



# My Mentor, My Self: Antecedents and Outcomes of Perceived Similarity in Mentoring Relationships<sup>☆</sup>

Melissa E. Mitchell<sup>a,\*</sup>, Lillian T. Eby<sup>a</sup>, Belle Rose Ragins<sup>b</sup>

<sup>a</sup> Department of Psychology, University of Georgia, Athens, GA, USA, 30602-3013

<sup>b</sup> Sheldon B. Lubar School of Business, University of Wisconsin-Milwaukee, Milwaukee, WI, USA, 53211

## ARTICLE INFO

### Article history:

Received 29 January 2015

Available online 14 April 2015

### Keywords:

Mentoring

Perceived similarity

Attachment security

Relational self-construal

Organizational commitment

Professional commitment

## ABSTRACT

This study examines the antecedents and outcomes of perceived similarity in mentoring relationships in a sample of 82 matched mentor-protégé dyads. Polynomial regression analyses were used to examine the association between actual and perceived similarity. Protégés were more likely to see themselves as similar to their mentors when they and their mentors shared either higher or lower levels of attachment security. However, sharing similar levels of relational self-construal was unrelated to protégés' perceptions of similarity with their mentors. Path analyses revealed that protégés reported more organizational and professional commitment when they saw themselves as similar to their mentors, and that these associations were mediated by protégés' reports of their mentors providing role modeling functions. These findings suggest that the effects of actual mentor-protégé similarity on perceptions of similarity may depend on the shared attribute, and provide further evidence of the importance of perceived similarity to not only mentoring relationships, but also to organizations.

© 2015 Elsevier Inc. All rights reserved.

## 1. Introduction

A considerable volume of research demonstrates that mentoring -- a developmental relationship between a more experienced mentor and a less experienced protégé (Kram, 1985) -- plays an important role in employees' work attitudes, behavior, and career development. Compared to non-mentored employees, employees with mentors experience more positive career outcomes reflecting promotion rate, compensation and career satisfaction (e.g., Allen, Eby, Poteet, Lentz, & Lima, 2004). The presence of a mentor also predicts positive employee attitudes, such as organizational commitment, job satisfaction and lower turnover intentions (Eby et al., 2013). Relative to the large body of research documenting that mentoring relates positively to protégé attitudes and behaviors, we know far less about how characteristics of mentors and protégés jointly affect positive protégé outcomes.

Focusing on specific characteristics of the mentor and protégé that contribute to positive protégé outcomes is important because mentoring relationships are idiosyncratic (Eby, Rhodes, & Allen, 2007) and interpersonal interactions are strongly influenced by characteristic ways of relating to others in close relationships (Back et al., 2011). Indeed, existing research has found that protégés who perceive themselves as being similar to their mentors report more positive outcomes from their relationship than those who do not have these perceptions (Eby et al., 2013). Although we know that perceived similarity is important, we know little about its antecedents, or the mechanisms through which perceived similarity relates to protégés' commitment to both the organization and their chosen profession. This lack of knowledge has important implications for mentoring scholars, who need to understand the processes through which high quality relationships are established, and practitioners, who need guidance in creating effective mentoring relationships in organizations.

<sup>☆</sup> We gratefully acknowledge the contribution of Tammy Allen for her ideas and suggestions related to the larger project upon which this study is based.

\* Corresponding author.

E-mail addresses: [melmitch@uga.edu](mailto:melmitch@uga.edu), [mitchellmelissa7@gmail.com](mailto:mitchellmelissa7@gmail.com) (M.E. Mitchell), [leby@uga.edu](mailto:leby@uga.edu) (L.T. Eby), [ragins@uwm.edu](mailto:ragins@uwm.edu) (B.R. Ragins).

Accordingly, the purpose of this study is to extend our understanding of the antecedents and outcomes of perceived similarity in mentoring relationships. We seek to make several contributions to the literature. First, integrating classic and emerging theoretical perspectives on mentoring and identification processes in work relationships (Kram, 1985; Sluss & Ashforth, 2007), we examine whether actual mentor-protégé similarity in two relationally-oriented individual differences (attachment security and relational self-construal) relates to protégés' perceptions of similarity to their mentors. As explained below, these two deep-level characteristics are highly relevant to mentoring relationships, in that both assess general ways of viewing close relationships and the self. Second, we extend existing research by examining whether and how perceived similarity in mentoring relationships predicts protégés' commitment to their organizations and their chosen professions. This builds on existing work suggesting that a mentoring relationship may serve as a lens by which an employee develops beliefs about his or her organization (Baranik, Roling, & Eby, 2010), and informs our theoretical understanding of how mentoring contributes to the protégé's professional identity (Kram, 1985). Third, we contribute to mentoring theory by explaining the processes through which perceived similarity in mentoring relationships predicts outcomes. Extending and integrating existing theoretical perspectives, we examine role modeling — a type of mentor function characterized by the protégé's identification with the mentor (Kram, 1985) — as a key mediating mechanism. Our model and the relationships investigated in this study are shown in Fig. 1.

### 1.1. Mentoring and Perceived Similarity

Two recent meta-analyses find that protégé perceptions of similarity to mentors are consistently related to positive mentoring outcomes. Eby et al. (2013) found that meta-analytic correlations between deep-level similarity (i.e., protégés' perceptions of similarity to their mentors in terms of attitudes, values, beliefs, or personality) and protégé perceptions of mentoring were consistently large, ranging from .38 for instrumental support to .59 for relationship quality. Similarly, Ghosh (2014) found mean meta-analytic correlations of .42 between perceived similarity and career mentoring and .60 between perceived similarity and psychosocial mentoring. These results support the similarity-attraction paradigm (Byrne, 1971), which posits that we are attracted to those who are similar to ourselves because they reinforce and validate our beliefs, attitudes, and behavior.

Although perceived similarity is a consistent predictor of mentoring experiences, we know little about what predicts perceived similarity in mentoring relationships. Most research has examined demographic similarity between mentors and protégés (i.e., gender, race) and has found it is either not related or is weakly related to protégé perceptions of similarity (Allen & Eby, 2003; Lankau, Riordan, & Thomas, 2005; Turban, Dougherty, & Lee, 2002). In discussing existing gaps in the literature on perceived similarity, Turban and Lee (2007) argue that actual similarity in characteristics that are interpersonally-oriented may be particularly important to examine in the context of understanding the effects of mentoring relationships on protégés.

