

# Factors That Enhance the Quality of Relationships Between Mentors and Mentees During Check & Connect

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## Abstract

School engagement is an important predictor of graduation. One strategy to enhance student engagement is mentoring. Check & Connect is a structured mentoring program that has resulted in favorable outcomes for many students, including those with emotional and behavioral disorders. Effectiveness, however, depends on the quality of the mentor–mentee relationship. Although research has examined factors that increase relationship effectiveness, findings have been inconsistent. We explored the perceptions and correspondence of 166 high school students (i.e., mentees) with social, emotional, and/or behavioral challenges and their mentors about the mentoring relationship and variables that contribute to relationship quality. Results indicated that mentors and mentees rated the relationship favorably and their ratings correlated moderately. Mentor and mentee variables examined (gender, ethnicity/race, age) were not significant predictors of relationship quality; however, specific topics discussed during mentoring sessions for mentors (family, friends) and mentees (school, future plans) were significantly related to their perceptions of relationship quality.

## Keywords

adolescent, challenging behavior, relationships, mentoring

High school dropout is a significant concern for many reasons. Compared with high school graduates, students who do not complete high school have lower overall lifetime earnings (Day & Newburger, 2002), higher rates of unemployment and incarceration (Pleis, Ward, & Lucas, 2010), and are a greater cost to society (Alliance for Excellence in Education, 2007). Research indicates that students with emotional and behavioral problems, including those identified with emotional and behavioral disorders (EBD), are particularly vulnerable to dropping out. Specifically, among all disability groups, dropout is highest for students with EBD (Bradley, Doolittle, & Bartolotta, 2008). Furthermore, students with EBD have significantly higher rates of detentions, suspensions, and expulsions compared with students who have other disabilities and their peers without disabilities (J. A. Anderson, Kutash, & Duchnowski, 2001; Krezmien, Leone, & Achilles, 2006). The presence of these precursors to dropout suggests that students with emotional and behavioral problems are disengaged from school (Hayling, Cook, Gresham, State, & Kern, 2008; Hirn & Scott, 2014).

An important factor consistently found to mitigate disengagement and dropout is school connectedness or belonging (Nasir, Jones, & McLaughlin, 2011), a construct characterized by students believing that adults in schools value them not only as students but also as individuals

(Centers for Disease Control and Prevention, 2009). Research has demonstrated that when students feel cared about and connected to adults in their school community, they perform better academically (Anderman, 2002) and are less likely to drop out prior to graduation (Catalano, Haggerty, Oesterle, Fleming, & Hawkins, 2004).

One approach to increase a sense of belonging among students is mentoring. A variety of mentoring programs have been described in the literature (for a review, see DuBois, Holloway, Valentine, & Cooper, 2002). Check & Connect (C&C; Christenson, Sinclair, Thurlow, & Evelo, 1999; Sinclair, Christenson, Evelo, & Hurley, 1998) is a structured school-based mentoring program designed to increase school engagement through a supportive relationship with a mentor. C&C mentoring uses a problem-solving approach based on variables (e.g., grades, attendance, tardiness to class) that contribute to student performance in

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school and predict disengagement or dropout. Mentors identify areas of need and engage in activities to help build student capacity (Christenson et al., 1999).

C&C was listed as an exemplary program by the National Dropout Prevention Center/Network (Hammond, Linton, Smink, & Drew, 2007) and, according to the What Works Clearinghouse and U.S. Department of Education (2015), met criteria for an evidence-based practice without reservations based on two large studies (Sinclair et al., 1998; Sinclair, Christenson, & Thurlow, 2005). Both of these studies demonstrated the effectiveness of C&C for students with emotional and behavioral problems. Sinclair et al. (1998) included 94 Grades 7 and 8 students with learning, emotional, or behavioral difficulties. Students were randomly assigned to receive C&C for either 1 or 2 years. Sinclair et al. (2005) included 144 Grade 9 students with EBD, approximately half of whom were randomly assigned to receive C&C for 2 years, with the other half serving as controls. Results of both studies indicated that those who received C&C for at least 2 years were significantly less likely to have dropped out of school.

In spite of these promising results, the outcomes from other studies implementing C&C have been mixed. For example, Maynard, Kjellstrand, and Thompson (2014) found C&C had a small effect on disciplinary referrals and academic performance, but no effect on attendance. Furthermore, although most studies have demonstrated positive student outcomes, similar to other mentoring programs, effects have been small to moderate and have varied across outcomes (DuBois, Portillo, Rhodes, Silverthorn, & Valentine, 2011; Eby, Allen, Evans, Ng, & DuBois, 2008; Eby et al., 2013; Wheeler, Keller, & DuBois, 2010).

These differential and small effects might be explained by the quality of the mentor–mentee relationship (A. R. Anderson, Christenson, Sinclair, & Lehr, 2004; Chan et al., 2013; DuBois et al., 2011; Rhodes, Schwartz, Willis, & Wu, 2014). For instance, A. R. Anderson et al. (2004) found that mentors' and mentees' perceived relationship quality was positively associated with school attendance and teacher-rated academic engagement. Thomson and Zand (2010) also found that the quality of the relationship between economically disadvantaged youth at risk for substance abuse and academic failure and their mentors significantly predicted positive youth relationships with other adults at 8 and 16 months after the beginning of the mentoring program.

Considering the importance of the mentor–mentee relationship to the success of mentoring programs, it is critical to understand factors that may promote a positive relationship. A better understanding of these variables will inform both future research and school decisions regarding the use of mentoring and the formation of specific mentor–mentee pairs. However, findings in the literature are mixed regarding specific variables that may enhance the mentoring relationship.

