

External career mentoring and mentor turnover intentions

Role of mentor work engagement, satisfaction with protégé, and meeting frequency

342

Received 11 February 2019
Revised 6 May 2019
30 May 2019
Accepted 3 June 2019

Robert W. Renn

*Department of Management, Coggin College of Business,
Taylor Leadership Institute,
University of North Florida, Jacksonville, Florida, USA*

Robert Steinbauer

Department of Management, Brock University, St Catharines, Canada, and

Tobias Michael Huning

*Department of Management,
University of North Florida, Jacksonville, Florida, USA*

Abstract

Purpose – Although studies have improved understanding of the relation between external career mentoring and mentor work outcomes, an important question remains regarding whether this mentoring function influences mentor turnover intentions. The purpose of this paper is to investigate the impact of career mentoring outside the workplace on mentor turnover intentions.

Design/methodology/approach – Data were collected from 101 working business professionals in the southeastern USA at two points in time who provided career mentoring to business student protégés in an eight-month university sponsored mentoring program.

Findings – As hypothesized, moderated mediation analysis indicated that amount of external career mentoring negatively related to mentor turnover intentions and that the indirect effect of external career mentoring on mentor turnover intentions via mentor work engagement was stronger when both mentor protégé satisfaction and meeting frequency were high vs low. A two-way interaction revealed that mentors reporting higher protégé satisfaction had lower turnover intentions when meeting frequency was high vs low.

Originality/value – The findings help clarify the external career mentoring and mentor turnover intentions relation and have valuable theoretical implications for research on the benefits external mentoring can provide mentors. They also have practical implications for using external mentoring to enhance mentor work engagement and reduce mentor turnover intentions.

Keywords Mentoring, Work engagement, Turnover intentions

Paper type Research paper

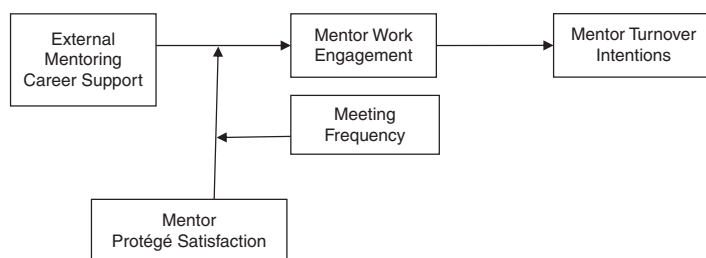
With the decades of research demonstrating that career mentoring can provide objective and subjective benefits to protégés (Eby *et al.*, 2013), research has begun investigating work outcomes associated with career mentoring for mentors (Allen, 2007; Chun *et al.*, 2012; Ragins and Scandura, 1999; Wang *et al.*, 2014). Studies indicate that providing protégés with career knowledge and coaching, protection and sponsorship may improve mentor job performance, job satisfaction, organizational commitment, leadership skills, and career success; and lessen career plateauing (Chun *et al.*, 2012; Ghosh and Reio, 2013; Lentz and Allen, 2009; Wang *et al.*, 2014). This research also suggests that mentors can derive personal satisfaction from teaching protégés new knowledge and skills and a sense of rejuvenation from the enthusiasm and energy exuded by protégés (see for review, Allen, 2007).

Although these studies have improved understanding of the relation between career mentoring and mentor work outcomes, a question remains regarding whether this mentoring function influences mentor turnover intentions. Lentz and Allen (2009) found that



mentor experience vs no mentor experience was associated with lower mentor turnover intentions in a cross-sectional study of public employees. However, they also found that amount of mentor career support positively related to mentor turnover intentions. By contrast, a meta-analysis by Ghosh and Reio (2013) found that amount of career mentoring was unrelated to mentor turnover intentions. Their review revealed a need for more career mentoring-mentor turnover intention studies and especially lagged studies in order to give mentoring time to influence mentor turnover intentions. Furthermore, Böckerman and Ilmakunnas examined the relationship between turnover intentions and their manifestations into actual quitting behavior (Böckerman and Pekka, 2009). They found that job disamenities played an important role in employees' search for new jobs and ultimately departure from their job. In addition, our review uncovered a dearth of studies that include mediating or moderating variables that could more clearly link career mentoring to turnover intentions or change the nature of the relation between mentoring and turnover intentions. Thus mentoring scholars face a challenge of designing more complex studies on the relation between career mentoring and mentor turnover intentions in order to improve mentoring theories and to better understand intervening processes and boundary conditions of the career mentoring and turnover intentions relation (Allen, 2007; Ghosh and Reio, 2013; Lentz and Allen, 2009). From a managerial perspective, companies likely want to retain employees who can provide career mentoring because these employees may be highly skilled and knowledgeable and better in-role and extra-role job performers (Ghosh and Reio, 2013; Wang *et al.*, 2014), and turnover intentions may be one of the best predictors of actual turnover of these employees (Hom *et al.*, 1992).

Our study investigates the relation between amount of external career mentoring provided to business student protégés in a university sponsored mentoring program and mentor turnover intentions. It also includes mentor work engagement as an explanatory mechanism and mentor protégé satisfaction and meeting frequency as moderating variables (see Figure 1). We collected data from students and mentors participating in a mentoring program of a large public university located in the southeastern USA. The study focused on amount of external career mentoring because the primary purpose of the present mentoring program was for business mentors to facilitate the career planning, development and advancement of student protégés who were near graduation and entering the workforce. We examine mentor work engagement as an explanatory mechanism because previous research links work engagement to turnover intentions. In addition, we expected mentor work engagement to be an outcome that follows from a mentor potentially having a significant impact on the career and life of a student protégé before she or he enters the workforce (Kahn, 1990; Saks, 2006). We include mentor protégé satisfaction and meeting frequency as potential moderators because research suggests that the more a mentor likes a protégé and the more often they meet, the more likely both parties will reap psychological benefits from mentoring (Eby *et al.*, 2013).



