s10464-007-9143-y

Whitlock, J. L. (2003). *Voice, visibility, place and power: Correlates of school and community connectedness among 8th, 10th, and 12th grade youth*. Unpublished doctoral dissertation, Cornell University, Ithaca, NY.

Whitlock, J. L. (2006). Youth perceptions of life at school: Contextual correlates of school connectedness in adolescence. *Applied Developmental Science*, 10(1), 13-29. doi:

10.1207/s1532480xads1001_2

Wilson, D. (2004). The interface of school climate and school connectedness and relationships with aggression and victimization. *Journal of School Health*, 74(7), 293-299. Retrieved from: <http://www.wiley.com.proxy.cc.uic.edu/WileyCDA/>. doi: 10.1111/j.1746-

1561.2004.tb08286.x

Wingspread Declaration. (2004). *Journal of School Health*, 74(4), 233-234. Retrieved from:

<http://web.ebscohost.com.proxy.cc.uic.edu/ehost/pdfviewer/pdfviewer?vid=3&hid=11&sid=d02eee99-4985-4104-8b86-66e00261040c%40sessionmgr14> (Original document

The Wingspread Conference, June 2003).

- Witherspoon, D., Schotland, M., Way, N., & Hughes, D. (2009). Connecting the dots: How connectedness to multiple contexts influences the psychological and academic adjustment of urban youth. *Applied Developmental Science, 13*(4), 199-216. doi: 10.1080/10888690903288755
- Wong, C. A., Eccles, J. S., & Sameroff, A. (2003). The influence of ethnic discrimination and ethnic identification on African American adolescents' school and socialemotional adjustment. *Journal of Personality, 71*(6), 1197-1232. doi: 10.1111/1467-6494.7106012

APPENDICES

APPENDIX A

	APPROVAL				
	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center; font-weight: bold;">STARTS</td> <td style="width: 50%; text-align: center; font-weight: bold;">EXPIRES</td> </tr> <tr> <td style="text-align: center;">03/08/2016</td> <td style="text-align: center;">— 03/08/2017</td> </tr> </table>	STARTS	EXPIRES	03/08/2016	— 03/08/2017
	STARTS	EXPIRES			
03/08/2016	— 03/08/2017				
UNIVERSITY OF ILLINOIS AT CHICAGO INSTITUTIONAL REVIEW BOARD					

Dear Staff Member:

You are being asked to collect information from students' files for purposes of the research study, "School Connectedness and Climate for African American Students with and without Disabilities" conducted by Kari Smith, MSW, MA, Doctoral Candidate and Principal Investigator, University of Illinois at Chicago. This information will be used for data analysis. Please know that this information will be reviewed for groups of students, yet in order to link this form to students' survey responses for data analysis, I am asking for students' names. All students will be given a confidential study ID that only I will have access. The list of confidential IDs linking to students' names will be kept in a password-protected file that only I will have access.

Please complete the following form for Ms. Smith. **One student per form, please.**

STUDENT NAME:

Please check the appropriate box. If student has more than one disability, please add on the line next to the disability, PRIMARY OR SECONDARY:

1. Student disability/Special education eligibility category:

- | | |
|---|------------------------------|
| <input type="checkbox"/> Learning Disability | _____ (PRIMARY OR SECONDARY) |
| <input type="checkbox"/> Speech-Language Impairment | _____ (PRIMARY OR SECONDARY) |
| <input type="checkbox"/> Emotional Disability | _____ (PRIMARY OR SECONDARY) |
| <input type="checkbox"/> Mild Intellectual Disability | _____ (PRIMARY OR SECONDARY) |
| <input type="checkbox"/> Other Health Impairment | _____ (PRIMARY OR SECONDARY) |

Please list the specific Other Health Impairment here: _____

2. Special education placement:

- ☐ Consult (No direct special education services)
- ☐ Resource (49% or less of school day with a special education teacher/receiving special education services)
- ☐ Instructional (50% or more of school day with a special education teacher/receiving special education services/self-contained)
- ☐ Speech-language services only


3. Overall grade point average:

4. Ethnicity: ☐ African American

5. Number of discipline referrals since the start of the school year:

STUDENT INFORMATION FORM [V3] 10.30.14

APPENDIX B

	APPROVAL
	<div style="display: flex; justify-content: space-between;"> <div style="text-align: left;"> STARTS 03/08/2016 </div> <div style="text-align: center;"> — </div> <div style="text-align: right;"> EXPIRES 03/08/2017 </div> </div>
	 UNIVERSITY OF ILLINOIS AT CHICAGO INSTITUTIONAL REVIEW BOARD

Study ID: _____

Hello! Thank you for agreeing to participate in my study, "School Connectedness and Climate for African American Students with and without Disabilities." The purpose of my study is to gather African American students' opinions of their connection to school and school climate. We will begin the survey shortly. Please complete the following information for me to help me better understand you. PLEASE DO NOT PUT YOUR NAME ON THIS FORM. I do not need to know your name.

