THE RELATIONSHIP OF SCHOOL CONNECTEDNESS TO RACE,
ACHIEVEMENT, ATTENDANCE, SOCIOECONOMIC STATUS, AND BEHAVIOR

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Abstract

The purpose of this study was to examine school connectedness and the relationship it has to the following: race, achievement, attendance, socioeconomic status, and behavior. This study focused on students who were in grades 6 - 8 and attended Grandview Middle School. Grandview Middle School is an urban school in the Grandview C4 School District. This study was the second administration of the 10 questions on the MSIP AQ School Climate and Equity Sub Scale used to measure school connectedness. The original survey was part of the DESE fourth cycle Missouri School Improvement Program (MSIP) visit in March 2009. Questions from the School Climate and Equity Subscales were re-administered as part of the current study.

A quantitative design was used. Measurement was determined by results from the 10 questions School Connectedness Survey. The items on the School Connectedness Survey were rated on a five point Likert Scale, where 1 = *Strongly Disagree*, 2 = *Disagree*, 3 = *Neutral*, 4 = *Agree*, and 5 = *Strongly Agree*. Permission letters were distributed to 565 students. One hundred eighty students participated in the study. One-way ANOVA, Pearson correlations, and *t* tests were used to analyze and test the hypotheses

Results yielded from this study showed a marginally significant relationship between student perceptions of equity and student achievement. The data of other hypotheses tests revealed no significant relationship or differences between school connectedness and the following: race, attendance, behavior, and socioeconomic status.

Dedication

I dedicate this work to God. Without Him, I could do nothing. "I can do all things through Christ which strengtheneth me" Philippians 4:13 (King James Version).

Acknowledgements

There are many people I owe a debt of gratitude. Without them my journey would not have been possible.

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Finally, to any student who feels they do not have the ability or capability to achieve beyond what others think. If an example is ever necessary to see what is possible in the midst of impossibilities, look at the testimony of my life.

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CHAPTER ONE

INTRODUCTION AND RATIONALE

America is a nation that can be proud of its many accomplishments throughout

history. Americans have risen above trials and tribulations, endured times of decline,

survived events that challenged their patriotism, prevailed during years of injustice and

peril, heard dreams sermonized, and seen dreams fulfilled. These moments in the

nation's history renewed the fortitude to stand together, replenished depleted spirits, and

restored our faith and hope. However, in 2009, Americans still live in a nation where 55

years after *Brown v. Board of Education,* there is an academic achievement gap between

ethnic subgroups. Too many students are disconnected from school and are failing to

achieve.

Since the *No Child Left Behind Act* (NCLB) of 2001, a vast amount of research

has focused on increasing student achievement and closing the educational gap between

low-income and minority children as compared with their peers (e.g. Aronson, 2004; Barr

& Parrett, 2007; Center for Performance Assessment, 2003; Evans, 2005; Groover, 2004;

Haycock, 1998; Krajewski & Parker, 2001; Kuykendall, 2004; Mathis, 2005; Poliakoff,

2006; Ramirez & Carpenter, 2005; Williams, 2003). For many years, low-income and

minority children have fallen behind their white peers in terms of academic achievement

(U.S. Department of Education, 2009). Often, these students enter school behind and are

placed in systems that perpetuate the problem of underachievement. Instead of

developing systems to narrow the educational gap and to address the concern regarding

underachievement, schools add to the problem by ineffectively educating these students.

Achievement data identified by The Education Trust (Wilkins, 2006) regarding educating students from different ethnic backgrounds included

1. Nearly two-thirds of African-American fourth-graders do not read at even the basic level, according to results on the National Assessment of Educational Progress (NAEP).

2. More than half of fourth-grade Native Americans does not have [*sic*] even basic reading skills.

3. Half of Latino eighth-graders do not do math at the basic level.

4. African-American and Latino graduating seniors have math and reading skills that are virtually the same as those of eighth grade White students. (p. 1)

Without an equitable education to ensure low-income, minority, and disadvantaged students achieve at high levels, these students will be required to remain in the margins of educational systems and society. The NCLB federal mandate brought the disparities in achievement to the limelight, especially focusing on the achievement of students from different subgroups. According to Schaps (2005), "Schools are now called upon to reduce the disparities in achievement among various racial, ethnic, and income subgroups" (p. 53). These important requirements cause teachers, administrators, professors, and researchers to search for ways to close the achievement gap and to improve student learning. Blum (2005) contended,

In this era of accountability and standards, school connectedness can seem like a soft approach to school improvement. It [school connectedness] can, however,

have a substantial impact on the measure of student achievement for which

schools are currently being held accountable. (pp. 16-17)

Often overlooked and minimized in the search for answers to close the

achievement gap and to improve the learning of students is the key role of building

positive relationships and fostering a sense of connectedness in this endeavor. Creating a

caring and productive environment that supports and encourages connectedness is a

major factor in improving the achievement of all students (Blum, 2005; Klem & Connell,

2004; Libbey, 2004).

<div align="center">Problem Statement</div>

When students feel connected, they are more likely to be socially and

academically successful in school (Blum, 2005; Elias, Wang, Weissberg, Zin, &

Walsburg, 2002; Johnson, 2006; Leffert, Benson, & Roehlkepartain 1997; Payne, 2001;

Schaps, 2005; Thiers, 2005). School connectedness, according to Blum (2004), refers to

the students' beliefs that adults in the school care about their learning and about them as

individuals. Developing positive relationships and creating a supportive school culture

are equally as important as instruction in assessing background knowledge, teaching

vocabulary, differentiating instruction, analyzing data, and other instructional strategies.

By addressing school connectedness and strengthening relationships among educators,

students, and families, tremendous strides can be taken in increasing student success

among all racial groups and socioeconomic levels (Blum, 2005; Blum & Libbey, 2004;

Klem & Connell, 2004; McNeely & Falci, 2004).

Blum (2004) advocated that school is the most important force in a child's life,

second to family. Developing positive relationships with peers and adults can be seen as

a viable school reform initiative to improve student achievement. Schaps (2005) extended school connectedness to include a close relationship with peers and adults. School connectedness allows educators to reach and understand students by forming positive relationships. A positive effect upon school culture and climate are observable when the number of students who feel connected increases. Furthermore, Schaps pinpointed the importance of school connectedness:

> Improving the social and emotional climate of schools, and the social and emotional soundness of students, advances the academic mission of the schools in important ways…Satisfying the social and emotional needs of students does more than prepare them to learn. It actually increases their capacity to learn. (p. 42)

By increasing this capacity to learn, minority and disadvantaged youth are given equitable opportunities to achieve at high levels. Rather than trying to identify instructional strategies effective in increasing student achievement, closing the educational gap, or meeting the benchmarks of NCLB, this study investigates the important roles of school connectedness and building positive relationships in addressing these issues. Greene (2006) concluded, "Learning is made real by building on the actual social relationships between teachers and students, the human interaction in the classroom" (p. 3).

Minority and disadvantaged students can become successful if they are given equitable resources, exposed to highly-qualified educators, provided quality and challenging coursework, and educated in environments where students can feel connected to a caring adult and to the school. Blum (2004) identified seven qualities that positively influence students' connection to school:

1. Having a sense of belonging and being part of a school

2. Liking school

3. Perceiving that teachers are supportive and caring

4. Having good friends within school

5. Being engaged in their own current and future academic progress

6. Believing that discipline is fair and effective

7. Participating in extracurricular activities (p. 1)

School connectedness plays a critical role in response to meeting the guidelines of NCLB, closing the achievement gap, and improving the learning of students from different subgroups.

Background & Conceptual Framework

The Grandview C4 District is located in the southern portion of Kansas City, Missouri. This urban district has a student population of 4,078. Grandview C4 is comprised of four elementary schools, one K-8 school, one middle school, one alternative school that serves grades 3-12, and one high school. Both the Grandview C4 and the Grandview Middle School mission statements speak to and focus on facilitating strong relationships by utilizing professional learning communities (Grandview C4 School District, 2009; Grandview Middle School, 2009). For the purposes of this study, Grandview Middle School served as the research location.

Enrollment core data from 2004-2009 as reported to Missouri Department of Elementary and Secondary Education (DESE) are presented in Table 1. Enrolled students at a given site determined enrollment data on the last Wednesday of September and the last Wednesday of January of each school year. Enrollment trends showed an

increase in Black students with the exception of 2008-2009. Hispanic students also

showed an increase in enrollment. With the exception of 2008-2009, a decrease was

noted among the white student enrollment. Overall enrollment data reveal a continuous

decrease in enrollment for the past 4 years.

Table 1

Enrollment at Grandview Middle School Data Disaggregated by Race

Race	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009
Asian	1.2%	0.6%	1.2%	1.0%	.9%
Black	63.3%	69.9%	69.9%	71.6%	69.2%
Hispanic	5.3%	6.7%	7.2%	8.7%	9.9%
Indian	0.3%	0.3%	0.3%	0.2%	0%
White	29.9%	22.5%	21.4%	18.5%	20%
Total	676	654	655	599	565

Note. From Missouri Department of Elementary and Secondary Education, 2009. Available at

http://dese.mo.gov/planning/profile/building/bl048074.html

Attendance rates at Grandview Middle School are shown in Table 2 for 2004-

2009. Attendance rate for individual students was measured by the percentage of time a

student attends school. It is figured by dividing the number of minutes the student is

present by the total minutes school is open. Monthly attendance figures were reported to

DESE and an average of the monthly reports determined the yearly attendance.

Attendance trends showed a 2-year increase from the baseline year of 2004-2005, with a

slight decrease during the 2007-2008 school year. Attendance data from 2008-2009

indicated an increase of 2.9% over the previous year to 94.6% during the current year.

Table 2

Average Daily Attendance Rate at Grandview Middle School

Year	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009
Percent of total enrollment	93.1%	96.8%	95.5%	91.7%	94.6%

Note. From Missouri Department of Elementary and Secondary Education, 2009. Available at

http://dese.mo.gov/planning/profile/building/bl048074.html

The number of students eligible for free or reduced-price lunch at Grandview

Middle School from years 2004-2009 is presented in Table 3. The data represent the

percentage and number of students from the total population who qualified for this

governmental program. The trend for the percentage of total students eligible for free or

reduced-price lunch has increased as noted from years 2004-2009.

Table 3

Students Eligible for Free or Reduced Lunch

	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009
% of total	57.0%	56.7%	59.9%	62.2%	67.4%
n	387	365	385	378	381

Note. From Missouri Department of Elementary and Secondary Education, 2009. Available at

http://dese.mo.gov/planning/profile/building/bl048074.html

Grade point average (GPA) disaggregated by year for students who qualify for free or reduced lunch is represented in Table 4. The trend data for the accumulative GPA indicate the largest number of students who qualified for the federally funded program earned a GPA in the 3.0 - 3.99 grade range.

Table 4

Free/Reduced Status Students Disaggregated by GPA and Year

Grade Level		0-.99	1. 0–1.99	2.0–2.99	3. 0–3.99	4.0
6	2006-2007	10	28	47	34	0
	2007-2008	5	22	52	35	2
	2008-2009	0	4	51	76	0
7	2006-2007	11	23	42	35	1
	2007-2008	4	21	49	48	0
	2008-2009	1	8	27	82	0
8	2006-2007	6	38	36	47	1
	2007-2008	3	36	48	36	1
	2008-2009	1	8	41	80	0

Note. From Grandview School District, Grandview C4 Student Information System (SIS), July 1, 2009. Available at http://www.csd4.k12.mo.us

Grade point average data disaggregated by gender and year are displayed in Table 5. The data indicate a majority of female students earned higher grades at Grandview Middle School and fell within the 3.0 - 3.99 range. In contrast, the GPA of the majority male students fell in the ranges of 3.0 -3.99 and 2.0 - 2.99.

Table 5

Student GPA Disaggregated by Gender

	GPA	0 - .99	1. 0 – 1.99	2.0 – 2.99	3. 0 – 3.99	4.0
Male	2006-2007	31	102	108	94	2
	2007-2008	21	70	126	88	3
	2008-2009	2	24	89	167	0
Female	2006 - 2007	4	30	112	153	6
	2007 - 2008	2	33	110	123	1
	2008 – 2009	0	5	66	210	2

Note. From Grandview School District, Grandview C4 Student Information System (SIS), July 1, 2009. Available at http://www.csd4.k12.mo.us

Three years of grade point averages earned by students attending Grandview Middle School are shown in Table 6. The grade point averages are disaggregated by ethnicity using a 4-point scale. The data revealed the GPA of the majority of students, including all ethnic groups was in the 3.0–3.9 GPA range. Students earning grades in the 2.0–2.9 range formed the second largest GPA group. Data indicated all ethnic groups increased their GPA in the 3.0-3.9 range during 2008-2009. Additionally, all students with a GPA between 1.0-1.99 for 2008-2009 decreased. A discrepancy between enrollment numbers reflected in Table 1(reported January 2009) and the total number of grades assigned is due to the time in which the enrollment numbers were reported. The final GPA totals in Table 6 were assigned in May 2009 and were retrieved in July 2009. The slight decrease in the number of grades assigned indicated students who withdrew from Grandview Middle School during the 2008-2009 school year.

