2020

Mentor and Mentee Ratings: Are They the Same or Different?

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MENTOR AND MENTEE RATINGS: ARE THEY THE SAME OR DIFFERENT?

A Capstone Project Presented in Partial Fulfillment

of the Requirements for the Degree Bachelor of Arts

with Mahurin Honors College Graduate Distinction at

Western Kentucky University

By

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May 2020

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ABSTRACT

Mentoring is the pairing of two people where the mentor is meant to be a role model and companion for the mentee in the mentee's area of struggle or deficit. These relationships are meant to be support systems that encourage positive outcomes in youth through frequent meetings between youth and older volunteers. Participants in this project were undergraduate students (i.e., mentors) and middle-school students (i.e., mentees) attending an alternative school in the east south-central region of the United States. The purpose of this school-based case study was to examine the experiences of five mentor and mentee pairs through weekly survey data. Specifically, level of agreement between mentor and mentee was examined. The results of the weighted kappa test showed that overall agreement was slight. However, more variability was observed across sessions. Limitations and future directions are discussed.

I dedicate this project to my younger sister and best friend Kara who will be beginning her journey as a Hilltopper in the Fall

ACKNOWLEDGEMENTS

I would first and foremost like to thank Dr. Sarah Ochs for all the countless hours of guidance and support she has given me over the last three years. She has showed me what it means to truly love what you do and carry out each day with a positive attitude. She has helped me through this project every step of the way and I would not be the person or student that I am today without her. I would also like to thank Dr. Cheryl Wolf for being such a huge help to me as I have been getting started in the Counseling program and for supporting me on this project.

Thank you also to my wonderful family and friends for supporting me throughout this project. You all have been amazing to me as I have been working and learning. You all encourage me to be the best that I can be and for that I am forever grateful.

Vita

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PRESENTATIONS

Zarotny, B.A., Keown, J., Lemon, H., & Ochs, S. (2020, April). *Does a writing screener function differently across response types and grades?* Poster presentation at the 2020 CEBS Reach Week Student Poster Session in Bowling Green, KY.

Zarotny, B.A. & Ochs, S. (2020, February). *School-based Mentoring in an Alternative Setting: Mentor and Mentee Experiences.* Poster presentation at the 2020 National Association of School Psychologists Annual Convention, Baltimore, MD.

East, C., Mulaski, J.C., **Zarotny, B**., & Ochs, S. (2019, April). *Exploring alternate-form reliability for written expression.* Poster presented at the 2019 CEBS Reach Week Student Poster Session in Bowling Green, KY.

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Mentoring

In the broad sense, mentoring is when an individual with an advanced skillset or experience is paired with someone with less knowledge or experience. A new employee may be paired with a mentor at his or her job or a college freshman may be paired with a senior in the same academic area. Mentoring is the pairing of two people where the mentor is meant to be a role model and companion for the mentee in the mentee's area of struggle or deficit. Although a mentoring relationship can be between individuals of any age, youth mentoring is a particularly popular area that has experienced tremendous growth over past two decades (Grossman, Chan, Schwartz, Rhodes, 2012). These relationships are meant to be support systems that encourage positive outcomes in youth through frequent meetings between youth and older volunteers (McQuillin & Lyons, 2016). This mentoring relationship gives a stable support system to youth who may not have those supports at home or in other parts of their school lives. Each mentoring relationship will vary by the needs of the mentee and how they are best encouraged and supported. This relationship is especially helpful as the mentee is going through many environmental changes that may be emotionally and socially straining (McQuillin & Lyons, 2016).

Having healthy relationships with adults has been associated with benefits for youth including improvements in academic outcomes, eating behaviors, and mental health, as well as life satisfaction, social skills, safety in sexual health, and reduced violence (McMorris, Doty, Weiler, Beckman, & Garcia-Huidobro, 2018; Raposa et al.,

2019). Although youth mentoring is facilitated through a variety of settings (e.g., community agency like YMCA), schools are an effective way to work with already enrolled youth. The school system is a place that when available can supply potential resources and funding to match a student in need with a reliable mentor who can provide targeted support for the areas in which they are struggling. Many at risk youth do not have an adult in their life that can be an example or positive role model for them, therefore this stability and support can be beneficial for the young developing student.

A recent meta-analysis of 70 youth mentoring studies found an average small effect size of .21 ($p < .001$), with some studies reporting moderate effect sizes. A correlation has been found between educational issues such as low grades and school absences have been positively correlated with mentees who engaged in risky health behaviors (such as substance abuse or sexual behavior), history of complex mental health problems, and abuse exposure Raposa et al., 2019). Without an effective support system, can alter the rest of their lives. The mentor is there for the youth to talk to and look up to so that they do not have to struggle in isolation and without help.

School-based Mentoring

In school-based mentoring (SBM), youth meet with mentors during or after school in the school building, unlike traditional community-based mentoring (CBM) where meetings take place outside the school setting and each match chooses where and when they will meet (Schwartz et al., 2012). In SBM, the mentors are given instructions and training on how to handle the sessions with the mentee. One way in which SBM and CBM have been shown to differ is that mentors in SBM tend to be more demographically

diverse than those in CBM and spend relatively more time working on academic goals with their mentee (Herrera, Sipe, & McClanahan, 2000).

The most successful SBM programs have been ones that use a guide and target specific psychological, behaviorally, social-emotional, or academic needs (McQuillin & Lyons, 2016) and have a shorter session duration (Raposa et al., 2019). Programs that utilized a mentee manual, revised mentor training and supervision, allowed mentors to select different activities to do with their mentees, enhanced e-training and support, and included value-oriented and relationship-based activities have shown to have a positive impact on the mentor and mentee relationship as well as enhance behavioral and academic conversation (McQuillin & Lyons, 2016). Programs that show support for their mentors resulted in higher mentor satisfaction (Frels et al., 2013). For instance, in one such program, middle school students who participated in a mentoring curriculum had statistically significantly higher math grades (d = .42), English grades (d = .59), life satisfaction (d = .49), and 82% fewer absences. Small, but not statistically significant effects were also found for science (d = .25) and history (d = .15). Near zero effects were found for behavioral infractions (McQuillin & Lyons, 2016) suggesting that this program led to improved outcomes in most academic areas, but not in behavior. Results from Gordon, Downey, and Bangert (2013) showed that 6th graders in SBM showed an increase in self-esteem over the first year of participation compared to the control group. This study found these effects were replicated for students in high school. The 10th graders in this same study reported significantly higher scores on the Connectedness to Reading subscale (Gordon et al., 2013).