Note: Control variables omitted for clarity

Figure 1.
Hypothesized model

External career mentoring and mentor work engagement

Most if not all research on career mentoring and mentor turnover intentions is based on formal company-sponsored programs developed by companies to connect mentors and protégés who work for the same company (Chun *et al.*, 2012). However, company employees may also volunteer to provide career mentoring to non-employee protégés in mentoring programs that are not company sponsored. These programs may not include junior employee protégés from a mentor's company. Moreover, they may not occur on company premises (e.g. mentoring college students or mentoring young adults or children at Big Brother Big Sisters of America, 4 H, and Youth Villages) (Bruce *et al.*, 2014; Eby *et al.*, 2013). In fact, recent research suggests employees may have more mentoring opportunities and may be volunteering to mentor outside the workplace more often now than in the past (Bruce *et al.*, 2014; Rodell, 2013).

Although these programs occur off company premises and do not involve mentor-protégé pairs working for the same company, external career mentoring may affect mentor turnover intentions. First, whether it occurs on or off company premises, career mentoring remains a reciprocal relation-based process that may deeply affect both mentors and protégés (Eby *et al.*, 2013). Second, external career mentoring is very similar to internal career mentoring because a mentor still provides career guidance, counseling and support to a protégé albeit a student protégé rather than a junior employee. Third, according to the multiple domain literature, changes in employee general attitudes and behaviors due to external career mentoring may spillover to work attitudes and behavior (Edwards and Rothbard, 2000). Although spillover effects can be positive or negative, recent research indicates that volunteering in general can enrich employee job performance and citizenship behavior and reduce counterproductive behavior (Rodell, 2013). Therefore, we argue that voluntary external career mentoring may reduce mentor turnover intentions and more specifically, it may do so by enhancing mentor work engagement.

Work engagement is “the simultaneous employment and expression of a person's ‘preferred self’ in task behaviors that promote connections to work and to others, personal presence (physical, cognitive, and emotional) and active, full performances” (Kahn, 1990, p. 700). Individuals who are highly engaged in their work fully invest their physical resources into tasks, are cognitively vigilant, emotionally connected to others, and experience enhanced general well-being (Gupta and Shaheen, 2018; Kahn, 1990, p. 700). By contrast, those who are disengaged from their work withdraw physically, cognitively and emotionally from others at work and their work roles. Kahn (1990) found in his original qualitative studies that relationships with others, inside and outside the workplace, were primary drivers of work engagement. For example, Kahn found that counselors were highly engaged with their work when they shared their work knowledge and philosophy with students, and architects experienced greater engagement with their work when they had opportunities to work and collaborate with clients (pp. 700-701). In addition to Kahn's qualitative study, the Weigl *et al.* (2010) three-wave longitudinal study indicates that work relationships enhance work engagement and work engagement enhances work relationships. Quality interactions with students, coworkers and clients enhance work engagement by helping individuals feel their work makes a significant difference, is worthwhile, and has meaning. This echoes findings from over 30 years of job characteristics model research that indicates believing that one's work significantly affects the lives of others inside and outside an organization (i.e. task significance) contributes to experienced meaningfulness of work (Fried and Ferris, 1987).

Providing career support to a student protégé in an external mentoring program is an opportunity for a mentor to influence the life of another individual and thus may enhance a mentor's feelings of experienced meaningfulness. By guiding student protégés on setting and planning professional goals, providing career coaching and networking opportunities,

and assisting with employment, a mentor helps a student begin and even establish a career. Ragins and Scandura (1999) suggest that “the sense of satisfaction and fulfillment received from fostering the development of a younger adult” is the main intrinsic reward mentors receive from mentoring (p. 494). Kram (1985) also explains that mentors may gain internal satisfaction and respect from young adults for his or her capabilities as teacher and advisor (p. 3). Allen (2007) adds that mentors may experience “personal satisfaction from passing knowledge and skills on to others” (p. 134). According to spillover effects, when a mentor’s sense of meaningfulness increases from providing career support to a student protégé in an external mentoring program, it will cause a similar rise in the mentor’s general sense of meaningfulness and work-related meaningfulness. Furthermore, because experienced meaningfulness is a key psychological condition of work engagement it is expected that a rise in a mentor’s experienced meaningfulness due to providing career support in an external mentoring program will enhance his or her work engagement:

H1. External career mentoring will be positively related to mentor work engagement.

Moderating role of mentor protégé satisfaction and meeting frequency

Mentors would be expected to gain a heightened sense of meaningfulness from providing career support to protégés they like and meet with more often vs those they do not care for because their interactions should be more growth-fostering and lead to higher quality mentoring relationships (Eby *et al.*, 2013). Individuals develop emotional bonds with other individuals and experience greater psychological meaningfulness when they have frequent and rewarding interactions with and feel known and appreciated by others (Kahn, 1990). This line of reasoning finds further support in the mentor investment model, which suggests stronger emotional bonds between mentor and protégé are more likely to occur when mentors are satisfied with their protégés (Eby *et al.*, 2007). In addition, the more frequently mentors meet with protégés who they like and to whom they provide greater amounts of career support the greater the opportunity for the mentors to experience the feeling that he or she is making a meaningful difference in a protégés career and life (i.e. significant difference). Specifically, we hypothesize that meeting frequency amplifies the moderating effect of mentor protégé satisfaction. When mentors do not interact with their protégés on a regular basis, mentor protégé (dis)satisfaction will have a weaker impact on the positive relation between mentor career support and mentor work engagement:

H2. External career mentoring, mentor protégé satisfaction, and meeting frequency will interact to affect mentor work engagement so that the linear positive relation between external mentoring career support and mentor work engagement will be stronger when mentor protégé satisfaction is high and mentors meet frequently with the protégé.