1. What is your age?
2. What grade are you in?
3. Do you participate in any extracurricular activities **AT** school?
 - a. If so, please list them. *Example: basketball team, chess club*
 - b. How often do you have a club meeting, sports practice, rehearsal or game per week? Please consider a week as Sunday through Saturday. *Example: one hour a week, two hours a week, etc.*
4. Do you participate in any extracurricular activities outside of school?
 - a. If so, please list them. *Example: church choir, park district baseball team*
 - b. How often do you have a club meeting, sports practice, rehearsal or game per week for the activities you listed above? Please consider a week as Sunday through Saturday. *Example: one hour a week, two hours a week, etc.*

APPENDIX C

UNIVERSITY OF ILLINOIS
AT CHICAGO

Office for the Protection of Research Subjects (OPRS)
Office of the Vice Chancellor for Research (VCR) 6721
203 Administrative Office Building
1737 West Polk Street
Chicago, Illinois 60612-7227

Approval Notice**Amendment to Research Protocol and/or Consent Document – Expedited Review
UIC Amendment # 4**

March 1, 2017

Kari Smith, MSW, MA
Special Education
3448 EPASW, 1040 W Harrison
M/C 147
Chicago, IL 60612
Phone: (708) 567-3585 / Fax: (312) 996-5651

RE: Protocol # 2012-1114
“School Connectedness and Climate for African American Male Students With and Without Disabilities”

Dear Ms. Smith:

Members of Institutional Review Board (IRB) #2 have reviewed this amendment to your research and/or consent form under expedited procedures for minor changes to previously approved research allowed by Federal regulations [45 CFR 46.110(b)(2)]. The amendment to your research was determined to be acceptable and may now be implemented.

Please note the following information about your approved amendment:

Amendment Approval Date:

March 1, 2017

Amendment:

Summary: UIC Amendment #4, dated February 2, 2017 and received via OPRS Live February 15, 2017, is an investigator-initiated amendment modifying the research questions to include measuring the relationships between the student and staff assessments of school climate and individual measures of student connectedness with respect to African American students; and, to assess which variables (i.e. school climate and/or covariates) predicts school connectedness among African American students (revised protocol, v6, 1/17/2017).

Approved Subject Enrollment #:

240

Performance Sites:

UIC, [REDACTED] School, [REDACTED]

[REDACTED] Middle School - [REDACTED], IL, [REDACTED] Middle School - IL

Sponsor:

None

PAF#:

Not applicable

Phone: 312-996-1711

<http://www.uic.edu/depts/ovcr/oprs/>

FAX: 312-413-2929

APPENDIX C (continued)

Research Protocol(s):

a) School Connectedness and Climate; Version 6; 01/17/2017

Please note the Review History of this submission:

Receipt Date	Submission Type	Review Process	Review Date	Review Action
02/15/2017	Amendment	Expedited	03/01/2017	Approved

Please be sure to:

→ Use your research protocol number (2012-1114) on any documents or correspondence with the IRB concerning your research protocol.

→ Review and comply with all requirements on the OPRS website at,
"UIC Investigator Responsibilities, Protection of Human Research Subjects"
 (<http://tiger.uic.edu/depts/ovcr/research/protocolreview/irb/policies/0924.pdf>)

Please note that the UIC IRB #2 has the right to ask further questions, seek additional information, or monitor the conduct of your research and the consent process.

Please be aware that if the scope of work in the grant/project changes, the protocol must be amended and approved by the UIC IRB before the initiation of the change.

We wish you the best as you conduct your research. If you have any questions or need further help, please contact the OPRS at (312) 996-1711 or me at (312) 355-0816.

Sincerely,

Alison Santiago, MSW, MJ
 Assistant Director, IRB # 2
 Office for the Protection of Research Subjects

Enclosure(s): None

cc: Elizabeth Talbott (Faculty Advisor), Special Education, M/C 147
 Norma Lopez-Renya, Special Education, M/C 147

APPENDIX D

UNIVERSITY OF ILLINOIS
AT CHICAGO

Office for the Protection of Research Subjects (OPRS)
Office of the Vice-Chancellor for Research (MC 672)
205 Administrative Office Building,
1737 West Polk Street
Chicago, Illinois 60612-7227

Approval Notice
Continuing Review

February 9, 2017

Kari Smith, MSW, MA
Special Education
3448 EPASW, 1040 W Harrison
M/C 147
Chicago, IL 60612
Phone: (708) 567-3585 / Fax: (312) 996-5651

RE: Protocol # 2012-1114
"School Connectedness and Climate for African American Male Students With and Without Disabilities"

Dear Ms. Smith:

Your Continuing Review was reviewed and approved by the Expedited review process on February 8, 2017. You may now continue your research.

