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ARTICLE

Birds of a feather: Is matching based on shared interests and characteristics associated with longer youth mentoring relationships?

Elizabeth B. Raposa[1] | **Adar Ben-Eliyahu**[2] | **Lauren E.W. Olsho**[3] | **Jean Rhodes**[4]

[1]College of William and Mary

[2]University of Haifa

[3]Abt Associates, Inc

[4]University of Massachusetts, Boston

Correspondence
Email: ebraposa@wm.edu

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Abstract

Youth mentoring practitioners and researchers have shown a growing interest in determining the ways in which mentor–youth matching practices might influence the duration and effectiveness of mentoring relationships. The current project tested whether mentor–youth similarities at baseline, in terms of demographic variables and interests in certain activities (e.g., sports, art), predicted a longer duration of mentoring relationships. Analyses used baseline and follow-up data from over 9,000 youth who participated in community-based mentoring programs in the northeastern United States, as well as their volunteer mentors. Racial and ethnic similarity between mentor and youth was predictive of longer match duration. Moreover, a shared dislike of activities was associated with longer matches than either shared interests or discordant interests in activities. Findings have important implications for determining the ways in which mentor–youth matching practices influence the length and effectiveness of mentoring relationships.

Youth mentoring programs pair youth with volunteer mentors who are trained to provide support and guidance, with the aim of promoting positive youth development. In the United States alone, approximately 2.5 million volunteer mentors are involved in youths' lives each year (Raposa, Dietz, & Rhodes, 2017). Anecdotal reports of volunteer mentors' protective influence on youth development are corroborated by a growing body of research, which has provided support for their modest but positive contributions across a range of populations, settings, and outcomes (e.g., DuBois, Holloway, Valentine, & Cooper, 2002; Tolan, Henry, Schoeny, Lovegrove, & Nichols, 2014; Wheeler, Keller, & DuBois, 2010).

At the same time, this body of research has revealed considerable room for improvement in both the strength and the consistency of program impacts (DuBois, Holloway, et al., 2002; Eby, Allen, Evans, Ng, & DuBois, 2008). For example, a recent meta-analysis of 73 evaluations of youth mentoring programs found evidence of only small benefits, on average, for participating youth on measures of emotional, behavioral, and educational functioning (DuBois, Portillo, Rhodes, Silverthorn, & Valentine, 2011). Small effect sizes might be due, at least in part, to inconsistency in the strength

and length of assigned mentoring relationships. Studies suggest that less than half of formal mentoring relationships last even a full year, and that early match closures result in no benefit or even negative effects on youth outcomes (Grossman & Rhodes, 2002; Grossman, Chan, Schwartz, & Rhodes, 2012). As a result, it is crucial to explore program factors that enhance the duration and potential impact of youth mentoring interventions.

One essential program factor involves how to best match mentors to youth to promote a close and lasting relationship for both individuals, and in turn maximize the benefits of mentoring. A similar question of how to best match two individuals in a relationship has long interested researchers across diverse disciplines, including those studying the outcomes of romantic, parent–child, teacher–student, employer–employee, and therapist–patient relationships. Across these diverse types of relationships, similarity is thought to be a key predictor of attraction, closeness, and relationship longevity (Byrne, 1971). Interacting with a similar other is hypothesized to confirm one's own beliefs and attitudes about the world while reducing sources of conflict and uncertainty within a relationship (Byrne, 1971; Fehr, 2001). These aspects of the relationship are experienced as comforting and inherently reinforcing, thereby leading to stronger and longer lasting relationships (Byrne, 1971; Fehr, 2001).

Indeed, a large body of evidence points to perceived similarity as an important factor for enhancing feelings of closeness in interactions with others, and in turn promoting satisfying and stable relationships (Burleson & Samter, 1996; Gehlbach et al., 2016; Gonzaga, Campos, & Bradbury, 2007; Hejmanowski, 2000; Lucas et al., 2004; Miller, Downs, & Prentice, 1998). The level of similarity in a particular relationship has been assessed using a wide variety of indices, including concordance between two people on constructs such as personality, intelligence, political and religious attitudes, socioeconomic background, and values or interests.

Yet studies testing the link between similarity and relationship satisfaction often struggle to discern whether similarity actually precedes closeness in relationships. Because most relationships (e.g., dating relationships, family relationships) arise organically, it is impossible to assess factors such as personality traits, values, or interests prior to the initiation of the relationship. Moreover, recent evidence suggests that feelings of relationship satisfaction can artificially inflate perceptions of similarity in a relationship (Morry, 2005). That is, perceived similarity might not be a prerequisite for making a successful and long-lasting match, but might emerge over time as two people develop closeness within a satisfying relationship.

