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The Impact of an Advisor-Advisee Mentoring Program on the Achievement, School
Engagement, and Behavior Outcomes of Rural Eighth Grade Students

by

Christopher J. Herrick

Presented to the Faculty of
the Graduate College of the University of Nebraska
for the Requirements of the Degree
Doctor of Education

Major: Educational Administration

Under the Supervision of
Kay A. Keiser, Ed.D., Chair
Jeanne L. Surface, Ed.D.
Larry L. Dlugosh, Ed.D.
David J. Carter, Ph.D.

Omaha, NE

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Abstract

The Impact of an Advisor-Advisee Mentoring Program on the Achievement, School Engagement, and Behavior Outcomes of Rural Eighth Grade Students

Christopher J. Herrick

University of Nebraska-Omaha

Advisor: Dr. Kay A. Keiser

The purpose of this exploratory two-group pretest-posttest comparative survey study was to determine the effect of a team adviser-advisee academic, behavior, and character mentoring program on the achievement, school engagement, and behavior outcomes of eighth grade students determined to be above ($n = 21$) and below ($n = 15$) eligibility guidelines for free and reduced price lunch participation during the 2008-2009 school year.

For this project, components of student achievement, student engagement, and student discipline were studied among eighth grade students. Student achievement was measured using the Iowa Test of Basic Skills and classroom academic performance. The Iowa Test of Basic Skills include Reading: (a) reading total national standard scores (NSS); Mathematics: (a) mathematics total national standard scores (NSS); and Science: national standard scores (NSS). Classroom performance was measured by the research school districts core curriculum grades (grade point average) for: (a) language arts; (b) mathematics; (c) science; (d) social studies scores; and (e) cumulative grade point average. School Engagement was measured by cumulative participation frequencies for:

(a) sports and (b) activities. Behavior was measured by cumulative frequencies for: (a) absences, (b) tardiness, and (c) discipline referrals.

The findings of this study indicate that significant growth academically was made over time on standardized tests for all students. There was significant improvement over time in Grade Point Average, and specifically low-income students in language arts, science, and core cumulative GPA closed the gap with non low-income students over time.

There were no significant findings in the areas of school engagement or school behavior among the students participating in the study.

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Chapter 1

Introduction

In December 2002, I was in my second year as the superintendent of a small Midwestern rural school district. On this cold winter morning, just after the start of the school day, the elementary secretary called my office. Robert had missed the bus again, his grandmother could not get him out of bed and she didn't know what to do with him. Robert was in the sixth grade and lived with his grandmother in a small house several miles from the school. Robert earned below average and failing grades and had a history of behavior problems in elementary school. From the educators' perspective who worked with Robert, it appeared his grandmother didn't know how to help Robert become successful with school. It appeared she did not know how to help him with academic work, and on many days, even how to get him to school. Robert had struggled with school most of his young educational career, and now as a sixth grader was beginning to exert his stubbornness with his grandmother in getting out of bed and coming to school.

I told the secretary I would go get him and to let his teacher know it would be a half hour or so before I could get back to the school with Robert. I drove the eight miles to the small village where Robert lived. The village has less than 200 residents most living in poverty, most of the homes in need of repair. When I arrived at Robert's house, I got out of the car and walked to the door. There were no sidewalks, only the dying grass of December and the mud from recent rains. There was no covered porch, no grand entry, and certainly no curb appeal. There were only the worn steps of cinder blocks leading up to the door of the run down home in which Robert and his grandmother lived.

This was poverty, not like urban poverty, but the kind of poverty found in rural farming communities. I was met at the door by Robert's grandmother, cigarette in hand, the disheveled look of morning on her face. "I cannot get him up for school," she said. I stepped inside and glanced around. There was some dog food strewn on the floor, an open bag of chips on the counter, overflowing ash trays among the clutter of dirty dishes in the kitchen, and a scattering of dirty clothes in the living room of the perhaps two bedroom home. It was cold. It must have been less than 50 degrees in the house as I could see my breath when I spoke. I asked if they had heat. "No, it went out yesterday," grandmother mumbled, "Someone is on the way to fix it today."

On the living room floor was a torn stained mattress, Robert was under blankets among the clutter. Apparently grandmother managed to get him awake before I arrived. "Robert, you have to come to school," I told him. He looked at me with no expression and with little emotion in his eyes. His grandmother yelled at him out of frustration to get up, he just stared up from under his blankets. I settled into an arm chair and told Robert I was not leaving until he got up, got dressed, and came to school with me. Finally he did get up and went to a room in the back of the house. He returned wearing a basketball jersey and sweats. His hair was uncombed and obviously none of the regular morning hygiene rituals were going to take place with Robert. But he was up and ready to come with me to school. We drove back to the school and on the way I asked him if he was hungry, assuming he had not eaten anything for breakfast. The small for his age boy nodded yes, he was hungry. It was perhaps the fact that at school, he would for sure get lunch and possibly get something for breakfast that actually motivated Robert to get up and come to school with me.

As we entered the school, we went to the kitchen and the cooks gladly gave Robert a breakfast bar and carton of milk. I checked him in with the secretary at the office, and Robert went to his sixth grade classroom for the day. As I walked back to my office, I thought to myself tomorrow may bring another morning trip to Robert's house. Robert needed to be in school, I should be prepared to make the trip.

Context and Rationale

Many students today find themselves in similar circumstances such as Robert, living in poverty, often with only one parent in the home and with limited adult influences in their lives (Books, 2004; Crump, 1997; Payne 2008). In fact, one in four children in the United States live in poverty, and 48% of all Americans living in poverty today are children (Hearts and Minds Network, Inc., 2007). For many of these students, school often becomes a challenge as the students find themselves left to their own abilities and motivation with limited effective relationships with adults and role model resources to help the student become successful in school (Payne, 2005; Reinstein, 1998; Taylor, 2005).

The K-12 school system provides a multitude of opportunities for children to interact with adults beyond the family structure. Teachers, principals, bus drivers, cooks, and custodians all adults, interact with students on a daily basis. Often these individuals serve as task masters, disciplinarians, advisors, mentors, and confidants as the child moves through the various stages of development and their academic careers (Hyslop, 2006). Schools are unique in that no other organized social system can reach as many kids on a daily and ongoing basis as our K-12 education system does. Opportunities are

limitless for student interaction both formally in the classroom and informally out of the classroom with adults who care about the success of the student. With this interaction comes the opportunity for students to connect with adults, to develop positive relationships with adults, and for adults to instill in each child self respect and the value of education in each child's life (Barker, Basile, & Olson, 2005; Witmer, 2005).

School administrators and teachers in the research district saw the need for all students not only to have caring adults as teachers, but to take it a step further and provide the opportunity for caring adults to take a more active presence in each student's daily life as well. The research school district officials and staff believed through the development and implementation of an advisor-advisee program, each junior and senior high school student would have the daily interaction with a specific adult or advisor within the school building. Through this type of relationship, students would have an improved opportunity to be successful in school.

It is believed through the development of these positive faculty-student relationships, student achievement, student behavior, and school engagement will improve, especially among low-socioeconomic students. This was of particular importance to the research district as school administration and faculty feel the low-socioeconomic and other at-risk students do not perform as well, have more behavior problems, and are less involved in school activities than their more affluent peers. As the district analyzed student achievement data, the evidence supports that the low-income students achieved at a lower level than their more non low-income counterparts. Further, this became important, because the research school district, in accordance with No Child Left Behind (2002) has been designated as a school in need of assistance by the Iowa

Department of Education for the 2009-10 school year due to the non-proficient reading performance of the low-socioeconomic subgroup of students as measured by standardized assessments.

As district officials continued to study low-socioeconomic students, it became clear these students not only struggled academically, but were less involved in school activities, had poorer school attendance, and more disciplinary issues than non low-socioeconomic students.

At the same time, the research district was taking a hard look at the school environment for students. Efforts began through the Character Counts program, district-wide policy, and school practices to address bullying, harassment, and peer-to-peer respect issues within the school to create a more positive environment in which all kids would feel safe to learn in.

Implementing support. Beginning with the 2008-09 school year, the research school district implemented an advisor-advisee program for all students in the junior and senior high school. The program begins before the school year starts with advisors choosing students who they believe they have had or could develop positive relationships with. The program consists of each faculty member, or advisor, drafting students much like that of a sports draft. For example, the eighth grade advisors took turns picking students for their respective advisory groups until all the students were selected. The staff believes this process sends a positive message that the student was chosen and by their advisor to be his or her advisee rather than assigned.

During the school year, advisors and advisees met for 25 minutes each school day. Each grade level has a specific curriculum as selected by the school leadership team to meet the needs of the particular age and grade level of the students. In addition, the advisors monitor grades, attendance, and disciplinary problems individual students may be encountering. The advisor helps the students select class schedules, provide guidance, and with career explorations. The advisory curriculum for the eighth grade focuses on social skills, values, character, anti-bullying, and relationship building. Each advisory group also does community service projects and participates in other activities to build team work and a sense of belonging. This study will review the research district's class of 2013 and their eighth grade performance during the 2008-2009 school year.

Purpose of the Study

The purpose of this exploratory two-group pretest-posttest comparative survey study was to determine the effect of a team adviser-advisee academic, behavior, and character mentoring program on the achievement, school engagement, and behavior outcomes of eighth grade students determined to be above and below eligibility guidelines for free and reduced price lunch participation during the 2008-2009 school year.

For this project, components of student achievement, student engagement, and student discipline was studied among eighth grade students. Student achievement was measured using the Iowa Test of Basic Skills and classroom academic performance. The Iowa Test of Basic Skills include Reading: (a) reading total national standard scores (NSS); Mathematics: (a) mathematics total national standard scores (NSS); and Science:

national standard scores (NSS). Classroom performance was measured by the research school districts core curriculum grades (grade point average) for: (a) language arts; (b) mathematics; (c) science; (d) social studies scores; and (e) cumulative grade point average. School Engagement was measured by cumulative participation frequencies for: (a) sports and (b) activities. Behavior was measured by cumulative frequencies for: (a) absences, (b) tardiness, and (c) discipline referrals.

Research Questions

The following research questions were used to analyze the achievement outcomes of eighth grade students determined to be below and above free and reduced price lunch eligibility guidelines following participation in a team adviser-advisee academic, behavior, and character mentoring program.

1. Are eighth grade students (low-income and non low-income) involved in the advisor-advisee program successful in school as indicated by academic performance?
2. Is there a difference in standardized pretest-posttest subtest scores in
 - a. reading total,
 - b. math total, and
 - c. science total

between eighth grade low-income students and eighth grade non low-income students after completion of the advisor-advisee program during eighth grade?

3. Is there a difference in GPA for:
 - a. math,

- b. language arts,
- c. science,
- d. social studies, and
- e. core cumulative GPA

between eighth grade low-income students and eighth grade non low-income students after completion of the advisor-advisee program during eighth grade?

4. Is there a difference in school engagement as measured by extra- and co-curricular activity participation between eighth grade low-income students and eighth grade non low-income students after completion of the advisor-advisee program during eighth grade?
5. Is there a difference in school behavior as measured by attendance, tardiness, and disciplinary referrals between eighth grade low-income students and eighth grade non low-income students after completion of the advisor-advisee program during eighth grade?

Assumptions and Strengths

This study has several strong features. The students in this study all participated in the advisor-advisee program for the entire 2008-2009 school year. There were four separate advisory groups each with a teacher advisor. Each student had the same advisor teacher throughout the year. The advisory consisted of a 25 minute block of time scheduled daily. The advisory curriculum was developed by the eighth grade advisory teachers who met periodically to plan together. It is assumed that all advisory activities, instruction, and the curriculum were the same across all four advisory groups. A unique

feature of the small research district is that for the curricular areas of science, math, and social studies a natural looping occurs. The students have the same teacher in math, the same teacher in science, and the same teacher in social studies during both the seventh and eighth grade years due to the small size of the research district.

Definition of Terms

Advisory program. Generally defined as a structured time in which an adult advisor meets routinely at school with a group of students, providing academic, social, and emotional support to help students be successful at school (Shulkind & Foote, 2009).

At-risk students. Students who struggle with school due to issues such as disciplinary problems, stressful personal and or home situations, or that may be alienated from their peers (Stuhlman, Hamre, & Pianta, 2002).

Iowa Test of Basic Skills (ITBS). The Iowa Test of Basic Skills is a standardized test given annually in the research school district to all students in grades 3 through 8 measuring student performance in academic areas (Hoover, et al., 2003).

Iowa Test of Educational Development (ITED). The Iowa Test of Educational Development is a standardized test given annually in the research school district to all students in grades 9-12 measuring student performance in academic areas (Forsyth, Ansley, Feldt, & Alnot, 2003).

Low- socioeconomic. For this study low-socioeconomic is defined as students and families qualifying for free and or reduced meals in school according to the National

Hot Lunch Program guidelines as established by the United States Department of Agriculture for the 2008-2009 school year.

Non low-socioeconomic. For this study non low-socioeconomic is defined as students and families who do not qualify for free and or reduced meals in school according to the National Hot Lunch Program guidelines as established by the United States Department of Agriculture for the 2008-2009 school year.

Low-income. For this study low-income is defined as students and families qualifying for free and or reduced meals in school according to the National Hot Lunch Program guidelines as established by the United States Department of Agriculture for the 2008-2009 school year.