Although there are no studies examining actual mentor-protégé deep-level similarity and protégé perceptions of similarity, some studies have examined these relationships in supervisor-subordinate dyads. These studies have found significant associations between self-reported personality characteristics of managers and subordinates and their perceptions of similarity (Strauss, Barrick, & Connerley, 2001; Wexley, Alexander, Greenawalt, & Couch, 1980). Huang and Lun (2006) found a significant interaction between actual supervisor-subordinate similarity in growth need strength and perceptions of similarity, but only at certain levels of the growth need strength trait. Researchers in this area observe that the effects of similarity may depend not only on the level of the trait, but also on the trait itself (Huang & Lun, 2006). In the case of mentoring, it is important to examine traits and characteristics that reflect the interpersonal closeness of the relationship. Mentoring relationships often involve a close emotional bond that reflects intimacy and vulnerability (Kram, 1985; Wu, Foo, & Turban, 2008). There are individual differences in how people approach relationships (cf., Aron, 2003), and mentoring scholars have theorized that attachment orientation and self-construal are two individual difference variables that may play a key role in affecting perceptions and expectations of mentoring relationships and their outcomes (Ragins & Verbos, 2007). As discussed below, attachment orientation and relational self construal reflect individuals' characteristic

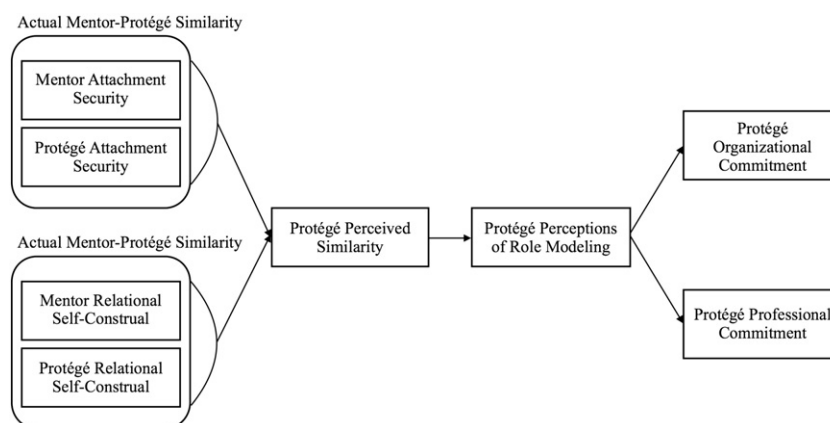


Fig. 1. Proposed theoretical model.

ways of viewing close others in relation to the self (Jordan, Kaplan, Miller, Stiver, & Surrey, 1991; Miller, 1976), and thus address the understudied area of how aspects of the self may operate at the dyadic level to affect individual outcomes.

### 1.2. Attachment and Perceived Similarity

Attachment theory (Bowlby, 1973) posits that individuals form internal representations (working models) of attachment based on their early experiences with caregivers. Research has established that attachment orientation is stable over time and that individuals can be reliably classified into different prototypical attachment patterns (Fraley, 2002). The most common attachment orientation, *secure* attachment, is characterized by positive internal working models of the self and of others (Scharfe & Bartholomew, 1994). Specifically, securely attached individuals expect close others to be available and responsive, and believe that they are worthy of care from others (Bartholomew & Horowitz, 1991). Likewise, securely attached individuals are more likely to provide appropriate caregiving in the form of social support than insecurely attached individuals (Carnelley, Pietromonaco, & Jaffe, 1996). Relationships in which both partners are securely attached are both complementary (they confirm each partner's positive expectations of themselves and others) and similar (both partners have similar working models of self and others; Klohnen & Luo, 2003). These complementary and similar positive expectations explain why secure-secure partner pairings are associated with the most positive outcomes in romantic relationships (e.g., Banse, 2004).

In mentoring relationships, the securely attached mentor is likely to engage in appropriate caregiving toward his or her protégé, and the securely attached protégé is likely to expect and accept the support provided. The mentor's responsive and supportive actions serve to confirm the protégé's positive expectations about how others should behave; likewise, the securely attached protégé's willingness to receive caregiving confirms the mentor's positive expectations of others. For these reasons, scholars have speculated that mentoring relationships in which both mentor and protégé are securely attached are likely to be the most functional (e.g., Germain, 2011); however, researchers have not tested this proposition, nor have they examined the association between mentor-protégé similarity in attachment security and perceptions of similarity. Secure individuals are likely to perceive themselves as similar to other secure people due to their similarities in internal working models; that is, similar individuals will recognize when others share their characteristically positive models of the self and others. In addition, securely attached individuals are more likely than insecurely attached individuals to engage in self-disclosure (Mikulincer & Nachshon, 1991), increasing the likelihood that an interaction partner will discover common values, interests, and beliefs, and thus perceive greater similarity.

Related research offers support for the idea that attachment orientations play a role in mentoring relationships. Allen, Shockley, and Potat (2010) found that more anxiously attached protégés were less likely to seek and accept feedback in their mentoring relationships. Wang, Noe, Wang, and Greenberger (2009) found that mentor and protégé attachment avoidance was associated with less willingness to mentor in the future for both mentors and protégés, and that mentor avoidance was negatively related to protégé reports of mentoring received. However, this research did not examine secure attachment, or the role of similarity of attachment orientations in mentoring relationships. As described above, secure attachment orientations are most relevant for perceived similarity because they facilitate relational closeness and disclosure. As such, we expect that protégés who share a secure attachment style with their mentors should perceive themselves as more similar to their mentors. Note that we expect that the effects of actual similarity in attachment security will only be apparent when mentors and protégés are similarly higher in attachment security. This is because only in situations where both individuals are similarly higher in secure attachment would we expect to see similarity-enhancing behaviors, such as self-disclosure and proximity-seeking (e.g., Mikulincer & Nachshon, 1991).

**Hypothesis 1.** Similarity between mentor and protégé in attachment security is related to protégé perceptions of similarity to the mentor, such that perceptions of similarity are higher when mentor and protégé are similarly higher in attachment security.