In many ways, mentoring relationships thus serve as a rare opportunity to test the effects of similarity along various domains on relationship outcomes. Formal mentoring relationships have a structured beginning, allowing for assessment of interests, values, and demographic characteristics prior to any interaction between mentor and youth. Despite this fact, little research has formally evaluated the impact of matching practices on mentoring relationship satisfaction and duration. Historically, mentoring programs have tended to rely on convenience methods for assigning matches, based on the availability and location of mentors, or on the stated preferences of mentor or youth. When similarity is accounted for, it has typically focused on demographic variables such as gender, race, or ethnicity , or checklists of hobbies, such as sports, video games, and art. For example, a handful of studies have examined the practice of matching based on mentor and youth demographic characteristics, including gender and race and ethnicity, with mixed results (e.g., Blake-Beard, Bayne, Crosby, & Muller, 2011; Ensher & Murphy, 1997).

Some studies have shown that similarity between mentor and youth on these characteristics predicts better relationship quality (Ensher & Murphy, 1997) and superior youth academic outcomes (Campbell & Campbell, 2007; Santos, Silvia, & Reigada, 2002), and these findings tend to be consistent with theoretical models that posit shared culture as a key facet of similarity and attraction within relationships (Sanchez & Colon, 2005). However, several other studies have shown no impact of matching on demographic variables (Herrera, Sipe, McClanahan, Arbreton, & Pepper, 2000; Jucovy, 2002; Kanchewa, Rhodes, Schwartz, & Olsho, 2014; Morrow & Styles, 1995). Matching youth and their mentors based on endorsement of similar hobbies and activities has generally been overlooked in the research literature. However, one meta-analysis found that the impact of youth mentoring was larger when programs indicated that they matched mentors with youth on the basis of shared interests (DuBois et al., 2011).

The current project sought to expand on these findings by testing whether mentor–youth similarities at baseline predicted longer-lasting mentoring relationships in a large, diverse sample of youth and their mentors. In particular, demographic variables, including race/ethnicity and gender, as well as mentor and youth interests, were assessed prior

TABLE 1 Racial/ethnic characteristics of mentors and youth ($N = 9,803$)

	Youth	Mentors
African American	32.6%	9.5%
Asian	3.9%	6.3%
White	27.4%	75.5%
Latino/Hispanic	21.4%	3.7%
Multiracial	9.9%	2.2%
Native American	0.1%	0.1%
Pacific Islander	0.1%	0.2%
Other	4.7%	2.5%

to matching, and these variables were used to create indices of similarity for over 9,000 matches in community-based Big Brothers Big Sisters programs. Matches were then followed for the duration of the relationship or until the end of the observation window, up to 12.5 years. Relationship length and reasons for match closure were assessed as outcomes.

1 | METHOD

1.1 | Participants and procedure

Participants were mentors and youth who were participating in Big Brothers community-based agencies in the northeastern United States. Data were collected from a total of 9,821 matches over the course of 13 years. Four matches were dropped from the sample because their files were missing data on the mentor's gender, and 14 matches were deleted because their files were missing data on mentor or youth race/ethnicity. The final analytic sample therefore included 9,803 mentor–youth pairs. Because participating programs exclusively served male youth during the data collection period, all youth were male, as were most mentors (91.5%). Youth were aged 6–18 years (mean [*M*] = 10.6 years, standard deviation [*SD*] = 2.2 years), and mentors were aged 16–79 years ($M = 29.1$ years, $SD = 9.1$ years)[1]. Youth and mentors in the sample identified with a diverse set of racial and ethnic backgrounds (see Table 1).

All mentors and parents of youth provided informed consent during enrollment in the mentoring program. As a part of the standard program intake process, all mentors and parents of youth provided basic demographic information, and all mentors and youth completed a checklist of activities they would be interested in participating in during the match. Each match was followed until its closure, and the reason for closure was noted by mentoring program staff.

1.2 | Measures

1.2.1 | Demographic characteristics

Mentor and youth race/ethnicity and gender were obtained during the intake interview. Reported race/ethnicity categories included European American, African American, Asian American, Latino/Hispanic, multiracial, Native American, Pacific Islander, and other. These data were used to assign dichotomous codes that indicated whether the mentor and youth in a particular pair were matched on each of the characteristics.

[1] Analyses were also run using only the sample of adult mentors older than 18; however, results did not substantively differ when the 70 matches for which mentors were below age 18 years were excluded from the sample. Thus, only models using the full sample are presented here.