Non low-income. For this study non low-income is defined as students and families who do not qualify for free and or reduced meals in school according to the National Hot Lunch Program guidelines as established by the United States Department of Agriculture for the 2008-2009 school year.

Lesbian, gay, bisexual, transgender(ed), and questioning (LGBTQ, LGBT, GLBT). Refers collectively to a diversity of sexuality and gender identity-based cultures and is sometimes used to refer to anyone who is non-heterosexual instead of exclusively to people who are homosexual, bisexual, or transgender. To recognize this inclusion, a popular variant adds the letter Q for queer or those questioning their sexual identity (Swain, 2007).

Proficiency. For this study proficiency refers to performance at or above the 40th percentile on the Iowa Test of Basic Skills and or the Iowa Test of Educational Development as defined by the Iowa Department of Education.

Grade point average (GPA). Grade point average is calculated in the research school district on the following scale: A = 4 points, B = 3 points, C = 2 points, D = 1 point, and F = 0 points.

Extra-curricular and co-curricular activities. In the research school district these are programs offered outside of the regular curriculum as voluntary activities for students. These programs include sports, fine arts, and clubs.

Delimitations of the Study

The study was delimited to one group of eighth grade students in a small Midwestern rural school who were in attendance during the 2007-08, 2008-09, and 2009-10 school years. In addition, the students must have completed the Iowa Test of Basic Skills in the fall of 2008, and the Iowa Tests of Educational Development during the fall of 2009. The study results, findings, discussions, and conclusions, are applicable to only these students and cannot be generalized to larger or urban schools.

Limitations of the Study

The eighth grade advisor-advisee program in the research school district was divided into four groups each with their own advisor. While the curriculum and goals of each group are the same, the degree to which the curriculum is implemented and

followed cannot be confirmed. The role of the advisor in the research school district was uniform, however the degree to which these roles are carried out may not be uniform.

Significance of the Study

This study contributes to research, practice, and policy. It is of considerable interest to school administrators, teachers, parents, and other stakeholders in the research school district, and to other educators who are interested in studying the role and impact on student achievement, behavior, and school engagement of advisor-advisee relationships at the secondary school level, especially regarding students from low-socioeconomic backgrounds.

The study will contribute to the research on the impact of advisor-advisee programs on academic achievement, school behavior, and school engagement. The results of this study will be communicated to school leadership, decision makers, and other stakeholders in the district. The results of this study may assist the research district in continuing, revising, and implementing advisor-advisee programs in the future. The results of this study may influence decision-makers in the research district as they allocate resources for programs. Local policy, practices, and procedures may be impacted in the research district should the study show a positive impact to student achievement, behavior, and school engagement. The results of this study may inform the theoretical literature on the effectiveness of advisor-advisee programs in schools.

Organization of the Study

The literature review pertinent to this study is found in Chapter 2. Chapter 3 describes the research design, methodology, and procedures that will be used to gather

and analyze the data for the study. Chapter 4 describes the statistical results of the study. Chapter 5 contains the conclusion, discussion, and implications of the study.

Chapter 2

Review of Literature

Truly remarkable is the public education system in the United States as it allows our citizens to transcend socioeconomic class. As Horace Mann stated, “Education then, beyond all other devices of human origin, is the great equalizer of the conditions of men, the balance-wheel of the social machinery.” The American education system, as Mann points out, has helped the United States to become an economic, cultural, and social world leader. However, in the education system today, there are many disparities between school and student performance, quality, family structures, and disparity in community resources and wealth (Aikens & Barbarin, 2008; Kahlenberg, 2003; Reinstein, 1998).

This literature review will explore the obstacles to success in school some students face, including socioeconomic obstacles, the impact of family support, and the influence negative school culture can have for some students. Also to be explored are the steps some schools are taking to help students achieve through increasing adult presence in the lives of students through advisor and mentoring programs.

Specifically the impact of poverty on academic performance, school behavior, and school engagement will be reviewed. The role of parents and family will be assessed as well as the school culture, especially for at-risk populations of students. The final part of the literature review will be to explore the advisory programs that are showing positive results through adult intervention and additional adult support for students during their junior and senior years.

Disparity of Opportunity

Many students today in the PK-12 education system have varied backgrounds and diverse experiences in their young lives. Many educators with middle class backgrounds are not are not familiar with their students' family environments. Nor do many teachers have a full understanding of the values, routines, and daily interactions of many students who live in poverty (Payne, 2005). Students in the K-12 educational system are from families, homes, and even communities with wide ranges of capacity. In this sense capacity can be defined as the ability to help the student be successful at school and includes the financial resources, knowledge, as well as the family and social structures to support the student's success in school.

Some families seem to have it all including the tools and know how to be successful in school, yet some seem to have nothing at all. For example, low-socioeconomic twelfth grade students read at the level of eighth grade middle socioeconomic class students and those students from families in the lowest 20% of income earnings are more than twice as likely to drop out as those students from families in the highest 20% of income levels (Kahlenberg, 2003). Regardless of advantages or disadvantages, all students need and deserve a top flight education and the opportunity to reach their full potential, however there is disparity among our students and schools (Kahlenberg, 2003; Reinstein, 1998).

Some families have the fullest capacity to help their children be successful in school and often have the resources to afford the best private education, live in the nicest neighborhoods, and as the child grows up can provide the richest experiences to help him

or her develop into young adulthood. Many children in these families grow up with parents and other adults who shuttle them to a wide array of activities including sports practices, youth clubs, and private music and dance lessons. The children find themselves riding in new and late-model mini vans and sport utility vehicles from location to location, traveling many miles to new and different destinations for diverse life experiences such as competitions, camps, and other youth based activities (Feldman & Matjasko, 2007).

In their study of the impact of socioeconomic status on activities, 80% of the students from non-free meal qualifying families participated in activities beyond school (Wikeley, Bullock, Muschamp, & Ridge, 2009). It is true for some types of families; their children's lives are full of extra and co-curricular activities far before they reach the age of interscholastic activities in junior and senior high school. Families such as these have the financial, emotional, and social resources to help their children reach their fullest potential as the child develops from childhood to adolescence to becoming a young adult.

The parents in many middle and upper socio-economic class families are often involved in the school, booster clubs, parent-teacher groups, taking a vested interest in their child's education. Families such as these have the ability and the "know-how," to be involved in the school, how to interact with teachers to benefit their children, do the daily tasks such as checking on homework, and set the daily routine for the child to follow a path to success (Wallis, 1998). Other parents take an active role in their child's education, pushing their children to take their role as a student seriously, to complete the

out of school tasks such as homework to be prepared each day for classes (Clabaugh, 2008).

For many, college education is the expectation. Three of four children in the highest 20% of income earners grow up and obtain a bachelor's degree from college. This type of family and parental involvement in the child's academic development is more likely to raise student achievement (Clabaugh, 2008; Kahlenberg, 2003).

Other families don't have such capacity to help their children be successful in school (Books, 2004; Payne, 2008). Often both parents work, sometimes uneven shifts, and making ends meet is a continuous struggle. Children leave an empty house in the morning and or come home to an empty home after school, which not only means lack of adult supervision, but also means for little or no accountability for the child in regard to schooling. As many as 77% of youth under the age of 18 may be considered to be "latch-key" kids, that is they carry a key to their home because when they arrive home after school they are home alone and need to unlock the family home (Books, 2004). For example, in Phoenix, AZ, as many as 50% of the third and fourth grade students are latch-key kids (City of Phoenix, 2003). For some, there are limited or no adults in the student's life to ask, "How was your day? Do you have homework? Are all of your assignments in? How did you do on your test today?"

Some families have only one adult, and more often than not the father in many families is not present, physically, emotionally, or financially. Students who come from one parent homes have significantly lower achievement scores than those from two-parent homes (Caldas & Bankston, 1999).

In many situations, how the child does in school becomes secondary to the daily routine of life, which is more about dealing with poverty and the month to month finding and providing shelter, transportation, food, and clothing (Books, 2004). Still other families suffer from other afflictions such as alcohol abuse, drug addictions, domestic violence, and other traumatic situations for the children (Clabaugh, 2008). In these situations the things educators expect of successful students - whether or not the child has their homework done, is on time for class, has studied for the exam, or even as basic as having their pencil and notebook for class; all these things take a back seat to the often traumatic situations the child deals with on a daily basis (Payne, 2005).

College education often is not the goal for those in poverty (Reinstein, 1998; Zwick, 2002). As opposed to the middle and high income children, only one of 25 low-income students earns a bachelor's degree (Kahlenberg, 2003). One mother in the research district living in this type of life said recently, "Ronnie, *has to pass school*. He will be the first member of our family to get a high school diploma." This followed a conversation in which the mother used profanity and called school administration derogatory names for his long term suspensions for drugs in the school during the previous year. For this mother and many other families high school diplomas are viewed as *the* accomplishment, and even then it is secondary to the dysfunction of daily living for these children. For many living in poverty expectations for education beyond high school is beyond the daily challenges, stress, and dysfunction of life (Reinstein, 1998).

In their study of family variables on student achievement Cassonova, Gracia-Linare, de la Torre, & de la villa Carpio (2005) showed parents of students with low student achievement have lower levels of acceptance, control, involvement, and

expectations than higher achieving students. For reasons including poverty, lack of adult supervision, lack of parenting skills, financial stresses, broken homes, physical and emotional abuse, drug addiction, and other problems, many children come from families and situations that do not have the capacity to help the child become successful in school.

In addition, some students do not find school to be a pleasant experience as they are victimized by peers and do not feel support from teachers. Many students who are unsuccessful academically and who receive insufficient positive attention from classmates and teachers often become quietly invisible, or in other cases they may act out until they receive the attention they crave, even though it is negative attention (Testerman, 1996). Classroom environments in which students do not feel safe or are not cared about limit the willingness of students to educationally challenge themselves (Witmer, 2005). Often at-risk students have lower academic achievement and poorer school performance than other students. Low achievement among students who are victimized at school is well documented and exacerbating the problem even further happens when students feel teacher intervention or parental involvement is lacking (Beran, 2009).

Poverty

Academic achievement. In predicting levels of student achievement, the family income continues to be a reliable indicator (Aikens & Barbarin, 2008; Taylor, 2005). Elementary and secondary students from middle and high income homes outperform their less affluent peers in school. In all curricular areas including the core areas of math, reading, science, and social studies, students from families qualifying for free and reduced meals underperform on the NAEP and other standardized tests than their more

affluent classmates. In comparing the groups, those students who qualify for free meals earn the lowest scores, those students who do not qualify for the free or reduced prices earn the highest scores, and the reduced group falls in between. This achievement data not only occurs across the curriculum, but also across grade levels as the pattern is the same for fourth, eighth, and twelfth grade students with the lowest scores earned by children who do qualify for the lunch programs (Iowa Department of Education, 2008; National Center For Educational Statistics, 2006).

Poverty in rural schools. Often when thinking of the public K-12 school system and poverty, we think of urban schools. With the restructuring of the nation's economy, the decline of employment in agriculture, and the loss in manufacturing jobs, poverty in rural areas is on the rise (Crump, 1997). Rural students in poverty are often impacted as much or sometimes even more so than their suburban counterparts (National Center for Education Statistics, 2007).

The National Center for Educational Statistics classifies schools in rural areas as those schools outside of an urbanized or suburban area. Schools in rural areas also have disparities in achievement between low-income and high income students. During the 2003-2004 school year, 56% of the nation's schools were operating in rural areas (National Center for Education Statistics, 2007).

Using the Census Bureau definition of rural areas and the 2007-2008 school year data, 332 of Iowa's 364 (91.3%) school districts are considered rural and served 51.8% of the students in the state (Iowa Department of Education, 2008). In exploring the Iowa data, students in low socio-economic homes lag behind their more affluent classmates

across all grade levels in the core academic subjects of reading, math, and sciences as measured by the Iowa Tests of Basic Skills. Biennium data of fourth, eighth, and eleventh grade students bears this out in terms of the percentages of students reaching the proficient levels, defined as at least the 40th percentile on the widely used Iowa Tests of Basic Skills/Educational Development. For the years 2006-2008 in Reading Comprehension 65.7% of Iowa low-socioeconomic fourth graders met the minimum proficient level, compared to 85.8% of their more affluent peers.

The following Figure 1 illustrates this across grade levels and academics.

Figure 1. 2006-2008 ITBS/ITED Comparison

Iowa Grade 8	Percent of Low-socioeconomic at or Above Proficient Level	Percent of Non-low-socioeconomic at or Above Proficient Level
Reading Comprehension	54.7	80.1
Math	60.4	80.3
Science	67.6	87.3

Iowa Grade 11	Percent of Low-socioeconomic at or Above Proficient Level	Percent of Non-low-socioeconomic at or Above Proficient Level
Reading Comprehension	59.6	81.9
Math	60.4	83.3
Science	66.3	85.0

Students who live in poverty are not only more likely to underachieve than their peers from middle-income and high-income households, they are also at risk of not completing school at all (Taylor, 2005). In 2001, 18.4% of the nation's rural 16-24 year olds living below the poverty threshold were high school drop outs. The dropout rate for those living within 185% of the poverty threshold was 16.3 %. For those living well above the poverty threshold, the dropout rate accounted for 7.2% of the 16-24 year olds (National Center for Education Statistics, 2007).

