Examining commitment and relational maintenance in formal youth mentoring relationships

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Abstract

This study utilizes a social exchange perspective to examine mentors' reported commitment and relational maintenance in formal youth mentoring relationships. One hundred and forty-five adult mentors from four mentoring programs completed surveys about aspects of their current youth mentoring relationship. Study measures assessed Investment Model variables (satisfaction, alternatives, investments, and commitment), stay/leave behavior, and reported use of relational maintenance strategies. Analyses supported hypotheses derived from the Investment Model, and commitment, in turn, predicted stay/leave behavior for mentors. In addition, a mediation model demonstrated that commitment mediates the relationships between some Investment Model variables and three of five relational maintenance strategies. The unique nature of formal youth mentoring relationships as prescribed is discussed, as are practical applications for mentoring programs.

Keywords

Commitment, Investment Model, relational maintenance, social exchange theory, youth mentoring relationships

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Formal youth mentoring programs such as Big Brothers Big Sisters are a popular intervention used to address a variety of challenges encountered by young people facing adversity. According to MENTOR (2009), 3 million young people in the U.S. are currently involved in formal mentoring relationships. In light of this, researchers are focusing attention on understanding which elements of the mentoring process yield the most positive results for youth. One such component—the formation of an *enduring* relationship between a mentor and mentee—has been associated with a range of academic, psychosocial, and behavioral benefits for youth (Grossman & Rhodes, 2002). In contrast, some youth involved in relationships that end prematurely can experience negative outcomes as a result of the mentoring process (DuBois, Holloway, Valentine, & Cooper, 2002; Grossman, Chan, Schwartz, & Rhodes, 2011; Grossman & Rhodes, 2002). Thus, this study explores how mentoring relationships form and persist by utilizing a social exchange approach to examine adult mentors' reported commitment and relational maintenance strategies in formal youth mentoring relationships.

Social exchange perspectives such as Rusbult's (1980) Investment Model have not been utilized to explore the formation and continuation of formal youth mentoring relationships. Research has yet to assess how mentors' perceptions of satisfaction, the quality of potential alternative relationships and investments into the relationship impact commitment to a current relationship. Given the prescribed nature of formal youth mentoring relationships, Investment Model variables may operate differently than they do in other relational contexts. In addition, relational maintenance strategies are considered communicative tools aimed at preserving or improving a relationship (Stafford, Dainton, & Haas, 2000). A primary aim of this study, then, is to examine what makes a mentoring relationship last by analyzing factors that predict adult mentors' commitment and the communicative outcomes of this commitment.

To develop the rationale, we briefly review existing research on youth mentoring. Next, key ideas related to the Investment Model and relational maintenance strategies are described with an emphasis on how they might function within youth mentoring relationships. Predictions about factors that impact adult volunteers' commitment to mentoring relationships and use of relationship maintenance strategies are forwarded. Finally, a study testing this line of reasoning using a mediation model is presented.

Overview of youth mentoring programs and relationships

Defining youth mentoring

Rhodes defined youth mentoring as "a relationship between an older, more experienced adult and an unrelated, younger protégé—a relationship in which the adult provides ongoing guidance, instruction, and encouragement aimed at developing the competence and character of the protégé" (2002, p. 3). Most definitions of youth mentoring, like this one, emphasize three elements (DuBois & Karcher, 2005). First, they suggest that the mentor has more experience or wisdom than the mentee. Second, they imply that mentors provide guidance to mentees to facilitate positive development. Finally, a strong emotional bond develops between mentor and mentee.

Scholars frequently distinguish between natural and formal mentoring relationships. Natural mentoring relationships are those that sometimes evolve—albeit, not necessarily—out of a variety of roles that adults play in the lives of youth (e.g., neighbors or coaches) (Zimmerman, Bingenheimer, & Behrendt, 2005). It is often these natural mentors that individuals recall when asked if anyone has served as a mentor in his or her life. However, formal mentoring relationships result when a program pairs a youth and an adult *specifically* to develop a bond. Formal mentoring programs aim to foster relationships that benefit youth in the same way as natural mentoring relationships.

A recent meta-analysis of evaluation studies assessing the impact of participating in formal youth mentoring programs (DuBois, Portillo, Rhodes, Silverthorn, & Valentine, 2011) underscored the importance of developing a close mentoring relationship by pointing to moderators of program effectiveness. Eighty-three samples from program evaluations were coded on characteristics including report information (e.g., year conducted), evaluation methodology (e.g., type of research design), program features (e.g., program goals), characteristics of youth (e.g., gender), mentor–mentee relationships (e.g., frequency of contact), and type of outcome assessed (e.g., emotional). Overall findings suggested that mentoring programs had modest positive benefits for youth (overall mean weighted effect size of Hedges $g = .21$ across outcome, confidence interval$_{95} = \pm .05$).

Germane to the current study, this meta-analysis also demonstrated that programs that matched mentors and youth based on similar interests produced larger effects than those that did not, consistent with the body of literature on perceived similarity and attraction (e.g., Burleson & Samter, 1996; Hatfield & Rapson, 1992). In addition, programs in which mentors were given "teaching" or "advocacy" roles obtained larger effects for youth compared with those that did not include this role. The authors explained that "the distinctive potential of mentoring programs with respect to skill building and advocacy resides in their capacity to leverage the flexibility and often potent sources of influence that are inherent in *close relationships*" (p. 78, emphasis added). Beyond relationship quality, length of the relationship may impact outcomes.

Relationship duration

Several researchers have explored whether the length of mentoring relationships is associated with differing outcomes for youth. There is evidence to suggest that longer relationships result in more positive outcomes (e.g., Grossman et al., 2011; Grossman & Rhodes, 2002; Herrera, Grossman, Kauh, Feldman, & McMaken, 2007; Slicker & Palmer, 1993). An equally important consideration may be whether a relationship lasts as long as the initial expectation (Larose, Tarabulsy, & Cyrenne, 2005). For example, a national Big Brothers Big Sisters study randomly assigned 1,138 youths aged 10–16 who applied to mentoring programs to either a treatment or control group (Grossman & Rhodes, 2002). Three hundred and seventy-eight youths were matched with a mentor (treatment) and the remaining youth stayed on a waiting list for a post-study match (control). Measures assessing a variety of variables were collected from all participants at baseline and again 18 months later (e.g., youth's relationship with a primary caregiver, confidence in academics, school performance, self-worth, quality of the mentoring relationship).

To assess the impact of relationship duration, Grossman and Rhodes (2002) divided the mentees into four groups based on match length: 6% lasted less than 3 months, 13% lasted between 3 and 6 months, 36% lasted 6–12 months, and 45% lasted 12 months or more. Results indicated that youth involved in relationships that lasted a year or longer reported improvements in academic, psychosocial, and behavioral outcomes compared with the non-mentored control group. These positive impacts progressively lessened for mentees who had been in relationships that ended between 6 months and just less than 1 year, between 3 months and 6 months or less than 3 months. Moreover, youth in relationships that terminated most quickly reported *decreases* in some areas relative to the control group. Youth in matches that ended within 3 months, for instance, reported declines in global self-worth and perceived scholastic competence. In contrast, youth in relationships lasting longer than 1 year experienced increases in areas such as self-worth, perceived scholastic competence, perceived social acceptance, and parental relationship quality, and decreases in reported drug/alcohol use.