Please note the following information about your approved research protocol:

Protocol Approval Period: March 8, 2017 - March 8, 2018
Approved Subject Enrollment #: 240 (Limited to data analysis from 227 enrolled subjects).

Additional Determinations for Research Involving Minors: The Board determined that this research satisfies 45CFR46.404, research not involving greater than minimal risk. Therefore, in accordance with 45CFR46.408, the IRB determined that only one parent's/legal guardian's permission/signature is needed. Wards of the State may not be enrolled unless the IRB grants specific approval and assures inclusion of additional protections in the research required under 45CFR46.409. If you wish to enroll Wards of the State contact OPRS and refer to the tip sheet.

Performance Sites: [REDACTED] School, [REDACTED]
Middle School - [REDACTED], IL, [REDACTED] - IL, UIC

Research Protocol(s):

- a) School Connectedness and Climate; Version 5, 09/02/2015

Recruitment Material(s):

- a) N/A – Limited to data analysis only.

Phone: 312-996-1711

<http://www.uic.edu/depts/ovcr/oprs/>

FAX: 312-413-2929

APPENDIX D (continued)

Informed Consent(s):

- a) N/A – Limited to data analysis only.

Your research meets the criteria for expedited review as defined in 45 CFR 46.110(b)(1) under the following specific category(ies):

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

Please note the Review History of this submission:

Receipt Date	Submission Type	Review Process	Review Date	Review Action
01/19/2017	Continuing Review	Expedited	02/08/2017	Approved

Please remember to:

→ Use your **research protocol number** (2012-1114) on any documents or correspondence with the IRB concerning your research protocol.

→ Review and comply with all requirements on the guidance,
"UIC Investigator Responsibilities, Protection of Human Research Subjects"
 (<http://research.uic.edu/irb/investigators-research-staff/investigator-responsibilities>).

Please note that the UIC IRB has the prerogative and authority to ask further questions, seek additional information, require further modifications, or monitor the conduct of your research and the consent process.

Please be aware that if the scope of work in the grant/project changes, the protocol must be amended and approved by the UIC IRB before the initiation of the change.

We wish you the best as you conduct your research. If you have any questions or need further help, please contact OPRS at (312) 996-1711 or me at (312) 413-1518. Please send any correspondence about this protocol to OPRS at 203 AOB, M/C 672.


Sincerely,

Alma Milat, BS
 IRB Coordinator, IRB # 2
 Office for the Protection of Research Subjects

Enclosure(s): None

cc: Norma Lopez-Renya, Special Education, M/C 147
 Elizabeth Talbott, Faculty Sponsor, Special Education, M/C 147

APPENDIX E

	APPROVAL
	STARTS EXPIRES 03/08/2016 — 03/08/2017
	 UNIVERSITY OF ILLINOIS AT CHICAGO INSTITUTIONAL REVIEW BOARD

University of Illinois at Chicago
Electronic Teacher Consent for Participation in Research Study
Conducted by Kari Smith, PhD Student, Special Education

Dear Teacher:

I am conducting a research study in order to gather African American students' opinions of their connection to school and school climate. I am asking you to complete one electronic (1) survey. The link for the survey is: _____

I am conducting a research study in order to gather African American students' opinions of their connection to school and school climate. Your consent is needed in order to participate in this study. All information will be kept confidential and only the results, not tied to any names, will be shared with the school district. The school district will not be informed of who decides or refuses to participate in this study.

Your participation in this study is completely voluntary. A small token of appreciation (i.e. Starbucks gift card) will be sent to you electronically following completion of the survey. In order to receive the gift card and for the researcher to be able to link your responses with your school, you will need to provide your email address at the end of the electronic survey. Please know that your individual responses WILL NOT be shared with school district personnel. Please read this form, and feel free to ask if you have any questions before agreeing to participate in this study.

Why is this research being done?

The purpose of this study is to gain an understanding of teachers' perceptions of the school's climate as it relates to students' connection to school. The results of this study will help me to better understand the climate of this school in conjunction with African American students' connection to school.

What procedures are involved?

I am asking you to complete one (1) survey. It should take you no more than 15 minutes to complete the survey. Your responses will remain confidential.

What are the potential risks and discomforts?

There are minimal risks associated with this research study. However, you may feel uncomfortable answering some survey questions. If at any time either you feel uncomfortable, you can stop participating in the survey. Also, there is a risk of a breach of privacy (others may

APPENDIX E (continued)

find out you are participating) and/or confidentiality (others may find out identifiable information collected during the research) which is minimal since the surveys are being completed online at your convenience.

Are there benefits to taking part in the research?

There will be no benefits to you for participating in this research study. The overall benefits of this study include allowing educators to identify factors that support or hinder African American students' connection to school and an understanding of school climate.

What about privacy and confidentiality?