Table 6

Student GPA Disaggregated by Ethnicity

	GPA	0-.99	1. 0–1.99	2.0–2.99	3. 0–3.99	4.0
Asian	2006-2007	0	1	5	2	0
	2007-2008	0	1	3	2	0
	2008-2009	0	0	2	3	0
Black	2006-2007	29	105	160	163	1
	2007-2008	14	81	181	133	3
	2008-2009	2	28	129	230	2
Hispanic	2006-2007	1	10	14	23	0
	2007-2008	0	6	21	19	2
	2008-2009	0	0	14	41	1
Indian	2006-2007	0	0	1	1	0
	2007-2008	0	0	0	1	0
	2008-2009	0	0	0	0	0
White	2006-2007	5	19	34	58	7
	2007-2008	0	24	31	56	5
	2008-2009	1	2	20	89	1
Total	2006-2007	35	135	214	247	8
	2007-2008	14	112	236	211	10
	2008-2009	3	30	165	363	4

Note. From Grandview School District, Grandview C4 Student Information System (SIS), July 1, 2009.

Available at http://www.csd4.k12.mo.us

The number of discipline incidents disaggregated by gender and ethnicity are shown in Table 7. The data show Black males as the most significant number of students receiving consequences due to behavioral infractions. Black females are the second highest group to be assigned consequences based on discipline referrals.

Table 7

Discipline Incidents Disaggregated by Ethnicity and Gender

Ethnicity	Gender	2006–2007	2007–2008	2008-2009
Asian	Male	1	1	1
	Female	8	3	2
Black	Male	889	593	611
	Female	363	304	381
Hispanic	Male	24	25	24
	Female	5	2	9
Indian	Male	0	0	0
	Female	0	0	0
White	Male	145	99	91
	Female	37	33	31
Total	Male	1059	818	727
	Female	413	378	423

Note. From Grandview School District, Grandview C4 Student Information System (SIS), July 1, 2009. Available at http://www.csd4.k12.mo.us

Significance

Developing positive relationships builds the foundation for everything that takes

place in a classroom and/or school (Blankenstein, 2004; Eaker, DuFour, & DuFour,

2002). Failure to connect with students hinders and often prevents the teaching and

learning process. In the day and age of increased accountability and high-stakes testing,

nothing can be left to chance as administrators, teachers, parents, community members,

and school leadership teams develop plans for school improvement; connecting with

students and building relationships are an important component of most school reform

initiatives (Ben-Avie, Comer, Joyce, & Haynes, 1999; National Association of Secondary

School Principals [NASSP], 2006; Partnership for Children, 2004). Without this, schools

and students are more likely to fall short of the mark of increasing achievement.

To understand connecting and building relationships between students and adults

more clearly, this study captures students' perceptions relating to school connectedness.

The results of this study were made available to the Grandview Middle School faculty

and staff and to Grandview C-4 School District. Data yielded from this study could be

used to inform decision making at Grandview Middle School regarding building

relationships with students, effectively educating low-income and minority student

populations, and informing teachers on students' perceptions about school connectedness.

Additionally, this study adds to the existing body of knowledge relating to school

connectedness.

During March 2009, the Grandview C4 School District underwent the State of

Missouri accreditation visit known as the Missouri School Improvement Process (MSIP).

In preparation of this visit, each student completed an MSIP Advanced Questionnaire in

December 2008. Student data were collected as part of the MSIP site visit in March

2009. The student perception data relating to school climate used a scale of 1 (*Strongly*

Disagreed) to 5 (*Strongly Agree).* The means for each question prompt were all above 3

which indicated students' perception of school climate was somewhat positive (see Table

8). The percentile column identifies how Grandview Middle Schools students scored

compared to all Missouri students who took the Advanced Questionnaire. For example,

the feeling of belonging is at the 19 percentile which indicates 81% of middle school

students in Missouri scored their school higher and more positively perceived they

experienced belonging at school.

Table 8

Student Perceptions Regarding School Climate

Student	Percentile	*M*	*SD*	*N*
There is a feeling of belonging at my school.	19	3.43	1.11	527
I feel safe at school.	12	3.49	1.16	535
I like going to this school.	11	3.34	1.26	536
My opinion is valued by teachers and administrators.	46	3.17	1.10	530
Teachers in my school really care about me.	29	3.48	1.14	527
If a student has a problem, there are teachers who will listen and help.	3	3.64	1.14	531

Note. From *MSIP AQ Report*, received in a personal email from Missouri Department of Elementary and

Secondary Education, April 1, 2009.

Student perceptions regarding equity are presented in Table 9. A scale of 1 (*Strongly Disagreed)* to 5 (*Strongly Agree)*. Means for each question prompt was above 3 representing students felt situations were handled somewhat equitable. The percentile column presents how Grandview Middle Schools students scored compared to all Missouri students who took the Advanced Questionnaire. For example, all students are given a chance to succeed is at the 32 percentile which indicates 68% of students in Missouri scored their school higher.

Table 9

Student Perceptions Regarding Equity

Student Perception	Percentile	*M*	*SD*	*N*
In my school, all students are given a chance to succeed.	32	4.04	1.05	524
Discipline is handled fairly in my school.	22	3.37	1.18	535
Teachers treat me with respect.	12	3.67	1.14	536
I am treated fairly at school.	6	3.38	1.18	533

Note. From *MSIP AQ Report*, received in a personal email from Missouri Department of Elementary and Secondary Education, April 1, 2009.

Due to the recent results from the MSIP AQ regarding school connectedness, this quantitative study is important because it gives perspective regarding individual students' perceptions about school climate and equity. Data from this study will provide information to educators at Grandview Middle School. Furthermore, it extends research on the existing body of knowledge regarding critical factors in school connectedness.

Information presented in this study was also important to the Grandview C4 School

District, educators, students, and parents alike.

Purpose Statement

The purpose of the study was to examine school connectedness and the

relationship it has with race, achievement, attendance, socioeconomic status, and

behavior. Research supports the important role of school connectedness in creating an

environment where all students can be successful (Klem & Blum, 2004; Schaps, 2005).

This quantitative study added to the overall body of research by uniquely examining

students' perceptions about school connectedness from an urban perspective.

Additionally, it determined whether school connectedness plays a role in meeting the

guidelines of No Child Left Behind and improving the learning of Black, Hispanic, and

White students.

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

This study was delimited by the researcher in several ways. First, this study was

limited to students at Grandview Middle School located in South Kansas City, Missouri.

This delimitation may limit the ability to generalize results outside this urban

environment and outside other middle school environments. Second, this study was

driven by the desire to determine the group or groups of students whose lack of

connectedness might be the significant factor leading to a lack of achievement. Finally,

the second administration of the MSIP AQ survey to measure school connectedness was

administered during the last week of school during the 2008-2009 school year.

Assumptions

Assumptions increase the authenticity of a research study (Calabrese, 2006). This study was based on the following assumptions:

1. Data from the Missouri Department of Elementary and Secondary Education are accurate and represent descriptive statistics of Grandview Middle School.

2. Data from Grandview Middle School are accurate and current.

3. Students responded honestly and accurately to the survey.

4. The interpretation of the data accurately reflected the perceptions of the respondents.

Research Questions

In a study, research questions frame and guide the work but do not make predictions regarding the findings (Gall, Gall, & Borg, 2005). The following questions served to drive the research process for this study:

1. Is there a relationship between students' perceptions about connectedness and their race?

2. Is there a relationship between students' perceptions about connectedness and their achievement?

3. Is there a relationship between students' perceptions about connectedness and their attendance?

4. Is there relationship between students' perceptions about connectedness and their student behavior?

5. Is there a relationship between students' perceptions about connectedness and their socioeconomic status?

Definition of Key Terms

The definition of terms allows the researcher to define commonly known terms and how they are used in the study (Roberts 2004). For the purpose of this study, the following terms are defined:

Achievement. This is measured by the grade point average earned by each student.

Achievement gap. This is the difference between how well low-income and minority children perform as compared with their peers. For many years, low-income and minority children have fallen behind their White peers in terms of academic achievement (U.S. Department of Education, 2009).

Attendance. This is the percentage of time a student attended school. It is figured by dividing by the number of minutes present by the total minutes school is open. The attendance for a school is the mean of attendance for all students in the school (Nelson, Personal Communication, June 4, 2009).

Behavior. This is the number of discipline referrals receiving consequences, such as in- and out-of-school suspensions and detentions.

Free and reduced-price lunch status. Free lunch status is assigned to those students whose family incomes are at or below 130 percent of the poverty level; reduced-price lunches are assigned to those students whose family incomes are between 130 percent and 185 percent of the poverty level (NAEP Glossary of Terms, 2009).

Grade point average (GPA). This is the average obtained by dividing the total number of grade points earned by the total number of credits attempted. Grandview Middle School uses a 4-point system of grading to calculate GPA: A = 4, B = 3, C = 2, D = 1, F = 0 (NAEP Glossary of Terms, 2009).

School connectedness. This is the belief by students that adults in the school care about their learning and about them as individuals (Blum 2004).

Socioeconomic status (SES). This is a combination of social and economic factors used as an indicator of household income and to determine eligibility for free/reduced-free lunch status (NAEP Glossary of Terms, 2009).

Subgroups. These are determined by NCLB and refer to students from racial and ethnic groups such as Asian/Pacific Islanders, Blacks, Whites, Hispanics, American Indian, socioeconomic status, and IEP students (U.S. Department of Education, 2009).

Overview of Methods

A quantitative research design was used to determine the relationship between school connectedness and the following: race, achievement, behavior, attendance, and socioeconomic status. For the purpose of this study, the independent variables were race, achievement, attendance, socioeconomic status, and behavior. Race was determined based on demographic information obtained from the Grandview Student Information System (SIS). Achievement was measured by GPA using a 4.0 scale. Attendance rate for individual students was measured by the percentage of time a student attends school. Behavior was measured by the number of referrals receiving consequences including detentions, in-school suspensions, or out-of-school suspensions for the current school year. Socioeconomic status was determined by qualification for free or reduced lunch

status. The dependent variable for this study was school connectedness. School connectedness was measured using a 10-question survey based on the MSIP AQ School Climate and Equity Sub Scale (See Appendix A).

The School Connectedness Survey was administered during the last week of school in May 2009. The results were compiled and put into an Excel spreadsheet. The data were then exported from the Excel spreadsheet into SPSS Version Faculty Pack16.0 to test each hypothesis. A one-way ANOVA was used to analyze the relationship between school connectedness and race. A Pearson correlation coefficient was used to determine the relationship between student connectedness and each of the following: achievement, attendance, and behavior. An independent samples *t* test was used to determine the difference in connectedness between students with free/reduced lunch and those who pay regular price.

<div align="center">Organization of the Study</div>

This clinical research study is divided into five chapters. The first chapter included an introduction, background to the study, statement of the problem, purpose of the study, significance of the study, an overview of methodology, research questions, and definition of key terms. This study differs from other studies on this topic because it focuses on students' perceptions about school connectedness from an urban perspective. Chapter Two consists of a review of literature on school connectedness, achievement gap, behavior/discipline, attendance, and socioeconomic status. The research design and methodology are described in Chapter Three. Chapter Four presents conclusions drawn from the analysis of the data for each hypothesis test. Finally, discussion of the findings

in relationship to the literature, implications for practice, and recommendations for

further research are presented in Chapter Five.

CHAPTER TWO

REVIEW OF LITERATURE

Introduction

School connectedness is a process to bridge the gap between students who are disconnected to school and who fail to achieve. The literature supports school connectedness as a critical process in increasing belongingness and student achievement (Blum, 2005; Centers for Disease Control and Prevention, 2009; Parker 2002; Whitlock, 2003). School connectedness includes a wide range of constructs such as bonding, engagement, teacher support, school climate, and equity that help students attach to the school and the people in the school environment. These relationships increase student involvement. According to Karcher (2003), "Connectedness refers to involvement not only in dyadic relationships and groups, but also in activities . . . social memberships or affiliations" (p. 2). For example, when students feel connected with adults and with the school, they experience a sense of belongingness.