Program effectiveness. Although it has become more popular and schools are a way to reach captive students, SBM has demonstrated mixed results. Some research shows that SBM yields positive impacts on academic achievement, peer relationships, and reductions in misconduct and truancy (McMorris, et al., 2018) as well as lower absences and disciplinary referrals and increased social outcomes (Gordon et al., 2013; McQuillin & Lyons, 2016; Raposa et al., 2019).

Across studies, life satisfaction of mentees was shown to improve post-mentoring (McQuillin, Straight, Shek, 2015; McQuillin & Lyons, 2016). According to Liao and Sánchez (2016), a significantly beneficial aspect of SBM is the supervision and multiple perspectives of the program staff to help mentor and mentee relationships if the relationship is precarious or if there are any issues. This supervision provides mentors with the support they need so they do not have to resolve all concerns in the program on their own. When the mentor is supported, they can bond with and help the mentee in a low-pressure environment.

Some studies have not shown significantly positive outcomes. A few of the mentoring programs previously studied produced null or even harmful results (McQuillin & Lyons, 2016). One study of graduate school mentoring found that mentoring relationships could be dysfunctional due to incompetence, conflicts, boundary violations, and more (Johnson & Huwe, 2002). The same effects could be possible in SBM if a mentee is matched with a mentor who provides inaccurate advice or tries to cross boundaries. Mentoring is meant to be a long-lasting, one-on-one relationship, but in SBM relationships, meetings tend to be less frequent and shorter, thus the relationship often does not last as long as other mentoring relationships. SBM relationships are found to be

most effective when they occur weekly for one hour and last at least 8-12 weeks (McQuillin & Lyons, 2016). A differentiating factor between the success and null effects of a program have been found to be whether the relationships were prematurely terminated (Grossman et al., 2012). Grossman et al. (2012) showed that intact relationships between mentors and mentees yielded positive academic improvement for the mentee. It was found that relationships that ended prematurely resulted in null or negative effects. This study emphasizes the importance of maintaining a healthy relationship between mentors and mentees for a significant amount of time because duration of the relationship tends to correlate with the strength of the relationship and program as a whole. Length has been found to be one of the strongest predictors of program success (DuBois & Rhodes, 2006; Grossman & Johnson, 1999; McQuillin & Lyons, 2016).

Relationship Elements in Mentoring

Based on a developmental perspective (e.g., Bowlby, 1988), we expect having a significant relationship while growing up can have a positive effect on future relationships and other outcomes. Mentoring relationship quality is defined as the characteristics of relationships between adults and youth that are specific to the mentoring experience and thought to directly and substantially influence the mentee's outcomes (McMorris et al., 2018). Evaluating the relationship between mentors and mentees is an under researched area in the mentoring field (Nelson et al., 2017; Frels et al., 2013). One school-based study did evaluate how the mentor perceived the relationship (McQuillin et al., 2015), but there was no evaluation of how the mentee

perceived the relationship. This past evaluation was very mentor-centered and not as relationship-centered.

Three factors that elementary school mentees ranked most important for a mentor in the success of the mentor-mentee relationship were commitment, role identity, and emphasis on the moment (Frels et al., 2013). Commitment in a mentoring relationship is when the mentor is genuinely invested in making the most of the time and always putting their mentee as a high priority. Role identity is when the mentor takes on all necessary responsibility to be completely present for their mentee. This involves the mentor giving time outside of the one-hour sessions to ensure mentoring success. A third characteristic of mentors that mentees deemed important was that the mentor places emphasis on the moment. This means that the whole relationship is not future and goal oriented, but also includes enjoyable activities that involve making the most of the present as a team.

Another aspect that contributes to a quality relationship between a mentor and mentee is the mentor's positive attitude towards youth (McMorris et al., 2018). This research suggests that when the mentor has passion and interest in helping youth, the relationship highly improves. This is logical because the mentee will naturally feel less motivated and cared for if someone is not genuinely interested in them and does not care about them.

The mindset of the mentor throughout the program had been shown to heavily influence the way that mentees experience growth (Frels et al., 2013). When the mentor pushes to fill a certain role that may not be needed, the mentee may feel pushed too far and disconnected from their mentor. Mentors found that their role was not to change the mentee's life, but instead to form a positive relationship and remind them that there is an

adult who supports and believes in them (Frels et al., 2013). Mentors and mentees have both reported that a close and unregimented schedule led to what they perceived to be the most successful relationship (Frels et al., 2013). Further research on this concept showed that it is possible for these synergetic relationships to form even outside a structured mentoring program (Frels et al., 2013).

A study on a group of mentees with elementary and middle school students showed that a close mentoring relationship with an undergraduate student produced many improvements for the student. These improvements included critical thinking and social skills, increased aptitude, enhanced mastery of subject matter, and improved retention of information (Nelson et al., 2017). This close bond was produced through after-school lessons and programs that combined education and enjoyable activities. This combination of learning and hands on activities helped the mentees to enjoy themselves while also growing academically.

The mentors that were viewed more positively by the mentees met more consistently with mentees, reported fewer office referrals, reported more relaxed mentoring sessions, and shared food and played games more often with their mentees than "questioned-impact" mentors (Converse & Lignugaris, 2009). McMorris et al. (2018) utilized a SBM program that included participants from mentors and mentees enrolled in Big Brothers Big Sisters of the Greater Twin Cities (n = 244). The researchers found multidimensional aspects of mentoring relationships, factors connected to these aspects, and associations between aspects and mentor perception of the program (McMorris, 2018). This means that the mentees had more positive perceptions of the mentor and the sessions were more interactive, comfortable, laid back, and frequent when

the mentors felt supported, had a positive attitude, and their expectations were similar to the outcome.