### 1.3. Relational Self-Construal and Perceived Similarity

Relational self-construal refers to the tendency to define the self in terms of close relationships (Cross, Bacon, & Morris, 2000). Like attachment security, relational self-construal is a characteristic of the self that affects how individuals view their relationships with others. Although relational self-construal complements attachment security, the constructs differ in that attachment security is determined by combinations of internal working models (Bartholomew & Horowitz, 1991). For example, it is possible for someone to see themselves in terms of relationships (i.e., have a strong relational self-construal), yet also believe they are not worthy of care from others (i.e., have low attachment security) due to a negative working model of the self.

Individuals with highly relational self-construals are more likely to perceive similarity between themselves and close others than are those with less relational self-construals. Specifically, Cross, Morris, and Gore (2002) found that those with highly relational self-construals described themselves and a close friend similarly, and perceived their friends to have similar traits and abilities to themselves. They proposed that those with highly relational self-construals are motivated to perceive similarity to close others to facilitate a sense of belonging to the relationship, enhance relationship harmony, and affirm positive aspects of the self. At the dyadic level, individuals with highly relational self-construals are also likely to think and act in ways that lead to cognitive closeness and mutual self-disclosure (Gore, Cross, & Morris, 2006), which may foster similarity perceptions. Although there are clear links between relational self-construal and perceived similarity, this has not been examined in the context of mentoring relationships, at the individual or dyadic level. The present study will examine how mentor-protégé similarity in relational self-construal relates to protégés' perceptions of similarity.

**Hypothesis 2.** Similarity between mentor and protégé in relational self-construal is related to protégé perceptions of similarity to the mentor, such that perceptions of similarity are higher when mentor and protégé are similarly higher in relational self-construal.

#### 1.4. Role Modeling, Perceived Similarity, and Commitment

Role modeling is an identification process that is central to mentoring relationships. Although originally conceptualized as a psychosocial support function (Kram, 1985), researchers now view role modeling as a distinct mentoring function with unique antecedents and outcomes (Scandura, 1992). Indeed, a recent meta-analysis found that role modeling was a stronger predictor of mentoring outcomes than either psychosocial or career-related functions (Dickson et al., 2014). In the present study, we integrate mentoring theory with new theoretical perspectives on relational identification to illuminate the role of role modeling in mentoring relationships.

According to Kram (1985), the process of role modeling occurs when the protégé recognizes aspects of his or her current or idealized self in the mentor and strives to emulate these aspects. As such, the process of identifying with a role model first involves perceiving similarity between the self (or one's ideal self) and the mentor (Kram, 1985). The idea that perceived similarity engenders identification with others is also consistent with Sluss and Ashforth's (2007) theory of relational identification. Relational identification is the extent to which employees define themselves in terms of a role-relationship, and their perceived oneness with the relationship (Sluss & Ashforth, 2007). As applied to mentoring relationships, role modeling can be seen as a form of relational identification; role modeling involves the protégé identifying with the mentor and the protégé internalizing valued aspects of the mentor into his or her self concept (Kram, 1985). Sluss and Ashforth (2007) also suggest that perceived similarity is an antecedent to relational identification. They explain that as two individuals interact, a personalization process unfolds in which each comes to see the other as a unique person rather than a prototypical member of a social group. This increases the likelihood of perceived similarity, which can ultimately lead to relational identification. Thus, there is strong theoretical rationale from both the mentoring and relational identification literatures to expect that protégé perceptions of similarity to a mentor will be related to perceptions of the mentor as a role model.

**Hypothesis 3.** Perceived similarity to the mentor is positively related to protégé perceptions of role modeling.

Sluss and Ashforth (2007) propose that relational identification may generalize to organizational and other identity outcomes. As they explain: "in identifying with a role-relationship, one may come to identify with the collective that embodies and sustains the role-relationship. In effect, one sees the collective as an extension of the role-relationship" (p.18). This perspective suggests that a protégé who views his or her mentor as a role model may generalize this identification to larger collectives, such as the organization and profession. This idea is also consistent with existing work in the field of mentoring. Mentors can be seen as agents of the organization, and mentoring relationships have been found to affect protégés' perceptions and attitudes about the organization (Baranik et al., 2010). Mentoring can also affect protégés' commitment to their profession. By modeling professional behaviors and helping protégés develop a sense of professional identity, Kram (1985) holds that mentors can exert a powerful influence on the protégé's professional identification. The identification processes inherent in role modeling can therefore mediate the relationship between perceived similarity and outcomes. Role modeling reflects more than perceived similarity – it reflects the protégé's perception of their ideal self and the degree to which they internalize the role relationship into their working self-concept. We test these theoretical perspectives with the following hypotheses:

**Hypothesis 4.** Role modeling mediates the relationship between protégés' perceptions of similarity to their mentors and organizational commitment.

**Hypothesis 5.** Role modeling mediates the relationship between protégés' perceptions of similarity to their mentors and professional commitment.

## 2. Method

### 2.1. Participants and Procedure

The sample for this study included 82 matched mentor-protégé dyads recruited from two large state universities. We targeted 2501 non-faculty university employees with professional titles (e.g., director, manager) as potential mentors. We sent these individuals survey packets through campus mail that included a cover letter, mentor survey, and return envelope, along with a sealed envelope for the mentor to pass to his or her protégé. Targeted employees were asked to return a completed survey if they were mentors, but to either disregard or return an unanswered survey if they were not mentors. We received 659 completed and unanswered surveys, yielding a general response rate of 26%. This is a conservative estimate, since employees who were not mentors may have simply discarded the survey. Of the 659 returned surveys, 218 indicated experience as a mentor. We received 82 protégé surveys that could be matched with mentor surveys; thus, the final sample included 82 matched mentor-protégé dyads.