Schools can be viewed as a positive or a negative force in the life of a child. One determining factor when deciding placement on the continuum between connectedness and disconnectedness is whether a student develops a meaningful relationship with an adult. Research provides significant evidence that students connect and build relationships with individuals before they connect with an institution (Blum, 2005). A lasting, meaningful relationship with at least one caring adult in the school is the cornerstone of connectedness (Blum, 2005; Blum & Libbey, 2004; Jackson & Davis, 2000; Mac Iver & Epstein, 1991).

In 2003, the "School Connectedness–Strengthening Health and Education Outcomes for Teenagers" conference set the stage for researchers representing education, health, and government divisions to synthesize current research on school connectedness. Results of studies presented at the conference showed students' emotional well-being, achievement, attendance, and behavior could be increased through the strengthening of school bonds and school engagement. This information was compiled and developed into what is known as *The Wingspread Report.* Blum and Libbey (2004) reported the core elements as a) student success can be improved through strengthening bonds, b) students feel supported by staff, and feel safe in their school are more likely to be academically successful, c) school connectedness is linked to higher academic achievement, motivation, engagement, better attendance, less negative behaviors, and can be built through fair and consistent discipline, high expectations, and building a relationship with at least one adult in a school.

Researchers attending the "School Connectedness–Strengthening Health and Education Outcomes for Teenagers" conference concluded, "By high school, as many as 40% to 60% of all students–urban, suburban, and rural–are chronically disengaged from school" (Klem & Connell, 2004, p. 262). School connectedness plays a major role in determining whether a student is engaged or disconnected. Engagement and disengagement can determine student success or failure. Students who are engaged and connected to school are likely to improve academically (Center for Disease Control and Prevention, 2009).

In this chapter, the review of educational literature includes the following themes. School connectedness theories and assessments are explored to build the foundation for

this study. School connectedness and the relationship to race are reviewed as related to educating minority youth effectively. School connectedness and its relationship to student achievement are examined. The relationship between school connectedness and attendance is investigated. School connectedness and its relationship to behavior are studied. The relationship between school connectedness and its correlation to socioeconomic status is analyzed. Finally, a summary of the research relating to school connectedness and the relationship between race, achievement, attendance, behavior, and socioeconomic status will conclude the chapter.

School Connectedness Theory and Assessment

Throughout the years, the school connectedness theory has been researched under several different names and terms. According to Libbey (2004), in the article "Measuring Student Relationships to School: Attachment, Bonding, Connectedness, and Engagement" the goal was to identify different ways, terms, and constructs relating to school connectedness. Within her review of the literature Libbey identified several measures of school connectedness, including school bonding (Hawkins, Guo, Hill, Battin-Pearson, & Abbott, 1996); school climate, teacher support, school engagement, positive orientation to school (Jessor, Van Den Bos, Vanderryn, Costa, & Turbin, 1995); school attachment (Mouton, Hawkins, McPherson, & Copley, 1996); school connection (Brown & Evans, 2002); school context (Resnick et al., 1997); school engagement (Manlove, 1998); school involvement (Caspi, Entner Wright, Moffitt, & Silva, 1998); student satisfaction with school (Samdal, Nutbeam, Wold, & Kannas, 1998); student identification with school (Voelkl, 1996); and teacher support (Rosenfeld, Richman, & Bowen, 2000). Furthermore, a plethora of measurement tools has been used to assess

school connectedness. Regardless of the synonym or terminology that is often used interchangeably or the measurement tool, the resounding theme of school connectedness refers to the study of a student's relationship to school and the belief an adult in the school cares about them as individuals (Blum & Libbey, 2004).

According to Libbey (2004), school connectedness can be separated into nine common themes: "academic engagement, belonging, discipline and fairness, likes school, student voice, extracurricular activities, peer relations, safety, and teacher support" (p. 282). The most common theme emerging from the research to measure school connectedness was teacher support. For example, Simons-Morton and Crump (2002) state teacher support is assessed by students determining whether they feel a teacher will help them, if rules of the school are fair and equitably enforced, and the students' perception of support. According to Resnick et al. (1997), teacher support can be defined as whether a student feels valued and is close to a teacher in the classroom or other adults in the building. In a study conducted by Ryan and Patrick (2001), 223 eighth grade students' perceptions of their environment and motivation were based on teacher support. Teachers who promoted interactions and mutual respect were related to positive changes in students' motivation and engagement. Support from a teacher has a significant impact on success and failure rate of each student.

Academic engagement and likes school were the second and third most common themes to measure school connectedness (Libbey, 2004). For example, Libbey described academic engagement as a student's motivation to learn and be academically successful in school. Jessor et al. (1995) assessed positive orientation to school as a students' attitude toward school and learning. This construct was utilized to determine how

students felt about going to school in a longitudinal study of 7th, 8th, and 9th grade students from a large urban school district. Results yielded showed a significant relationship between protective factors (moderate or insulate against risk) and risk behaviors (negative or undesirable outcomes). For example, a student who likes school is less likely to become involved with risk behaviors. As part of this premise, The Social Development Research Group (Hawkins et al., 2001) assessed students on school bonding, if they liked going to school, and if they liked going to their classes. Researchers concluded school bonding is a protective factor against students becoming involved in problem behaviors such as delinquency, drug abuse, and violence.

Other ways to measure school connectedness gleaned from Libbey's (2004) review of the literature included discipline and fairness, school voice, extracurricular activities, peer relations, and safety. A student's perception about how discipline is handled in the school can be used to define the discipline and fairness theory. School voice is described as allowing students to have an active role in decision-making. Participation in non-academic activities beyond the school day describes the extracurricular activities theme. The peer relations construct includes students' feelings of developing friendships and having friends in the school. Safety, the least common theme found as part of Libbey's research, is measured by the degree to which students feel secure and protected the in school environment.

A safe and secure environment and the school connectedness theory are also presented in Maslow's Hierarchy of Needs. Maslow (1943) noted the significance of the theoretical premise of relationships. Belongingness, on Maslow's Hierarchy of Needs, is located at the center between safety and self-esteem. Maslow posited humans need to

experience a sense of belonging and acceptance in order to move to the next level of the hierarchy. Sergiovanni (1994) extended the theory of belongingness and relationships by suggesting that community is a fundamental human need without which we become estranged from ourselves, others, and society. Additionally, Sergiovanni (1994) uses the term "*gemeinschaft*," originally coined by Ferdinand Tonnies, to describe bonding together to a common environment or setting (e.g., a neighborhood or school).

In addition, The National Longitudinal Study of Adolescent Health is one of the most widely cited research studies relating to school connectedness (U.S. Department of Education, 2008). This study involved more than 90,000 students in grades 7 through 12 in 132 schools. Twenty thousand participants in the study were interviewed. Evidence from this study built the argument that "school connectedness was a protective factor in the lives of young people" (pp. 9-10). Blum and McNeely (2002) corroborated this finding by writing that students who connect to school and experience positive relationships have higher levels of emotional well-being.

School connectedness also includes the theme of students participating in activities offered at school. The Caring School Community project focused on the aspect of student connectedness and meaningful student participation. Studies conducted on the effectiveness of this project "consistently found that in schools where the program was widely implemented, students showed significant benefits in a number of areas, including attitudes toward learning, feelings about the self, social and ethical attitudes and values, and behavior, relative to students in closely matched comparison schools" (Developmental Studies Center, 2005, p. 8). Other studies that emphasized the relationship between school connectedness and self-efficacy include Zimmerman (1989),

Csikszentmihalyi (1990), Paris and Paris (2001), and Schunk (2003). These studies examined a student's motivation to continue to achieve when learning becomes hard.

Fundamental to the school connectedness premise is the role of a student's relationship with an adult in the school. Waterhouse (2007), in a qualitative study to explore the school-based care experiences of at-risk youth, investigated students' perceptions regarding relationships and personal connections, saying, "You have to have a connection; otherwise, students won't listen to you, or they don't care what you're saying, or they won't care about anything. So, I think it's really important to have a connection with a student" (p. 99). Furthermore, Waterhouse goes on to state the importance of knowing students as individuals.

To expand upon the theory of school connectedness, Bridgeland, Dilulio, and Morison (2006) reported that meaningful relationships between students and teachers are important. Teachers can close the divide between disconnectedness and connectedness by motivating students to learn, instructing students on what to do rather than just telling them, establishing high expectations, and making lessons engaging and fun. Sixty-five percent of the participants reported a meaningful relationship with at least one adult in their school, while 41% responded they would seek the assistance of an adult in their building with a problem.

Bowlby (1969/1982) and Ainsworth, Blehar, Waters and Wall (1978) devoted extensive research to the development of attachment theory and believed connectedness could be linked to the attachment theoretical framework. Within attachment theory, children first establish bonds with their parents through social interactions and develop strong emotional bonds. These interactions are the beginning relationship development

(Bowlby, 1969/1982). The Caring School Community project, developed by Schaps (Developmental Studies Center, 2004) built upon the attachment construct by strengthening elementary students' attachment to the school environment.

Bonding is another principle associated with school connectedness. Hirschi's Social Control Theory (as cited in U.S. Department of Education, 2008) posits a person will engage in deviant behaviors when the social bond has been broken. Social Control Theory consists of four elements: involvement, attachment, commitment, and beliefs. According to Alton, Harley, and Lenhoff (1994), each element aids in helping individuals not to be involved in negative behaviors by strengthening social attachments. Whelage et al. (1989) built upon and substantiated Hirschi's theory by incorporating the term school membership. School membership is established by student-teacher relationships, by concern for both personal and academic matters, by adults providing extra assistance, and by helping students connect to society through their involvement in school activities.

School Connectedness and Race

Attachment, bonding, and building relationships with a caring adult are aspects in all school settings; however, these components are critically important to African American and Latino students (Kuykendall, 2004; Sergiovanni, 1994). Ladson-Billings (1994) studied effective teachers of African-American students and found that relationships in which students felt comfortable and supported produced the types of environments where these students could thrive. The quality of the teacher-student relationships is the focus of Turnaround Schools, as noted in *Closing the Achievement Gap,* edited by Dr. Belinda Williams. In the chapter by Benard (2004), the author stated, "None of the other reforms that follow will be transformative unless the teacher-student

relationship is caring, has high expectations, and is reciprocal" (p. 128). Conversely, Baron, Tom, and Cooper (1985) observed that relationships and interactions between teachers and minority students whose achievement is considered low might be characterized by limited and inappropriate interactions.

Achievements of African American and Latino students are far behind those of their White counterparts. Such achievement gaps are insidious. Olsen (2007) postulated the achievement of African American and Latino students by the end of high school are equal with that of White eighth grade students. The achievement gap has been investigated and analyzed by researchers throughout the years. For example, in recent years, investigations by Haycock (2007) Johnson (2004), and Williams (2004) focus on causes and solutions to close the achievement gap between ethnic groups. Critical to the level of achievement attained by minority youth is the relationship with a caring adult. Wiener (2006) in his *Washington Post* article, "Guess Who's Still Left Behind?" declared, "We will forever consign poor and minority children to the margins of society if we do not act now and give them the teachers [adults] they need and deserve" (p. 3).

According to Martin and Halperin (2006), a new student drops out of high school every nine seconds in the U.S. Students from minority groups make up the vast majority of the students representing this statistic. Advocating for policy and reform for minority, low socioeconomic, and disenfranchised youth, Kati Haycock, Executive Director of The Education Trust, corroborates this statistic with data relating to graduation rates from diverse populations: For every 100 kindergartners enrolled in school, 94 White, 89 African American, 71 American Indian/Alaskan Native, and 62 Latino will graduate from high school (2007).

In contrast, *The Silent Epidemic* (Bridgeland et al., 2006), a report commissioned by the Bill and Melinda Gates Foundation refutes Haycock (2007) and the percentage of minority students who will graduate from school. Furthermore, in research conducted by Swanson (2004), a devastating picture is painted as it relates to educating minority youth. The report identified the nationwide graduation rate for all students in 2001 at 68% to 71%. Conversely, Swanson (2004) noted the graduation rates for White and Asian students were reported at 75% to 77%. Although this statistic is unacceptable when the goal is 100%, the minority graduation rates are even more dreadful. Within the same report by Swanson, African American and Latino students experienced a 50% graduation rate. A 15% to 18% gap exists between graduation rates of schools with large minority populations and students who fall within the low socioeconomic status (2004). According to results from The WestEd Study by the California Department Education (2003), schools with large African American and Hispanic populations had the lowest rates of school support, perceived safety, and connectedness, and the highest rates for harassment/victimization, violence, and truancy.