The relationships between therapists and clients can be successful or can fail for similar reasons as mentors and mentees. Research showed that techniques such as using a mentee manual, revising mentor training and supervision, allowing mentors to select different activities to do with their mentees, and enhancing e-training and support have demonstrated an increase in the mentor-mentee relationship (McQuillin et al., 2015; McQuillin & Lyons, 2016;). These changes have sometimes led to harmful outcomes that could be a result of feelings of disappointment or rejection of the mentee, or counterproductive mentoring actions that hurt the relationship (McQuillin & Lyons, 2016). Other research shows that staff can be a valuable source of information on mentoring relationships, and that obtaining multiple perspectives of relationship quality provides a more nuanced understanding of the complexity of youth mentoring relationships (McQuillin et al., 2015). This shows how important it is that the mentor takes their role seriously and abides by the training and directions they have been given. Research has also shown that the use of a questionnaire administered to the mentor to evaluate their perception of the sessions and the success of the relationship helps researchers to monitor the relationships and make the mentors feel supported (McQuillin et al., 2015).

Mentoring relationships that last less than six months are associated with greater risk for harmful effects on youth (McQuillin & Lyons, 2016). Mentors who feel dissatisfied with their experience may be less invested or committed to the relationship (Gettings & Wilson, 2014) or less likely to participate in future mentoring relationships

(McMorris et al., 2018). It is imperative that a mentoring program is proven to be effective but leaves room for the mentor and mentee to explore how the relationship will be most effective for both of them as a pair. This provides the maximum opportunity for growth and minimizes risk of harm from the relationship.

Alternative School

Most SBM programs have been implemented in regular schools, for regular students, but may be particularly well suited for at-risk students. Of studies shown to have an effect, there was no difference based on level of risk at baseline (Raposa et al., 2019), suggesting that mentoring programs shown to be effective in regular settings may also be effective with a higher risk population. Alternative schools provide an educational setting in alternative to the standard school by addressing needs that cannot be met in a public school. Common reasons that students will go to alternative school are suspension, emotional or behavioral issues, or special scheduling to help students with children make time to raise them. Some mentoring programs have been implemented into alternative schools as a way to support at-risk youth in schools but research results vary (Bernstein, Rappaport, Olsho, Hunt & Levin, 2009; Grossman et al., 2012; Wood & Mayo-Wilson, 2012). The number of alternative schools with low graduation rates increased from 677 in 2014 to 878 in 2016 (DePaoli, Balfanaz, Atwel, & Bridgeland, 2018) showing the need for support and additional programming within alternative schools.

Mac Iver, Sheldon, Naeyer, and Clark (2019) did a study on a SBM program for low-income and minority middle and high schoolers who showed early signs of issues with behavior, course passing, and attendance. Disengagement from school began in elementary and middle school and then by high school manifested in the form of absence

from school, failure to turn in assignments, and even course failure. These resulting factors are all early predictors of dropout. Mac Iver et al. (2019) examined a middle and high school population across five different districts emphasizing the transition from middle to high school and saw mentoring as a way to help bridge this gap through the use of interpersonal relationships. Youth of disadvantaged families are far less likely to have a mentor than advantaged ones (Mac Iver et al., 2019; Sourk, Weiler, & Cavell, 2019). Mac Iver et al. (2019) emphasized (a) a personal relationship between a student and mentor, (b) intentional tracking of data on early warning indicators of a drop-out (low attendance, behavior problems, course failures) and implementation of interventions in response, and (c) partnerships between the afterschool organization, school, and family to increase student success.

The SBM program used a survey to evaluate several dimensions of school engagement including emotional (happiness, excitement in school), behavioral (paying attention, following the rules), and cognitive (activities exercising the mind related to schoolwork). Each item was measured on a 5-point scale ranging from 1 = never to 5 = almost always. Data were analyzed to measure changes in the three separate dimensions of engagement over the course of the year. After the first year, the mentors and mentees were asked to evaluate their mentoring experience and relationships. Results showed that while there were very positive reviews of the program by mentors and mentees, significant changes in student attendance, behavior, and course passing were not found (Mac Iver et al., 2019).

In a different study, Sourk et al. (2019) evaluated the differences between the parents of students involved in CBM and SBM programs. Parents of children involved in

CBM enrolled their child for the purpose of gaining new experiences while parents of students involved in SBM programs wanted to see behavioral and academic improvement in their child. The results of the study found no difference in how well the programs reached at-risk families (Sourk et al., 2019).

Current Study

The purpose of this school-based case study was to examine the experiences of five mentor and mentee pairs through an eight-week mentoring program monitored through weekly survey data and mentor focus group responses. The purpose of the program was to give the alternative students a successful older student to assist them with academic and personal struggles in their lives. School-based mentoring has been shown to demonstrate positive outcomes for youth (Raposa et al., 2019). Despite this evidence, there is still much to learn about the mentoring experience. The current study was one small step at addressing some of the limitations of mentoring research such as examining both mentor and mentee experiences, rather than just mentor. Because SBM programs are often after school, it is not uncommon that the relationships between the mentors and mentees are not highly successful because of the inconsistency of the meetings and other factors. However, little research looks at the shared experience, or relationship, between mentors and mentees. Specifically, this descriptive study evaluated the congruence between mentor and mentee perceptions of the mentoring sessions and relationship. Research question: What is the level of agreement between mentor and mentee ratings on a five-item survey administered weekly?

Research hypothesis: The researcher anticipated that mentor-mentee agreement would be moderate to substantial (κ = .41 - .80; Altman, 1999).

