

The Impact of Youth Risk on Mentoring Relationship Quality: Do Mentor Characteristics Matter?

Elizabeth B. Raposa,¹ Jean E. Rhodes,¹ and Carla Herrera²

© Society for Community Research and Action 2016

Abstract Although mentoring is a widely used intervention strategy, effect sizes for at-risk youth remain modest. Research is therefore needed to maximize the impact of mentoring for at-risk youth who might struggle to benefit from mentoring relationships. This study tested the hypothesis that different types of youth risk would have a negative impact on mentoring relationship quality and duration and explored whether mentor characteristics exacerbated or mitigated these negative effects. Results showed that elevated environmental stress at a youth's home and/or school predicted shorter match duration, and elevated rates of youth behavioral problems, such as poor academic performance or misconduct, predicted greater youth dissatisfaction and less positive mentor perceptions of relationship quality. Mentors with greater self-efficacy and more previous involvement with youth in their communities were able to buffer the negative effects of environmental stress on match duration. Similarly, mentors' previous involvement with youth buffered the negative effects of youth behavioral problems on mentor perceptions of relationship quality. Findings have important implications for the matching of mentors and at-risk youth in a way that improves mentoring outcomes.

Keywords Stress · Mentoring · Close relationships · Adolescence · Big brothers big sisters

Over the past few decades, youth participation in formal mentoring programs has become increasingly popular (MENTOR; Bruce & Bridgeland, 2014). Although such programs have led to modest improvements in a range of developmental outcomes (DuBois, Portillo, Rhodes, Silverthorn & Valentine, 2011; Herrera, DuBois & Grossman, 2013), these effects appear to vary widely across youth. For example, youth who enter such programs with relatively poor academic, social, or behavioral functioning appear less likely to benefit from mentoring programs (DuBois et al., 2011; Herrera et al., 2013; Schwartz, Rhodes, Chan & Herrera, 2011). To maximize the impact of mentoring interventions for all youth, there is a need to further specify the extent to which baseline risk attenuates program effects.

Several recent studies have explored youth characteristics that might predict relatively poor mentoring outcomes. Schwartz et al. (2011), for example, found that youth who, at baseline, exhibited higher interpersonal risk benefited less from mentoring interventions, both in terms of the quality and duration of the match, as well as impact on academic performance, than peers who presented with only moderate risk. A recent meta-analysis tested a similar question using four groups of at-risk youth, which were based on high versus low levels of environmental risk (e.g., family conflict, and poverty) and high versus low levels of individual risk (e.g., behavioral, academic, or social difficulties; DuBois et al., 2011). Findings suggested that the effects of mentoring were weaker for youth who had high levels of both types of risk, relative to youth who had only high levels of environmental risk or high levels of individual risk.

Of note, another large-scale study of mentoring that included 1310 youth did not replicate these findings. Instead, it showed that mentoring outcomes were largely

✉ Elizabeth B. Raposa
eb.raposa@gmail.com

¹ Department of Psychology, University of Massachusetts, Boston, MA, USA

² Portland State University, Portland, OR, USA

similar across youth of different levels of individual and environmental risk (Herrera et al., 2013). However, mentors of youth with high levels of environmental and/or individual risk reported more challenges within the match, such as more frequent cancellations by the youth, difficulty managing youth behavioral problems, and greater need for program staff support in interacting with the youth's family, navigating social services, and addressing youth social and emotional needs. Similarly, qualitative interviews with mentors who ended mentoring relationships prematurely showed that these mentors often reported feeling less efficacious and more overwhelmed in their capacity to deal with the stressful home lives of mentees (Spencer, 2007).

These findings suggest a need to further explore whether the impact of mentoring varies depending on the levels of youth baseline risk, including youth stressors and problem behaviors. They also suggest a need to identify characteristics of mentors who may be better suited for building relationships with more vulnerable youth. For example, mentors who are more seasoned in working with youth might be better able to deal with the complexities of forming relationships with children who are exposed to high levels of stress at home and/or show elevated rates of problem behavior. Based on their experiences, such adults may feel more confident and hold a more nuanced understanding of youth across diverse contexts. In fact, there is some evidence that at-risk youth are more likely to benefit from working with mentors who hold more positive attitudes of youth (Karcher, Herrera & Hansen, 2010), have had previous experience in a helping profession (DuBois et al., 2011), and have greater self-confidence (Karcher, Nakkula & Harris, 2005). However, previous mentoring experiences may also influence expectations about subsequent mentoring relationships and lead to disappointment if these expectations are not met. For example, qualitative interviews revealed that mentors who ended relationships early often reported having had preconceived and unfulfilled expectations about mentees' needs and capabilities, based on past mentoring experiences (Spencer, 2007). This, in turn, can lead to disappointment and premature termination of the relationship (Spencer, 2007; Spencer & Basualdo-Delmonico, 2014). Similarly, a discrepancy between a mentor's idealized and actual roles in the relationship has been linked to poorer relationship quality and lower motivation to stay in the relationship (Madia & Lutz, 2004).