## Factors That Might Influence Mentoring Effectiveness

### Age

Age similarity has been proposed as one variable that may influence the mentor–mentee relationship. Parra, DuBois, Neville, Pugg-Lilly, and Povinelli (2002) investigated factors influencing perceived benefits and continuation of mentoring relationships reported by 50 mentors and 50 mentees (7–14 years old) in a Big Brothers Big Sisters program. Youth with older mentors reported fewer relationship benefits ( $r = -.51$ ). Proponents of intergenerational mentoring programs (e.g., Across Ages; LoSciuto, Rajala, Townsend, & Taylor, 1996), however, contend that the age of the mentor is irrelevant (Taylor, 2007). Toward this point, LoSciuto et al. (1996) evaluated the effects of a cross-generational mentoring program with mentors age 55+ years and mentees in sixth grade and found positive outcomes (e.g., attitude, behavior) despite the age differences between mentor and mentee.

### Ethnicity Match

Ensher and Murphy (1997) collected self-report data on variables related to relationship quality from mentors and mentees participating in the Summer Jobs Training Program. Mentees, matched with a mentor based on gender, were assigned to same-race or cross-race dyads. Results indicated benefits to relationship quality in same-race dyads when compared with cross-race dyads, including significantly higher mentor ratings of liking their mentee and significantly higher mentee perceptions of receiving instrumental support (i.e., providing challenging assignments, sponsorship, and protection). Furthermore, mentee perceptions of similarity with their mentors were significantly correlated with their reports of satisfaction with the mentoring experience.

Rhodes, Reddy, Grossman, and Lee (2002), however, did not find similar benefits from race-matched dyads. They examined the survey responses of 959 mentees (9–16 years old) in either same-race and or cross-race mentoring dyads and found significant differences on only two of 125 items pertaining to relationship quality. Specifically, mentees in same-race dyads reported significantly greater willingness to talk to mentors about things that bothered them and perceived that their mentors provided more unconditional support than youth in cross-race pairs.

### Gender Match

Gender match has also been hypothesized to influence relationship quality, but studies have yielded mixed findings. For example, Chen, Greenberger, Farruggia, Bush, and Dong (2003) found that when given the opportunity, youth

selected mentors of similar gender (and race/ethnicity), which may offer indirect support for potential benefit. Furthermore, research has identified differences in relationship expectations based on gender (Darling, Bogat, Cavell, Murphy, & Sanchez, 2006). Specifically, girls were more likely to expect and seek emotional support from mentoring relationships whereas boys were more likely to seek activity (Clark & Ayers, 1993). These differences may play a role in relationship quality.

Other research, however, suggests gender match may not be important to ratings of relationship quality or outcomes. For instance, Kanchewa, Rhodes, Schwartz, and Olsho (2014) evaluated relationship ratings by 1,513 mentees (8–18 years old) from two large, randomized controlled studies of mentoring programs (Bernstein, Rappaport, Olsho, Hunt, & Levin, 2009; Herrera, Grossman, Kauh, Feldman, & McMaken, 2007). The only significant difference between matched and cross-gender dyads was that cross-gender pairs met more frequently and for 2 weeks longer than same-gender pairs. There were no significant differences in treatment effects.

### *Topics Discussed*

Topics of conversation during mentoring sessions have also been examined, although research in this area is limited. It is possible that discussion of particular topics fosters a higher quality relationship (DuBois & Neville, 1997). For example, Parra et al. (2002) found that discussion of specific topics (i.e., youth behavior and relationships, social issues) as well as having casual conversations functioned as a mediator between amount of contact and relationship closeness as reported by mentors. Furthermore, Herrera, Sipe, and McClanahan (2000) interviewed and held focus groups with 1,101 mentors and 669 youth in elementary, middle, and high schools in 98 community and school-based mentoring programs and found that similarity between mentor and mentee interests (which is potentially linked to topics discussed) was one of the strongest variables to influence the mentor–mentee relationship.

### *Mentor and Mentee Perceptions*

Research indicates that mentor and mentee ratings about their perceptions of the mentoring experience are not always correlated and this lack of consistency might suggest a mismatch between mentor or mentee goals, expectations, or benefits. Ensher and Murphy (1997), in the aforementioned study, found only moderate correlations between mentor and mentee ratings of relationship dimensions with significant differences between ratings of time spent together, degree that the mentor and mentee “like” each other, and perceived similarity (i.e., having similar outlooks, perspectives, and values) between mentor and

mentee. Also, Parra et al. (2002) compared ratings of 50 mentors and 50 youth in the areas of frequency of mentor and youth contact, relationship closeness, topics of discussion, activities, and perceived benefits of mentoring. The authors found significant associations between mentor and mentee ratings on a majority of domains; however, agreement regarding topics discussed and perceived benefit was not statistically significant. Thus, it is important to evaluate the correspondence between mentee and mentors’ ratings on dimensions of the relationship.

### **Purpose**

Given evidence of the potential benefits of mentoring programs, it is critical to further examine aspects of the mentoring relationship that may contribute to positive outcomes. In particular, as we have noted, there is limited research regarding variables that contribute to the quality of mentor–mentee relationships and the findings from these few studies have been mixed. This is a significant limitation because such information has the potential to guide practitioners when matching mentors with mentees. Furthermore, it is important to examine the concordance between mentor and mentee ratings of relationship quality for several reasons. First, soliciting both interventionist and consumer opinions about interventions is considered best practice. Although research has not examined the implications of concordance per se, discrepancies in satisfaction suggest the possibility of differing values or needs. This may be particularly important for relationship-based interventions. In addition, research suggests that intervention acceptability is significantly correlated with treatment integrity (Miramontes, Marchant, Heath, & Fischer, 2011) and models suggest a self-reinforcing cycle (Lane, Beebe, Frankenberger, Lambros, & Pierson, 2001). Thus, interventions that are not valued by either interventionists or consumers may result in lower implementation integrity (and vice versa), thus compromising potential effects. Finally, examining the degree of correspondence might also inform practice by allowing interventionists to address elements with routinely lower ratings prior to implementation. For example, dissimilar ratings relative to topics discussed could lead to proactive modifications at the initiation of mentoring, such as aligning expectations for discussion topics. Such changes could enhance the relationship and, in turn, result in optimal benefit and student outcomes. Thus, the purpose of this study was to further examine issues related to mentor–mentee relationship assessed through self-reports by mentors and their high-school-age mentees who received C&C. The following specific research questions were addressed.

