Warriors Mentor Warriors: A Cross-Age Mentoring Program

by

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ABSTRACT

Adolescence comes with a multitude of challenges that students must face, while still positively engaging with other students and teachers within the school environment. Eighth grade students, in particular, face issues pertaining to behavior control and behavior problems, which in turn impacts their ability to be successful in a school setting. Cross-Age Mentoring Programs (CAMPs) have been shown to improve youth behavior when youth are matched with individuals who act as positive role models over an extended period of time. The primary function of CAMPs is to assist mentors and mentees in building a strong relationship that consists of trust and empathy, which in turn leads to the ability for mentors to lead mentees towards the achievement of goals.

The purpose of this action research study was to introduce an innovation aimed at helping eighth grade students improve their behavior control and behavior problems. The innovation consisted of a nine-week CAMP that paired eight eighth graders with eight eleventh graders at a charter school in Phoenix, Arizona. Mentors and mentees met twice a week before school with the purpose of addressing the behavior control and behavior problem goals that they co-created. Mixed-method data were collected: the quantitative data collection tools were pre- and post-intervention mentee surveys and teacher weekly behavior reports, and the qualitative data collection tools included mentee and mentor journal entries, researcher observations, and mentoring conversation checklists.

Results showed that mentors and mentees were able to develop positive close personal relationships with one another, as seen in the researcher observations. In addition to the development of positive relationships, researcher observations, and journal

prompt entries provided data to support mentees meeting their goals and mentee self-identification of positive improvement in behavior problems and control. Conversely, there were no significant changes in behavior control and behavior problems as reported on the survey and teacher weekly behavior reports. Attendance and retention of students created challenges in accurately assessing the results of this program; however, consistent with the literature, this study suggests that CAMPs should be sustained longer and with consistent attendance to achieve goals.

DEDICATION

Thank you to my family and friends who supported me through this process! I could not have done it without your love and encouragement. The journey has been long and there have been bumps along the way, but I was constantly reminded that I can do anything I set my mind to.

To my son Lasher, I want you to know that you can do anything you want in your life! I hope that my accomplishments show you that although things might be challenging, it will always be worth it in the end! Always shoot for the stars!

ACKNOWLEDGMENTS

As I close this chapter in my life, I reflect back upon my journey and I am reminded of all of the individuals who have positively contributed to my success. First, the school staff and administration who gave their time and energy to ensuring my project was a success. Second, to the students who participated in my study, without their contributions this work would not have been possible. Lastly, to all of the ASU professors who provided me with the skills and knowledge I needed in order to become an Action Researcher.

I feel honored to have worked under the direction of Erin Rotheram-Fuller, my dissertation chair. She believed in me, sometimes even more than I believed in myself. She was always available to provide advice and guidance. I am also grateful to Stanley Zucker and Peter Bartenan, my dissertation committee members, for their time and commitment to my research study. The wisdom and dedication offered by all three of these knowledgeable individuals supported me through the entire project.

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CHAPTER 1: INTRODUCTION

Student behavior, motivation, and attitudes can greatly impact students'

educational attainment. Research on middle school students has shown that this group is

particularly at risk for establishing poor study habits and behavior problems and may

need additional modeling and support from successful adolescents to help give them

strategies to navigate a difficult social and developmental period (Compas, Hinden,

Gerhardt, 1995). Cross-age mentoring programs offer a unique opportunity to capitalize

on the experiences and expertise of slightly older students, and allow younger students to

learn from students close in age who have gone through the same struggles they may be

having now. In addition, research has shown that middle school students in economically

disadvantaged schools are even more predisposed to some of these issues (Karcher

(2007) which is why a mentoring program was designed for the students in this project.

Cross-age mentoring programs (CAMPs) have become an increasingly popular

choice for educators with the intention of creating a positive change within a particular

youth population. According to Garringer and MacRae (2008),

> Cross-age peer mentoring refers to programs in which an older youth (mentor) is
> matched with a younger student (mentee) for the purpose of guiding and
> supporting the mentee in many areas of her academic, social, and emotional
> development. These programs are "cross-age" because there is a gap between the
> age of the mentor and mentee, which allows for effective role modeling and
> positions the mentor as a wiser and older individual, as with adult-youth
> mentoring. But these programs are also "peer" programs because they focus
> exclusively on youth-youth relationships. (p. 2)

Karcher (2007) describes "cross-age peer mentoring programs [as programs that] utilize

structure, meet for more than ten meetings, do not focus primarily on deficit or problem

reduction, and require an age span of at least two years" (p. 9). Thus, cross-age peer

mentoring programs are designed to connect youth with other youth in order to provide growth and learning opportunities for both mentor and mentee.

National Context

Behavioral concerns within the adolescent population has been an increasing national concern, especially within the school context. According to Simons-Morton, Crump, Hanie, and Saylor (1999), some of the most prevalent problems amongst youth by the time they reach eighth grade are alcohol use, cigarette use, physical altercations with peers, truancy, bullying, theft, and vandalism. Regardless of academic performance, adolescents are engaging in numerous high risk behaviors, with approximately 21.5% carrying weapons, 25% using cigarettes, 47% using alcohol, and 38.75% being sexually active (CDC, 2010). These risk behaviors can lead to even bigger life problems later on, such as dropping out of school, health problems, incarceration, and substance abuse (Alliance for Excellent Education, 2003; NCES, 2006; McIntosh, Flannery, Sugai, Braun, & Cochrane, 2008). There are a wide variety of behavioral issues plaguing adolescents which impact their ability to function in the school setting.

Unfortunately, students with behavioral issues often find themselves displaced from the classroom environment leading to a negative impact in their development and academic success during this very important developmental stage. It is vital that schools view these behavioral issues as learning opportunities and implement procedures that lead to behavioral growth and overall achievement amongst all students.

CAMPs have become increasingly more popular within the United States.

According to Karcher, Kuperminc, Portwood, Sipe, and Taylor (2006), there are

approximately 4,500 agencies offering mentoring services within the United States,

which includes 500 Big Brothers/Big Sisters of America agencies.

> Popular national initiatives, such as America's Promise, and federal legislation
> promoting mentoring, including the No Child Left Behind Act of 2001 and Title
> IV-B of the Social Security Act, which provides funding for the Mentoring
> Children of Prisoners Program, reflect the widespread belief that the presence of a
> mentor in the life of a young person not only supports healthy growth and
> development, but also serves as a protective factor against many of the risks
> facing today's youth. (Karcher et al., 2006, p. 710).

Thus, the popularity of mentoring programs has continued to spread across the United

States.

> Due to the increase in popularity of mentoring programs, there has been a rapid
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> expansion of peer programs around the country. It is now estimated that over 25
> percent of all Big Brothers Big Sisters (BBBS) matches are cross-age peer
> relationships, and over 40 percent of BBBS school-based matches are with high
> school–aged volunteers. (Karcher, 2007)

Other school-based programs, such as U.S. Department of Education school-based

mentoring grantees, are also turning increasingly to the cross-age peer model (Garringer

& MacRae, 2008, p. 8). The time for peer mentoring has come and it is being seen more

frequently in organizations across the United States.

The large number of mentoring programs in the United States arises from public

and governmental concern over the negative outcomes experienced by significant

proportions of youth in this country, especially those growing up under conditions of

disadvantage. During the past decade, these concerns have led to mentoring initiatives

funded through the Office of Juvenile Justice and Delinquency Prevention (OJJDP), the

Departments of Health and Human Services (HHS), Education (ED), and Labor, and the

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Corporation for National and Community Service. In response to the growing number of different federal agencies supporting youth mentoring, in 2003 the White House Task Force on Disadvantaged Youth requested the formation of the Federal Interagency Workgroup on Mentoring to coordinate all federally sponsored mentoring programs and activities (DuBois, Portillo, Rhodes, Silverthorn, & Valentine, 2011).

> By 2004, HHS and ED were allocating a collective $100 million per year for mentoring programs to support children with parents in prison and to promote middle-school students' academic outcomes. During the 2011 fiscal year, OJJDP similarly awarded $60 million of funding to support youth mentoring provided through national organizations such as Big Brothers Big Sisters of America (BBBSA) as well as approximately $40 million for more locally based mentoring programs. (DuBois et al., 2011, p. 2)

Thus, mentoring programs continue to grow across the United States in part due to the fiscal support provided by various organizations.

Local Context

The school where this action research project took place was located in Phoenix, Arizona, more specifically in the Maryvale community, and the school had been serving this community for two school years. The school is classified as a public charter school, which means that it receives public funding but operates outside of the other public schools in the area. The economic status of the 378 students and their families had led to the school being classified as Title I, with 97% of the student body qualifying for free or reduced lunch during the school year when the intervention took place. Thus, the majority of the student population were classified as economically disadvantaged.

In order to begin determining the needs of this particular school campus, the school's "culture cabinet" was consulted. The "culture cabinet" consists of ten staff members: principal, assistant principal, school counselor, parent coordinator, and six

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teachers. During a meeting surrounding the culture of the seventh and eighth grade students, these individuals discussed student behavior and overall student attitude. The data they used was based on the school-wide student behavior tracker, the number of referrals received by students, and anecdotal evidence provided by staff. After an in-depth discussion surrounding these students, all members agreed that eighth grade students needed additional support. With this in mind, they brought up the concept of starting a mentoring program to help assist eighth grade students. They noticed that eighth grade students were struggling in a variety of areas and could use some support that teachers and other staff were not able to provide. Their hopes were that a peer mentoring program would provide these students with positive mentors to assist them in addressing student behavior. They believed that a positive role model might be the missing piece to student success. Although they could identify that this particular group of students was struggling, they were not able to specifically pinpoint the needs of these students in order to address them.

       In order to determine the needs of this specific student body, a Needs Assessment Survey of seventh grade students was conducted during the 2015-2016 school year. Also, teachers were given a similar survey requesting their perspective of the needs of seventh and eighth grade students on campus. According to the needs assessment, 134 students self-identified the following needs: behavior needs and behavior control (see Table 1).

Table 1

Student and Teacher Nominated Student Needs

	Students (*M, SD*) (n = 137)	Teachers (*M, SD*) (n = 6)
Self-Esteem	3.27 (0.68)	2.27 (0.60)
Connectedness	3.13 (0.56)	2.10 (0.30)
Social Skills	2.91 (0.77)	2.79 (0.43)
Emotional Skills	2.77 (0.77)	3.00 (0.58)
Motivation	3.17 (0.62)	2.57 (0.75)
Attitudes	3.07 (0.69)	2.69 (0.44)

Their survey results assisted me in determining the needs of the targeted population. The highest needs identified by the students were self-esteem, connectedness, motivation, and attitudes. These categories were then classified as *behavior control* and *behavior problems*. Thus, these were the categories that were addressed in the mentoring program that targeted this population. The needs identified by the teachers were not used to create the focus of the mentoring program because they were not aligned to the concerns described by the students.

Purpose Statement and Research Questions

This action research project addressed the needs of the eighth graders at this particular charter school by implementing a cross-age mentoring program that paired eight eighth grade students with eight eleventh grade students during the fall 2016 semester. Student identified needs to be addressed included behavior problems and behavior control. Specifically, this research addressed:

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- How did a cross-age mentoring program influence eighth grade students' (mentees') behavior problems and behavior control based on survey data, weekly teacher behavior reports, journal prompt entries, researcher observations, and mentoring conversation checklists?