All information about you will be kept confidential. I will assign your email address a code so that I can review survey results per school. I do ask for your email address so that I can send you an electronic gift card as a thank you for participating in the survey. I will NOT share your individual responses or email address with the school district unless compelled to do so in order to protect your rights or welfare (e.g. the UIC Institutional Review Board monitors the study or consent process) or if required by law.

No information that will link your answers to the data will be included in any published reports. All data will be kept in a locked file. After the data has been analyzed and evaluated, it will be kept for up to 5 years. After 5 years, it will be destroyed.

I will not release any information about you unless compelled to do so in order to protect your rights or welfare (e.g. the UIC Institutional Review Board monitors the study or consent process) or if required by law. Please note the UIC Office for the Protection of Research Subjects/Institutional Review Board and Auditors from UIC or the State of Illinois *always* have the right to inspect research records for research conducted at UIC.

What are the costs for participating in this research?

There are no costs to you for participating in this study.

Can I withdraw or be removed from this study?

Your participation in this study is completely voluntary. You can withdraw at any point during the study, including before, during, or after completion of the surveys.

Your decision to participate in this study will not affect your current or future relations with the school district, me, or the University of Illinois at Chicago.

You can choose whether or not to participate in this study. If you give consent now, but later change your mind and decide you do not want to participate, you may withdraw your consent at any time without any consequences. To withdraw from this study, please contact me, Kari Smith, at 708.567.3585. You can email me as well at ksmith63@uic.edu

Who should I contact if I have questions?

Please feel free to contact Kari Smith, principal investigator, at 708.567.3585. You can also email me at ksmith63@uic.edu

APPENDIX E (continued)

You may also contact the faculty sponsor of this project, and her information is listed below:

Dr. Elizabeth Talbott

etalbott@uic.edu

312-413-8745

What are my rights as a research subject?

If you have any questions about your rights as a research subject, you may call the Office for the Protection of Research Subjects at 312-996-1711 or email uicirb@uic.edu.

Please remember

Your participation in this study is completely voluntary. Your refusal to participate in this study will not affect your current or future relations with the school district, me, or the University of Illinois at Chicago. If you agree to participate now but later changes your mind, you may withdraw from this study at any time without any consequences.

****You will be given a copy of this form for your information and to keep for your records.****

Sincerely,

Kari Smith, MSW, MA

Doctoral Candidate

Department of Special Education, University of Illinois at Chicago

Teacher Signature

I have read (or someone has read to me) the preceding information. I have been given the opportunity to ask questions, and my questions have been answered to my satisfaction. I have been given a copy of this form.

_____ YES, I give consent to participate in the study, "School Connectedness and Climate for African American Male Students with and without Disabilities" as described.

_____ NO, I DO NOT give consent to participate in "School Connectedness and Climate for African American Male Students with and without Disabilities"

Electronic Signature of Teacher

Date

Name of Teacher

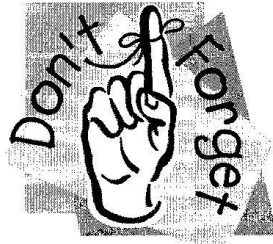
APPENDIX F

**Teacher Presentation Outline**

Kari Smith, MSW, MA, a doctoral candidate at the University of Illinois at Chicago is recruiting teachers for her doctoral study, **School Connectedness and Climate for African American Students with and without Disabilities**. You are being asked to complete a survey of school climate so that Kari can get an overall view of school climate from teachers' perspectives. This information will be examined in conjunction with students' responses to surveys to examine the relationships among a broad measure of school climate and measures of individual student connectedness. Also, Kari is interested in examining which of the constructs of school climate and connectedness at the school and individual student levels will distinguish between African American students with and without disabilities. **In order to be able to use data from your school, Kari needs 70% of the staff to complete surveys.** She is recruiting staff first, and after 70% of staff has completed the surveys, Kari will begin recruitment of students. Surveys will be completed online at your leisure. You will be asked to provide your email address at the end of the survey if you wish to receive an electronic Starbucks gift card thanking you for your participation in the survey. Your email address will only be used to send the gift card and to link your responses to the school.

As educators, we know that adolescence is a time of transition for students both emotionally and behaviorally. Research shows that as students' progress in grades from elementary to middle school, their connections to school and perceptions of school climate may decline. Few research studies have examined student-teacher relationships from both the students' and teachers' perspectives, and this is critical in order to gain an understanding of the student-teacher relationship and the school climate within which these relationships develop. Also, students' racial-ethnic identity can protect them from declines in academic achievement and can serve as a buffer from risk that African American students face in schools. **The information gained from this study will assist educators in understanding school climate and connectedness for African American students with and without disabilities.**

APPENDIX G



Date: _____

Dear Certified Staff Member:

Please remember to complete the American School Climate Survey-Teacher Version, electronically for Ms. Smith, Doctoral Candidate.