Beyond High School. The impact of socioeconomic status on elementary and secondary school academic performance goes beyond the K-12 school setting (Eveyn, 1998; Reinstein, 1998). In the United States the two primary college entrance examinations given to students to determine college readiness are the SAT and the ACT tests. On both tests, the evidence reflects socioeconomic status matters as there is a strong correlation between family income and performance on the tests. In 2001, the

average combined SAT score for students with a family income of less than \$20,000 was 887 compared to that of 1126 for students whose family income topped the \$100,000 mark. On the ACT, students from homes with less than \$18,000 annual income scored an average of 18.1 compared to 23.4 average score by students from homes earning more than \$100,000 per year (Zwick, 2002). The disparity between high and low-income students is magnified in considering college degrees. Kahlenberg (2003) cites 76% of high-income students complete bachelor's degrees as opposed to only 4% of low-income students.

Student Behavior. Students who live in poverty are more likely to be expelled, suspended, or retained from school (Taylor 2005). In a 1999-2002 study of a large Florida school district, the low SES schools had higher rates of serious disciplinary referrals than their high SES counter parts. While the percent of violations for policy infractions were relatively the same between the groups, there were vast differences among other types of discipline referrals. The incidence rate among low-SES school students for classroom misbehavior, campus rule violations, and bus misconduct were significantly higher than the numbers of the high-SES students. In the low-SES schools, referrals for violence were nearly five times higher than in the high SES schools (Boroughs, Massey, & Armstrong, 2005).

Attendance and the likelihood of dropping out of school is also impacted by a student's socio-economic status. The correlation is striking. Students living below the poverty threshold are 2½ times more likely to drop out of school for those living significantly above the same threshold (National Center for Education Statistics, 2007).

For those living in poverty, problems with behavior also goes beyond the K-12 school setting. Children who grow up in poverty are more than twice as likely to commit and be involved with or report serious crimes than those children who come from families living double the family income of the poverty threshold (Holzer, Schanzenbach, Duncan, & Ludwig, 2007).

Student Engagement. There are many opportunities in the secondary school system for students to be engaged in school outside of the academic classroom in terms of the world of extracurricular and co-curricular activities. Junior high traditionally marks the point in which adolescents can begin to explore varied interests in school sponsored sports, music, clubs, and other outside of the school day sponsored activities for youth.

Student participation in extra-curricular and co-curricular activities results in higher student achievement (Dearing, et al., 2009). The research indicates the greater the participation in school activities the result will be positive student achievement. The National Longitudinal Study of Adolescent Health focused on adolescents, families, and schools involving over 90,000 students in grades 7-12 completing in-school and or in-home surveys regarding participation in school activities during 1994 and 1999. This study utilized data of over 13,000 students to explore the profiles of students participating in school based extracurricular programs. They found students participating in one or more activities had higher grade point averages than those students who did not participate in extracurricular activities at all (Feldman & Matjasko, 2007). This research is consistent with the National Longitudinal Study of 1988, which also showed consistent

benefits in grades for students who participated in extra- and co-curricular sports in the tenth and twelfth grades (Broh, 2002).

Participation in extra activities beyond the school day is positively associated with family income, with those students at the lowest income levels most likely to be nonparticipants than their more affluent peers (Dearing, et al., 2009). Further, 60% of students from higher socioeconomic classes participated in one or more activities as opposed to 40% from the lower middle and lower socioeconomic class. The National Center for Educational Statistics Center report (2006) shows students who live in the lowest quartile of family incomes are less likely to participate in extracurricular school activities ranging from sports to clubs to music. According to 2002 data compiled by the center, among sophomores from families in the lowest quartile of income, 44.3% of participated in sports. For those sophomores whose family income fell in the middle two quartiles, 54.9% participated in school sports, and 64.3% of sophomores from families in the highest income quartile participated in sports. The data shows the same pattern among other extracurricular programs as well. Nearly one-third more sophomores from the high income quartile participate in music (band, orchestra, and chorus/choir) than do sophomores from the lowest quartile (National Center For Educational Statistics, 2006).

Parent Support

Parents. Parents play a critical role in the ability for children to be successful at school. Asian-Americans typically take the role of their child seriously in education, take on the role of teacher after school, and push their children to do the things such as homework necessary to be successful in school. Asian-Americans account for 4% of the

U.S. population, however, their children account for nearly 25% of the student populations at Stanford, Cornell, and Columbia, and 18% of the student population at Harvard, four of the nation's top universities. More Asian-Americans have bachelor's degrees at age 25 than any other race or ethnicity in the United States (Clabaugh, 2008).

Single parent homes. Nearly six of ten children in single parent homes are at or near the poverty level, including 45% of children being raised by divorced mothers, and 69% of children being raised by never married mothers (Hyslop, 2006). In rural areas non-metropolitan areas nearly one in two children living in poverty live in single mother households (Crump, 1997).

Analyzing achievement data from the 1990 Louisiana Graduation Exit Examination scores of over 40,000 sophomores, Bankston and Caldas (1999) found that school districts with disproportionate numbers of single-parent families did not achieve as well academically as other school districts and that the percentage of students from single parent homes was a stronger indicator than poverty or racial makeup of the schools in terms of academic achievement.

The challenges for children living in single parent homes can be daunting and poverty may be the least of problems faced by children from single-parent homes. Three out of every four children/adolescents in hospitals for chemical dependency are from single parent homes, one in two youths incarcerated for criminal acts come from single parent families, and the most tragic statistic of all, 63% of those who have committed suicide share in common the fact they come from single parent families (singleparentsucces.org, 2007).

The role of adults in the academic achievement and development of adolescents cannot be discounted, and many children today find themselves without the adult presence, support, and guidance that can help lead to success in school.

Impact of School Culture

While poverty and parental involvement may be strong factors determining student success in school, other factors such as bullying and the overall school peer to peer and teacher to student relationships can keep students from being successful.

For at-risk students, such as lesbian, gay, bisexual, transgender, and questioning (LGBTQ) students, ethnic minorities, and other targeted students, the school environment often is a negative experience. These students find themselves the target of teasing, bullying, and even worse physical violence. In the National School Climate Survey of LGBTQ students, 90% of students reported verbal harassment, 67% were harassed because of their gender expression, and 25% of students suffered physical violence including being punched, kicked, or injured because of their sexual orientation (Gay Lesbian Straight Education Network, 2008). Worse still, in 2008 young Lawrence King of Oxnard, California was shot and killed by a classmate because of his sexual identity, during the school day while attending his junior high school (Kim, 2009).

In our nation's schools, millions of students, gay and straight, suffer in isolation as victims of anti-LGBTQ and other types of bullying. A 2009 National Education Association report concludes that having even one supportive adult at school can make all the difference to helping at-risk students such as LGBTQ stay in school and achieve academically. For kids living in rural areas, the isolation felt by these students is

heightened. In other rural areas, just 23.7 percent of students could find resources on LGBT subjects at school, compared to 31.7 % in urban schools and 44.6 percent in suburban schools (Kim, 2009).

Schools Can Help

Schools are grappling with many issues today. No Child Left Behind (2002) has put emphasis on test scores of children, often ignoring the unique individual learning style and process each child has. New levels of accountability have demanded more from teachers, and schools with poor scores are scrambling to find the solutions to poor performance through a solitary intervention – instructional practices. Public pressure has built for schools to do more, and education has found its way into the political arena as well (Wirt & Kirst, 1997).

Adolescence and the teen age years are typically marked by independence and the assertion of said independence in the normalcy of growing up. However despite this, close relationships with adults are of considerable value as our young people develop and transition to the world of adolescence and adulthood (Brown, 2001; Stuhlman, Hamre, & Pianta, 2002).

While the education system may not hold all of the answers, schools can do more to help students who may be at-risk due to poverty, lack of family support, or isolated students in the school culture by focusing on what happens when the child enters school and moves through his or her educational career.

Adult support. According to Payne (2005), there are four ways to help students break the poverty cycle and change their socioeconomic station in life: a goal or vision of

something they want to be or have; a situation that is so painful that anything would be better; a specific talent or ability that provides that opportunity for them; or a role model or mentor who shows them they could live differently.

Schools may be best positioned to provide role models who can develop positive relationships between adults and students, giving the students a sense they are valued and also instilling in the student the notion how they perform in school makes a difference and matters to someone (Champeau, 2006; Green, Rhodes, Hirsch, Suarez-Orozco, & Camic, 2008; Hyslop, 2006). Schools can help students set goals, develop specific talents and skills, and provide role models and mentors who will show the student how to be successful in school and in their life beyond the K-12 school system.

Teachers as relationship builders. Adult intervention in the child's life such as mentors or advisors may be the answer for many kids at-risk, and help other students as well achieve and lead more successful lives. For at-risk and vulnerable kids, the classroom environment that provides support and guidance helps them learn and be academically successful. Educators who facilitate the building of positive relationships with students can help provide the motivation, initiative, and engagement, all which are essential for academic success (Stuhlman, et al., 2002).

The classroom teachers interact with the student everyday in their class, in the hallways, and in school sponsored activities. These educators may be best positioned to develop positive relationships with students. There are many factors that can help students achieve including the teacher being highly qualified and skilled in their content area, supportive classroom parents, and a manageable student to teacher ratio. However,

teachers must first have the disposition to create a positive supportive classroom, be caring and empathetic with their students, and cultivate positive relationships to help students succeed (Helm, 2007; Lumpkin, 2007).

The positive teacher-student relationship is also dependent on the level in which students feel respected, supported, and valued by their teachers (Doll, Zucker, & Brehm 2004). In an ethnographic study of eight middle school girls in New Hampshire, Seaton (2007) found a recurring theme in that the students wished for greater respect from their teachers, and explains this to be beyond courtesy and kindness, but for the teacher to recognize the students individuality, understand the challenges the students face, and recognizing the good inside of the of the student and the student's capacity to do good works as a result.

The social support needed by students from their teachers and other adults is defined even further. Tardy (1985) defines social support into four specific types including emotional, instrumental, appraisal, and informational. Emotional support is that of caring about another person, for example trust and love, as well as communications of care and empathy. Instrumental support is defined as those things such as time, skills, services, or other resources such as money to help someone. Appraisal support includes evaluation of another's performance or behaviors along with ideas and suggestions to improve. Informational support involves giving guidance, information, or advising another who is experiencing or trying to resolve problems or questions.

Outstanding teachers love children, respect children and parents in all situations, see potential in all children, motivate children to reach their full potential, and have the unique ability to seize and capitalize on teachable moments (Woolfolk, 2004; Helm, 2007). Krishnaveni and Anitha (2007) describe professional characteristics of teachers as being divided into three spheres, skill, concern for others, and concern for self. In the second of these, the teacher-student relationship is defined as the teacher being able to have strong communication skills, be available to students, understand students, and help students develop self discipline and a sense of responsibility. Teacher attitudes toward students can help or hinder student performance as either a source of satisfaction or frustration for students (Krishnaveni & Anitha, 2007).

For at-risk students such as LGBTQ kids and ethnic minorities, the role of caring teachers can be notably important (Green, Rhodes, Hirsch, Suarez-Orozco, & Camic, 2008; Kim, 2009). The Lely High School in Naples, Florida implemented an advisor program for 29 at-risk students with a grade point average of 1.5 or less on a 4 point scale. During the 21 week program, each student was assigned a teacher-advisor to meet with at least weekly. Advisors spent the time talking with their advisees about grades and school related matters. This experimental group was compared to a control group of students with the same GPA who were not assigned advisors. At the end of the 21 week period, the students with advisors had an average GPA of 1.05 vs. the non-advisor students' average of 0.66 on the four point scale (Testerman, 1996).

For students who are at-risk of being the victims of bullying and harassment, the role of not just a caring teacher, but a teacher willing to intervene is viewed as particularly helpful. In a study of 285 middle school students, the students viewed

teacher intervention the most helpful to curb and deter bullying in school (Crothers, Kolbert, & Barker, 2006). Teachers who create caring, safe, and positive environments position their students to achieve at higher levels and have a more successful school experience (Helm, 2007; Hyslop, 2006; Witmer, 2005).

Advising

Advising and guiding students is not a new concept in schools. Traditionally schools, especially junior and senior high schools, have a guidance counseling office full of college brochures, course information, scheduling information, and resources for personal development and other issues students may be facing. Often, in smaller schools this is done by one individual to serve the entire school population. This can restrict the ability of the school to provide one on one or small group support to each student in the school.

Advisory programs are different than traditional guidance type of programs. Advising is about providing advocacy and personalization for each student. There is diversity among school advisory programs. However, most share the common element of advocating for students, regular meeting times throughout the year for each advisory group, individual advising for each student, school wide and administrative support, and communication with families. (Burkhardt, 1999; Sando-Brown & Shetlar, 1994).

Advisory programs are unique to the schools in which they are found, some focusing on academic support, others on character development such as respect, perseverance, integrity, citizenship, trustworthiness, responsibility, compassion, and fairness (Deitte, 2002). Advisory programs in schools may also focus on social issues

students may face, such as teenage use of drugs and alcohol (Brown, 2001). Other advisory programs may foster communication between school and home, and even others have a strong community service element (Burkhardt, 1999; McCaffrey, 2008; Shulkind & Foote, 2009).