**Research Question 1:** How do high school age mentees and their mentors rate the quality of a mentoring relationship and to what extent do ratings correspond?

**Research Question 2:** To what extent are mentor and mentee perceptions of the quality of their relationship influenced by age (mentor, mentee, pair discrepancy), race/ethnicity match, gender match, and specific topics discussed during mentoring meetings?

## Method

### Participants

**Mentees.** Participants were part of a study conducted by the Center for Adolescent Research in Schools (CARS), a center grant funded by the Institute of Education Sciences (Kern, Evans, & Lewis, 2011). The purpose of the grant was to develop and evaluate a comprehensive intervention package for secondary-aged students with social, emotional, and behavioral problems. The study took place across five states (Pennsylvania, Ohio, Kansas, South Carolina, and Missouri), and 647 high school students (Grades 9–12) participated in the intervention evaluation via a 2-year randomized control trial (RCT).

To identify students for the RCT, school professionals (e.g., counselors, teachers, administrators) referred students who were experiencing significant impairment due to social, emotional, and/or behavioral problems. Students were then assessed for eligibility to verify they demonstrated both social/emotional/behavioral problems and school impairment.

Social/emotional/behavioral problems were demonstrated by scores at least one standard deviation above the norm on any of the three following standardized assessments (all of which were administered with each participant): (a) a *t* score of 60 or higher on either the internalizing or externalizing composite of the *Behavior Assessment System for Children–Teacher or Parent Version* (BASC-2; C. R. Reynolds & Kamphaus, 2004), indicating minimally “at risk” status; (b) a *t* score of 60 or higher on the self-report *Multidimensional Anxiety Scale for Children–2* (MASC-2; March, 1998), with 61 being above average or clinical; or (c) a *t* score of 60 or higher on the self-report *Reynolds Adolescent Depression Scale–2* (RADS-2; W. M. Reynolds, 2002), with 61 indicating at least mild depression. School impairment was demonstrated when a student experienced two or more of the following risk indicators for dropout: (a) five or more absences or tardies, other than illness or suspension, in any given month; (b) four or more office behavior referrals in a semester; (c) two or more suspensions in the current academic year; or (d) one or more Fs or two or more Ds in core academic subjects in one of two most recent grading periods. Students with autism spectrum disorder/pervasive developmental disorder or an IQ below 75 were excluded.

Schools were randomly assigned to an intervention or comparison condition. Approximately half of the sample

( $n = 337$ ) received intervention in the form of an assessment-based multicomponent package (see Kern et al., 2015). Due to the need to improve school connections for all students in the study, every student in the intervention condition received the C&C mentoring intervention. Teachers, school mental health professionals, and parents in the comparison condition received monthly newsletters focused on aspects of wellness (e.g., nutrition, exercise, relaxation, effective communication).

A subsample of 166 students attending 27 schools participated in the current analysis. Participants were students (hereafter referred to as mentees) who were randomly assigned to the intervention group and remained in the study for Year 2 of the RCT. The subsample represented 49% of the 337 students in the intervention group. Missing data were primarily due to attrition, which is common with this population and age group (U.S. Department of Education, 2016; Villarreal, 2015). For this sample, 62% of the students ( $n = 103$ ) had an individualized education program (IEP). With respect to race/ethnicity, the majority of the sample was Caucasian (59%), followed by African American (36.1%). The sample was predominantly male (74.7%). Grade level at study enrollment (the year prior to intervention) spanned 8 to 11. Mentee demographic information can be found in Table 1.

**Mentors.** The majority of mentors were teachers (54.8%), who may also have served as case managers (17.2%). Mentor age ranged from 21 to 65 years. Most were Caucasian (87.1%) and female (61.3%). Mentor demographic information can be found in Table 2. No efforts were made to match mentees and mentors along demographic characteristics; however, 42.2% of mentor–mentee dyads were gender matched and 83.2% of mentor–mentee dyads were the same race/ethnicity.

### Measures

**C&C monitoring sheet.** Prior to each weekly meeting, the mentor completed a C&C Monitoring Sheet with information about the mentee’s performance in school, including (a) attendance, (b) tardies, (c) grades/failing classes, (d) missing assignments, (e) skipped classes, (f) behavioral referrals, (g) detention, and (h) in-school and out-of-school suspensions. These data, typically available through an electronic database, shaped the focus of conversation during C&C sessions and also guided implementation of additional support strategies when indicated. Specifically, preestablished criteria indicated to the mentor that the mentee was at risk for disengagement or dropout. These criteria pertained to the current month of mentoring and included having four or more absences or disciplinary referrals, five or more tardies, three or more unexcused absences, two or more detentions, two or more in-school or out-of-school

**Table 1.** Demographics for Mentee Study Participants.

Characteristic	<i>n</i>	%
<b>Age (years)</b>		
13	1	0.6
14	35	21.1
15	73	44.0
16	38	22.9
17	17	10.2
18	2	1.2
<b>Grade</b>		
8	9	5.4
9	78	47.0
10	67	40.4
11	6	3.6
Unknown	6	3.6
<b>Ethnicity</b>		
Caucasian	98	59.0
African American	60	36.1
Hispanic/Latino	4	2.4
Other	4	2.4
<b>Gender</b>		
Male	124	74.7
Female	42	25.3
<b>Family SES</b>		
US\$0–US\$20,000	59	35.5
US\$20,001–US\$40,000	49	29.5
US\$40,001–US\$60,000	29	17.5
US\$60,001–US\$80,000	13	7.8
US\$80,000–US\$100,000	3	1.8
US\$100,001+	6	3.6
Unknown	7	4.2
<b>Free or reduced-price lunch</b>		
Yes	116	69.9
No	46	27.7
Unknown	4	2.4

Note. SES = socioeconomic status.

suspensions, missing 10% or more assignments in an academic class, and currently having a grade of D or lower in an academic class.

