

ARTICLE



I see you in me: measuring mentee-mentor identification in peer-mentoring relationships

Archie L. Bates III , Joel K. Cartwright  and Lissa V. Young 

Department of Behavioral Sciences and Leadership, United States Military Academy, West Point, NY, US

ABSTRACT

This study developed identification measures between U.S. Service Academy cadet squad members and squad leaders in peer-mentoring relationships, highlighting identification as an important antecedent to mentoring. However, research has failed to show evidence of this relationship, largely because researchers have failed to measure identification, psychometrically test their measures, or differentiate identification from related constructs. Addressing this gap, we use theories of the self and interviews of cadets and faculty members to develop measures of both mentee and mentor identification. We include these measures, along with measures of empathy and similarity, in a longitudinal study of mentoring between cadet squad leaders ($n = 96$) and squad members ($n = 968$). Factor analyses revealed a three-factor solution of mentee identification with the mentor, measuring identification, empathy, and similarity. The analyses yielded a four-factor solution of mentor identification with the mentee, measuring two forms of identification, self-image, and empathy. The findings encourage future research to employ these measures for exploring identification's role in mentoring relationships.

PUBLIC SIGNIFICANCE STATEMENT

This study developed survey questions that researchers can use to measure how much mentors identify with their mentees and mentees identify with their mentors. Researchers of mentoring believe that identification is critical to the development of mentoring relationships. The questions developed in this study can help future researchers test whether a relationship between identification and mentoring exists.

ARTICLE HISTORY

Received 1 February 2024
Accepted 1 February 2024

KEYWORDS

Mentoring relationships;
peer mentoring;
identification; theories of the self; psychometrics

Mentoring is a key determinant of career success in the organization. In traditional mentoring relationships, senior, more experienced mentors share their expertise with and give support to junior, less experienced mentees (Hunt &

CONTACT Archie L. Bates III  archie.bates@westpoint.edu  Department of Behavioral Sciences and Leadership, United States Military Academy Official Mail & Distribution Center, ATTN: MADN-BSL 646 Swift Road, West Point, NY 10996-1905

The views expressed in this article are those of the author(s) and do not necessarily reflect the official policy or position of the Department of Defense, the U.S. government, or any of its agencies.

This work was authored as part of the Contributor's official duties as an Employee of the United States Government and is therefore a work of the United States Government. In accordance with 17 U.S.C. 105, no copyright protection is available for such works under U.S. Law.

Michael, 1983; Kram, 1985). A wealth of research supports Kram's (1985) notion that mentors provide career development and psychosocial functions. Researchers have shown mentoring to be positively associated with mentees' promotions, salary levels, academic success, career mobility and satisfaction, and organizational socialization and commitment (Chao, Walz, & Gardner, 1992; Dreher & Ash, 1990; Fagenson, 1989; Hillier, Goldstein, Tornatore, Byrne, & Johnson, 2019; Orstroff & Kozlowski, 1993; Payne & Huffman, 2005; Scandura, 1992; Turban & Dougherty, 1994; Whitely, Dougherty, & Dreher, 1991) and negatively associated with mentees' turnover intentions and work-related stress (Viator & Scandura, 1991; Weaver & Chelladurai, 2002). Also, researchers have found that benefits of mentoring for mentors include professional development, institutional recognition, cultural capital, increased self-efficacy and personal satisfaction (Hayman, Wharton, Bruce-Martin, & Allin, 2022; Larose, 2013; Schmidt & Faber, 2016).

Kram and Isabella (1985) asserted that peer mentoring is a valuable alternative to traditional mentoring. Compared to traditional mentoring, peer mentoring occurs between individuals of similar age and hierarchical position in an organization – for example, more senior students mentoring first-year students (Leidenfrost, Strassnig, Schabmann, Spiel, & Carbon, 2011). Mentoring researchers have highlighted the benefits of peer mentoring for mentors, mentees, and organizations, including better social integration, performance, and satisfaction, and decreased attrition (Allen, McManus, & Russell, 1999; Campbell & Campbell, 1997).

Although extant research documents well the benefits of mentoring relationships, we know little about how these relationships evolve. Early mentoring theorists (e.g. Erikson, 1950; Kram, 1985; Ragins, 1997a) emphasized that identification is vital to the development of mentoring relationships. They proposed that mentees identify with the characteristics and behaviors of mentors and seek to model themselves in the images of their mentors. Similarly, mentors identify with mentees whom mentors see as images of their idealized past. Despite the theorized significance of identification to the formulation of mentoring relationships, scientists have dedicated little research to empirically testing the relationship between identification and mentoring. A few exceptions exist. For example, in a study of corporate employees and educators, Bouquillon, Sosik, and Lee (2005) found that mentee's identification with their mentors did not differ based on the stage of the mentoring relationship (e.g. from initiation to separation stages of the relationship). However, the study's identification measure essentially measured similarity (e.g. 'I feel like my mentor and I share many of the same value'). The lack of empirically tested measures of identification contributes to this gap in the literature.

Thus, the primary purpose of this study is to develop and test two measures of identification – mentee identification with the mentor and mentor identification with the mentee. Certainly, identification might be confounded with

constructs within the same nomology, such as role modeling (Ashforth, Schinoff, & Rogers, 2016; Sanford, 1955). Thus, our second purpose was to conduct factor analysis to differentiate identification from other related yet distinct constructs. Consequently, a few guiding or research questions focused our research. First, does identification occur in peer mentoring relationships? If so, how might we measure identification? Further, is identification on the part of the mentor and mentee the same or different. Finally, how is identification similar to or different from other theorized antecedent to mentoring, such as similarity?

Identification: an antecedent of mentoring

Humberd and Rouse (2016) provide theoretical explanations for the development of identification in mentoring relationships. They integrate theories of the self (e.g. Albert, 1977; Higgins, 1987; Markus & Nurius, 1986; Markus & Wurf, 1987) and relationships (e.g. Aron, Aron, Tudor, & Nelson, 1991) with mentoring theory. Humberd and Rouse (2016) define identification as ‘a process by which individuals realize cognitive overlap between the self and the other over time in a relationship’ (p. 435). They theorize that identification differs for mentors and mentees, changes over time by virtue of the quality of the mentoring relationship, and stems from identification sources and identification mechanisms. Identification sources are the various temporal selves from which one identifies with the other. For the mentee, present and future selves (e.g. Obodaru, 2012) are likely most salient because the mentee envisions the mentor as whom the mentee aspires to become in the future. Contrastingly, present and past selves are most salient for the mentor, as the mentor reflects and pictures the mentee as a younger version of the mentor (Albert, 1977).

Next, Humberd and Rouse (2016) propose that three identification mechanisms – projection, recognition, and integration – explain how cognitive overlap between the self and the other might occur. First, the mentor and the mentee might project aspects of him/herself onto the other and see the other as a reflection of the one’s own image based on fantasy or unfamiliarity (Holmes, 1968; Klein, 2013). For example, the mentor might recall having frequent feelings of nervousness earlier in his or her organizational experience and project those feelings onto the mentee, irrespective of the mentee’s true feelings. Similarly, the mentee might desire to feel leaderful in the future and project feelings of confident leadership on the mentor, regardless of the mentor’s leadership self-assuredness. In both examples, projection of the self onto the other leads to a sense of cognitive overlap. Second, cognitive overlap might occur through recognition, that is, the accurate perception of similarities between the self and the other. In this case, Humberd and Rouse (2016) suggest that mentor–mentee interactions lead one or both parties to recognize

substantiated similarities between the self and the other, which is, in turn, associated with identification (e.g. Cooper & Thatcher, 2010; Pratt, 1998). For instance, the mentee might recognize that the mentor has similar interests, and thus identify with the mentor. Third, Humberd and Rouse (2016) theorize that identification stems from integration, the tendency to incorporate aspects of the other into the self. Asserting that one might change one's sense of self to appear like the other, Humberd and Rouse (2016) suggest that a mentee might envision the self as a change agent in the organization, like the mentor is, and thus identify with the mentor. Alternately, the mentor might view the self as tech-savvy like the mentee is, and thus identify with the mentee.