Method

Participants

Participants in this project were undergraduate college students (i.e., mentors) and middle school student participants (i.e., mentees) who were sixth through ninth graders at an alternative school in the east south-central region of the United States. This project included 10 total participants, five mentor-mentee pairs. Although both psychology and education students were eligible to serve as mentors, all five mentors who completed the mentor training were psychology majors. Participant data are presented for the mentees and full demographics can be found in Table 1. Average mentee age was 13.2 with a range from 13 to 14 years. The participants included 2 (40%) Black, 2 (40%) White, Non-Hispanic, and 1 (20%) White, Hispanic. There were 3 (60%) males and 2 (40%) females. Primary language included 3 (60%) who spoke English as their native language and (2) 40% who spoke Spanish. Related to risky behaviors, 4 (80%) of the mentees had carried a weapon, all of them (100%) had been in a physical fight, 4 (80%) had consumed alcohol, 4 (80%) had tried marijuana, and 4 (80%) had sexual intercourse. The mentor demographics included 2 (40%) males and 3 (60%) females. The mentor race demographics included 1 (20%) African American and 4 (80%) white. All mentors were in their senior year of an undergraduate degree with an average age of 23.5.

Procedures

Data came from a larger, year-long project evaluating several components of an academic mentoring program piloted in an alternative-school. The first step was to solicit mentors from a pool of university undergraduate psychology or education students. After

providing consent to participate, interested students completed a two-day training so they were equipped to guide their assigned mentee through the manualized curriculum and became familiar with the use of motivational interviewing (a component of the program). All coders (discussed below) and mentors were trained on the mentoring program, motivational interviewing (a framework of the mentoring program), ethics, and the alternative school. The program used was the Academic Mentoring Program for Educational Development (AMPED; McQuillin, McLelland, & Smith, 2017), which is a manualized mentoring curriculum.

Table 1

Participant Demographics

	N	Percent
Age		
13	3	60%
14	1	20%
Grade		
8	4	80%
Ungraded/Other	1	20%
Race/Ethnicity		
White, Not Hispanic	2	40%
White, Hispanic	1	20%
Black	2	40%
Religion		
Nondenominational Christian	2	40%
Jehovah's Witness	1	20%
Prefer not to say	1	20%
Gender		
Male	3	60%
Female	2	40%
Sexual Orientation		
Straight/Heterosexual	5	100%
Parent Relationship		
Separated	3	60%
Divorced	1	20%
I don't know	1	20%
Native Language		
English	3	60%
Spanish	2	40%

Mentees (i.e., alternative school students) were randomly selected from a population of students whose parents/guardians granted permission to participate from a local alternative school. Following training, consent, and assent procedures, mentor and mentees started meeting once per week for eight weeks. All mentors and mentees were randomly matched, with the exception of Pair E. Pair A consisted of a White, female mentor and Hispanic, male mentee, Pair B a White, female mentor and mentee, Pair C had a White, female mentor and mentee, and Pair D consisted of White, male mentor and Black, male mentee. For Pair E, the school specifically requested a homogenous pairing for gender and race. This pair included a Black, male mentor and mentee.

Data collection occurred between September and December of 2019. To monitor fidelity of implementation, a trained research student observed each session and completed a fidelity checklist to ensure the mentor adhered to the manual. After each session, the coder administered surveys to both the mentor and mentee to evaluate the agreement between the mentor and mentee experience of the sessions and relationship. To collect these data, we used a form of ecological momentary assessment (EMA) to capture the experiences of mentors and mentees immediately following each session. Initially, surveys were completed on paper but were transitioned to electronic completion within the first couple of weeks. The coder facilitated the completion of the survey by giving the mentee their cellphone to complete the survey items in Qualtrics. The mentor completed the same 5-item survey on his or her phone from another room before leaving the school.

Following data collection, all data were entered into an excel document and double-checked by a second research student for accuracy. To calculate level of

agreement, weighted kappas were run because they weight the levels of agreement on Likert scales based on the distance between rankings (McHugh, 2012). For example, the difference between a little true and somewhat true is not as significant as the difference between a little true and completely true. Weighted kappas also account for error and randomness in responding. Unlike many other measures, the weighted kappa accounts for the possibility that the raters could have guessed due to uncertainty (McHugh, 2012). Weighted kappas were not yielded when any rater selected the same response on every item to eliminate the possibility that the participant filling out the survey was just guessing, or when data were missing.

Measures

The brief 5-item survey was researcher created. Previous research has used surveys or questionnaires to measure program outcomes or experiences and have shown positive results (Raposa et al., 2019). Items were adapted from the National Mentoring Center's Youth Survey (Jucovy, 2002) and consideration was given to the characteristics identified as important by students in Frels et al. (2013). Survey items were intended to examine overall relationship quality (e.g., feeling of respect, importance, and understanding, and closeness) and the degree to which the mentor and mentee felt connected or "on the same page" with compatible goals. This provides a more specific connection to the mentors. The measures are included in Appendix A. These measures were researcher developed and no psychometric properties have been identified.

Results

Results are provided for the mentor and mentee ratings. First, results are presented to address the primary research question: What is the level of agreement between mentor and mentee ratings on a five-item survey administered weekly? It was hypothesized that mentor-mentee agreement would be moderate or substantial (κ = .41-.80; Altman, 1999). We defined the level of agreement as κ < 0 as less than chance agreement, κ = .01 - .20 as slight agreement, κ = .21 - .40 as fair agreement, κ = .41 - .60 as moderate agreement, κ = .61 - .80 as substantial agreement, and κ = .81 - .99 as almost perfect agreement. Cohen's weighted kappa (κ) was run to determine agreement between mentee and mentor ratings for each session when possible, and across all sessions. These results are presented in Table 2.

Agreement was varied across sessions and pairs. Therefore, to answer the research question, we looked at the overall values. Weighted κ values ranged from -.01 to .15, with only pair C yielding a significant result ($p < .05$); overall agreement was slight. However, more variability was observed across weekly sessions, yet, the only pair to show statistically significant results and substantial agreement between mentee and mentor was pair B for session six, κ = .71 (95% CI, .38, .1.03), $p < .05$. No other sessions yielded statistically significant results. Though not significant, there was fair agreement for pair B at session three κ = .38 (95% CI -.15, .90), $p = .71$ and session seven κ = .29 (95% CI -.25, .82), $p = .36$, and for pair C at session two κ = .29 (95% CI -.15, .72), $p = .31$. Moderate agreement was found for pair A at session two κ = .55 (95% CI .16, .26), $p = .17$.