Teachers as advisors. Effective and successful teachers have unique attributes that help students to be successful in the classroom (Helm, 2007; Woolfolk, 2004). Teachers and other adults in the school serving in the role of advisors or advisory mentors have the opportunity to develop ongoing relationships with students and provide the opportunity for interactions beyond the traditional teacher-student relationships. Students have the opportunity to see their advisor as someone who cares for them and to see them as someone who as an adult leads a real life beyond the typical teacher role (Carlson, Wolsek, & Sinder, 2002).

Students respond positively to caring adults advocating for them. Student views regarding adult learning mentors were assessed over a two year period by researchers in a group of English primary and secondary schools. The project consisted of trained learning mentors working with students referred that were having difficulty with academic and social performance in school. Pupils interviewed expressed positive feelings regarding the impact to the student's academic achievement helping the individual focus the student on academics even more so than the student's regular classroom teacher (Rose & Deveston, 2008).

Advisory programs. Advisory programs such as those at Gerish Middle School in Southgate, MI, focus on social skills and values, in which the students engage in

conversation within their peer group facilitated by their adult advisors. Meeting 25 minutes each day, the topics covered are often determined by the non-academic needs of the particular group of students, for example learning to make new friends (Carlson, Wolsek, & Sinder, 2002).

Much of the literature speaks to advisory at the middle school level, however, educators are looking to the middle school advisory concept to implement support for students at the high school level (Manning & Saddlemire, 1998). At Waukesha North High School in Wisconsin, the advisory program was put in place after faculty and staff observed flat lines in student performance, a gradual decline in attendance rates from year to year, and increasing discipline problems, both in severity and frequency. After implementation teachers report higher student engagement, leadership, and peer support among their students (Champeau, 2006).

In Lexington, NC, the Lexington Senior High school created the Males Only Service Club to target and to engage at-risk minority male students in school. With a program focused on dropout prevention and a goal of graduation, character education, and service to the community, the result has been increased academic performance, attendance, and behavior. The results include a 100% graduation rate, along with 68% of program participants going on to post-secondary education (American Association of School Administrators, 2010).

Other schools such as the Jefferson County Colorado Open School implement advising programs as part of a comprehensive approach including intellectual, social, and personal development to create safe and supportive classrooms. The Jefferson County

advising program gives the students a chance to connect, and helps the students set and achieve goals in all three areas, and in doing so hopes to produce caring, empathetic, and adult life-long learners (Barker, Basile, & Olson, 2005).

Advisory in the Research District

Background. In the fall of 2008, an advisory program was implemented in the research district for all junior and senior high school students. The program was designed as a result of many students having low academic achievement, problems with behavior at school, and disengaged from school and school activities. These are all factors the school board, administration, and staff believed to be important to a successful school experience. While the program is designed for every student, the faculty and staff believed it could be especially effective to help improve the school culture and environment, especially for low socio-economic and at-risk students, who consistently fall behind in academics, behavior, and engagement at school.

Traditionally like in other districts, in the research district there was a guidance counseling office involved in setting up college visits, helping students with their course schedules, and sometimes providing one-on-one counseling and resources for the students in need. Like many traditional guidance programs, it was helpful to students who sought out information and guidance, but not so effective with those such as low-income and at-risk students. In the research district guidance was done by one individual trying to serve the entire school population. The school board, administration, parents, and staff believed this was not an effective way to reach each student.

Research district faculty and staff believed if a strong relationship could be developed with at least one adult in the building during the school year, the student's chances for success will improve. The program is specifically developed to improve student achievement, improve student behavior, and to engage more kids with the school, classroom, and within the overall culture.

Program Structure. The advisory program is in the third year of implementation. While this research project will be based on the initial implementation 2008-2009 school year, there are some important notes to make regarding the program as it has evolved over the past three years.

Students are selected into advisory groups by the grade level advisors in an intentional draft type of selection process. The advisors meet prior to the school year and divide up the number of students into smaller groups of 8-15 depending on the number of students and number of available advisors. The selection process involves the advisors identifying students who they believe they have the highest likelihood of developing a strong positive relationship with. The advisors take turns, much like the practice of picking teams on the playground, selecting the students until all the students have been selected. Occasionally students will be traded to improve the cohesiveness of the advisory group or other similar reasons.

Initially during 2008-2009 the advisors met with their advisees for 25 minutes each day of the school year. However, this has changed some in that the district implemented a weekly late start to focus on staff development during 2009-10 and 2010-11 which shortened one school day each week. The advisory program meets currently

for 25 minutes for four days of the week, and in shortened weeks may only meet part of the week. Even with this, the advisory remains a routine part of the school year in the research district.

Advisor Roles. In the research district, teachers, teacher associates, and administrators serve and have served as advisors. The overall function of the advisor is to develop a relationship with each student in a non-academic or content specific role that will help support the student as they complete the school year. Specifically, all advisors have routine functions to perform including monitoring progress and providing counsel and direction to the student regarding grades, attendance, discipline issues, and other problems the student may be experiencing both inside and outside of the school. Advisors also help building leadership through performing such housekeeping duties as going over policies during the first few weeks of school, internet safety, and other types of procedures associated with the general functioning of the school.

Curriculum. Each grade level has a curriculum designed by the Advisory Leadership Team which consists of teachers and the building principal. The curriculum, while designed at the developmentally appropriate level, focuses on three main areas: Supporting the student in their role as a learner, providing guidance and help to the student as they prepare for their future, and to help the student develop personally and socially. As students move into the later years of high school, there is a heavy emphasis on post-secondary planning, including preparation for college, entering the workforce, and skills for living including financial literacy and preparing to be on one's own.

During the eighth grade year, to help the students in their roles as learners, instruction focuses on study skills such as using symbols, note taking, preparing for tests, taking tests, and writing essays. These skills are intermixed with the other components of the advisory throughout the year, not only giving the students the initial instruction, but opportunities to practice and use the skills in non-academic activities.

The eighth grade curriculum focuses on helping students prepare for their future through the online Iowa Choices program to help the student's develop a four-year plan for high school, and to help the student's explore careers they may be interested in. The Iowa Choices program features an online interest and skills set survey, student answer questions about their interests, likes, and dislikes to focus on career clusters the student may be prone to success in. As students work through the Iowa Choices program, they keep an online portfolio of career cluster interests, their personal four year plan for high school courses, and goals for the future. After the student has registered during eighth grade, their personal online portfolio continues to serve them through their high school years as they prepare for life beyond high school graduation.

To help students develop personally and socially, the research district teaches character education through the Character Counts model, teaching students the six pillars of character: trustworthiness, respect, citizenship, caring, responsibility, and fairness. These attributes are incorporated into the advisory program at the junior and senior high school level as well. To support this, the advisory program participates in the Learning Through Movies program. Students will participate in small group and large group discussions around the pillars of character, along with social, ethical, emotional, and ethics using contemporary movies. Advisors use movies such as *Remember the Titans*,

Boystown, and Billy Elliot to focus on the pillars of character and other personal development lessons such as being your own person, teamwork, role models, trustworthiness, respect, responsibility, family relationships, sexual orientation, grieving, as well as other social-emotional and moral-ethical learning.

Teamwork activities are also components built within the program. Advisory groups will compete with each other to improve student achievement, student behavior, and engagement in the school. For example, each advisory will compete with other grade level advisory groups in decorating the school hallways with one of the six pillars of character education. Other inter-advisory competitions include attendance for the quarter, school behavior, and improvement on the Iowa Tests of Basic Skills. Advisory groups who achieve well and meet their goals are rewarded with incentives such as field trips, out of school celebrations, and other rewards such as a pizza party for lunch.

Measuring Success. It should be noted the program continues to grow and develop in the research district, and there are improvements to continue making, such as structured time for grade level advisors to meet and collaborate, and a more focused continuous staff development to further define and refine the roles of the advisors.

Perhaps the best measure of success is this recent story shared by one of the research district advisors: Mrs. J. served as an advisor during the 2009-10 school year to a group of 10 seniors. In her advisory group was David. David had a history of discipline problems in his younger years, was not known as an outstanding student, and who was looking forward to graduating and entering the work force. David settled into a positive groove during his senior year, his academics while nothing spectacular were

adequate to graduate, and the discipline referrals of his early high school years had subsided.

The group worked through the year as an advisory team, through the curriculum, and planning for life after high school. David and his classmates graduated from the research district in May of 2010. David left school, and entered the work force as far as the school knew. Mrs. J. did not know exactly where he was going or what he was going to do, as David wasn't sure himself when they parted at graduation.

The summer passes and a fresh school year approaches, David and the Class of 2010 are on their way in post-secondary life. A new group of pre-school and kindergarten parents anxiously prepare to send the Class of 2023 to school for the first time. As the hustle and bustle of the 2010-11 school year is gearing up, on a hot August afternoon Mrs. J. is busy working in her classroom, cleaning, organizing, preparing for the first days of school. In walks David and he says, "Hi Mrs. J., I am thinking I should go to college. I wasn't sure who to talk to or what I should do, can you still help me?"

Conclusion

Through developing and implementing strategies to build these positive relationships with students, schools can enable teachers and mentors to help students with the motivation, initiative, and engagement that can help lead the student to success (Stuhlman, Hamre, & Pianta, 2002). By establishing formalized mentoring and advising programs, schools can connect students with adults who see the potential and build the relationships crucial in helping every child reach his or her dreams and aspirations.

With the implementation of the advisor-advisee program for junior and senior high school students, it is the goal of the research district to establish the process and culture to build positive relationships for greater student achievement, more positive student behavior, and a higher level of student engagement in school activities.

By completing this project, the research district will have more information on the impact of the advisor-advisee program during the implementation year on student achievement, student behavior, and student engagement in school. This in turn will lead the school to be in a better position to accomplish the mission of developing the potential of not only Robert and David, but all students served by the district.

Chapter 3

Methodology

The purpose of this exploratory two-group pretest-posttest comparative survey study is to determine the effect of a team adviser-advisee academic, behavior, and character mentoring program on the achievement, school engagement, and behavior outcomes of eighth grade students determined to be above and below eligibility guidelines for free and reduced price lunch participation.

Design

The pretest-posttest, two-group comparative survey study design is displayed in the following notation:

Group 1 $X_1 O_1 X_2 O_2$

Group 2 $X_1 O_1 X_3 O_2$

Group 1 = eighth grade students ($n = 15$) who completed the seventh grade and eighth grade in the research school district .

Group 2 = eighth grade students ($n = 21$) who completed the seventh grade and eighth grade in the research school district.

X_1 = Team Adviser-Advisee Program where students are “drafted” by teacher-mentors and receive academic, behavior, and character mentoring

X_2 = students determined to be below free and reduced price lunch eligibility guidelines

X_3 = students determined to be above free and reduced price lunch eligibility guidelines

O_1 = Pretest 1. Eighth grade achievement as measured by the research school districts beginning of school year norm-referenced Iowa Test of Basic Skills for Reading: (a) reading total National Standard Scores (NSS); Mathematics: (a) mathematics total National Standard Scores (NSS); and Science: science total National Standard Scores (NSS). Pretest 2. Classroom performance as measured by the research school districts end of the seventh grade school year second semester core curriculum grades (grade point average) for: (a) language arts; (b) mathematics; (c) science; (d) social studies grade scores; and (e) cumulative grade point average. Pretest 3. School Engagement for end of seventh grade school year cumulative participation frequencies for: (a) sports and (b) activities. Pretest 4. Behavior for end of seventh grade school year cumulative frequencies for: (a) absences, (b) tardiness, and (c) discipline referrals.

O_2 = Posttest 1. Eighth grade achievement as measured by the research school districts ending of school year norm-referenced Iowa Test of Basic Skills for Reading: (a) reading total National Standard Scores (NSS); Mathematics: (a) mathematics total National Standard Scores (NSS); and Science: science total National Standard Scores (NSS).

Posttest 2. Classroom performance as measured by the research school districts end of the eighth grade school year second semester core curriculum grades (grade point average) for: (a) language arts; (b) mathematics; (c) science; (d) social studies grade scores; and (e) cumulative grade point average. Posttest 3. School Engagement end of eighth grade school year cumulative participation frequencies for: (a) sports and (b) activities. Posttest 4. Behavior for end of eighth grade school year cumulative frequencies for: (a) absences, (b) tardiness, and (c) discipline referrals.

Research Questions

1. Are eighth grade students (low-income and non low-income) involved in the advisor-advisee program successful in school as indicated by academic performance?
2. Is there a difference in standardized pretest-posttest subtest scores in
 - a. reading total,
 - b. math total, and
 - c. science total

between eighth grade low-income students and eighth grade non low-income students after completion of the advisor-advisee program during eighth grade?

3. Is there a difference in GPA for:
 - a. math,
 - b. language arts,
 - c. science,
 - d. social studies, and
 - e. core cumulative GPA

between eighth grade low-income students and eighth grade non low-income students after completion of the advisor-advisee program during eighth grade?

4. Is there a difference in school engagement as measured by extra- and co-curricular activity participation between eighth grade low-income students and eighth grade non low-income students after completion of the advisor-advisee program during eighth grade?

5. Is there a difference in school behavior as measured by attendance, tardiness, and disciplinary referrals between eighth grade low-income students and eighth grade non low-income students after completion of the advisor-advisee program during eighth grade?