- How did eighth grade student mentees and eleventh grade mentors engage with and experience the cross-age mentoring program across the intervention?

CHAPTER 2: LITERATURE REVIEW

Adolescent Development

Adolescence is a trying time and can lead to challenges for both youth and educators. Adolescent development is quite complex and can be attributed to both stress and positive development. Thus, it is imperative that opportunities for personal growth and contribution to their community are provided. As educators, this is an enormous responsibility to address the needs of our youth and at the same time encourage them to blossom into successful contributors to our society.

Unfortunately, today's youth are faced with a host of issues which have led to an increased number of emotional and behavioral problems (Compas et al., 1995). During adolescence, cognition and brain development is occurring, which leads to a "complex maturational and developmental process with great variations across individuals and cultures" (Milkman & Wanberg, 2012, p. 27). The goal at the end of this developmental process is to reach "biological maturity, a secure sense of self, the ability to enjoy close friendships and group belonging, and the mental capacity to deal with the onslaught of life's challenges" (Milkman & Wanberg, 2012, p. 27). It is important to consider the needs of students at different developmental stages and within specific contexts and find appropriate supports to enhance their development when they are struggling. Cross-age mentoring programs have been identified as one possible alternative to truly support students in a socially acceptable and effective way.

Cross-age mentoring programs recognize and appreciate adolescent growth and development in order to address the specific needs of this age group. Garringer and MacRae (2008) suggest that youth mentoring programs utilize a developmental approach

by emphasizing the "Five C's of competence, confidence, connection, character, and caring" (p. 6). If these "Five C's" are kept in mind, there is a greater probability that the program will lead to personal growth for involved adolescents. These "Five C's" were connected to the theoretical framework used to develop this intervention. The Development Model of Youth Mentoring Relationships (Rhodes & Lowe, 2008) directly incorporates the integration of relationship building into the mentoring process by addressing social-emotional and cognitive means as well as the need to look at the identity of the individual. Overall, the "Five C's" directly relate to this need to develop relationships in order for the mentorship to be successful.

Student Identified Needs

Based on a preliminary student needs assessment, students identified needing support with behavior needs and behavior control. Thus, these were the focus of the cross-age peer mentoring program that was implemented. There is considerable research that supports these needs among adolescents and has made suggestions on how to address each within cross-age peer mentoring programs.

Adolescence can be a trying time that can be accompanied with behavioral struggles and the inability of youth to exhibit the appropriate behaviors within a variety of settings. Students on this school campus self-identified that they struggled with behavioral issues pertaining to their actions at school. Behavior problems in this age group could take the shape of defiance and unethical/immoral behavior Karcher (2005) suggested that school-based mentoring could "affect changes in school-related attitudes and behaviors by using conventionally oriented activities" (p. 75). Thus, behavioral concerns were targeted within the cross-age mentoring program.

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According to Milkman and Wanberg (2012), a majority of adolescents could be capable of making decisions that society would consider to be morally sound, however this depends on the community and family that surrounded that individual. With this being said, it was imperative that adolescents are surrounded by positive individuals who have good moral and decision-making skills. By selecting students who had strong morals and decision-making skills, mentees benefitted from interacting closely with these mentors.

Emotional skills, classified in this study as behavior control, were also identified as a deficit amongst students on the school campus, which was not an unusual struggle of modern youth. Unfortunately, deficits in emotional skills amongst adolescents has been increasing, which could lead to things such as social exclusion and an inability to excel within the academic setting. Some emotional issues that I had observed on my school campus, and students have self-identified as issues, were an inability to stay calm in challenging situations, inability to control anger, inability to control frustration, and inability to stay calm when the environment changes. According to Herrera, DuBois, and Grossman (2013), peer mentoring could positively benefit youth's emotional and psychological well-being, including a decrease in depressive symptoms. Thus, the cross-age mentoring program aimed at addressing this emotional skills deficit amongst the middle school students.

Mentoring Programs

The large number of mentoring programs in the United States came from public and governmental concern over the negative outcomes experienced by significant proportions of youth in this country, especially those growing up under conditions of

disadvantage. As previously discussed, these concerns led to funding of multiple

mentoring initiatives and the formation of the Federal Interagency Workgroup on

Mentoring by the White House Task Force in 2003. In addition to the White House Task

Force taking action, OJJDP awarded $60 million of funding to support organizations like

Big Brothers Big Sisters of America (BBBSA; DuBois, et al., 2011). Thus, the popularity

of mentoring programs continued to grow across the United States in part due to the

fiscal support provided by various organizations.

This financial support made many of the mentoring programs possible within the

United States. Not only has it made them possible, but it helped to emphasize the

importance that the United States is placing on youth mentoring programs.

School-Based Mentoring

School-based mentoring is a form of youth mentoring where the mentoring occurs

within the school setting, during, or after school hours. According to the Department of

Education (2009), "School- (as opposed to community-) based mentoring programs are

programs where typically teachers and other school staff target and identify academically

and/or social/emotionally at-risk students whom they feel would benefit from mentoring"

(p. x.iii). Programs that take place on the school campus tend to come with a lower cost,

which has led to an increase in popularity of this type of program structure (Grossman &

Rhodes, 2002; Portwood, Ayers, Kinnison, Waris, & Wise, 2005). These programs could

be organized in a variety of ways where some programs matched mentees with adult

mentors and others matched mentees with peer mentors.

Multiple studies were conducted with the intent of determining the effectiveness

of school-based mentoring programs. The seminal studies pertaining to this topic were

those looking at the Big Brother Big Sister program, the Communities in Schools of San Antonio program, and the U.S. Department of Education Student Mentoring Program.

The Big Brother Big Sister (BBBS) school-based mentoring program served the purpose of providing students "with mentors—adults or older youth who visit[ed] students on the school campus, typically one hour a week during or after school, to provide them with friendship, support and academic help" (Herrera, Grossman, Kauh, Feldman, & McMaken, 2007, p. ii). In order to ensure that those goals were being met by the organization, both the Big Brothers Big Sisters of America Corporation and Public/Private Ventures conducted a comprehensive study of the effectiveness of the programs that serve 126,000 children across the United States (Herrera et al., 2007). The study aimed to identify if the following goals were being met: academic attitudes, performance, and behaviors. Each school had a slightly different way of integrating the programs into their school; however, they all shared the following characteristics: most of the programs met at least once per week, included non-academic relationship-social activities, encouraged interactions with other youth, provided intense mentor support from the BBBS organization, and included structured mentor training and supervision of the mentors by BBBS staff.

Ten BBBS agencies participated in the study which included 70 schools and 1,139 students. Students were selected for the study by means of school referral and then random selection. In order to gain insight into the lives of the student participants teachers, the program, and the youth were surveyed at three points: the beginning (fall 2004), the middle (during the school year), and the end (fall 2005; Herrera et al., 2007). Within this study, the following was discovered: overall academic performance

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improved, participants received fewer disciplinary infractions, scholastic efficacy improved, and youth reported that they had additional support from a non-parental figure (Herrera et al., 2007). Overall, modest growth was found amongst youth participants in the areas previously listed. Thus, in one academic school year, youth saw growth in academic and social areas when they participated in the BBBS school-based mentoring program.

The second study focused on the Communities in Schools of San Antonio Program (SAP), which was also a randomized controlled study of 2,360 youth. The focus of this study was to determine whether this particular mentoring program affected academic engagement and achievement, interpersonal relationships, personal responsibility, community involvement, and juvenile delinquency/participation in harmful activities. Researchers collected data from elementary through middle school youth who participated in the study by surveying the students and analyzing school records. This study determined that "school-based mentoring as typically implemented within a multi-component program may be of limited value for students in general and most helpful to elementary school boys and high school girls" (Karcher, 2008, p. 112). Thus, it was possible that the effects of mentoring programs might be greater amongst different populations of students. Although those findings brought the positive effects of mentoring into question, it was important to note that not all mentees were paired with mentors for the full length of the study.

The final study pertained to the U.S. Department of Education Student Mentoring Program, which was managed under the Office of Safe and Drug Free Schools (OSDFS), and aimed to address "the lack of supportive adults at critical junctures in the lives of

students at risk by providing funds to schools and to community- and faith- based organizations to create school-based mentoring programs targeting children in grades 4–8" (Department of Education, 2009, p. xiv). The purpose of the program was to "improve interpersonal relationships with peers, teachers, other adults and family members; increase personal responsibility and community involvement; discourage drug use" (Department of Education, 2009, p. xiv). An experimentally-based study was designed in order to evaluate the program utilizing random assignment of students. The study aimed to examine the impact of ED school-based mentoring programs on students' interpersonal relationships with adults, personal responsibility, and community involvement students' school engagement (e.g., attendance, positive attitude towards school) and academic achievement, as well as students' high-risk or delinquent behavior (Department of Education, 2009, xv).

The study collected data from two school years, 2004-2005 and 2006-2007, which included two cohorts of students. Surveys were used for the purpose of gathering data in the following domains: interpersonal relationships and personal responsibility, academic achievement and engagement, and high-risk or delinquent behavior. Findings of the study varied between male and female students. In regards to the first goal pertaining to interpersonal relationships, the study utilized the Pro-Social Behavior Scale to measure the effects of the program and discovered that there was no statistically significant difference between participants and those in the control group. In regards to the second goal of improving academic achievement, surveys and student records were utilized in order to determine that there was no statistically significant difference in academic achievement amongst participants and those in the control group. Lastly, self-reported

and school-reported data was utilized in order to determine changes in delinquent student behavior. No statistically significant data was found to support any changes in delinquent student behavior amongst participants. Although these findings did not show any statistically significant differences amongst those in the participant group,

> there was some scattered evidence that impacts were heterogeneous across types of students. In particular, impacts on girls were statistically significantly different from impacts on boys for two self-reported scales: Scholastic Efficacy and School Bonding, and Pro-social Behaviors. For boys, the impact on Pro-social Behaviors was negative and statistically significant (i.e., treatment group boys had lower Pro-social Behaviors scores). (Department of Education, 2009, p. 91)

Although the researchers did not find positive effects for both male and female students, there was still evidence that mentoring programs could have positive effects for certain populations of students.

Cross-Age Mentoring Programs

According to Garringer and MacRae (2008), "cross-age peer mentoring refers to programs in which an older youth (mentor) is matched with a younger student (mentee) for the purpose of guiding and supporting the mentee in many areas of her academic, social, and emotional development. These programs were considered "cross-age" because there was a gap between the age of the mentor and mentee, which allowed for effective role modeling and positioned the mentor as a wiser and older individual, as with adult-youth mentoring. But these programs were also "peer" programs because they focus exclusively on youth-youth relationships (p. 2). Karcher (2007) described "cross-age peer mentoring programs [as programs that] utilize[d] structure, meet for more than ten meetings, do not focus primarily on deficit or problem reduction, and require an age span of at least two years" (p. 9). Thus, cross-age peer mentoring programs were designed to

connect youth with other youth in order to provide growth and learning opportunities for both mentor and mentee.