Mentor work engagement and mentor turnover intentions

Work engagement is associated with several beneficial work attitudes and behaviors. Most engagement research has focused on burnout, task performance, job and career satisfaction, organizational commitment, extra-role behaviors and work interference with family (Christian *et al.*, 2011; Halbesleben *et al.*, 2009; Maslach *et al.*, 2001), and personal outcomes such as positive emotions and affect general well-being and good health (Gupta and Shaheen, 2018; Joo and Lee, 2017; Sonnentag, 2003).

However, Saks (2006) found a negative relation between work engagement and turnover intentions and argued that individuals who are highly engaged with their work are likely to be in more trusting and high-quality work relationships and will, therefore, be more likely to

report positive attitudes and intentions toward the organization. Furthermore, highly engaged employees are more likely to find their work interesting, meaningful, and energizing; and will experience happiness, joy, enthusiasm and career satisfaction (Bakker and Demerouti, 2008; Joo and Lee, 2017). Thus, those employees who are vigorously engrossed (i.e. engaged) in their work will likely wish to continue the work which they are dedicated and passionate about and be less likely to quit (Halbesleben *et al.*, 2009; Schaufeli *et al.*, 2002). Furthermore, strong social connections with other employees within the organization and customers and clients outside of the organization should enhance work engagement, which should embed the highly engaged employee within the organization (e.g. Mitchell *et al.*, 2001). Consequently, more highly engaged employees will likely possess career goals congruent with those of the organization (i.e. fit), experience career satisfaction, have more connections (formal or informal) with the organization (i.e. links), perceive a higher cost associated with leaving the organization (i.e. sacrifice), and thus be more embedded in the organization and less likely to quit:

H3. Mentor work engagement will be negatively related to mentor turnover intentions.

Conditional indirect effects of external career mentoring on mentor turnover intentions

As depicted in Figure 1 and stated in *H2*, mentor satisfaction with protégé and meeting frequency interact to affect the hypothesized relation between external career mentoring and mentor work engagement. In addition, *H3* states that mentor work engagement will be negatively related to mentor turnover intentions. In other words, mentor work engagement links external career mentoring to mentor turnover intentions. Because the hypothesized interaction changes the strength of relation between external career mentoring and mentor work engagement and mentor work engagement links external career mentoring-mentor turnover intentions, the strength on the linking mechanism or indirect effect changes. Specifically, the impact of external career mentoring on mentor work engagement is hypothesized to be strongest when mentor protégé satisfaction is higher and meeting frequency is higher, the indirect effect is hypothesized to be greater under this condition:

H4. The indirect effect of external career mentoring on mentor turnover intentions via mentor work engagement will be stronger when mentor protégé satisfaction is higher and meeting frequency is higher than when mentor protégé satisfaction and meeting frequency are lower.

Method

Participants and procedure

Participants were 101 volunteer professionals who worked for a variety of businesses (e.g. transportation and logistics, pulp and paper, medical, consulting, food and restaurant, nonprofits, retail and insurance) and who volunteered to serve as mentors for an institute of leadership education at a large public university located in the southeastern USA. The program provides career mentoring and leadership education for the university's business students. The mentors were on average 45 years old and had 20 years of work experience. Approximately half of the mentors were female. Most of them were Caucasian (80 percent), followed by an equal amount of African American, Asian and Hispanic. We believe this convenience sample to be a moderately accurate representation of the "corporate America" workforce. Mentors and student protégés were paired based on their major (e.g. accounting students matched with leaders in accounting firm or accounting managers). Over a period of eight months, mentors and protégés interacted for several hours at monthly meetings. In addition, mentors and protégés were required to commit to monthly one-on-one meetings

(e.g. work lunch, professional organizational meetings, charity events, volunteer events, job shadowing, etc.).

Protégés were on average 25 years and 60 percent were females. Most were seniors (60 percent) and juniors (30 percent) who majored in accounting, marketing, international business, management information systems, management or economics. Half of the protégés were Caucasian, followed by African American (30 percent), Asian (10 percent) and Hispanic (5 percent).

We collected data from participating mentors twice using paper and pencil surveys. Time 1 survey data ($n = 101$) were collected from mentors four months after the start of the mentoring program. The time 1 survey measured demographic variables, personality traits, amount of mentor career support and mentor satisfaction with protégé. The time 2 survey data ($n = 79$) were collected four months after the time 1 data and measured mentor work engagement, mentor protégé satisfaction, mentor job satisfaction, meeting frequency and mentor turnover intentions.

Measures

External career mentoring. We adapted the career support scale of the Mentoring Functions Questionnaire (MFQ-9; Scandura and Williams, 2004) to fit the context of the mentoring program. Mentors rated their agreement with statements such as “I help my protégé set career goals.” on a five-point Likert-type scale (1 = “Strongly disagree” and 5 = “Strongly agree”). The coefficient α for the four-item scale was 0.89.

Mentor work engagement. Rich *et al.* (2010) identified a physical, emotional and cognitive dimension of job engagement. Due to the strong correlation between the scales they concluded that job engagement is better understood as a second-order factor. We selected the two highest loading items from each dimension and slightly modified them to measure mentor work engagement. Mentors rated their job engagement with statements such as “Being a mentor has helped me to try my hardest to perform well on my job.” on a five-point Likert-type scale (1 = “Strongly disagree” and 5 = “Strongly agree”). The coefficient α for the six-item scale was 0.97.