Although these findings are suggestive, correlation is not causality. Perhaps mentees who were in relationships that ended quickly already were different in important respects from the mentees who were in longer relationships. Grossman and Rhodes (2002) acknowledged this possibility while also noting evidence to the contrary: They indicated that the basic pattern of findings remained even after controlling for potential self-selection biases and that there were no baseline differences between the treatment and control groups on any relevant measures. Thus, while evidence suggests that the duration of a mentoring relationship can make a difference in the outcomes enjoyed by youth, relationship duration itself is certainly impacted by and/or closely related to a host of other relational factors that have yet to be fully examined. The Investment Model offers a framework for examining these issues.

The Investment Model

Predictors of relational commitment

Commitment is an individual's intention to sustain and remain psychologically attached to a relationship (Rusbult, 1980; Rusbult, Martz, & Agnew, 1998). According to the Investment Model, commitment is a function of three factors: satisfaction level, quality of alternatives, and investment size (see Figure 1, paths a_1, a_2, and a_3). First, satisfaction level refers to one's positive or negative feelings about a relationship. Individuals determine satisfaction by comparing rewards received from a relational partner with costs incurred and evaluating the outcome (i.e., what one deems he/she is "getting" out of the relationship).

A second component is the quality of alternatives. Individuals assess this by evaluating the comparison level for alternatives (CL_{alt}), which refers to one's perception of the relational outcomes they could receive from an alternative relationship, in multiple other relationships or on one's own. In the mentoring context, this might include benefits from a different mentoring pair, a separate philanthropic endeavor or even from having more time alone. If what one is currently "getting" out of a relationship falls below this comparison level for alternatives than she is likely to leave the present relationship
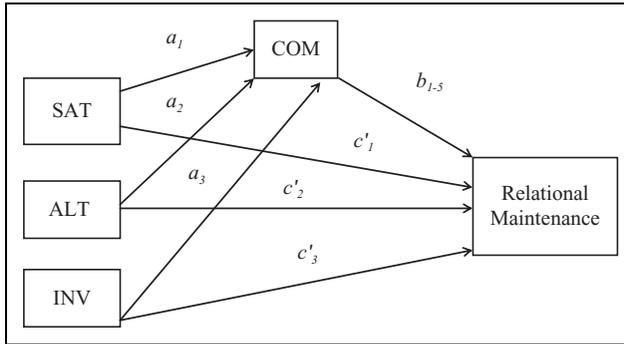
Figure 1. Model of commitment mediating the relationship between Investment Model variables and relational maintenance subscales.

(Thibaut & Kelley, 1959). Alternatively, the absence of other desirable partners may result in an individual remaining in a current relationship.

Third, the model includes investment size as a predictor. Investments are resources that individuals gain from being in a relationship that would be lost if the relationship ended (Rusbult, Drigotas, & Verette, 1994), including both intrinsic (e.g., time) and extrinsic (e.g., material possessions) contributions. Satisfaction, alternatives and investment, together predict an individual's commitment to a relationship.

The Investment Model has been successfully used to predict relationship commitment and continuation in a variety of contexts including friendship relationships (Lin & Rusbult, 1995), romantic relationships (Duffy & Rusbult, 1986; Kurdek, 1991, 1993), abusive heterosexual relationships (Choice & Lamke, 1999; Rusbult & Martz, 1995), organizational relationships (Farrell & Rusbult, 1981), and relationships between musicians and musical ensembles (Koslowsky & Kluger, 1986). A meta-analysis of studies that utilized the Investment Model framework (60 samples from 52 studies; 11,582 total participants) found that satisfaction level, quality of alternatives, and investment size accounted for nearly two thirds of the variance in commitment (Le & Agnew, 2003). Based on the preceding evidence, the Investment Model variables should predict mentor commitment in formal youth mentoring relationships.

In general, high levels of satisfaction, low quality of alternatives, and large size of investment predict high levels of commitment to a relationship. Notably though, the Investment Model is not formulaic in terms of the exact levels of each predictor that must be present. For example, women in abusive relationships often are highly invested in the relationship and view few alternatives so they remain in the relationship *despite* relatively low levels of satisfaction (Rusbult & Martz, 1995). Perhaps, then, in the case of formal youth mentoring relationships, associations between the predictor variables and commitment will offer a unique pattern that differs from those in other relational types.

To this end, Le and Agnew's (2003) meta-analysis revealed that the satisfaction–commitment connection was significantly stronger for interpersonal relationships (including primarily married and dating relationships) than for workplace commitment or commitment to activities. Similarly, the alternatives–commitment link was significantly

stronger for interpersonal relationships than for workplace commitment or commitment to other activities. This pattern did not carry over to the investments–commitment association (i.e., it was *not* stronger for interpersonal relationships than for commitment to other activities). Overall, satisfaction was the strongest predictor of commitment, followed by quality of alternatives and investment size, which predicted roughly the same amount of variance (Le & Agnew, 2003). The authors concluded that "external, structural influences on commitment such as alternatives and investments individually are less predictive than internal factors such as satisfaction" (Le & Agnew, 2003, p. 50).

To the extent that formal youth mentoring relationships can be considered interpersonal in nature given that the target of commitment is a person (i.e., mentee) rather than a job or an activity, satisfaction should be the greatest predictor of mentor commitment. This conceptualization may fall in line with Johnson's (1991) description of personal commitment to relationships, which stems primarily from internal sources such as attraction to partner and/or the relationship and couple identity. However, the prescribed nature of these relationships may alter the pattern. Mentoring dyads are prescribed because it is an external force (i.e., mentoring program)—rather than some kind of internal drive—that is the impetus for the relationship. Mentors typically make the decision to volunteer *before* they meet their mentee (e.g., complete an application and/or interview process with program staff). Thus, the initial commitment is to the mentoring program or perhaps to the notion of mentoring but not to a specific person. The matching process can vary from one mentoring program to the next. Typically, program staff match adult volunteers and youths based on factors such as geographic proximity, shared interests, gender, and race. The parties then have the chance to meet before agreeing to the pairing. Note, though, that mentors do not "select" mentees in the same way one might choose a friend or romantic partner. In this way, formal youth mentoring relationships may be more akin to commitment to *activities*, especially in the earliest stages of a mentoring relationship when the mentor may feel committed to the activity of mentoring or to the program itself rather than to a mentee in particular. Commitment from this perspective may be likened to Johnson's (1991) moral and structural commitment in that the former refers to the sense that one is morally obligated to continue a relationship (in this case, it could mean that a mentor signed up for a 1 year commitment), and the latter speaks to the sense that there are constraints to leaving the relationship. Based on this reasoning, the following is proposed (see Figure 1):

> **Hypothesis 1:** A mentor's commitment to a relationship will be greater the more satisfying the relationship (path a_1), the fewer desirable alternatives (path a_2), and the more investments (path a_3) the mentor has made into the relationship.
> **Research Question 1:** Will satisfaction, alternatives, and/or investments differ in terms of the strength with which they predict a mentor's commitment?