Mentors' goals for the relationship can also strongly influence relationship quality and outcomes, particularly in the context of youth risk. Researchers have identified different types of goals that mentors and mentoring programs use to guide their work (Hamilton & Hamilton, 1990; Karcher, Kuperminc, Portwood, Sipe & Taylor, 2006). In

what is sometimes called a *developmental* or psychosocial approach, mentors focus on building close relationships as a way to facilitate the youth's overall development. In contrast, an *instrumental* approach involves a focus on building specific skills and movement toward achieving goals. Although successful relationships tend to incorporate a balance of these two approaches, a mentor's commitment to specific instrumental objectives, particularly without youth input, could detract from building a relationship with a particularly at-risk youth. For example, a mentor whose primary goal is to improve the youth's academic outcomes might struggle to engage with a youth who dislikes school and is struggling with multiple family stressors at home.

This study investigated the impact of youth baseline risk on mentoring relationships, as well as mentor characteristics that might moderate these associations. Multiple indicators of mentoring relationship quality and duration were chosen as the outcomes of interest, given that these variables play an important role in determining mentoring outcomes (DuBois, Neville, Parra & Pugh-Lilly, 2002; Grossman & Rhodes, 2002). Participants were drawn from a large, longitudinal dataset of youth and mentors participating in Big Brothers Big Sisters (BBBS) school-based mentoring programs (Herrera, Grossman, Kauh & McMacken, 2011). We hypothesized that youth experiences with environmental stressors and reports of behavioral and academic problems would have a negative impact on the duration and quality of mentoring relationships. We also hypothesized that mentors with more previous experience with youth and mentoring, greater self-efficacy, and more developmental goals at baseline would help to mitigate the negative effects of youth risk on mentoring relationship outcomes.

Method

Participants

Youth in the current analyses were drawn from a larger, random assignment impact evaluation study involving youth recruited from 10 Big Brother Big Sister (BBBS) agencies across the country. The participating BBBS agencies served a total of 71 participating schools and had been operating programs for at least 4 years, had strong leadership in place, served at least 150 youth, and recruited at least two different types of volunteers (e.g., high school students and professionals; Herrera et al., 2011). Youth inclusion criteria for the original study included the following: (a) fourth through ninth grades at the start of the study, (b) had parental consent to participate, and (c) had not been referred because of a crisis

(e.g., referred by Child Protective Services). The current analyses involved the 565 youth (54% female) who were randomized to the treatment condition and their mentors. On average, youth were 11.24 years old ($SD = 1.67$, range from 9 to 18 years old) and 64% of the youth identified as an ethnic minority. Approximately 69% of youth reported receiving free or reduced-price lunch. Mentors (63% female) were matched to youth on a one-to-one basis ($n = 565$). On average, mentors were 24.59 years old ($SD = 12.06$), 20% of mentors were married, and 19.5% of mentors identified as an ethnic minority.

Procedure and Intervention

At baseline, questionnaires were completed by youth, mentors, and one teacher per youth. For youth in middle and high school, the majority of questionnaires were completed by the youth's science, social studies, English as a second language, or homeroom teacher. After baseline measures were completed, youth were randomized to either the mentoring condition ($n = 565$) or waitlist control condition ($n = 574$). Current analyses focus on the mentoring relationships of youth assigned to the treatment group. Follow-up questionnaires were administered to this group of youth at two additional time points: the spring of the first school year (T1) and the fall of the second school year (T2). Questionnaires were administered by a survey firm and were available in Spanish and English. Questionnaires were completed in youths' schools or over the phone if youth had moved or were absent from school.

Measures

Youth environmental stressors and individual, behavioral risk factors, and mentor characteristics and goals were assessed at baseline. Youth and mentor perceptions of the mentoring relationship were measured at T1, during spring of the first school year. Overall match duration was assessed at the completion of the study at T2, during fall of the second school year.

Youth Environmental Stress

At baseline, youth completed a checklist of 14 environmental stressors. These stressors included a history of parental incarceration, receiving free or reduced-price lunch at school, someone close dying within the past year, and the occurrence of any of the following stressors within the past 6 months: moved or changed homes, changed schools, broke up with a boyfriend/girlfriend, close friend moved away, picked on or bullied at school or in your neighborhood, someone you know well was hurt badly or

very ill, parents separated, parent/guardian started working, parent/guardian stopped working or lost a job, anyone you live with had a baby, and anyone moved into or out of your house. A final environmental stressor was created based on youth reports on the Absent Parent Scale (Vandell et al., 2005). Youth who scored in the top third of the sample for this measure were coded as having an absent parent. A composite measure of environmental stress was created using a count of the total number of environmental stressors endorsed.