1.2.2 | Interests

At intake, mentors and youth were presented with a list of 21 activities that they "might enjoy and/or be interested in engaging in during mentoring activities." For each activity, mentors and youth provided a dichotomous response to indicate liking or disliking the activity. The activities list was developed for use within this mentoring program, and included items such as playing board games, computer-based activities, making or listening to music, outdoor activities, and playing sports. If both mentor and youth indicated interest on a particular activity, the match was coded as having a shared interest, and if the mentor and youth both indicated not liking a particular activity, the match was coded as having shared disinterest. For each match, cumulative "shared interest" and "shared disinterest" scores were calculated by summing across all activities. In addition, cumulative scores were created for two types of discordant interests: mentor interests not shared by the youth, and youth interests not shared by the mentor.

1.2.3 | Match length

The length of the mentoring relationship was calculated as months from the beginning of the mentoring relationship until the match close date. For matches that were still open as of the end of the observation window, the match length was right-censored at that date.

1.2.4 | Reason for closure

In addition to match length, the primary reason for match closure was also assessed by mentoring program staff after having conversations with all involved parties (i.e., parents of youth, youth, and mentor). A match was determined to be successfully completed by staff if the match met consistently for over a year, and came to a nonconflictual agreement about ending the relationship. If the match was not successfully completed, then an effort was made to reach a consensus about a true reason for closure across all involved parties. For example, if program staff were aware that a mentor had been struggling to feel connected with his mentee for months, but then reported that he had to close the match because of a changing work schedule, staff would make an effort to engage in further conversations with the mentor, parent, and youth to assess the true reason for closure.

A primary reason for match closure, and up to one secondary reason, were then coded by staff into 12 closure categories, including reasons such as successful completion of the match, lack of time or scheduling difficulties, conflict between mentor and youth, behavioral issues, program rule violations, and youth incarceration. Only the primary reasons for match closure were included in current analyses.

1.2.5 | Covariates

Given the substantial variability in youth age within the present sample, this variable was included as a covariate in all analyses. In addition, although religious affiliation is not typically included in evaluations of mentor–youth matching processes, significant differences in the distribution of mentor and youth religious beliefs were noted in the current sample (for Kolmogorov-Smirnov test, $p < .001$). As a result, matching on religious affiliation was included as a covariate in all analyses examining matching on demographic characteristics. There was substantial missing data for the religious affiliation item, with full information for approximately 36% of the analytic sample. Rather than excluding matches with missing religion data from the sample, matches with missing data on religion were included as a separate category in regression analyses. That is, if either the mentor or youth was missing religion data, then this was coded as a separate "missing" category for religious affiliation.

1.3 | Analytic procedures

To test whether of mentor–youth matching on demographics and shared interests influences the length of the relationship and reasons for match closure, multivariate Cox proportional hazard models (Breslow, 1975; Hosmer, Lemeshow, & May, 2008) were run. Results are reported as hazard ratios, which can be interpreted as the effect of the match characteristic on the likelihood that a match will end on any given day. As an aid for judging the effect size of these

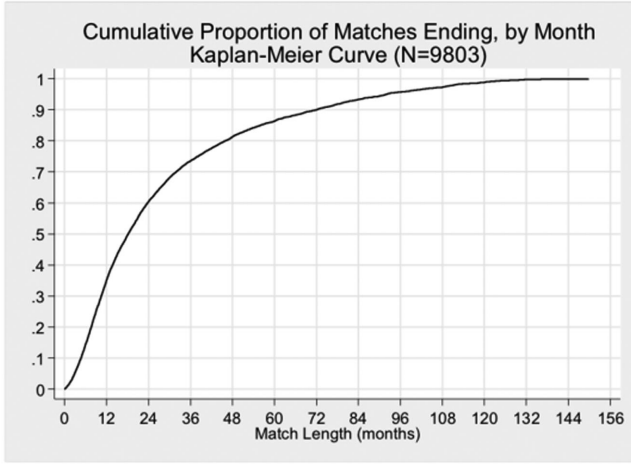

FIGURE 1 The cumulative proportion of closed matches, depicting length of matches for the sample

hazard ratios, one set of guidelines specifies small, medium, and large hazard ratios as approximately 1.3, 1.9, and 2.8, respectively (Azuero, 2016). In addition, two sets of logistic regression analyses were run to test whether mentor–youth matching on demographics and shared interests predicted early terminations (i.e., relationships of one year or less) and particularly long relationships (i.e., match length greater than three years). All models were stratified on the calendar months for the match start and end dates to account for any seasonal trends in the probability of match termination.