Ms. Smith has been approved to conduct her dissertation study in your school. Your completion of the survey is extremely important to conducting this study, and I hope the findings from this study will give us valuable information regarding school climate and connectedness measures for African American middle school students.

Ms. Smith really appreciates your participation.

Thanks!

THE LINK TO THE SURVEY IS: _____

APPENDIX H

	APPROVAL
	STARTS EXPIRES
	03/08/2016 — 03/08/2017
 UNIVERSITY OF ILLINOIS AT CHICAGO INSTITUTIONAL REVIEW BOARD	



Research Study Seeking Student Participants

Dear Parent/Guardian,

Your student is invited to participate in a research study conducted by Ms. Kari Smith, a doctoral candidate at the University of Illinois at Chicago. I am asking your student to complete surveys regarding school climate and whether or not s/he feels a connection to school to determine if there are differences between groups of students. Completion of the surveys will occur either before or after school or during his or her lunch period and will take no more than one (1) class period to complete. **S/he will receive an iTunes gift card for completing the surveys.**


If you are willing to allow your student to participate in this study and would like additional information, please contact Ms. Smith at ksmith63@uic.edu or 708-567-3585.

I HOPE YOU WILL CONSIDER ALLOWING YOUR STUDENT TO PARTICIPATE IN THIS STUDY.

THANK YOU!

For more information on this study please contact: Ms. Smith, Principal Investigator, at ksmith63@uic.edu or 708.567.3585.

APPENDIX I

	APPROVAL
	STARTS EXPIRES 03/08/2016 — 03/08/2017
	 UNIVERSITY OF ILLINOIS AT CHICAGO INSTITUTIONAL REVIEW BOARD

University of Illinois at Chicago
Parental Consent for Participation in Research Study
Conducted by Kari Smith, PhD Student, Special Education

Dear Parent or Guardian:

I am conducting a research study in order to gather African American students' opinions of their connection to school and school climate. I am asking to give surveys to your student at his/her school either before or after school or during lunch.

Your permission is needed in order to collect information about your student's experiences. All information will be kept confidential and only the results, not tied to any names, will be shared with the school district. The school district will not be informed of who decides or refuses to participate in this study.

Your student's participation in this study is completely voluntary. A small token of appreciation (i.e. \$10 gift card) will be offered to thank your student for his/her time.

Please read this form, and feel free to ask if you have any questions before agreeing to allow your student to participate in this study.

Why is this research being done?

The purpose of this study is to gain an understanding of your student's connection to school and school climate. The results of this study will help me to better understand the student-teacher relationships of African American middle school students in this school.

What procedures are involved?

I am asking to give three (3) surveys to your student in a group for the maximum of one hour. I will read all survey items to the group. The survey administration will be held at the school before or after school or during your student's lunch period.

In order to screen participants for participation in this study, I will have school staff member, who has access to student files, collect the following basic demographic information for me: 1) name; 2) phone number; 3) age; 4) grade; 5) overall grade point average for this school year; 6) number of discipline referrals for this school year; and 7) whether or not your student receives

APPENDIX I (continued)

special education services. If your student receives special education services, I also need to know 8) your student's disability classification and 9) special education placement (that is, consult, resource, instructional, speech/language only). This information will be shared with me so that I can link your student's responses on the survey to the correct school. This information is used for data analysis purposes only and will remain confidential. I will pick up this information from the school office and it will be kept locked up at all times in a secure drop box, including prior to me picking it up and once I have received the information from the school.

What are the potential risks and discomforts?

There are minimal risks associated with this research study. However, your student may feel uncomfortable answering some survey questions. If at any time your student feels uncomfortable, s/he can stop participating in the survey. I can give you a copy of the surveys ahead of time so that you know the questions I will be asking your student. If you would like copies of the surveys, please let me know. Also, there may be a potential for a breach of privacy and/or confidentiality when the surveys are conducted in a group setting. However, confidentiality will be stressed with participating students, and I will maintain confidentiality to the highest standard possible for this research.

Are there benefits to taking part in the research?

There will be no benefits to your student for participating in this research study. Overall, the benefits of this study include allowing educators to identify factors that support or hinder African American students' connection to school and an understanding of school climate.

What about privacy and confidentiality?

All information about your child, including his/her name and address, will be kept confidential and locked up at all times. I will keep all identifying information separate from the surveys and will not report the identifying information. I will assign a confidential identifier to your student's responses in order to keep track of his/her answers for data entry. Only I will have access to this information. Also, the list of numbers corresponding to names will be destroyed at the end of this study.

No information that will link your student's name to his/her answers will be included in any published reports. All data will be kept in a locked file. After the data has been analyzed and evaluated, it will be kept for up to 5 years. After 5 years, it will be destroyed.