Mentor protégé satisfaction. Protégé satisfaction was measured by adapting three items developed by Cammann *et al.* (1979). Mentors rated their protégé satisfaction with statements such as “In general, I like my protégé.” on a five-point Likert-type scale (1 = “Strongly disagree” and 5 = “Strongly agree”). The coefficient α for the three-item scale was 0.96.

Meeting frequency. Meeting frequency was measured by asking mentors/protégés at the last meeting “How many times have you met with your protégé during and outside of formal meetings?”

Turnover intentions. Mentor turnover intentions were measured using a single-item measure adapted from Michaels and Spector (1982). At the last mentoring meeting, mentors rated their agreement with “Being a mentor has reduced my intentions to quit my current job” on a five-point Likert-type scale (1 = “Strongly disagree” and 5 = “Strongly agree”). A single-item measure is deemed to be appropriate since we assess a general impression of a uni-dimensional construct (Wanous *et al.*, 1997).

Control variables. To enhance the validity of our study, we control for mentor demographics such as age and work experience because they are known to be related to turnover intentions and work engagement. Because conscientiousness has been linked to job engagement (Inceoglu and Warr, 2011) and behavioral intentions (Conner and Abraham, 2001), we also control for this personality trait in our analysis. Finally, job satisfaction has been consistently linked to job engagement (Saks, 2006) and turnover intentions (e.g. Chen *et al.*, 2011) and we therefore include it as a control variable. Conscientiousness was measured with three items from the short form Big-Five Inventory (John and Srivastava, 1999).

Mentors rated their agreement with statements such as “I see myself as someone who does a thorough job” on a five-point Likert-type scale (1 = “Strongly disagree” and 5 = “Strongly agree”). The coefficient α for the conscientiousness scales was 0.564. Mentor job satisfaction was measured by adjusting three items developed by Cammann *et al.* (1979). Mentors rated their agreement with statements such as “Being a mentor has helped me to be more satisfied with my job” on a five-point Likert-type scale (1 = “Strongly disagree” and 5 = “Strongly agree”). The coefficient α for the three-item scale was 0.81.

Results

Table I shows the means, standard deviations and Pearson correlations of all study variables. Variables used to calculate interaction terms were mean centered prior to analysis (Aiken and West, 1991). To address missing values due to attrition, we first assessed whether data were missing completely at random ($\chi^2 = 848.27$, $df = 907$, $p = 0.918$). Next, we used the expectation-maximization method in SPSS to impute missing data (Gold and Bentler, 2000).

H1 stated that external career mentoring will be positively related to mentor work engagement. As can be seen at the top of Table II (i.e. mediator variable model) amount of external career mentoring is positively related to mentor work engagement ($\beta = 0.65$; $p < 0.01$). In addition, 95% confidence intervals (CIs) for the parameter estimate did not contain 0. Therefore, *H1* was supported.

H2 stated that the linear positive relation between external career mentoring and mentor work engagement will be stronger when mentor satisfaction with protégé and meeting frequency are higher than when mentor satisfaction with protégé and meeting frequency are lower. *H2* was tested using Hayes’ SPSS macro process (Hayes, 2018). The top of Table II displays the mediator variable model (see Table II). As shown the interaction term for the three-way interaction of mentor career support, mentor satisfaction with protégé and meeting frequency on mentor work engagement is statistically significant ($\beta = 0.07$, $p < 0.05$). In addition, 95% CIs for the parameter estimate did not contain 0. Figure 2 displays the interaction plots of the three-way interaction (see Figure 2). When mentors and protégés did not meet frequently (meeting frequency one standard deviation below the mean), mentor work engagement improved only slightly with the amount of external career mentoring provided to protégés and was consistently higher for mentors who were more satisfied with their protégés. When mentors and protégés met more frequently (meeting frequency one standard deviation above the mean), mentor work engagement increased with the amount of external career mentoring more strongly (i.e. stronger linear relation) for mentors who were satisfied with their protégés than for those less satisfied with their protégés. Thus, *H2* was supported.

H3 stated that mentor work engagement will be negatively related to mentor turnover intentions. The dependent variable model (bottom of Table II) provides the regression

Variable	M	SD	1	2	3	4	5	6	7	8	9
1. Turnover intentions T2	3.11	1.05	1.00								
2. Career support T1	4.04	0.66	-0.05	1.00							
3. Work engagement T2	3.51	0.85	-0.45**	0.51**	1.00						
4. Meeting frequency T2	10.08	6.43	0.00	0.15	-0.06	1.00					
5. Protégé satisfaction T2	4.52	0.69	-0.22*	0.51**	0.38**	0.00	1.00				
6. Conscientiousness T1	4.42	0.50	-0.19*	0.13	-0.00	0.15	0.15	1.00			
7. Job satisfaction T2	2.97	0.62	-0.41**	0.30**	0.77**	0.05	0.19*	-0.06	1.00		
8. Age T1	42.99	10.57	-0.21*	-0.20*	0.02	-0.10	0.07	0.01	-0.15	1.00	
9. Work experience T1	21.84	10.03	-0.04	-0.15	-0.02	-0.11	0.10	0.06	-0.20*	0.90**	1.00

Notes: $n = 79$. Turnover intentions measure reverse-scored prior to analysis. * $p < 0.10$; ** $p < 0.01$