In sum, Humberd and Rouse (2016) propose that the repertoire of selves from which one identifies with the other leads to identification in mentoring. Additionally, identification might stem from projection, recognition, and integration. They also suggest that while present and future selves might be salient for mentee identification with the mentor, present and past selves might be salient for mentor identification with the mentee. Thus, Humberd and Rouse (2016) suggest that researchers examine identification from both the mentee's and mentor's perspectives, to fully grasp the role of identification in mentoring relationships.

Mentoring context of the current study

In the current study, we examined identification in formal, peer mentoring relationships between service academy cadet squad leaders and members of their squads conducting Cadet Field Training (CFT). The service academy is a four-year undergraduate institution whose mission is to educate, train and inspire cadets to serve as commissioned officers in the U.S. military. CFT is an intensive, eight-week military training course that develops, trains, tests, and validates cadets' basic military skills.¹ The training emphasizes individual- and team-level soldier competencies, such as rifle marksmanship, land navigation, water confidence, and team leadership. To facilitate mentoring during CFT, the service academy randomly assigns roughly 90–100 rising junior cadets to serve as squad leaders (i.e. mentors) to 8–12 rising sophomore cadets (i.e. mentees) each. Before becoming CFT mentors, cadets must successfully pass CFT. Thus, CFT mentors possess the knowledge, skills, abilities, and other attributes necessary for developing and advising their mentees throughout CFT. Although CFT mentors are similar to their mentees in age, the former are generally more experienced in military training than the latter are, and mentors are charged with developing their mentees for their first cadet leadership roles. Consequently, mentoring between cadets in this study resembles near- or

¹At the time of this study, Cadet Field Training (CFT) lasted eight weeks. Currently, CFT last four weeks, as the service academy has moved some training from CFT to the four-week Cadet Leader Development Training, which typically takes place during the summer of a cadet's junior year.

equal-peer mentoring relationships in other studies in higher education settings (e.g. Anderson, Tenenbaum, Ramadorai, & Yourick, 2015; Colvin & Ashman, 2010; Gafni-Lachter et al., 2021).

Yet, research on mentoring relationships in military contexts is sparse. Examining mentoring in this setting, researchers have typically conducted exploratory studies focused primarily on mentoring between noncommissioned officers and/or commissioned officers and have examined individuals' conceptualization of mentoring, the prevalence of mentoring, mentor and mentee characteristics (e.g. demographics), and mentor and/or mentee success and relationship satisfaction (Johnson et al., 1999, McGuire, 2007; Steinberg & Foley, 1999; Yoder, 1992). Our review of the literature yielded only two studies highlighting peer mentoring in military contexts. In a survey study of 568 midshipmen at the United States Navy Academy (USNA), Baker, Hovevar, and Johnson (2003) found that 28% of midshipmen reported their 'most significant USNA mentor' to be another midshipman. In a similar study of cadets, Bates (2003) found that cadets reported receiving significantly less mentoring from their female peer mentors than cadets with male peer mentors reported receiving. However, the researcher found no significant differences in peer mentoring due to race. Although Bates (2003) provided some evidence that identification between cadets was related to the level of peer mentoring received, the author's measure of identification was confounded with other constructs, such as similarity. Our aim is to develop measures of identification distinct from similar constructs.

Method

This study was conducted using survey research design, a practical approach used to describe or explain features of a population of interest. Specifically, the investigators employed an adapted version of Gehlbach and Brinkworth's (2011) scale development process, which utilizes a qualitative approach to the development of the survey items and a quantitative approach to validate the developed construct and to ensure the robustness and validity of the Likert scale instrument. The research was designed and executed in key stages to achieve these objectives. First, to establish a strong theoretical foundation an extensive literature review was conducted. Subsequently, to gain deeper insights and a more nuanced understanding of the subject matter, we used qualitative methods to conduct in-depth interviews with experts in the field. These interviews provided invaluable qualitative data that complemented and enriched our understanding, contributing to a more comprehensive framework for item development. The synthesis of the literature review and qualitative interview data served as a thorough framework for which the items were constructed. This comprehensive approach ensured that items were not only theoretically grounded but also reflective of the practical insights shared by domain experts.

Finally, to refine and validate the measures, a pilot study was conducted using the quantitative methods outlined by Gehlbach and Brinkworth (2011). This rigorous approach enabled us to systematically develop and validate the scale employed in this study, ensuring its reliability and validity in measuring the constructs of interest.

Item development

Humberd and Rouse's (2016) theory on identification in mentoring underpinned our development of items to measure identification. More specifically, we developed items aimed at measuring sources of identification (i.e. past, present, and future selves) and identification mechanisms (i.e. projection, recognition, and integration). For instance, Humberd and Rouse posit that a mentee serves as a source of identification for a mentor's past self; that is, the mentor's 'view of who he or she used to be' (p. 440). Accordingly, for mentors, we developed the item, 'I can recall behaving like "Cadet X" when I was in a similar position.' Similarly, Humberd and Rouse theorize that a mentee identifies with a mentor as the mentee's future self or 'view of who he or she might become' (p.440). Thus, for mentees, we developed the item, 'I can envision myself behaving like "Cadet X" when I am in a similar leadership position.'

Additionally, we utilized a qualitative approach for item development and conducted formal, semi-structured group interviews of cadets and Army officers assigned to the faculty who self-identified as being actively engaged in mentoring relationships, to better understand the underlying factors for the development of those relationships. Since formal and informal mentoring is prevalent, encouraged, and frequently discussed at the service academy in which we conducted our study, we easily obtained approval and volunteers for our interviews. We conducted three one-hour interviews of 8–10 first-year cadets who self-identified as having mentors; two one-hour interviews of 8–10 junior cadets who self-identified as being mentors to other cadets; and two one-hour interviews of 4–8 Army officer and civilian faculty who identified as being mentors to cadets and/or other faculty. Each group interview followed a semi-structured interview protocol (See [Appendix A](#)). After reading each question, the interviewer allowed the group members to discuss their perspectives freely. The researchers took notes during the interviews to capture key themes. We were careful not to lead interviewees during questioning. For example, rather than asking mentors to describe what caused them to identify with their mentees, we asked questions like, 'Tell me about what drew you and your mentee together.' We asked interviewees to describe concrete examples, facilitating reliance on their episodic memory, which yields comprehensive accounts (Tulving, 2002).

In addition to Humberd and Rouse's (2016) proposed theoretical underpinnings for identification (i.e. identification sources and identification mechanisms), these conversations uncovered that mentee identification also stemmed

from mentees emulating, admiring, respecting, and empathizing with their mentors. Similarly, mentors shared that their empathy for their mentees led mentors to identify with their mentees, but mentors spoke less about respecting, admiring, or emulating their mentees. Accordingly, we developed separate measures of mentee identification with the mentor (see [Appendix B](#)) and mentor identification with the mentee (see [Appendix C](#)) to examine theorized and evidenced differences between the two types of identification and to investigate how various sources of identification (e.g. the other, the self, empathy) align. Measures for this study appeared with other measures in surveys administered to cadet mentors and mentees during day 12 of CFT. Each cadet mentee responded to survey items regarding his or her squad leader mentor, and each mentor responded to survey items on each of the roughly 10 mentees in his or her respective squad.

Measure validation

To ensure proper sample sizes, we utilized benchmarks previously established in the literature for factor analysis. Notably, these sample sizes surpass the recommended threshold of 200 participants set by Jackson, Voth, and Frey (2013) by approximately twofold. For validation of the mentee identification with mentor and the mentor identification with mentee measures we utilized a quantitative approach, and data were randomly split into development groups ($n = 353$; $n = 485$) and confirmatory groups ($n = 354$; $n = 484$). First, to determine the maximum number of factors for further exploration, we conducted parallel analyses utilizing RStudio Version 1.3.1093 and the psych package version 2.0.12 (Revelle, 2021). Second, principal components analyses (PCA) were conducted utilizing the psych package version 2.0.12 (Revelle, 2021) for each model to identify the best fit. To assess factor analytic model fit, multiple indices were reported (Jackson, Gillaspay, & Purc-Stephenson, 2009). Specifically, two relative fit indices were used: Comparative Fit Index (CFI) and the Tucker Lewis Index (TLI). CFI and TLI values of 0.95 or higher represent a good fit (Hooper, Coughlan, & Mullen, 2008). Two indices of absolute fit were used: root mean square error of approximation (RMSEA) and standardized root mean square residual (SRMR). Indices of 0.06 or lower for the RMSEA and 0.09 or lower for SRMR suggest a good fit (Hu & Bentler, 1999).