Youth Behavioral Risk

Academic performance. Youth self-reported on their grades on their last report card, from 1 "D's and F's" to 8 "all A's." In addition, teachers provided a baseline assessment of each youth's overall academic performance from 1 "below grade level" to 5 "excellent." These two items were standardized and summed to create a measure of youth academic performance. Youth who scored in the bottom third of academic performance were coded as having poor academic performance.

Misconduct. Youth reported whether they had engaged in any of 10 problem behaviors, such as getting into a fight at school, lying to parents about something important, or breaking something on purpose. Youth were coded as having misconduct problems if they endorsed engaging in any of these behaviors within the past 3 months.

Substance use. Youth reported whether they had used tobacco, alcohol, marijuana, or any other drug (e.g., LSD, cocaine, heroin, and inhalants) not including medicine. Youth were coded as having substance use if they endorsed using any substances within the past 3 months.

A composite of youth behavioral risk was created by summing youth scores for academic problems, misconduct, and substance use (range 0–3).

Mentor Characteristics

Self-efficacy. Mentors completed 19 self-report items about their confidence in their ability to effectively mentor, using a Likert scale from 1 "not at all confident" to 4 "extremely confident" (DuBois et al., 2002; Parra, DuBois, Neville, Pugh-Lilly & Povinelli, 2002). Example items include "How confident are you in your ability to deal with a mentee's behavioral problems?" and "How confident are you in your ability to provide emotional support to a mentee?" Responses from these items were averaged to create an overall score for mentor self-efficacy, with higher scores indicating greater confidence.

Attitudes toward youth. Mentors completed seven self-report items about their general perceptions of youth ages 9–14 in their communities. Example items include "How many kids in your community respect adults?" and

“How many kids in your community try to do their best?” Mentors responded using a Likert scale from 1 “none” to 5 “all or almost all.” Overall attitudes toward youth were calculated as a mean of all seven items, with higher scores indicating more positive attitudes.

Previous involvement with youth. Mentors completed eight self-report items about their prior involvement with youth and youth activities, such as volunteering in academic tutoring or literacy programs, volunteering for programs like the Boy Scouts or Girl Scouts, and making donations to youth programs or activities. The number of items endorsed by each mentor was summed to create a measure of mentors’ previous involvement with youth in their communities, with higher scores indicating greater previous involvement with youth.

Previous mentoring experience. Mentors completed a single item asking whether they had previous mentoring experience in a formal mentoring program like BBBS.

Goals. Mentors were asked to indicate their most important goal for the mentoring relationship. Options included helping the child make academic improvements, helping the child improve school behavior, being a friend, helping the child improve relationships with others, helping the child feel good about himself/herself, or other. Based on previous research on mentors’ goals and mentoring outcomes (Hamilton & Hamilton, 1990; Karcher et al., 2006), mentor responses were coded as developmental if the mentor indicated “being a friend” or “helping the child feel good about himself/herself” as his/her most important goal for mentoring and instrumental if the mentor indicated “academic improvement” or “improving school behavior” as his/her most important goal for mentoring. “Helping the child improve relationships with others” was examined separately given that it has aspects of both an instrumental (defined goal) and a developmental (focused on relationships and psychosocial growth) approach.

Mentor–Youth Relationship Outcomes

Youth emotional engagement. Youth completed eight self-report items about their level of emotional engagement in the mentor–youth relationship, using a four-point Likert scale ranging from 1 “not at all true” to 4 “very true” (Rhodes, Reddy, Roffman & Grossman, 2005). Example items include, “When I’m with my mentor, I feel excited” and “When I’m with my mentor, I feel important.” A mean score of youth emotional engagement was created based on these items, with higher scores indicating greater youth emotional engagement.

Youth dissatisfaction. Youth completed six self-report items about their level of dissatisfaction in the mentor–youth relationship, again using a four-point Likert scale ranging from 1 “not at all true” to 4 “very true” (Jucovy,

2002). Example items include “Sometimes my mentor promises we will do something, then we don’t do it” and “I wish my mentor knew me better.” A mean score of youth dissatisfaction was created based on these items, with higher scores indicating greater youth dissatisfaction.

Mentor perceptions of relationship quality. Each mentor completed five items about quality of his or her mentor–mentee relationship, using a five-point Likert scale ranging from 1 “strongly disagree” to 5 “strongly agree” (Karcher et al., 2005). Example items include “My mentee and I trust each other” and “I feel close with my mentee.” A mean score of mentor perceptions of relationship quality was created based on these items, with higher scores indicating better relationship quality.

Match length. Match length was measured as the total number of days that a youth had been in an open match by T2.