2 | RESULTS

2.1 | Descriptive statistics

The final dataset included 8,464 closed matches and 1,157 matches that were still active. The average match length was 25.2 months ($SD = 24.4$). The Kaplan-Meier curve representing the cumulative proportion of closed matches over time is presented in Figure 1 (Kaplan & Meier, 1958). Approximately 35% of matches ended within 1 year, about 60% within 2 years, and about 87% within 5 years. Approximately 25% of matches lasted longer than 3 years, and 13% longer than 5 years. Exploration of match start and end dates using histograms suggested that matches were least likely to start during the summer months (i.e., July and August) and most likely to end at the start of the summer (i.e., June).

The racial distribution was significantly different for mentors versus youth (see Table 1; for Kolmogorov-Smirnov test, $p < .001$), with substantially more youth from minority racial backgrounds. Only 37% of matches were between mentors and youth of the same race and ethnicity. In contrast, most of the sample (92%) was matched on gender, due largely to matching practices within the participating Big Brothers programs, as well as the limited variability in mentor and youth gender within this sample. Table 2 displays the frequency of agreement between mentors and youth about interest in specific activities. The four interests shared most commonly by mentor and youth were playing sports, outdoor activities, movies/concerts, and attending sports events. The four least shared interests were sewing, poetry, fashion, and mechanical hobbies.

Mentors and youth who were matched on race and ethnicity tended to report fewer shared interests ($r = -.10$, $p < .05$), fewer mentor interests not shared by the youth ($r = -.09$, $p < .05$), fewer youth interests not shared by the mentor ($r = -.06$, $p < .05$), and more shared dislikes ($r = .13$, $p < .05$). Mentors and youth who were matched on gender showed a similar pattern of results with respect to interests, with fewer shared interests ($r = -.24$, $p < .05$), fewer mentor interests not shared by the youth ($r = -.22$, $p < .05$), fewer youth interests not shared by the mentor ($r = -.07$, $p < .05$), but more shared dislikes ($r = .28$, $p < .05$).

TABLE 2 Mentor and youth interests as reported at intake interview ($N = 9{,}803$)

	Both interested		Only mentor interested		Only youth interested		Neither interested	
	N	%	*N*	%	*N*	%	*N*	%
Playing sports	3,899	39.8	710	7.2	1,846	18.8	3,348	34.2
Outdoor activities	3,749	38.2	991	10.1	1,567	16.0	3,496	35.7
Movies/concerts	3,535	36.1	1286	13.1	1,393	14.2	3,589	36.6
Attending sporting events	3,332	34.0	1,358	13.9	1,422	14.5	3,691	37.7
Video games	2,563	26.2	778	7.9	2,473	25.2	3,989	40.7
Museums	2,103	21.5	1,981	20.2	1,118	11.4	4,601	46.9
Board games	1,961	20.0	2,016	20.6	1,052	10.7	4,774	48.7
Watching TV/videos	1,694	17.3	2,140	21.8	1,012	10.3	4,957	50.6
Computers	1,415	14.4	1,629	16.6	1,554	15.9	5,205	53.1
Reading	941	9.6	2,643	27.0	615	6.3	5,604	57.2
Drawing/painting	932	9.5	1,009	10.3	1,772	18.1	6,090	62.1
Music/musical instruments	777	7.9	1,080	11.0	1,769	18.1	6,177	63.0
Arts/crafts	693	7.1	1,396	14.2	880	9.0	6,834	69.7
Attending cultural events	572	5.8	2,780	28.4	530	5.4	5,921	60.4
Shopping	364	3.7	1,618	16.5	242	2.5	7,579	77.3
Dancing	222	2.3	738	7.5	470	4.8	8,373	85.4
Cooking	180	1.8	1,898	19.4	166	1.7	7,559	77.1
Mechanical	147	1.5	937	9.6	606	6.2	8,113	82.8
Fashion	119	1.2	590	6.0	111	1.1	8,983	91.6
Poetry	64	0.7	1,083	11.1	177	1.8	8,479	86.5
Sewing	5	0.1	261	2.7	22	0.2	9,515	97.1

The most commonly cited reasons for ending a match were the mentor or youth moving (24.0%), mentor or mentee lost interest (22.5%), and lack of time for mentoring (16.7%). Other reported reasons are as follows: successful completion of the relationship (13.0%), youth graduating (5.8%), conflict (5.5%), the mentoring relationship did not meet expectations (1.2%), the mentor or youth moved to a new relationship with a different match (1.2%), problems with the volunteer mentor (1.1%), youth behavioral issues (0.8%), violation of program rules by mentor or youth (0.5%), mentor or youth went to jail (0.2%), and other (7.5%).