Prior to the confirmatory factor analyses, the R package Multivariate Normality Tests (MVN) version 5.8 was used to test for normality (Korkmaz, Goksuluk, & Zararsiz, 2014). We tested univariate normality using the Shapiro–Wilk test of normality, and we tested multivariate normality utilizing the Mardia skewness test for normality. Confirmatory factor analysis (CFA) was conducted utilizing the confirmatory sample ($n = 354$; $n = 484$) and lavaan package 0.6–8 in RStudio (Rosseel, 2012). In addition to TLI, CLI was also included in the CFA fit indices with the same benchmarks as outlined previously. Internal consistency

was reported using Cronbach's alpha on the full sample. An alpha greater than .70 represents high internal consistency (James, 1988).

Participants

The mentee sample included 969 mentees, with 707 valid responses to the Mentee Identification with Mentor measure, which represented an approximately 73% response rate. The average mentee age was 19. Eighty-five percent of mentees were male, and 78% of mentees were White. Seven percent were Asian; 5% were Hispanic; 5% were Black; less than 1% were Native American, and 4% were mixed or had parents from two different groups. Two percent indicated other.

The mentor sample included 96 mentors with 67 valid responses to the demographic questionnaires representing a response rate of 70%, and 969 valid responses to the Mentor Identification with Mentee measure, which represented a 100% response rate.² The average mentor age was 20. 88% of mentors were male, and 78% of mentors were White. Six percent were Black; 6% were Asian; none selected American Indian, and 2% were Hispanic. Eight percent indicated being of more than one race/ethnicity, and 2% selected other. Mentors were typically in-charge of 10 mentees, although squad size ranged from 8 to 12 mentees.

Results

Sample descriptives

Eighty-five-point 4% ($n = 828$) of mentees and 88.1% ($n = 59$) of mentors were male. Slightly more than three-quarters of mentees (78.1%, $n = 757$) and mentors (77.6%, $n = 52$) selected white as their race/ethnicity with (4.9%, $n = 47$; 1.5%, $n = 1$) choosing Hispanic and (3.6%, $n = 35$; 7.5%, $n = 5$) selecting multiple. Reliability of the mentee identification with mentor ($\alpha = 0.93$, 95% CI = 0.93–0.94) was slightly less than the mentor identification with mentee ($\alpha = 0.94$, 95% CI 0.94–0.95) with both measures showing high internal consistency.

Mentee identification with mentor

Of the 969 mentees, 707 completed the mentee identification with mentor measure. Descriptive statistics for the mentee identification with mentor measure are shown in Table 1. According to Little's (1988) test statistic data are missing completely at random [MCAR; χ^2 (242) 258.70, $p = 0.220$], thus listwise deletion was used for the exploratory and confirmatory factor analyses.

²The researchers did not receive complete demographic data on 29 of the mentors. However, each of the 96 mentors responded to the Mentor Identification with Mentee measure for each of his or her 8–12 assigned mentees.

Table 1. Mentee identification with mentor.

Item	<i>M</i> (<i>SD</i>)	Not True (%)	Slightly True (%)	Somewhat True (%)	Mostly True (%)	True (%)
How true are the following statements?						
I understand why CDT «Name» behaves the way he/she does.	4.01 (1.00)	2.26	7.36	13.72	40.74	35.93
I understand CDT «Name» 's feelings.	3.57 (1.06)	4.53	10.61	27.72	37.20	19.94
I understand the personal challenges that CDT «Name» faces.	3.70 (1.11)	5.23	8.91	23.06	36.07	26.73
I understand the leadership challenges that CDT «Name» faces.	4.08 (0.87)	1.41	3.35	15.98	44.27	35.08
I understand CDT «Name» 's way of thinking.	3.55 (1.09)	4.81	12.02	27.30	35.36	20.51
How similar or different are you and CDT «Name» in terms of ...						
Moral values	3.83 (0.91)	1.70	7.50	18.25	50.78	21.78
Interests	3.17 (0.96)	4.38	19.80	36.78	32.67	6.36
Personality	3.08 (1.13)	8.63	24.33	27.30	29.84	9.90
Background	2.61 (1.06)	14.99	34.09	29.14	18.25	3.54
Career aspirations	2.99 (1.06)	7.36	25.88	35.22	23.06	8.49
How true are the following statements?						
I can envision myself behaving like CDT «Name» when I am in a similar leadership position.	3.34 (1.18)	9.19	13.58	27.58	32.96	16.69
I will model my leadership qualities after CDT «Name»'s leadership qualities.	3.38 (1.18)	7.50	16.12	25.74	31.97	18.67
I have the utmost respect for CDT «Name».	2.48 (1.26)	29.84	21.50	26.73	14.43	7.50
I admire CDT «Name».	2.99 (1.15)	11.74	21.22	33.95	22.77	10.33
I will emulate many of CDT «Name» 's characteristics.	3.99 (1.03)	2.97	6.08	17.54	36.21	37.20
I look at things from a similar perspective as CDT «Name» does.	3.49 (1.21)	7.78	14.00	23.20	31.82	23.20
I identify with CDT «Name».	2.98 (1.21)	14.57	19.52	30.55	24.33	11.03
In a lot of ways, CDT «Name» reminds me of myself.	3.18 (1.12)	7.78	19.52	31.54	29.28	11.88

n = 707. *SD* = Standard Deviation.

Sample 1: exploratory factor analysis

First, to determine the maximum number of factors for further exploration, we conducted a parallel analysis on the development sample (*n* = 353) utilizing the psych package version 2.0.12 (Revelle, 2021). The resulting parallel analysis scree plot (Figure 1) identified three factors.

Second, principal components analyses (PCA) on both the three-factor and two-factor models utilizing the psych package version 2.0.12 (Revelle, 2021) to identify the best fit for the measure. Due to the intercorrelations of the factors, we used an oblique rotation method for the PCAs. In comparison to the two-factor model (TLI = 0.87; RMSEA = 0.10, 90% CI = 0.09–0.11; RMSR 0.05) the three-factor model (TLI = 0.93; RMSEA = 0.07, 90% CI = 0.06–0.08; RMSR 0.03) was the best fit. As shown in Table 2, items 3A through 3H and 2A loaded on the first factor. Items 1A, 1B, 1C, 1D, and 1E loaded on the second factor and items 2B through 2E loading on the third factor.

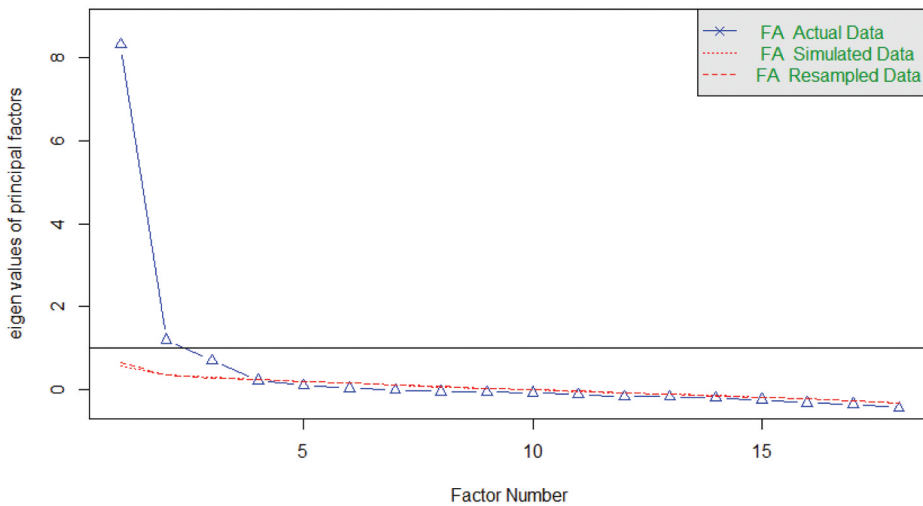


Figure 1. Mentee identification with mentor scree plots.