Analytic Procedure

Analyses were conducted using hierarchical linear models (HLM) to account for nesting of youth within schools (Raudenbush & Bryk, 2002; Raudenbush, Bryk & Congdon, 2004), and robust standard errors were used. The main effects of youth risk on mentoring outcomes were examined using equations like the following, with youth (*i*) nested within schools (*j*):

$$\text{DURATION}_i = \pi_0 + \pi_1(\text{MINORITY}_i) + \pi_2(\text{AGE}_i) + \pi_3(\text{GENDER}_i) + \pi_4(\text{STRESS}_i) + e_i$$

$$\pi_{0j} = \beta_{00} + \beta_{01}(\text{STRESSBW}_j) + u_{0j}$$

$$\pi_{1j} = \beta_{10}$$

$$\pi_{2j} = \beta_{20}$$

$$\pi_{3j} = \beta_{30}$$

$$\pi_{4j} = \beta_{40}$$

where DURATION_i represents the duration of the mentoring relationship in days for a given individual. Youth minority status ($-1 = \text{white}$, $1 = \text{non-white}$), gender ($-1 = \text{male}$, $1 = \text{female}$), and age (grand-centered) were included as covariates on Level 1, along with levels of youth environmental stress, or STRESS_i , the predictor of interest in this example. Associations among variables of interest were not expected to vary across schools, and this hypothesis was confirmed by examining the slope random effects. As a result, slopes were not allowed to vary.

Hypotheses regarding the interaction between youth risk and mentor characteristics in predicting mentoring relationship quality were examined using the same functions, except that both Level 1 predictors and their interaction were included in the equation.

Results

Descriptive statistics, as well as correlations, for key study variables are reported in Table 1.

Youth Risk and Mentoring Relationship Quality

Analyses first examined whether youth levels of environmental stress and behavioral risk had a negative impact on the quality and duration of mentoring relationships (Table 2). Higher levels of environmental stress predicted a shorter overall match length, but did not have an impact on youth emotional engagement, youth dissatisfaction, or mentor ratings of relationship quality.

Greater behavioral risk predicted greater youth dissatisfaction and lower mentor perceptions of mentoring relationship quality, but did not predict match duration or youth emotional engagement.

Moderating Effects of Mentor Characteristics

Analyses next examined whether aspects of mentors' attitudes or goals influenced the relationship between youth risk and the quality of the mentoring relationship. Preliminary analyses explored the main effects of mentor characteristics on each outcome (Table 2). Higher mentor self-efficacy predicted higher mentor perceptions of relationship quality, but not other outcomes. More positive attitudes toward youth in general predicted longer match duration only. Contrary to expectations, mentors' previous experience with formal mentoring programs predicted less youth emotional engagement and mentors' greater previous involvement with youth in the community did not predict any mentoring relationship outcomes. In terms of mentor goals for the relationship, mentor endorsement of a developmental goal for the mentoring relationship at baseline predicted less youth dissatisfaction, but no other outcomes. Mentor endorsement of an instrumental goal predicted shorter overall match duration only. Finally, mentor endorsement of the goal of improving the mentee's relationships with others at baseline predicted longer overall match duration, but no other outcomes.

Next, moderating factors of the negative association between environmental stress and match duration were examined. Both mentor baseline self-efficacy (Fig. 1a; $b = 8.88$, $SE = 3.57$, $p < .05$) and mentors' previous

involvement with youth in the community (Fig. 1b; $b = 1.97$, $SE = .93$, $p < .05$) moderated the association between environmental stress and overall match length. The online calculator designed by Preacher, Curran and Bauer (2003) to calculate simple slopes was used to probe the nature of these interactions. Results of these simple effects analyses showed that, as expected, when levels of mentor self-efficacy were low (1.5 SD below the sample average), greater environmental risk had a negative effect on match duration ($b = -9.27$, $SE = 3.15$, $p < .01$). However, when mentor self-efficacy was relatively high (1.5 SD above the mean for the sample), there was no relationship between environmental stress and match duration ($b = 2.27$, $SE = 2.75$, $p = .41$). Similarly, when mentors had relatively little previous involvement with youth in their communities (1.5 SD below the sample mean), greater environmental stress predicted shorter match duration ($b = -8.91$, $SE = 3.06$, $p < .01$). In contrast, when mentors had greater previous involvement with youth (1.5 SD above the sample mean), there was no association between environmental stress and match duration ($b = 1.62$, $SE = 3.22$, $p = .62$).

Contrary to hypotheses, mentor attitudes toward youth in general ($b = 1.69$, $SE = 3.47$, $p = .63$), mentor previous involvement in formal mentoring ($b = 4.02$, $SE = 4.88$, $p = .41$), mentor endorsement of an instrumental goal ($b = -.91$, $SE = 5.64$, $p = .87$), mentor endorsement of a developmental goal ($b = 3.66$, $SE = 4.52$, $p = .42$), and mentor endorsement of improving the mentee's relationships with others as the most important goal ($b = 2.57$, $SE = 4.49$, $p = .57$) did not moderate the negative effects of environmental stress on match duration.