Cross-age peer mentoring programs caught the attention of multiple educators and researchers, who found there to be multiple benefits to the implementation of such programs. The overall purpose of implementing cross-age peer mentoring programs was to provide the right kind of support that put youth on a "path toward bright, productive futures, and make vital contributions to their families, neighborhoods and nation" (Herrera et al., 2013, p. 9). Providing positive youth relationships by means of CAMPs serves the "purpose of providing the younger youth guidance and social support" (Karcher, 2010, p. 292). Researchers have linked CAMPs to the following positive outcomes for mentees: increases in academic connectedness and self-esteem (Karcher, 2010); improvements in social acceptance, academic attitudes, and grades (Herrera et al., 2013); reduction in risky and negative behaviors (Foster, 2001); and positive attitudes towards connectedness to school and peers (Karcher, 2007). CAMPs have the potential to offer positive benefits for both the mentor and mentee which lends itself to a program that could be beneficial within a school environment to help youth "become socially, morally, emotionally, physically, and cognitively competent" (Foster, 2001, p. 7). CAMPs have become increasingly more popular within the United States

> Reports suggest there are at least 4,500 agencies providing mentoring (DuBois & Karcher, 2005), including 500 Big Brothers/Big Sisters of America agencies. Popular national initiatives, such as America's Promise, and federal legislation promoting mentoring, including the No Child Left Behind Act of 2001 and Title IV-B of the Social Security Act, which provided funding for the Mentoring Children of Prisoners Program, reflect the widespread belief that the presence of a mentor in the life of a young person not only supported healthy growth and development, but also served as a protective factor against many of the risks facing today's youth. (Karcher et al., 2006, p. 710)

Overall, cross-age mentoring programs were on the rise and grew in popularity amongst organizations that support the growth and development of the youth population.

CAMP Studies

In order to differentiate between programs utilizing mentoring versus cross-age mentoring, the following is a brief summary of the components of cross-age mentoring programs:

> Cross-age peer mentoring programs utilized structure, met for more than ten meetings, do not focus primarily on deficit or problem reduction, and required an age span of at least two years. Cross-age peer mentoring, defined this way, has yielded positive effects for both mentors and mentees alike. (Karcher, 2007, p. 6)

Thus, there was a clear distinction between mentoring programs and programs defined as CAMPs. With this being said, there have been a few studies that focused primarily on programs that meet the CAMPs criteria due to the specific CAMPs criteria. Although there were few seminal works specifically for CAMPs programs, school-based mentoring programs previously discussed can be used to predict the effectiveness of CAMPs programs in schools.

Karcher (2005) analyzed the effects of developmental mentoring, which is a structured approach to cross-age mentoring where high school mentors worked with 33 randomly assigned elementary school mentees. The primary goal of the mentoring program was to promote connectedness to the school and their parents. In the study, Karcher (2005) discusses how "low connectedness to school has been found to predict adolescent depression, risk taking, underachievement, and alienation from peers, teachers, and parents" (p. 66). Thus, connectedness can be attributed to student academic and social success. Karcher (2005) utilized the following design to analyze the effects of

the mentoring program: "a pre/post randomized experimental design was used that included an equivalent comparison group for both the high- and low-risk youth in the study" (p. 67). The following scales were utilized in order to measure various potential effects: Hemingway Measure of Preadolescent Connectedness, Harter Self-Perception Scale for Children, and the Primary Mental Health Project (PMHP) Child Rating Scale. Causal evaluations were also used in order to analyze changes in self-management, social skills, self-esteem, and connectedness.

The program consisted of 33 mentors and 33 mentees who met twice a week after school over a six-month period of time. Karcher (2005) concluded that there was "an overall positive effect of program participation on connectedness to school and parents" (p. 70). Thus, literature that has been previously cited regarding the positive effects of cross-age mentoring can be supported by this study, Warriors Mentor Warriors.

Karcher (2010) examined another CAMP that consisted of 46 mentors and 45 mentee participants and a comparison group. Mentors and mentees participated in structured academic and social development activities. The CAMPs utilized "a 2- year connectedness curriculum was developed that included activities to promote connectedness to peers, friends, family, self, parents, school, and reading" (Karcher, 2010, p. 294). Thus, the purpose of the study was to measure whether or not connectedness was affected by the mentors interacting with the mentees. Several quantitative surveys were used to assess connectedness, and the study found that the CAMP helped in academic, career, personal, and social development. The CAMP also changed both mentor and mentee student attitudes, who became more engaged in school activities (Karcher & Santos, 2011).

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In a similar study focused on middle-school students, Simon, Abrams, McDonnough, McLeod, and Warren (2008) paired University (Virginia Commonwealth University) students to middle school students in a cross-age mentoring program. The purpose of the program was to enrich "academic performance in mathematics and science as well as enhancing student self-esteem and a sense of responsibility" (Simon et al., 2008, p. 75). The relationships between the mentors and mentees were found to assist in the development of "greater self-esteem, connectedness, identity, and academic attitudes" of the mentees (Simon et al., 2008, p. 75). In order to address these needs, the program utilized a two-tiered system of tutoring and mentoring. Students were selected for this program based on their potential needs and at-risk behaviors pertaining to academics, attendance, and discipline concerns. This study concluded that the program made a positive impact on mentees' self-esteem and academic achievement.

Theoretical Framework

The Developmental Model of Youth Mentoring Relationships, which has also been referred to as the "Rhodes Model" after the researcher Jean Rhodes, has been used as the framework for many of the CAMPs because mentoring programs offer support and role modeling by means of the formation of a relationship between a mentor and mentee. A developmental approach to youth mentoring centered around the creation of a positive interpersonal relationship to help with the developmental processes in three main areas: social-emotional, cognitive, and identity (DuBois et al., 2011). Such a model would be more effectively implemented within a supportive context of family and the community. This model supported the focus on positive relationships between mentor and mentee in order to positively impact students within the school context.

According to DuBois et al. (2011), the Developmental Model began with the creation of positive relationships between mentor and mentee, with the hope that mutual trust and empathy would form. This bond had the potential to catalyze change within the following categories: social emotional development, cognitive development, and identity development. Increasing development in these areas is then predicted to lead to additional positive outcomes, such as improvements in grades, behavior, and emotional well-being. Within this study, the mentoring program was based on this model by using research-based approaches to assist mentors and mentees in building meaningful relationships.

Within the literature, it was suggested that the creation of these relationships between the mentor and mentee be the focus, since this relationship was the foundation. In order to create this relationship, Rhodes and Lowe (2008) suggested that the focus be on the following areas: social-emotional, cognitive, and identity. I developed a program that first developed these relationships before addressing the other needs of the students. Thus, I utilized a one-on-one approach to mentoring, where each mentor had only one mentee that they worked with directly.

Several researchers (Garringer & MacRae, 2008; Foster, 2001; Karcher, 2007), discussed the CAMP models that were used to affect positive change amongst youth mentors and mentees. All of these authors suggested that CAMPs should take a developmental approach to mentoring, where the "program's goals, objectives, and desired outcomes are achieved through the establishment of trusting, mutually beneficial developmental relationships between mentors and mentees" (Garringer & MacRae, 2008, p. 3). In addition to using a developmental approach, Garringer and MacRae (2008), Foster (2001), and Karcher (2007) all suggested that the following steps be taken within

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the CAMPs process: recruitment, screening, and selection of mentors; orientation, training, and ongoing support of mentors; appropriate matching of mentors and mentees; analysis of duration program; and appropriate evaluation of the effectiveness of the program. Overall, multiple researchers have outlined characteristics of effective CAMPs, which included the implementation of positive relationship building strategies between mentors and mentees.

In order to address the needs identified by students within this specific context, a logic model was used to construct my program. According to Garringer and MacRae (2008), a logic model is a model that can be used to construct a program with the underlying goals in mind. The steps that must be followed within this model are: identify the need (needs assessment), resources needed (program ingredients and potential staff needs), activities, outputs (evidence of success), intermediate outcomes (positive changes over 1-5 years), and impact/long-term outcomes (lasting outcomes). Although this study focused on immediate changes in student reports following the intervention, intermediate and long-term goals were considered for the sustainability of the program.

Measuring Effects of CAMPs

Among all of the studies pertaining to mentoring programs that were either school-based or cross-age, only quantitative evidence was gathered. Thus, there was a need to explore qualitative data surrounding the effectiveness of mentoring programs. With this in mind, the use of visual and written narratives was also included which asked students to document their experiences using visual images and narration.

Visual Narratives

According to Jean Anyon (2009), "writing can become the glue that binds youth and their struggles to each other. It affords them a reason to become a larger cacophony of voiced youth concerns" (p. 70). This project was intended to not only address the needs of the eighth grade students through the mentorship process, but also to provide an opportunity for students to become active participants of the research and have a voice throughout the process. Visual narratives can capture students' thoughts and feelings to explore how the mentoring program is effectively addressing the needs of the students.

According to a popular expression, "a picture of worth a thousand words." The use of visual arts was incredibly powerful and allowed for participants to creatively respond to journal prompts. According to Patricia Leavy (2015), "visual images can be very powerful and leave a lasting impression" (p. 225). This allowed meaningful and deep responses to the prompts that allowed for understanding of the thoughts and feelings of the participants as they engaged in the mentoring program. Leavy (2015) identified the power of creating collages when she stated that collages "bring disparate elements together and can be a powerful way of jarring people into thinking and seeing differently, performing cultural critique, producing connections or refining or enhancing meanings" (p. 235). Thus, visual narratives provided a vehicle for students to express their opinions in multiple ways in order to ensure they were heard and were active participants in the process. They were co-constructors in the knowledge that was being formed throughout the course of the study through both written and picture based formats.

Surveys and questionnaires were the dominant data collected in the mentoring studies previously discussed. This form of data was easily conducted in large-scale

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studies and there were multiple valid surveys and questionnaires that could be utilized by researchers. The survey and questionnaire used in this project were pieces from the surveys and questionnaires that have been previously validated and found to be sensitive to change as a result of the intervention by CAMPs researchers.

Conclusion

There has been a lot of research conducted around mentoring programs; however the number of studies that have been conducted pertaining strictly to cross-age mentoring programs is minimal, yet provide evidence that CAMPs could be effective. This study aimed to identify the effects a cross-age mentoring program on behavior problems and behavior control. Unlike the previous research conducted on CAMPs, this study consisted of a qualitative measure to contribute to the determination of program effectiveness. Visual narratives were used along with standardized surveys that provided participants the opportunity to reflect on the mentorship process.

CHAPTER 3: METHODS

Setting and Participants

This study took place within a small community in a southwestern city. The school has been serving this community over the past two years and is classified as a public charter school, which means that it received public funding but operates outside of the administration of other public schools in the area. The charter school served 378 students (127 seventh graders, 123 eighth graders, 75 ninth graders, and 63 tenth graders), at the time of the study. Ethnically speaking, the breakdown of the student body was 96% Hispanic, 2% Black/African, 1% Native American, and 1% Caucasian/White. The economic status of the 378 students and their families has led to the school being classified as Title I, with 97% of the student body qualifying for free or reduced lunch during this current school year. Thus, it can be concluded that a large majority of the student population could be classified as economically disadvantaged.

Role of the Researcher

At the time of the study, I was a seventh and eighth grade science teacher within this school. I taught four periods of eighth grade and two periods of seventh grade. Thus, I worked with all eighth grade students at an academic level, which could have potentially affected my interaction with them during this action research project.