Sample 2: confirmatory factor analysis

We used the R package Multivariate Normality Tests (MVN) version 5.8 to test for normality (Korkmaz, Goksuluk, & Zararsiz, 2014). We tested univariate normality using the Shapiro–Wilk test of normality, and we tested multivariate normality utilizing the Mardia skewness test for normality, and we determined that the data were non-normal. To adjust for the potential bias due to the resulting non-normality, we conducted analyses using full information maximum likelihood estimation with robust statistics in the lavaan package version 0.6–8 (Rosseel, 2012). We conducted confirmatory factor analysis (CFA) utilizing the confirmatory sample ($n = 354$) and lavaan package 0.6–8 in RStudio (Rosseel, 2012). While the three-factor model fit was not great, analysis confirmed that the model fit was sufficient ($CFI = 0.91$; $TLI = 0.89$; $RMSEA = 0.08$, $90\% CI = 0.08–0.10$; $SMRM = 0.06$). The mentee identification of mentor factor loadings are presented in Table 2.

Mentor identification with Mentee

Nine hundred and sixty-nine mentor identification with mentee measures were completed by 96 mentors. Each mentor completed approximately 10 mentee measures. Descriptive statistics for the mentor identification with mentee measure are shown in Table 3. According to Little's test statistic [$\chi^2 (444) 664.63, p < .005$], data were not MCAR, after further exploration, participant demographics were not associated with any item missingness. Thus, unlike the mentee identification with mentor measure, we handled missing data using the full-information maximum likelihood approach as opposed to listwise deletion (Enders & Bandalos, 2001).

Table 2. Factor loadings mentee identification with mentor.

Item	Identification	PCA (n = 353)		Identification	CFA (n = 354)	
		Empathy	Similarity		Empathy	Similarity
How true are the following statements?						
I understand why CDT «Name» behaves the way he/she does.	.216	.688	−.105		.710	
I understand CDT «Name» 's feelings.	.032	.786	−.021		.800	
I understand the personal challenges that CDT «Name» faces.	−.179	.757	.078		.610	
I understand the leadership challenges that CDT «Name» faces.	−.040	.703	−.016		.531	
I understand CDT «Name» 's way of thinking.	.113	.673	.089		.814	
How similar or different are you and CDT «Name» in terms of ...						
Moral values	.317	.222	.160	.569		
Interests	.345	.163	.393			.766
Personality	.454	.026	.464			.864
Background	−.022	.107	.698			.565
Career aspirations	.153	.082	.449			.503
How true are the following statements?						
I can envision myself behaving like CDT «Name» when I am in a similar leadership position.	.709	.098	.120	.830		
I will model my leadership qualities after CDT «Name»'s leadership qualities.	.633	.219	.149	.838		
I have the utmost respect for CDT «Name».	.593	−.027	.392	.821		
I admire CDT «Name».	.826	−.003	.092	.827		
I will emulate many of CDT «Name» 's characteristics.	.829	.066	−.240	.638		
I look at things from a similar perspective as CDT «Name» does.	.888	.028	−.132	.782		
I identify with CDT «Name».	.889	−.057	.045	.856		
In a lot of ways, CDT «Name» reminds me of myself.	.668	.079	.156	.821		

PCA = principal components analysis; CFA = confirmatory factor analysis; All factor loadings significant at the < .001 level.

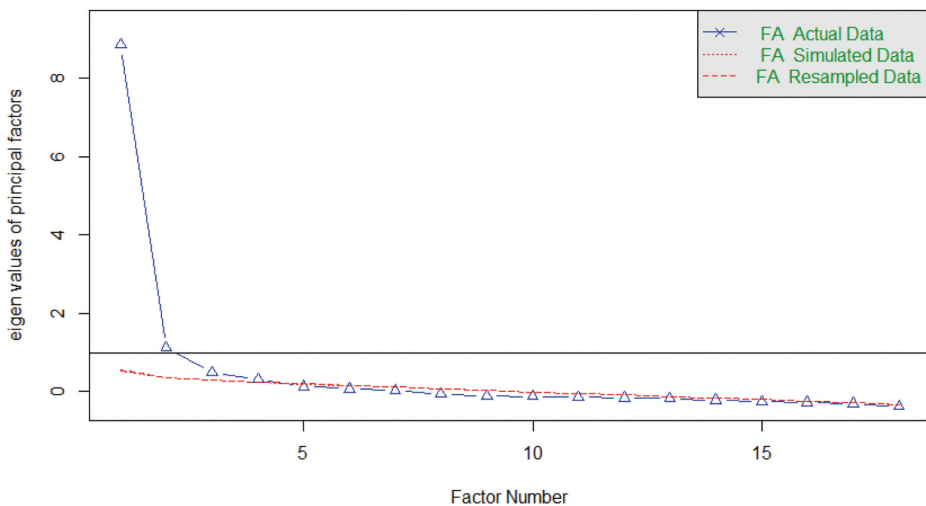
Sample 1: exploratory factor analysis

Parallel analyses conducted on the development sample (*n* = 484) identified four factors (Figure 2). We conducted the resulting PCAs for a four- three- and two-factor model. In comparison to the two-factor (TLI = 0.86; RMSEA = 0.10, 90% CI = 0.10–0.11; RMSR 0.05) and three-factor (TLI = 0.90; RMSEA = 0.09, 90% CI = 0.08–0.10; RMSR 0.04) models, the four-factor model (TLI = 0.93; RMSEA = 0.07, 90% CI = 0.06–0.08; RMSR 0.03) was the better fitting model.

Table 3. Mentor identification with Mentee.

Item	<i>M (SD)</i>	Not True (%)	Slightly True (%)	Somewhat True (%)	Mostly True (%)	True (%)
How true are the following statements ...						
I understand why CDT «Name» behaves the way he/she does.	3.44 (1.1)	5.64	12.45	29.38	37.05	15.48
I understand CDT «Name» 's feelings.	3.29 (1.1)	6.95	16.06	31.84	31.40	13.75
I understand the personal challenges that CDT «Name» faces.	3.33 (1.1)	5.79	16.35	31.55	31.55	14.76
I understand the followership challenges that CDT «Name» faces.	3.66 (1.0)	3.91	8.83	25.76	40.81	20.69
I understand CDT «Name» 's way of thinking.	3.27 (1.1)	5.64	17.95	33.14	29.96	13.31
How similar or different are you and CDT <<Name>> in terms of ...						
Moral values	3.73 (0.9)	1.88	6.51	29.38	41.10	21.13
Interests	3.12 (1.0)	4.63	24.31	35.17	25.90	9.99
Personality	3.03 (1.1)	8.83	25.62	29.52	25.47	10.56
Background	2.71 (1.0)	10.27	34.44	34.15	16.06	5.07
Career aspirations	3.15 (1.0)	4.63	20.69	38.35	27.64	8.68
How true are the following statements?						
I can recall behaving like CDT «Name» when I was in a similar position.	3.03 (1.2)	10.71	22.29	30.68	26.05	10.27
I will model my followership qualities after CDT «Name» 's followership qualities.	3.15 (1.2)	9.41	19.97	29.52	28.65	12.45
I have the utmost respect for CDT «Name».	2.66 (1.3)	22.58	23.44	27.93	17.22	8.83
I admire CDT «Name».	2.86 (1.3)	16.20	23.01	28.94	22.58	9.26
I emulate many of CDT «Name» 's characteristics.	4.04 (1.0)	2.17	7.38	18.09	28.65	43.70
I look at things from a similar perspective as CDT «Name» does.	3.40 (1.2)	6.51	16.35	27.79	29.23	20.11
I identify with CDT «Name».	2.91 (1.1)	13.46	20.98	34.73	23.15	7.67
In a lot of ways, CDT «Name» reminds me of myself.	3.05 (1.2)	11.72	19.39	33.29	23.59	12.01

n = 969. *M* = Mean. *SD* = Standard Deviation.