Of the 82 dyads, 75.6% ( $n = 62$ ) were informal mentoring relationships (i.e., developed without outside assistance). The majority of mentors were White ( $n = 75$ ; 91.5%), and over half were women ( $n = 49$ ; 59.8%). The average age of mentors was 45.19, and mentors' average organizational was 11.2 years ( $SD = 8.39$ ). The majority of protégés were White ( $n = 72$ ; 87.8%), and most were women ( $n = 60$ ; 73.2%). The average age of protégés was 33.25, and protégés' average organizational tenure was 5.42 years

( $SD = 5.76$ ). Mentor-protégé dyads tended to be racially similar (85.4%;  $n = 70$ ), and 62.2% ( $n = 51$ ) of protégés were in relationships with mentors of the same gender. Relationship length averaged 2.54 years ( $SD = 3.41$ ).

## 2.2. Measures

Unless otherwise indicated, variables were measured using five-point Likert scales (1 = *strongly disagree* to 5 = *strongly agree*), and items were coded so that higher values represent greater amounts of the construct.

*Attachment security* was measured using Bartholomew and Horowitz's (1991) Relationship Questionnaire (RQ). Participants were asked to rate their degree of correspondence to a short paragraph describing the secure attachment pattern using a 5-point Likert scale: "It is easy for me to become emotionally close to others. I am comfortable depending on others and having others depend on me. I don't worry about being alone or having other accept me." Considerable research supports the construct validity and stability of the RQ as a measure of adult attachment (e.g., Bartholomew & Horowitz, 1991; Scharfe & Bartholomew, 1994).

*Relational self-construal* was measured using Cross et al.'s (2000) 11-item Relational-Interdependent Self-Construal Scale. Sample items include "My close relationships are an important reflection of who I am" and "When I think of myself, I often think of my close friends or family also". Cronbach's alpha was .84 for mentors and .89 for protégés.

*Perceived similarity* was measured using a reverse-scored version of the nine-item *mismatch within the dyad* subscale of Eby, Butts, Lockwood, and Simon's (2004) negative mentoring experiences measure. Items were reverse-scored so that higher levels represent more similarity. Sample items include "The personal values of my mentor are different from my own" and "My mentor and I are different" (both items reverse-scored). Cronbach's alpha was .89.

*Role modeling* was measured using the three-item role model subscale of Ragins and McFarlin's (1990) mentor role instrument. Sample items include "My mentor is someone I can identify with" and "My mentor represents who I want to be". Cronbach's alpha was .88.

*Organizational commitment* was measured using Meyer, Allen, and Smith's (1993) six-item affective commitment to the organization subscale. Because the respondents were employed at a university, the wording of items was modified to refer to "university" instead of "organization". A sample item is "I do not feel "emotionally attached" to this university" (reverse-scored). Cronbach's alpha was .82.

*Professional commitment* was measured using Meyer et al.'s (1993) five-item affective commitment to the occupation scale. Since Meyer et al.'s (1993) original scale referred to the nursing context only, the wording of items was modified to refer to career and professional commitment more broadly. Sample items include "I dislike my career" (reverse-scored) and "I am proud to be in this profession". Cronbach's alpha was .87.

Five potential control variables were considered. *Relationship length* was measured using protégés' reports of how long (in months) they have been in their mentoring relationships. Relationship length was considered because previous research has found that it is related to the development of similarity perceptions (Allen & Eby, 2003; Lankau et al., 2005; Turban et al., 2002). We also considered controlling for *racial and gender similarity* within the dyad in order to account for the possibility that the effects of personality similarity are due in part to demographic similarity. Demographically similar dyads (i.e., both mentor and protégé identified as the same race or gender) were coded 1, whereas demographically dissimilar dyads were coded 0. We also considered controlling for differences between the two university samples. Finally, we considered controlling for formal vs. informal mentoring status because prior research finds that relationship formality is related to a wide range of protégé outcomes (Eby et al., 2013); formal relationships were coded 0, whereas informal relationships were coded 1.

## 3. Results

Means, standard deviations, and correlations are presented in Table 1. There were no significant correlations between four of the control variables (relationship length, racial similarity, gender similarity, and source) and perceived similarity; therefore, following Spector and Brannick's (2011) recommendation, these potential control variables were not included in subsequent analyses. However, informal mentoring status was significantly associated with perceived similarity ( $r = -.25$ ); thus, this variable was controlled for in subsequent analyses. In order to examine similarity effects, we used polynomial regression with response surface methodology. This procedure avoids the conceptual and methodological problems associated with the use of difference scores as an index of similarity (Edwards & Parry, 1993). Polynomial regression also provides more information than moderated regression because it tests nonlinear effects and tests for both similarity and discrepancy effects (Shanock, Baran, Gentry, Pattison, & Heggstad, 2010). We tested two parallel regression equations predicting perceived similarity:

$$PS = b_{ps0} + b_{ps1}PA + b_{ps2}MA + b_{ps3}PA^2 + b_{ps4}MAPA + b_{ps5}MA^2$$

$$PS = b_{ps0} + b_{ps1}PR + b_{ps2}MR + b_{ps3}PR^2 + b_{ps4}MRPR + b_{ps5}MR^2$$

where PS represents perceived similarity, MA and PA are mentor and protégé attachment security, and MR and PR are mentor and protégé relational self-construal. Following Edwards and Parry's (1993) recommendation, the linear predictors were midpoint-centered in the analyses. Similarity effects were modeled using linear combinations of the polynomial regression coefficients resulting from the PS equations. These response surface tests assess the extent to which the surface varies along the *congruence line* (i.e., the line along which mentor and protégé personalities are equal) and the *incongruence line* (i.e., the line along which mentor and protégé

**Table 1**  
Means, Standard Deviations, Correlations, and Internal Consistency Estimates for Study Variables.

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12
1. Mentor Attachment Security	3.50	1.04	—											
2. Protégé Attachment Security	3.35	0.76	.01	—										
3. Mentor Relational Self-Construal	3.64	0.53	.16	.15	(.84)									
4. Protégé Relational Self-Construal	3.60	0.64	-.04	.31*	.14	(.89)								
5. Protégé Perceived Similarity	3.12	0.75	.06	.08	.14	.23*	(.89)							
6. Protégé Role Modeling	3.76	0.79	.08	-.05	.05	.12	.59*	(.88)						
7. Protégé Organizational Commitment	3.22	0.79	-.11	.13	.18	.11	.35*	.42*	(.82)					
8. Protégé Professional Commitment	4.12	0.63	-.06	-.05	.05	.12	.27*	.37*	.39*	(.87)				
9. Gender Similarity	0.64	0.48	.03	.21	.15	.13	-.19	-.10	.07	.01	—			
10. Racial Similarity	0.90	0.30	-.08	.09	-.02	.03	-.10	-.17	.02	-.03	.01	—		
11. Relationship Length	2.54	3.41	.01	-.06	.02	-.12	.07	.07	.16	.27*	.10	.14	—	
12. Data Source	1.28	0.45	.15	.00	.05	-.20	-.08	.04	-.11	-.10	.13	-.35*	-.14	—
13. Formal vs. Informal	0.79	0.41	.18	.22*	.01	-.11	-.25*	-.13	-.19	-.24*	.00	.32*	-.14	.15

Note: N = 82. Coefficients alpha are shown on the diagonal in parentheses.