Table 2

Level of Agreement between Mentors and Mentees across Weekly Mentoring Sessions

	Pair A		*Pair B*		*Pair C*		*Pair D*		*Pair E*	
Session	κ	*CI*	*κ*	*CI*	*κ*	*CI*	*κ*	*CI*	*κ*	*CI*
2	.55	*.16, .26*	*.17*	*-.71, 1.04*	*.29*	*-.15, .72*	*.00*	*.00, .00*	*-.25*	*-.59, .09*
3	--	--	*.38*	*-.15, .90*	*.12*	*-.18, .42*	--	--	--	--
4	--	--	*.12*	*-.49, .72*	--	--	*.00*	--	--	--
5	.09	*-.11, .29*	--	--	*.17*	*-.11,.45*	--	--	--	--
6	.00		*.71**	*.38, 1.03*	*.14*	*-.09, .37*	*.00*	--	*.00*	*.00, .00*
7	--	--	*.29*	*-.25, .82*	*.14*	*-.09, .37*	*.00*	--	*.00*	--
8	--	--	--	--	*.14*	*-.09, .37*	--	--	--	--
Overall	.00	*-.14, .39*	*.13*	*-.04, .12*	*.15**	*.03, .26*	*-.01*	*-.03, .01*	*.02*	*-.13, .16*

*Note. κ = weighted kappa, CI = 95% confidence interval, *indicates p < .05; -- indicates data for session would not yield a statistic.*

Note. *indicates $p < .05$; -- indicates data for session would not yield a statistic

Table 3

Average Ratings for Mentee and Mentor Across Weekly Mentoring Sessions

	Pair A		Pair B		Pair C		Pair D		Pair E	
	Mentee Rating	Mentor Rating	Mentee Rating	Mentor Rating	Mentee Rating	Mentor Rating	Mentee Rating	Mentor Rating	Mentee Rating	Mentor Rating
Session 2	3.2	3.4	4.4	4.4	3.8	3.8	4.4	3.2	3.6	4.0
Session 3	--	3.0	4.2	4.2	4.8	4.2	4.4	--	4.2	4.6
Session 4	3.8	3.0	4.4	4.2	4.2	4.0	4.2	3.6	4.0	5.0
Session 5	4.0	3.2	4.0	5.0	4.2	4.2	4.0	3.8	4.0	5.0
Session 6	4.4	3.2	4.6	4.0	4.0	4.0	4.4	2.4	3.8	2.6
Session 7	5.0	3.2	4.4	4.8	4.0	4.2	4.4	2.4	3.8	4.8
Session 8	5.0	3.0	4.6	4.0	4.0	4.2	4.0	2.4	4.0	5.0
Average										

Note. 1 = Not at all true; 2 = A little true; 3 = Somewhat true; 4 = Mostly true; 5 = Completely true

Table 3 lists average ratings for mentee and mentor across sessions. These data show that on average, the mentees rated the relationship higher. All mentees except for mentee D showed an increase in the average rating of their relationship with their mentor from sessions two to eight. Mentors A, B, and D showed a decrease in the average rating of their relationship with their mentee between session two and eight and Mentor C and E showed an increase. Specifically, Mentor B showed increase continuously across sessions. Mentor E showed increase from session two to session eight; however, Mentor E showed a significant decrease, or drop in rating, in session six.

Table 4 includes the average ratings for mentees and mentors across each survey item, as well as a total session average. The most highly rated survey item was how respected the mentee or mentor felt when with the other (4.5 and 4.3, respectively). The lowest rated question was how well the mentor felt the mentee understood them (3.5).

Session three had the highest average rating for both the mentees and mentors.

Table 4

Average Ratings for Mentee and Mentor Across Items

		Session Number							
		2	3	4	5	6	7	8	Total Item Average
When I'm with my mentor/mentee, I feel respected	Mentee Average	4.75	4.50	4.20	4.40	4.60	4.80	4.60	4.55
	Mentor Average	4.33	5.00	4.20	4.60	4.00	4.20	4.00	4.30
When I'm with my mentor/mentee, I feel important	Mentee Average	4.00	4.75	4.40	4.20	4.40	3.80	4.40	4.30
	Mentor Average	3.60	4.33	4.00	3.80	3.60	4.00	3.60	4.00
My mentor/mentee understands me	Mentee Average	3.75	4.50	4.00	3.80	3.60	4.40	4.20	4.00
	Mentor Average	4.20	4.00	4.20	4.20	3.20	3.60	3.60	3.50
My mentor/mentee and I have compatible goals	Mentee Average	3.75	4.25	4.20	4.20	4.60	4.00	4.40	4.20
	Mentor Average	3.20	4.00	3.40	4.20	2.80	3.60	3.80	3.60
Overall, I feel close to my mentor/mentee	Mentee Average	3.50	4.00	3.80	3.80	4.00	4.60	4.00	3.90
	Mentor Average	3.40	4.67	4.00	4.20	3.20	3.75	3.60	3.80
Total Session Average	Mentee Average	3.76	4.00	4.00	3.54	3.32	3.88	3.72	
	Mentor Average	3.88	4.40	4.12	4.00	4.24	4.32	4.32	

Note. 1 = Not at all true; 2 = A little true; 3 = Somewhat true; 4 = Mostly true; 5 = Completely true

Discussion

This study looked at the agreement between mentee and mentor pairs on a five-item survey looking at relationship quality within the mentoring relationship. It was expected that agreement would be moderate to substantial, but this was not found in the results. Instead, agreement was generally less than chance or slight. No clear patterns were seen in the results of the weighted kappas across pairs or sessions.