In identifying effective methods for educating Black children, Ladson-Billings (1994) hypothesized that the teachers exhibit a connectedness with all students and the teacher-student relationship is equitable. A response from a qualitative study conducted by Ladson-Billings, the significance of a student-teacher relationship is noted:

> I try to find out as much as I can about the student early in the school year so I can plan an instructional program that motivates them and meets their needs. You'd be surprised how many kids tell me that nobody has ever bothered to even ask them what they like. The entry questionnaire is also a great way to learn a little

about their reading and writing levels. I think that it's hard for sixth graders in a community like this one to trust white people, especially. They've been lied to too many times. I don't blame them for not wanting to open up with me right away. But soon enough, they begin to see that I take the information they give me to heart. (1994, p. 67)

Moreover, in a qualitative study conducted by Booker (2004), Black high school students identified belonging to a school environment based on the positive interactions with teachers. The researcher concluded these positive interactions with a teacher are critical to academic performance and high school completion. Schlosser (1992), substantiated these findings in another qualitative study of 31 junior high schools representing diverse student populations. He noted the following findings: a) student-teacher relationship was the resounding premise, b) students identified a limited amount of teachers with whom they felt comfortable with and consistently identified the same people, and c) academic achievement was based on how a teacher in the school viewed them as an individual, rather than participation in school study habits. During interviews for this study, Schlosser captured the thoughts of a teacher who had significant impact on effectively educating diverse populations: "The most critical component that contributes to marginal students' success is a connectedness to school that is established at a purely non-academic level" (1992, p. 137). This finding substantiated the findings yielded in a study by Garcia-Reid, Reid, and Peterson (2005). Two hundred twenty-six Latino middle school students from an urban environment among the top 30 poorest districts in the State of New Jersey participated in the study. Researchers concluded supportive relationships provide a safety net for students who are considered at risk of school failure.

As previously noted, research shows Latino students are the least likely to complete a high school education; however, teachers have the ability to set the tone for improving these graduation statistics (McDougal, 2005; Lazarín, 2008). Teachers have the capability to create humanizing environments such as engaging students in the school environment. The teachers must value each student as an individual and respect the multiple points of view each brings to the class. Gonzalez et al. (2005) agreed saying for Latino youth to succeed in school, teachers must validate their culture. In the study, "Changes in Latino Students' Perceptions of School Belonging Over Time: Impact of Language Proficiency, Self-Perceptions and Teacher Evaluations," Morrison, Cosden, O'Farrell, and Campos (2003) investigated the role of belonging in the lives of elementary Latino students as it related to lack of attachment to school and the Latino dropout rate. Students were assessed in both the fourth and sixth grades. Results from this study showed that language at the fourth grade played a major role in a student's perception of school belonging.

Evidence substantiates a correlation between school connectedness and relationships with students from different ethnic groups. Developing strong relationships has been shown to be an effective strategy in working with both African-American and Hispanic youth. These relationships can be instrumental in improving both achievement and graduation rates. Furthermore, school connectedness can be the reason a student goes to and stays in school.

School Connectedness and Achievement

School connectedness also correlates directly with improved academic achievement among all students (Blum, 2005; Blum & Libbey, 2004; McNeely & Falci, 2004). Furthermore, academic performance and outcomes improve when meaningful relationships are established between an adult and a student (Anfara, 2006; Galassi, Gulledge, & Cox, 2004; NASSP, 2006; National Middle School Association, 2003). For example, in a longitudinal study conducted by Klem and Connell (2004), elementary students from six elementary schools and three middle schools in an urban district participated in the study. Results indicated elementary students with higher levels of engagement were 44% more likely to perform well academically. Similarly, middle school students who experienced higher levels of engagement were 75% more likely to perform better academically. These significant correlations underscore the noteworthy role that building positive relationships plays in the achievement of students. Wehlage, Rutter, Smith, Lesko, and Fernandez (1989) cited school engagement as a crucial forecaster of academic achievement. Along with high grades, high test scores, and lower dropout rates, student engagement was also an indicator of increased achievement according to a study presented during the "School Connectedness-Strengthening Health and Education Outcomes for Teenagers" conference (Blum & Libbey, 2004; Klem & Connell, 2004).

Accountability measures such as NCLB have caused researchers to review the conditions that lead to improved student achievement for all students. Outcomes from this review involved educational reform initiatives that included "high standards for academic learning and conduct . . . and personalized learning environments" (Klem & Connell, 2004, p. 262). School connectedness and building positive relationships are also

major components in creating conditions where student achievement is increased.

According to Butkowsky and Willows (1980), there is a relationship between school

connectedness and increased academic achievement. Students who are attached to the

school engage more in the classroom activities and respond to the teacher. Makkonen

(2004) demonstrated that students who do not feel connected to an adult are not as

successful academically.

In *Turning Points 2000: Educating Adolescents in the 21ˢᵗ Century* (Jackson and

Davis, 2000)*,* researchers reported the results of a study on middle level education and

effectively educating adolescents. Conclusions drawn by authors laid the foundation for

later studies, advancing:

> Every student should be well known by at least one adult. Students should be
>
> able to rely on that adult to help them learn from their experiences, comprehend
>
> physical changes and changing relationships with family and peers, act on their
>
> behalf to marshal every school and community resource needed for the student to
>
> succeed, and help fashion a promising vision of the future. (p. 142)

Additionally, researchers Blum & Libbey (2004) asserted that academic performance of

all students is likely to be impacted by increasing the number of students who are

connected to school.

According to a study by California Department of Education (2003), important

outcomes relating to school connectedness were found. The study involved 481,074

students in grades 5, 7, 9, 11. Data indicated only 35% of the seventh grade students

surveyed noted a close relationship with an adult in the school. Moreover, 30% of the

seventh grade students who took the survey indicated low participation in school.

Researchers concluded when a relationship between students and teachers is missing, the less likely students will be connected to the school environment.

Similar conclusions were reported in a study by the Institute for Research and Reform in Education (IRRE) regarding the First Things First (FTF) initiative. FTF is a comprehensive school reform framework that began in the Kansas City Kansas Public Schools. Key findings from a study noted in the article, "Relationships Matter: Linking Teacher Support to Student Engagement and Achievement" indicated positive results from the FTF initiative (Klem & Connell, 2004). The first purpose of FTF is to "improve relationships between students and adults" (Klem & Connell, 2004, p. 263). A positive correlation between teacher support, student engagement, and academic performance highlights the findings from the study. In 1989, Finn identified similar results in a study involving 15,737 eighth grade students. Within the study, Finn found that engagement was associated with academic achievement. When students are not engaged, the likelihood of high dropout rates was indicated by the 23% of the eighth grade students surveyed. The outcomes from Finn's study revealed greater disengagement of students leads to a greater likelihood that a student will drop out of school.

Benson, Galbraith, and Espeland (1998), in their research conducted for the Search Institute, analyzed the role of developmental assets in the lives of troubled and healthy teens. Developmental assets are defined as "building blocks for human development that help young people make wise decisions, choose positive paths and grow up to become competent and caring adults" (p. 3). The initial survey evolved into three different administration phases. A total 46,000 students from 25 states completed the first survey. During the second administration of the survey, participants grew to

over 250,000 students from 33 states. The final phase in 1996 included a revision of the

survey and added 100,000 additional students from 25 states. The research culminated in

the book, *What Kids Need to Succeed: Proven, Practical Ways to Raise Good Kids*,

Benson et al. identified 40 developmental assets and determined the more assets

possessed by a student correlated inversely with the likelihood for involvement in

negative behaviors. The developmental assets were divided into two categories: external

and internal. External assets incorporated situations within a student's environment, such

as home, school, and community. Internal assets included attitudes, values, and

competencies. Although the optimal number of development assets is at least 31, the

average number of developmental assets youth have today is 18, with boys reporting on

average fewer assets, 16.5, and girls reporting 19.5 (Benson, et al., 1998). Benson et al.

concluded the more assets a student had, the greater chances were that the student would

be successful in school.

Also important in the relationship between school connectedness and achievement

is the role of the teacher. According to Stronge's meta-analysis, *Handbook for Qualities*

of Effective Teachers (2002), seven characteristics were identified in determining a

teacher's effectiveness as a person in a classroom environment: a) caring, b) fairness, c)

respect, d) social interactions with students, e) promotion of enthusiasm and motivation

for learning, f) attitude toward teaching profession, and g) reflective practice. These

characteristics are instrumental in creating student-teacher relationships in an

environment where students can develop interpersonal skills and connect with a caring

adult. Similarly, as noted above, motivation and adjustment can also be connected to

effective student-teacher relationships (Lynch & Cicchetti, 1997). Effective teachers

motivate students and help them cross the divide from disengagement to connectedness. Motivation, social behaviors, and the desire to stay connected to the school environment can be determined by the student-teacher relationships (Bashin, 1987).

Transitioning from the disengagement construct to connectedness is especially important during adolescence. Simons-Morton, Crump, Haynie, & Saylor (1999) emphasize the significance of student-teachers relationships during middle school years. In *Breaking the Ranks in the Middle: Strategies for Middle Level Reform* (NASSP, 2006), educators commented, "The need to build relationships rests on the premise that many students require a supportive relationship with the school or with someone at the school who understands them personally" (p. 130). This judgment was supported in research conducted by Roeser, Midgley, and Urban (1996) in which the relationships between perceptions of belonging were examined in middle school students. Results indicated that academic achievement could be determined based on a student's perception of belonging. Hence, strengthening the student-teacher relationship has a positive effect on student achievement.

Achievement among all students can be improved when a student has established a relationship with a caring adult. Thus, the research indicates that the more attached a student is to an adult; the more likely that student is to engage in activities at the school. In contrast, the less engaged, less motivated, and less social a student is in school, the more likely that student is to drop out.

School Connectedness and Attendance

Research has also linked and demonstrated a strong relationship between school connectedness and educational outcomes, including school attendance (Centers for

Disease Control and Prevention, 2009). The relationship between these two variables, according to Resnick et al. (1993), was significant because connectedness has been shown to be more protective than any other factor, including family connectedness, against student absenteeism, delinquency, poly-drug use, and pregnancy. Moreover, Makkonen (2004) hypothesized that students who are disconnected from school have higher dropout rates and lower attendance rates. The researcher found the correlation between these variables to be positive.

Schools can be places where students thrive and grow emotionally and physically or places students try to avoid at all costs. According to Blum (2005), the National Longitudinal Study of Adolescent Health indicated that higher percentages of school connectedness help to promote educational motivation, classroom engagement, and improved school attendance. Furthermore, Blum went on to state that the classroom environment is important to whether or not a student becomes disenchanted with school. To support this position on school connectedness and attendance, Hendrie's (2005) article "First Things First Shows Promising Results" reported evaluation results to be positive relating to graduation rates, attendance, student engagement, and test scores.

As noted in a study mentioned earlier by Klem and Connell (2004), conditions contributing to school success were examined. First, the study was guided using the Self-System Process Model originally developed by Connell in 1991. This model linked an individual's experience to the social context and the outcomes of performance. Second, data from an urban district implementing the FTF school reform initiative were reviewed. The sample in the study included six elementary schools and three middle schools within the same urban school district. Results from this study indicated middle school students

who were more engaged in school were 75% more likely to have high rates of attendance (Klem & Connell, 2004).

According to Hawkins & Catalano (1992) in *Communities that Care: Action for Drug Abuse Prevention*, an additional finding related to school connectedness and attendance included "bonding to family, school, and peers and clear standards or norms for behavior" (p. 15) as two key protective factors to improve attendance and reduce truancy in youth. This claim was upheld by research relating to students attending and engaging in the school environment. According to a Virginia Department of Education document entitled, *Improving Student Attendance: A Resource Guide for Virginia* (2005), the number one strategy to improve student attendance is to ensure students are connected and engaged in the school environment.

Current research indicates that the level or degree of school connectedness is an important factor to improve students' attendance. The more students are engaged in the school environment, the more likely that student will come to school. In preventing truancy, researchers recommend to ensure students are engaged in activities and connected to a least one adult. School connectedness is also linked to self-efficacy in increasing a student's motivation to participate in school.