\*  $p < .05$ .

personalities differ). Similarity effects are typically indicated by downward curvature in the incongruence line (Edwards & Cable, 2009); this would occur if perceptions of similarity decreased as mentor-protégé dissimilarity increased. In the present study, the hypothesized similarity effect is best characterized by downward curvature in the incongruence line ( $a_4$ ) and a positive linear slope in the congruence line ( $a_1$ ); this would indicate that perceptions of similarity decrease as mentor-protégé dissimilarity increase, and that perceptions of similarity increase as mentor-protégé characteristics jointly increase.

Results for mentor-protégé personality similarity as a predictor of protégé perceptions of similarity are presented in Table 2. We used maximum likelihood estimation in Mplus 7 to derive the surface test values. These values were tested and plotted using procedures outlined by Shanock et al. (2010). As shown in Table 2, only  $a_2$  was significant and positive ( $a_2 = .31, p = .03$ ), indicating positive curvature along the congruence line. This indicates a non-linear relationship between actual mentor-protégé similarity in attachment security and perceived similarity. As shown in Fig. 2, protégé perceptions of similarity are highest when mentors and protégés are similarly higher or similarly lower in attachment security, and lowest when mentors and protégés are similarly average in attachment security. Recall that Hypothesis 1 expected effects only for higher levels of actual attachment similarity. The finding that perceptions of similarity increased as mentor-protégé attachment security jointly deviated from the midpoint of the scale (to reflect either more similarly higher attachment security or more similarly lower attachment security) was somewhat, albeit not completely consistent with expectation. Therefore, we found partial support for Hypothesis 1. As shown in Table 2, all four surface tests predicting perceived similarity from relational self-construal were nonsignificant at  $\alpha = .05$ . Thus, Hypothesis 2 was not supported.

We tested the model in Fig. 1 using ML estimation in Mplus 7. In order to obtain path coefficients for the mentor-protégé similarity variables, we created block variables from the terms in the PS regression equations. Block variables are weighted linear composites created by weighting variables by the estimated regression coefficients for the variables in the block (c.f., Edwards & Cable, 2009). For example, the block variable associated with attachment security equals  $b_{PS1}PA + b_{PS2}MA + b_{PS3}PA^2 + b_{PS4}MAPA + b_{PS5}MA^2$ . The results of these analyses are shown in Table 3. The model provided an adequate overall fit to the data ( $\chi^2(8) = 13.90, p = .08$ ;

**Table 2**  
Polynomial Regressions of Perceived Similarity on Mentor-Protégé Personality Similarity.

Attachment Security <sup>a</sup>		Relational Self-Construal <sup>b</sup>	
Intercept	3.16*	Intercept	3.06*
Mentor attachment security (MA)	0.02 (.10)	Mentor relational self-construal (MR)	-0.08 (.33)
Protégé attachment security (PA)	-0.05 (.13)	Protégé relational self-construal (PR)	0.21 (.27)
MA <sup>2</sup>	0.07 (.07)	MR <sup>2</sup>	0.22 (.22)
MA X PA	0.08 (.11)	MR X PR	-0.16 (.32)
PA <sup>2</sup>	0.16 (.08)	PR <sup>2</sup>	0.21 (.10)
R <sup>2</sup>	0.14	R <sup>2</sup>	0.17*
<i>Congruence (MA = PA) line</i>		<i>Congruence (MR = PR) line</i>	
Slope (a1)	-0.03 (.18)	Slope (a1)	0.13 (.47)
Curvature (a2)	0.31* (.14)	Curvature (a2)	0.26 (.36)
<i>Incongruence (MA = -PA) line</i>		<i>Incongruence (MR = -PR) line</i>	
Slope (a3)	0.07 (.13)	Slope (a3)	-0.29 (.38)
Curvature (a4)	0.14 (.11)	Curvature (a4)	0.59 (.43)

$a_1 = (b_1 + b_2)$ , where  $b_1$  is the unstandardized regression coefficient for protégé personality and  $b_2$  is the unstandardized regression coefficient for mentor personality.  $a_2 = (b_3 + b_4 + b_5)$ , where  $b_3$  is the unstandardized regression coefficient for protégé personality squared,  $b_4$  is the unstandardized regression coefficient for the cross-product of mentor and protégé personality, and  $b_5$  is the unstandardized regression coefficient for mentor attachment security squared.  $a_3 = (b_1 - b_2)$ .  $a_4 = (b_3 - b_4 + b_5)$ .

<sup>a</sup> N = 70 due to missing data on attachment security.

<sup>b</sup> N = 75 due to missing data on relational self-construal.

\*  $p < .05$  (two-tailed).

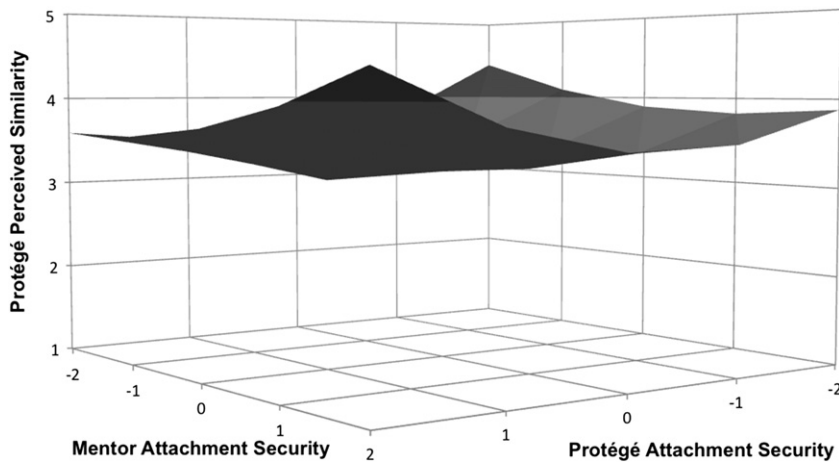


Fig. 2. Mentor-protégé similarity in attachment security predicting perceived similarity.