The data on the mentee and mentor average ratings between pairs for all sessions showed that, on average, the mentees rated the relationship higher. This means that within pairs, the mentees may have felt more respected, understood, and accepted than the mentors. The mentees may have been positively influenced by the additional support since many of the mentees did not have strong support systems. This relationship is especially helpful as the mentee is going through many environmental changes that may be emotionally and socially straining (McQuillin & Lyons, 2016). The mentees on average rated the relationship .45 points higher than the mentors. This may have been due to the mentors caring so much about the project and overthinking things. It could also have been from the mentors having more experience to compare and rate their experiences.

Another possibility for generally higher mentee ratings is that the mentors may have been focused on accurately carrying out the sessions as indicated within the manual. The mentors were being observed and coded for accuracy, so they may have paid more attention to the material than building a relationship with the mentee. Similarly, the mentor may have been more focused on the academic and goal setting nature of the

sessions rather than the relationship with the mentee. Focus group feedback from the larger study suggested that mentors became frustrated or discouraged when their mentee did not meet their goal or complete tasks. Having the mentor focus on the academic and structured portion of the program may have influenced their experience with the mentee. The mentors may also have become exhausted towards the end of the semester with their own personal responsibilities. Both mentors and mentees may have been influenced by the time of year or other life events outside of the mentoring sessions.

One aspect that contributes to a quality relationship between a mentor and mentee is the mentor's positive attitude towards youth (McMorris et al., 2018). These mentors chose to be part of the study and all were psychology majors, thus they presumably have a passion for working with children. By session, on average the mentees also rated the mentors higher consistently. This means that throughout the whole study, the mentees on average consistently perceived the relationship to be better than the mentors did. The mentor and mentee surveys showed that the mentors and mentees both reported respect as what they felt the most in the sessions. This may be because even if the mentors and mentees did not feel understood by one another, they were still able to feel respected. It is interesting to note that this respect did not translate to feeling close to the mentor/mentee. There was also a significant jump in the average ratings of the mentors and mentees by session after the first couple of sessions. This may have been due to the mentors and mentees becoming comfortable with one another after "breaking the ice" on the first session when getting to know each other. Another possibility is that the changing goals of each session kept the mentor's attention on meeting the requirements.

Another consideration in interpreting these results is that, while the agreement levels were generally low, all items were rated as a 2 (a little true) or higher. This means that mentees and mentors always indicated at least some level of agreement which each item, never reporting that an item or experience was not true for them.

Implications

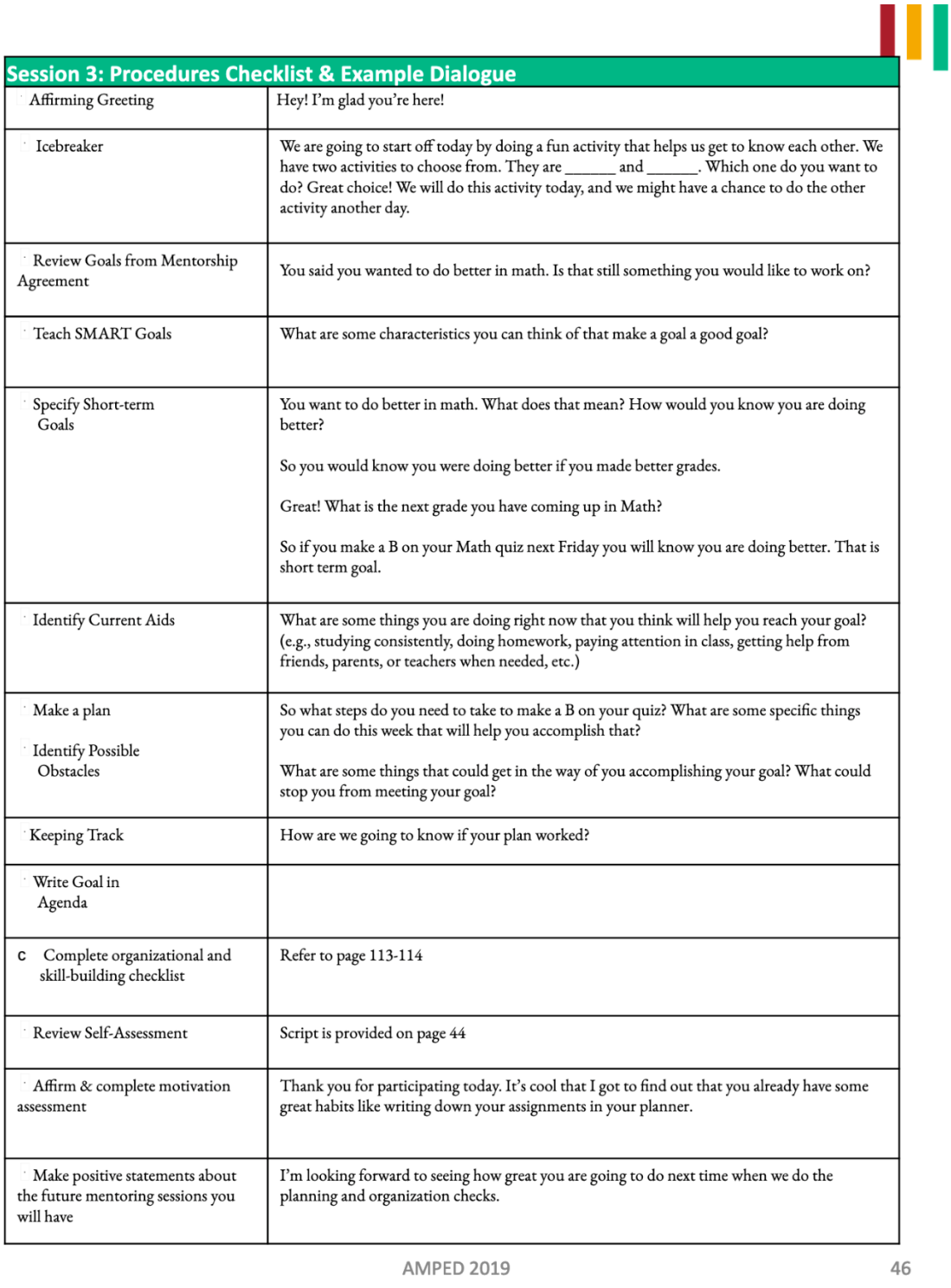
The purpose of the study was to examine agreement between mentors and mentees in the pilot program for alternative school AMPED mentoring. Although mean scores on the 5-point Likerts scales ranged from 2.97 to 4.43 indicating that they agreed with the statements that they had compatible goals and felt respected, important, understood, and close to their mentee/mentor, the results of this study showed that the degree of agreement between each mentor-mentee pair was generally low. Most scores were in the 3-4 range, but the kappas showing degree of agreement still were low. This study provides some initial data on both the mentor and mentee experience and any similarities shared, which has been missing from the literature. The study also revealed that session three showed the highest mentor and mentee scores of relationships. This session involved reviewing the "Big 3" (Organize, Goal, Skill) and setting a goal with the mentee.