Finally, moderators of the association between behavioral risk and relationship outcomes were examined. There were no statistically significant moderators of the negative effects of youth behavioral risk on youth reports of dissatisfaction in the mentoring relationship, although mentor previous involvement with youth in the community approached statistical significance as a buffer of these negative effects ($b = -.03$, $SE = .02$, $p = .07$). Mentor self-efficacy ($b = .08$, $SE = .06$, $p = .16$), mentor attitudes toward youth in general ($b = -.11$, $SE = .07$, $p = .12$), mentor previous formal mentoring experience ($b = .05$, $SE = .07$, $p = .43$), mentor endorsement of an instrumental goal ($b = -.16$, $SE = .10$, $p = .12$), mentor endorsement of a developmental goal ($b = -.02$, $SE = .08$, $p = .76$), and mentor endorsement of improving the mentee's relationships with others ($b = .30$, $SE = .47$, $p = .52$) did not moderate the negative effects of behavioral risk on youth dissatisfaction in the mentoring relationship.

However, when the negative association between youth behavioral risk and mentor perceptions of relationship

Table 1 Correlations and descriptive statistics for study variables

Variable	% of sample	M (SD)	Range	1	2	3	4	5	6	7	8	9	10	11	12
1. Environmental stress	—	5.82 (2.90)	0 to 14	—											
2. Behavioral risk	—	−.10 (1.80)	−4.97 to 7.87	.30 ^{***}	—										
3. Match duration	—	261.59 (135.74)	0 to 556	−.06	−.05	—									
4. Youth emotional engagement	—	3.59 (.54)	1 to 4	.01	−.05	.19 ^{**}	—								
5. Youth dissatisfaction	—	1.59 (.55)	1 to 3.5	.03	.13 ^{***}	−.08	−.42 ^{***}	—							
6. Mentor perception of relationship quality	—	3.65 (.73)	1 to 5	−.03	−.12 [*]	.20 ^{***}	.19 ^{**}	−.09	—						
7. Mentor attitude toward youth	—	3.48 (.50)	1.71 to 4.71	.01	.06	.15 ^{***}	.07	−.02	.11 [*]	—					
8. Mentor self-efficacy	—	3.26 (.43)	2.05 to 4.00	−.04	−.08	−.02	−.03	.01	.20 ^{***}	.12 ^{***}	—				
9. Mentor previous youth involvement	—	4.19 (1.78)	0 to 8	−.06	−.05	.06	−.03	.06	.05	.07	.22 ^{***}	—			
10. Mentor previous formal mentoring	24.6	—	0–1	−.05	−.02	−.03	−.12	.04	.001	.03	.07	.17 ^{***}	—		
11. Instrumental goal	11	—	0–1	.01	.04	−.15	−.06	.10 [*]	−.004	−.09	.04	−.06	−.02	—	
12. Developmental goal	78.9	—	0–1	−.03	−.02	.05	.08	−.17 ^{***}	−.04	.16 ^{***}	−.07	.01	.05	−.68 ^{***}	—
13. Goal of improving mentee's relationships	2.7	—	0–1	.04	−.04	.06	.02	.07	−.06	−.06	.01	.03	−.03	−.06	−.32 ^{***}

p* < .05; *p* < .01.

Table 2 Main effects of youth risk and mentor characteristics on mentoring outcomes

	Match duration			Youth emotional engagement			Youth dissatisfaction			Mentor relationship quality		
	<i>b</i>	<i>SE</i>	<i>p</i>	<i>b</i>	<i>SE</i>	<i>p</i>	<i>b</i>	<i>SE</i>	<i>p</i>	<i>b</i>	<i>SE</i>	<i>p</i>
Risk variables												
Environmental stress	-3.77	1.88	<.05	-.002	.01	.81	.01	.01	.29	-.01	.01	.62
Behavioral risk	-16.95	10.50	.11	-.005	.03	.89	.11	.04	<.05	-.10	.05	<.05
Mentor characteristics												
Mentor self-efficacy	2.61	14.29	.86	-.02	.06	.71	-.01	.05	.92	.30	.06	<.001
Positive attitudes toward youth	36.97	13.22	<.01	.07	.05	.22	-.003	.05	.96	.15	.08	.09
Previous involvement with youth in community	4.52	3.38	.18	-.01	.01	.47	.02	.01	.18	.02	.02	.22
Previous formal mentoring experience	-4.81	11.06	.66	-.14	.06	<.05	.03	.05	.50	.04	.10	.67
Mentor goals												
Developmental	4.83	12.55	.70	.11	.07	.13	-.21	.08	<.05	-.08	.09	.40
Instrumental	-45.2	16.07	<.01	-.11	.10	.26	.15	.09	.10	-.01	.12	.91
Improve relationships	58.56	23.28	<.05	.06	.10	.55	.22	.18	.22	-.22	.27	.41