**C&C surveys.** Mentees completed an adapted version of the Check & Connect Subject Survey (hereafter referred to as mentee survey; see Table 3), designed to gain their perspectives on the C&C experience. The survey was adapted by the American Institutes for Research (AIR) for use in a multiyear evaluation of the efficacy of C&C. The adaptation consisted of adding three questions, mirroring the mentor survey (denoted by an asterisk on Table 3), to the original four-question survey, developed by the University of Minnesota (A. R. Anderson et al., 2004). Five questions (and subquestions) are answered using Likert-type scales, and two questions request open-ended responses.

**Table 2.** Demographics for Mentor Study Participants.

Characteristic	<i>n</i>	%
<b>School role</b>		
Teacher only	51	54.8
Case manager only	3	3.2
Teacher and case manager	16	17.2
Counselor	3	3.2
Social worker	3	3.2
School psychologist	1	1.1
Counselor and psychologists	1	1.1
Administrator	1	1.1
Other	12	12.9
Missing	2	2.2
<b>Age (years)</b>		
21–30	22	23.6
31–40	30	32.3
41–50	19	20.4
51–60	12	12.9
61–65	5	5.4
Missing	5	5.4
<b>Ethnicity</b>		
White/Caucasian	81	87.1
Black/African American	9	9.7
Hispanic/Latino	2	2.1
Missing	1	1.1
<b>Gender</b>		
Female	57	61.3
Male	35	33.6
Missing	1	1.1

Mentors completed the C&C Mentor Survey, also developed by the University of Minnesota (A. R. Anderson et al., 2004), to assess mentors' views of mentoring (see Table 4). The mentor survey included five questions (and subquestions), all of which are answered using Likert-type scales. Most of the questions ask the mentor to speculate about his or her mentee's perception of the relationship (e.g., "The student is excited to meet with me").

Questions pertain to either "talk" or "relationship quality." The talk subscale on the mentors' survey includes items that ask the mentor to rate the degree to which he or she talks to the mentee about doing well in school, friendships, family, and/or future plans. On the mentees' survey, talk subscale items ask the mentee how the mentor helps with the four areas (i.e., school, friendships, family, and/or future plans). The relationship quality subscale on the mentor survey consisted of five items and the relationship quality subscale on the mentee survey consisted of 10 items, each representing different aspects of the mentor's/mentee's perception of how well the mentee related to the mentor.

We examined the internal consistency of two subscales on both the C&C Mentee Survey and the C&C Mentor Survey. As noted above, subscale items evaluated pertained

**Table 3.** Check & Connect Mentee Survey.

Question	Response options
1. How often do you get to see your mentor? <sup>a</sup>	Haven't met, less than once a month, about once a month, once every 2 weeks, once a week, more than once a week
2. How often would you like to see your mentor? <sup>a</sup>	Less often, about the same, more often
3. To what extent do you talk with this student about the following things? Doing well in school <sup>a,t</sup> Friendships <sup>a,t</sup> Family <sup>a,t</sup> Future plans <sup>a,t</sup>	Not at all, a little bit, somewhat, very much
4. Tell us how much you agree or disagree with the following questions about your mentor? I look forward to meeting with my mentor <sup>a,m,q</sup> I feel comfortable meeting with my mentor <sup>a,m,q</sup> I am willing to share information about my school experiences with my mentor <sup>a,m,q</sup> I am willing to share information about my personal life with my mentor <sup>a,m,q</sup> I could ask my mentor for help if I had a problem <sup>a,m,q</sup> I know that my mentor is really on my side <sup>q</sup> I know that my mentor is there for me no matter what I do <sup>q</sup> My mentor knows if something is bothering me <sup>q</sup> My mentor respects me <sup>q</sup> My mentor really cares about me <sup>q</sup>	Strongly disagree, disagree, agree, strongly agree
5. I would recommend the Check & Connect program to a friend	Strongly disagree, disagree, agree, strongly agree
6. What is something that you would want to change about Check & Connect?	Open-ended response
7. What is the best thing about being in Check & Connect?	Open-ended response

<sup>a</sup>Items that appear on both mentor and mentee survey. <sup>t</sup>Talk items. <sup>m</sup>Items matched to answer Question 1. <sup>q</sup>Relationship quality items.

**Table 4.** Check & Connect Mentor Survey.

Question	Response options
1. Please tell us how much you agree or disagree with the following questions about this student? The student is excited to meet with me <sup>a,m,q</sup> The student is comfortable spending time with me and talking to me <sup>a,m,q</sup> The student easily and readily shares information with me about his or her school experiences <sup>a,m,q</sup> The student easily and readily shares information with me about his or her personal life <sup>a,m,q</sup> This student has asked for, or been receptive to, an offer of help from me <sup>a,m,q</sup>	Strongly disagree, disagree, agree, strongly agree
2. How often do you get to see this student? <sup>a</sup>	Haven't met, less than once a month, about once a month, once every 2 weeks, once a week, more than once a week
3. How often would you like to see this student? <sup>a</sup>	Less often, about the same, more often
4. To what extent do you talk with this student about the following things? Doing well in school <sup>a,t</sup> Friendships <sup>a,t</sup> Family <sup>a,t</sup> Future plans <sup>a,t</sup>	Not at all, a little bit, somewhat, very much
5. How would you rate the extent to which you have been able to build a relationship, or connect, with this student?	Still working on it, fairly good, very close connection/good relationship

<sup>a</sup>Items that appear on both mentor and mentee survey. <sup>m</sup>Items matched to answer Question 1. <sup>q</sup>Relationship quality items. <sup>t</sup>Talk items.

to “talk” (four items on each survey), indicated by a superscript t on Tables 3 and 4, and relationship quality (10 items

on the mentee survey, five items on the mentor survey), indicated by superscript q on Tables 3 and 4. Coefficient

alpha for talk, mentee survey, was .70; relationship quality, mentee survey, was .94; talk, mentor survey, was .71; and relationship quality, mentor survey, was .89. Thus, internal consistency fell in the acceptable to excellent range for all four subscales.