I was the primary teacher of the mentoring program and conducted all trainings preparing mentors for how to lead mentoring sessions. As an academic teacher, this could have led to students feeling pressure to provide feedback that would be only positive about the innovation. It was vital that I continuously informed students that it was imperative they provide me with honest and constructive feedback. Also, my role as a

teacher could have had an effect on student participation in data collection. It was important that I stressed to student that their participation was voluntary and would not affect their academic standing in my science class. The final potential issue was that students would not fully express their opinions during surveys. I highlighted the fact that their opinions would not affect them negatively.

Procedure

The purpose of the study was to determine if, and to what extent, a cross-age mentoring program improved behavior problems and control of participating students. Student selection began during the first two weeks of school. The potential eighth grade participants were selected based on the 2015-2016 school year disciplinary records. Parents of the top 24 students identified as being the "highest need" students (most disciplinary referrals in the 2015-2016 academic year) received a recruitment letter (parental consent) to participate in the program. If parents did not want their child to participate, then students that were next on the list of disciplinary referrals were given a consent form. Multiple attempts to receive permission slips back from these selected students included sending home permission slips daily for two weeks and making phone calls to parents. When the goal of 24 students was not achieved despite these efforts, I opened recruitment up to all eighth grade students. By using this strategy, I enrolled sixteen students into the program, I then used a random selection method in order to select my eight participants and my eight students for the control group. Of the 16 participants, students were randomly assigned into two groups: participants and control. In the participant group of eight students, five students were considered high-risk (a part of the original 24 students recruited), and six students in the control group were

considered high-risk. Once parental consent was returned, the study was explained to students, and they were asked to complete an assent form as well.

Eight mentor students (eleventh grade students) were selected through eleventh grade teacher nominations. Parents of those students who were identified as potential mentors received a letter of consent. When parental consent was returned, the study was explained to potential mentors, and they were asked to provide assent as well.

By the end of a six-week period, eight mentors and sixteen mentees were selected for the program. Although sixteen mentees were selected for the program, only eight eighth grade students participated in the cross-age mentoring program and the other eight acted as a control group.

The next three weeks of school was used to train the eight mentor students two mornings a week for 40 minutes prior to the school day starting (thus academic time was not utilized for this intervention). After the three weeks of training, the eight mentors and mentees came together to participate in the nine-week mentoring program. The intervention took place two days a week for 40 minutes prior to the beginning of the school day (7:45-8:25). During this time, students engaged in conversations regarding the two SMART goals co-created created by the mentors and mentees. In addition to conversations about the goals, the mentors also took the liberty of having conversations about the mentee's life, grades, and study habits. The mentoring sessions took place in the science lab (my classroom), and sessions were periodically monitored and attended to ensure that students were covering the required materials. In addition, a checklist was given to mentors during each session to ensure fidelity to the mentoring topic during each session. Journal responses using picture, collage, and written formats were also collected

to track student experiences throughout the mentorship process. During this time, the control group did not participate in any activities besides the pre- and post- surveys.

Innovation

The cross-age mentoring program was designed using the Logic Model (Garringer & MacRae, 2008), which states that the following steps must be followed: identification of needs, identification of resources, plan of activities, and determination of outputs. In addition to the use of the Logic Model, the Developmental Model of Youth Mentoring Relationships Framework (Grossman & Rhodes, 2002) was used to develop a mentoring program with a focus on meaningful relationships between the mentor and mentee.

Content Focus During Mentoring Sessions

In order to identify student needs, a student and teacher needs assessment was distributed in February, 2016, and asked seventh and eighth grade students and their teachers to identify their challenges within school. The constructs that the seventh and eighth grade students self-identified as areas of concern were behavior needs and behavior control. *Behavioral needs* refered to the ability of the youth to do the right thing, act appropriately in the school setting (as defined by the school teachers and administration), tell the truth, and avoid getting in trouble. *Emotional skills/behavior control* refers to the ability of the students to stay calm in situations that are stressful, frustrating, or cause anxiety as well as the ability to control his or her anger.

Table 2

Curriculum and Implementation Plan (Weeks 1-5)

Week	Who	Purpose/ Topic	Activities
1	Mentors	Training	• Team Building • Expectations • What does it mean to be a mentor? • What are the goals of the mentoring program?
2	Mentors	Training	• Team Building • Tools that will be used (Checklist, SMART Goals template)
3	Mentors	Training	• Modeling practice (social-emotional, cognitive, identity). Role Playing- Mentoring relationships (how to create a positive relationship) Discuss Day 1 of Mentoring program and how mentees should select mentors
4 & 5	Mentors & Mentees	Goal Setting & Relationship Building	• Team Building Activities: Getting to know you circle and mentees selected mentors • Mentor and Mentee Bonding Activities (handshake and trust walk) • What did the needs assessment survey tell us? • Create a pledge to not allow these conversations to leave this room. • Pre-survey • Goal Setting pertaining to each of the two topics: "Behavior Problems" and "Behavior Control"

Plan of activities. The mentoring program lasted a total of twelve weeks,

including three weeks of mentor training and nine weeks of the semi-structured

mentoring program. The program activities took place two times a week, with each

mentoring session lasting 40 minutes in the morning before the start of the school day.

However, the original plan for the meetings was to have them take place during the

school day. The sessions primarily took place in the science room; however, there was

one time where it was relocated to the back field, which was also private. The

overarching framework of the program was based on the Developmental Model of Youth

Mentoring Relationships Framework (Grossman & Rhodes, 2002), which encourages

building meaningful relationships between a mentor and mentee by focusing on positive

interpersonal relationships. These relationships were developed by focusing on social-

emotional (modeling caring, providing support, and acting as a sounding board),

cognitive (providing meaningful guidance and modeling new ways to think), and identity

(modeling good decision making and assisting in identifying a healthy sense of self)

centered activities. This foundation was used to help guide students towards

accomplishing the goals of improving behavior as a whole (behavior needs and behavior

control). Tables 2 and 3 outline the weekly curriculum for the cross-age mentoring

program.

The mentor/mentee conversation structure for each session followed these steps:

1. Mentor reads the mentee's goals to the mentee.

2. Mentor asks which goal mentee would like to focus on for this conversation.
   (check-list)

3. Mentor facilitates the conversation around these questions: (Social emotional,
   cognitive, and identity development through this process)

   a. Where am I now?

   b. Where do I want to be?

   c. How do I get there?

   d. How am I doing?

4. Mentor makes a plan for follow-up and support surrounding discussed topics.

Table 3

Curriculum and Implementation Plan (Weeks 6-12)

Week	Who	Purpose/ Topic	Activities	
6	Mentors & Mentees	Relationship Topic: Social-Emotional	Day 1: Mentor/Mentee Relationship Building Activity Mentor/Mentee Conversation (Mentee guided- use check-list)	Day 2: Team Building Activity Mentor/Mentee Conversation (Mentee guided- use check-list) Journal Write: What are your thoughts and feelings about your relationship with your peers?
7	Mentors & Mentees	Relationship Topic: Social-Emotional	Day 1: Mentor/Mentee Relationship Building: Express emotions activity Mentor/Mentee Conversation (Mentee guided- use check-list)	Day 2: Mentor/Mentee Conversation (Mentee guided- use check-list) Journal Write: How do you feel about your ability to communicate with your peers?
8	Mentors & Mentees	Relationship Topic: Cognitive (Values)	Day 1: Mentor/Mentee Relationship Building: Values Activity Mentor/Mentee Conversation (Mentee guided- use check-list)	Day 2: Team Building Activity Mentor/Mentee Conversation (Mentee guided- use check-list) Journal Write: How would you describe your behavior at school this week and what would you do the same or differently in the future?
9	Mentors & Mentees	Relationship Topic: Cognitive (Values)	Day 1: Mentor/Mentee Relationship Building: Values Activity Mentor/Mentee Conversation (Mentee guided- use check-list)	Day 2: Mentor/Mentee Conversation (Mentee guided- use check-list) Journal Write: What new skills did you learn from your mentor this week? Will you implement them at school?
10	Mentors & Mentees	Relationship Topic: Identity	Day 1: Mentor/Mentee Relationship Building: Who am I? Mind Map activity Mentor/Mentee Conversation (Mentee guided- use check-list)	Day 2: Team Building Activity Mentor/Mentee Conversation (Mentee guided- use check-list) Journal Write: What did you learn about yourself this week?
11	Mentors & Mentees	Relationship Topic: Identity	Day 1: Mentor/Mentee Relationship Building: How do you want to be remembered? activity Mentor/Mentee Conversation (Mentee guided- use check-list)	Day 2: Team Building Activity Mentor/Mentee Conversation (Mentee guided- use check-list) Journal Write: Who do you believe you will be in the future?
12	Mentors & Mentees	Culminating Week Summary Topic: Goal Reflection	Day1: Mentor Guided Goal Reflection Conversation Mentee look at Journal entries and writes a final entry. Mentors write a "final journal write"	Day 2: Whole class discussion surrounding the experience, possible improvements, and feedback. (post-survey) Fun Mentor/Mentee Outing (Planning for January 2017)

Outcomes

Post-intervention surveys examined whether the intervention was effective at reducing challenges in behavior control and behavior needs. In addition to the surveys, weekly teacher behavior reports were used to determine if students experienced a decrease in Dean's List behavioral steps. Qualitative data was collected from mentees throughout the study process through weekly journaling that included both text and internet-based pictures chosen by students to reflect on weekly prompts. The weekly prompts were based on the relationship topic for the week. In addition to the journal prompts, researcher observations and mentoring conversation checklists were used to analyze changes in behavior problems and behavior control.

Measures

Within this mixed-method action research study, both qualitative and quantitative instruments were used concurrently. The qualitative data assisted in answering the "how" portion of the research questions and the quantitative data assists in answering the "in what ways" of the research questions. Qualitative data included researcher observations, weekly mentoring conversation check-lists, and weekly mentee journal responses using a picture collage and written format to respond, as well as a final mentor journal prompt. Quantitative data included a pre- and post-intervention survey, attendance, and behavior data collected by all people on campus in a system called "Dean's List".

Journal prompt with a written and collage response format (See Appendix A). In order to gain insight into the thoughts and feelings of the participants during each week of the mentorship process, all students were asked to answer a journal prompt by using a collage and written response format. Examples of the journal prompts are:

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- How do you feel about your mentoring sessions this week?

- How did your mentoring sessions affect your week at school?

- How have your mentoring sessions this week affected how you interact with other students and teachers?

- What was your favorite conversation you had this week?

Along with the journal prompt, students were given the following directions:

> Please select one or more pictures that you believe help you to answer the weekly journal prompt. Feel free to select multiple pictures and create a collage in order to answer the prompt. Once you have selected your picture or pictures, please answer the prompt using one or more sentences.

Students used pictures that they had either taken or that they found on the internet. These journals were submitted on "Google Classroom" on a weekly basis.

In addition to these mentee journal writes, the mentors were asked to complete a "final journal write" where they expressed their thoughts pertaining to the mentoring experience, provided ideas on how to improve the experience, reflected on whether or not mentee goals were met, and weighed in on whether the mentoring sessions were too long, not long enough, or just right.