**Figure 2.** Mentor identification with mentee scree plots.

Sample 2: confirmatory factor analysis

We conducted confirmatory factor analysis (CFA) utilizing the confirmatory sample ($n = 485$). As with the mentee identification with mentor measure, the Shapiro–Wilk test of normality and the Mardia skewness test for normality determined that data were non-normal. To adjust for the potential bias due to the resulting non-normality, we conducted analyses using full information maximum likelihood estimation with robust statistics. Analysis confirmed that the four-factor model fit was sufficient ($CFI = 0.92$; $TLI = 0.91$; $RMSEA = 0.08$, $90\% \text{ CI} = 0.07\text{--}0.09$; $SMRM = 0.06$). The mentor identification of mentee factor loadings are presented in [Table 4](#).

Table 4. Factor loadings mentor identification with Mentee.

Item	PCA Sample ($n = 484$)				CFA Sample ($n = 485$)			
	Empathy	Similarity	ID1	ID2	Empathy	Similarity	ID1	ID2
How true are the following statements ...								
I understand why CDT «Name» behaves the way he/she does.	.738	–.049	.025	.113	.820			
I understand CDT «Name» 's feelings.	.756	.174	.040	–.079	.877			
I understand the personal challenges that CDT «Name» faces.	.845	–.004	–.087	–.016	.730			
I understand the followership challenges that CDT «Name» faces.	.777	–.134	–.034	.048	.677			
I understand CDT «Name» 's way of thinking.	.773	.028	.122	–.007	.859			
How similar or different are you and CDT <<Name>> in terms of ...								
Moral values	.335	.236	.289	–.114	.635			
Interests	–.009	.839	.113	–.103		.763		
Personality	.023	.777	–.106	.155		.800		
Background	.037	.644	–.007	.062		.607		
Career aspirations	.032	.549	.142	.016		.560		
How true are the following statements?								
I can recall behaving like CDT «Name» when I was in a similar position.	.152	.379	.064	.376		.824		
I will model my followership qualities after CDT «Name» 's followership qualities.	.261	.173	.131	.511				.806
I have the utmost respect for CDT «Name».	.130	.350	.088	.480				.574
I admire CDT «Name».	.074	.094	.486	.303			.793	
I emulate many of CDT «Name» 's characteristics.	.161	.032	.600	–.163			.871	
I look at things from a similar perspective as CDT «Name» does.	–.010	.011	.922	.005			.878	
I identify with CDT «Name».	.041	.068	.521	.372			.859	
In a lot of ways, CDT «Name» reminds me of myself.	.110	.245	.258					.809

PCA = principal components analysis; CFA = confirmatory factor analysis; ID = Identification; All factor loadings significant at the $< .001$ level.

Discussion

Mentoring scholars have long theorized that identification is integral to the development of mentoring relationships. However, past researchers have failed to investigate identification as an antecedent of mentoring. This study aimed to examine the construct of identification in peer mentoring relationship. We endeavored to determine whether identification occurs for mentors and mentees similarly or differently. Additionally, we wanted to examine whether identification is a separate construct from similar antecedents discussed in mentoring literature, such as similarity. We developed items to measure identification based on theories of the self and interviews of mentors actively involved in mentoring relationships. Then, we measured those items in surveys administered to cadet mentors and their mentees conducting summer training at a U.S. service academy. Additionally, we conducted factor analysis to test the relationships between items designed to measure identification and items designed to measure other evidenced antecedents of mentoring. Our study's findings provide some support for mentoring theorists' notion (e.g. Humberd & Rouse, 2016) that identification stems from the cognitive overlap between the self and the other, that mentor and mentee identification should be considered and measured separately in studies examining the antecedents of mentoring, and that identification should be considered as a separate construct from empathy and similarity. Based on our results, we suggest that future researchers explicitly measure identification as an antecedent to the development of mentoring relationships. In the following sections, we discuss our results, study limitations, and future implications.

Mentee identification with the mentor

The factor analysis of the items developed to examine mentee identification with the mentor resulted in a three-factor solution, indicating that mentee identification might be distinguishable from mentee-mentor perceived similarity and mentee-mentor empathy. As Humberd and Rouse's (2016) theory might suggest, we found that items developed to measure cognitive overlap between the self and the other (Factor 1; e.g. 'I can envision myself behaving like CDT "X" when I am in a similar leadership position' and 'I will emulate many of CDT "X's" characteristic) loaded on a single factor. Items aimed towards measuring respect, admiration, and emulation (e.g. 'I have the utmost respect for CDT "X") and one item measuring mentee-mentor similarity (i.e. in moral values) loaded on this factor as well. A few reasons might help explain these factors' loadings. First, in this setting, mentees should look to their mentors as direct images of what they aspire to become. Indeed, the institution teaches mentees to revere and emulate their mentors who have accomplished the goals and met the objective requirements (e.g. passed training qualification tests) to

which mentees aspire. In essence, mentors should personify mentees' future selves. Therefore, in accordance with theories of the future self (e.g. ideal, possible, and ought self), it seems reasonable that mentees would respond to measures of mentor respect, admiration and emulation in a similar fashion as they would answer items measuring future self or integration of another into oneself (e.g. 'I will model my leadership qualities after CDT 'X').

Second, it makes sense that of the mentee-mentor similarity items, only the item measuring similarity in moral values loaded with the other items in the Identification factor. Identification does not necessitate that one identifies with every attribute of another individual (Bucher & Stelling, 1977; Flum, 2001; Peters, 1973). Instead, identification centers on those attributes that one perceives to be meaningful and enduring attributes of the person with which one identifies (Albert & Whetten, 1985). In this study's context, moral values are particularly meaningful, which helps explain why this item loaded with items of identification. In contrast, the other, less relevant mentee-mentor similarity items (e.g. interests, personality, and background) loaded on a separate factor, which provides some evidence that similarity and identification are separate constructs.

Likewise, items measuring empathy loaded on a third factor, separate from identification. This finding supports Ashforth, Schinoff, and Rogers (2016) theory on identification, which they define as 'perceived oneness with another individual, where one defines oneself in terms of the other' (p. 28). Distinguishing identification from similar constructs, these theorists propose that while empathy and identification are related, 'appreciating or imagining what another is experiencing ... does not require that one actually perceive a sense of oneness with another' (p. 30). So, while some focus group members in our study offered that empathy is central to identification, our factor analysis supported the notion that identification and empathy are separate constructs. Therefore, in sum, our study suggests that researchers of mentoring antecedents should examine mentee identification with the mentor separate from mentee-mentor similarity and mentee-mentor empathy.

Mentor identification with the mentee

The factor analysis of the items developed to examine mentor identification with the mentee resulted in a four-factor solution. These results are perhaps more complex and difficult to explain than those of the mentee-generated response items. As expected, items developed to measure empathy and similarity loaded separately from each other and generally loaded separately from items developed to measure mentor identification with the mentee. However, unexpectedly, one item aimed towards measuring mentor identification with past self (i.e. 'I can recall behaving like CDT 'X' when I was in a similar position') loaded with items generated to measure mentee-mentor similarity. An

explanation for this result might be that mentors experienced cognitive overlap when they imagined their past selves and considered the similarity between themselves and some of their mentees. On the other hand, mentors who considered themselves to be dissimilar from mentees likely experienced little cognitive overlap when reflecting on their past selves.

However, another item generated to measure the past self (i.e. 'In a lot of ways, CDT' X' reminds me of myself') loaded on a separate factor. Moreover, the item loadings for the items measuring sources of identification (i.e. selves) and identification mechanisms (e.g. integration) were surprising, as they loaded on two factors. One explanation for these findings is that mentors experienced cognitive dissonance when thinking about themselves and their multiple mentees as both followers and leaders. For example, for a given mentor, the item 'I will model my followership qualities after CDT' X's' followership qualities' might have generated a favorable response based on the mentor's ability to cognitively integrate into the self a particular mentee's qualities. That is, envisioning himself in future roles as a mentee, perhaps that mentor identified with and planned to emulate that mentee. However, thinking of himself in his current role, that mentor might not have similarly answered the item 'I emulate many of CDT' X's' characteristics' because the mentor did not identify with that mentee as a leader. Because the institution is a leader development-focused context, one might reason that some mentors found it cognitively challenging to see themselves in their generally less leaderful mentees. Further, a reasonable question is: did mentors answer these items based on their level of identification with mentees as (future) leaders, followers, or a mixture of both, depending on the mentee? Having to conduct this relational assessment for each of 8–12 mentees, mentors were likely inconsistent in how they envisioned their past, present, and future selves relative to each mentee.