RMSEA = .10; CFI = .92; TLI = .81, SRMR = 0.07). Mediation hypotheses were tested using James, Mulaik, and Brett's (2006) recommendations. In support of Hypothesis 3, perceived similarity was positively associated with role modeling ( $b = .63$ ,  $p < .001$ ); thus, the first condition of mediation was supported. The regression coefficients for the equations relating the mediator (role modeling) to the two outcomes (organizational and professional commitment) were also significant ( $bs = .37$  and  $.24$ , respectively), supporting the second condition of mediation. Finally, the indirect effect of perceived similarity on commitment via role modeling was estimated by testing the product of the coefficients for significance using the Sobel test. As shown in Table 3, the indirect effects were significant for both models ( $bs = .23$  and  $.15$ , respectively). Thus, Hypotheses 4 and 5 were both supported.

#### 4. Discussion

The purpose of this study was to examine the antecedents and outcomes of perceived similarity in mentoring relationships. Specifically, we examined whether actual mentor-protégé similarity in two relationally-oriented individual differences (attachment security and relational self-construal) predicted protégé perceptions of similarity to his or her mentor. We also examined whether perceived similarity had downstream associations with protégés' commitment to their organizations and professions through identification with their mentors as role models.

Even though similarity is an important attribute in mentoring relationships (Eby et al., 2013), our findings suggest that actual similarity may or may not predict perceptions of similarity. Specifically, we found that actual similarity in relational self-construal did not predict perceived similarity, but similarity in attachment security was related to perceived similarity. We also found that the level of similarity mattered: protégés were more likely to see themselves as similar to their mentors when they and their mentors shared either high or low levels of attachment security.

These findings point to the complexities of perceived similarity and illustrate the importance of a more nuanced approach when examining predictors of perceived similarity. One explanation for the findings of this study is that attachment security may be more behaviorally salient than relational self-construal, which may help protégés detect similarity between themselves and their mentors. In support of this interpretation, research indicates that close others can reliably classify individuals into prototypical attachment patterns (e.g., Bartholomew & Horowitz, 1991), and that attachment orientations are associated with unique behavioral manifestations in close relationships, including caregiving and support seeking (Collins & Feeney, 2000). Behavioral caregiving may be particularly salient in mentoring relationships, given that a primary role of mentors is to provide care and support (Kram, 1985). The behavioral

Table 3

Results of path estimates for perceived similarity, relational identification, and organizational and professional commitment.

Path	$b$	S.E.	$\beta$	$R^2$
Attachment Security → Perceived Similarity	0.67	0.35	0.22	
Relational Self-Construal → Perceived Similarity	0.83*	0.32	0.30	0.22*
Perceived Similarity → Role Modeling	0.63*	0.11	0.59	0.34*
Role Modeling → Organizational Commitment	0.37*	0.10	0.40	0.18*
Role Modeling → Professional Commitment	0.24*	0.08	0.33	0.16*
<i>Tests for Mediation</i>		$b$		S.E.
Professional Commitment		0.24*		0.08
Organizational Commitment		0.15*		0.06

manifestations of a particular individual difference may therefore be a key factor to consider in future research on perceived similarity in mentoring relationships. Our findings also suggest that some relational attributes may independently predict perceptions of similarity in relationships, irrespective of whether or not partners actually share the attribute. For example, relational self-construal was not significant in our modeling of dyadic similarity of the attribute, but we found that protégés with high relational self-construals were more likely to perceive themselves as similar to their mentors than protégés with low relational self-construals ( $r = .23$ ). This is consistent with Cross et al.'s (2002) finding that individuals high in relational self-construal perceive their friends as similar to themselves, regardless of actual similarity. Thus, individuals with higher relational self-construals may be motivated to see themselves as similar to close others, including mentors, regardless of actual similarity.

Interestingly, our results suggest that there is a significant curvilinear relationship between similarity in attachment security and protégé perceptions of similarity, such that perceived similarity was highest when mentors and protégés were similarly higher or similarly lower in attachment security. Protégés did not perceive their mentors as being similar to them when they shared average levels of attachment security. As noted earlier, attachment security has behavioral manifestations, which may be most obvious at extreme levels of the attribute. Although we are tempted to assume that mentors with less secure orientations may have less effective relationships, future research could examine whether these mentors are better able to understand and empathize with protégés' who share this level of the attribute. For example, a mentor and protégé who share negative working models of self may also share how to manage lower self-worth, a discussion that may not occur if a less secure protégé were paired with a highly secure mentor. These types of interactions may increase the probability that a protégé will identify with a mentor, and in turn become committed to the organization and profession.

Our study also helped illuminate the processes through which perceived similarity may affect outcomes. We found that role modeling mediated the relationship between perceived similarity and the outcomes investigated in this study. Our findings suggest that to the extent that protégés perceive themselves as similar to their mentors, they are more likely to identify with their mentors as role models, and may generalize this identification to their organization and their profession. These findings suggest that it is not just perceptions of similarity, but what these perceptions mean in terms of future selves and role modeling processes that matter. Drawing on existing theory on identification processes in work relationships (Sluss & Ashforth, 2007), we were able to examine whether perceptions of similarity in the relationship generalized to higher-order forms of identification through role modeling processes. We found that protégés' perceptions of similarity to their mentors ultimately influenced their commitment to their organizations and their professions. These results provide further evidence of the importance of perceived similarity to not only mentoring relationships, but also to organizations.