Subjects

Participants. The number of Participants is 36 attending the research school district during the 2007-08, 2008-09, and 2009-10 school year. During these school years the students were in seventh, eighth, and ninth grades. The naturally formed groups of students are those students qualifying for free and or reduced meals ($n=15$) and those not qualifying for free or reduced meals ($n=21$) as of October 1, 2008, which represents the official count date for all of Iowa's school districts. All the students in the study completed core academic courses of Math, English, Science, and Social Studies. The students all completed the Iowa Tests of Basic Skills During the Fall of their eighth grade (2008-09) school year, and the fall of their ninth grade (2009-10) school year. The students all participated in the research school district's advisor –advisee program during the 2008-2009 school year while in the eighth grade.

Gender and Race. Females represent 50% ($n = 18$), males represent 50% ($n=18$) of the participating students. The group is 97.22% ($n = 35$) Caucasian and 1.63% African-American ($n = 1$).

Data Collection

The research will be conducted in the research school district setting through normal educational practices. The study procedures will not in any way interfere with the

normal educational practices of the research school. Data will be collected by the study researcher using Iowa Test of Basic Skills Data, and the school district record keeping system to collect academic, attendance, and disciplinary data. School Engagement data will be collected through a student survey.

School engagement data will be collected from students, coaches, and activity sponsors. The de-identified data will be stored on spreadsheets and kept in the researcher's files. The data will be collected and analyzed confidentially in the researcher's office. The data is stored in the researcher's office on secure databases and will be used for statistical analysis in the office of the primary researcher and dissertation chair. As the superintendent of the district, the researcher has ethical access to all the student data.

Instruments

The instrument used to collect norm referenced performance data is the Iowa Test of Basic Skills during the fall of the eighth grade year and Iowa Tests of Educational Development during the ninth grade year.

Reliability. Internal consistency and equivalent forms are used. Based on the Kuder-Richardson Formula 20 (K-R20) of 84 reliability coefficients reported for the various subtests, six are in the .70s, the others are in the .80s and .90s. The composite score reliabilities are .98 (Forsyth, Ansley, Feldt, & Alnot, 2003; Hoover, et al., 2003).

Validity. Research studies have been conducted on five separate occasions since 1958 to determine validity of the tests. Common practices to validate test content have been used (Forsyth, Ansley, Feldt, & Alnot, 2003; Hoover, et al., 2003).

Survey for student engagement. A simple student survey was developed to survey the students as to their participation in during the 2007-08 school year, and participation in extra-curricular and co-curricular activities during the 2008-09 school year. See appendix A.

Data Analysis

Research question 1 will be tested using descriptive statistical measures. Mean and standard deviations will be reported for the non low-socioeconomic and the low socio-economic groups for academic performance, school engagement, and school behavior. Research questions 2 and 3 will be tested using two way analysis of variance (ANOVA). Independent variables include Iowa Tests of Basic Skills/Educational Development, grade point average, school engagement, and school behavior. Dependent variables are non low-socioeconomic and low-socioeconomic. ANOVA is a parametric test of significance used to determine whether a significant difference exists between two or more means at a selected probability level. This determines if the differences among the means represent true significant differences or chance differences due to sampling error (Gay, Mills, & Airasian, 2006). Research questions 2 and 3 will be tested using two way analysis of variance (ANOVA). Research questions 4 and 5 will be tested using the chi-square test. Independent variables include Iowa Tests of Basic Skills/Educational

Development, grade point average, school engagement, and school behavior. Dependent variables are non low-income and low-income.

Research questions 4 and 5 will be measured using the chi-square test. The chi-square test is a nonparametric test of statistical significance that is used when the research data are in the form of frequency counts for two or more categories (Gall, Borg, & Gall, 1996).

Effect size will be measured using Cohen's d . Cohen's (1977, 1988) original guidelines that $d = .20$ is a "small," $d = .50$ is a "medium," and $d = .80$ is a "large" effect size are still widely cited and used for interpreting magnitudes of effect (Dunst, Hamby, & Trivette, 2004). To show effect size when the alpha level is significant, Cohen's d was calculated between subjects and in pair-wise comparisons within subjects.

Chapter 4

Results

Purpose of the Study

The purpose of this exploratory two-group pretest-posttest comparative survey study is to determine the effect of a team adviser-advisee academic, behavior, and character mentoring program on the achievement, school engagement, and behavior outcomes of eighth grade students determined to be above and below eligibility guidelines for free and reduced price lunch participation during the 2008-2009 school year.

For this project, components of student achievement, student engagement, and student discipline were studied among eighth grade students. Student achievement was measured using the Iowa Test of Basic Skills and classroom academic performance. The Iowa Test of Basic Skills include Reading: (a) reading total National Standard Scores (NSS); Mathematics: (a) mathematics total National Standard Scores (NSS); and Science: National Standard Scores (NSS). Classroom performance was measured by the research school districts core curriculum grades (grade point average) for: (a) language arts; (b) mathematics; (c) science; (d) social studies scores; and (e) cumulative grade point average. School Engagement was measured by cumulative participation frequencies for: (a) extra and co-curricular activities. Behavior was measured by cumulative frequencies for: (a) absences, (b) tardiness, and (c) discipline referrals.

All data related to each of the dependent variables were retrospective, archival, and routinely collected school information. The number of subjects for which data was collected was 36.

Research Questions

The following research questions were used to analyze the achievement outcomes of eighth grade students determined to be below and above free and reduced price lunch eligibility guidelines following participation in a team adviser-advisee academic, behavior, and character mentoring program.

Research Question 1

Are eighth grade students (low-income and non low-income) involved in the advisor-advisee program successful in school as indicated by academic performance, school engagement, and school behavior?

The National Standard Score is used to describe the location of a student's performance on an achievement curriculum for the Iowa Test of Basic Skills and Iowa Tests of Educational Development. Eighth grade pretest typical performance for all subject areas is a score of 250, while the posttest score is 260 (Forsyth, Ansley, Feldt, & Alnot, 2003).

In reading, participants improved from the pretest score ($M = 244.61$, $SD = 38.17$) to the posttest score ($M = 260.39$, $SD = 39.83$). The low-income student pretest score ($M = 239.53$, $SD = 39.74$) below the national average, improved to the posttest ($M = 253.13$, $SD = 37.65$), still below but closer to the national average score of the pretest. The non

low-income student pretest score ($M = 248.23.53$, $SD = 37.56$) below the national average, improved to the posttest ($M = 265.57$, $SD = 41.43$), above the national average score.

In Math, all participants improved from the pretest score ($M = 252.08$, $SD = 30.62$) to the posttest score ($M = 268.00$, $SD = 39.83$), both pretest and posttest scores above the national average. The low-income student pretest score ($M = 239.53$, $SD = 39.74$) below the national average, improved to the posttest ($M = 252.13$, $SD = 37.65$), still below but closer to the national average score of the pretest. The non low-income student pretest score ($M = 261.05$, $SD = 30.23$) above the national average score, improved to the posttest ($M = 279.33$, $SD = 31.94$), also above the national average score.

In Science, all participants improved from the pretest score ($M = 263.33$, $SD = 35.49$) to the posttest score ($M = 276.06$, $SD = 39.83$). Both pretest and posttest scores were above the national average. The low-income student pretest score ($M = 254.20$, $SD = 26.32$) above the national average, improved to the posttest ($M = 266.80$, $SD = 37.44$), still below but closer to the national average score of the pretest. The non low-income student pretest s ($M = 269.86$, $SD = 40.14$) above the national average score, improved to the posttest ($M = 282.67$, $SD = 39.67$), also above the national average score.

Research Question 2

Is there a difference in standardized pretest-posttest subtest scores in

- a. Reading total,
- b. Math total, and
- c. Science total

between eighth grade low-income students and eighth grade non low-income students after completion of the advisor-advisee program during eighth grade?

On the Iowa Test of Basic Skills Reading subtest there was a statistically significant main effect within subjects for time (pretest/posttest), $F(1, 34) = 7.86, p = .008, d = 0.41$. There was no significant main effect between subjects for SES, $F(1, 34) = .770, p = .386$. There was no significant interaction between time (pretest/posttest) and SES, $F(1, 34) = 1.66, p = .737$.

The Reading National Standard Scores (NSS) statistically significant main effect for time indicated that eighth graders who participated in the advisor-advisee program significantly improved on the Iowa Test of Basic Skills Reading test from the pretest ($M = 244.61, SD = 38.17$) to the posttest ($M = 260.39, SD = 39.83$), regardless of their SES status. The means and standard deviations for the Iowa Test of Basic Skills Reading NSS totals are displayed in Table 1. The two way ANOVA for Iowa Test of Basic Skills Reading NSS is displayed in Table 2.

On the Iowa Test of Basic Skills Math subtest there was a statistically significant main effect between the SES groups $F(1, 34) = 6.61, p = .015, d = .839$. There was a statistically significant main effect within subjects for time (pretest/posttest), $F(1, 34) = 12.04, p = .001, d = .485$. There was no significant interaction between time (pretest/posttest) and SES, $F(1, 34) = .408, p = .527$.

The Math National Standard Scores (NSS) statistically significant main effect for SES indicated non low-income group ($M = 279.33, SD = 31.94$) had significantly higher scores than the low-income group ($M = 252.13, SD = 33.81$). The Math National

Standard Scores (NSS) statistically significant main effect for time indicated that eighth graders who participated in the advisor-advisee program significantly improved on the Iowa Test of Basic Skills Math subtest from the pretest ($M = 252.08$, $SD = 30.62$) to the posttest ($M = 268.00$, $SD = 35.01$), regardless of their SES status. The means and standard deviations for the Iowa Test of Basic Skills Math NSS totals are displayed in Table 1. The two way ANOVA for Iowa Test of Basic Skills Math NSS is displayed in Table 3.

On the Iowa Test of Basic Skills Science subtest there was a statistically significant main effect within subjects for time (pretest/posttest), $F(1, 34) = 6.57$, $p = .015$, $d = .339$. There was no significant main effect between subjects for SES, $F(1, 34) = 1.843$, $p = .184$. There was no significant interaction between time (pretest/posttest) and SES, $F(1, 34) = 0.00$, $p = .983$.

The Science National Standard Scores (NSS) statistically significant main effect for time indicated that eighth graders who participated in the advisor-advisee program significantly improved on the Iowa Test of Basic Skills Reading test from the pretest ($M = 263.33$, $SD = 35.49$) to the posttest ($M = 276.06$, $SD = 39.67$), regardless of their SES status. The means and standard deviations for the Iowa Test of Basic Skills Science NSS totals are displayed in Table 1. The two way ANOVA for Iowa Test of Basic Skills Science NSS is displayed in Table 4.

Research Question 3

Is there a difference in GPA for:

- a. math,

- b. language arts,
- c. science,
- d. social Studies, and
- e. core cumulative GPA

between eighth grade low-income students and eighth grade non low-income students after completion of the advisor-advisee program during eighth grade?

For math GPA there was a statistically significant main effect between the SES groups $F(1, 34) = 17.56, p < .0005, d = 1.10$. There was a significant main effect within subjects for time (pretest/posttest), $F(1, 34) = 27.02, p = .005, d = 0.77$. There was no significant interaction between time (pretest/posttest) and SES, $F(1, 34) = 1.04, p = .315$.

The math GPA statistically significant main effect for SES indicated the non low-income group ($M = 2.43, SD = 1.21$) had significantly higher scores than the low-income group ($M = 1.00, SD = 1.07$). The Math National Standard Scores (NSS) statistically significant main effect for time indicated that eighth graders who participated in the advisor-advisee program significantly improved math GPA from the end of seventh grade ($M = 1.83, SD = 1.30$) to the posttest ($M = 2.75, SD = 1.08$), regardless of their SES status. The means and standard deviations for the math GPA totals are displayed in Table 5. The two way ANOVA for math GPA are displayed in Table 6.

For language arts GPA there was a statistically significant main effect between the SES groups $F(1, 34) = 6.41, p = .016$. There was a significant main effect within

subjects for time (pretest/posttest), $F(1, 34) = 5.23, p = .029$. There was significant interaction between time (pretest/posttest) and SES, $F(1, 34) = 5.23, p = .029$.

The language arts GPA statistically significant main effect for SES indicated the non low-income group ($M = 2.86, SD = .910$) had significantly higher GPA than the low-income group ($M = 1.67, SD = 1.05$).

In pair wise comparisons, there was a significant effect on the pretest for SES, $F(1, 34) = 4.79, p = .036, d = 1.21$; a significant between on the posttest for SES, $F(1, 34) = 6.04, p = .019, d = 0.33$; and for the low SES group over time (pretest to posttest) $F(1, 34) = 8.97, p = .005, d = 0.66$. There was not a significant effect for the non low SES for time $F(1, 34) = 0.00, p = 1.00$. The means and standard deviations for the language arts GPA totals are displayed in Table 5. The two way ANOVA for language arts GPA are displayed in Table 7.

For science GPA there was a statistically significant main effect between the SES groups $F(1, 34) = 11.16, p = .002$. There was a significant main effect within subjects for time (pretest/posttest), $F(1, 34) = 4.72, p = .037$. There was significant interaction between time (pretest/posttest) and SES, $F(1, 34) = 4.72, p = .037$.

The science GPA statistically significant main effect for SES indicated the non low-income group ($M = 3.19, SD = .873$) had significantly higher GPA than the low-income group ($M = 2.07, SD = .961$).