Finally, we did not anticipate that the item for mentor-reported mentee-mentor similarity in moral values would load with items developed to measure empathy. Further, this item did not load with identification items in the mentor survey as it did in the mentee survey. Providing a theoretical explanation for the alignment of empathy and perceived similarity in moral values is beyond the scope of this study. However, extant research shows that moral character has distinguishing effects from other traits in person perception (Goodwin, Piazza, & Rozin, 2014).

Study limitations and future research

Our research has limitations that should be addressed. First, our study examined identification between mentors and mentees who were of similar age and experience. In many organizational settings, this gap is more defined, so the process of identification in those settings might occur differently than it did between cadets in this study. Nonetheless, existing research

has shown that mentoring takes place between cadet mentor-mentee dyads (Bates, 2003). Additionally, a vast body of research on peer mentoring provides considerable evidence of the benefits of mentoring between similarly aged and experienced individuals (cf. Colvin & Ashman, 2010). Thus, while studying identification in peer mentoring in this setting seemed practical, researchers should compare the results herein with the results of studies involving other mentoring relationships, such as cross-cultural mentoring relationships (see Batiste, Denby, & Brinson, 2022)

Second, we might have included more or different items to measure identification. While our items focused on the cognitive overlap between individuals, behavioral-based items that examine oneness with another (e.g. Ashforth, Schinoff, & Rogers, 2016), such as 'When I talk about my squad leader, I usually say "we" rather than "he or she"' (Cooper, 2013, p. 633), might have been benefitted our research. However, we were limited in space for our survey items, which were included with other measures administered to our sample. Third, our research method entailed mentors completing surveys on each of their 8–12 mentees. As previously mentioned, a mentor might have had trouble assessing the overlap between the self and so many others in one sitting. We might have seen different results had mentors had fewer relationships with mentees to assess.

Nonetheless, we suggest that mentoring researchers use our identification measures to examine the relationship between identification and the extent of mentoring provided in relationships. While we found both of our measures of identification to be somewhat distinct from other constructs such as similarity and empathy, our factor analysis did not completely distinguish these constructs. Thus, future researchers should develop and test additional measures of identification that researchers can use to examine how mentoring relationships develop and change. More specifically, since mentoring evolves in a relationship (Kram, 1983), future researchers should investigate what distinct mechanisms (e.g. projection, recognition, integration) drive identification at various stages in the mentoring relationship (Humberd & Rouse, 2016). Additionally, researchers might explore how identification congruence between the mentee and mentor helps determine the strength of mentoring relationships and the extent to which mentoring relationships are beneficial to both parties and the organization. Even more, mentoring researchers should explore how the distinct mechanisms of identification differ across groups (e.g. race, gender). Given the evidenced advantages of mentoring, further research like ours is needed to help pinpoint the determinants of mentoring relationships.

Disclosure statement

No potential conflict of interest was reported by the author(s).

ORCID

Archie L. Bates III  <http://orcid.org/0000-0003-3553-2448>
 Joel K. Cartwright  <http://orcid.org/0000-0002-9244-4586>
 Lissa V. Young  <http://orcid.org/0000-0003-0641-0628>

Public Significance Statement

This study developed survey questions that researchers can use to measure how much mentors identify with their mentees and mentees identify with their mentors. Researchers of mentoring believe that identification is critical to the development of mentoring relationships. The questions developed in this study can help future researchers test whether a relationship between identification and mentoring exists.

References

- Albert, S. (1977). Temporal comparison theory. *Psychological Review*, 84(6), 485–503. doi:10.1037/0033-295X.84.6.485
- Albert, S., & Whetten, D. A. (1985). Organizational identity. *Research in Organizational Behavior*, 7, 263–295.
- Allen, T. D., McManus, S. E., & Russell, J. E. A. (1999). Newcomer socialization and stress: Formal peer relationships as a source of support. *Journal of Vocational Behavior*, 54(3), 453–470. doi:10.1006/jvbe.1998.1674
- Anderson, M. K., Tenenbaum, L. S., Ramadorai, S. B., & Yourick, D. L. (2015). Neer-peer mentor moel: synergy with mentoring. *Mentoring & Tutoring Partnership in Learning*, 23(2), 116–132. doi:10.1080/13611267.2015.1049017
- Aron, A., Aron, E. N., Tudor, M., & Nelson, G. (1991). Close relationships as including other in the self. *Journal of Personality and Social Psychology*, 60(2), 241–253. doi:10.1037/0022-3514.60.2.241
- Ashforth, B. E., Schinoff, B. S., & Rogers, K. M. (2016). “I identify with her,” “I identify with him”: Unpacking the dynamics of personal identification in organizations. *Academy of Management Review*, 41(1), 28–60. doi:10.5465/amr.2014.0033
- Baker, B. T., Hocevar, S. P., & Johnson, W. B. (2003). The prevalence and nature of service academy mentoring: A study of Navy midshipmen. *Military Psychology*, 15(4), 273–83. doi:10.1207/S15327876MP1504_2
- Bates, A. L. (2003). A multi-level analysis of the effects of surface- and deep-level diversity, identification, and past performance on supervisory mentoring. (Master’s thesis, University of Maryland, College Park, US). Retrieved from <https://drum.lib.umd.edu/handle/1903/101>.
- Batiste, H., Denby, R., & Brinson, J. (2022). Cross-cultural mentoring in higher education: The use of a cultural identity development model. *Mentoring & Tutoring Partnership in Learning*, 30(4), 409–433. doi:10.1080/13611267.2022.2091194
- Bouquillon, E. A., Sosik, J. J., & Lee, D. (2005). ‘It’s only a phase’: Examining trust, identification and mentoring functions received across the mentoring phases. *Mentoring & Tutoring Partnership in Learning*, 13(2), 239–258. doi:10.1080/13611260500105808
- Bucher, R., & Stelling, J. G. (1977). *Becoming professional*. Beverly Hills, CA: Sage.
- Campbell, T. A., & Campbell, D. E. (1997). Faculty/Student mentor program: Effects on academic performance and retention. *Research in Higher Education*, 38(6), 727–742. doi:10.1023/A:1024911904627