I will not release any information about your student unless compelled to do so in order to protect your rights or the welfare of your student (e.g. the UIC Institutional Review Board monitors the study or consent process) or if required by law. Please note the UIC Office for the Protection of Research Subjects/Institutional Review Board and Auditors from UIC or the State of Illinois *always* have the right to inspect research records for research conducted at UIC.

What are the costs for participating in this research?

There are no costs to you or your student for participating in this study.

Can I withdraw or be removed from this study?

APPENDIX I (continued)

Your student's participation in this study is completely voluntary. S/he can withdraw at any point during the study, including before, during, or after the survey.

Your decision whether or not to allow your student to participate in this study will not affect you or your student's current or future relations with the school district, myself, or the University of Illinois at Chicago.

You can choose whether or not your student participates in this study. If you sign the permission form now, but later change your mind and decide you do not want your student to participate, you may withdraw your consent at any time without any consequences. To withdraw from this study, please contact me, Kari Smith, at 708.567.3585. You can email me as well at ksmith63@uic.edu

Who should I contact if I have questions?

Please feel free to contact Kari Smith, Principal Investigator, at 708.567.3585. You can also email me at ksmith63@uic.edu

You may also contact the faculty sponsor of this project, and her information is listed below:

Dr. Elizabeth Talbott
etalbott@uic.edu
312-413-8745

What are my rights as a research subject?

If you have any questions about your rights as a research subject, you may call the Office for the Protection of Research Subjects at 312-996-1711 or email uicirb@uic.edu.

Please remember

Your student's participation in this study is completely voluntary. Your decision whether or not to allow your student to participate in this study will not affect you or your student's current or future relations with the school district, me, or the University of Illinois at Chicago. If your student agrees to participate now but later changes his/her mind, s/he may withdraw from this study at any time without any consequences.

****You will be given a copy of this form for your information and to keep for your records.****

Sincerely,

Kari Smith, MSW, MA
Doctoral Candidate
Department of Special Education, University of Illinois at Chicago

APPENDIX I (continued)**Signature of Parent or Legal Guardian**

I have read (or someone has read to me) the preceding information. I have been given the opportunity to ask questions, and my questions have been answered to my satisfaction. I have been given a copy of this form.

____ YES, I give permission for my child to participate in the study, "School Connectedness and Climate for African American Students with and without Disabilities" as described.

____ NO, I DO NOT give permission for my child to participate in "School Connectedness and Climate for African American Students with and without Disabilities"

Signature of Parent/Guardian

Date

Printed Name of Parent/Guardian

Print Name of Child (first and last name)

Child's Date of Birth & Age

PLEASE RETURN THIS CONSENT FORM DIRECTLY TO MS. SMITH IN THE SECURE DROPBOX AT THE SCHOOL, VIA EMAIL TO MS. SMITH AT ksmith63@uic.edu, OR CALL MS. SMITH AT 708-567-3585 TO ARRANGE FOR A PICK UP TIME AND LOCATION.

APPENDIX J

	APPROVAL
	<div style="display: flex; justify-content: space-between;"> <div style="text-align: left;"> STARTS 03/08/2016 </div> <div style="text-align: center;"> — </div> <div style="text-align: right;"> EXPIRES 03/08/2017 </div> </div>
	UNIVERSITY OF ILLINOIS AT CHICAGO INSTITUTIONAL REVIEW BOARD

University of Illinois at Chicago
Assent to Participate in Research Study
Conducted by Kari Smith, Doctoral Candidate, Special Education

1. Hello! I am a student at the University of Illinois at Chicago. I am asking you to participate in a research study I am conducting in order to gather African American students' opinions of their connection to school and school climate.
2. In order to screen participants for participation in this study, I will have a staff member, who has access to your student files, collect the following basic demographic information for me to make sure you meet the criteria to participate in my study: 1) name; 2) phone number; 3) age; 4) grade; 5) overall grade point average for this school year; 6) number of discipline referrals for this school year; and 7) whether or not you receive special services. If you do receive special services, I also need to know 8) why (i.e. your classification) and 9) placement (i.e., consult, resource, instructional, speech/language only). This information will be shared with me so that I can link your responses on the survey with the correct school. This information is used for data analysis purposes only and will remain confidential. I will pick up this information from the school office, and it will be kept locked up at all times in a secure drop box, including prior to me picking it up and once I have received the information from the school. All of the information I collect will be kept confidential and locked up at all times. I will keep all information that can identify you separate from the surveys and only I will have access to this information.
3. If you agree to be in this study, I will invite you to a meeting to complete surveys so that you can complete a form asking you questions about your school and your relationships with your teachers. The surveys should take no more than one hour/class period. If at any time you feel uncomfortable answering a question or want to stop participating, you can do so.
4. Please know that I understand you may feel uncomfortable sharing some information, but like I said, if you feel uncomfortable at any time, you can stop taking the survey. Also, I will keep your name confidential and will only share findings with the school district. I WILL NOT share your name, only your comments. Also, the school district will not be informed of who decides or refuses to participate in this study.
5. I have asked your parent/guardian(s) for permission for you to participate in this study, but I need to make sure you understand what is being asked of you. Also, you can choose not to participate in this study if you want to, even if your parent/guardian gave consent for you to do so. Again, you won't receive any consequences for that.