Relational maintenance

Social exchange perspectives suggest that satisfaction and commitment to a relationship impact individuals' cognition and behaviors beyond just the decision to remain with a partner. Simply knowing whether a relationship stays together overlooks *how* individuals

maintain a relationship even through difficult times. There are a number of definitions for relational maintenance, which include relational continuity or stability, or relationships kept in good repair (e.g., Canary & Stafford, 1993). In the context of the Investment Model, relational maintenance is described as a "pro-relationship orientation." High levels of commitment play a pivotal role in encouraging an individual to forego "self-centered behavioral preferences based on the immediate, personal outcomes he or she might obtain in the situation" and instead choose somewhat undesirable behaviors, change one's current cognitive representations or exert effort for the good of the relationship (Rusbult, Weiselquist, Foster, & Witcheter, 1999, p. 429). This transformation of motivation results from the interdependence, long-term orientation, psychological attachment, and collectivistic mind-set that characterize highly committed relationships. Performing relational maintenance behaviors is one way individuals can communicate commitment to their partners (Ogolsky & Bowers, 2013; Rusbult, 1983).

In line with this thinking, we adopt the conceptualization advocated by Stafford, Dainton, and Haas (2000) that relational maintenance behaviors are both the strategic behaviors enacted by relational partners that are intended to preserve or improve a relationship and the routine behaviors that partners perform that contribute to relational maintenance but in a less intentional way. This framework has seven factors: assurances (messages stressing commitment to the partner and relationship), openness (self-disclosure and direct discussion of the relationship), positivity (behaving in an optimistic and cheerful manner), sharing tasks (equal responsibility for accomplishing tasks that face the couple), social networks (relying upon common friends and affiliations), advice (sharing your opinion with the other), and conflict management (engaging in constructive conflict behaviors such as cooperation and patience). In a meta-analysis, Ogolsky and Bowers (2013) found moderate to strong associations between use of relational maintenance strategies and relational characteristics of romantic relationships including satisfaction (mean-weighted rs ranging from .30 to .52 across strategies) and commitment (mean rs ranging from .30 to .58).

Relational maintenance may be particularly salient in the context of formal youth mentoring relationships—especially on the part of the mentor—given their prescribed nature. Most often, the young people identified as potentially benefiting from a mentor have experienced some type of challenge in their lives including economic adversity (e.g., parent believes family could be evicted from home), family risk/stress (e.g., not living with both parents, recent parent separation, recent death of/loss of contact with an adult youth knows well), peer difficulties (e.g., no close friends, bullying), academic challenges (e.g., missing school three or more times a month), problem behaviors (e.g., ran away from home, bullies others), or mental health concerns (e.g., exhibiting depressive symptoms) (Herrera, DuBois, & Grossman, 2013). Frameworks such as attachment theory (Ainsworth, Blehar, Waters, & Wall, 1978; Bowlby, 1969/1982) suggest that youth with insecure attachments to a primary caregiver (based, perhaps, on recent parent separation) may have a difficult time bonding with important others such as peers or teachers. It is critical, then, that individuals who choose to become mentors take establishing a committed relationship with a mentee very seriously (or risk further negative impacts on youth's working models of relationships). A mentor's ability to communicate her commitment to the mentee and/or the mentoring relationship by enacting maintenance behaviors may distinguish high-quality relationships from others.

However, relational maintenance strategies identified in the context of romantic relationships may not map directly onto mentoring relationships or may take on different meaning when considered in the mentoring context. For instance, although sharing tasks makes sense for romantic partners as couples must address the "business of life" together, it may not be as pertinent for mentoring dyads. And, although giving advice is likely something that occurs in mentoring relationships, it may take on different meaning, given the dissimilarity, power distance, and other unique elements of mentoring dyads.

Based on this review, mentors who are more committed to their relationships are likely to report using more relational maintenance behaviors. Given that the Investment Model assumes satisfaction, alternatives, and investments lead to a "pro-relationship orientation" because of their impact on commitment, commitment should mediate associations between the Investment Model variables and each of the relational maintenance strategies (see Figure 1). Precisely, the following is proposed:

> **Hypothesis 2:** Mentor commitment will be positively related to mentor's reported use of relational maintenance strategies (paths b_{1-5}).
>
> **Hypothesis 3:** Satisfaction, alternatives, and investments will predict reported use of each relational maintenance strategy (paths c_1, c_2, and c_3).
>
> **Hypothesis 4:** Commitment will mediate the relationships between satisfaction, alternatives, and investments and each relational maintenance strategy ($a \times b$).

Stay/leave behavior

Empirical evidence generally supports the claim that individuals with high levels of commitment are more likely to remain with a partner than those in less committed relationships. Le and Agnew's (2003) meta-analysis indicated that commitment served as a significant predictor of stay/leave behavior (across 12 studies the averaged correlation was $r = .47$). Although Le and Agnew's work focused on a variety of relationships, the Investment Model has been applied across a variety of relational contexts. Given this evidence, whether a mentor continues a relationship with a youth in the future may depend—at least in part—on their commitment. Put differently, it may be the case that shorter relationships occur when mentors lose commitment to the mentoring relationship, and it is this process (and not individual differences) that may help explain why shorter duration is associated with poorer outcomes for youth. Following this line of logic, mentors who report greater use of relational maintenance strategies will also be more likely to remain in the mentoring relationship. We propose the following:

> **Hypothesis 5:** A mentor's commitment will predict future mentor stay/leave behavior.
>
> **Hypothesis 6:** A mentor's use of relational maintenance strategies (total) will predict future mentor stay/leave behavior.

Methods

Participants

Participants were 145 mentors (101 female, 42 male, and 2 did not respond) from four mentoring programs who on average were 30.17 ($SD = 13.86$) years old. Most were white (92.4%) and not Hispanic/Latino (90.3%). In terms of marital status, 52 participants reported being currently married and 91 participants reported not being currently married (2 did not respond). Participants had varying levels of education: 4.1% completed high school/GED, 44.1% completed some college, 29% were college graduates, 21.4% earned an advanced degree, and 1.4% did not respond.

Participants reported that their youth mentees on average were 11.26 years old (range = 6–22 years) and were mostly female (91). Mentors identified 74.5% of mentees as non-Hispanic/Latino and 62.1% as white, 16.6% as black, and 17.2% as biracial (4.1% did not respond). Mentors had been in a relationship with their mentee for an average of 17.64 months ($SD = 19.33$; range of 1 month to 9 years). Most matches were same sex (89%), with female mentor/female mentee being the most common (89 pairs), followed by male mentor/male mentee (40 pairs), female mentor/male mentee (11 pairs), and male mentor/female mentee (3 pairs).

Participants were recruited from four different types of mentoring programs to capture a range of experiences. In order to assure confidentiality, especially in the small programs, none of the participants were asked to indicate the program they represented. The first program is a local chapter of a national mentoring organization. As such, this branch follows the guidelines set by the larger body. Mentors are primarily adult volunteers from the community and mentees are recommended by school personnel, social workers, or parents. The chapter offers three opportunities for mentoring: community based, school based, and faith based.

The second organization is a college-based program that pairs college students with elementary-aged youth. Nearly 200 children are bused to campus a few afternoons each week. Activities are planned for the mentoring pairs (e.g., drawing with chalk and playing sports). Ideally, mentors sign up for a 1 year commitment but flexibility is often granted due to college students' changing schedules. Unique to this organization, mentoring pairs are placed in buddy families to allow for a larger support network, should a mentor be absent for a session.