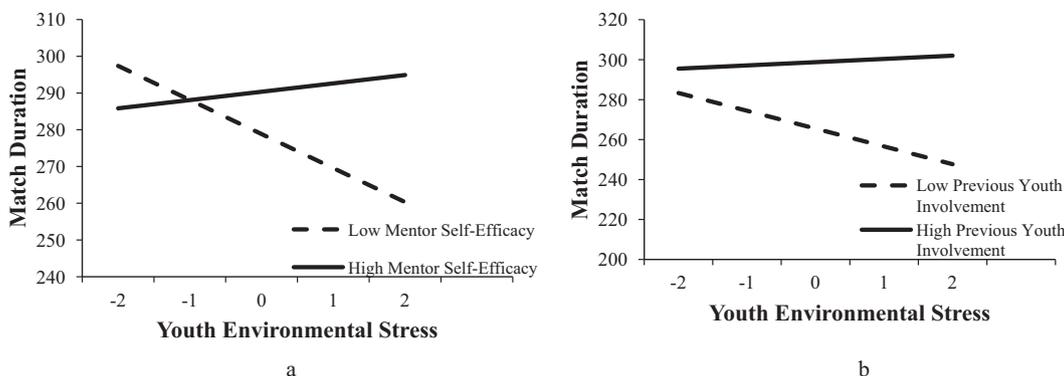


Fig. 1 The negative impact of youth environmental stressors on match duration was buffered by having a mentor with higher than average levels of self-efficacy (a) or greater than average previous involvement with youth (b).

quality was examined, mentor previous involvement with youth in the community was a statistically significant moderator (see Fig. 2; $b = .06, SE = .02, p < .05$). Simple effects analyses revealed that, as expected, when mentors had relatively little previous involvement with youth (1.5 *SD* below the sample mean), greater behavioral risk predicted less positive mentor perceptions of relationship quality ($b = -.22, SE = .07, p < .01$). In contrast, when mentors had more previous involvement with youth (1.5 *SD* above the sample mean), there was no relationship between behavioral risk and mentor perceptions of relationship quality ($b = .09, SE = .08, p = .30$).

Although mentors' involvement with youth in their communities was a moderator, mentors' previous formal mentoring experience again did not serve as a mitigating factor ($b = -.001, SE = .14, p = .99$), and no other mentor characteristics or goals moderated this relationship: mentor self-efficacy ($b = -.08, SE = .10, p = .42$), mentor attitudes toward youth in general ($b = .08, SE = .12, p = .51$), mentor endorsement of an instrumental goal

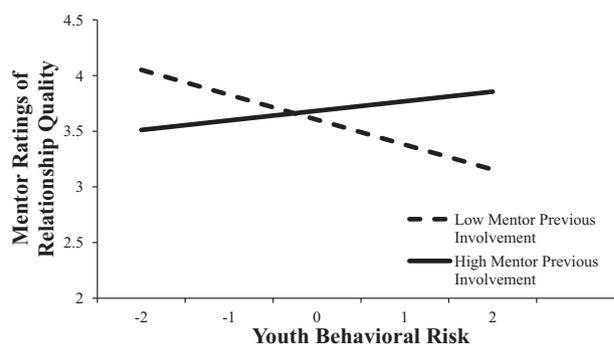


Fig. 2 The negative impact of elevated youth behavioral risk on mentor ratings of relationship quality was buffered by having a mentor with greater previous involvement with youth in their communities.

($b = -.03, SE = .14, p = .83$), mentor endorsement of a developmental goal ($b = -.01, SE = .11, p = .95$), and mentor endorsement of improving the mentee's relationships as a primary goal ($b = .31, SE = .26, p = .23$).

Discussion

Findings suggest that stressful environments at home and at school, as well as the existence of behavioral problems, such as poor academic performance or misconduct, can influence youth and mentors' ability to form high-quality and lasting mentoring relationships. In particular, youth experiencing elevated rates of environmental stressors had shorter mentoring relationships, and youth with elevated rates of behavioral problems had mentoring relationships marked by more youth dissatisfaction and less positive mentor perceptions of relationship quality. Although recent literature has been somewhat mixed, these results are consistent with several studies showing that youth who, at baseline, are the most compromised in terms of relationship difficulties, environmental stress, or individual risk benefit less from formal mentoring (DuBois et al., 2011; Schwartz et al., 2011).

It is interesting that environmental stressors were most likely to affect match duration (without necessarily causing decreases in relationship satisfaction), while behavioral risk factors were more likely to influence youth and mentor perceptions of relationship quality (without necessarily leading to early termination). It may be the case that environmental stressors affect the capacity of youths' parents, schools, and broader network to maintain regular meetings and sustain the mentoring relationship, irrespective of its quality. By contrast, youth with individual, behavioral risk may bring the same interpersonal and behavioral struggles into the mentoring relationship in ways that erode its quality. Such patterns can help to inform the training adjustments that might be needed for matches struggling with one or both of these risk factors.