APPENDIX J (continued)

6. You will receive a small token of appreciation (i.e. \$10 gift card) if you decide to participate in this study to thank you for your time.

7. Please feel free to ask me any questions now. You can also email or call me if you think of a question later. My email is ksmith63@uic.edu, and my phone number is 708.567.3585. You may also contact the faculty sponsor of this project, and her information is listed below:
Dr. Elizabeth Talbott
etalbott@uic.edu
312-413-8745

8. What are my rights as a research subject?

If you have any questions about your rights as a research subject, you may call the Office for the Protection of Research Subjects at 312-996-1711 or email uicirb@uic.edu.

I HAVE READ THE ABOVE ITEMS AND:

PLEASE CHECK ONE

☐ Yes, I want to participate in this study

☐ No, I do not want to participate in this study

_____ Student's Signature	_____ Printed Name	_____ Date of Birth/Age	_____ Today's Date
------------------------------	-----------------------	----------------------------	-----------------------

_____ Researcher's Signature	_____ Today's Date
---------------------------------	-----------------------

PLEASE RETURN THIS CONSENT FORM DIRECTLY TO MS. SMITH IN THE SECURE DROPBOX AT THE SCHOOL, VIA EMAIL TO MS. SMITH AT ksmith63@uic.edu, OR CALL MS. SMITH AT 708-567-3585 TO ARRANGE FOR A PICK UP TIME AND LOCATION.

VITA**Kari Smith**

Education & Certifications

Doctoral Candidate in Special Education, College of Education, University of Illinois at Chicago
Anticipated Graduation Date: Fall 2017

Masters of Arts (MA), 2008, Concordia University, River Forest, IL
School Leadership

Masters of Social Work (M.S.W.), 1999, University of Illinois, Urbana-Champaign, IL
School Social Work Specialization

Bachelors of Social Work (B.S.W.), 1996, Arizona State University, Tempe, AZ

Illinois Professional Educator License, General Administrative
Director of Special Education Endorsement

Illinois Professional Educator Licenses, School Social Worker and School Counselor

Teaching Experience**School of Social Work, Aurora University, Aurora, IL**

SWK 5610, Social Work with Exceptional Children, Fall 2008

SWK 5610, Social Work with Exceptional Children, Fall 2009

SWK 5610, Social Work with Exceptional Children, Fall 2010

College of Education, University of Illinois at Chicago, Chicago, IL

SPED 467, Social & Emotional Development and Disabilities (co-taught with Elizabeth Talbott, PhD,
Advisor), Summer 2010

Professional Experience

7/17-present Elmwood Park Community Unit School District 401, Elmwood Park, IL
Director for Student Services

7/15-6/17 Lombard District 44, Lombard, IL
Director of Special Services

8/10-6/15 Oak Park Public School District 97, Oak Park, IL
Special Education Coordinator

8/10-8/14 Oak Park Public School District 97, Oak Park, IL
Summer School Site Supervisor

8/99-6/10 Oak Park Public School District 97, Oak Park, IL
School Social Worker

6/09-8/09 Center for Capacity Building of Minorities with Disabilities Research (CCBMDR),
University of Illinois at Chicago
Summer Research Intern

VITA (continued)

6/08-8/08 Institute for Disability and Human Development (IDHD), University of Illinois at Chicago
Summer Intern

Conference Presentations

- Smith, K. (October, 2014). *Common Core State Standards and school social workers: Where do we fit in?* Presented at the Illinois Association of School Social Workers Annual Conference, Lisle, IL.
- Alvarez, M., Childs, P., James, M., Kunkel, R., Lindsey, B. C., **Smith, K.**, & Cox, T. (March, 2014). *Common core standards for school social work services*. Presented at the School Social Work Association of America Annual Conference, Chicago, IL.
- Kunkel, R., Childs, P., James, M., & **Smith, K.** (March 2014). *State leadership boot camp*. Presented at the School Social Work Association of America Annual Conference, Chicago, IL.
- Smith, K. (November, 2013). *Common Core State Standards and school social workers: Where do we fit in?* Presented at the Illinois Association of School Social Workers Annual Conference, Lisle, IL.
- Smith, K. (January, 2011). *School experiences of African American male middle school students*. Presented at the Illinois Alliance of Administrators of Special Education Conference, Springfield, IL.
- Smith, K. (October, 2010). *School experiences of African American male middle school students*. Presented at the Illinois Association of School Social Workers Annual Conference, Bloomington, IL.
- Smith, K. (October, 2010). *School experiences of African American male middle school students*. Presented at the Midwest School Social Work Conference, Bloomington, MN.
- Smith, K. (April, 2010). *Giving voice to African American males*. Presented at the School Social Work Association of America Conference, St. Louis, MO.
- Smith, K. (March, 2010). *School experiences of African American male middle school students*. Poster session presented at the STEP=UP Doctoral Student Poster Session, Chicago, IL.
- Smith, K. (February, 2010). *Giving voice to African American males*. Presented at the Equity Forum, Equity Alliance at Arizona State University, Phoenix, AZ.
- Smith, K. (October, 2009). What I know now that I wish I knew then. In B. Lindsey (Chair), *Tiefenthal Symposium*. Symposium conducted at the Illinois Association of School Social Workers Annual Conference, Arlington Heights, IL.
- Lindsey, B. C., White, M., & **Smith, K.** (September, 2009). *Response to Intervention: School social work at all three tiers*. Co-presented at the National Association of Social Workers, Illinois Chapter, Statewide Conference, Chicago, IL.