In pair wise comparisons, there was a significant effect on the pretest for SES $F(1, 34) = 13.34, p = .001, d = 1.22$; there was a significant effect on the posttest for SES, $F(1, 34) = 6.13, p = .018, d = 0.83$; and between low SES and time $F(1, 34) = 8.09, p =$

.007, $d = 0.51$. There was not a significant effect for the non low SES for time $F(1, 34) = 0.00$, $p = 1.00$. The means and standard deviations for the science GPA totals are displayed in Table 5. The two way ANOVA for science GPA are displayed in Table 8.

For social studies GPA there was a statistically significant main effect between the SES groups $F(1, 34) = 9.28$, $p = .004$, $d = 0.84$. There was a significant main effect within subjects for time (pretest/posttest), $F(1, 34) = 6.47$, $p = .016$, $d = 0.34$. There was no significant interaction between time (pretest/posttest) and SES, $F(1, 34) = 0.374$, $p = .545$.

The social studies GPA statistically significant main effect for SES indicated the non low-income group ($M = 3.00$, $SD = 0.94$) had significantly higher scores than the low-income group ($M = 2.00$, $SD = 1.07$). The social studies GPA statistically significant main effect for time indicated that eighth graders who participated in the advisor-advisee program significantly improved GPA from the end of seventh grade ($M = 2.58$, $SD = 1.10$) to the posttest ($M = 2.94$, $SD = 1.04$), regardless of their SES status. The means and standard deviations for the Social Studies GPA totals are displayed in Table 5. The two way ANOVA for social studies GPA are displayed in Table 9.

For cumulative GPA there was a statistically significant main effect between the SES groups $F(1, 34) = 12.90$, $p = .001$. There was a significant main effect within subjects for time (pretest/posttest), $F(1, 34) = 22.07$, $p < .0005$. There was significant interaction between time (pretest/posttest) and SES, $F(1, 34) = 4.41$, $p = .043$.

The cumulative GPA statistically significant main effect for SES indicated the non low-income group ($M = 2.86$, $SD = 0.86$) had significantly higher GPA than the low-income group ($M = 1.68$, $SD = 0.87$).

In pair wise comparisons, there was a significant effect on the pretest for SES, $F(1, 34) = 15.59$, $p = <.0005$, $d = 5.22$; there was a significant effect on the posttest for SES, $F(1, 34) = 6.97$, $p = .012$, $d = 6.66$; and between low SES and time $F(1, 34) = 19.81$, $p = <.0005$, $d = .802$. There was not a significant effect for the non low SES for time $F(1, 34) = 0.00$, $p = 1.00$. The means and standard deviations for the cumulative GPA totals are displayed in Table 5. The two way ANOVA for cumulative GPA are displayed in Table 8.

Research Question 4

Is there a difference in school engagement as measured by extra- and co-curricular activity participation between eighth grade low-income students and eighth grade non low-income students after completion of the advisor-advisee program during eighth grade?

Chi-square tests for frequency of activity participation of low-income compared to non low-income students before implementation and after implementation of the advisor-advisee program indicate there is not a significant difference for observed versus expected cell frequencies ($df = 5$), $\chi^2 = 1.25$, $p = .74$. The means and standard deviations for the participation in activity totals are displayed in Table 11. The Chi-square for attendance is displayed in Table 12.

Research Question 5

Is there a difference in school behavior as measured by attendance, tardiness, and disciplinary referrals between eighth grade low-income students and eighth grade non low-income students after completion of the advisor-advisee program during eighth grade?

Chi-square tests for frequency of attendance of low-income compared to non low-income students before implementation and after implementation of the advisor-advisee program indicate there is not a significant difference for observed versus expected cell frequencies ($df = 5$), $\chi^2 = 1.25$, $p = .74$. The means and standard deviations for the attendance totals are displayed in Table 13. The Chi-square for attendance is displayed in Table 14.

Chi-square tests for frequencies of tardiness of low-income compared to non low-income students before implementation and after implementation of the advisor-advisee program indicate there is a significant difference for observed versus expected cell frequencies ($df = 5$), $\chi^2 = 5.33$, $p = .38$. The means and standard deviations for the tardiness totals are displayed in Table 13. The Chi-square for attendance is displayed in Table 15.

Chi-square tests for frequencies of disciplinary referrals of low-income compared to non low-income students before implementation and after implementation of the advisor-advisee program indicate there is not a significant difference for observed versus expected cell frequencies ($df = 3$), $\chi^2 = 3.29$, $p = .66$. The means and standard deviations for the tardiness totals are displayed in Table 13. The Chi-square for attendance is displayed in Table 16.

Summary

In summary, the results show there was significant improvement on the ITBS National Standard Scores in Reading, Math, and science for all students. Low-income students were significantly lower in Math than their more affluent counterparts; however, there was no significant difference between the SES groups in Reading and Math on the ITBS. In GPA, all students showed significant improvement from their seventh grade year to the end of the eighth grade year in math, science, social studies, and in cumulative GPA. In Language arts and science low-income students showed significant improvement from the end of seventh grade to the end of eighth grade.

There was no significant difference for engagement as measured by participation in extra-curricular and co-curricular activities from the seventh grade year compared to the eighth grade year in which the advisory program was implemented. There were no significant differences for behavior as measured by student attendance, tardiness, and behavioral referrals from the seventh grade year to the eighth grade year in which the advisory program was implemented.

Table 1

Descriptive Statistics for ITBS National Standard Scores

	Pre-test		Post-Test	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
ITBS Reading National Standard Scores				
Low-income (<i>n</i> = 15)	239.53	39.74	253.13	37.65
Non Low-income (<i>n</i> = 21)	248.23	37.56	265.57	41.43
Total Reading	244.61	38.17	260.39	39.83
ITBS Math National Standard Scores				
Low-income (<i>n</i> = 15)	239.53	27.41	252.13	33.81
Non Low-income (<i>n</i> = 21)	261.05	30.23	279.33	31.94
Total Math	252.08	30.62	268.00	35.01
ITBS Science National Standard Scores				
Low-income (<i>n</i> = 15)	254.20	26.32	266.80	37.44
Non Low-income (<i>n</i> = 21)	269.86	40.14	282.67	40.78
Total Science NSS	263.33	35.49	276.06	39.67

Table 2

ANOVA for Time and SES for ITBS Reading National Standard Score

Source of Variation	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>	<i>d</i>
Between Subjects					
SES	1	1955.71	0.77	.386	ns
Error	34	2540.95			
Within Subjects					
Time	1	4186.31	7.86	.008	0.41
Time*SES	1	60.98	1.66	.737	ns
Error	34	532.65			

ns = not significant

Table 3

ANOVA for Time and SES for ITBS Math National Standard Score

Source of Variation	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>	<i>d</i>
Between Subjects					
SES	1	10382.23	6.61	.015	.84
Error	34	1570.80			
Within Subjects					
Time	1	4173.42	12.04	.001	.49
Time*SES	1	141.43	.408	.527	ns
Error	34	3 46.64			

ns = not significant

Table 4

ANOVA for Time and SES for ITBS Science National Standard Score

Source of Variation	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>	<i>d</i>
Between Subjects					
SES	1	4337.66	1.843	.184	ns
Error	34	2358.58			
Within Subjects					
Time	1	2824.69	6.57	.015	0.34
Time*SES	1	.192	.000	.983	ns
Error	34	429.78			

ns = not significant

Table 5

Descriptive Statistics for Grade Point Averages

	End of Seventh		End of Eighth	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Math Grade Point Average				
Low-income ($n = 15$)	1.00	1.07	2.13	1.25
Non Low-income ($n = 21$)	2.43	1.21	3.19	0.68
Total Math	1.83	1.30	2.75	1.08
Language Arts Grade Point Average				
Low-income ($n = 15$)	1.67	1.05	2.47	1.36
Non Low-income ($n = 21$)	2.86	0.91	2.86	0.96
Total Language Arts	2.36	1.12	2.69	1.14
Science Grade Point Average				
Low-income ($n = 15$)	2.07	0.96	2.53	0.83
Non Low-income ($n = 21$)	3.19	0.87	3.19	0.75
Total Science	2.72	1.06	2.92	0.84

Social Studies Grade Point Average

Low-income ($n = 15$)	2.00	1.07	2.47	0.92
Non Low-income ($n = 21$)	3.00	0.95	3.29	1.01
Total Social Studies	2.58	1.10	2.94	1.04

Cumulative Grade Point Average

Low-income ($n = 15$)	1.68	0.87	2.40	0.92
Non Low-income ($n = 21$)	2.86	0.86	3.13	0.74
Total Cumulative	2.37	1.04	2.83	0.89

Table 6

ANOVA for Time and SES for Math Grade Point Average

Source of Variation	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>	<i>d</i>
Between Subjects					
SES	1	27.03	17.56	< .0005	1.10
Error	34	1.54			
Within Subjects					
Time	1	15.71	27.02	.005	0.77
Time*SES	1	0.60	1.04	.315	ns
Error	34	0.58			

ns = not significant

Table 7

ANOVA for Time and SES for Language Arts Grade Point Average

Source of Variation	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>	<i>d</i>
Between Subjects					
SES	1	10.93	6.41	.016	
Error	34	1.71			
Within Subjects					
Time	1	2.80	5.23	.029	
Time*SES	1	2.80	5.23	.029	
Error	34	.54			
Pairwise Comparisons					
SES*Pretest			4.79	.036	1.21
SES*Posttest			6.04	.019	.34
Time*Low SES Time			8.97	.005	.66
Time*Non-Low SES			0.00	1.000	ns

Table 8

ANOVA for Time and SES for Science Grade Point Average

Source of Variation	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>	<i>d</i>
Between Subjects					
SES	1	13.87	11.16	.002	
Error	34	1.24			
Within Subjects					
Time	1	0.95	4.72	.037	
Time*SES	1	0.95	4.72	.037	
Error	34	0.20			
Pairwise Comparisons					
SES*Pretest			13.34	.001	1.22
SES*Posttest			6.13	.018	0.83
Time*Low SES Time			8.09	.007	0.51
Time*Non-Low SES			0.00	1.00	ns

ns = not significant

Table 9

ANOVA for Time and SES for Social Studies Grade Point Average

Source of Variation	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>	<i>d</i>
Between Subjects					
SES	1	14.48	9.28	.004	0.84
Error	34	1.56			
Within Subjects					
Time	1	2.48	6.47	.016	0.34
Time*SES	1	0.14	0.37	.545	ns
Error	34	0.38			

ns = not significant

Table 10

ANOVA for Time and SES for Cumulative Grade Point Average

Source of Variation	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>	<i>d</i>
Between Subjects					
SES	1	15.87	12.90	.001	
Error	34	1.23			
Within Subjects					
Time	1	4.29	22.07	<.0005	
Time*SES	1	0.86	4.41	.043	
Error	34	0.19			
Pairwise Comparisons					
SES*Pretest			15.99	<.0005	5.22
SES*Posttest			6.97	.012	6.66
Time*Low SES Time			19.81	<.0005	0.80
Time*Non-Low SES			0.00	1.00	ns

ns = not significant

Table 11

*Descriptive Statistics for School Engagement**(Participation in Extra-Curricular and Co-Curricular Activities)*

	Pre-test		Post-Test	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Participation				
Low-income (<i>n</i> = 15)	1.33	1.68	1.13	1.41
Non Low-income (<i>n</i> = 21)	3.52	1.91	3.71	1.68
Total Participation	2.61	2.01	2.64	2.02

Table 12

Chi-Square for School Engagement as Measured by Activity Participation of Low-income Compared to Non Low-income Students Before and During Advising Program

Activity Participation	Low-income		Non Low-Income		Total	$\chi^2(a)$
	One or less N(%)	Two or more N(%)	One or less N(%)	Two or more N(%)		
Before Advising	11(31)	4(11)	4(11)	17(47)	36(100%)	
During Advising	11(31)	4(11)	2(6)	19(52)	36(100%)	

0.78

(a)Note: χ^2 not significant for observes versus expected cell frequencies ($df=3$) $\chi^2=0.78$,
 $p=.84$

Table 13

Descriptive Statistics for School Behavior (Tardiness, Attendance, and Disciplinary Referrals)

	Pre-test		Post-Test	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Tardiness				
Low-income (<i>n</i> = 15)	2.13	0.83	2.53	0.74
Non Low-income (<i>n</i> = 21)	2.38	0.81	2.76	0.54
Total Tardiness	2.28	0.81	2.67	0.63
Attendance				
Low-income (<i>n</i> = 15)	1.87	0.74	2.00	0.93
Non Low-income (<i>n</i> = 21)	2.29	1.10	2.00	0.78
Total Attendance	2.11	0.98	2.00	0.83
Discipline Referrals				
Low-income (<i>n</i> = 15)	.80	1.08	.80	1.37
Non Low-income (<i>n</i> = 21)	.43	1.16	.90	2.00
Total Discipline Referrals	.58	1.13	.86	1.74

Table 14

Chi-Square for Tardiness of Low-income Compared to Non Low-income Students Before and During Advising Program

Levels(a)	Low-income			Non Low-Income			Total
	1	2	3	1	2	3	
	N(%)	N(%)	N(%)	N(%)	N(%)	N(%)	
χ^2 (b)							
Before Advising	4(11)	5(14)	6(17)	4(11)	5(14)	12(33)	36(100%)
During Advising	2(6)	3(8)	10(29)	1(3)	3(8)	17(47)	36(100%)

5.33

(a) Levels of Tardiness: Level 1 = 9 or more incidents, Level 2 = 4 to 8 incidents, and Level 3 = 0 to 3 incidents.