2.2 | Matching as a Predictor of Match Length

Analyses first examined mentor–youth concordance on race/ethnicity, gender, and activity interests as simultaneous predictors of match duration, with match on religious affiliation and youth age included as covariates. The proportional hazards assumption of fixed hazard ratios over time was satisfied for all covariates in our multivariate model when adjusting for other factors. Same race and ethnicity matches were associated with longer match durations (i.e., lower risk of match termination on any given day; hazard ratio [HR] = 0.92, $p < .001$). Same-gender match was not a significant predictor of match length (HR = 0.95, $p = .26$); however, as noted above, there was very little variability in mentor and youth gender within the current sample, and this particular finding should therefore be interpreted with caution.

With respect to mentor and youth interests, hazard ratios revealed that, contrary to hypotheses, shared *disinterest* was more protective against match termination than shared or discordant interests. That is, having a greater number of mutual dislikes between mentor and youth predicted longer relationships relative to having a greater number of shared interests (HR = 1.04, $p < .001$), a greater number of mentor interests not shared by the youth (HR = 1.04, $p < .001$),

or a greater number of youth interests not shared by the mentor (HR = 1.07, $p < .001$). In addition, having a greater number of youth interests not shared by the mentor predicted substantially shorter matches relative to both mentor–youth pairs with greater shared interests ($p < .001$) and more mentor interests not shared by youth ($p < .001$). That is, having a greater number of youth interests that were not endorsed by mentors was associated with the greatest risk for earlier match termination. No differences in match length were observed when comparing a greater number of shared interests to a greater number of mentor interests not shared by the youth ($p = .98$).

We then ran a set of exploratory analyses to examine whether shared interest (or disinterest) in specific types of activities, such as sports or outdoor activities, was particularly important for mentoring match duration (see Supplementary Table 1). In general, the directions of effects for activity-specific results were quite similar to the results for the cumulative assessment of shared interest, though most activity-specific hazard ratios were not statistically significant.[2] For example, having a shared disinterest in playing sports was protective against earlier termination relative to having a shared interest in playing sports (HR = 1.39, $p < .001$) and having a discordance between mentor and youth in interest in sports (HR = 1.35, $p < .001$; HR = 1.49, $p < .001$).

2.3 | Matching as a predictor of early terminations and longer relationships

Matching on race/ethnicity (odds ratio [OR] = .94, $p = .15$) and gender (OR = 1.03, $p = .75$) did not predict early terminations (i.e., matches ending earlier than the one-year expectation set by Big Brothers Big Sisters programs). However, matching on race/ethnicity (OR = 1.21, $p < .001$) predicted especially long matches, or matches lasting longer than three years. Matching based on gender did not predict especially long matches (OR = 1.08, $p = .53$).

Shared disinterest again appeared to be protective when looking at dichotomous measures of particularly short or long matches. Compared to a greater number of shared dislikes between mentor and youth, having more shared interests (OR = 1.03, $p < .001$), having more mentor interests not shared by the youth (OR = 1.03, $p < .001$), and having more youth interests not shared by the mentor (OR = 1.10, $p < .001$) all predicted greater likelihood of an early match closure. Similarly, having more shared interests (OR = 0.92, $p < .001$), having more mentor interests not shared by the youth (OR = 0.92, $p < .001$), and having more youth interests not shared by the mentor (OR = 0.88, $p < .001$) all predicted a lower likelihood of having a match longer than three years, relative to shared dislikes among the mentor and youth.

2.4 | Matching as a predictor for reasons for match termination

Cox proportional hazard specifications were also used to model whether matching on demographics and interests was related to specific reasons for match termination (see Table 3). The match closure reason "youth incarceration" was too rare to produce estimates in analyses, so results for that model are not included here. When the most common reasons for match termination were examined (mentor or youth move, loss of interest, lack of time, successful match completion, youth graduation, and conflict in the match) several findings emerged. Same-race and ethnicity matches had a lower risk of match termination because the mentor or youth moved away or loss of interest. However, matching on race/ethnicity predicted a higher risk of match termination because of conflict. Tentative findings regarding gender matching show that same-gender matches were more likely to end due to a mentor or youth moving away or to a loss of interest. In contrast, same-gender matches were less likely to end due to a lack of time for mentoring and were marginally less likely to end due to youth graduation or a mentor–youth conflict.

Consistent with the models predicting match length, greater concordance between mentor and youth disliking certain activities reduced the probability of match termination for most commonly cited reasons (e.g., a move, losing interest, lack of time, graduation). Moreover, match closure as a result of a successful completion of the mentoring relationship was more common in matches with a greater number of shared dislikes, relative to matches with more shared or discordant interests.

[2] The one exception is in the finding that shared interest by both mentor and youth in attending sporting events is associated with lower risk of termination compared to both not being interested in attending sporting events.