Researcher observations. In order to record and reflect upon my experience during my action research project, I conducted observations and kept notes in an Excel spreadsheet.

I conducted observations during each mentoring meeting. During my observations, I focused on ensuring that students were following the mentorship model and procedures and staying on topic during sessions. In addition to this, I took notes

regarding any additional things that I witnessed, for example, "special moments" between mentors and mentees.

Approximately 15 minutes after each mentoring, I reflected upon what occurred during the mentoring sessions. The purpose of journaling was to help me to construct knowledge prior to discussing the information with other stakeholders. This was a way for me to document how I believed the mentoring program was progressing and any adjustments I thought might be helpful.

Mentoring checklist (see Appendix B). The mentoring checklist was completed by mentors during each mentoring session. The mentoring checklist consisted of basic information such as names, date, goal that was the focus of the conversation, and a section for notes. Mentors were asked to submit these at the end of each mentoring session on "Google Classroom." These were used to document topics that were covered during sessions and any potential important topics or comments about things that the mentor might have wanted to address during future mentoring sessions.

Weekly teacher behavior reports (Dean's List). All teachers utilized the behavior management tracker called "Dean's List," which is used to track negative student behavior. Teachers recorded specific negative behavior on the computer program called Dean's List. The system tracks negative behaviors on a daily, weekly, and yearly basis. Advisors provide students with a "Warrior Report," on Fridays that would inform students of his or her negative steps/points for the week. In addition to this information, each negative behavior "step" included a code that helped describe the type of behavior that occurred and a brief description of the incident. I had access to all students' information on Dean's List, which I recorded into a tracker on a weekly basis.

Pre- and post-survey (See Appendix C). Participants completed a pre- and post-intervention survey, which consisted of 28 Likert-type scale items. Participants completed the pre-intervention survey just before the training in mentorship began and the post-intervention survey was completed after the last mentoring session was completed. The survey was divided into three constructs to align to the targeted topics during peer mentoring. The three constructs were *connectedness*, *attitudes and behavior*, and *emotional skills and control.* Two of the constructs, connectedness and attitudes and behavior aligned to Behavior Problems whereas emotional skills and control aligned to Behavior Control. Each part of the questionnaire contained multiple items. Respondents choose among four possible responses: 4 = *strongly agree*, 3 = *agree*, 2 = *disagree*, and 1 = *strongly disagree*. The pre- and post-intervention assessments consisted of identical questions and required approximately 15 minutes for students to complete during a class session. Two examples of questions on the survey are: "I know I have the ability to do anything I want to do" and "I believe I have a bright future." These two surveys allowed me to analyze how students felt about the three constructs before and after the innovation and helped to determine whether there was a change in scores in any of the categories. Overall, I was able to determine if students' attitudes pertaining to Behavior Control and Behavior Needs were significantly different pre-intervention and post-intervention. The surveys were used in conjunction with the other data to create a comprehensive picture of participants' perceptions with respect to the constructs before and after implementation of the innovation.

Table 4

Timeline

Sequence	Procedures	Methods
May to June 2016	• Used needs assessment data to construct innovation.	• Met with campus "Culture Cabinet" in order to receive feedback.
July to September 2016	• Recruitment of mentor and mentee participants for the project • Three-week mentoring program training for 11th grade mentors.	• Distributed consent forms and letters to parents for student participants (mentors and mentees). • Collected student assent
October to December 2016	• Innovation began. • Students completed the pre-intervention survey. • Students participated in weekly mentoring sessions and completed mentor checklist. Students completed weekly journal entries.	• Pre-intervention survey • Weekly mentor checklists • Researcher Observations Journal • Weekly visual narrative journal
December 2016 to January 2017	• Students completed post-intervention survey • Analyze data (qualitative and quantitative)	• Post- intervention survey

Data Analysis

Qualitative Data Analysis

The qualitative data that was collected included participants' weekly pictures,

mentoring checklist, narrative based journal entries, and researcher observation

journaling. To analyze qualitative data, an inductive approach was used which means that

data was organized into general themes and categories. This process allowed for common

themes and categories to be identified. The goal was to gain an overall understanding of participant responses and how they related to one another.

Ivankova's (2015) steps were used in process of analyzing data. These steps included:

(1) Organize, transcribe, sort, and prepare the data for analysis.
(2) Review all data files to get a general sense of the collected information and to reflect on the overall meaning.
(3) Start coding the data and developing a qualitative codebook.
(4) Use the coding process to generate a description of the setting or people and categories and themes for analysis.
(5) Decide on the way to represent the qualitative findings in narrative reports organized by themes, visual diagrams, tables, and figures.
(6) Interpret the meaning of the findings focusing on the lessons learned in the context of the existing research and theories about the studied issue. (p.235)

From this process, an overall framework was created and qualitative data were explained and connected to the quantitative data to provide a full picture of the research findings.

Quantitative Data Analysis

Due to the small number of participants, descriptive statistics were used to analyze the pre and post-intervention student surveys. The purpose of using descriptive statistics is to "describe and summarize quantitative information with the purpose of identifying trends and patterns in the data and uncovering potential relationships among the variables" (Ivankova, 2015, p. 220). Percent responding in each category was calculated and compared to identify differences from pre- to post-intervention surveys. In addition, paired-samples comparison (t-tests) tests were conducted to identify significant changes in sample means from pre to post-intervention.

To answer how and in what ways a cross-age mentoring program affected eighth grade mentees and eleventh grade mentors at this charter school, repeated measures t-test

results of pre- and post-test surveys were evaluated. The quantitative data analysis and the qualitative data analysis were triangulated to create a full overall picture of the action research study findings. The pre- and post-surveys and the behavior data from Dean's List served to answer the first research question pertaining to how a cross-age mentoring program affects eighth grade (mentees') behavior problems and control. However, the journal prompts and researcher observations served to answer the second research question pertaining to how the students engage with and experience the cross-age mentoring program. Table 5 summarizes how the measures that were used to answer the two research questions.

Table 5

Measures and Research Questions

Research Questions	Measures
How did a cross-age mentoring program affect eighth grade students' (mentees') behavior problems and behavior control based on both student survey data, weekly teacher behavior reports, journal prompt responses, and researcher observations?	• Pre and Post Surveys • Weekly teacher behavior reports (Dean's List) • Journal Prompt Responses
How did eighth grade student mentees and eleventh grade mentors engage with and experience the cross-age mentoring program across the intervention?	• Researcher Observations • Journal Prompts • Researcher Observations • Mentoring Checklist • Attendance

CHAPTER 4: ANALYSIS AND RESULTS

Warriors Mentor Warriors was a study conducted to address whether a cross-age mentoring program would have a positive effect on both eighth grade mentees and eleventh grade mentors. More specifically, the study addressed the following two research questions:

- How did a cross-age mentoring program influence eighth grade students' (mentees') behavior problems and behavior control based on survey data, weekly teacher behavior reports, journal prompt entries, researcher observations, and mentoring conversation checklists?

- How did eighth grade student mentees and eleventh grade mentors engage with and experience the cross-age mentoring program across the intervention?

In order to determine if, and to what extent the mentoring program influenced the mentors and mentees, both qualitative and quantitative measures were used to answer these questions.

Question One

The effect of the program on behavior problems and behavior control was examined using pre- and post-survey results, Dean's List negative behavior step counts, and the number of days the mentees attended mentoring sessions. In addition, qualitative measures, including mentee journal prompt responses, researcher observations, and mentoring conversation checklists, were analyzed.

Pre- and Post-Survey

Mentees (and a control group) were asked to take a survey both before and after the Warriors Mentoring Warriors program. The purpose of the survey was to assist the

researcher in answering the first research question pertaining to whether or not and to what extent the cross-age mentoring program would impact behavior problems and behavior control of the mentees. Within the survey, Connectedness and Attitudes and Behavior domains served the purpose of answering the part of the question pertaining to behavior problems, while Emotional Skills and Control domains answered the part of the question pertaining to behavior control. As depicted in Table 6, there were no significant findings in the survey results from the pre- to post-intervention assessment. Thus, in all three constructs there were not significant changes in the way in which the mentees or the control group answered the Likert scale questions. Thus, according to the survey results, the students did not identify positive or negative changes in their behavior control or behavior problems as a result of their experiences in the intervention.

Attendance

Within this study low attendance was observed. The mean number of days attended by the mentees, out of 17 days, was 9.25 days, which was only 54.4% of the mentoring sessions.

Weekly Teacher Behavior Reports (Dean's List)

In addition to survey results, behavior steps/points from Dean's List's weekly teacher behavior reports were collected both before and during the mentoring program for the mentees and the control group. The steps/points collected prior to the mentoring program were collected during the first eight weeks of school and the steps/points collected during the mentoring program also consisted of eight weeks of data. These steps/points served the purpose of showing if the eighth grade students had any changes in the number of negative behavior steps/points they received, which could assist in

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answering whether or not there had been a change in students' actual behavior problems. Negative behavior step/points were assigned to students as a negative consequence for such behaviors as interfering with learning, profanity, responsibility breach, and respect breach.

As depicted in Table 6, there were no significant findings pertaining to the number of disciplinary steps/points received by the control group or the mentoring group. Thus, this data does not help to conclude whether or not the mentoring program impacted the behavior problems of the participating students. However, there were two students who participated in the mentoring program who received more than ten steps less during the intervention period than prior to the intervention. Whereas in the control group, this type of decrease was not seen, and in fact, one student had an increase of 18 steps/points. Although the results were not significant, there were still decreases in the number of negative behavior steps/points for the students who had the highest attendance rates.

Table 6

Pre- and Post-Surveys and Weekly Teacher Behavior Ratings

Survey Categories	All Participants (N = 16)		Active Participants (N = 8)		Control Participants (N = 8)	
	Mean (*SD*)	Sig.	Mean (*SD*)	Sig.	Mean (*SD*)	Sig.
Connectedness- Pre	50.53 (8.94)		50.66 (11.11)		50.44 (7.92)	
Connectedness- Post	51.20 (7.41)	.55	49.66 (8.93)	.53	52.22 (6.59)	.27
Emotional Control- Pre	14.16 (3.68)		13.50 (3.29)		14.70 (4.05)	
Emotional Control- Post	13.66 (4.07)	.55	11.37 (3.85)	.154	15.50 (3.37)	.38
Attitudes/Behavior-Pre	21.81 (3.03)		21.28 (3.59)		22.22 (2.68)	
Attitudes/Behavior-Post	20.68 (4.31)	.15	20.28 (4.42)	.11	21.00 (4.47)	.37
Pre-Survey Total	90.72 (12.16)		90.13 (13.50)		91.20 (11.71)	
Post-Survey Total	89.61 (10.79)	.62	86.38 (8.43)	.21	92.20 (12.16)	.76
Behavior Steps	Mean (*SD*)	Sig.	Mean (*SD*)	Sig.	Mean (*SD*)	Sig.
Steps Pre-Intervention	10.56 (9.15)		13.50 (10.61)		8.20 (7.54)	
Steps During Intervention	10.56 (7.30)	1.000	9.88 (7.36)	.178	11.10 (7.61)	.22

Mentee Journal Prompt Responses

The journal prompts served to gauge how the students were doing in regards to

behavior problems and control throughout the mentoring program in their own words,

and there was a final prompt to receive feedback about their experience. Unfortunately,

due to the low attendance rate, the number of participants who regularly responded to the

journal prompts was also low, which provided less ongoing data than hoped. The journal

prompts were completed inconsistently for most participants and were not comprehensive

in what was written. There were seven journal prompts distributed throughout the

mentoring program, which means there were a total of 56 possible entries from the eight

participants; however, there were only 29 total submissions, which is 51.7% of the

number of submissions that were possible.