(b) Note: χ^2 not significant for observed versus expected cell frequencies ($df = 5$)

$\chi^2 = 5.33, p = .38$

Table 15

*Chi-Square for Attendance of Low-income Compared to Non Low-income Students
Before and During Advising Program*

Level(a)	Low-income			Non Low-Income			Total
	1	2	3	1	2	3	
	N(%)	N(%)	N(%)	N(%)	N(%)	N(%)	
χ^2 (b)							
Before Advising	5(14)	7(19)	3(8)	4(11)	11(31)	6(17)	36(100%)
During Advising	6(17)	3(8)	6(17)	6(17)	9(25)	6(17)	36(100%)

1.25

(a) Levels of Attendance: Level 1 = 12 or more absences, Level 2 = 6 to 11 absences, and Level 3 = 0 to 5 absences from school.

(b) Note: χ^2 not significant for observed versus expected cell frequencies ($df = 5$) $\chi^2 = 1.25, p = .74$

Table 16

Chi-Square for Disciplinary Referrals of Low-income Compared to Non Low-income Students Before and During Advising Program

Referrals	Low-income		Non Low-Income		Total
	None <i>N</i> (%)	One or More <i>N</i> (%)	None <i>N</i> (%)	One or More <i>N</i> (%)	
Before Advising	9(25)	6(17)	17(47)	4(11)	36(100%)
During Advising	10(29)	5(14)	14(38)	7(19)	36(100%)

χ^2 (a)

3.29

(a)Note: χ^2 not significant for observes versus expected cell frequencies ($df = 5$) $\chi^2 = 3.29$, $p = .66$

CHAPTER FIVE

Conclusions and Discussion

The purpose of this exploratory two-group pretest-posttest comparative survey study was to determine the effect of a team adviser-advisee academic, behavior, and character mentoring program on the achievement, school engagement, and behavior outcomes of eighth grade students determined to be above and below eligibility guidelines for free and reduced price lunch participation during the 2008-2009 school year.

The data for this project was collected by the researcher using the district's student management software system and included components of student achievement, student engagement, and student discipline among eighth grade students for the 2008-2009 school year.

Student achievement was measured using the Iowa Test of Basic Skills and classroom academic performance. The Iowa Test of Basic Skills include Reading: (a)

Reading total National Standard Scores (NSS); Math: (a) mathematics total national standard scores (NSS); and Science: national standard scores (NSS). Classroom performance was measured by the research school district's core curriculum grades (grade point average) for: (a) language arts; (b) mathematics; (c) science; (d) social studies; and (e) cumulative grade point average. School engagement was measured by cumulative participation frequencies for: (a) extra and co-curricular activities. Behavior was measured by cumulative frequencies for: (a) absences, (b) tardiness, and (c) discipline referrals.

Conclusions

Research Question 1

Are eighth grade students (low-income and non low-income) involved in the advisor-advisee program successful in school as indicated by academic performance?

On the standardized tests, students who participated in the advisor-advisee program showed improvement in National Standard Scores (NSS) on the Reading, Math, and Science subtests over time. The National Standard Score is used to describe the location of a student's performance on an achievement curriculum for the Iowa Test of Basic Skills and Iowa Tests of Educational Development. Eighth grade (pretest) typical performance for all subject areas is a score of 250, while the ninth grade (posttest) average score is 260 (Forsyth, Ansley, Feldt, & Alnot, 2003).

On the Reading subtests, both low-income and non low-income NSS showed significant improvement over time. The low-income students' pretest ($M = 239.53$, $SD = 39.74$) was below the national average NSS of 250. However, even though the low-

income students posttest ($M = 253.13$, $SD = 137.65$) remained below the NSS average 260, the group average score moved closer to the national average. The non low-income students' pretest ($M = 248.23$, $SD = 37.56$) was slightly below the average NSS of 250, however the non low-income students' posttest ($M = 265.57$, $SD = 137.65$) improved to above the average NSS of 260.

On the Math subtests, both low-income and non low-income NSS showed improvement over time. The low-income students' pretest ($M = 239.53$, $SD = 27.41$) was below the national average NSS of 250. However, the low-income students posttest ($M = 252.13$, $SD = 33.81$) moved closer to the average NSS of 260. The non low-income students' pretest ($M = 261.05$, $SD = 30.23$) was above the average NSS of 250. The non low-income students' posttest ($M = 279.33$, $SD = 31.94$) also was above the average NSS of 260.

On the Science subtests, both low-income and non low-income NSS showed improvement over time. The low-income students' pretest ($M = 254.20$, $SD = 26.32$) was above the national average NSS of 250. The low-income students' posttest ($M = 266.80$, $SD = 37.44$) improved and was also above the average NSS of 260. The non low-income students' pretest ($M = 269.86$, $SD = 30.23$) was above the average NSS of 250. The non low-income students' posttest ($M = 282.67$, $SD = 40.78$) improved and also was above the average NSS of 260.

Using Iowa Test of Basic Skills Standard Scores as measures of academic success, eighth grade students participating in the advisor-advisee program in the research district are at or above the National Standard Score average posttest score in

Math and science and non low-income students in language arts. While low-income students scored slightly below the national average on the posttest, the movement of the group closer to the national average is a positive result for the district. Given these measures, students in the research district are successful as compared to other students nationwide in language arts, math, and science.

Research Question 2

Is there a difference in standardized pretest-posttest subtest scores in

- a. Reading total,
- b. Math total, and
- c. Science total

between eighth grade low-income students and eighth grade non low-income students after completion of the advisor-advisee program during eighth grade?

On the Iowa Test of Basic Skills Reading subtest there was improvement over time (pretest/posttest), regardless of SES status. There were no differences between the SES groups, and there was no significant interaction between time (pretest/posttest) and SES. The improvement over time for all students is a positive result for the district showing student growth in the area of reading for all kids, regardless of socioeconomic status.

On the Iowa Test of Basic Skills Math subtest there a significant difference between the groups with the non low-income group ($M = 279.33$, $SD = 31.94$) having significantly higher scores than the low-income group ($M = 252.13$, $SD = 33.81$). There

was a statistically significant main effect within subjects for time (pretest/posttest), indicating all eighth graders who participated in the advisor-advisee program significantly improved on the Iowa Test of Basic Skills Math subtest from the pretest ($M = 252.08$, $SD = 30.62$) to the posttest ($M = 268.00$, $SD = 35.01$), regardless of SES status. There was no significant interaction between time (pretest/posttest) and SES.

The ITBS Math data shows there is a significant achievement gap between eighth grade low-income students and high-income students. Even though a gap exists, the Math data also shows that all students participating in the advisor-advisee program are making significant progress over time (pretest/posttest). The fact there was not a significant interaction between time and SES status indicates the achievement gap remains between the groups on.

On the Iowa Test of Basic Skills Science subtest there was a statistically significant main effect within subjects for time indicating that eighth graders who participated in the advisor-advisee program significantly improved on the Iowa Test of Basic Skills science test from the pretest ($M = 263.33$, $SD = 35.49$) to the posttest ($M = 276.06$, $SD = 39.67$), regardless of their SES status. There was no significant main effect between subjects for SES, indicating low-income students are performing at the same level as non low-income students.

Research Question 3

Is there a difference in GPA for:

- d. math,
- e. language arts,

- f. science,
- g. social studies, and
- h. core cumulative GPA

between eighth grade low-income students and eighth grade non low-income students after completion of the advisor-advisee program during eighth grade?

For math GPA there was a statistically significant main effect between the SES groups showing the non low-income group ($M = 2.43$, $SD = 1.21$) had significantly higher GPA than the low-income group ($M = 1.00$, $SD = 1.07$). There was a significant main effect within subjects for time (pretest/posttest), showing eighth graders who participated in the advisor-advisee program significantly improved math GPA from the end of seventh grade ($M = 1.83$, $SD = 1.30$) to the posttest ($M = 2.75$, $SD = 1.08$), regardless of their SES status.

For language arts GPA there was a statistically significant main effect between the SES groups, indicating the non low-income group ($M = 2.86$, $SD = .910$) had significantly higher GPA than the low-income group ($M = 1.67$, $SD = 1.05$). Further, the data show the low-income students significantly improved from the end of seventh grade ($M = 1.67$, $SD = 1.05$) to the end of eighth grade ($M = 2.47$, $SD = 1.36$). The non low-income students end of seventh grade GPA ($M = 2.86$, $SD = 0.91$) did not improve over time to the end of the eighth grade year ($M = 2.86$, $SD = 0.96$). The data shows at the end of seventh grade, low –income students were significantly lower than the non low-income group creating a performance gap between the two groups. During the

implementation year of the advisor-advisee program to the end of the eighth grade year, low-income GPA significantly closed the gap with the non low-income students.

For science GPA there was a statistically significant main effect between the SES groups indicating the non low-income group ($M = 3.19$, $SD = .873$) had significantly higher GPA than the low-income group ($M = 2.07$, $SD = .961$). The data shows the low-income students significantly improved from the end of seventh grade ($M = 2.07$, $SD = 0.96$) to the end of eighth grade ($M = 2.53$, $SD = 0.83$). The non low-income students end of seventh grade GPA ($M = 3.19$, $SD = 0.87$) did not improve over time to the end of the eighth grade year ($M = 3.19$, $SD = 0.75$).

The science GPA data shows at the end of seventh grade, low-income students were significantly lower than the non low-income group creating a performance gap between the two groups. During the implementation year of the advisor-advisee program to the end of the eighth grade year, low-income GPA significantly closed the gap with the non low-income students.

For social studies GPA there was a statistically significant main effect between the SES groups indicating the non low-income group ($M = 3.00$, $SD = 0.94$) had significantly higher GPA than the low-income group ($M = 2.00$, $SD = 1.07$). There was a significant main effect within subjects for time (pretest/posttest), indicating eighth graders who participated in the advisor-advisee program significantly improved GPA from the end of seventh grade ($M = 2.58$, $SD = 1.10$) to the end of eighth grade ($M = 2.94$, $SD = 1.04$), regardless of their SES status. The data shows the low-income students significantly improved from the end of seventh grade ($M = 1.68$, $SD = 0.87$) to the end of eighth grade

($M = 2.40$, $SD = 0.92$). The non low-income students end of seventh grade GPA ($M = 2.86$, $SD = 0.86$) improved, but not significantly, over time to the end of the eighth grade GPA ($M = 3.13$, $SD = 0.74$).

The social studies GPA data shows at the end of seventh grade, low-income students were significantly lower than the non low-income group creating a performance gap between the two groups. All students improved GPA during the implementation year of the advisor-advisee program to the end of the eighth grade year, low-income GPA significantly improved, closed the gap with the non low-income students. Non low-income student GPA improved, but not significantly.

The cumulative GPA statistically significant main effect for SES indicated the non low-income group ($M = 2.86$, $SD = 0.86$) had significantly higher GPA than the low-income group ($M = 1.68$, $SD = 0.87$) indicating an achievement gap existed between the two groups at the end of the seventh grade year. The data for low-income students shows there was a significant improvement from the end of the seventh grade year ($M = 1.68$, $SD = 0.87$) to the end of the eighth grade year ($M = 2.40$, $SD = 0.92$), in fact closing the achievement gap between groups. While the non- low-income student improved the cumulative GPA from the end of the seventh grade year ($M = 2.86$, $SD = 0.86$) to the end of the eighth grade year ($M = 3.13$, $SD = 0.74$) the improvement was not statistically significant.

The GPA data shows students participating in the advisor-advisee program improved or maintained the same level of performance from the end of the seventh grade year to the end of the eighth grade year. The data showing low-income students during

the implementation year of the advisor-advisee program closing the gap in language arts, science, and on the cumulative GPA is exciting and a positive sign for the research district in its evaluation of the program.

Research Question 4

Is there a difference in school engagement as measured by extra-curricular and co-curricular activity participation between eighth grade low-income students and eighth grade non low-income students after completion of the advisor-advisee program during eighth grade?

Chi-square tests for frequency of activity participation of low-income compared to non low-income students before implementation and after implementation of the advisor-advisee program indicates there was no significant difference in participation in extra-curricular and co-curricular activities.

Research Question 5

Is there a difference in school behavior as measured by attendance, tardiness, and disciplinary referrals between eighth grade low-income students and eighth grade non low-income students after completion of the advisor-advisee program during eighth grade?

Chi-square tests for frequency of attendance of low-income compared to non low-income students before implementation and after implementation of the advisor-advisee program indicates there is not a significant difference in attendance. The district

attendance rate of 95% is consistent with the state of Iowa average school attendance rate, potentially accounting for the results being insignificant.

Chi-square tests for frequencies of tardiness of low-income compared to non low-income students before implementation and after implementation of the advisor-advisee program indicate there was no difference in the tardiness rate among the eighth grade students. This may be attributed to the relatively low number of students experiencing tardiness and combined with the overall low levels of tardiness that occurred during same during the research period.

Chi-square tests for frequencies of disciplinary referrals of low-income compared to non low-income students before implementation and after implementation of the advisor-advisee program indicate there is not a significant difference in behavior referrals. This may be attributed to the relatively low number of disciplinary referrals among the eighth grade students.

Discussion

The purpose of this study was to determine the impact of an advisor-advisee program on the student achievement, school engagement, and behavior of eighth grade low-income students and non low-income students. Overall the study results show significant gains for students in student achievement including standardized test scores and the measurement of GPA. There were no significant differences in school engagement as measured by participation in extra-curricular and co-curricular activities. There were also no significant differences in school behavior as measured by attendance, tardiness, and disciplinary referrals.