Table I.
Descriptive statistics
and Pearson
correlations for all
study variables

Predictor	β	SE	LLCI	ULCI
<i>Mediator variable model: mentor work engagement</i>				
Constant	3.48**	0.09	3.289	3.677
Career support	0.65**	0.15	0.340	0.966
Meeting frequency	-0.03*	0.01	-0.061	-0.005
Protégé satisfaction	0.03	0.19	-0.360	0.427
Career support \times meeting frequency	0.02	0.02	-0.017	0.062
Career support \times protégé satisfaction	0.14	0.22	-0.009	0.021
Meeting frequency \times protégé sat.	-0.04	0.03	-0.306	0.586
Career sup. \times meet. freq. \times protégé sat.	0.07*	0.03	0.003	0.133
Model R^2 : 0.39**				
<i>Dependent variable model: mentor turnover intentions</i>				
Constant	0.45	1.08	-1.719	2.628
Mentor work engagement	-0.54**	0.20	0.133	0.942
Career support	-0.38	0.21	-0.799	0.046
Meeting frequency	0.02	0.02	-0.015	0.051
Protégé satisfaction	-0.35	0.23	-0.114	0.808
Career support \times meeting frequency	0.02	0.02	-0.023	0.064
Career support \times protégé satisfaction	-0.26	0.26	-0.773	0.255
Meeting frequency \times protégé sat.	0.07*	0.02	0.012	0.131
Career sup. \times meet. freq. \times protégé sat.	-0.02	0.04	-0.090	0.059
Mentor conscientiousness	-0.40*	0.18	-0.762	-0.038
Mentor job satisfaction	-0.22	0.24	-0.264	0.710
Age	0.07**	0.02	0.030	0.110
Work experience	-0.06**	0.02	-0.103	0.021
Model R^2 : 0.53**				

Notes: Turnover intentions measure reverse-scored prior to analysis. Results are based on 1,000 bootstrap samples. LLCI/ULCI: 95% lower/upper level confidence interval. * $p < 0.05$; ** $p < 0.01$

Table II. Regression results for moderated mediation

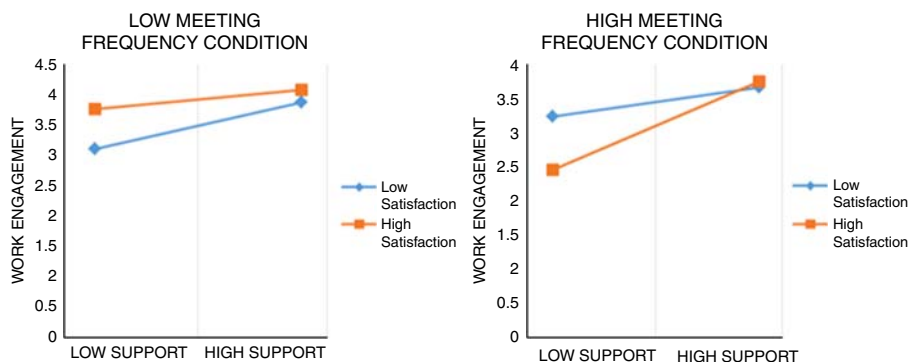


Figure 2. Three-way interaction plots for mentor career support, protégé satisfaction, meeting frequency and mentor work engagement

Note: The interaction is statistically significant ($\beta = 0.07, p < 0.05$) and the 95% CIs for the parameter estimate do not contain 0 (LLCI: 0.003 ULCI: 0.133)

results for mentor turnover intentions and confirms that mentor work engagement is negatively related to mentor turnover intentions, providing support for *H3*.

Finally, we tested the conditional indirect effect of external career mentoring on mentor turnover intentions via mentor work engagement (*H4*). Process calculates bootstrapping results for indirect effects at three different levels of the moderators (one standard deviation below the mean, at the mean and one standard deviation above the mean). The results are

summarized in Table III. As shown at the bottom of Table III, the indirect effect is strongest when mentor protégé satisfaction and meeting frequency are higher than under any other condition (see Table III). In addition, 95% CIs for the hypothesized indirect effect do not contain 0. This provides support for *H4*. In addition, because the parameter estimate for the direct effect for external career mentoring is not statistically significant, the results indicate that mentor work engagement fully accounted for the relation between mentor career support and mentor turnover intentions.

Although not hypothesized, the dependent variable model results shown in Table II reveal an interesting serendipitous result. Namely, the two-way interaction between mentor satisfaction with protégé and meeting frequency predicted mentor turnover intentions. As can be seen from the plotted interaction in Figure 3, mentors' turnover intentions were not significantly affected by mentor protégé satisfaction when the meeting frequency was low (see Figure 3). However, high meeting frequency resulted in a significant drop in mentor turnover intentions when mentors who were satisfied with their protégés met them frequently.

Discussion

Although Kram (1985) discussed benefits of career mentoring for mentors in her seminal book on workplace mentoring, most research focuses on mentoring benefits for protégés

Table III. Bootstrapping results for the test of conditional indirect effects of mentor career support on mentor turnover intentions at specific values of the moderators (meeting frequency and protégé satisfaction): mean ± 1 standard deviation

Mediator	Value of meeting frequency	Value of protégé satisfaction	Conditional indirect effect	SE	LLCI	ULCI
Mentor work engagement	-1 SD	-1 SD	0.388	0.305	-0.037	1.134
	-1 SD	<i>M</i>	0.273	0.253	0.013	0.713
Mentor work engagement	-1 SD	+1 SD	0.162	0.161	-0.059	0.566
	<i>M</i>	-1 SD	0.299	0.228	0.008	0.023
Mentor work engagement	<i>M</i>	<i>M</i>	0.351	0.211	0.076	0.118
	<i>M</i>	+1 SD	0.403	0.253	0.076	0.284
Mentor work engagement	+1 SD	-1 SD	0.214	0.229	-0.056	0.028
	+1 SD	<i>M</i>	0.429	0.277	0.076	0.137
	+1 SD	+1 SD	0.643	0.413	0.131	1.81