The third mentoring program is based on a local school and run by the school counselor. It serves approximately 40 elementary school students. Mentors are adult volunteers from the community. Pairs typically meet once a week either before school or during lunch but always on school grounds. Finally, a university's Latino Cultural Center runs a small mentoring program that pairs college students with Latino high school students (approximately 14 mentors). Pairs meet weekly after school and interactions most often focus on academic and social challenges.

Procedure

Upon receiving institutional review board approval, the researchers sent three e-mails spaced 1 week apart to each program director who, in turn, forwarded these e-mails to

program mentors. E-mail text described what would be involved in the research including potential risks and benefits. Participants were offered a $10 gift card for completing the survey. Mentors who wished to participate in the study could click on the link provided in the e-mail and complete the questionnaires online.

Participants initially were asked two general questions about the mentoring relationship to ease the mentor into an appropriate mind-set for the questions that followed (i.e., "Why did you decide to become a mentor?" and "How long have you known your mentee?"). Next, the mentor completed measures of study variables. The satisfaction scale was always presented first, but the order of remaining scales and items within each scale was randomized to reduce order effects. The survey ended with three open-ended prompts and a short demographic questionnaire. Finally, the mentor was asked to provide a first name and phone number or e-mail address if she/he was willing to be contacted to answer follow-up questions. About half (76) of participants agreed to be contacted again. Participants were then thanked and given instructions on how to claim their gift card.

Independent variables: Satisfaction, alternatives, and investments

Investment Model variables were measured using scales validated in previous research (e.g., Rusbult et al., 1998) but adapted for the mentoring context based on a pilot study consisting of interviews with staff from youth mentoring programs. For example, instead of the satisfaction item "My partner fulfills my sexual needs," items that tapped into the benefits mentors gain were included (e.g., "Mentoring <name> fulfills my need for feeling good about helping others"). The survey included 2 types of items for satisfaction, alternatives, and investments: facet and global. For each predictor variable 3 facet items were used to introduce the concept in a concrete way. Consistent with past research, only global items were included in analyses.

Global items were more abstract and participants indicated their degree of agreement using a 9-point Likert scale (0 = *Do Not Agree At All*, 4 = *Agree Somewhat* and 8 = *Agree Completely*). Satisfaction with the mentoring relationship was assessed with 5 global items (e.g., "My mentoring relationship makes me happy"). To assess alternatives, participants were first asked to consider how they might spend their time if they were no longer in a mentoring relationship and to focus on these alternatives as they answered the next set of questions. Five global alternative items included "The ways I might spend my time if I was no longer in a relationship with my mentee are very appealing" and "If I weren't mentoring <name> I would do fine—I would find other ways to get the same experiences." Five global investment items included "I have put a lot into our relationship that I would lose if the relationship were to end" and "Compared to other mentors I know, I have invested a great deal in my relationship with my mentee." Three separate principal axis factor analyses revealed that the measures of satisfaction, alternatives, and investment were unidimensional. One investment item ("My relationships with other mentors and/or program staff would be complicated if my relationship with my mentee were to end") was dropped due to a low factor loading (<.50). Total scores for each variable were computed by taking the mean of the global items; higher values indicate higher levels.

Table 1. Descriptive statistics for study variables.

Measure	Min	Max	M	SE of M	SD	Skewness	Kurtosis	Cronbach's α
Satisfaction	1.75	8.0	6.14	.12	1.42	−.87	.36	.90
Alternatives	0	7.6	3.83	.15	1.83	−.01	−.53	.85
Investments	0	8.0	4.81	.15	1.84	−.22	−.56	.85
Commitment	.80	8.0	5.95	.14	1.75	−.75	.03	.91
RM (total)	69	167	29.69	.35	17.63	−.69	.74	.93
Assurances C	6.0	35.0	24.75	.56	6.71	−.52	−.16	.89
CM/positivity	3.0	49.0	44.80	.33	4.03	−1.03	.70	.87
Advice	13.0	35.0	29.69	.35	4.20	−.92	1.29	.76
Social networks	2.0	14.0	7.26	.32	3.86	.38	−1.17	.83
Assurances F	9.0	35.0	27.66	.43	5.18	−.92	1.05	.82

Note. $N = 145$ mentors. For Investment Model variables, ratings were made on items ranging from 0 to 8 points and then averaged across items composing each scale. For relational maintenance variables, ratings were made on items ranging from 1 to 7 points and then summed across items composing each scale; summing all subscales yielded total scale. CM = conflict management; C = current; F = future; RM = relational maintenance.

Mediator: Commitment

Commitment items were adapted from Rusbult et al. (1998) and included 7 items such as "I want our relationship to last as long as possible" and "It is likely that I will mentor someone other than my current mentee within the next year" [reverse coded]. Participants indicated their degree of agreement using a 9-point Likert scale. A principal axis factor analysis suggested a 2-factor model where the 5 positively items loaded on 1 factor and the 2 reverse coded items loaded on a second. Because item-total correlations were smaller for the 2 reverse coded items and reliability of the overall scale was improved by deleting them, we retained only the 5 positively worded items for the final commitment measure.

Finally, a principal axis factor analysis with oblique rotation was conducted to determine if the 19 retained items factored into the proposed four variables: satisfaction, alternatives, investments, and commitment. The proposed 4-factor solution worked well in that four factors emerged with an eigenvalue greater than 1.0, and 18 out of the 19 items loaded cleanly on these four factors (using a .50/.30 rule; Nunnally & Bernstein, 1994). One item was removed from satisfaction because it did not load above .50 ("My mentoring relationship is much better than other mentoring relationships I know about."). Reliabilities for the four measures were strong (all α = .85 or higher; see Table 1).

Dependent variables: Relational maintenance strategies

Relational maintenance strategies were measured using an adapted version of Stafford et al.'s (2000) 31-item expanded maintenance scale. Again, results from a pilot study were used to slightly modify item wording to fit the mentoring context (e.g., the item "I say *I love you*" was changed to "I say *I care about you*"). Four items were added to address aspects of the mentoring relationship not included in the current scale (e.g.,

an item asking about mentor contact with program staff was added to the social networks subscale).

Given that relational maintenance has not been studied in the context of mentoring, we again assessed the scale's factor structure in two steps. First, principal axis factor analyses were conducted separately on each measure to assess unidimensionality. All measures were unidimensional with the exception of the assurances subscale for which a two-dimensional model of "current" (e.g., "I show liking for my mentee) and "future" (e.g., "I imply that our relationship has a future") appeared to fit best. For scales that were unidimensional, items with a factor loading of less than .50 were dropped. For the two-factor assurances subscale, a .50/.30 rule was used. This resulted in retaining 29 items across the 8 relational maintenance subscales.