Although the purpose of the journal prompts was to see progress in behavior

control and behavior problems from the beginning of the program to the end, instead the

answers stayed relatively consistent. Both the tone of the responses (positive and

negative), as well as the actual contents of the responses were examined. One of the

students stayed consistently negative in his responses, whereas the other seven students

had consistently positive responses to the prompts. The contents of the responses were

very short and did not provide an in-depth look at how the participant was feeling; for

example, students responded with items like a thumbs up or a few word response like

"feels great." These responses were not as helpful as I hoped in helping to answer the

first research question. However, the final journal prompt, which was a reflection on the

mentoring program and the mentee's goals and was answered by five mentees, provided

more information. All five of the mentees clearly stated that they had met the behavior

control and behavior problem goals they set with their mentors. The mentees expressed

excitement surrounding the meeting of their goals. For example, one mentee stated, "I

met my goals!"

The major themes seen in the mentee journal prompts were: "positivity," "doing

the right thing," and "meeting goals." Due to the short nature of the journal responses,

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assigning themes was challenging. However, students expressed positivity through responses that included pictures of a thumbs up and statements like "I get along with everyone real good." The second theme, "doing the right thing" was a theme seen in multiple journal entries. For example, one mentee responded to the prompt about doing the right thing with a picture of three boxes one for yes, one for no, and one for maybe with the yes marked off. Another student stated, "I think it's important to do the right thing because if you don't do what's right it will affect you in the future." The final theme "meeting goals" was seen in all final journal entries completed by the five students who attending the last mentoring session.

Although the journal entries did not provide the insight for which I had hoped, they did provide some information about the mentees' experiences during the intervention. The themes were positive overall and students who attended and completed the journals described an overall good attitude towards meeting their goals, which mean they made positive progress towards improving their behavior problems and behavior control.

Researcher Observations

During the mentoring process, I kept a log of various things that I observed during each session of the mentoring program, either as I spoke to students or as I silently observed. I found these notes to be a rich sources of data due to the large amount of information I was able to gather.

I first noted the structure of each of the mentoring meetings. Each mentoring meeting began with students entering the classroom at approximately 7:40. The time varied from student to student and day to day due to various circumstances; however, the

expectation that was voiced to the students was the need to be in the room by 7:40. Next, students sat next to their mentee or mentor in order to allow for productive conversations to occur between the pairs. After the pairs were seated around the room, I would make announcements regarding the expectations, such as tasks to be completed by each individual or about the topic on which we would be focusing. In addition, this was also the time when any major issues that occurred within the group were discussed and time was allowed for the group to problem solve. For example, some students took this time to problem solve around specific homework assignments or struggles with teachers. Next, mentors would go to Google Classroom and open the Mentoring Checklist for the day. The structures of the conversations were relatively consistent, as the mentor would go over the two goals, then they would ask the mentee which goal they would like to work on. The pair would discuss various items relating to that specific goal. By the end of the conversation, the mentees would have a plan of attack for the next few days that they could implement in order to make strides towards achieving their larger goal. If there was time, the mentors took it upon themselves to help the mentees check their grades and complete work from their classes. At the end of the mentoring session, mentees would complete journal prompts if there was one assigned. All observed interactions were positive and structured.

In addition to keeping notes regarding the structure of the sessions, I also kept notes on specific conversations I had with mentees during the meetings that I felt aligned to the research questions. I noted numerous statements made by mentees that supported a positive effect of the mentoring program on their behavior control and problems. One student in particular, a female mentee, came to me and told me that she attributes her

improved behavior and grades to the relationship she has made with her mentor. The improved behavior and grades were not just a perception of the student but could be seen in a decrease in steps on the weekly teacher behavior ratings and an improvement of grades across all subject areas. Another female student informed me that she looks forward to the mentoring meetings and her goal of arriving to class on time has made a big improvement in her relationship with her teachers.

Although the quantitative data did not show significant findings in improved behavior, I was able to see students work through behavioral issues with their mentors during each session, as well as have conversations with students about the improvements that they had seen within themselves. The overall response to the mentoring meetings was positive and the mentees voiced on several occasions that their mentors helped them with identified behavioral issues.

Mentoring Conversation Checklists

Each mentor was asked to complete a Mentoring Conversation Checklist after their conversations with their mentee. Mentors were asked to submit these documents on Google Classroom. Although the expectation was voiced to mentors on numerous occasions, the mentors often forgot to submit these forms or ran out of time. The mentors tended to place a large focus on having the conversation and less focus on completing the forms. I used my observation notes as a place to note that conversations were occurring and that they were conversing about the appropriate topics. Thus, this source of data is inconsistent and does not provide the data I hoped it would. Instead, my researcher notes are far more reliable and consistent when it comes to noting conversation topics and progress of mentees.

Out of the 136 possible Mentoring Conversation Checklists that could have been completed by the mentors, only 73 were completed. This is a low completion rate of only 53.7%.

Question Two

Exploring how mentors and mentees engaged with and experienced the cross-age mentoring program was answered using journal prompts of both mentors and mentees, researcher observations, and Mentoring Conversation Checklists.

Mentor and Mentee Journal Prompt Responses

Both mentors and mentees were given journal prompts to respond to throughout the process. The purpose of the journal prompts for the mentees was twofold. The first purpose was to assess their progress in regards to behavior problems and control throughout the intervention, and the second was to assess their experience of the intervention itself. The mentors only responded to one journal prompt at the end of the intervention, which asked them to reflect on four questions pertaining to their overall experience in the program, how they would change the program, whether their mentee accomplished their goals, and their thoughts about the time spent in the mentoring sessions. These journal prompts allowed me to gain insight into how both the mentees and mentors engaged with the cross-age mentoring program.

The mentee engagement with the journal prompts was minimal in multiple ways. As stated above, only 51.7% of journal entries were completed by mentees, and the entries were not substantive for many of the entries. The mentees included very little detail in their journal responses. For the most part the mentees responded with a few words or a sentence at the most in conjunction with one picture that they found on the

internet. The words or the sentence did answer the questions; however, they did not provide an in-depth look into the thoughts and feelings of the mentees. Thus, the mentees' engagement with the journal prompts was low overall and reflected their attendance, more than their actual engagement with the intervention process when they did attend sessions.

The mentors, however, had a slightly higher completion rate for their one journal prompt, which was 62.5% (5/8), and were far more comprehensive in their responses. Although 62.5% might seem low, it is important to note that all of the mentors who attended the last session completed the journal entry. The journal entry included four or more sentences, which could be attributed to the lengthier journal prompt that provided more detail for the mentors to engage with. In addition to the higher response rate and longer answers, the mentors also provided responses that were more thoughtful and gave information that showed a much higher level of engagement with the questions. For example, the mentors provided valuable data surrounding their attitudes about the overall mentoring experiences. All of mentors who answered the journal prompt provided positive feedback pertaining to their overall experience in the program and showed that they were very engaged with their mentees. The two themes seen in the journal responses were "growth/improvement," "positivity," and "new perspective." Some of the responses under the theme of new perspective were:

- "It helped [me] understand other people and see how they see the world."
- "It was fun when we got to be together and it was nice to bond with someone younger than me. As well helping her to become better person for herself and just have a nice talk."

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One journal prompt that shows the theme of positivity was, "The experience during this mentoring program was something really good, I liked having a younger one look up to me and tell me about her day and tell me her struggles in school and outside of school." An example that shows the theme of "growth and improvement" was "My mentee did accomplish her goals, even if I wasn't in all of the [meetings]. She was able to accomplish them making me very proud of her." The overall responses suggested that the students enjoyed the experience and felt as if it provided them with a new perspective. From all responses, mentor engagement and enjoyment of the intervention appeared high.

Researcher Observations

The engagement level when students attended the mentoring sessions was high and the enthusiasm was always present from both the mentors and mentees. Mentors and mentees were always excited to see one another and they never wasted any time beginning their conversations. The mentor and mentee pairs even created secret handshakes. I was always impressed by the desire of both mentor and mentee to make the most of their time during each and every session. It was always exciting to see the organic conversations that grew out of the interactions. The students entered the room with enthusiasm, both mentors and mentees immediately took their seats, mentors would begin the conversations as soon as they were seated with their mentoring conversation questions open. The commitment to the mentoring program was seen in the urgency they expressed to start the meetings on-time and follow the protocol with fidelity.

Mentors took incredible ownership of the program from the very beginning. I provided the mentors with the overall structure of what sessions should look like, but then they went beyond this framework and took the responsibility to design the

mentoring program and make it their own. Over the three-week training period, mentors were provided with topics and a framework, and then they worked together in order to form the mentoring program.

On day one, I provided the mentors with an overview of the program and introduced the research that supported the need for a cross-age mentoring program on campus. The mentors listened to the reasoning and participated in a conversation about the needs of the eighth graders. The mentors also participated in completing a PowerPoint called "What Being a Mentor Means to Me!" I asked mentors to work together to create a slide show that showed what being a mentor meant to them. Each mentor added a slide to the slide show with pictures and key words that supported the topic. Some of the key words were: support, perseverance, accountability, trustworthy, leader, inspire, success, and advice. See Figure 1 for an overview of the slide show that was created. All of the words and images were positive and showed an excitement about the process. In addition to this activity, mentors completed a short writing activity, only requiring a three to four sentence response, about why they would like to be a mentor, and they provided responses like, "I enjoy helping other people" and "It seems fun and I would like to help out and give them support." Overall, the responses were positive and all of them showed an excitement and interest in helping others, especially younger individuals.

Figure 1. What being a mentor means to me! Slide show.

On day two, mentors looked at what it meant to be a good role model because all of them had agreed that being a good role model was imperative to the success of the mentoring program. Mentors worked together to design what they believed it meant to be a good role model by assigning words and images that answered the following questions:

- What does it mean to be a good role model?

- What traits should we have in order to be considered a good role model?

- What can we do in order to be good role models to the mentees?

- What will this look like and sound like?