TABLE 3 Estimated hazard ratios for match length by reason for closure

Predictors	Moved	Lost interest	Time	Complete	Graduated	Conflict	Expect	New relationship	Volunteer problems	Behavioral issues	Rule violation
Same gender	1.28	1.27	0.73	0.93	0.67	0.75	0.63	< 0.001	0.72	0.80	< 0.001
	(.007)	(.004)	(< .001)	(.756)	(.070)	(.069)	(.176)	(> .99)	(.404)	(.601)	(> .99)
Same race and ethnicity	0.73	0.90	0.95	1.06	0.84	1.25	1.37	2.01	1.18	1.09	1.53
	(< .001)	(0.035)	(.383)	(.372)	(.124)	(.022)	(.121)	(.001)	(.444)	(.738)	(.167)
Same religion	0.86	0.96	0.84	1.12	0.44	0.89	0.61	0.57	0.86	1.01	0.88
	(.044)	(.606)	(.043)	(.710)	(< .001)	(.501)	(.179)	(.3337)	(.721)	(.992)	(.824)
Missing data on religion	0.83	0.88	0.76	1.62	0.55	1.18	0.63	1.06	0.91	1.11	1.43
	(.003)	(.043)	(< .001)	(.040)	(.001)	(0.227)	(.100)	(.886)	(.775)	(.777)	(.429)
Youth age[a]	0.96	1.05	1.00	1.03	–	0.99	1.02	0.96	0.96	1.05	–
	(.001)	(< .001)	(.795)	(< .001)	–	(.499)	(.395)	(.385)	(.459)	(.051)	–
Number of shared interests	1.06 (< .001)	1.12 < .001)	1.09 (< .001)	0.26 (< .001)	1.07 (.004)	1.04 (.019)	0.95 (.178)	0.88 (.069)	0.96 (.361)	0.97 (.567)	1.16 (.006)
Number of mentor interests not shared by youth	1.07 (< .001)	1.09 (< .001)	1.08 (< .001)	0.90 (< .001)	1.19 (< .001)	1.00 (.910)	1.01 (.788)	0.93 (.233)	0.94 (.185)	1.04 (.406)	1.14 (.005)
Number of youth interests not shared by mentor	1.12 (.001)	1.15 (< .001)	1.12 (< .001)	0.88 (< .001)	1.13 (< .001)	1.09 (< .001)	1.05 (.150)	0.98 (.640)	1.02 (.565)	1.06 (.188)	1.20 (.001)

Note. For each predictor and outcome, *p* values are listed in parentheses under the hazard ratios.

[a]Youth age was excluded as a covariate from "graduated" and "rule violation" models because of collinearity

3 | DISCUSSION

Youth mentoring practitioners and researchers have shown a growing interest in determining the ways in which mentor–youth matching practices influence the duration and effectiveness of mentoring relationships. Using a large sample of community-based mentoring relationships, current analyses revealed a range of mentor and youth demographic and baseline interest variables that were associated with match duration and reason for closure. Findings suggest that racial and ethnic similarity is generally predictive of a longer match length. Moreover, contrary to expectations, a shared *dislike* of activities was associated with longer matches than either shared interests or discordant interests in activities. To our knowledge, this is the first study to examine associations between baseline match characteristics and both match length and reasons for match closure.

With regard to demographic characteristics, analyses suggested that same race/ethnicity matches tended to last longer than different race/ethnicity matches, with shared race/ethnicity increasing the likelihood of having a match last longer than 3 years. At termination, same-race matches were less likely than different-race matches to report that the match had closed because of the mentor or youth moving away or a loss of mentor or youth interest. However, matching on race and ethnicity predicted a higher risk of relationship closure because of conflict within the match.

In past studies on youth, matching on race and/or ethnicity has shown inconsistent associations with mentoring length and termination (Herrera et al., 2000). Unfortunately, the majority of studies of these variables, like our study, have relied on naturalistic observation of mentoring outcomes, rather than a randomization procedure that would allow one to draw causal inferences about race and ethnicity matching and youth outcomes. Nevertheless, one exception to this trend found that mentors and youth randomized to same-race pairs in a work-related mentoring program had stronger mentoring relationships, marked by greater perceived career support and higher levels of liking for one another (Ensher & Murphy, 1997).

Likewise, findings from qualitative research suggest that parents, youth, and mentors tend to show a preference for same-race or ethnicity matches, with the expectation that shared culture will improve the strength of the relationship (Sanchez & Colon, 2005). At the same time, studies of informal mentoring relationships have shown that naturally occurring relationships with same-race mentors can have a positive influence on racial identity for African American youth, and these shifts in racial identity are in turn associated with improved academic outcomes (Hurd, Sanchez, Zimmerman, & Caldwell, 2012). Such findings, coupled with the length results of this study, suggest that pairing minority youth with a same-race mentor could be similarly helpful in formal mentoring programs.