Notes: Results are based on 1,000 bootstrap samples. LLCI/ULCI: 95% lower/upper level confidence interval

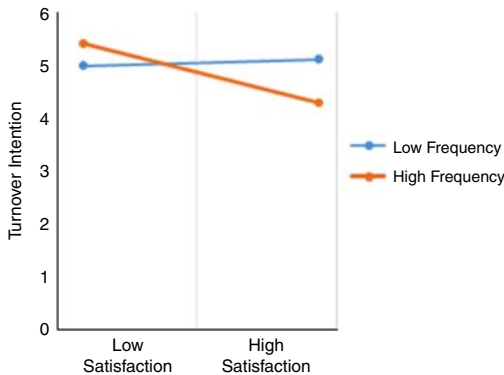


Figure 3. Two-way interaction plot for mentor Protégé satisfaction, meeting frequency, and mentor turnover intentions

Note: The interaction is statistically significant (Math $\beta=0.07, p<0.05$) and the 95% CIs for the parameter estimate do not contain 0 (LLCI: 0.012 ULCI: 0.131)

(Allen, 2007; Ragins and Scandura, 1999). Furthermore, even though company employees may volunteer to provide career mentoring in non-company-sponsored mentoring programs, few studies have investigated the impact career mentoring outside the workplace may have on mentor work attitudes and behavior. Our study provided a unique opportunity to examine whether external career mentoring provided to business student protégés in a university sponsored mentoring program was associated with mentor turnover intentions. We found that external career mentoring predicted mentor turnover intentions and that mentor work engagement accounted for the relation. We also found that external career mentoring enhanced mentor work engagement more strongly when mentors were more satisfied with their protégés and met more frequently with them. A serendipitous finding revealed that, after controlling for mentor work engagement, a two-way interaction between mentor protégé satisfaction and meeting frequency accounted for additional variance in mentor turnover intentions. Our findings bear on the mixed results regarding the relation between career mentoring and mentor turnover intentions and have important theoretical and practical implications.

Implications for research

Our results help clarify mixed results from previous studies on the relation between career mentoring and mentor turnover intentions. Lentz and Allen (2009) found that experience as a mentor vs no experience as a mentor was associated with reduced mentor turnover intentions, but they also found that amount of mentor career support increased mentor turnover intentions. By contrast, the Ghosh and Reio (2013) meta-analysis found that amount of career mentoring was unrelated to mentor turnover intentions. This is surprising because research suggest career mentoring positively relates to mentor work attitudes that linked to turnover intentions in both cross-sectional and longitudinal studies (Chun *et al.*, 2012; Ghosh and Reio, 2013). By lagging the time between mentors providing career support and measuring mentor turnover intentions, including mentor work engagement as a linking mechanism, and mentor satisfaction with protégé and meeting frequency as moderating variables; our study showed that amount of external career mentoring was not only associated with reduced mentor turnover intentions but was more strongly related when the hypothesized moderating variables were included in the analyses. Thus, our results suggest that the relation between career mentoring and mentor turnover intentions appears to be more complex than hypothesized and tested in most previous studies and that future longitudinal studies are warranted that develop and test models that incorporate theoretically driven mediating and moderating variables that can help to further explain the relation.

Our findings regarding the positive impact of external career mentoring on mentor work engagement and turnover intentions advances the mentoring literature by demonstrating an intersection between mentoring outside the workplace and mentor work attitudes and behavioral intentions. To the best of our knowledge, most management research on career mentoring and mentor work outcomes is based on mentoring programs where the mentor and protégé work for the same company and the constructs of interest lie within the same domain (Chun *et al.*, 2012; Ghosh and Reio, 2013). For these studies, researchers do not need to theoretically justify linking career mentoring from one life domain to mentor outcomes in the work domain. However, this is not the case when linking external career mentoring to mentor work attitudes, intentions and behavior. Although external career mentoring may share similarities with internal career mentoring, they are not identical and thus we argue researchers must develop additional theoretical explanations for why and how career mentoring in one domain may influence mentor constructs in a separate domain. Our findings provide important initial empirical evidence supporting an overlap between the two domains. Armed with these results and the growing research associating volunteer work to greater well-being (Son and Wilson, 2012), lower levels of negative affect during work (Mojza *et al.*, 2011), and improved work performance (Rodell, 2013); mentoring researchers

have a firm foundation for drawing on the multiple domain and volunteer literature to develop richer theoretical explanations for the potential overlap between external career support and mentor work outcomes. In our theorizing, we adopted an enhancement perspective from the multiple domain and volunteer literatures. However, researchers may also invoke other potential linking mechanisms found in the work-family literature such as compensation, resource drain and congruence to link external career mentoring in other ways to mentor work outcomes (Edwards and Rothbard, 2000).