- Chao, G. T., Walz, P. M., & Gardner, P. D. (1992). Formal and informal mentorships: A comparison on mentoring functions and contrast with non-mentored counterparts. *Personnel Psychology*, 45(3), 691–636. doi:10.1111/j.1744-6570.1992.tb00863.x
- Colvin, J. W., & Ashman, M. (2010). Roles, risks, and benefits of peer mentoring relationships in higher education. *Mentoring & Tutoring Partnership in Learning*, 18(2), 121–134. doi:10.1080/13611261003678879
- Cooper, D. (2013). Dissimilarity and learning in teams: The role of relational identification and value dissimilarity. *International Journal of Intercultural Relation*, 37(5), 628–642. doi:10.1016/j.ijintrel.2013.06.005
- Cooper, D., & Thatcher, S. M. (2010). Identification in organizations: The role of self-concept orientations and identification motives. *Academy of Management Review*, 35(4), 516–538. doi:10.5465/amr.35.4.zok516
- Dreher, G. F., & Ash, R. A. (1990). A comparative study of mentoring among men and women in managerial, professional, and technical positions. *Journal of Applied Psychology*, 75(5), 539–546. doi:10.1037/0021-9010.75.5.539
- Enders, C. K., & Bandalos, D. L. (2001). The relative performance of full information maximum likelihood estimation for missing data in structural equation models. *Structural Equation Modeling*, 8(3), 430–457. doi:10.1207/S15328007SEM0803_5
- Erikson, E. H. (1950). *Childhood and society*. New York: Norton. https://usma.primo.exlibrisgroup.com/permalink/01USMA_INST/1fetnv1/alma991009712279705711
- Fagenson, E. A. (1989). The mentor advantages: Perceived career/job experiences of protégé versus non-protégé. *Journal of Organizational Behavior*, 10(4), 309–320. doi:10.1002/job.4030100403
- Flum, H. (2001). Relational dimensions in career development. *Journal of Vocational Behavior*, 59(1), 1–16. doi:10.1006/jvbe.2000.1786
- Gafni-Lachter L, Niemeyer L, Doyle N, Norcross J and Jacobs K. (2021). Equal peer e-mentoring for online graduate students: a case study and mediation model. *Mentoring & Tutoring: Partnership in Learning*, 29(5), 545–564. 10.1080/13611267.2021.1986799
- Gehlbach, H., & Brinkworth, M. E. (2011). Measure twice, cut down error: A process for enhancing the validity of survey scales. *Review of General Psychology*, 15(4), 380–387. doi:10.1037/a0025704
- Goodwin, G. P., Piazza, J., & Rozin, P. (2014). Moral character predominates in person perception and evaluation. *Journal of Personality and Social Psychology*, 106(1), 148–168. doi:10.1037/a0034726
- Hayman, R., Wharton, K., Bruce-Martin, C., & Allin, L. (2022). Benefits and motives for peer mentoring in higher education: An exploration through the lens of cultural capital. *Mentoring & Tutoring Partnership in Learning*, 30(2), 256–273. doi:10.1080/13611267.2022.2057098
- Higgins, E. T. (1987). Self-discrepancy: A theory relating self and affect. *Psychological Review*, 94(3), 319–340. doi:10.1037/0033-295X.94.3.319
- Hillier, A., Goldstein, J., Tornatore, L., Byrne, E., & Johnson, H. M. (2019). Outcomes of a peer mentoring program for university students with disabilities. *Mentoring & Tutoring Partnership in Learning*, 27(5), 487–508. doi:10.1080/13611267.2019.1675850
- Holmes, D. S. (1968). Dimensions of projection. *Psychological Bulletin*, 69(4), 248–268. doi:10.1037/h0025725
- Hooper, D., Coughlan, J., & Mullen, M. (2008, June). Evaluating model fit: A synthesis of the structural equation modeling literature. In 7th European Conference on research methodology for business and management studies, London, UK (pp. 195–200).

- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 1–55. doi:[10.1080/10705519909540118](https://doi.org/10.1080/10705519909540118)
- Humberd, B. K., & Rouse, E. D. (2016). Seeing you in me and me in you: Personal identification in the phases of mentoring relationships. *Academy of Management Review*, 41(3), 435–455. doi:[10.5465/amr.2013.0203](https://doi.org/10.5465/amr.2013.0203)
- Hunt, D. M., & Michael, C. (1983). Mentorship: A career training and development tool. *The Academy of Management Review*, 8(3), 475–485. doi:[10.2307/257836](https://doi.org/10.2307/257836)
- Jackson, D. L., Gillaspay, J. A., & Purc-Stephenson, R. (2009). Reporting practices in confirmatory factor analysis: An overview and some recommendations. *Psychological Methods*, 14(1), 6–23. doi:[10.1037/a0014694](https://doi.org/10.1037/a0014694)
- Jackson, D. L., Voth, J., & Frey, M. P. (2013). A note on sample size and solution propriety for confirmatory factor analytic models. *Structural Equation Modeling: A Multidisciplinary Journal*, 20(1), 86–97. doi:[10.1080/10705511.2013.742388](https://doi.org/10.1080/10705511.2013.742388)
- James, L. R. (1988). Organizational climate: Another look at a potentially important construct. In S. G. Cole & R. G. Demaree (Eds.), *Applications of interactionist psychology: Essays in honor of Saul B. Sells* (pp. 253–282). Hillsdale, NJ: Lawrence Erlbaum.
- Johnson, W. B., Huwe, J. M., Fallow, A., Lall, R., Holmes, E. K., & Hall, W. (1999, December). The flag officer mentor study: did admirals have mentors. In *Proceedings of the U.S. Naval Institute* (pp. 44–46).
- Klein, M. (2013). Notes on some schizoid mechanisms. In E. Spillius & E. O'Shaughnessy (Eds.), *Projective identification: The fate of a concept* (pp. 19–46). New York: Routledge.
- Korkmaz, S., Goksuluk, D., & Zararsiz, G. (2014). MVN: An R package for assessing multivariate normality. *The R Journal*, 6(2), 151–162. doi:[10.32614/RJ-2014-031](https://doi.org/10.32614/RJ-2014-031)
- Kram, K. E. (1983). Phases of the mentor relationship. *Academy of Management Journal*, 26(4), 608–625. doi:[10.2307/255910](https://doi.org/10.2307/255910)
- Kram, K. E. (1985). *Mentoring at work: Developmental relationships in organizational life*. Glenview, IL: Scott Foresman.
- Kram, K. E., & Isabella, L. (1985). Mentoring alternatives: The role of peer relationships in career development. *Academy of Management Journal*, 28(1), 110–132. doi:[10.2307/256064](https://doi.org/10.2307/256064)
- Larose, S. (2013). Trajectories of mentors' perceived self-efficacy during an academic mentoring experience: What they look like and what are their personal and experimental correlates? *Mentoring & Tutoring Partnership in Learning*, 21(2), 150–174. doi:[10.1080/13611267.2013.813728](https://doi.org/10.1080/13611267.2013.813728)
- Leidenfrost, B., Strassnig, B., Schabmann, A., Spiel, C., & Carbon, C. (2011). Peer mentoring styles and their contribution to academic success among mentees: A person-oriented study in higher education. *Mentoring & Tutoring Partnership in Learning*, 19(3), 347–364. doi:[10.1080/13611267.2011.597122](https://doi.org/10.1080/13611267.2011.597122)
- Little R J. (1988). A Test of Missing Completely at Random for Multivariate Data with Missing Values. *Journal of the American Statistical Association*, 83(404), 1198–1202. doi:[10.1080/01621459.1988.10478722](https://doi.org/10.1080/01621459.1988.10478722)
- Markus, H., & Nurius, P. (1986). Possible selves. *American Psychologist*, 41(9), 954–969. doi:[10.1037/0003-066X.41.9.954](https://doi.org/10.1037/0003-066X.41.9.954)
- Markus, H., & Wurf, E. (1987). The dynamic self-concept: A social psychological perspective. *Annual Review of Psychology*, 38(1), 299–337. doi:[10.1146/annurev.ps.38.020187.001503](https://doi.org/10.1146/annurev.ps.38.020187.001503)
- Mcguire, M. A. (2007). A joint perspective on mentoring: A look by senior military officers across the services on the prevalence and contribution of mentoring relationships. *Dissertation Abstracts International: Section B: The Sciences and Engineering*, 68(4-B), 2698.