Second, principal axis exploratory factor analyses were performed on all 29 retained items. Three criteria guided our decisions about the number of dimensions that fit best: (1) interpretability, (2) eigenvalue, and (3) scree plot. Interpretability is a critical criterion because we are aiming to understand the structure underlying relational maintenance behaviors in the youth mentoring context and hence must be able to make sense of what a factor means. Forcing an 8-factor solution did not produce interpretable results and resulted in two factors with eigenvalues < 1.0. A 6-factor solution produced interpretable results with each factor having an eigenvalue > 1.0. Using a .50/.30 rule, 21 of the 29 items were retained for the final relational maintenance scale (see Table 2). However, one factor (shared tasks) retained just a single item, so only five factors are discussed: assurances current, positivity and conflict management, social networks, advice, and assurances future. These five factors account for 61.21% of the interitem variance.

Assurances current consists of 5 items from two subscales of the original seven factors: (a) assurances (3 items) and (b) openness (2 items). All of these items speak to the kinds of things a mentor can do or say that let the mentee know how he/she currently feels about his/her mentoring relationship. *Positivity and conflict management* consists of 7 items from the original positivity (3 items) and conflict management (4 items) scales. This factor references the ways that mentors can cultivate an upbeat, healthy relationship with a mentee. *Social networks* contain 2 items and references how mentoring pairs share common affiliations. *Advice* contains 3 items that speak to how mentors can assist mentees in making decisions or resolving problems in their lives. Finally, *assurances future* consists of 3 items (all from the original assurances subscale) that refer to how the mentor views the future of his/her mentoring relationship. Reliabilities for the five subscales ranged from .76 to .89 (see Table 1).

Stay/leave behavior

Stay/leave behavior was assessed approximately 7 months after mentors completed the initial survey. The first author called or e-mailed all of the mentors (76) who agreed to follow-up and asked the following questions: Do you and your mentor still see one another regularly? If "yes": How many times have you met with your mentee in the last month? When are you scheduled to see your mentee next? If "no": What changed so that you and your mentee do not see each other regularly? If a mentor did not respond after approximately 3 weeks, the researcher contacted those mentors one additional time. Of

Table 2. Factor loadings of the relational maintenance scale.

Item	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6
I tell my mentee how much he/she means to me. A	.846					
I simply tell my mentee how I feel about our relationship. O	.798					
I say "I care about you." A	.756					
I talk about where we stand (e.g., Wow, I'm so glad we have known one another for six months …) O	.733					
I show him/her how much he/she means to me. A	.731					
I like to have periodic talks or check-ins about our relationship. O		.795				
I act cheerful and positive around him/her. P		.769				
I am patient and forgiving with my mentee. CM		.754				
I listen to my mentee and try not to judge. CM		.753				
I try to be upbeat when we are together. P		.726				
Even when I am having a tough day, I act enthusiastic when meeting with my mentee. P						
I apologize when I am wrong. CM		.632				
I am understanding. CM		.626				
Common friends are important to our relationship (e.g., other mentoring pairs). SN			.910			
I take advantage of chances for us to spend time with other mentoring pairs that we both know. SN			.881			
I share suggestions about how my mentee might handle certain situations. ADV				.802		
I share my opinion with my mentee about things going on in his/her life. ADV				.756		
I listen to my mentee and guide him/her toward resolving his/her problems. ADV				.680		
I am open about my feelings (e.g., I might show my excitement over my mentee's good test score …) O	.351			.551		
I encourage my mentee to share his/her feelings with me.				.460		

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Table 2. (continued)

Item	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6
I imply that our relationship has a future. A					**.749**	
I talk about our plans for the future. A					**.676**	
I talk about future events. A					**.675**	
I talk about my concerns. O					.466	.415
I tell my mentee what I need or want from the relationship (e.g., that I want to support them …) O					.465	.319
I help equally with the tasks that need to be done (e.g., choosing activities … ST		.309			.409	-.333
I do my fair share of the work we have to do. ST						**-.703**
I perform my responsibilities when it comes to cleaning up our space when we're done hanging out. ST		.418				-.419
I show my liking for my mentee. A	.324	.377				-.388
[a]*Eigenvalue*	10.50	2.74	1.85	1.48	1.19	1.07
[b]*Variance explained*	36.19%	9.45%	6.38%	5.11%	4.10%	3.68%

Note. N = 145. Analysis is performed on 29 of the 35 original maintenance items. Extraction method: principal axis factoring; rotation method: oblimin rotation. Factor loadings < .20 are suppressed. Loadings on the primary factor are in boldface. Items in italics are retained in the final scale. Scale items are marked with original factor structure: A = assurances; O = openness; CM = conflict management; ST = shared tasks; P = positivity; ADV = advice; SN = social networks.
[a] Eigenvalue for each factor is below the factor number.
[b] Variance explained by each factor is listed.

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the 76 mentors contacted, 44 provided information about the status of their mentoring relationship (the remaining 32 mentors could not be reached). Of these 44, 24 (54.5%) responded *yes* they still saw their youth mentee regularly, whereas 20 (45.5%) responded *no* they no longer did so.

Results

Descriptive statistics revealed that scores for study variables were approximately normally distributed (Table 1). Adult mentors reported high levels of satisfaction with (mean slightly above 6 on the 0–8 scale) and commitment to (mean nearly 6) their youth mentoring relationships, moderate levels of investment (slightly above the scale midpoint), and slightly lower perceived alternatives. Bivariate correlations suggested that relationships between the three Investment Model variables and commitment were all in the expected directions (Table 3).

Hayes and Preacher's (2011) MEDIATE macro for Statistical Package for the Social Sciences was used to test the relationships proposed by Hypotheses 1–4. The macro estimates total, direct, and indirect effects for multiple independent variables on a mediator and a dependent variable, providing unstandardized regression coefficients and bootstrapping estimates of confidence intervals related to mediation effects. Every coefficient reflects the unique contribution of each independent variable, while holding the other independent variables constant. The total indirect effect is considered significant at $p < .05$ if its confidence interval does not contain zero. *Complete* mediation results when there is a significant indirect effect and the direct effect is not significant. *Partial* mediation occurs when there is a significant indirect effect but also a significant direct effect.

In the current model, satisfaction, alternatives, and investments were entered as the independent variables. Commitment was the mediator and each of the five relational maintenance strategies, one at a time, served as a dependent variable. Relationship length, mentor age, and highest level of mentor education were entered as covariates because of their significant correlations with satisfaction, alternatives, investments, commitment, and/or relational maintenance subscales (see Table 3). Estimates for the indirect effects were based on 1,000 bootstrap samples.

Consistent with Hypothesis 1, a mentor's commitment was greater the more satisfying the relationship (path a_1), the fewer desirable alternatives (path a_2), and the more investments (path a_3) the mentor has made into the relationship, $F(6, 130) = 26.69$, $p < .001$, $R^2 = .55$. Results indicated that satisfaction ($b = .30$, $p < .001$), alternatives ($b = -.14$, $p < .05$), and investments ($b = .46$, $p < .001$) each accounted for significant variance in mentor commitment.

In response to Research Question 1 (RQ1), confidence intervals were calculated for each of the Investment Model variable's unstandardized β coefficients to determine if the strength with which each predicted a mentor's commitment differed more than could be expected due to chance. Confidence intervals were computed as follows: Satisfaction $.13 \leq b \leq .48$; investments $.31 \leq b \leq .60$; and alternatives $-.02 \leq b \leq -.26$. Because RQ1 asks about the strength rather than the direction of association, one should focus on absolute values when interpreting confidence intervals. Analyses suggest the strength of the betas for satisfaction and alternatives and satisfaction and investments do not differ

Table 3. Correlations between study variables and sociodemographics.