Implications for students. For all students, there were strong results in the academic measures for students, specifically improvement over time on the ITBS Reading, Math, and Science subtests. While the advisor-advisee program in the research district was put into practice to meet the needs of all students, the impact to low-income students is especially notable.

From the study data, and consistent with the literature (Aikens & Barbarin, 2008; Taylor, 2005), socio-economic status was a strong indicator of academic success for students in the research district for this study. Low-income students showed lower performance than non low-income students in five of the eight measures of academic achievement covered in the study. These measurements included lower scores on the ITBS Math subtest, and lower GPA in the academic areas of math, language arts, social Studies, science, and on the cumulative GPA measure. However, the observed data showing significant narrowing of gaps in language arts, science, and cumulative GPA is a positive indicator for the impact of the advisor-advisee program for low-income students in the research district. The statistically significant improvements in GPA measures during the implementation of the advisor-advisee program stand to reason as the first indicators the advisor-advisee program is having a positive impact. It stands to reason students better prepared for class, completing more homework, and prepared for assessments are more likely to earn higher grades, translating to higher grade point averages for the students. It also is reasonable to believe that the first indicator of advisor-advisee program impact to students would appear first in GPA.

Most importantly the study data shows that all is not lost for low-income students. There may be something that can be done that may provide students in poverty a way to

be successful. The role of adults in a child's formal education cannot be discounted when it comes to academic achievement (Clabaugh, 2008; Kahlenberg, 2003; Reinstein, 1998). For many living in poverty, for a myriad of reasons, the adult presence that can help the child become successful often is not there, the student is left to their own abilities and motivation for learning (Caldas & Bankston, 1999).

For low-income students in the research district as well as other areas, the PK-12 school system can provide the tools, experiences, and means to change their status in life. Schools are full of adults who can establish positive relationships with students to help students be successful, especially those such as low-income and other at-risk students who so desperately need the adult interaction and involvement in their young lives the most (Champeau, 2006; Green, Rhodes, Hirsch, Suarez-Orozco, & Camic, 2008; Hyslop, 2006; Kim, 2009). Programs such as the advisor-advisee program in the research district as well as those cited in the literature (Carlson, Wolsek, & Sinder, 2002; Champeau, 2006; Deitte, 2002) put structure and focused purpose into developing relationships that can have such positive results for students in regard to school performance.

Implications for the school district. In 1999-2000 the poverty rate as determined by the percentage of students qualifying for the free and reduced meal program stood at 29%. By the 2009-2010 school year, this number had grown to 45%. The rising percentage and number of students living close to or at the poverty level has impacted the district. In fact, for the 2008-2009 school year, the district did not meet Adequate Yearly Progress on the Iowa Department of Education trajectories for student performance in the low-income subgroup under No Child Left Behind. Because of this

the district was named a School in Need of Assistance for reading achievement among low-income students.

For the research district, looking beyond the traditional approaches to educating this growing demographics is necessary, not only from a functional and technical perspective, but from a philosophical and cultural perspective as well.

Critically important is the ability of school districts to recognize that for many students, the school system, the teachers, programs, and culture may be the last and only hope to truly change the child's station in life, that is to break the cycle of generational poverty and help students succeed (Books, 2004; Helm, 2007; Payne, 2005). It is imperative for school districts to put into place adults who can recognize students for what they can become, as opposed to judging them based on from the situation in which they come. Indeed, the school structure and culture that served traditional middle class families well, may not serve the changing population of the district.

While causality may not be indicated, this study provides the research district reasons to believe the continued focus and implementation of the advisor-advisee program may have a promising impact on student achievement.

Implications for the advisor-advisee program. As the No Child Left Behind timeline looms requiring schools to make sure each and every student meets academic proficiency, combined with the rising poverty rate and associated issues in student achievement, the research district is at a crossroads in terms of how to move forward with resources and programming to meet these new and growing needs. Based on the findings

of this study and consistent with the literature (appears the advisor-advisee program is having a positive impact on student achievement, especially among low-income students.

The advisor-advisee program in the district was created to help students in their roles as learners. Like other advisory programs (Brown, 2001; McCaffrey, 2008; Shulkind & Foote, 2009), the research district's advisory program is also to help students prepare for the future as well as help students through personal development and character building. Of these three goals, the study data supports improvement in academic achievement.

Other indicators not measured in the study support this as well. District administration report a steady decline since the implementation of the advisor-advisee program of the number of students academically ineligible to participate in extra-curricular activities. The most recent data shows a year over year decline of 35% in the number of ineligible students during the first grade reporting period of this year. Advisor responses indicate the advisor-advisee program as being successful in helping students track grades, improve climate, and establish closer ties with their advisees.

Research district advisors also report areas of concern with the advisor-advisee program. Chief among these is the need for staff development time to collaborate with other advisors and implement curriculum to improve the program, especially in the character education and personal development goals of the program. Other advisors cite concern of the fidelity of the implementation of the program from advisor to advisor, specifically if all advisors take the role of the advisor and the approach to implementation at the level needed for all students to be successful. The results of this study are further

supported by indicators not measured in the study. This study can help set the course for practice and policy as the district grapples with a rising low-income population.

Implications for the community. As in other rural Midwest communities, the research district is seeing a shift in demographics with increasing poverty, and at the same time facing “brain drain” as the best and brightest students turned out by the education system often leave the community. The most talented students are prepared to succeed and often leave the community becoming an asset to another, often suburban community. With this shift, there become fewer and fewer opportunities for professional and entrepreneurs in the rural community (Carr & Kefalas, 2009). Illustrating this was the recent discussion with a community leader in one of the smaller towns of the research district in which the discussion centered on being able to keep a gas station open in the town, and even though many would consider it a small step, the symbol of an important lifeline to the small rural community.

Further, the educational system has traditionally been geared to use resources on these top achievers who often leave taking their skills and talents with them, as opposed to the students most likely to stay in the community such as low-income students (Carr & Kefalas, 2009). With the rising poverty in the community, and the likelihood that non low-income academically successful students will leave the community, the community may become prone to generational poverty. Payne (2005) indicates one of the interventions to escaping generational poverty is for middle class role models to be present in the lives of children living in poverty. School systems in rural communities may be best positioned to provide role models for low achieving students living in

poverty (Champeau, 2006; Hyslop, 2006) through implementation of interventions such as the advisor-advisee program in the research district.

Implications for further research. The initial results of this study suggest the advisor-advisee program is having a positive impact on student achievement for all students as measured by ITBS standardized test scores. The results show improvement in GPA in the academic areas of math, language arts, science, social studies, and cumulative GPA, especially for low-income students.

The current study focused on eighth graders in the research district during the 2008-2009 school year. A suggestion would be a longitudinal study of academic achievement in the subsequent years tracking the same participants of the current study as they continue into high school, into college, and into life beyond cumulating with a qualitative study of the participants' reflections and impressions of their advisors and the program.

This study focused on specifically low-income and non low-income students. The research indicates at-risk students also benefit from adult intervention (Green, Rhodes, Hirsch, Suarez-Orozco, & Camic, 2008; Kim, 2009). A suggestion for another study would be the impact of advisor-advisee programs to at-risk students such as ethnic minorities, LGBTQ, and students who may be the targets of school bullying.

Making a Difference

While it was gratifying that significant growth for the group of eighth graders, in a rural school setting, advisory programs can have individual significance that may be hard to measure, but makes a positive impact. Students who are at risk because of

poverty, lack of parental support or positive role models, as well as those who are vulnerable to isolation because of individual needs, must look to the teachers and the school to advocate and care about them.

Robert's story. Robert continued his educational career in the research district finishing sixth grade and entering the junior high school. As superintendent, I didn't have much contact with him other than seeing him and talking briefly on occasion in the halls. Robert's grades continued to suffer as he appeared to lack motivation to achieve at school. In fact, in the core areas Robert failed two courses, and earned below average grades in the others his sixth grade year.

In seventh grade, Robert hit new lows with his academic achievement and appeared to be completely disengaged from school. His teachers and principal at the time became very concerned as he failed nearly all of his courses, including math, language arts, science, social studies, Spanish, and geography during the first semester. In addition, to failing grades, Robert began having serious trouble at school and began to accumulate disciplinary referrals as well. The second semester he managed to earn D-grades in math and English, but failed the rest of his courses. Through the building principal a relationship was established with Robert's grandmother and in a team approach with his teachers, it was decided that Robert would repeat seventh grade.

Robert continued to struggle with school, even when repeating seventh grade he continued to fail courses at an alarming rate. Robert also struggled with his peers and became the subject of teasing. The district, already having used the option of retention, promoted Robert to the eighth grade. Things did start to change for Robert, and he began

to find some success in school. During the fall semester of his eighth grade year, he passed every class, albeit three courses he earned the grade of D in, the others including Reading, and Science he earned B's and C's in. During the spring semester, his grades continued to improve. In fact, by the end of the spring semester Robert took home a final report card with no grade lower than a C in any of his courses.

As Robert entered high school he seemed to slip back to his old pattern of earning less than average grades and even began to fail classes again during his freshman year. But during his sophomore year things once again began to change for Robert. He was recruited by the speech coaches Mrs. W. and Mrs. L. to join competition speech, he started hanging around the gym during basketball practices and eventually joined the team, and he joined the school choir. In addition, during the fall semester Mrs. L., one of the speech coaches, won approval to start a new competition debate program at the school. Robert loved to argue, and when Mrs. L. recruited him for the fledgling program, Robert accepted and found a niche of his own. As Robert became engaged in school activities, his grades improved steadily. In fact, during his sophomore year he earned no grade lower than a C, and earned a cumulative grade point average of 2.385 for the year, a vast improvement over the 1.00 grade point average of his freshman year.

Robert continued to soar, and even at one point stopped by my office and told me, "I am tired of failing classes and getting into trouble. I am going to go to college to become a lawyer." By his junior year Robert made the honor roll for the first time in his academic career, posting a 3.667 grade point average.

Robert was especially close to Mrs. L., his debate coach, and when she unexpectedly passed away during the school year, even though devastated, Robert continued to be engaged in school through competitive debate, participating in basketball, and served as a peer teacher helping tutor younger students.

During his senior year, including taking two college courses, Robert earned a 3.769 grade point average capping off an amazing turn around in his studies. Robert graduated from high school and is currently attending junior college, where as of the writing of this dissertation, he holds a 3.40 GPA, studying pre-law, and has aspirations to go to law school.

For Robert, turning his life around was truly an accomplishment of his own motivation. However, there were many who cared for Robert at school both in and beyond the classroom. There were the teachers at the junior high who took the time and courage to work with Robert and his family in the socially difficult retention process that may have helped Robert become successful in school. There was the beloved Mrs. L. who invited him, encouraged him, and coached him in competitive debate believing in his success, helping Robert find his talent and focus. There was basketball Coach M., who even though Robert did not have the skills to contribute in games, still welcomed Robert, and in fact routinely drove out of his way *every night* to take Robert home after practices and games so Robert could be a part of the team. There are all of those who cared enough to role model, encourage, guide, direct, and provide the help for Robert to reach for a higher place in life.

It may never show up in terms of NCLB assessments, but Robert's success story is testament to the power and success of relationships that can be and are being built everyday between teachers and students who so desperately need them in our PK-12 school systems.

The difference. Recently I met with Robert for lunch and we talked about those teachers who made a difference to him. We talked about Mrs. L., the debate coach. We talked about Mr. M., the basketball coach. We talked about Mrs. J., his math teacher. We talked about Mr. J, the debate coach who took over after Mrs. L. passed. He also talked about teachers he felt were biased toward him, those that in his words, "would always view me on my past, not on what I could become in the future."

I asked him what it was about those teachers and adults at school who helped him in his remarkable and amazing turnaround success story. He told me, "They understood me, I could tell by their actions. When people tell you that you are smart, it brings out the best in you. They showed me a different life, and what life could be like. They gave me a place to be, something to do with my time. When people give you a chance, when those teachers gave me an inch, it was like getting a mile...Even though they could have prejudged me on what I had been, they didn't. They judged me for what I could become."

While the key roles that strong teacher and school relationships play in students' lives has always been a positive educational force, creating a culture where staff is expected to make a difference through relationships needs to be intentional, planned, and

celebrated (Purkey, 1996). The challenges schools face in reaching for success can never overshadow the goal of helping each student to meet success with individual challenges.

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Appendix A

Activity Survey

Name _____

The following is to help the district collect information about participation in our extra- and co-curricular programs such as music, sports, etc.

Please circle all that apply to you:

During 7th Grade, I participated in:

Football Basketball	Volleyball	Cross Country	Boys Basketball	Girls
Wrestling	Girls Track	Boys Track	Baseball	Softball
Choir	Band			

During 8th Grade, I participated in:

Football Basketball	Volleyball	Cross Country	Boys Basketball	Girls
Wrestling	Girls Track	Boys Track	Baseball	Softball
Choir	Band			

During 9th Grade, I have/am participating in:

Football Basketball	Volleyball	Cross Country	Boys Basketball	Girls
Wrestling	Girls Track	Boys Track	Baseball	Softball
Choir Council	Band	Speech	Drama	Student
FFA Club	FCCLA	Publications(Newspaper)	Golf	AV