School Connectedness and Behavior

In a study noted in the Student Connectedness Theory and Assessment section, The National Longitudinal Study of Adolescent Health (Blum, 2005) showed strong links between school connectedness and every risk behavior examined in the study. A preponderance of evidence supported "students who feel connected to school are (a) less likely to use alcohol and illegal drugs, (b) less likely to engage in violent or deviant

behavior, (c) less likely to become pregnant, and (d) less likely to experience emotional

distress and suicidal thoughts or attempts" (U.S. Department of Education, 2008, p. 10).

These types of behavior are likely to impede a student's success in school and in life.

Similarly, in the article, "Improving the Odds: The Untapped Power of School to

Improve the Health of Teens," authors Blum and McNeely (2002) noted students are less

likely to engage in unhealthy behaviors when they feel cared about and feel they are a

part of the school.

Similarly, a growing body of research shows that disengaged students are at risk

of being involved in disruptive behavior in class, exhibiting increased absenteeism, and

dropping out of school (Klem & Connell, 2004). Marzano, Marzano, and Pickering

(2003) also linked disengagement and problem behaviors. The importance of student-

teacher relationships was documented in a meta-analysis of classroom management

research. Student-teacher relationships [school connectedness] were shown to reduce

classroom disruptions, which showed a relationship to gains in achievement and

engagement in the classroom (Marzano et al., 2003). Furthermore, in the same meta-

analysis, Marzano and colleagues asserted positive student-teacher relationships could

significantly reduce classroom disruptions. They went on to explain that the small

number of studies may exaggerate the impact of the relationships, but asserted that their

power is evident and worthy of further investigation and study (Marzano et al., 2003).

Negative and problematic behaviors such as aggression and disruptive behavior

within a school can cause devastating effects on students' ability to learn and establish an

interpersonal relationship in a school environment (Somen, 1984). As noted earlier in the

review of literature, Hirschi's attachment theory underpins this claim. Attachment,

commitment, and involvement play critical roles in the development of a school bond (Hirschi, 1969). Hirschi postulated that lack of attachment and bonding increases interpersonal differences between student and other members of the school. The article, *Attachment Theory: Implications for School Psychology* (Kennedy and Kennedy 2004), extends Hirschi's research relating to attachment theory by hypothesizing students establish stronger relationships and demonstrate fewer negative actions when a strong student-teacher bond is present. Additionally, in their study, Minden, Henry, Tolan, and Gorman-Smith (2000) of 285 inner city $5^{th} - 8^{th}$ grade male students concurred with the hypothesis by reporting the lack of student-to-school bonding is a significant predictor of individual violence and student behavior.

School connectedness and behavior also includes an examination of school climate. Welsh, Stokes, and Green (2000) defined school climate as "unwritten beliefs, values, and attitudes that characterize the style of interaction among the students, teachers, and administrators" (p. 248). The four dimensions of school climate identified by the researchers included physical aspects, social components, organizational structure, and beliefs, values, and attitudes toward the school. Schools, and the people who work in them, are responsible for ensuring students learn in a safe and healthy environment. A healthy environment is established by the development of positive relationships. Bhasin (1987) asserted teacher perceptions about the students in the school influence classroom behavior. This influence can have both positive and negative impacts.

School climate and school safety include parameters of acceptable behavior (Welsh et al., 2000). All adults within the school environment are responsible for creating such an environment. Simons-Morton et al. (1999) emphasized a negative

correlation was established when investigating school bonding and problematic behaviors. Furthermore, a positive relationship was noted between school bonding, school adjustment, and perceived school climate.

Research supports school connectedness as helping protect students from engaging in negative behaviors (Blum & Libbey, 2004; Klem & Connell, 2004; Marzano et al, 2003). Connectedness to school and the adults in the school vigorously enhances positive developmental outcomes and protects against negative developmental effects. Bonny, Britto, Klostermann, Hornung, & Slap (2000), in their study of 1959 middle and high school students, reported a powerful sense of school connectedness demonstrate strong commitment to healthier behaviors and healthy outcomes.

The evidence regarding school connectedness and behavior are clear. The more connected a student is to school; the less likely the student is to engage in inappropriate behaviors. School connectedness also involves students' perceptions about how they are treated by the adults in the building. When students are in a safe environment wherein relationships have been established and where students perceive they are being treated fairly, they are less likely to be associated with negative conduct.

School Connectedness and Socioeconomic Status

Student connectedness is a strong predictor of student achievement and behavior in school, regardless of socioeconomic status (Klem & Connell, 2004; McNeely & Falci, 2004). Forming strong relationships can be viewed as a critical role in addressing the needs of students from different socioeconomic levels. The National Research Council and the Institutes of Medicine (2004) reported that students who come from disadvantaged backgrounds and who are not attached to the school environments have

increased likelihood of later experiencing unpleasant circumstances, such as unemployment, poverty, poor health, and involvement in the criminal system. In a longitudinal study conducted by Battistich, Solomon, Watson, and Schaps (1997), researchers analyzed three elementary schools over a 7-year period. Outcomes from the study indicated a caring school community was beneficial for students who came from the most disadvantaged environments.

Socioeconomic disparities for youth are perpetuated for African American and Latino students who have disengaged from school and who experience continuous school failure. According to Gloria Ladson-Billings in the book, *The Dreamkeepers: Successful Teachers of African American Children,* strategies for successfully educating African American children included incorporating culturally responsive pedagogy to educate these students. Ladson-Billings (1994) emphasized culturally responsive practices are critical in the success of African American and Latino children from low-income families in urban settings. Optimal social interaction within a culturally responsive classroom includes humanely equitable teacher-student relationships in school and community, connecting with all students, and students taking responsibility for teaching each other (Ladson-Billings, 1994).

In research relating to understanding children of poverty, building relationships is noted as a strategy for improving achievement in high-performing, high-poverty schools (Barr & Parrett, 2007; Payne, 2001). In a study involving 71 high-performing Title I schools in 18 districts and seven states, Schiller et al. (2006) indicated a common theme in high-poverty and levels of achievement included teachers who demonstrated respect towards each student and held high expectations for all students. Kannapel and Clements

(2005), in their research linking high-performing, high-poverty schools, identified caring, nurturing environments as a characteristic for meeting the needs of children of poverty. Researchers identified respectful relationships as a common theme in the eight high-poverty, high-performing schools.

Researchers Howley and Bickel (2002) analyzed the effects of size of a school or district on the achievement of economically disadvantaged students. Results from the study involving 13,600 schools in 2,300 school districts indicated school size increase had a direct correlation to decreased student achievement, a finding important in building the platform for small learning communities. Small learning communities create personalized environments where the student-teacher relationship can be developed and supported. Barr and Parrett (2007) agree with this supposition by stating, "For low-socioeconomic-status children and youth, a supportive educational atmosphere has an overwhelming positive effect" (p. 212).

As part of the WestEd Study (California Department of Education, 2003), researchers noted that students in low-performing schools consistently reported lower levels of school environmental support, safety, and connectedness than did students in high-performing schools. Additionally, when socioeconomic status was controlled, African-American and Hispanic students from low-income environments scored the lowest in academic performance and school well-being. In turn, this supported the argument affirming school climate factors and school connectedness play a role in closing the achievement gap in schools that educate low-income African American and Hispanic students.

School connectedness has been found to be a positive factor for every child. However, students who come from low socioeconomic conditions, who represent minority subgroups, and who are disengaged from school are more likely to fail. Therefore, social interactions among children of poverty are imperative to the student's success.

Summary

An overview the research on school connectedness was presented in Chapter Two. The review of literature included research linked to school connectedness and its relationship to race, achievement, attendance, socioeconomic status, and behavior. The research supports a positive correlation among all variables. This review of literature supports the conclusion that school connectedness is a factor in school reform and increasing student achievement.

Chapter Three presents the research methodology used to conduct this quantitative study, population and sample, sampling procedures, instrumentation, measurement, validity and reliability, data collection procedures, data analysis and hypotheses tests, and limitations of the study.

CHAPTER THREE

METHODS

Introduction

The purpose of this study was to investigate students' perceptions of school connectedness and the relationship those perceptions had to race, achievement, attendance, socioeconomic status, and behavior at Grandview Middle School. This chapter presents the research methodology used to conduct this quantitative study, population and sample, sampling procedures, instrumentation, measurement, validity and reliability, data collection procedures, data analysis and hypothesis tests, and limitations of the study.

Research Design

Quantitative research methodology was used for this study. According to Gall et al. (2003), quantitative research allows the researcher "to collect numerical data on the observable behavior of samples and subject them to statistical analysis" (p. 555). This method was selected because it allowed the researcher to determine whether a relationship exits between the dependent variable, school connectedness, and the independent variables, race, achievement, attendance, socioeconomic status, and behavior.

Population and Sample

This study focused on students who were in grades 6 - 8 and attended Grandview Middle School. Grandview Middle School is an urban school in the Grandview C4 School District. Participants involved in the research population represented both male and female students from the following subgroups according to NCLB: Black, White, and

Hispanic. Other subgroups were not included in this study due to no enrollment of Indian

students for 2008-2009 and less than one percent enrollment of Asian students. Total

enrollment at Grandview Middle School was presented in Table 1 in Chapter One.

Sampling Procedure

The sample for the study included students from grades 6 – 8. Five hundred

sixty-five letters were distributed to students at Grandview Middle School during the

month of May 2009 (Appendix E). Only students who returned a permission slip

participated in the study.

Instrumentation

The School Connectedness Survey is a 10-item questionnaire used to measure

students' perception about school connectedness. This survey is a subset of the questions

from the Missouri School Improvement Process Student Advanced Questionnaire (MSIP

AQ) administered by the Missouri Department of Elementary and Secondary Education

(DESE) in December of 2008. The original survey was part of the DESE fourth cycle

Missouri School Improvement Program (MSIP) visit in March 2009. Results from the

subsections that dealt with school climate and equity were presented in Tables 8 and

Table 9 in Chapter One.

Permission to use the survey questions was obtained from the Department of

Elementary and Secondary Education, Accountability, Data, and Accreditation Division

(Appendix D). On the original survey, and the version used in this study, six questions

were used to measure school climate and four questions were used to measure equity. In

the current study, all 10 items from both subscales were also used to measure total school

connectedness. The survey yielded data regarding students' perceptions of school

connectedness.

Measurement

Measurement was determined by results from the 10 questions from the School

Connectedness Survey (Appendix A). The items on the School Connectedness Survey

were rated on a five point Likert Scale, where 1 = *Strongly Disagree*, 2 = *Disagree*, 3 =

Neutral, 4 = *Agree*, and 5 = *Strongly Agree*. Scores were divided by the sum of the first

six to get the first score and the last four by four to get the second score. The total

connectedness score was summed and the total divided by 10, yielding a mean score

between 1 and 5 inclusive. Using a middle score of 3, student responses below this

number indicate a student is less connected to school. In turn, responses above 3 indicate

a student feels more connected to school.

The race of each student was taken from the GC4 SIS (the Grandview School

District Student Information System). To measure achievement, the independent variable

was a student's GPA using a 4-point system of grading to calculate GPA: A = 4, B = 3, C

= 2, D = 1, F = 0. To measure attendance, the independent variable was the average daily

attendance rate for a student. Socioeconomic status was measured by whether a student

qualified for free or reduced lunch. To measure behavior, the independent variable was

the number of discipline infractions where consequences were assigned such as in- and

out-of-school suspensions and detentions.

The archival data was coded by a GMS staff member to ensure the researcher

was not aware of the identification of the participants. The first number in the code

represented a student's grade. The second number in the code represented the race of the

student. The third number in the code represented the student's gender. The fourth

number in the code represented the lunch status of each student. The fifth number in the

code represented regular or special education. The sixth, seventh, and eighth digits was a

random number assigned to each student.

Validity and Reliability

According to Roberts (2004), "Validity is the degree to which your instrument

truly measures what it purports to measure" (p. 136). The Office of Social and Economic

Data Analysis (OSEDA), which oversees data from the MSIP AQ, addressed validity in

two different ways: content validity and convergent validity. According to K. A.

Jamtgaard (Personal communication, March 18, 2009), OSEDA Research Associate and

Research Assistant Professor at University of Missouri-Columbia, content validity for the

MSIP AQ was determined by asking a panel of experts to identify items to be included in

the survey to address different subscales (e.g., classroom management, school climate).

Convergent validity was determined by obtaining multiple perspectives (i.e., teachers,

students, parents) on whether relationships existed between the different groups of people

taking the survey (Jamtgaard, Personal communication, March 18, 2009).