- Obodaru, O. (2012). The self not taken: How alternative selves develop and how they influence our professional lives. *Academy of Management Review*, 37(1), 34–57. doi:10.5465/amr.2009.0358
- Orstroff, C., & Kozlowski, S. W. (1993). The role of mentoring in the information gathering processes of newcomers during early organizational socialization. *Journal of Vocational Behavior*, 42(2), 170–183. doi:10.1006/jvbe.1993.1012
- Payne, C. P., & Huffman, A. H. (2005). A longitudinal examination of the influence of mentoring on organizational commitment and turnover. *Academy of Management Journal*, 48(1), 158–168. doi:10.5465/amj.2005.15993166
- Peters, D. R. (1973). Identification and personal learning in T-groups. *Human Relations*, 26(1), 1–21. doi:10.1177/001872677302600101
- Pratt, M. G. (1998). To be or not to be? Central questions in organizational identification. In D. Whetten & P. Godfrey (Eds.), *Identity in organizations: Building theory through conversations* (pp. 171–207). Thousand Oaks, CA: Sage. doi:10.4135/9781452231495.n6
- Ragins, B. R. (1997a). Antecedent of diversified mentoring relationships. *Journal of Vocational Behavior*, 51(1), 90–109. doi:10.1006/jvbe.1997.1590
- Revelle, W. 2021. *Psych: Procedures for psychological, psychometric, and personality research*. Evanston, Illinois: Northwestern University. R package version 2.1.3. <https://CRAN.R-project.org/package=psych>.
- Rosseel, Y. 2012. Lavaan: An R package for structural equation modeling and more. Version 0.5–12 (BETA). *Journal of Statistical Software*, 48(2), 1–36. doi: 10.18637/jss.v048.i02
- Sanford, N. (1955). The dynamics of identification. *Psychological Review*, 62(2), 106–118. doi:10.1037/h0044055
- Scandura, T. A. (1992). Mentorship and career mobility: An empirical investigation. *Journal of Organizational Behavior*, 13(2), 169–174. doi:10.1002/job.4030130206
- Schmidt, E. K., & Faber, S. T. (2016). Benefits of peer mentoring to mentors, female mentees and higher education institutions. *Mentoring & Tutoring Partnership in Learning*, 24(2), 137–157. doi:10.1080/13611267.2016.1170560
- Steinberg, A. G., & Foley, D. M. (1999). Mentoring in the army: From buzzword to practice. *Military Psychology*, 11(4), 365–79. doi:10.1207/s15327876mp1104_2
- Tulving, E. (2002). Episodic memory: From mind to brain. *Annual Review of Psychology*, 53(1), 1–25. doi:10.1146/annurev.psych.53.100901.135114
- Turban, D. B., & Dougherty, T. W. (1994). Role of protégé personality in receipt of mentoring and career success. *Academy of Management Journal*, 37(3), 688–702. doi:10.2307/256706
- Viator, R. E., & Scandura, T. A. (1991). A study of mentor-protégé relationships in large public accounting firms. *Accounting Horizons*, 5(3), 20. Retrieved from: <https://login.usmalibrary.idm.oclc.org/login?url=https://www-proquestcom.usmalibrary.idm.oclc.org/scholarly-journals/study-mentor-protége-relationships-large-public/docview/208914722/se-2?accountid=15138>
- Weaver, M. A., & Chelladurai, P. (2002). Mentoring in intercollegiate athletic administration. *Journal of Sport Management*, 16(2), 96–116. doi:10.1123/jsm.16.2.96
- Whitely, W., Dougherty, T. W., & Dreher, G. F. (1991). Relationship of career mentoring and socioeconomic origin to managers' and professionals' early career progress. *Academy of Management Journal*, 34(2), 331–351. doi:10.5465/256445
- Yoder, L. H. (1992). A descriptive study of mentoring relationships experienced by Army nurses in head nurse or nursing supervisor roles. *Military Medicine*, 157(10), 517–523. doi:10.1093/milmed/157.10.518

Appendix A

Interview protocol

Interview Protocol

Instructions: **You** are here to share your perspectives about your respective mentoring relationships. The intent is to better understand the formulation of mentoring relationships at (the service academy). Your participation is completely voluntary, and you may choose not to engage in the discussion of any or all interview questions.

Your answers are confidential and will not be shared with others or used against you in any way. Records of this discussion will be kept confidential. Researchers may use ideas gained from your discussion to assist with their research. Information gained from this study may be used as part of a scientific publication, but you will in no way be personally identified.

I will read each question to the group. Then, I will allow you to share your experiences and perspectives freely among the group. Once the discussion subsides, I will ask whether anyone has anything more to share, and when we're ready, I will move to the next question.

Are there any questions before we begin?

Questions

- (1) Describe to me the origins of your relationship with your mentor (mentee).
- (2) Tell me about what drew you and your mentor (mentee) together?
- (3) Reflecting upon your relationship, tell me about how you concluded that this person was indeed your – quote – mentor (mentee).
- (4) Close your eyes for a moment . . . now take a moment to envision your mentor (mentee) . . . now, open your eyes and tell me what you envisioned?
- (5) When you have described to people your mentor (mentee), what types of things have you said?
- (6) How have you described to others the connection between you and your mentor (mentee)?
- (7) If we were to ask your mentor (mentee) what he or she sees in you, what would he/she likely say?

Appendix B

Survey of Mentee's Identification with Mentor MENTEE IDENTIFICATION WITH MENTOR

1.How true are the following statements?

	Not True	Slightly True	Somewhat True	Mostly True	True
a. I understand why CDT «Name» behaves the way he/she does.	[1]	[2]	[3]	[4]	[5]
b. I understand CDT «Name»'s feelings.	[1]	[2]	[3]	[4]	[5]
c. I understand the personal challenges that CDT «Name» faces.	[1]	[2]	[3]	[4]	[5]
d. I understand the leadership challenges that CDT «Name» faces.	[1]	[2]	[3]	[4]	[5]
e. I understand CDT «Name»'s way of thinking.	[1]	[2]	[3]	[4]	[5]

2.How similar or different are you and CDT «Name» in terms of . . .

	Very Dissimilar				Very Similar
a. Moral values	[1]	[2]	[3]	[4]	[5]
b. Interests	[1]	[2]	[3]	[4]	[5]
c. Personality	[1]	[2]	[3]	[4]	[5]
d. Background	[1]	[2]	[3]	[4]	[5]
e. Career aspirations	[1]	[2]	[3]	[4]	[5]

3.How true are the following statements?

	Not True	Slightly True	Somewhat True	Mostly True	True
a. I can envision myself behaving like CDT «Name» when I am in a similar leadership position.	[1]	[2]	[3]	[4]	[5]
b. I will model my leadership qualities after CDT «Name»'s leadership qualities.	[1]	[2]	[3]	[4]	[5]
c. I have the utmost respect for CDT «Name».	[1]	[2]	[3]	[4]	[5]
d. I admire CDT «Name».	[1]	[2]	[3]	[4]	[5]
e. I will emulate many of CDT «Name»'s characteristics.	[1]	[2]	[3]	[4]	[5]
f. I look at things from a similar perspective as CDT «Name» does.	[1]	[2]	[3]	[4]	[5]
g. I identify with CDT «Name».	[1]	[2]	[3]	[4]	[5]
h. In a lot of ways, CDT «Name» reminds me of myself.	[1]	[2]	[3]	[4]	[5]

Appendix C

Survey of Mentor's Identification with Mentees

MENTOR IDENTIFICATION WITH MENTEE

1.How true are the following statements?

	Not True	Slightly True	Somewhat True	Mostly True	True
a. I understand why CDT «Name» behaves the way he/she does.	[1]	[2]	[3]	[4]	[5]
b. I understand CDT «Name»'s feelings.	[1]	[2]	[3]	[4]	[5]
c. I understand the personal challenges that CDT «Name» faces.	[1]	[2]	[3]	[4]	[5]
d. I understand the followership challenges that CDT «Name» faces.	[1]	[2]	[3]	[4]	[5]
e. I understand CDT «Name»'s way of thinking.	[1]	[2]	[3]	[4]	[5]

2.How similar or different are you and CDT «Name» in terms of . . .

	Very Dissimilar				Very Similar
a. Moral values	[1]	[2]	[3]	[4]	[5]
b. Interests	[1]	[2]	[3]	[4]	[5]
c. Personality	[1]	[2]	[3]	[4]	[5]
d. Background	[1]	[2]	[3]	[4]	[5]
e. Career aspirations	[1]	[2]	[3]	[4]	[5]

3.How true are the following statements?

	Not True	Slightly True	Somewhat True	Mostly True	True
a. I can recall behaving like CDT «Name» when I was in a similar position.	[1]	[2]	[3]	[4]	[5]
b. I will model my followership qualities after CDT «Name»'s followership qualities.	[1]	[2]	[3]	[4]	[5]
c. I have the utmost respect for CDT «Name».	[1]	[2]	[3]	[4]	[5]
d. I admire CDT «Name».	[1]	[2]	[3]	[4]	[5]
e. I will emulate many of CDT «Name»'s characteristics.	[1]	[2]	[3]	[4]	[5]
f. I look at things from a similar perspective as CDT «Name» does.	[1]	[2]	[3]	[4]	[5]
g. I identify with CDT «Name».	[1]	[2]	[3]	[4]	[5]
h. In a lot of ways, CDT «Name» reminds me of myself.	[1]	[2]	[3]	[4]	[5]