Importantly, the current analyses also explored whether certain mentor characteristics moderated associations between youth risk and mentoring relationship outcomes. Results suggested that mentors with greater baseline self-efficacy and more previous involvement with youth in their communities were able to buffer the negative effects of environmental stress on match duration. Similarly, previous involvement with youth also buffered the negative effects of youth behavioral problems on mentor perceptions of relationship quality. These two mentor characteristics are likely linked, with previous involvement in youth-related activities giving rise to higher levels of self-efficacy. However, findings also highlight the importance of adequate training prior to beginning the match. Such training should provide mentors with exposure to situations that commonly arise when working with youth, as well as increase mentors' confidence in their ability to work effectively with youth.

Contrary to our hypotheses, mentors with previous formal mentoring experience appeared no better suited for

working with at-risk youth than mentors without previous experience. In fact, main effects analyses showed that youth matched with mentors who had previous formal mentoring experience actually reported *lower* emotional engagement. It is possible that particularly successful previous mentoring experiences may have led volunteers to hope that they could reproduce the experience, resulting in more rigid expectations, disappointment, and difficulty engaging with at-risk youth. The expectations that mentors bring to relationships with youth based on past experiences are important to assess and address during screening and training, particularly given the link between disappointment and unfulfilled expectations and early termination of mentoring relationships (Madia & Lutz, 2004; Spencer, 2007; Spencer & Basualdo-Delmonico, 2014).

Mentor goals for the relationship at baseline (i.e., before they had met with youth to develop and refine these goals) had main effects on the quality of the mentor–youth relationship. Developmental goals predicted less youth dissatisfaction, and the goal of improving mentees' relationships with others predicted longer overall match duration. In contrast, instrumental goals predicted shorter overall match duration. Contrary to our hypotheses, however, mentor goals did not serve to buffer or exacerbate the link between youth risk and relationship quality. It is important to note that our measure of instrumental goals primarily focused on youth school behavior, because mentoring was taking place within the school context. Further research with more fine-grained analysis of mentors' goals and their influence on match activities within school-based and community-based mentoring programs is needed to better understand how mentor goals might interact with youth risk to influence the mentoring relationship. It is possible that some additional structure and goal setting is necessary in work with particularly at-risk youth, but that overly rigid agendas do not align with the unpredictable nature of many at-risk youth's lives. It is also possible that mentors' initial expectations and goals might not be as important as the extent to which they collaborate with youth in discussing and refining goals throughout the mentoring relationship.

Several limitations of this study should be acknowledged. One important limitation involves the lack of random assignment of mentors and youth. Rigorously controlled studies with random assignment are needed to more precisely determine what mentor and youth characteristics influence relationship quality. Alternatively, future analyses that approach these questions using dyadic designs and methods could begin to tease apart the effects of risk and mentor characteristics on within- and between-dyad processes, even within nonrandomized

matches. In addition, all participants in this study were drawn from school-based mentoring programs, which tend to provide more opportunities for mentoring activities within the school setting and can be more susceptible to attrition over the summer months. Further research is therefore needed to determine whether these findings are generalizable across various types of community-based mentoring programs. Finally, due to the large sample size, assessments were relatively brief. More detailed measurement of risk within youths' families and communities, using multiple informants, would help to further elucidate the interplay between various domains of youth risk and mentoring relationship quality. In particular, our measure of environmental stressors was limited to stressors that occur at the individual or family level. More comprehensive measures of stress that assess risk factors within broader contexts, such as the youth's neighborhood or school, are essential to understand how contextual stress influences the mentoring relationship. For example, formal mentoring might be particularly helpful for youth growing up in neighborhoods and schools where they have little access to informal mentoring (e.g., coaches, teachers) through extracurricular activities. On the other hand, safety concerns and instability within a youth's neighborhood could contribute to logistical difficulties within the formal mentoring relationship, much like family stressors. Further research with more inclusive stress measurement is needed to clarify these issues. Finally, assessments of mentor characteristics and mentoring outcomes that go beyond self-report questionnaires and incorporate interview or behavioral measures would add to our understanding of the interplay between mentor characteristics and youth risk.

Despite these limitations, the present study highlights the importance of youth risk and mentor characteristics in predicting the strength and duration of mentoring relationships within a large, ethnically and socioeconomically diverse sample of mentors and youth. Future studies should explore the specific behaviors or attitudes employed by mentors who have more previous involvement with youth and higher baseline self-efficacy. For example, are they more likely to elicit youth suggestions for match activities, or check in about potentially stressful circumstances at home and school? Such research would help to explain how exactly these mentors manage to have more effective relationships with different types of at-risk youth. Future work should also examine how guidelines for evidence-based mentoring, as well as training protocols for mentors, can be altered to incorporate practices that improve outcomes for at-risk youth. This type of research would help to strengthen the impact of mentoring on youth of all backgrounds and improve the developmental trajectories of at-risk youth.

Acknowledgments The authors gratefully acknowledge the support of the MacArthur Foundation Research Network on Connected Learning and the MENTOR: The National Mentoring Partnership.