### Procedures

**Mentor recruitment and training.** To recruit school staff to become mentors, CARS staff (graduate students or master's level employees) described the C&C Program during school faculty meetings and placed flyers with a written explanation of the program in faculty and school staff mailboxes. Simultaneously, student study participants were asked to identify a school staff member they would like to have as a mentor. A small number of students requested specific school staff members, who were asked to serve as mentors. To our knowledge, all requested school staff agreed to serve as mentors. Prior to becoming a mentor, school staff self-reported they could demonstrate the following characteristics: (a) be willing to persist with mentee, (b) believe in mentee's strengths and abilities, (c) be willing to collaborate and cooperate with families and CARS staff, and (d) have good skills in advocacy, organization, and case management. Mentors were asked to commit to mentoring their designated mentee for an entire school year and some continued for a second year. In addition, occasionally a mentor changed midyear due to unforeseen circumstances (e.g., mentor leave of absence, school transfer).

CARS staff used a coaching model to train mentors. An initial 15- to 20-min small-group instructional session with all mentors in a school was conducted that included the following procedures: (a) the purpose and format of the intervention was explained; (b) examples and nonexamples of the intervention were provided; (c) the intervention was modeled by the facilitator and role-play was used, if requested by the mentor; (d) a video of a partial mentoring session was shown; and (e) the CARS staff answered any questions about the intervention. After the initial instructional session, each mentor was observed during his or her initial mentoring session and two additional sessions within the first month of implementation. During these observations, fidelity data were collected using a checklist that listed critical components of C&C sessions (mentor praised student for improvements or continued success; mentor problem solved about risk when indicated; if needed, mentor and student created a plan with specific interventions). CARS staff provided performance feedback following each fidelity check. When a mentor did not meet fidelity of 80%, a booster session was held. Booster sessions followed a problem-solving model designed to ascertain the reason for the lapse in fidelity (Clemens, Turner, & Kern, 2011). After the reason for the fidelity lapse was identified, the CARS staff provided corresponding support (e.g., additional explanation if mentor lacked understanding of any aspect of

the intervention, modeling if mentor needed clarification on how to provide feedback in a supportive manner, assistance in how to access mentee data through school information system). Subsequent to the booster session, fidelity was again assessed via three additional fidelity checks. If fidelity on the third check was still below the predetermined 80% level, an additional booster session was planned; however, this was never needed. Overall, fidelity during this initial implementation was 80.13%.

**Mentoring sessions.** Mentoring sessions almost always occurred during homeroom, lunch, or before or after school. However, on occasion, when no other availability in mentor and mentees schedules was found, students were pulled from a class other than core academic instruction. After reviewing mentee information (e.g., attendance, tardies, grades; as described above), each mentor was expected to meet individually with his or her mentee for a minimum of 15 to 20 min one time per week. When any risk indicator was present, the mentor followed a problem-solving procedure, facilitated by a flowchart linking mentee concern to related intervention options (developed by CARS). Mentors collaborated with mentees to determine an acceptable strategy that was most likely to effectively address the problem.

In addition to assessing integrity during initial implementation, ongoing implementation/treatment integrity throughout the school year was assessed on a monthly basis via permanent product data using C&C Monitoring Sheets. A fidelity checklist was developed and field-tested during the development phase of CARS that contained the core and critical components of C&C (for a description of the development process, see Kern et al., 2011). CARS staff then coded five items indicating whether the mentee met with the mentor each week, the reason if they failed to hold a weekly meeting, whether mentor recorded risk factors, whether an intensive intervention was indicated based on risk factors (described below), and interventions that were implemented when indicated by risk factors. Overall, mean integrity was 80% during Year 1 and 81% during Year 2 (range = 0%–100%). Note that 0% was coded if mentor/mentee never met across the course of a month; however, students were not dropped from the study unless they failed to attend school for four consecutive weeks. Thus, total integrity underestimates actual implementation with participating students.

**Data collection.** Data for the current study were collected by CARS staff at the end of Year 2 of the RCT, when the most complete data set was obtained due to heightened monitoring of form completion. CARS staff were trained extensively during full-day workshops that spanned 5 days. Training included review of all of the interventions and integrity forms and practice administering assessments. At the end of the school year, mentors and mentees independently completed their respective C&C survey. Mentees

were administered the survey as part of an end-of-the-year assessment battery. CARS staff provided the survey to mentees to complete independently, which was collected approximately a week later.

### Data Analysis

To answer Research Question 1 pertaining to perceptions of the C&C intervention and relationship quality, we used descriptive statistics. Specifically, five matched items contained on both the mentor and mentee survey (see superscript m on Tables 3 and 4) were compared by calculating percentage of mentor and mentee response options for each question and subquestion. In addition, we conducted correlational analyses between mentor mentee quality ratings (i.e., five quality items on the mentee survey that matched five quality items on the mentor surveys). It is important to note that for many items, mentors were asked to speculate about their mentee's perception, rather than provide information about their own experience. To further explore the differences in means between mentor and mentee ratings of relationship quality, we conducted paired-sample (dependent) *t* tests of (a) the means of the relationship quality ratings by the mentee and mentors across five matched quality survey items (see Table 6) and (b) the mean of each of the mentor and mentee item-level responses to the five matched items.