	SAT	ALT	INV	COM	Assurances current	CM/ positivity	Social networks	Advice	Assurances future	RM total (z-score)
ALT	−.14	1.00	–	–	–	–	–	–	–	–
INV	.56**	−.20*	1.00	–	–	–	–	–	–	–
COM	.55**	−.23**	.65**	1.00	–	–	–	–	–	–
Assurances current	.51**	−.09	.59**	.60**	1.00	–	–	–	–	–
CM/positivity	.45**	−.12	.34**	.44**	.47**	1.00	–	–	–	–
Social networks	.15	−.13	.25**	.00	.17*	.22**	1.00	–	–	–
Advice	.48**	−.15	.55**	.44**	.58**	.51**	.22**	1.00	–	–
assurances future	.40**	−.08	.57**	.61**	.62**	.49**	.07	.59**	1.00	–
RM total (z-score)	.55**	−.16	.64**	.58**	.79**	.75**	.47**	.81**	.77**	1.00
Length	.26**	−.05	.35**	.39**	.34**	.03	−.27**	.21*	.23**	.15
Mentor sex	.01	−.09	.08	.06	.11	.16	.10	.05	.16	.16
Mentor age	−.10	.23**	−.14	.12	.17*	.03	−.23**	−.20*	−.09	−.09
Marital status	.00	.12	−.11	.11	.15	.05	−.22**	−.03	−.01	−.01
Education	−.01	.29**	−.21*	−.01	−.01	−.16	−.29**	−.07	−.09	−.17*
Mentor ethnicity	−.02	.16	.08	−.01	.12	−.08	−.01	−.10	.05	.00
Mentee sex	.02	−.03	.10	.08	.12	.12	−.07	.02	.16	.10
Mentee age	.10	.05	.02	.05	−.03	.05	−.11	.11	.14	.04
Mentee ethnicity	.03	.16	.04	.01	.02	−.01	−.05	−.07	.04	−.02

Note. $N = 145$ mentors. SAT = satisfaction; ALT = alternatives; INV = investments; COM = commitment; CM = conflict management; RM = relational maintenance; for mentor and mentee sex, *male* = 1 and *female* = 2; for mentor marital status, *not married* = 1 and *married* = 2; for mentor and mentee ethnicity, *Hispanic* = 1 and *not Hispanic* = 2.

*p < .05; **p < .001.

from one another more than would be expected due to chance because there is considerable overlap between these confidence intervals. However, there is no overlap between the alternatives and investments confidence intervals, suggesting that investments are a stronger predictor of commitment than alternatives in the youth mentoring context.

Next, commitment significantly predicted three of the five relational maintenance strategies (assurances current, positivity/conflict management, and assurances future) even when controlling for other variables (*b* paths; see Table 4). This finding provides partial support for Hypothesis 2.

In terms of total effects (i.e., the impact of the Investment Model variables on each of the relational maintenance strategies, controlling for the other predictor variables; *c* paths), not all three individual predictors remained significant once the impact of the other predictors was controlled (see Table 4). Only satisfaction remained a significant predictor for conflict management/positivity ($b = 1.15$, $p = .000$). Only investments remained a significant predictor for assurances future ($b = .94$, $p = .000$) and social networks ($b = .57$, $p = .007$). Finally, both satisfaction and investments remained significant predictors for assurances current (satisfaction [SAT] $b = 1.16$, $p = .002$; investment [INV] $b = 1.64$, $p = .000$) and advice (SAT $b = .39$, $p = .03$; INV $b = .62$, $p = .000$). Alternatives did not significantly predict any of the relational maintenance subscales. Thus, Hypothesis 3 receives partial support. In traditional tests of mediation (e.g., Baron & Kenny, 1986), researchers would stop at this point if there was not a significant *c* path between a predictor and outcome variable (e.g., alternatives). Hayes (2009) argues, however, that a significant *c* path is not required in tests of mediation so we proceed with testing for mediation using all Investment Model variables.

Examination of the confidence intervals for indirect effects of the Investment Model variables through commitment (path $a \times b$) suggests that commitment is a mediator for the relationships between satisfaction and conflict management/positivity and assurances future (see Table 5). Commitment is a mediator for the relationships between alternatives and conflict management/positivity and assurances future. Finally, commitment is a mediator for the relationships between investments and assurances current, and conflict management/positivity and assurances future. Commitment does not serve as a mediator between any predictors and advice or social networks.

In terms of direct effects, not all Investment Model predictors remained significant after controlling for the other two variables, commitment and the covariates (paths c_1', c_2', and c_3'; see Table 5). Specifically, investments only was a significant predictor of advice ($b = .58$, $p = .001$), social networks ($b = .75$, $p = .002$), and assurances future ($b = .45$, $p = .02$). Satisfaction only remained a significant predictor of conflict management/positivity ($b = .93$, $p = .001$). Both satisfaction ($b = .87$, $p = .02$) and investments ($b = 1.21$, $p = .001$) remained significant predictors of assurances current.

In summary, these results indicate that the relationship between satisfaction and assurances future is completely mediated by commitment, whereas the association between satisfaction and conflict management/positivity is partially mediated by commitment (see Table 5). Next, the relationships between alternatives and conflict management/positivity and assurances future are completely mediated by commitment. Finally, the relationship between investments and conflict management/positivity is completely mediated by commitment, whereas the associations between investments and

Table 4. Relationships between relational maintenance subscales and predictors, covariates, and mediator.

	Assurances C		CM/positivity		Advice		Social networks		Assurances F	
	b (SE)	t	b (SE)	t	b (SE)	t	b (SE)	t	b (SE)	t
Constant	5.644 (2.97)	1.90	37.78 (2.12)	17.86**	12.67 (1.46)	8.67**	7.82 (2.02)	3.87**	9.83 (1.77)	5.54**
Predictor variables										
SAT	1.16 (.37)	3.10*	1.15 (.27)	4.33**	.39 (.18)	2.15*	.21 (.25)	.84	.17 (.22)	.77
ALT	.04 (.25)	.14	−.07 (.18)	−.36	−.14 (.13)	−1.13	−.09 (.17)	−.50	.10 (.15)	5.54
INV	1.64 (.30)	5.35**	.32 (.22)	1.47	.62 (.15)	4.13**	.57 (.21)	2.71*	.94 (.18)	5.13**
Covariates										
Length	.02 (.03)	.87	−.03 (.02)	−1.45	.003 (.12)	.25	−.06 (.02)	−3.6**	.01 (.02)	.76
Mentor age	.11 (.03)	3.30**	.05 (.02)	2.07*	−.04 (.02)	−2.38*	−.03 (.02)	−1.25	−.01 (.02)	−.51
Education	−.0003 (.58)	−.0005	−.67 (.42)	−1.61	.22 (.29)	.76	−.60 (.40)	−1.52	.32 (.35)	.92
Mediator variable										
Commitment	.95 (.36)	2.65*	.71 (.26)	2.76*	.10 (.18)	.54	−.41 (.25)	−1.64	1.07 (.20)	5.32**

Note. For predictor variables, this table represents the *c* paths (total effects). For commitment, this table represents the *b* paths. Significant *a* paths are reported in text and tests of mediation are reported in Table 2. Covariates are reported to aid with interpretation and to allow readers to reconstruct the full regression model. C = current; CM = conflict management; F = future; SAT = satisfaction; ALT = alternatives; INV = investments.
*p < .05; **p < .001.