This study also has implications for theory. Integrating fundamental concepts from the mentoring literature (Kram, 1985) with emerging work on relational identification in work relationships (Sluss & Ashforth, 2007), we provide more fine-grained insights into the mediational processes involved with similarity effects in mentoring relationships. Our findings not only inform mentoring theory, but also emerging theoretical work on the role of relationships in organizations (Eby & Allen, 2012; Dutton & Ragins, 2007). Our results suggest that future theoretical work on relational identification could incorporate research and theory on role modeling effects in work relationships. Similarly, mentoring scholars could benefit from the incorporation of emerging research and theory on identification processes in work relationships. Our study provides support for the applicability of the similarity-attraction paradigm (Byrne, 1971) to mentoring relationships. However, it appears that the effects of actual similarity depend on the similar characteristic under investigation, and that perceptions of similarity have stronger effects on relational and perceptual outcomes than actual similarity. Finally, our findings illustrate the importance of using a dyadic approach to examine similarity in the relationship.

From a practical perspective, our results reinforce the idea that it is important to cultivate perceived similarity and role modeling in mentoring relationships. For example, it may be helpful for mentors to share not only work-related, but also more personal information about themselves with their protégés. These discussions may facilitate deeper levels of disclosure and provide more opportunities for creating stronger perceptions of similarity, identification and role modeling in the relationship. Second, formal mentoring programs may consider structuring activities that help mentors and protégés learn more about each other in the initial stages of the mentoring relationship. For example, mentors and protégés could both complete personality inventories and go through similarities and differences together, or could complete worksheets in which they jointly reflect on how their past experiences have informed their career progression. These rapport-building exercises may have important implications for protégé perceptions of similarity to mentors, and may have a dual benefit of helping mentors and protégés understand how their differences may play out in the mentoring relationship. Third, it may be important for mentors to minimize hierarchy between themselves and their protégés whenever possible. The interpersonal distance created by hierarchy is likely to inhibit the extent to which protégés can identify with their mentors, and thus their commitment to their organizations and professions.

Like all research, this study has several limitations. First, this was a cross-sectional study so causal inferences cannot be made and reverse causality is possible for some associations. For example, it may be that organizational and professional commitment engenders identification with mentors, as committed individuals may be motivated to identify with mentors who can assist their professional development. Longitudinal research may help clarify the direction of causality in these associations. Second, although the personality measures were collected from different sources, perceived similarity, role modeling, and commitment were all collected from the protégé. Thus, common method bias may have affected the parameter estimates in this study. Third, the sample size in this study was relatively small, which may have affected significance tests by increasing the standard errors associated with the parameter estimates. Thus, it is possible that similarity in relational self-construal may have significant effects in a larger sample.

Overall, the results of this study shed further light on the antecedents and outcomes of perceived similarity in mentoring relationships. Future research should further examine how characteristics of mentor-protégé dyads, and the mentoring relationship itself,



relate to protégé perceptions of similarity to mentors. Ultimately, the capability of a protégé to identify with a mentor may have lasting effects on a protégés' commitment to an organization or career.