Contents

Figure 1. Contents from Academic Mentoring Program for Educational Development Manual (McQuillin, McLelland, & Smith, p. 3, 2017)

Contents

Figure 2. Continued Contents from Academic Mentoring Program for Educational Development Manual (McQuillin, McLelland, & Smith, p. 4, 2017)



Session 3: Procedures Checklist & Example Dialogue	
Affirming Greeting	Hey! I'm glad you're here!
Icebreaker	We are going to start off today by doing a fun activity that helps us get to know each other. We have two activities to choose from. They are _____ and _____. Which one do you want to do? Great choice! We will do this activity today, and we might have a chance to do the other activity another day.
Review Goals from Mentorship Agreement	You said you wanted to do better in math. Is that still something you would like to work on?
Teach SMART Goals	What are some characteristics you can think of that make a goal a good goal?
Specify Short-term Goals	You want to do better in math. What does that mean? How would you know you are doing better? So you would know you were doing better if you made better grades. Great! What is the next grade you have coming up in Math? So if you make a B on your Math quiz next Friday you will know you are doing better. That is short term goal.
Identify Current Aids	What are some things you are doing right now that you think will help you reach your goal? (e.g., studying consistently, doing homework, paying attention in class, getting help from friends, parents, or teachers when needed, etc.)
Make a plan Identify Possible Obstacles	So what steps do you need to take to make a B on your quiz? What are some specific things you can do this week that will help you accomplish that? What are some things that could get in the way of you accomplishing your goal? What could stop you from meeting your goal?
Keeping Track	How are we going to know if your plan worked?
Write Goal in Agenda	
c Complete organizational and skill-building checklist	Refer to page 113-114
Review Self-Assessment	Script is provided on page 44
Affirm & complete motivation assessment	Thank you for participating today. It's cool that I got to find out that you already have some great habits like writing down your assignments in your planner.
Make positive statements about the future mentoring sessions you will have	I'm looking forward to seeing how great you are going to do next time when we do the planning and organization checks.

Figure 3. Session 3 from Academic Mentoring Program for Educational Development Manual (McQuillin, McLelland, & Smith, p. 46, 2017)

Limitations and Future Directions

This project did have limitations. This was a pilot study which means it was the first time AMPED (McQuillin et al., 2017) was used in the alternative school setting. The study also used a small sample size of only five pairs when ideally the study would have used at least thirty pairs of mentors and mentees. As a result of the small sample size, no statistical inferences can be drawn about the data, rather it is purely descriptive. Relatedly and due to the small sample size, no other outcome data were shared such as grades, absences, or behavioral points. The mentors and mentees also did not always complete the sessions in consecutive weeks due to student absences or disciplinary issues. The surveys of relationship perception were not always completed on the same day of the session because the coders would occasionally forget and have the mentors and mentees fill them out after the session. Some surveys were not turned in at all which led to incomplete data.

Additionally, collecting qualitative feedback could have provided valuable information not assessed in the brief quantitative survey which may have helped to understand the variance in scores across participants and/or sessions. The sample of mentors was also a convenience sample which may not accurately represent the whole psychology senior population. The manual did not align with the alternative school curriculum and structure. For example, a session in the manual had the mentor and mentee work together on organizing their belongings and another session on homework support. The alternative school students do not have homework because they do all of their work in class, and they do not have backpacks because all of their belongings are

kept in one classroom and they stay in that same room all day while the teachers rotate classes.

In the future, we can implement many improvements to increase the relevance and effectiveness of the study. Additional research is needed about the unique role common experiences may play in outcomes for alternative school students. This population tends to have greater mental health and behavioral needs, which means it may be even more important for mentees to be on the same page with their mentors. After feasibility data are collected, larger-scale studies are needed to increase the sample size and make more statistical conclusions. While the survey did demonstrate face validity, we also hope to gather additional psychometrics on the mentor and mentee surveys. The measure could be distributed to a broader sample and data could be collected on reliability and validity. Relatedly, some of our results may be due to the Likert scale used. Ratings of 2-5 all indicated an endorsement of that item and only item 1 indicated that the item was untrue. In the future, using a different Likert scale. such as strongly disagree to strongly agree, may allow for more spread in the data and possibly impact levels of agreement.

References

Altman, D.G. (1999). *Practical statistics for medical research.* New York, NY: Chapman & Hall/CRC Press.

Bernstein, L., Rappaport, C. D., Olsho, L., Hunt, D., & Levin, M. (2009). *Impact evaluation of the U.S. Department of Education's student mentoring program* (NCEE 2009–4047). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education.

Bowlby, J. (1988). *A secure base: parent-child attachment and healthy human development.* Basic Books, USA.

Converse, N., & Lignugaris, B. (2009). Evaluation of a school-based mentoring program for at-risk middle school youth. *Remedial and Special Education, 30*(1), 33-46.

DePaoli, J.L., Balfanaz, R., Atwel, M.N., & Bridgeland, J. (2018). *Building a grad nation: Progress and challenges in raising high school graduation rates*. Annual Report produced by Civic Enterprises, Alliance for Excellent Education, and America's Promise Alliance. Retrieved from http://gradnation.americaspromise.org/sites/default/files/d8/2018-06/2018-BGN-FullReport_0.pdf

DuBois, D. L., & Rhodes, J. E. (2006). Youth mentoring: Bridging science with practice. *Journal of Community Psychology, 34,* 547–565.