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Table 5. Indirect ($a \times b$) and direct (c') effects of predictors on relational maintenance strategies with commitment as a mediator.

| | Indirect ($a \times b$) | | Direct (c') |
	b (SE)	95% CI for bootstrap	b (SE)
Assurances C			
SAT	.29 (.17)	(−.01, .66)	.87 (.38)*
ALT	−.14 (.09)	(−.33, .02)	.17 (.25)
INV	.44 (.22)*	(.02, .88)	1.2 (.34)**
CM/positivity			
SAT	.22 (.12)*	(.04, .50)	.93 (.27)**
ALT	−.10 (.06)*	(−.23, −.002)	.03 (.18)
INV	.32 (.12)*	(.08, .61)	−.002 (.24)
Advice			
SAT	.03 (.07)	(−.08, .19)	.36(.19)
ALT	−.01 (.03)	(−.09, .05)	−.13 (.13)
INV	.05 (.08)	(−.14, .22)	.58 (.17)*
Social networks			
SAT	−.12 (.08)	(−.30, .02)	.34 (.26)
ALT	.06 (.05)	(−.01, .18)	1.14 (.18)
INV	−.19 (.12)	(−.17, .03)	.75 (.24)*
Assurances F			
SAT	.33 (.13)*	(.09, .61)	−.15 (.21)
ALT	−.15 (.07)*	(−.31, −.02)	.25 (.14)
INV	.49 (.13)*	(.26, 76)	.45 (.19)*

Note. 1,000 bootstrap samples with 95% CI. The total indirect effect is considered significant at $p < .05$ if its confidence interval does not contain zero. Complete mediation results when there is a significant indirect effect and not a significant direct effect. Partial mediation occurs when there is a significant indirect effect and also a significant direct effect. CI = confidence interval; C = current; F = future; SAT = satisfaction; ALT = alternatives; INV = investments; COM = commitment; CM = conflict management.
*$p < .05$; **$p < .001$.

assurances current and assurances future are partially mediated by commitment. Hypothesis 4 receives partial support.

To examine Hypotheses 5 and 6, logistic regression analyses were conducted with the subset of the sample ($N = 44$) who responded to the telephone follow-up 7 months later. Whether a mentor reported no longer being in (0) or still being in (1) a relationship with a mentee at the time of the follow up served as the criterion variable.

Hypothesis 5, which posited that commitment would predict stay/leave behavior, was supported. The initial model correctly predicted 53.5% of cases but was not significant. However, the second model included commitment and relationship length at Time 1 (covariate) as predictors, predicted 67.4% of cases correctly and was significant, $\chi^2(2, N = 43) = 11.29$, $p = .004$. Commitment was a significant predictor ($B = .67$, $p = .005$), but length was not. In other words, each one point increase in commitment was associated with a 1.95 increase in the log-odds of stay/leave behavior.

Hypothesis 6, which suggested that relational maintenance behaviors would predict stay/leave behavior, was tentatively supported. Due to the small sample size, total

relational maintenance was used in these analyses. A total score was computed by creating z-scores for each participant's five relational maintenance strategies and then summing those values (because the subscales contain different numbers of items). The initial model correctly predicted 53.5% of cases but was not significant. The second model included relational maintenance total and relationship length at Time 1 (covariate) as predictors, predicted 58.1% of cases correctly and approached conventional levels of significance, $\chi^2(2, N = 43) = 5.33$, $p = .070$. Total relational maintenance was a significant predictor ($B = .20$, $p = .039$), but length was not.

Discussion

Overall, results confirmed the hypotheses derived from the Investment Model: Satisfaction, alternatives, and investments predicted adult volunteers' commitment to their youth mentoring relationships. However, the degree to which each of these predicted commitment in mentoring relationships differed somewhat from patterns found in other contexts. Moreover, analyses provided support for the mediating impact of commitment in associations between satisfaction, alternatives, and investments and reported use of three of the five relational maintenance strategies. Mentors' level of commitment predicted future stay/leave behavior; relational maintenance strategies total also predicted future stay/leave behavior (though the overall model in the latter case only approached statistical significance). The following sections elaborate on these results.

This study demonstrated the Investment Model's ability to predict commitment in the youth mentoring context, yet findings regarding the predictive strength of the three variables differ from that in other relationships. For mentors, investments accounted for the greatest amount of variance followed by satisfaction, then alternatives. However, Le and Agnew's (2003) meta-analysis suggested that satisfaction was the *strongest* predictor of commitment, followed by the equal contributions of alternatives and investments. Furthermore, correlational data indicated that for interpersonal and workplace domains, satisfaction was the strongest predictor of commitment, compared with alternatives and investments. For commitment to other activities, the satisfaction–commitment association did not differ from either the investments–commitment or alternatives–commitment associations. The preceding points of comparison highlight three considerations.

First, the importance of size of investment into the relationship seems unique to this context. Although satisfaction is still important in predicting mentor commitment, it is less so than in romantic relationships. These findings speak to how mentors view a relationship with a mentee. Individuals typically volunteer to become mentors because they want to positively contribute to the life of a young person. For instance, open-ended responses from this study to a question of why one became a mentor included "I wanted to make an impact in a child's life," and "to help create a better future for a child." In relationships with a mentee, mentors recognize they will need to contribute time, energy, or other resources to truly make a difference for their mentee and likely perceive that these investments would be "wasted" if the mentoring relationship were to end. Moreover, mentors may not anticipate "getting" as much out of the relationship in terms of satisfaction (especially in the early stages of a relationship) as they might from other relational types (e.g., romantic relationships). A mentor's mind-set is different from that

of an individual in a romantic relationship, given that there is not usually a goal of "changing" the other for the better when one seeks a romantic partner and this may explain why investments become more salient in the mentoring context.

Second, the patterns of prediction for mentoring seem more in line with Le and Agnew's (2003) findings about commitment to other activities than commitment to interpersonal relationships, though more exploration of this claim is necessary. This finding hints at the complexity of categorizing formal youth mentoring pairs using the field's current relationship category framework. That is, mentoring relationships certainly ought to be considered interpersonal in nature since the very "success" of the pairing often rests on the formation of a close relationship. Yet, there is something inherently forced about pairing two very different people and expecting them to form a lasting bond. In this way, mentoring relationships are prescribed rather than freely chosen. Akin to formal youth mentoring relationships might be arranged marriages, foster parent–child dyads (assuming child is old enough to comprehend the situation), or parole officer–parolee assignments. In each of these examples, individuals make an initial commitment to an activity or program (e.g., marriage and foster parenting) and are then assigned a person with whom they are expected to form a relationship (and vice versa). Adult mentors also usually make the commitment to volunteer and to mentor with a mentoring *program* before meeting a mentee. In this way, engagement in mentoring might be more in line with an individual's association with an organization or hobby than to a specific individual, at least in the earliest stages of relationship development.