## References

- Allen, T.D., & Eby, L.T. (2003). Relationship effectiveness for mentors: Factors associated with learning and quality. *Journal of Management*, 29, 469–486.
- Allen, T.D., Eby, L.T., Poteet, M.L., Lentz, E., & Lima, L. (2004). Career benefits associated with mentoring for protégés: A meta-analysis. *Journal of Applied Psychology*, 89, 127–136.
- Allen, T.D., Shockley, K.M., & Poteat, L. (2010). Protégé anxiety attachment and feedback in mentoring relationships. *Journal of Vocational Behavior*, 77, 73–80.
- Aron, A. (2003). Self in close relationships. In M.R. Leary, & J.P. Tangney (Eds.), *Handbook of self and identity* (pp. 442–461). New York, NY: The Guilford Press.
- Back, M.D., Baumert, A., Denissen, J.J.A., Hartung, F., Penke, L., Schmukle, S.C., et al. (2011). PERSOC: A unified framework for understanding the dynamic interplay of personality and social relationships. *European Journal of Personality*, 25, 90–107.
- Banse, R. (2004). Adult attachment and marital satisfaction: Evidence for dyadic configuration effects. *Journal of Social and Personal Relationships*, 21, 273–282.
- Baranik, L.E., Roling, E.A., & Eby, L.T. (2010). Why does mentoring work? The role of perceived organizational support. *Journal of Vocational Behavior*, 76, 366–373.
- Bartholomew, K., & Horowitz, L.M. (1991). Attachment styles among young adults: A test of a four-category model. *Journal of Personality and Social Psychology*, 61, 226–244.
- Bowlby, J. (1973). *Attachment and loss: Volume 2. Separation: Anxiety and anger*. New York: Basic Books.
- Byrne, D.E. (1971). *The attraction paradigm*. San Diego, CA: Academic Press.
- Carnelley, K.B., Pietromonaco, P.R., & Jaffe, K. (1996). Attachment, caregiving, and relationship functioning in couples: Effects of self and partner. *Personal Relationships*, 3, 257–278.
- Collins, N.L., & Feeney, B.C. (2000). A safe haven: An attachment theory perspective on support seeking and caregiving in intimate relationships. *Journal of Personality and Social Psychology*, 78, 1053–1073.
- Cross, S.E., Bacon, P.L., & Morris, M.L. (2000). The relational-interdependent self-construal and relationships. *Journal of Personality and Social Psychology*, 78, 791–808.
- Cross, S.E., Morris, M.L., & Gore, J.S. (2002). Thinking about oneself and others: The relational-interdependent self-construal and social cognition. *Journal of Personality and Social Psychology*, 82, 399–418.
- Dickson, J., Kirkpatrick-Husk, K., Kendall, D., Longabaugh, J., Patel, A., & Scielzo, S. (2014). Untangling protégé self-reports of mentoring functions: Further meta-analytic understanding. *Journal of Career Development*, 41, 263–281.
- Dutton, J. E., & Riggins, B. R. (2007). *Exploring positive relationships at work: Building a theoretical and research foundation*. Mahwah, NJ: Lawrence Erlbaum Associates Publishers.
- Eby, L. T., & Allen, T. D. (Eds.). (2012). *Personal relationships: The effect on employee attitudes, behavior, and well-being*. New York, NY: Routledge.
- Eby, L.T., Allen, T.D., Hoffman, B.J., Baranik, L.E., Sauer, J.B., Baldwin, S., et al. (2013). An interdisciplinary meta-analysis of the potential antecedents, correlates, and consequences of protégé perceptions of mentoring. *Psychological Bulletin*, 139, 441–476.
- Eby, L., Butts, M., Lockwood, A., & Simon, S.A. (2004). Protégés negative mentoring experiences: Construct development and nomological validation. *Personnel Psychology*, 57, 411–447.
- Eby, L.T., Rhodes, J., & Allen, T.D. (2007). Definition and evolution of mentoring. In T.D. Allen, & L.T. Eby (Eds.), *Blackwell handbook of mentoring* (pp. 1–20). Oxford: Blackwell Publishing.
- Edwards, J.R., & Cable, D.M. (2009). The value of value congruence. *Journal of Applied Psychology*, 94, 654–677.
- Edwards, J.R., & Parry, M.E. (1993). On the use of polynomial regression equations as an alternative to difference scores in organizational research. *Academy of Management Journal*, 36, 1577–1613.
- Fraley, R.C. (2002). Attachment stability from infancy to adulthood: Meta-analysis and dynamic modeling of developmental mechanisms. *Personality and Social Psychology Review*, 6, 123–151.
- Germain, M.L. (2011). Formal mentoring relationships and attachment theory: Implications for human resource development. *Human Resource Development Review*, 10, 123–150.
- Ghosh, R. (2014). Antecedents of mentoring support: A meta-analysis of individual, relational, and structural or organizational factors. *Journal of Vocational Behavior*, 84, 367–384.
- Gore, J.S., Cross, S.E., & Morris, M.L. (2006). Let's be friends: Relational self-construal and the development of intimacy. *Personal Relationships*, 13, 83–102.
- Huang, X., & Iun, J. (2006). The impact of subordinate-supervisor similarity in growth-need strength on work outcomes: The mediating role of perceived similarity. *Journal of Organizational Behavior*, 27, 1121–1148.
- James, L.R., Mulaik, S.A., & Brett, J.M. (2006). A tale of two methods. *Organizational Research Methods*, 9, 233–244.
- Jordan, J., Kaplan, A., Miller, J.B., Stiver, I., & Surrey, J. (1991). *Women's growth-in-connection*. New York: Guilford Press.
- Klohnen, E.C., & Luo, S. (2003). Interpersonal attraction and personality: What is attractive-self similarity, ideal similarity, complementarity or attachment security? *Journal of Personality and Social Psychology*, 85, 709–722.
- Kram, K.E. (1985). *Mentoring at work*. Glenview, IL: Scott Foresman.
- Lankau, M.J., Riordan, C.M., & Thomas, C.H. (2005). The effects of similarity and liking in formal relationships between mentors and protégés. *Journal of Vocational Behavior*, 67, 252–265.
- Meyer, J.P., Allen, N.J., & Smith, C.A. (1993). Commitment to organizations and occupations: Extension and test of a three-component conceptualization. *Journal of Applied Psychology*, 78, 538–551.
- Mikulincer, M., & Nachshon, O. (1991). Attachment styles and patterns of self-disclosure. *Journal of Personality and Social Psychology*, 61, 321–331.
- Miller, J.B. (1976). *Toward a new psychology of women*. Boston: Beacon Press.
- Riggins, B.R., & McFarlin, D.B. (1990). Perceptions of mentor roles in cross-gender mentoring relationships. *Journal of Vocational Behavior*, 37, 321–339.
- Riggins, B.R., & Verbos, A.K. (2007). Positive relationships in action: Relational mentoring and mentoring schemas in the workplace. In J.E. Dutton, & B.R. Riggins (Eds.), *Exploring positive relationships at work: Building a theoretical and research foundation* (pp. 91–116). Mahwah, NJ: Lawrence Erlbaum.
- Scandura, T.A. (1992). Mentorship and career mobility: An empirical investigation. *Journal of Organizational Behavior*, 13, 169–174.
- Scharfe, E., & Bartholomew, K.I.M. (1994). Reliability and stability of adult attachment patterns. *Personal Relationships*, 1, 23–43.
- Shanock, L.R., Baran, B.E., Gentry, W.A., Pattison, S.C., & Heggstad, E.D. (2010). Polynomial regression with response surface analysis: A powerful approach for examining moderation and overcoming limitations of difference scores. *Journal of Business and Psychology*, 25, 543–554.
- Sluss, D.M., & Ashforth, B.E. (2007). Relational identity and identification: Defining ourselves through work relationships. *Academy of Management Review*, 32, 9–32.
- Spector, P.E., & Brannick, M.T. (2011). Methodological urban legends: The misuse of statistical control variables. *Organizational Research Methods*, 14, 287–305.
- Strauss, J.P., Barrick, M.R., & Connerley, M.L. (2001). An investigation of personality similarity effects (relational and perceived) on peer and supervisor ratings and the role of familiarity and liking. *Journal of Occupational and Organizational Psychology*, 74, 637–657.
- Turban, D.B., Dougherty, T.W., & Lee, F.K. (2002). Gender, race, and perceived similarity effects in developmental relationships: The moderating role of relationship duration. *Journal of Vocational Behavior*, 61, 240–262.
- Turban, D.B., & Lee, F.K. (2007). The role of personality in mentoring relationships. In B.R. Riggins, & K.E. Kram (Eds.), *The handbook of mentoring at work: Theory, research, and practice* (pp. 21–50). Thousand Oaks, CA: Sage.
- Wang, S., Noe, R.A., Wang, Z.M., & Greenberger, D.B. (2009). What affects willingness to mentor in the future? An investigation of attachment styles and mentoring experiences. *Journal of Vocational Behavior*, 74, 245–256.
- Wexley, K.N., Alexander, R.A., Greenawalt, J.P., & Couch, M.A. (1980). Attitudinal congruence and similarity as related to interpersonal evaluations in manager-subordinate dyads. *Academy of Management Journal*, 23, 320–330.
- Wu, P.C., Foo, M.D., & Turban, D.B. (2008). The role of personality in relationship closeness, developer assistance, and career success. *Journal of Vocational Behavior*, 73, 440–448.