Yet same-race pairs are often difficult to assign within the constraints of formal mentoring programs, where most youth referrals tend to be male minority youth, whereas the majority of volunteers are White female adults (Raposa et al., 2017). Indeed, in the current sample, only 37% of the matches were between mentors and youth of the same race/ethnicity. It is also important to note that almost all of the matches in the current sample were same-gender, and current findings therefore largely suggest that same-race, same-gender pairs tend to be more successful than different-race, same-gender pairs. As a result, these findings about matching on race and ethnicity might not generalize to samples that involve cross-gender matches (e.g., female mentors matched with male youth).

It is interesting that the same-race matches tended to report match closure because of logistical reasons (e.g., a mentor or youth moving away) less often, but that these matches also tended to report match closure because of experiencing conflict more often. To our knowledge, this is the first study to examine the ways in which mentor and youth characteristics map onto reasons for match closure, and additional rigorous research in this area is needed. There are many possible reasons why matching on race and ethnicity could lead to fewer logistical challenges. For example, racial segregation of neighborhoods and schools within the United States could mean that mentors of youth with shared racial and ethnic backgrounds travel shorter distances to mentor, or are more familiar with the schools, neighborhoods, and/or transportation systems of their mentees. It is less clear why matching on race and ethnicity would be associated with a greater likelihood of closure because of conflict. It is possible that same-race pairs are marked by less cultural mistrust (Sanchez & Colon, 2005), and that these pairs are therefore more likely to confront one another about concerns or dissatisfaction within the relationship, leading to greater conflict. Alternatively, this finding could be an artifact of a lack of randomization, such that youth assigned to same-race mentors differed systematically in some way at baseline from

youth assigned to mentors of a different race (e.g., greater stress exposure, more baseline behavioral problems). These baseline differences could in turn account for the increased likelihood of certain reasons for closure within same-race pairs, rather than the actual experience within the same-race pairing (Rhodes, Reddy, Grossman, & Lee, 2002).

Match on gender was generally not a significant predictor of relationship length in our sample. However, these findings should be interpreted with great caution, given that all youth in the sample were boys, and gender concordance is a key matching criterion in the Big Brothers Big Sisters programs used for our sample, resulting in very little variability around gender matching in current analyses. Moreover, it is possible that specific findings around shared interest and disinterest might not generalize to a sample that includes female youth. For example, it is possible that activity preferences play a larger role in the success of matches between male mentors and youth, whereas other factors, such as personality or relational tendencies, play a more important role in the duration of matches between female mentors and youth. Further research, using mentors and youth randomized to matches based on characteristics such as gender, is therefore needed.

Self-report inventories of mentor and youth preferences for activities enabled us to code for baseline concordance and discordance of mentor and youth likes and dislikes. Interestingly, these results revealed that matches with a greater number of shared dislikes for specific activities had the longest lasting matches, were less likely to experience an early termination prior to the program's one-year expectation, were less likely to report terminating the relationship for various common reasons (e.g., loss of interest, lack of time), and were more likely to report successfully completing the match. These findings are intriguing and suggest that mentoring programs might benefit from assessing and taking into account the activities mentors and youth do *not* prefer, in addition to those activities they like.

Results are consistent with the idea that, especially in the early stages of the relationship, shared negative attitudes might be more potent than positive attitudes, permitting greater differentiation from others and affiliation within the match (Byrne, 1971), particularly if one's dislike for an activity is unusual or inconsistent with prevailing opinions in one's peer group. Indeed, one series of experiments found that participants felt more familiar with and liked strangers more when they shared their dislikes over their likes (Harding, 2006), and other investigations have found that negative self-disclosure is associated with heightened feelings of friendship quality and closeness among youth (Rose, 2002). Relatedly, findings within the youth mentoring literature suggest that the absence of conflict might be more important than indices of positive relationship quality in predicting relationship duration (Spencer, 2007), as well as the impact of the mentoring relationship on youth outcomes (Cavell, Elledge, Malcolm, Faith, & Hughes, 2009).