To answer Research Question 2, we examined ratings of relationship quality relative to age (mentor, mentee, pair discrepancy), race/ethnicity match, gender match, and specific topics discussed during mentoring meetings. For this analysis, demographic information regarding race/ethnicity and gender of mentees and mentors was used as well as questions on the mentor and mentee surveys, which were grouped by topic into two subscales representing (a) topics discussed (talk, noted by superscript t on Tables 3 and 4) and (b) relationship quality (noted by superscript q on Tables 3 and 4). We used a linear mixed-effects model to evaluate whether race, gender, or topics discussed (as measured by the help/talk subscale) were related to mentor and mentee perceptions of relationship quality. To test the effects of gender, race, and topics discussed on relationship quality, mentee and mentor ratings of relationship quality were treated as repeated measures and regressed on respective ratings of topics discussed, with demographic variables (gender, minority status, and number of sessions) entered as covariates. A multivariate regression model was estimated to allow dependence between mentor and mentee's ratings of relationship quality. The mentor and mentee reports of relationship quality were allowed to correlate. Differential effects of mentor and mentee gender and minority status were evaluated by including interaction terms between the gender and minority-status of the mentor and mentee. Preliminary analysis examined the variability in relationship quality using

linear-mixed effects model. School level variability in relationship quality was small and not statistically significant. As such, random effect of school was excluded from subsequent analysis.

## Results

### *Relationship Quality and Mentor–Mentee Correspondence*

Descriptive results for Research Question 1 are reported in Table 5. Almost all mentees reported that they looked forward to meeting with their mentor (i.e., 92.9% strongly agreed or agreed), felt comfortable with their mentors (i.e., 94.2% strongly agreed or agreed), were willing to talk about school-related experiences (i.e., 96.1% strongly agreed or agreed), and would be willing to ask for or accept help from their mentors (i.e., 94.1% strongly agreed or agreed). Although overall high, ratings were slightly lower for willingness to talk about personal life (i.e., 83.1% strongly agreed or agreed). When asked how often they would like to see their mentor, 76.5% answered "about the same" whereas 18.8% answered "more often." Very few (4.7%) answered "less often." When mentors were asked similar questions in relation to how they perceived their mentees would feel, mentors' ratings were slightly lower in some areas than mentees. Most mentors indicated they felt their mentee looked forward to meeting (i.e., 78.5% strongly agreed or agreed), felt comfortable with them (i.e., 95.7% strongly agreed or agreed), was willing to talk about school-related experiences (i.e., 91.3% strongly agreed or agreed), was willing to talk about their personal life (i.e., 83.6% strongly agreed or agreed), and would be willing to ask for or accept help from their mentors (i.e., 76.4% strongly agreed or agreed). In response to the question pertaining to how often they would like to see their mentee, 66.7% of mentors responded "about the same," 31.2% responded "more often," and 2.2% answered "less often."

When asked about perceptions of topics discussed during mentoring meetings, mentors and mentees reported similarly in relation to conversations about future planning, friendships, and families. A large majority of mentees (88.2%) reported mentors helped with future planning very much or somewhat, whereas most mentors (84.4%) reported discussing future planning somewhat or very much. A majority of mentors (64.5%) reported having conversations about friendships very much or somewhat, and mentees (65.4%) reported mentors helped very much or somewhat with friendships. A majority of mentors (69.9%) reported discussing families very much or somewhat, and mentees (62.8%) reported that mentors helped with families very much or somewhat. A large majority of mentors (92.4%) reported that doing well in school was a frequent conversation; however, a smaller percentage of mentees (86.3%)

**Table 5.** Percentage of Mentees and Mentors Endorsing Each Anchor on Survey.

Survey item	Strongly disagree		Disagree		Agree		Strongly agree	
	Mentee	Mentor	Mentee	Mentor	Mentee	Mentor	Mentee	Mentor
I look forward to meeting/student is excited to meet	0.0%	7.5%	7.1%	14.0%	57.8%	54.8%	35.1%	23.7%
I feel comfortable meeting with my mentor/student is comfortable meeting with me.	0.6%	3.2%	5.2%	1.1%	46.8%	40.9%	47.4%	54.8%
I am willing to share information about my school experiences/student easily and readily shares information about their school experiences	0.6%	3.3%	3.2%	5.4%	50.0%	44.6%	46.1%	46.7%
I am willing to share information about my personal life/student easily and readily shares information about personal life	3.2%	4.4%	13.6%	12.1%	50.6%	36.3%	32.5%	47.3%
I could ask my mentor for help/student has asked for or been receptive to an offer of help	0.0%	6.5%	5.9%	17.2%	45.1%	48.4%	49.0%	28.0%

  

Survey item	More often		About the same		Less often	
	Mentee	Mentor	Mentee	Mentor	Mentee	Mentor
How often would you like to see your mentor?/ How often would you like to see this student?	18.8%	31.2%	76.5%	66.7%	4.7%	2.2%

  

Survey item	Not at all		A little bit		Somewhat		Very much	
	Mentee	Mentor	Mentee	Mentor	Mentee	Mentor	Mentee	Mentor
How much do you talk about doing well in school?	1.9%	3.2%	11.7%	4.3%	33.1%	16.1%	53.2%	76.3%
How much do you talk about future plans?	6.5%	4.3%	9.2%	7.5%	28.8%	32.3%	55.6%	55.9%
How much do you talk about friendships?	22.2%	11.8%	12.4%	23.7%	30.1%	39.8%	35.3%	24.7%
How much do you talk about family?	23.5%	8.6%	13.7%	21.5%	28.8%	34.4%	34.0%	35.5%