Frels, R. K., Onwuegbuzie, A. J., Bustamante, R. M., Garza, Y., Nelson, J. A., Nichter, M., & Soto Leggett, E. (2013). Purposes and approaches of selected mentors in

school-based mentoring: A collective case study. *Psychology in the Schools*, 50(6), 618-633. doi: 10.1002/pits.21697

Gettings, P. E., & Wilson, S. R. (2014). Examining commitment and relational maintenance in formal youth mentoring relationships. *Journal of Social and Personal Relationships*, *31*(8), 1089–1115. doi: 10.1177/0265407514522145

Gordon, J., Downey, J., & Bangert, A. (2013). Effects of a school-based mentoring program on school behavior and measures of adolescent connectedness. *The School Community Journal*, *23*(2), 227-248.

Grossman, J. B., Chan, C. S., Schwartz, S. E. O., & Rhodes, J. E. (2012). The test of time in school-based mentoring: The role of relationship duration and re-matching on academic outcomes. *American Journal of Community Psychology*, 49(1–2), 43–54. doi:10.1007/s10464-011-9435-0

Grossman, J. B., & Johnson, A. (1999). Assessing the effectiveness of mentoring programs. In J. B. Grossman (Ed.), *Contemporary issues in mentoring* (pp. 25–47). Philadelphia: Public/Private Ventures.

Herrera, C., Sipe, C. L., & McClanahan, W. S. (2000). *Mentoring school-age children: Relationship development in community based and school-based programs.* Philadelphia: Public/Private Ventures. Retrieved from https://files.eric.ed.gov/fulltext/ED441066.pdf

Johnson, W. B., & Huwe, J. M. (2002). Toward a typology of mentorship dysfunction in graduate school. *Psychotherapy*, *39*, 44–55.

Jucovy, L. (2002). *Measuring the quality of mentor-youth relationships*. Northwest Regional Educational Laboratory. Retrieved from https://educationnorthwest.org/sites/default/files/packeight.pdf

Liao, C. L., & Sánchez, B. (2016). Mentoring relationship quality profiles and their association with urban, low-income youth's academic outcomes. *Youth & Society*, *51*(4), 443–462. doi: 10.1177/0044118x16668058

Mac Iver, M. A., Sheldon, S., Naeger, S., & Clark, E. (2017). Mentoring students back on-track to graduation: Program results from five communities. *Education and Urban Society*, *49*(7), 643-675. doi: 10.1177/0013124516645164

McHugh, M. L. (2012). Interrater reliability: The kappa statistic. *Biochemia Medica, 22*(3), 276- 282.

McMorris, B. J., Doty, J. L., Weiler, L. M., Beckman, K. J., & Garcia-Huidobro, D. (2018). A typology of school-based mentoring relationship quality: Implications for recruiting and retaining volunteer mentors. *Children and Youth Services Review*, 90, 149-157. doi:10.1016/j.childyouth.2018.05.019

McQuillin, S. D., & Lyons, M. D. (2016). Brief instrumental school-based mentoring for middle school students: Theory and impact. *Advances in School Mental Health Promotion*, *9*(2), 73-89. doi:10.1080/1754730x.2016.1148620

McQuillin, S., McLelland, B., Smith, B. (2017). University of Houston Student Mentoring Manual Version 3. Available from www.http://faculty.coe.uh.edu/smcquillin/UHSM.pdf

McQuillin, S. D., Straight, G. G., & Saeki, E. (2015). Program support and value of training in mentors' satisfaction and anticipated continuation of school-based mentoring relationships. *Mentoring & Tutoring: Partnership in Learning*, *23*(2), 133-148. doi:10.1080/13611267.2015.1047630

Nelson, K., Sabel, J., Forbes, C., Grandgenett, N., Tapprich, W., & Cutucache, C. (2017). How do undergraduate STEM mentors reflect upon their mentoring experiences in an outreach program engaging K-8 youth? *International Journal of STEM Education*, *4*(1), 1-13.

Raposa, E. B., Rhodes, J., Stams, G. J. J. M., Card, N., Burton, S., Schwartz, S., … Hussain, S. (2019). The effects of youth mentoring programs: A meta-analysis of outcome studies. *Journal of Youth and Adolescence*, *48*(3), 423–443. doi: 10.1007/s10964-019-00982-8

Sourk, M., Weiler, L. M., & Cavell, T. A. (2019). Risk, support, and reasons for wanting a mentor: Comparing parents of youth in community versus school-based matches. *Children and Youth Services Review*, *99*, 156–164. doi: 10.1016/j.childyouth.2019.01.046

Wood, S., & Mayo-Wilson, E. (2012). School-based mentoring for adolescents: A systematic review and meta-analysis. *Research on Social Work Practice*, *22*(3), 257–269. doi:10.1177/1049731511430836

Appendix

Measures

Mentee Survey

Enter ID number:

Date:

	Not At All True	A Little True	Somewhat True	Mostly True	Completely True
I stand behind the decisions I make.	1	2	3	4	5
My goals reflect my own values, not just what my mentor wants me to do.	1	2	3	4	5
My mentor encourages me to think about my values and feelings before I make important decisions.	1	2	3	4	5
When I'm with my mentor, I feel respected.*	1	2	3	4	5
When I'm with my mentor, I feel important.*	1	2	3	4	5

My mentor understands me.*	1	2	3	4	5
My mentor and I have compatible goals.*	1	2	3	4	5
Overall, I feel close to my mentor.*	1	2	3	4	5

*Indicates items examined for this project

Mentor Survey

Enter first name:

Date:

	Not At All True	A Little True	Somewhat True	Mostly True	Completely True
When I'm with my mentee, I feel respected.	1	2	3	4	5
When I'm with my mentee, I feel important.	1	2	3	4	5
My mentee understands me.	1	2	3	4	5
My mentee and I have compatible goals.	1	2	3	4	5
Overall, I feel close to my mentee.	1	2	3	4	5