Our findings provide a new bridge between the bodies of literature on mentoring and work engagement. In his original qualitative research, Kahn (1990) identifies tasks, roles and work interactions as antecedents of experienced psychological meaningfulness, one of three key psychological conditions of work engagement. Although his research reveals that interpersonal interactions with coworkers (including leaders) and work clients contribute to work engagement through psychological meaningfulness, Kahn (1990) did not explicitly identify interpersonal interactions outside of the work context as potential antecedents of work engagement. However, he states, “meaningful [interpersonal] interactions [...] often involved both personal and professional elements and a looseness of the boundaries separating the two [sic]” (p. 707). This alludes to the possibility that interpersonal interactions with others outside the work domain may affect experienced psychological meaningfulness and work engagement. Building on this possibility and connecting it to theory and research in the mentoring literature, we argued that external mentoring may be one such type of social interaction outside of the workplace that contributes to mentor experienced psychological meaningfulness and mentor work engagement. Although other studies have shown that social interactions in the family domain may affect work engagement (Edwards and Rothbard, 2000), to the best of our knowledge ours is the first study to link external career mentoring to work engagement. In addition, our results for the three-way interaction among external career mentoring, protégé satisfaction and meeting frequency suggest that undiscovered theoretical extensions to work engagement theory may lie in breaking down and explicating how the interplay among amount, quality and frequency of social interactions outside and within the work domain affect work engagement.

Practical implications

Employees who volunteer to provide career mentoring in external mentoring programs may be an organization’s most valued employees who a company wants to retain (Allen, 2007; Ghosh and Reio, 2013), and turnover intentions have been shown to be among the best predictors of turnover (Hom *et al.*, 1992). Although our study did not compare employees who engaged in external career mentoring with those who did not, our study suggests that companies may be able to reduce turnover intentions of these employees by encouraging them to volunteer for external mentoring programs. In addition, allowing employees to provide external career mentoring may enhance mentor work engagement that in turn may not only reduce intentions to quit but, according to other studies, also enhance in-role and extra-role work performance (Christian *et al.*, 2011; Halbesleben *et al.*, 2009). The serendipitous finding for the two-way interaction of mentor protégé satisfaction and meeting frequency on mentor turnover intentions suggest that companies may want to try and coordinate with the directors of external mentoring programs the matching of mentors and protégés on deep level similarities (e.g. personality, functional expertise) to try and enhance relationship quality and facilitating frequent meetings may further reduce mentor intentions to quit (Eby *et al.*, 2013).

Limitations and future research

Although our research design separates measures of external career mentoring and mentor turnover intentions by four months, it does not allow for strong causal inferences regarding

the intervening role of mentor work engagement. To strengthen conclusions about the intervening role of work engagement, future studies should collect at least three complete waves of data at appropriate time intervals to control prior levels of mentor work engagement and to lag measures of work engagement and mentor turnover intentions. Our sample represents a relatively small number of mentors in the southeastern USA who provided career mentoring in one type of external mentoring program. Therefore, before strong conclusions about the impact of external career mentoring on mentor job engagement and quit intentions can be drawn, we encourage future studies with larger and more diverse samples of mentors and protégés. To strengthen the validity of our conclusions, we reported 95% bootstrapped CIs for results of all statistical tests. Shrout and Bolger (2002) demonstrated that bootstrapping CIs increases statistical power in small samples ranging from 20 to 80. In a similar vein, we did not examine the potential heterogeneity in the estimated effects. The obtained results may differ significantly by age and/or gender. The small sample size limited our analyses of the relationships by policy-relevant subgroups. Due to the specific purpose of the present mentoring program, we examined only external career mentoring. We did not investigate external psychosocial support or role modeling, two additional mentoring functions (Scandura and Williams, 2004). Thus, before our findings can be generalized, they need to be corroborated by future studies that include additional mentors who participate in other types of external mentoring programs and that incorporate external psychosocial support and role modeling.

Conclusion

External mentoring programs appear to be increasing and more and more company employees have the opportunity to serve as mentors in these programs (Bruce *et al.*, 2014). Thus, it is important for management researchers to investigate potential relations between external mentoring and mentor work attitudes and behaviors. As one small step in this direction, our study indicates that external career mentoring may improve mentor work engagement and lower mentor turnover intentions. We hope our study fosters many more future studies on the potential work-related benefits of external mentoring programs.

References

- Aiken, L.S. and West, S. (1991), *Multiple Regression: Testing and Interpreting Interactions*, Sage, Newbury Park, CA.
- Allen, T.D. (2007), "Mentoring relationships from the perspective of the mentor", in Ragins, B.R. and Kram, K.E. (Eds), *The Handbook of Mentoring at Work: Theory, Research, and Practice*, Sage, Thousand Oaks, CA, pp. 123-147.
- Bakker, A.B. and Demerouti, E. (2008), "Towards a model of work engagement", *Career Development International*, Vol. 13, pp. 209-223.
- Böckerman, P. and Pekka, I. (2009), "Job disamenities, job satisfaction, quit intentions, and actual separations: putting the pieces together", *Industrial Relations*, Vol. 48 No. 1, pp. 73-96.
- Bruce, M., Bridgeland, J. and Peter, D., Hart Research Associates, United States of America, Civic Enterprises, LLC and United States of America (2014), "The mentoring effect: young people's perspectives on the outcomes and availability of mentoring", Civic Enterprises with Peter D. Hart Research Associates.
- Cammann, C., Fichman, M., Jenkins, D. and Klesh, J. (1979), *The Michigan Organizational Assessment Questionnaire*, unpublished manuscript, University of Michigan, Ann Arbor, MI.
- Chen, G., Ployhart, R.E., Thomas, H.C., Anderson, N. and Bliese, P.D. (2011), "The power of momentum: a new model of dynamic relationships between job satisfaction change and turnover intentions", *Academy of Management Journal*, Vol. 54 No. 1, pp. 159-181.