All of the mentors worked together enthusiastically and collaboratively to answer these questions. They created a slideshow that they presented to me with the responses to each of these questions. It was comprehensive and a very impressive display of their

understanding of the concept. Figure 2 shows an overview of the presentation that they created.
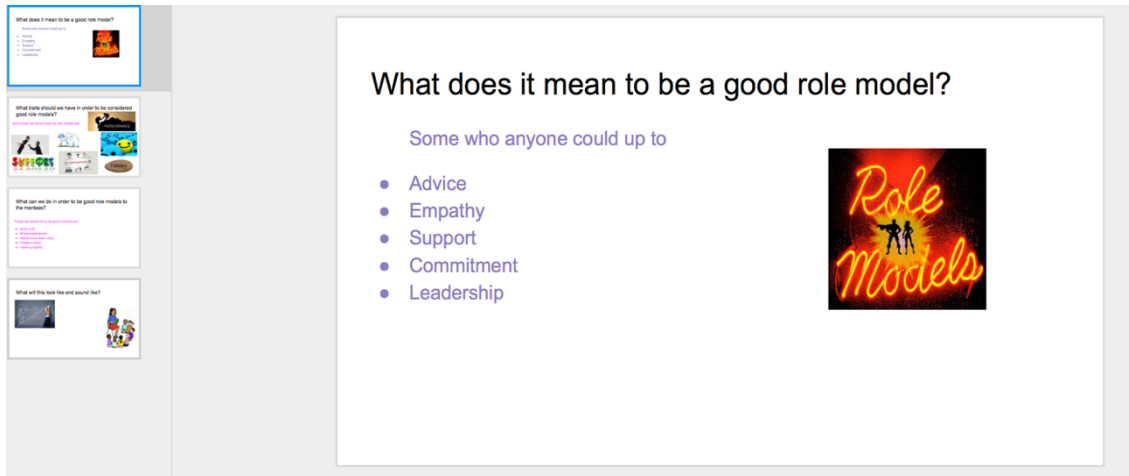

Figure 2. What does it mean to be a good role model? Slide show.

On day three, mentors participated in a role play surrounding the creation of SMART goals. First, I introduced the format of the SMART goals that they would be using with the mentees and then they worked together to role play using the SMART goals template to set goals. The mentors paired up and had rich conversations surrounding the development of SMART goals. Each pair developed goals and submitted them to me for feedback. The goals were very comprehensive and aligned to the expectations that I had presented to the mentors at the start of the lesson.

On day four, I introduced the Mentoring Conversation Checklist. I demonstrated how it should be used and discussed the expectations surrounding the submission of the checklists. The mentors then paired up and practiced using and submitting the checklists. They provided positive feedback to this tool and submitted excellent practice checklists.

On days five and six, I introduced the Mentoring Session Agenda, which described to the mentors what each mentoring session should look like (see Appendix D). Over those two days, the mentors paired up with one another and practiced going through the mentoring process using the tool provided. The students openly asked for feedback and enthusiastically worked together to master the mentoring process. The mentors took their roles very seriously and wanted to ensure they mastered the content. In addition to practicing these skills, the mentors also conversed about the best way to pair mentors with mentees. Mentors were insistent upon having the mentees select the mentors in order to assist in the process of building positive relationships from day one. With this being said, it was clear that the mentors understood the importance of building positive relationships in the mentoring process.

During the mentoring sessions, the mentors were highly engaged in the process. The mentors showed accountability by e-mailing me if they would be absent or late, which was not a requirement but they took the initiative on their own accord. In addition to this accountability, the mentors arrived on time and immediately made it a point to take their mentee to a seat and start the conversation. Not only did the mentors follow the Mentoring Session Agenda, they also took it upon themselves to check their mentees' grades, ask about behavioral steps for the week, and go over homework with their mentee. It was impressive to see how the mentoring sessions became their own and they authentically engaged with their mentees in a productive manner, in addition to following the Mentoring Session Agenda. The conversations were positive, encouraging, and supportive; I even witnessed multiple high fives and hugs. The overall bond that was

created between the mentors and mentees was something that I did not anticipate in this short time frame but it certainly was present.

One of the best moments that truly cemented in my mind the positive impact the program was having on the mentees, was the time where one male mentee entered the room quite distraught. His mom was upset with him prior to him leaving the house because his grades were not what she classified to be as "good." The look on his face was heartbreaking, he was not the normal talkative student I knew, and he did not want to really share the struggle he was having with me. However, to my excitement, when his mentor entered the room, his demeanor changed. His mentor immediately stepped into his role as role model and support person, he gave his mentee a hug and sat down and worked through the issue. The conversation was so fluid and organic. At that moment, I knew relationships had been built and the mentoring program was affecting the students. This building of meaningful relationships is exactly what the Rhodes Model aims to accomplish.

Mentees were also engaged in the process; however, the mentees appeared a little less invested in the process in several ways. Mentees expected the mentors to do a larger majority of the work and did not take as much responsibility for the mentoring process. In addition to this, the attendance rate of mentees was lower, which could have been indicative of the level of engagement of the mentees.

Overall, there was a high level of engagement amongst participants when they were present at the mentoring meetings, but the sporadic attendance of mentees leaves questions about whether they felt it was worth coming in early in the morning to engage in these sessions.

Mentoring Conversation Checklists

The Mentoring Conversation Checklists did not capture the level of engagement as originally hoped. The expectation expressed to the mentors during training was that they needed to submit a Mentoring Conversation Checklist at the end of each mentoring conversation; however, the mentors were very inconsistent in the submission of these forms. Not only were they inconsistent, but the forms also did not have enough detail to be helpful for future conversations or for me to gain an understanding of their mentoring conversations. The level of engagement in this activity seemed to be low; however, when I asked the mentors why this was occurring, they had a consistent response that they were just forgetting to do them or they were running out of time. Thus, it is hard to determine if the lack of submission or minimal writing on the forms is due to a lack of engagement or due to a lack of time or mentors being too engaged in the conversations to remember to complete them.

Conclusion

Overall, the goal of this research study was to answer the two research questions regarding if, and to what extent, the mentoring program affected the mentees' behavior control and behavior problems and the levels of engagement in the mentoring program by the mentors and mentees. The data that was collected and analyzed for the first question was both qualitative and quantitative in nature and included the following: pre- and post-survey data, weekly teacher behavior reports, mentee journal prompts, mentee attendance rates, Mentoring Conversation Checklists, and researcher observations. The data that was collected and analyzed for the second questions were qualitative in nature: mentoring conversation checklists, mentor and mentee journal prompts, and researcher observations.

Data did not show significant changes in behavior control and behavior problems for either the intervention or control group; however, the researcher observations did suggest some insight into the excitement with which students arrived to the mentoring sessions, and their own reports that this was helping them feel better about and do better in school.

The researcher observations and mentors' journal prompt responses also highlighted the high engagement levels of the mentors throughout the process from the training to the final day and suggested that mentees were highly engaged when they attended. The poor attendance rates and lack of mentee journal responses, however, did not suggest a high level of engagement in the intervention by the mentees.

CHAPTER 5: DISCUSSIONS AND FINDINGS

Warriors Mentoring Warriors was a study conducted to address whether a cross-age mentoring program would have a positive effect on both eighth grade mentors and eleventh grade mentees. More specifically, the study addressed two research questions and the following is a discussion of the findings.

Question One

How did a cross-age mentoring program influence eighth grade students' (mentees)' behavior problems and behavior control based on survey data, the weekly teacher behavior reports, the journal prompt entries, the researcher observations, and the Mentoring Conversation checklists? The quantitative data did not show any significant overall changes in behavior problems or behavior control amongst the participants. However, students who had good attendance in the mentoring program showed growth in behavior control and behavior problems, even if the changes were not significant.

The quantitative data did not provide evidence of participant change in behavior control and behavior problems; however, these findings are aligned to the findings of other researchers who have looked at cross-age mentoring programs. There are several reasons why this may have occurred. There was poor attendance by mentees and the mentoring program was less than ten weeks in length. According to multiple studies (Karcher, 2005, 2007), programs lasting less than a year, especially those lasting shorter than a ten-week period of time, often do not have significant results. Given the brief nature of this intervention (nine weeks) and the fact that the majority of participants did not even attend all of the sessions, it was not surprising that there were no significant changes in behavior control or problems.

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There was also a lack of data due to low mentee attendance rates, inconsistent completion of documents (journal prompts and Mentoring Conversation Checklists), and the mentee journal prompt responses which did not provide detailed answers to the questions. Measures used to collect data, more specifically the survey and the journal prompts, may not have been sensitive enough to capture small gains in behavior improvements. The journal prompts should have had more explicit directions, in addition to more specific questions to elicit more in depth responses from participants.

Also, the population of students studied was different than originally intended, which may have limited the potential growth of students in the program. The mentee selection was originally based on the previous year's behavior data, in order to target at-risk students; however, due to limited numbers of these students volunteering to participate, recruitment was opened up to the general population of eighth grade students. Thus, there was a mixture of students classified as "at-risk" and those classified as not "at-risk" who participated in the program as either an active or a control. When students who were not considered "at risk" were included, they did not have as many problem behaviors as would have been anticipated from those "at risk." Thus, they did not have as much room for growth as a result of the intervention.

Unfortunately, poor attendance rates greatly impacted the amount of the intervention that students received. This was most likely caused by the timing of the mentoring sessions, which were early in the morning before school. Students stated that is was challenging for them to make it on time due to ride issues, siblings who didn't want to go early to school, and parents who were not able to get them there on time. Students begged to change the program to a time that would better suit their schedules.

After a lot of contemplation and many conversations with administration, it was deemed impossible for this intervention. However, even with the poor attendance rates, all eight mentees stated that they wanted to be there. In fact, the students expressed a clear frustration when they could not attend and provided reasons for each absence. The overall sentiment surrounding the mentoring sessions was positive, but it was at an inconvenient time for most students.

The students who engaged with the program on a regular basis did show improvements in their behavior control and behavior problems, which could be seen in their journal entries, conversations with the researcher, conversations with their mentors, and negative behavior step decreases (even though these behavior step decreases were not significant). The students who showed up regularly showed consistent improvement in their behavior, which could be seen in their lower step counts. In addition to the decrease in step counts, these were also the students who were very vocal regarding their excitement about the impact that the mentoring program was having on their ability to behave in school. For example, two of the students who actively engaged (had good attendance) in the mentoring program saw considerable decreases on their negative behavior steps/points. They reduced the number of negative behavior steps/points seen on the weekly teacher behavior reports from before the intervention to during the intervention by 12 and 14. Given their total number of steps/points of 19 and 14 respectively during the intervention as compared to 31 and 28 respectively prior to the intervention, this shows a large rate of decrease, even if the overall group did not change significantly. The data did not show significance for the overall mentee population because not all mentees experienced these results, and some mentees did not see any

improvement at all. The mentees who did not see an improvement tended to be the mentees who did not have a high step/point count to begin with and stayed consistent with a lower step count overall (not really "at risk" at the beginning of the study). These students did exhibit a positive attitude during the sessions and also in the science classroom across the intervention.

Most CAMPs studies measure mentees' connectedness, academic achievement, social acceptance, and other various school and social-related youth issues, which were not explored in this particular study. While these are important, and have been previously shown to be improved by using CAMPs (Karcher, 2005; Simon et al., 2008), the goals of this study were purposefully limited to the issues of behavior problems and control, which were initially identified as a primary issue for these students. It is possible that these other measures may have been impacted by this intervention if they had been explored, but the brief nature of the intervention would likely similarly impact the ability to effect change in such a short time with these other measures as well.

Question Two

How did eighth grade student mentees and eleventh grade mentors engage with and experience the cross-age mentoring program across the intervention? Mentees who attended and regularly engaged with the program engaged deeply in the sessions with their mentors. In addition to the mentee experiences, mentors engaged actively and positively with the program from the training all the way to the final journal prompt. There is currently not literature pertaining to how the mentors and mentees engage with the various mentoring programs but instead they measure the effects in specific areas as a result participation in the programs.