Perhaps less surprising, matches in which there were a greater number of youth interests that were not endorsed by mentors were associated with the largest risk for earlier match termination, and these matches also tended to have the greatest risk for early termination and the smallest likelihood of lasting more than three years. These findings suggest that it might be essential for mentoring programs to encourage mentors to actively engage around youth interests, even when they do not necessarily match with the mentor's preferences. This idea is consistent with previous work highlighting the effectiveness of developmental, or relationship-oriented, approaches to youth mentoring (Morrow & Styles, 1995). In developmental relationships, the mentor emphasizes youth needs and decision-making, with an eye toward providing new opportunities and support for the youth. Such an approach is in contrast to a prescriptive approach, which can tend to ignore the specific preferences of the youth as the mentor plans activities in the service of certain goals or expectations not shared by the youth, such as academic improvement (Morrow & Styles, 1995).

Finally, the descriptive results from our sample also yielded several interesting findings. In particular, analyses of match length showed that the majority of community-based mentoring relationships in this sample closed within two years (60%), with approximately one third closing within the first year (35%). The most commonly cited reasons for closure of the relationship included the mentor or youth moving away, loss of interest in the relationship, and lack of time for mentoring, with only 13% of mentors reporting closure because of successfully completing the relationship. Such findings have important implications for program and participant expectations about the strength and duration of formally assigned mentoring relationships.

As noted earlier, longevity is an important factor accounting for variability in mentoring relationships effects, with several studies highlighting the negative consequences of unexpected, early terminations (Dubois, Neville, Parra, &

Pugh-Lilly, 2002; Grossman & Rhodes, 2002; Grossman et al., 2012; Karcher, 2005; Slicker & Palmer, 1993; Spencer, 2006). Therefore, it is essential to foster realistic expectations about the time-limited nature of most mentoring relationships for mentors and families of youth, while training mentors around the issues of actively engaging youth in the mentoring relationship, to avoid premature termination because of loss of interest or avoidable logistical issues. Finally, mentor–youth relationships were mostly likely to end at the start of summer (i.e., June), suggesting that added support for community-based mentoring matches during the summer months could help to improve longevity.

3.1 | Limitations

Several limitations of the current analyses should be acknowledged. First, as noted above, prediction based on matching characteristics was restricted to the typical program practices of Big Brothers Big Sisters community-based programs. All youth were boys and most matches were same-gender, which prohibited exploration of the impact of gender-based matching. Moreover, because matches were not randomly assigned, it is possible that other match characteristics not assessed here could help to account for the observed effects. To address this most essential limitation, future studies using random assignment of mentors to youth are necessary to fully assess the role of match characteristics on mentor–youth relationships.

Additionally, our measures of shared interest and reason for closure were developed by the mentoring agency for routine program assessment, and the measure of shared interest was based on dichotomized variables that involved forced choices between liking and disliking particular activities. Future studies could benefit from creating and using well-validated assessments of these constructs, with established indices of reliability. Relatedly, the effect sizes for the impact of our matching variables on match length also tended to fall within the "small" range, indicating that thorough measurement of other match characteristics is necessary to more fully account for variability in match length.

Current analyses focused on the impact of match characteristics on the length of the mentor–youth relationship as well as reasons for match closure, and did not directly measure mentoring relationship quality or the impact of mentoring on youth outcomes. A growing body of evidence suggests that match length often corresponds to relationship satisfaction and is an important factor accounting for variability in mentoring program effects, with longer relationships benefitting youth more (Dubois , Neville, et al., 2002; Grossman & Rhodes, 2002; Grossman et al., 2012; Karcher, 2005; Slicker & Palmer, 1993; Spencer, 2006). Yet several studies have also shown robust effects of mentoring in short-term relationships (Cavell & Henrie, 2010; McQuillin, Strait, Bradley, & Ingram, 2015). To explore these issues more fully within the context of mentor–youth matching, future studies should collect information from parents, youth, and mentors about the relationship quality and duration, as well as key youth outcomes across different areas of psychosocial and academic functioning. This will allow for a more precise determination of how optimal matching between mentors and youth influences diverse mentoring outcomes.

Finally, it should be noted that youth age was associated with many of our key study variables, and the youth's developmental stage likely shapes the importance of factors such as race/ethnicity match or shared activity preferences between mentor and youth. Future research should further explore these issues to determine how youth age might be accounted for in evidence-based matching practices.

3.2 | Conclusion

This study offers an important first step toward understanding how concordance or discordance on a range of baseline characteristics affects mentoring relationships. Future studies should continue to explore the ways in which matching practices can influence mentoring relationship outcomes, as well as the specific mechanisms that account for these effects. Such research has important implications for our conceptual understanding of the role of similarity in close relationships, as well as practical implications for youth mentoring programs looking to create long-lasting and impactful matches between mentors and youth.

ORCID

Elizabeth B. Raposa http://orcid.org/0000-0001-8169-3862

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SUPPORTING INFORMATION

Additional supporting information may be found online in the Supporting Information section at the end of the article.

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