According to Colosi (1997), "Reliability is the consistency of your measurement,

or the degree to which an instrument measures the same way each time it is used under

the same condition with the same subjects" (p. 2). To evaluate reliability, OSEDA used

Cronbach's alpha which was developed by Cronbach in 1951. This index is the most

common way to measure reliability and consists of calculating the variance within an

item and determining the covariance between a certain item and any other item on the

scale (Fields, 2009). Questions from the MSIP AQ have a Cronbach's alpha of .68 or higher (Jamtgaard, 2009).

<div align="center">Data Collection Procedures</div>

Permission to conduct the study at Grandview Middle School was received from the Grandview C4 School District (Appendix B). DESE granted permission to use the 10 questions from the MSIP AQ (Appendix C). Approval was received from the Baker University IRB Chair to conduct the study (Appendix D). A letter to parents/guardians (Appendix E) was sent home with Grandview Middle School students extending an invitation to participate in this research study. The survey was administered electronically in the Computer Applications and Gateway to Technology classes. Two Grandview Middle School teachers were responsible for proctoring the survey administration and ensuring that students who returned the parent consent form took the survey.

Students were encouraged to participate in the study through the distribution of multiple reminders and by a drawing for Worlds of Fun tickets. Participating students had 10 minutes to respond to the 10-question survey. Numbers were assigned to each student to ensure confidentiality of the information obtained. The winners of the drawing were told they would be able to redeem the prizes after the opening of Worlds of Fun on May 22, 2009. One name from each grade level was drawn as a winner. Three Worlds of Fun tickets were given to students.

Codes for the study were assigned to each participating student. Grandview School District personnel matched data to them so the researcher did not know which responses were associated with particular students. School connectedness, race,

achievement, behavior, attendance, and socioeconomic data were cross-referenced

through the GC4 SIS using the assigned numbers to match survey results (dependent

variable) with the independent variables. The administration of questions from the MSIP

AQ was linked to students' demographic data to match data to individual students and to

understand more clearly the students and subgroups who attend the school.

<div style="text-align:center">Data Analysis and Hypothesis Tests</div>

The results from the School Connectedness Survey were compiled and put into an

Excel spreadsheet. The data were then exported from the Excel spreadsheet into SPSS

Faculty Version Pack 16.0. The hypothesis tests were used to examine the five research

questions.

Three ANOVAs were used to analyze the relationship between school

connectedness and race. The dependent variable was operationalized three ways: school

climate, equity, and total connectedness. Three hypothesis tests were used to address the

first research question:

1. Is there a relationship between students' perceptions about connectedness and

race?

H1: There is a significant difference in students' perceptions of climate between

the categories defined by race (Black, Hispanic, and White).

H2: There is a significant difference in students' perceptions of equity between

the categories defined by race (Black, Hispanic, and White).

H3: There is a significant difference in students' perceptions of total

connectedness between the three categories of race (Black, Hispanic, and White)

A Pearson correlation was used to analyze the relationship between connectedness and achievement. The dependent variable was operationalized three ways: school climate, equity, and total connectedness. Three hypothesis tests were used to address the second research question.

2. Is there a relationship between students' perceptions about connectedness and achievement?

H4: There is a significant relationship in students' perceptions of climate and achievement as measured by GPA.

H5: There is a significant relationship in students' perception of equity and achievement as measured by GPA.

H6: There is a significant relationship in students' perception of total connectedness and achievement as measured by GPA.

A Pearson correlation was used to analyze the relationship between connectedness and attendance. The dependent variable was operationalized three ways: school climate, equity, and total connectedness. Three hypothesis tests were used to address the second research question.

3. Is there a relationship between students' perceptions about connectedness and attendance?

H7: There is a significant relationship between students' perceptions of climate and attendance as measured by the percentage of time a student attends school.

H8: There is a significant relationship between students' perception of equity and attendance as measured by the percentage of time a student attends school.

H9: There is a significant relationship between students' perception of total connectedness and attendance as measured by the percentage of time a student attends school.

A Pearson correlation was used to analyze the relationship between connectedness and behavior. The dependent variable was operationalized three ways: school climate, equity, and total connectedness. Three hypothesis tests were used to address the second research question.

4. Is there relationship between students' perceptions about connectedness and behavior?

H10: There is a significant relationship between students' perceptions of climate and behavior as measured the number of discipline infractions where consequences were assigned.

H11: There is a significant relationship between students' perception of equity and behavior as measured by the number of discipline infractions where consequences were assigned.

H12: There is a significant relationship between students' perception of total connectedness and behavior as measured by the number of discipline infractions where consequences were assigned.

Three *t* tests were used to determine the difference in connectedness between students who receive free or reduced lunch and those who do not. The dependent variable was connectedness as operationalized by the three scores: school climate, equity, and total connectedness. The independent variable was socioeconomic status, which had two levels: regular and reduced/free.

5. Is there a relationship between students' perceptions about connectedness and socioeconomic status?

> H13: There is a significant difference in student perceptions of climate between the two categories defined by socioeconomic status (regular and reduced/free lunch).

> H14: There is a significant difference in students' perceptions of equity between the two categories defined by socioeconomic status (regular and reduced/free lunch).

> H15: There is a significant difference in student perceptions of total connectedness between the two categories defined by socioeconomic status (regular and reduced/free lunch).

Limitations

*"*Limitations are usually areas over which you have no control" (Roberts, 2004, p. 146). The following were limitations of the study:

1. The students in the study represent urban middle level students. Their results may not be generalized to other schools that do not have similar demographics.

2. The sample in the study may not be representative of the population of all Grandview Middle School students who were invited to participate in the research study.

Summary

Middle school students in sixth through eighth grades in the Grandview School District were surveyed in May 2009. The researcher used a quantitative design to analyze school connectedness and its relationship to race, achievement, attendance,

socioeconomic status, and behavior. The School Connectedness Survey included 10

questions used to measure school climate and equity attendance. One-way ANOVA,

Pearson correlations, and *t* tests were used to analyze and test the hypotheses. The results

of the data analysis for this study are included in Chapter Four.

CHAPTER FOUR

RESULTS

Introduction

The purpose of this study was to examine school connectedness and the

relationship it has to race, achievement, attendance, socioeconomic status, and behavior.

Grandview Middle School, an urban school for grades 6 – 8 outside the urban core of

Kansas City, Missouri, was the location for this quantitative study. This chapter presents

the descriptive statistics and hypothesis testing of the study.

Descriptive Statistics

One hundred eighty-three out of 565 students returned the parent permission slips

and 180 participated in the study as presented in Table 10. Three students did not

Table 10

*2008-2009 Enrollment Data Disaggregated by Race and Number of Students
Participating in the Study*

Race	2008-2009	Number of Participants	Percentage of Population
Total	565	180	32%
Asian	.9%	1	.5%
Black	69.2%	113	64%
Hispanic	9.9%	22	12%
Indian	0%	0	0
White	20%	44	24%

Note. Retrieved from the Grandview C4 Student Information System

(SIS) on May 26, 2009.

participate in the study due to absences. The percentage of participants, disaggregated by ethnicity is representative of the overall student enrollment.

The instrument used in this study, a survey with 10 Likert items, was administered to students in grades 6 – 8 at Grandview Middle School. The survey included two subscales that measured school climate and equity. Collectively, both subscales measured school connectedness. Students were given five answers to choose from that ranged from 1 (*Strongly Disagreed*) to 5 (*Strongly Agree*).

The number of responses marked *strongly disagree, disagree, neutral, agree, and strongly agree* from the School Connectedness Student Survey are presented in Table 11. Approximately 65.5% of respondents strongly agreed or agreed feeling a sense of belonging at school. In addition, 8.3% of students strongly disagreed or disagreed with this item. Nearly 58% of students strongly agreed or agreed they felt safe at school. While 15% strongly disagreed or disagreed with this item. Approximately 55% of respondents strongly agreed or agreed with "I like going to this school." In contrast, 15.6% strongly disagreed or disagreed with this item. On the item, "my opinion is valued by teachers and administrators," 46.7% strongly agreed or agreed. While 18.5% strongly disagreed or disagreed. About 58 % of students strongly agreed or agreed with "teachers in my school really care about me." In addition, 12% strongly disagreed or disagreed with teachers caring about them. An estimated 55% of respondents strongly agreed or agreed "if a student has a problem, there are teachers who will listen and help." Conversely, 14.4% of students strongly disagreed or disagreed with this item. An estimated 77.3% of respondents strongly agreed or agreed that "all students are given a chance to succeed." On the other hand, 6.1% of the students strongly disagreed or agreed

with this item. On the item, "discipline is handled fairly in my school," 42.7% of

participants strongly agreed or agreed. Approximately 25% strongly disagreed or

disagreed that discipline is handled fairly. Finally, 50.6% of the respondents strongly

agreed or agreed that they are treated fairly at school. On the other hand, 15.5% strongly

disagreed or disagreed.

Table 11

Number of Respondents Regarding School Connectedness Student Survey (N=180)

Item	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Rating Average
There is a feeling of belonging at my school.	4	11	47	76	42	3.78
I feel safe at school.	9	18	49	64	40	3.60
I like going to this school.	14	14	53	62	37	3.52
My opinion is valued by teachers and administrators.	12	22	62	59	25	3.35
Teachers in my school really care about me.	7	15	53	58	47	3.70
If a student has a problem, there are teachers who will listen and help.	9	17	55	51	48	3.62
In my school, all students are given a chance to succeed.	3	8	30	57	82	4.15
Discipline is handled fairly in my school.	20	25	58	42	35	3.26
Teachers treat me with respect.	8	20	49	55	48	3.65
I am treated fairly at school.	11	17	61	54	37	3.49

Hypothesis Testing

This section of the study presents an analysis of the data from the School

Connectedness Student Survey administered at Grandview Middle School. The five

research questions guiding this study were investigated.

The dependent variable was operationalized three ways: school climate, equity,

and total connectedness. The table immediately preceding this included 10

measurements. The first six questions were averaged to form the subscale related to

school climate. The last four questions were averaged to form the subscale related to

equity. Combined, these subscales yielded a total connectedness score.

The first research question asked whether there was a relationship between

students' perceptions about connectedness and their race. The first one-way ANOVA

was conducted to test for differences in student perceptions of climate among the three

categories that defined race (Black, Hispanic, and White). Data for this hypothesis test is

presented in Table 12.

RQ1: Is there a relationship between students' perceptions about connectedness and

race?

H1: There is a significant difference in students' perceptions of climate between

the categories defined by race (Black, Hispanic, and White).

The results of the analysis revealed no significant differences among the school climate

means ($F_{(2,176)} = 1.383$, $p = .254$).

Table 12

Mean Perceptions of Climate Disaggregated by Race

Ethnicity	Mean	Standard Deviation	N
Black	3.5619	.78180	113
Hispanic	3.8485	.65447	22
White	3.5682	.71917	44

The second one-way ANOVA was conducted to test hypothesis 2 that student perceptions of equity differed among the three categories of race. Data for this hypothesis test is presented in Table 13.

H2: There is a significant difference in students' perceptions of equity between the categories defined by race (Black, Hispanic, and White).

The results of the analysis revealed no significant differences among the equity means ($F_{(2,176)} = 1.996, p = .139$).

Table 13

Mean Perception of Equity Disaggregated by Race

Ethnicity	Mean	Standard Deviation	N
Black	3.5465	.96046	113
Hispanic	3.8864	.75879	22
White	3.7727	.70054	44

The third one-way ANOVA was conducted to test hypothesis 3 that student perceptions of total connectedness differed among the three categories of race. Data for this hypothesis test is presented in Table 14.

H3: There is a significant difference in students' perceptions of total connectedness between the three categories of race (Black, Hispanic, and White). The results of the analysis revealed no significant differences among the means ($F_{(2,176)} =$ 1.564, $p = .212$).

Table 14

Mean Perception of Total Connectedness Disaggregated by Race

Ethnicity	Mean	Standard Deviation	N
Black	3.5558	.80821	113
Hispanic	3.8636	.66515	22
White	3.6500	.67186	44

A correlation matrix was used to test hypotheses 4, 5, and 6 that there is a relationship between connectedness (as measured by school climate, equity, and total school connectedness) and achievement.

RQ2: Is there a relationship between students' perceptions about connectedness and achievement.

H4: There is a significant relationship between students' perceptions of climate and achievement as measured by GPA.

The correlation between climate and GPA was .084 ($p = .262$, $n = 179$). This indicates no significant relationship between climate and achievement.