In every mentoring session, students were observed engaging in positive communications with one another. Both mentors and mentees appeared excited to come to the mentoring meetings. For example, they would come to the classroom at all hours of the day to ask if there was a mentoring meeting scheduled for the next day. Upon arriving to the meetings, the students would show excitement by greeting one another energetically, smiling, participating in their own handshake that they created, and usually even a hug. Mentors and mentees would immediately find one another, sit down, and begin their work together without any prompting. Mentors were not afraid to ask the mentees about their behavior at school and enthusiastically gave high-fives to mentees who met their goals and diligently sought answers from those who did not. It was not uncommon to hear mentors demanding that a mentee open up their grade book and take out their homework, and the mentee would always comply. The meetings ran themselves, both mentors and mentees engaged to such an extent that I never had to intervene. The relationships that were built between the mentor and mentee were aligned to that of the Rhodes Model (DuBois & Karcher, 2011) where a mutual trust and empathy was formed. When students were present, they were engaged, and there was evidence of relationships forming between mentors and mentees. `

Unfortunately, there was very limited existing research in the literature on the way in which mentors and mentees engaged in the program because there is far more quantitative research on the effects of the program on mentors and mentees. The research on how mentors have engaged is limited, but the results of positive engagement have been shown in multiple studies to have a positive effect on mentors as well as mentees. According to Karcher (2007), who looked at a wide range of literature pertaining to the

effects of CAMPS, multiple studies found that when mentees engaged in the mentoring programs positive effects were seen in self-esteem, behavioral problems, social skills, and attitudes. These positive relationships between mentors and mentees appeared, based on the researcher observations, like the key to program retention, and the behavioral improvements that were observed for those students who attended.

Limitations

Within this study there were multiple limitations that need to be addressed. First, the small sample size was a concern as it limits the analyses that can be done and reliability of the results. The study was originally intended to include ten active mentees, and ten control students; however, only eight were able to be recruited to each group. These participants were also originally intended to only include students who had been struggling in school the previous year (considered more high risk for developing problems this year). However, in order to recruit even eight students to the program, recruitment had to be opened up to the larger population of all eighth grade students. Adding five students who were not considered to be in this high risk category could have affected the results of the study by decreasing the variability in the weekly behavior counts at both baseline and throughout the intervention. The students who were not considered high risk for problems in eighth grade were randomly assigned across the two conditions (two in the control and three in the intervention group), however, as this was intended to minimize the impact of including students who were not struggling in the previous year.

Finally, experimenter bias is a concern in this study due to the large amount of data that was collected by the researcher as "researcher observations." Due to the lack of

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sensitivity of the other measures, the researcher observations became a large source of data to support the successes of the intervention, but were based on the observations and conclusions of the researcher alone, and did not have additional information to validate those findings.

Future Considerations

While strong relationships were observed between the mentors and mentees when they attended the sessions, there are several things to consider for running these interventions in the future that may improve the feasibility, sustainability, and outcomes of participants.

First, scheduling considerations should be taken into account for future mentoring programs. The duration of the mentoring program should exceed ten weeks, the time allotted for each mentoring session should be one hour, and the time that is designated for the program should be at a more convenient time for both mentors and mentees. According to multiple studies (Karcher, 2005, 2007), programs lasting less than a year do not usually yield significant results. Thus, it would be imperative to plan a mentoring program that would allow mentors and mentees to meet throughout an entire year. In addition to a year-long program, planning the mentoring program at a convenient time would ensure a higher attendance rate of mentees. The better the attendance rate, the more the mentors and mentees will gain from the meetings.

Second, additional measures may be valuable in capturing more sensitive information about changes in participants' behavior. For example, interviews could be used to capture the thoughts and feelings of mentors and mentees, and the completion of measures, such as the mentoring Conversation Check List, should be monitored more

carefully. Participants should also be given more dedicated time to complete the journal entries with clear and explicit guidelines for what is expected to ensure more complete information from participants about their experience. Finally, academic grades of mentees could also be useful information to gather in future interventions to capture possible academic improvements as a result of the mentoring program.

Conclusion

Overall, the mentees who attended and participated reported improvements in their behavior control and behavior problem goals and formed positive relationships with their mentors, even if there were not significant reductions in problem behavior on the survey or weekly teacher behavior ratings. In addition to these findings, mentors positively engaged with the program and found joy in helping students who were younger than themselves. The Culture Cabinet at the charter school found that these results were significant enough to continue the program beyond the scope of this study. In addition to continuing the program, they decided to schedule the program during the school day and expand the number of participants to fifteen mentees. Thus, this mentoring program became a permanent fixture in the way in which this charter school addressed behavior problems and behavior control amongst students.

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APPENDIX A

JOURNAL PROMPTS

Mentees:

Prompt 1: What are your thoughts and feelings about your relationship with your peers?

Prompt 2: How do you feel about your ability to communicate with your peers?

Prompt 3: How would you describe your behavior at school this week and what would

you do the same or differently in the future

Prompt 4: What new skills did you learn from your mentor this week? Will you

implement them at school?

Prompt 5: What did you learn about yourself this week? How did it affect your behavior

at school?

Prompt 6: Do you believe it is important to do the right thing?

Prompt 7: Reflect on your previous journal entries. How do you feel you have grown

over the past 6 weeks? Did you meet your goals? Why or why not?

Mentors:

Please reflect on the following questions:

- What do you think about the overall mentoring experience?

- What would you change about the mentoring program?

- Did your mentee accomplish their goals? If not, why do you think this happened?

- What are your thoughts about the amount of time you spent in mentoring

  sessions?

APPENDIX B

MENTORING CHECKLIST

Warriors Mentoring Warriors: Cross-Age Mentoring Program

Mentoring Checklist

Mentor Name_____

Mentee Name_____

Date _____

Direction: Please check all topics that you discussed during your mentoring session.

____ Behavior Problems
____ Behavior Control

Comments about the mentoring session: (specify topic)
_____
_____
_____
_____
_____
_____
_____
_____
_____

APPENDIX C

PRE- AND POST-SURVEY

Warriors Mentoring Warriors:
CAMPS Pre- and Post-Survey

Please select your gender below.
- ❍ Male
- ❍ Female

Please select your ethnicity below.
- ❍ White
- ❍ Hispanic or Latino
- ❍ Black or African American
- ❍ Native American or American Indian
- ❍ Asian/Pacific Islander
- ❍ Other

Please select your grade level below.
- ❍ 7th grade (1)
- ❍ 8th grade (2)

Select the circle that best describes how much you agree or disagree with each statement about Academic and Adolescent Connectedness.

	Strongly Agree (4)	Agree (3)	Disagree (2)	Strongly Disagree (1)
Spending time with my friends is important to me. (1)	○	○	○	○
I work hard in school. (2)	○	○	○	○
I care what my teachers think of me. (3)	○	○	○	○
I will have a good future. (4)	○	○	○	○
I enjoy being at school. (5)	○	○	○	○
I get along well with all of my teachers. (6)	○	○	○	○
Doing well in school will help me in the future. (7)	○	○	○	○
I like working with my classmates. (8)	○	○	○	○
I want to be respected by my teachers. (9)	○	○	○	○
I really like who I am. (10)	○	○	○	○
I do well in school. (11)	○	○	○	○
I try to get along with my teachers. (12)	○	○	○	○
I feel good about myself when I am at school. (13)	○	○	○	○
I am liked by my classmates. (14)	○	○	○	○
My friends and I spend a lot of time talking about things. (15)	○	○	○	○
I rarely fight or argue with other kids. (16)	○	○	○	○

Select the circle that best describes how much you agree or disagree with each statement about Emotional Skills and Control.

	Strongly Agree (4)	Agree (3)	Disagree (2)	Strongly Disagree (1)
I can stay calm in stressful situations. (1)	○	○	○	○
I stay calm and overcome anxiety in new or changing situations. (2)	○	○	○	○
I stay calm when things go wrong (3)	○	○	○	○
I stay calm when I am frustrated in class. (4)	○	○	○	○
I do not allow others to make me angry. (5)	○	○	○	○

Select the circle that best describes how much you agree or disagree with each statement about your Attitudes and Behavior.

	Strongly Agree (4)	Agree (3)	Disagree (2)	Strongly Disagree (1)
I do the right thing (1)	○	○	○	○
I don't get in trouble at school (2)	○	○	○	○
I feel good about the way that I act at school. (3)	○	○	○	○
I act the way I'm supposed to act at school. (4)	○	○	○	○
I believe doing what I believe is right, even if my friends make fun of me. (5)	○	○	○	○
Standing up for what I believe, even when it is unpopular to do so. (6)	○	○	○	○
I believe in telling the truth, even when it is not easy. (7)	○	○	○	○

APPENDIX D

MENTORING SESSION AGENDA

Mentoring Session Agenda

1. Mentor reads the mentee's goals to the mentee.

2. Mentor asks which goal mentee would like to focus on for this conversation. (check-list)

3. Mentor facilitates the conversation around these questions: (Social emotional, cognitive, and identity development through this process)

   a. How are you doing with your goal?

   b. Where are you now? What's going on?

   c. How do you get there?

4. Mentor makes a plan for follow-up and support surrounding discussed topics.

APPENDIX E

INSTITUTIONAL REVIEW BOARD APPROVAL

ASU Knowledge Enterprise Development

APPROVAL: MODIFICATION

Erin Rotheram-Fuller
Division of Educational Leadership and Innovation - Tempe
-
Erin.Rotheram-Fuller@asu.edu

Dear Erin Rotheram-Fuller:

On 7/21/2016 the ASU IRB reviewed the following protocol:

Type of Review:	Modification
Title:	Warrior Mentors: Cross-Age Mentoring Program
Investigator:	Erin Rotheram-Fuller
IRB ID:	STUDY00003501
Funding:	None
Grant Title:	None
Grant ID:	None
Documents Reviewed:	• Phase II Parent Consent Form (Mentor), Category: Consent Form; • Phase I Student Assent Script , Category: Consent Form; • Phase I Parent Passive Consent (Survey), Category: Consent Form; • Phase I Teacher Consent Form, Category: Consent Form; • Phase II Mentoring Assent Form, Category: Consent Form; • Pre and Post Survey (Mentees), Category: Measures (Survey questions/Interview questions /interview guides/focus group questions); • Principal Letter of Support.pdf, Category: Off-site authorizations (school permission, other IRB approvals, Tribal permission etc); • Student Needs Assessment Survey, Category: Measures (Survey questions/Interview questions /interview guides/focus group questions); • Sample Journal Prompts , Category: Participant

	materials (specific directions for them); • Phase II Parent Consent Form (Mentee), Category: Consent Form; • Phase I Teacher Recruitment Letter, Category: Recruitment Materials; • Mentoring Checklist, Category: Participant materials (specific directions for them); • Teacher Survey, Category: Measures (Survey questions/Interview questions /interview guides/focus group questions); • IRB Application , Category: IRB Protocol; • Teacher Interview, Category: Measures (Survey questions/Interview questions /interview guides/focus group questions);

The IRB approved the modification.

When consent is appropriate, you must use final, watermarked versions available under the "Documents" tab in ERA-IRB.

In conducting this protocol you are required to follow the requirements listed in the INVESTIGATOR MANUAL (HRP-103).

Sincerely,

IRB Administrator

cc: Melanie Larson
        Melanie Larson