**Table 6.** Results of Paired-Sample (Dependent) *t* Test Analyses.

Mentee/Mentor	Item	<i>M</i>	<i>SD</i>	<i>p</i>	<i>d</i>
Mentee	Mentee quality ratings*	2.32	0.51	.116	0.22
Mentor	Mentor quality ratings*	2.19	0.67		
Mentee	I look forward to meeting with my mentor	<b>2.20</b>	<b>0.55</b>	<b>.005</b>	<b>0.35</b>
Mentor	This student is excited to meet with me	1.95	0.83		
Mentee	I feel comfortable talking with my mentor	2.42	0.61	.478	0.08
Mentor	This student is comfortable spending time with me and talking to me	2.47	0.69		
Mentee	I am willing to share information about my school experiences with my mentor	2.43	0.57	.459	0.12
Mentor	This student easily and readily shares information with me about his or her school experiences	2.35	0.73		
Mentee	I am willing to share information about my personal life with my mentor	2.13	0.72	.181	0.16
Mentor	This student easily and readily shares information with me about his or her personal life	2.26	0.84		
Mentee	I could ask my mentor for help if I had a problem	<b>2.40</b>	<b>0.60</b>	<b>&lt;.001</b>	<b>0.57</b>
Mentor	This student has asked for, or been receptive to, an offer of help from me	1.98	0.85		

Note. Mentor and mentee quality ratings are based on the five overlapping items marked with superscript *m* on Tables 2 and 3. Mentee ratings were converted to the following numbers: 0 = not at all, 1 = a little bit, 2 = somewhat, 3 = very much; Mentor ratings were converted to the following numbers: 0 = strongly disagree, 1 = disagree, 2 = agree, 3 = strongly agree. Bold items are statistically significant.

**Table 7.** Mixed-Effects Model.

Fixed effects	Mentee			Mentor		
	Estimate	<i>t</i>	<i>p</i>	Estimate	<i>t</i>	<i>p</i>
Intercept	2.37	25.94	<.0001	2.31	19.36	<.0001
Number of sessions	0.00	0.68	.49	0.01	1.76	.08
Male mentee	-0.03	-0.27	.79	-0.12	-0.99	.32
Male mentor	-0.03	-0.18	.86	0.05	0.26	.79
Male Mentee × Male Mentor	-0.04	-0.23	.82	-0.20	-0.84	.40
Minority mentee	0.02	0.29	.77	0.03	0.28	.79
Minority mentor	0.04	0.26	.79	-0.21	-1.02	.31
Minority Mentee × Minority Mentor	-0.12	0.18	.51	0.18	0.69	.49
School talk/help	<b>0.13</b>	<b>2.39</b>	<b>.02</b>	0.06	0.80	.43
Family talk/help	0.08	1.82	.07	<b>0.20</b>	<b>3.27</b>	<b>.001</b>
Friendship talk/help	0.06	1.30	.20	<b>0.14</b>	<b>2.61</b>	<b>.01</b>
Future plans talk/help	<b>0.10</b>	<b>2.01</b>	<b>.05</b>	0.01	0.12	.91

Note. Bold items are statistically significant.

reported that mentors were somewhat or very much helpful in this area. Preliminary analysis did not reveal significant school-level variability in ratings of relationship quality. The correlation between mentee and mentor ratings of relationship quality was moderate ( $r = .42$ ;  $p < .001$ ). In addition, age-related variables (i.e., age of mentee, age of mentor, or age difference between mentee and mentor) were not correlated with relationship quality and were not included in the final mixed-effects model.

Results of the paired-sample *t* tests (see Table 6) revealed two statistically significant differences in ratings. Mentees reported greater excitement about meeting than their mentors:  $t(83) = -.074$ ,  $p = .005$ ,  $d = 0.35$ . On average, the mentee rating was 0.24 points higher than the mentor rating. Compared with mentors, mentees reported greater willingness to ask for help,  $t(83) = -4.335$ ,  $p < .001$ ,  $d = 0.57$ . On average, mentee rating was 0.41 points higher than mentor rating.

### Predictors of Mentoring Relationship Quality

Table 7 reports the results evaluating the effects of gender, race, and topics discussed on relationship quality. The first column represents the effects of predictors on mentor's report of relationship quality. The second column represents the corresponding effects for the mentee. The four hypothesized predictors were respective reports of help related to school, family, friendship, and future plans. The covariates include main effects of mentor and mentee gender, their minority status, and their interactions. Mentor ratings of topics discussed and mentee ratings of the helpfulness of those topics were significant predictors, with 30% of variance in mentee-reported quality of relationship explained by the predictors. In contrast, 68% of variance in mentor-reported quality of relationship was explained by the

predictors. Correlation between residuals of mentor and mentee reports was 0.26 suggesting that about 7% of variability in reports of mentor and mentee was shared. Demographic variables and interactions between mentee and mentor gender, and mentee and mentor race were not significant predictors of relationship quality for either mentors or mentees. However, when race and the number of sessions were controlled for, some topics discussed were related to the quality of relationships. For mentors, discussions about (a) family and (b) friends were significantly related to their view of the mentees' perceptions of relationship quality. For mentees, discussions of (a) school and (b) future plans were significant predictors of relationship quality. Hence, although mentees and mentors agreed to a certain extent regarding the influence of topics of discussion on relationship quality, the specific content of the discussion that influenced their perception differed. After accounting for the effects of all predictors, the covariance between the residuals of mentor and mentee reports of relationship quality was significantly different from zero.

### Discussion

Descriptive data from the current study indicated that both mentors and mentees rated all aspects of the relationship favorably. This is consistent with previous research that identified positive effects of mentoring (e.g., Sinclair et al., 1998). The predominantly affirmative mentor and mentor ratings might also reflect the risk population in the current sample. Specifically, DuBois et al. (2002) found greater effect sizes for studies with at risk or disadvantaged participants.