H5: There is a significant relationship between students' perception of equity and achievement as measured by GPA.

The correlation between equity and GPA was .143 ($p = .056$, $n = 179$). This indicates a marginally significant relationship between equity and achievement.

H6: There is a significant relationship between students' perception of total connectedness and achievement as measured by GPA.

The correlation between total school connectedness and GPA was .116 ($p = .121$, $n = 179$). This indicates no significant relationship between school connectedness and achievement.

A correlation matrix was used to test hypotheses 7, 8, and 9 that there was a relationship between connectedness (as measured by school climate, equity, and school connectedness) and attendance.

RQ3: Is there a relationship between students' perceptions about connectedness and attendance?

H7: There is a significant relationship between students' perceptions of climate and attendance as measured by the percentage of time a student attends school.

The correlation between climate and attendance was .100 ($p = .183$, $n = 179$). This indicates no significant relationship between climate and attendance.

H8: There is a significant relationship between students' perception of equity and attendance as measured by the percentage of time a student attends school.

The correlation between equity and attendance was .029 ($p = .702$, $n = 179$). This indicates no significant relationship between equity and attendance.

H9: There is a significant relationship between students' perception of total connectedness and attendance as measured by the percentage of time a student attends school.

The correlation between total school connectedness and attendance was .073 ($p = .334$, $n = 179$). This indicates no significant relationship between total school connectedness and attendance.

A correlation matrix was used to test hypotheses 10, 11, and 12 that there is a relationship between connectedness (as measured by school climate, equity, and total school connectedness) and behavior.

RQ4: Is there relationship between students' perceptions about connectedness and behavior?

H10: There is a significant relationship between students' perceptions of climate and behavior as measured the number of discipline infractions where consequences were assigned.

The correlation between climate and behavior was .024 ($p = .747$, $n = 179$). This indicates no significant relationship between climate and behavior.

H11: There is a significant relationship between students' perception of equity and behavior as measured by the number of discipline infractions where consequences were assigned.

The correlation between equity and behavior was -.054 ($p = .473$, $n = 179$). This indicates no significant relationship between equity and behavior.

H12: There is a significant relationship between students' perception of total

connectedness and behavior as measured by the number of discipline infractions

where consequences were assigned.

The correlation between total school connectedness and behavior was -.011 ($p = .888$, $n =$ 179). This indicates no significant relationship between total school connectedness and behavior.

An independent samples t test was used to test hypotheses 13, 14, and 15 to determine the difference in connectedness between students who receive free or reduced lunch and those who do not. The dependent variable was the School Connectedness Survey score. The independent variable was socioeconomic status, which had two levels: regular and reduced/free. Data for these tests are presented in Table 15.

RQ5: Is there a relationship between students' perceptions about connectedness and socioeconomic status?

H13: There is a significant difference in student perceptions of climate between

the two categories defined by socioeconomic status (regular and reduced/free

lunch).

The results of the analysis revealed no significant differences between the climate means ($t = 1.150$, $p = .252$, $df = 177$).

H14: There is a significant difference in students' perceptions of equity between

the two categories defined by socioeconomic status (regular and reduced/free

lunch).

The results of the analysis revealed no significant differences between the equity means ($t = 1.028$, $p = .305$, $df = 177$).

H15: There is a significant difference in student perceptions of total

connectedness between the two categories defined by socioeconomic status

(regular and reduced/free lunch).

The results of the analysis revealed no significant differences between the school

connectedness means ($t = 1.159$, $p = .248$ $df = 177$).

Table 15

Means and Standard Deviations for the Connectedness Subscales Broken

Down by SES

Subscale	Lunch	N	Mean	Standard Deviation
School Climate	Free/Reduced	110	3.6500	.70601
	Regular	69	3.5169	.82404
Equity	Free/Reduced	110	3.6977	.87465
	Regular	69	3.5580	.90255
Total Connectedness	Free/Reduced	110	3.6691	.72450
	Regular	69	3.5333	.81955

Summary

Data yielded from the statistical analysis of the five research questions were

presented in Chapter Four. This quantitative study utilized the SPSS Faculty Version

Pack 16.0 software to conduct a statistical analysis of the research questions, to create

frequency tables to perform one way ANOVA tests, t-tests, and correlation matrices to

examine student perceptions about school connectedness and the relationship it has to race, achievement, attendance, behavior, and socioeconomic status.

The hypotheses tests yielded a marginally significant relationship between equity and achievement. The data of other hypotheses tests revealed no significant relationship or differences between school connectedness and the following: race, attendance, behavior, and socioeconomic status.

Chapter Five presents a summary of the study and an analysis of the findings including how this data correlates with the review of literature, implications for action, recommendations for future research, and conclusions of the study.

CHAPTER FIVE

INTERPRETATION AND RECOMMENDATIONS

Introduction

Students are disconnected from school and are failing to achieve. The academic achievement gap between ethnic sub groups is still evident 55 years after Brown v. Board of Education. School connectedness, according to Blum (2004), refers to the students' beliefs that adults in the school care about their learning and about them as individuals. Often disregarded in the search for answers to close the achievement gap and improve the learning of African American, Hispanic, and students from low socioeconomic backgrounds is the key role building positive relationships and fostering a sense of connectedness plays in this effort. This chapter provides an overview of the problem, reviews the purpose statement and research questions, reviews the methodology, identifies major findings related to the literature, implications for actions, and offers recommendations for further study.

Study Summary

Overview of the Problem

School connectedness and creating a supportive school culture is important and can be seen as a viable school reform initiative to improve student achievement to meet the guidelines of No Child Left Behind, closing the achievement gap, and improving the learning of students from different sub groups. A positive effect upon school culture and climate can be seen when the number of students who feel connected increases (Blum, 2005). Additionally, by expanding opportunities to learn, minority and disadvantaged youth are given equitable opportunities to achieve at high levels. Minority and

disadvantaged students can become successful if they are given equitable resources, exposed to highly-qualified educators, provided quality and challenging coursework, and educated in environments where students can feel connected to a caring adult and to the school.

Purpose Statement

The purpose of the study was to examine school connectedness and the relationship it has with race, achievement, attendance, behavior, and socioeconomic status. Research supports when students feel connected, they are more likely to be successful in school (Blum, 2005).

Review of the Methodology

A quantitative research design was used to determine the relationship school connectedness has to race, achievement, attendance, behavior, and socioeconomic status. Permission letters were sent to the parents of 565 middle school students with 183 students returning permission slips and 180 participating. The study site was Grandview Middle School in the Grandview C4 School District. For the study, the dependant variable was students' perceptions about school connectedness. The independent variables were race, achievement, attendance, behavior, and socioeconomic status.

Survey Monkey, an electronic survey format, was used to collect data for this study. Data results were entered into an Excel spreadsheet and imported into the SPSS 16.0 software to conduct statistical analyses. The dependent variable was operationalized three ways: school climate, equity, and total connectedness. Three one-way ANOVA's were used to test the hypotheses. A Pearson correlation coefficient was used to

determine the relationship between student connectedness and each of the following: achievement, attendance, and behavior.

A correlation matrix was used to test the relationship between connectedness (as measured by school climate, equity, and school connectedness) and attendance. This same statistical analysis was used to test the relationship between connectedness and behavior. *T tests* were conducted to investigate differences in students' perceptions of climate, equity, and total school connectedness relating to socioeconomic status.

Major Findings

The major findings yielded from this study revealed students' perception of school connectedness and the relationship it has to race, achievement, attendance, behavior, and socioeconomic status. The relationship between students' perception about connectedness and students' race was investigated in the first research question. The dependent variable was operationalized in three ways. There was no significant difference in students' perception of climate, equity, or total connectedness among Black, White, and Hispanic students.

The relationship between school connectedness and achievement was examined in the second research question and there was not a significant relationship between climate and achievement. The correlation between equity and achievement indicates a marginally significant relationship. There was not a significant relationship between school connectedness and achievement.

The third research question analyzed the relationship between students' perception about connectedness and attendance. There was not a significant relationship

between climate and attendance. Research did not indicate a relationship between equity and attendance. There was not a significant relationship between total connectedness and attendance.

The relationship between students' perceptions about connectedness and their behavior was examined in the fourth research question. There was no significant relationship between climate, equity, or total connectedness and behavior.

Students' perceptions about connectedness and socioeconomic status were the focus of the fifth research question. There was no difference between perceptions of climate, equity, and total connectedness with students who receive free/reduced lunch and those who do not.

Findings Related to the Literature

Research pertaining to school connectedness revealed a preponderance of evidence supporting the role it plays in the success of educating African American and Hispanic youth and forecasting academic achievement among all students. Additionally, school connectedness was associated with increasing rates of attendance, decreasing the likelihood of students becoming involved in negative behaviors, and was found as a common characteristic among high-performing, high poverty schools. School connectedness theory was found to be researched under several different terms and assessed using multiple measures. Although various terms and different measures were used, the resounding premise behind school connectedness is the development of positive relationships between student and teacher. School connectedness, according to Blum (2004), refers to the students' beliefs that adults in the school care about their learning and about them as individuals.

The School Connectedness Survey from this study was distributed to participants during the last week in May 2009. The question arises of whether investigating school connectedness at such a late date in the school year might have yielded different scores than would have been descriptive of a sample earlier in the school year. The total connectedness mean score for all participants in the study was 3.612 as compared to the 3.0 value that would be expected using a five-point scale. Data from this study indicates that the sample felt more connected to school than average.

Three possible explanations for the discrepancy in the current study come to mind. First, students who were more connected to school would be more likely to fulfill the requirements to participate in the study. Second, students who attend Grandview Middle School may feel connected to school and to a teacher, counselor, or coach in the building. Third, students may have associated the survey responses to the supportive relationship established between the researcher and participants.

With respect to students' perceptions about connectedness and the relationship to race, the results of this study revealed no difference among the three races after operationalizing the dependent variable three ways: school climate, equity, and total connectedness. The lack of significant findings fails to substantiate the work of authors who have cited a relationship between school connectedness and race. Research from the review of literature identified developing positive relationships as a significant indicator of the success of both African American and Hispanic students (Kuykendall, 2004). According to research conducted by Garcia-Reid, Reid, and Peterson (2005), evidence substantiates a correlation between school connectedness and race. To further support the relationship between students' perception of connectedness and race, Benard (2004)

identified school connectedness as a reform initiative in Turnaround Schools.

Conversely, Baron et al. argued that relationships and interactions between teachers and

minority students whose achievement is considered low may include limited and

inappropriate exchanges (1985). Consequently, in the meta-analysis of 16 studies

focusing on teacher expectations, Baron et al, found teachers had higher expectations for

whites in 9 of the studies. One study reported higher expectations for Black students.

Due to no significant results, the other 6 studies did not report which group was favored.

When teachers have lower expectations for Black students, this impedes building positive

relationships and adequately educating these youth (Kuykendall, 2004, Ladson-Billings,

1994).

In examining students' perceptions of connectedness relating to achievement,

there was not a significant relationship between climate and achievement. The

correlation between equity and achievement indicated a marginally significant

relationship. There was not a significant relationship between school connectedness and

achievement. The contradiction in results is refuted by authors who support the

relationship between school connectedness and achievement and indicate a significant

correlation between the two. Wehlage, Rutter, Smith, Lesko, and Fernandez (1989)

found that school connectedness was a crucial forecaster of academic achievement.

School connectedness and building positive relationships are major components in

creating conditions where student achievement is increased. Klem and Connell (2004)

suggested schools establishing such environments are more likely to have students who

are connected. Similarly, Makkonen (2004) reports students who are not do not have a

relationship with someone in the school are less likely to be successful. In *Breaking the*

Ranks in the Middle: Strategies for Middle Level Reform (NASSP, 2006), the importance of students developing a bond with the school or someone in the school is noted. The likelihood of increased achievement of all students can be enhanced when a relationship has been established between the teacher and student. Additionally, teachers who build positive relationships with students can bridge the gap between disconnectedness to connectedness.

Although the correlation found in this study between school connectedness and attendance were not significant, research cited in the review of literature found a relationship between these two variables. Klem and Connell (2004) surveyed students from six elementary schools and three middle schools in the same urban district. Results from Klem and Connell's study showed that middle level students who are connected to school were 75% more likely to have high rates of attendance. The likelihood of truancy is decreased when a student is connected to an adult. In Improving *Student Attendance: A Resource Guide for Virginia* (2005), educators commissioned to work on this project agreed ensuring students are connected and engaged in school is the number one strategy to improve students' attendance.