Third, quality of alternatives was the weakest predictor of commitment. This is likely because mentoring relationships do not impose mutual exclusivity in the same way as romantic or workplace contexts. That is, for many individuals it is culturally and/or morally unacceptable to be in a serious relationship with more than one romantic partner. Similarly, it is not possible to be employed by two companies for the same set of hours. However, mentoring is not necessarily incompatible with many of the alternatives that participants in this study may have considered. For example, adults can mentor a youth while also working, spending time with family, and/or volunteering in other organizations. Alternatives to youth mentoring may also be difficult to compare and, thus, may account for only a small contribution to commitment in youth mentoring relationships (i.e., it is difficult for a mentor to determine whether she would rather mentor a youth or go to the gym because they are such different activities).

In addition to expanding our understanding of commitment, this study extends our understanding of relational maintenance strategies into a new context. Although the factor structure identified in the mentoring context shares similarities with the 5- (Stafford & Canary, 1991) and 7-factor (Stafford et al., 2000) versions of the relational maintenance scales, there are important differences as well. For instance, openness and shared tasks present in previous versions of the relational maintenance scale do not load cleanly in the mentoring context. In addition, the assurances factor splits into two in this context (current and future), perhaps emphasizing the prescribed nature and power dynamics inherent to mentoring relationships.

Finally, this study offers support for the mediating role of commitment in the relationships between satisfaction, alternatives, and investments and some relational maintenance strategies. Partial mediation suggests that some of the impact of the

Investment Model variable on the relational maintenance strategy flows through commitment, whereas complete mediation suggests that nearly all of the impact of the Investment Model variable on the relational maintenance strategy flows through commitment. These findings are important in at least two ways. First, they suggest that mentors who perceive they are in committed relationships communicate this commitment to a mentee by enacting a set of specific behaviors. As described above, the formation of a strong bond with a mentor may be critical in beginning to shift a mentee's beliefs about his/her ability to form relationships and communicating commitment via relational maintenance strategies such as offering assurances is one way to accomplish this.

Second, these findings draw connections between the "pro-relationship orientation" associated with the Investment Model and relational maintenance strategies. We gain insight into how individuals undergoing a transformation of motivation from self-centered behavioral preferences to more interdependent ones "sound" in that reported relational maintenance strategies may be some of the external representations of internal cognitive adjustments associated with commitment.

Implications

This study offers at least three considerations that warrant continued attention. First, the prescribed nature of the mentoring dyad challenges some of the ways the field currently thinks about relationship development and can represent a new line of relationship research distinguishable from romantic, family, or friendship contexts. For example, as noted above, aspects of prescribed relationships call into question some of what we know about the predictors of commitment in interpersonal relationships (insofar as mentoring relationships can be considered interpersonal). Beyond this, the social exchange perspective adopted here might propose that "affection logically precedes social closeness in the evolution of voluntary associations" (Solomon, 1997, p. 101). In other words, individuals in the early stages of relational development begin to feel connected and wish to reciprocate positive social outcomes *prior to* engaging in the (often difficult) transition to behavioral interdependence and commitment (Solomon & Knobloch, 2004). Analysis of mentoring relationships, though, indicates that closeness likely occurs by behaving as a unit first and then feeling close due to the prescribed nature of the pairing, given that pairs are required by the mentoring program to meet regularly regardless of how they feel toward one another (the hope, of course, is that feelings of affection will follow). Future research might empirically test the idea that behaving close may come before feeling close in prescribed relationships and subsequently explore associated constructs to understand why this is the case.

Second, relationship scholars in particular need to turn greater attention to the study of youth mentoring relationships. Future research must look beyond simply whether mentoring is "effective" and instead examine the processes by which mentoring relationships are developed and maintained. For instance, mentors with higher levels of investment reported offering more advice, though the effect was not mediated by commitment (see Table 3). Given that advice is not always welcomed, when does advice function as a relationship maintenance strategy within mentoring relationships and when might it undermine relational closeness? Pertinent research has shown that a variety of factors influence whether advice is perceived as helpful, including the content of advice

(e.g., whether it is perceived as likely to solve the problem and is feasible to implement), the style in which it is given (e.g., whether it is attentive to the mentee's face needs), the timing with which advice is offered (e.g., whether the mentee has disclosed a problem), or the existing relationship between the mentor and mentee (e.g., mentee perceptions of relational closeness; see MacGeorge, Feng, & Thompson, 2008). Scholars can help inform mentoring practitioners as they tweak training efforts and develop new programs by providing a deeper understanding of the processes involved in mentoring.

Finally, there are practical applications of these findings that may be useful to mentoring program directors and staff. For instance, despite evidence that training mentors is associated with greater program effectiveness (e.g., DuBois et al., 2002), there is relatively little research that has specifically explored which training practices or topics are more or less effective (instead, most studies on mentor training have focused on the quantity and timing of training; see e.g., Davidson & Redner, 1988 or Herrera, Sipe, & McClanahan, 2000). A unique contribution here, then, is that making sure mentors feel *invested* in their relationships is important to fostering commitment and, perhaps, something that can be emphasized during ongoing mentoring training. The question becomes, then, what are relational and/or programmatic elements that foster a deep sense of investment for mentors?

Limitations and future directions

Despite these insights, any potential conclusions are bound by at least two limitations. First, the primarily cross-sectional design limits our ability to make causal claims about the associations between variables. Longitudinal research is required to verify any developmental trends identified here. For instance, whether relationship maintenance strategies are precursors to or outcomes of relational satisfaction can best be determined by following mentoring dyads over time. Although we included the follow-up to address concerns about the limits of a solely cross-section design, we realize that attrition does present a threat to external validity in this case (i.e., can the findings from the subsample who agreed to be contacted be generalized to other mentors in this sample and beyond? Shadish, Cook, & Campbell, 2002). To assess this possibility, we conducted one-way analysis of variances to compare differences among three groups: Mentors who said they did not want to be contacted for follow-up at Time 1 ($n = 69$), mentors who said they could be contacted but were unreachable at Time 2 ($n = 32$), and mentors who said they could be contacted and were reached at Time 2 ($n = 44$). With $n = 145$ and $p < .05$ power to detect a medium effect size (eta squared $= .06$) was .76. There were no significant differences across groups in terms of reported satisfaction, investments, commitment, or total relational maintenance, suggesting that attrition is not a major threat to the external validity of the finding that commitment predicts stay/leave behavior.

Second, our decision to uphold anonymity and not match mentors with their program could be considered a limitation because it did not allow for analyses about how variables functioned in each program (e.g., are school-based mentors less committed than community-based mentors?). Still, the above analyses controlled for several demographic factors that varied across the four programs such as age and level of education, and support for the hypotheses held, which suggests that findings are not program specific.

Conclusion

In short, the current findings shed light on the development of high quality, enduring mentoring relationships. Specifically, the evidence supports the hypothesis that mentors are more committed to their mentoring relationships when they are satisfied and feel they have invested a great deal into the relationship. In addition, when mentors are highly committed, they are likely to employ relational maintenance strategies to maintain their desired relational balance. Finally, findings provide preliminary evidence for a model that connects the pro-relationship orientation most often associated with the Investment Model and communicative relational maintenance strategies.

Author's note

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