Disclosure

All research was conducted in compliance with APA ethical principles, and the research protocol was approved by the Public/Private Venture's Institutional Review Board (chaired at the time by David Bernhardt).

Conflict of Interest

The authors declare that they have no conflicts of interest.

References

- Bruce, M., & Bridgeland, J. (2014). *The mentoring effect: Young people's perspectives on the outcomes and availability of mentoring. MENTOR report*. Washington, DC: Civic Enterprises with Hart Research Associates.
- DuBois, D. L., Neville, H. A., Parra, G. R., & Pugh-Lilly, A. O. (2002). Testing a new model of mentoring. *New Directions for Youth Development*, 2002, 21–57.
- DuBois, D. L., Portillo, N., Rhodes, J. E., Silverthorn, N., & Valentine, J. C. (2011). How effective are mentoring programs for youth? A systematic assessment of the evidence. *Psychological Science in the Public Interest*, 12, 57–91.
- Grossman, J. B., & Rhodes, J. E. (2002). The test of time: Predictors and effects of duration in youth mentoring relationships. *American Journal of Community Psychology*, 30, 199–219.
- Hamilton, S. F., & Hamilton, M. A. (1990). Linking up: Final report on a mentoring program for youth. *ERIC*, ERIC Number: ED324385.
- Herrera, C., DuBois, D.L., & Grossman, J.B. (2013). The Role of Risk: Mentoring Experiences and Outcomes for Youth with Varying Risk Profiles. New York, NY: A Public/Private Ventures project distributed by MDRC.
- Herrera, C., Grossman, J. B., Kauh, T. J., & McMaken, J. (2011). Mentoring in schools: An impact study of Big Brothers Big Sisters school-based mentoring. *Child Development*, 82, 346–361.
- Jucovy, L. (2002). Same-race and cross-race matching, Technical Assistance Packet #7, Northwest Regional Educational Laboratory, USA.
- Karcher, M. J., Herrera, C., & Hansen, K. (2010). "I dunno, what do you wanna do?": Testing a framework to guide mentor training and activity selection. *New Directions for Youth Development*, 2010, 51–69.
- Karcher, M. J., Kuperminc, G. P., Portwood, S. G., Sipe, C. L., & Taylor, A. S. (2006). Mentoring programs: A framework to inform program development, research, and evaluation. *Journal of Community Psychology*, 34, 709–725.
- Karcher, M. J., Nakkula, M. J., & Harris, J. (2005). Developmental mentoring match characteristics: Correspondence between mentors' and mentees' assessments of relationship quality. *Journal of Primary Prevention*, 26, 93–110.
- Madia, B. P., & Lutz, C. J. (2004). Perceived similarity, expectation-reality discrepancies, and mentors' expressed intention to

- remain in Big Brothers/Big Sisters programs. *Journal of Applied Social Psychology*, *34*, 598–623.
- Parra, G. R., DuBois, D. L., Neville, H. A., Pugh-Lilly, A. O., & Povinelli, N. (2002). Mentoring relationships for youth: Investigation of a process-oriented model. *Journal of Community Psychology*, *30*, 367–388.
- Preacher, K. J., Curran, P. J., & Bauer, D. J. (2003, September). Probing interactions in multiple linear regression, latent curve analysis, and hierarchical linear modeling: Interactive calculation tools for establishing simple intercepts, simple slopes, and regions of significance. Available from: <http://quantpsy.org> [last accessed November 19, 2015].
- Raudenbush, S. W., & Bryk, A. S. (2002). *Hierarchical linear models: Applications and data analysis methods* (2nd edn). Newbury Park, CA: Sage.
- Raudenbush, S. W., Bryk, A. S., & Congdon, R. (2004). HLM 6 for Windows [Computer software]. Skokie, IL: Scientific Software International Inc.
- Rhodes, J., Reddy, R., Roffman, J., & Grossman, J. B. (2005). Promoting successful youth mentoring relationships: A preliminary screening questionnaire. *Journal of Primary Prevention*, *26*, 147–167.
- Schwartz, S. E., Rhodes, J. E., Chan, C. S., & Herrera, C. (2011). The impact of school-based mentoring on youths with different relational profiles. *Developmental Psychology*, *47*, 450–462.
- Spencer, R. (2007). “It’s not what I expected”: A qualitative study of youth mentoring relationship failures. *Journal of Adolescent Research*, *22*, 331–354.
- Spencer, R., & Basualdo-Delmonico, A. (2014). Termination and closure of mentoring relationships. In D. L. DuBois & M. J. Karcher (Eds.), *Handbook of youth mentoring* (pp. 469–480). Washington, DC: Sage.
- Vandell, D. L., Reisner, E. R., Brown, B. B., Dadisman, K., Pierce, K. M., Lee, D., & Pechman, E. M. (2005). The study of promising after-school programs: Examination of intermediate outcomes in year 2. Report to the Charles Stewart Mott Foundation.