The relationship between school connectedness and behavior was investigated in this study and results showed no significant relationship between the two. Findings from this study were not congruent with other researchers. Authors mentioned in the review of literature revealed students are less likely to engage in behaviors that impede their learning if they are connected to a caring adult in the school. Blum and McNeely's (2002) research substantiates this result by noting students are less likely to engage in unhealthy behaviors when they feel cared about and feel a part of the school. According

to Somen (1984), aggressive and disruptive behavior within a school can have devastating results on a student's ability to learn and develop relationships. In a meta-analysis of classroom management research, Marzano et al. (2003) corroborates this statement. A healthy environment is determined by a strong student-teacher relationship. According to Bonny et al. (2000), a student who reports a considerable feeling of connectedness demonstrates a strong commitment to healthier behaviors and health results.

Results of this research study identified no significant difference between school connectedness and socioeconomic status as defined by reduced/free or regular price lunch. These results disagree with the findings from the review of literature that noted a correlation between school connectedness and socioeconomic status. According to Kannapel and Clements (2005), the common characteristic between high-poverty, high-performing schools and school connectedness were respectful relationships. Ladson-Billings (1994) noted in her research the importance of a teacher-student relationship in successfully educating African American and Latino children from low-income families in urban settings. Howley and Bickel (2002) extended the topic of school connectedness by investigating the role of small learning communities. They investigated the effects of school size and how it relates to school connectedness and economically disadvantaged students. According to Williams (2003), school connectedness was found as a characteristic for helping economically disadvantaged students stay in school and to achieve.

Conclusions

Implications for Action

Based on the results from this study, findings yielded a marginal correlation between equity and achievement. The researcher recommends that the faculty and staff at Grandview Middle School analyze how grades are assigned to students. Additionally, careful attention needs to be paid to ensure students' perceive grades are assigned equitably. This monitoring of grades should be done each mid-term and at the end of each quarter.

As suggested by the research (Blum, 2005; Elias, Wang, Weissberg, Zin, & Walsburg, 2002; Leffert, Benson, & Roehlkepartain 1997; Schaps, 2005; Thiers, 2005), the investigator of this study recommends careful attention be paid to building meaningful relationships between students and teachers. This relationship building process has been proven effective in educating students who are African-American, Hispanic, and who come from low socioeconomic environments (Kuykendall, 2004, Haycock, 2007; Williams, 2003). To establish the focus on increasing achievement and lowering dropout rates, it is recommended that each student at Grandview Middle School be known by at least one adult and be engaged in the school environment. In order for students to feel connected, they must experience high expectations for academic success, feel supported by staff, and feel safe in their school. To improve students' perception relating to school climate, it is recommended that effective classroom techniques be established and a system developed to address, teach, and monitor discipline.

Recommendations for Future Research

The recommendations for future research include the following: First, the researcher recommends replicating this study during a different time of year rather than during the last week of school. A suggested time might be at the end of first semester or at the beginning of second semester. Moreover, a recommendation would include a pre and posttest during the fall and spring of a school year to compare results.

The second recommendation is to include the perceptions of teachers and parents about school connectedness. By adding these additional groups, results from the study can be analyzed and compared to determine recurring themes or issues.

Third, the researcher recommends using a qualitative or mixed methods research design to collect data regarding student connectedness. A qualitative approach will allow the researcher to capture the stories associated with school connectedness. According to Patton (2002), qualitative research is often used to provide understanding of human experiences as well as to construct meaning in context-specific settings. Further, McMillan (2000) suggested qualitative research focuses on understanding and clarifying meaning of key words, phrases, and themes based on verbal narratives and observations.

The fourth recommendation is to conduct the same study in three middle schools (urban, rural, and suburban) throughout the United States. Students' perceptions about school connectedness could be analyzed and compared to determine if the data yielded from these studies differed from the results of this study.

Concluding Remarks

The purpose of this study was to examine school connectedness and the relationship it has to the following: race, achievement attendance, behavior, and

socioeconomic status. Findings relating to race, attendance, socioeconomic status, and

behavior were found not to be significant. The outcomes from this study showed a

marginal correlation between equity and achievement.

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APPENDIX A: SCHOOL CONNECTEDNESS STUDENT SURVEY

Student ID Number _____

School Connectedness Student Survey
Grades 6 - 8

Indicate how much you agree or disagree with each statement by clicking one of the circles.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. There is a feeling of belonging at my school.	○	○	○	○	○
2. I feel safe at school	○	○	○	○	○
3. I like going to this school.	○	○	○	○	○
4. My opinion is valued by teachers and administrators.	○	○	○	○	○
5. Teachers in my school really care about me.	○	○	○	○	○
6. If a student has a problem there are teachers who will listen and help.	○	○	○	○	○
7. In my school, all students are given a chance to succeed.	○	○	○	○	○
8. Discipline is handled fairly in my school.	○	○	○	○	○
9. Teachers treat me with respect.	○	○	○	○	○
10. I am treated fairly at school.	○	○	○	○	○

APPENDIX B: CONSENT TO CONDUCT RESEARCH STUDY IN GRANDVIEW

C4 SCHOOL DISTRICT

April 28, 2009

Ms. Johnson,

Your request to conduct a research study is approved.

Debra Nelson
Assistant Superintendent of Human Resources

From: Johnson, Cynthia - GMS
Sent: Tuesday, April 28, 2009 3:30 PM
To: Nelson, Debra
Cc: Tate, Barbara; Johnson, Cynthia - GMS
Subject: Permission to Conduct Study Revision
Importance: High

Mrs. Nelson,

The purpose of this message is to seek district approval to conduct a research study at Grandview Middle School. Currently, I am a doctoral candidate at Baker University completing my studies. The information below will outline the purpose of the proposed research study and the data that will need to be collected.

Title of Research Study:

School Connectedness and the Relationship to Equity, Race, Achievement, Attendance, Socioeconomic Status, and Behavior

Purpose of the Study:

- The purpose of this study is to determine the relationship between students' perception about school connectedness and achievement, equity, behavior, attendance, and socioeconomic status.

- Grandview Middle School will be the location sight for this study.

- This quantitative study examines the critical role school connectedness plays in response to meeting the guidelines of No Child Left Behind, closing the achievement gap, and improving the learning of students from different subgroups.

- For the purpose of this study, ten questions from the Missouri School Improvement Process Student Advanced Questionnaire MSIP AQ will be used to measure school climate and equity. Collectively, this set of ten questions will measure school connectedness.

- This study will include a second administration of the MSIP Student AQ survey questions. Ten out of fifty-five questions will be a part of this study. The first administration of this MSIP Student AQ took place in December of 2008 as part of a fifty-five question survey for the MSIP accreditation visit.

- Results yielded from the second administration will help pinpoint particular subgroups and determine whether or not a relationship exists between students' perceptions about school connectedness and achievement, equity, behavior, attendance, and socioeconomic status.

- Each student will return a consent form from the parent/guardian granting permission to participate. Only students who return the form will participate in the study.

- Each student will be assigned a code to ensure all responses are confidential.

- Responses from the survey will be correlated with achievement, behavior, attendance, and socioeconomic data for each student using the Student Information System (SIS).

- No risks and/or stress are perceived to be encountered by any participant in the study.

- Parents/guardians can decide not to have their child participate and/or can discontinue participation at anytime.

Results of the Study:

- Results from the study will assist Grandview Middle School in building positive relationships with different subgroups and ensure the school climate is culturally relevant and responsive.

Administration of Survey

- Administration of the survey will take place during the third week in May 2009.

- Each survey will take no more than ten minutes to complete through the use of Survey Monkey.

Thank you in advance for considering this research proposal. I look forward to hearing from you soon.

Respectfully Submitted,

Cynthia K. Johnson

Principal, Grandview Middle School

Baker University Doctoral Student

APPENDIX C: CONSENT FROM MISSOURI DEPARTMENT OF ELEMENTARY

AND SECONDARY EDUCATION

From: Rush, Brenda [mailto:Brenda.Rush@dese.mo.gov]
Sent: Thursday, April 30, 2009 2:33 PM
To: Johnson, Cynthia - GMS
Subject: RE: Request to Use MSIP AQ

The items you are requesting to use are public documents and are available for your use.

Brenda Rush
Missouri Department of Elementary & Secondary Education
School Improvement & Accountability
573-751-4104
From: Johnson, Cynthia - GMS [mailto:cynthia.johnson@csd4.k12.mo.us]
Sent: Thursday, April 30, 2009 11:23 AM
To: Rush, Brenda
Cc: Johnson, Cynthia - GMS
Subject: Request to Use MSIP AQ
Importance: High

Dear Ms. Rush,

My name is Cynthia Johnson and I am a doctoral candidate at Baker University. I am writing to request permission to use questions from the School Climate and Equity Sub Scale of the MSIP AQ. I will use these questions to measure school connectedness in a research study. The purpose of the study is noted below:

The purpose of this study is to examine school connectedness and the relationship it has to race, achievement, attendance, socioeconomic status, and behavior. Grandview Middle School will be the location site for this study. Grandview Middle is an urban school for grades 6-8 outside the urban core of Kansas City, Missouri. This quantitative study examines the critical role school connectedness plays in response to meeting the guidelines of No Child Left Behind and improving the learning of students from different subgroups.
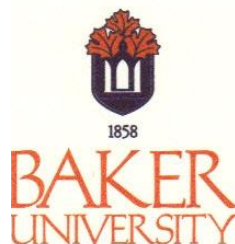
Thank you in advance for considering this request.

Cynthia K. Johnson
Principal, Grandview Middle School
Baker University Doctoral Student

APPENDIX D: BAKER UNIVERSITY IRB APPROVAL

14 May 2009

Cynthia Johnson
5424 NE Holiday Drive
Lee's SUmmitt, MO 64064

Dear Ms. Johnson:

The Baker University IRB has reviewed your research project application (P-0068-0509-0514-G) and approved this project under Expedited Review. As described, the project complies with all the requirements and policies established by the University for protection of human subjects in research. Unless renewed, approval lapses one year after approval date.

The Baker University IRB requires that your consent form must include the date of approval and expiration date (one year from today). Please be aware of the following:

1.   At designated intervals (usually annually) until the project is completed, a Project Status Report must be returned to the IRB.
2.   Any significant change in the research protocol as described should be reviewed by this Committee prior to altering the project.
3.   Notify the OIR about any new investigators not named in original application.
4.   Any injury to a subject because of the research procedure must be reported to the IRB Chair or representative immediately.
5.   When signed consent documents are required, the primary investigator must retain the signed consent documents for at least three years past completion of the research activity. If you use a signed consent form, provide a copy of the consent form to subjects at the time of consent.
6.   If this is a funded project, keep a copy of this approval letter with your proposal/grant file.

Please inform Office of Institutional Research (OIR) or myself when this project is terminated. As noted above, you must also provide OIR with an annual status report and receive approval for maintaining your status. If your project receives funding which requests an annual update approval, you must request this from the IRB one month prior to the annual update. Thanks for your cooperation. If you have any questions, please contact me.

Sincerely,

Marc L. Carter, PhD
Chair, Baker University IRB

CC: Susan Rogers

P.O. Box 65, Baldwin City
Kansas 66006-0065
785-594-6451 • fax 785-594-2522
www.bakeru.edu

APPENDIX E: PARENT CONSENT LETTER

Dear GMS Parents and Guardians:

Grandview Middle School is very interested in your child's experience at our school. As a doctoral student, I am writing to seek my permission for your child to participate in a research project under the supervision of Dr. Susan Rogers, Associate Professor at Baker University. The information generated by this process will be used to better meet the needs of students in our diverse learning community.

As a participant, your child will be asked to answer ten questions concerning their perceptions about school. This survey will be administered during the school day during the third week of May 2009. It will take your child approximately ten minutes to complete. All students who participate will be assigned a number individually to ensure no child can be identified. All your child's answers will remain confidential and will not be released to anyone.

This research study has been reviewed and approved by the Baker University Institutional Review Board and the Grandview School District. At the end of the study, it is my hope to provide methods for improving students' school experience at Grandview Middle School. I hope you will give permission for your child to participate. Participation is completely voluntary; you may refuse for your child to participate, or discontinue participation at any time without consequence. Children participating will be entered into a drawing for World's of Fun tickets.

Sincerely,

Cynthia K. Johnson
Principal, Grandview Middle School
Baker University Doctoral Student

I have read the material above, and agree to have _____

participate in this research study.

_____ _____
Parent and/or Guardian   Date