Interestingly, mentees' responses to two matched questions (excited to meet with me/look forward to meeting, receptive to help/could ask for help) indicated they judged the relationship to be significantly higher quality than the

mentors perceived their mentees would. This could be because mentors did not recognize the importance of the relationship to their mentees and/or that mentees may not have expressed how much they valued their experience. Furthermore, whereas 95% of the mentees liked weekly meetings, 18.8% desired more frequent meetings. This suggests that increasing the frequency of meetings may have been of further benefit to at least some of the mentees. In addition, 92.9% of mentees indicated they agreed or strongly agreed that they looked forward to meeting, whereas 78.5% of mentors agreed or strongly agreed. It is possible this difference could be attributed to the mentors finding mentoring burdensome at times, as it was a task in addition to their required activities. In fact, several studies have used outside mentors whose responsibility is solely to mentor students (e.g., Maynard et al., 2013; Sinclair et al., 1998; Sinclair et al., 2005). This arrangement might address student needs while reducing the burden on school staff.

Topics discussed explained a significant amount of variation in relationship quality. The most frequent topics discussed and perceived as helpful, as reported by both mentors and mentees, were school and future plans, whereas friendships and family were less frequently discussed. Analyses indicated that discussions about family and friends were significantly related to mentors' perceptions of relationship quality, but not mentees' perceptions. It may be that both mentors and mentees felt it was necessary to talk about school-related topics, which is a parsimonious conclusion because the process required they track school-related indicators of dropout. But, when conversations extended beyond those topics, mentors felt it was indicative of a higher quality relationship. Also, it may be that adolescents are less inclined to discuss their family or friendships with adult mentors. Future research might focus on ascertaining why particular topics are discussed or perhaps mentee characteristics (e.g., family issues, difficulty with peer relationships) that make it important to discuss particular issues. Future research might also focus on clarifying mentors' and mentees' expectations of discussion topics prior to beginning mentoring. For example, some dyads might find greater value in relationships that allow for discussion of things bothering them or that provide emotional support (Clark & Ayers, 1993; Rhodes et al., 2002), whereas others mentees might prefer instrumental support, such as discussion of school performance (Ensher & Murphy, 1997).

The findings also indicated that variables of age, gender, and ethnicity were not significant predictors of relationship quality. As discussed in the introduction, research examining the role of these variables is mixed (e.g., LoSciuto et al., 1996; Parra et al., 2002). Future research should examine whether these variables interact in ways that are not yet understood. For example, research indicating that mentoring may have larger effects on at-risk students (DuBois

et al., 2002) suggests they may have a greater need for adult relationships and guidance and adult characteristics may be less important. Future research should examine population differences and the relative role of predictors.

### *Study Limitations*

There are several limitations in the current study that should be considered. First, limited research has been conducted on the psychometrics of the surveys used in this study. Although we found acceptable to excellent internal consistency for four of the subscales of the C&C Survey, additional psychometric research is needed.

In addition, we used data from the second year of the RCT because the data set was more complete. However, there was attrition during the first year of the study and data were missing from some of the participating mentees and mentors. It is quite possible that mentees and mentors who did not persist into Year 2 would have differed in important ways in their perceptions of their mentoring relationship. Future research across multiple years should administer more frequent surveys and might compare responses from year to year.

Another limitation is that students were referred due to behavior problems, rather than randomly selected from a population of students with identified EBD. Although assessments were conducted to assure participants exhibited significant impairment, generalizability to a larger population should not be assumed. In addition, participants included only those who remained in the larger study for 2 years and completed surveys. Due to attrition, approximately half of the original sample was included in the current analysis. Again, this limits generalizability of the findings.

Another limitation is that we did not explore the relationship between the quality ratings and student outcomes. The CARS study implemented an intervention package, so the effects of C&C alone could not be parceled out. Furthermore, the intent of the current study was to examine relationship quality. Nonetheless, such information may be critical for optimal effectiveness of C&C and is an important next step in mentoring research. It will be particularly important to examine the role of C&C for dropout prevention, given that failure to complete school is a significant problem for this population.

Another potential limitation is that surveys were self-report. Although the intent of most survey questions is to obtain information about mentee perceptions of the relationship, which must be accomplished through self-report, other questions request more objective data (e.g., topics discussed). Future research might collect direct observation data to assess reliability of such self-report data. Finally, our analyses were largely correlational, and causation should not be inferred.

## Implications for Practice

In the current study, participating mentees indicated that they highly valued the mentoring relationship. We believe that these and earlier findings support a recommendation for this type of support for all students with emotional and behavioral problems. Although it seems clear that additional individualized interventions are needed for most students with significant emotional or behavioral concerns, continuous mentoring may enhance school connectedness among mentees. This type of intervention may be particularly appropriate given that topics of discussion pertained to success in school and interpersonal relationships, which are areas of difficulty for students with or at risk for EBD. In addition, the mentoring process can facilitate rapid identification and intervention when student problems arise.

Our findings also suggest the need for flexibility in mentoring. Specifically, almost one in five students indicated he or she would like more frequent mentoring meetings. We recommend that mentors gauge whether more frequent meetings would be beneficial or desirable to their mentee. In light of the time commitment, schools may want to identify ways to assure mentor availability, such as hiring staff specifically dedicated to mentoring, identifying outside volunteers willing to commit on a long-term basis, or designating protected time for staff (e.g., counselors, school psychologists, case managers) to mentor as part of their assigned responsibilities. In addition, differences in mentor and mentee perceptions of helpfulness of topics suggest that flexibility should be considered with respect to goals of the mentoring relationship. For example, mentors might identify the topics their mentees prefer to discuss and allocate time for discussion of those topics.

Finally, although additional research is needed, our data support that mentors and mentees generally viewed their mentoring relationships as positive, and that this was irrespective of any match along demographic lines. Thus, pending further research, it may be the case that simply establishing mentoring relationships for youth with or at risk for EBD is more important than ensuring age, gender, or ethnic matches between mentors and mentees.

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