Professional Development Presentations

- Smith, K. (June 2016). *Importance of Data*. Panelist, Opening Plenary, Summer Training Institute for School Social Work Professionals, Jane Addams College of Social Work, University of Illinois at Chicago, Chicago, IL.
- Smith, K. (August 2016). *Social emotional learning*. Presented to Lombard District 44 staff, Lombard, IL.
- Smith, K. (January 2015). *Common Core State Standards and school social workers: Where do we fit in?* Presented to District 99 School Social Workers, Cicero, IL.
- Smith, K. (October 2014). *Common Core State Standards for teaching assistants*, Oak Park, District 97 Institute Day Presentation, Oak Park, IL.

VITA (continued)

- Smith, K. (February 2014). *Common Core State Standards for related services personnel*, Oak Park, District 97 Institute Day Presentation, Oak Park, IL.
- Smith, K. (April 2013). *Common Core State Standards and teaching assistants*, Oak Park, District 97 Institute Day Presentation, Oak Park, IL.
- Smith, K. (December 2008). *The special education referral process*, Percy L. Julian Middle School, Oak Park District 97, Oak Park, IL.
- Smith, K. (February, 2008). *Mental health issues in the schools*, Community Mental Health Board of Oak Park, Oak Park, IL.
- Smith, K. & Diehl, S. (2007-2010). Parent workshops for parents of students with low incidence disabilities, Co-Presenter, Oak Park District 97, Oak Park, IL.
- Smith, K. (October, 2007). *The middle school student*, Percy L. Julian Middle School, Oak Park District 97, Oak Park, IL.
- Smith, K. (July, 2007). *Social workers and teachers working together*, International Activities Network, National Association of Social Workers, Oak Park, IL.
- Smith, K. (June, 2007). *Including students with disabilities through Best Buddies programs*, University of Illinois at Chicago, Occupational and Physical Therapy Seminar Class, Chicago, IL.
- Smith, K. (July, 2006). *Developmental assessment of children from an educational perspective*, International Activities Network, National Association of Social Workers, Durban South Africa.

Publications**Books & Chapters**

- Lindsey, B. C., **Smith, K.**, Cox, T., & Alvarez, M. (2016). The school social work contribution to meeting national standards for social emotional learning. In Massat, C. R., Kelly, M., & Constable, R. (Eds.). *School Social Work: Practice, Policy, and Research*, 8th Edition. Chicago, IL: Lyceum Books, Inc.
- Lindsey, B. C., Sabatino, C., **Smith, K.**, & Kunkel, R. (2016). Evaluation. In L. Villarreal Sosa, T. Cox, & M. Alvarez (Eds.). *School social work: National perspectives on practice in schools*. New York: Oxford University Press.

Journal Articles

- Smith, K. (2009). Recruitment and retention of African Americans to the social work profession. *Social Work Networker*, XLVII (1), 4-5.
- Smith, K., & Teasley, M. (April, 2014). The impact of Common Core State Standards on the school community (Editorial). *Children & Schools*, 36(2), 67-69. doi: 10.1093/cs/cdu008.

Dissertation

Title: *School Climate and Connectedness for African American Students with and without Disabilities*
 Department of Special Education, College of Education, University of Illinois at Chicago
 Advisor: Elizabeth Talbott, PhD
 Anticipated Graduation Date: Fall 2017

Research Project

Title: *School Experiences of Young African American Men Participating in a Middle School Leadership Academy*
 Department of Special Education, College of Education, University of Illinois at Chicago
 Advisor: Elizabeth Talbott, PhD
 Status: Completed November 2011

VITA (continued)

Professional Activities

National

Council for Exceptional Children, 2007-present

School Social Work Association of America, 1999-present

State

Illinois Alliance of Administrators of Special Education (IAASE), 2010-present

Illinois Association of School Social Workers, 1997-present