- Christian, M., Garza, A. and Slaughter, J. (2011), "Work engagement: a quantitative review and test of its relations with task and contextual performance", *Personnel Psychology*, Vol. 64 No. 1, pp. 89-136.
- Chun, J.U., Sosik, J.J. and Yun, N. (2012), "A longitudinal study of mentor and protégé outcomes in formal mentoring relationships", *Journal of Organizational Behavior*, Vol. 33, pp. 1071-1094.
- Conner, M. and Abraham, C. (2001), "Conscientiousness and the theory of planned behavior: Toward a more complete model of the antecedents of intentions and behavior", *Personality and Social Psychology Bulletin*, Vol. 27 No. 11, pp. 1547-1561.
- Eby, L. (2007), "Understanding relational problems in mentoring", in Ragins, B.R. and Kram, K.E. (Eds), *The Handbook of Mentoring at Work: Theory, Research, and Practice*, Sage, Thousand Oaks, CA, pp. 323-344.
- Eby, L., Allen, T.D., Hoffman, B.J., Baranik, L.E., Sauer, J.B., Baldwin, S., Morrison, M.A., Kinkade, K.M., Maher, C.P., Curtis, S. and Evans, S.C. (2013), "An interdisciplinary meta-analysis of the potential antecedents, correlates, and consequences of protégé perceptions of mentoring", *Psychological Bulletin*, Vol. 139 No. 2, pp. 441-476.
- Edwards, J.R. and Rothbard, N.P. (2000), "Mechanisms linking work and family: clarifying the relationship between work and family constructs", *Academy of Management Review*, Vol. 25 No. 3, pp. 178-199.
- Fried, Y. and Ferris, G.R. (1987), "The validity of the job characteristics model: a review and meta-analysis", *Personnel Psychology*, Vol. 40 No. 2, pp. 287-322.
- Ghosh, R. and Reio, T.G. (2013), "Career benefits associated with mentoring for mentors: a meta-analysis", *Journal of Vocational Behavior*, Vol. 83 No. 1, pp. 106-116.
- Gold, M.S. and Bentler, P.M. (2000), "Treatments of missing data: a Monte Carlo comparison of RBHDI, iterative stochastic regression imputation, and expectation-maximization", *Structural Equation Modeling*, Vol. 7 No. 3, pp. 319-355.
- Gupta, M. and Shaheen, M. (2018), "Does work engagement enhance general well-being and control at work? Mediating role of psychological capital", *Evidence-based HRM: A Global Forum for Empirical Scholarship*, Vol. 6 No. 3, pp. 272-286.
- Halbesleben, J.R.B., Harvey, J. and Bolino, M.C. (2009), "Too engaged? A conservation of resources view of the relationship between work engagement and work interference with family", *Journal of Applied Psychology*, Vol. 94 No. 6, pp. 1452-1465.
- Hayes, A.F. (2018), *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*, 2nd ed., Guilford Press, New York, NY.
- Hom, P.W., Caranikas-Walker, F., Prussia, G.E. and Griffeth, R.W. (1992), "A meta-analytical structural equations analysis of a model of employee turnover", *Journal of Applied Psychology*, Vol. 77 No. 6, pp. 890-909.
- Inceoglu, I. and Warr, P. (2011), "Personality and job engagement", *Journal of Personnel Psychology*, Vol. 10 No. 4, pp. 177-181.
- John, O. and Srivastava, S. (1999), "The Big Five trait taxonomy: history, measurement, and theoretical perspectives", *Handbook of Personality: Theory and Research*, 2nd ed., pp. 102-138.
- Joo, B.K. and Lee, I. (2017), "Workplace happiness: work engagement, career satisfaction, and subjective well-being", *Evidence-Based HRM: A Global Forum for Empirical Scholarship*, Vol. 5 No. 2, pp. 206-221.
- Kahn, W.A. (1990), "Psychological conditions of personal engagement and disengagement at work", *Academy of Management Journal*, Vol. 33 No. 4, pp. 692-724.
- Kram, K.E. (1985), *Mentoring At Work: Developmental Relationships in Organizational Life*, Scott, Foresman, and Company, Glenview, IL.
- Lentz, E. and Allen, T.D. (2009), "The role of mentoring others in the career plateauing phenomenon", *Group and Organization Management*, Vol. 34 No. 3, pp. 358-384.

- Maslach, C., Schaufelli, W.B. and Leiter, M.P. (2001), "Job burnout", *Annual Review of Psychology*, Vol. 52, pp. 397-422.
- Michaels, C.E. and Spector, P.E. (1982), "Causes of employee turnover: a test of the Mobley, Griffeth, Hand, and Meglino model", *Journal of Applied Psychology*, Vol. 67 No. 1, pp. 53-59.
- Mitchell, T.R., Holtom, B.C., Lee, T.W., Sablinski, C.J. and Miriam, E. (2001), "Why people stay: using job embeddedness to predict voluntary turnover", *Academy of Management Journal*, Vol. 44 No. 6, pp. 1102-1121.
- Mojza, E.J., Sonnentag, S. and Bornemann, C. (2011), "Volunteer work as a valuable leisure-time activity: a day-level study on volunteer work, non-work experiences, and well-being at work", *Journal of Occupational and Organizational Psychology*, Vol. 84 No. 1, pp. 123-152.
- Ragins, B.R. and Scandura, T.A. (1999), "Burden or blessing? Expected costs and benefits of being a mentor", *Journal of Organizational Behavior*, Vol. 20 No. 4, pp. 493-509.
- Rich, B.L., LePine, J.A. and Crawford, E.R. (2010), "Job engagement: antecedents and effects on job performance", *Academy of Management Journal*, Vol. 53 No. 3, pp. 617-635.
- Rodell, J.B. (2013), "Finding meaning through volunteering: why do employees volunteer and what does it mean for their jobs?", *Academy of Management Journal*, Vol. 56, pp. 1274-1294.
- Saks, A.M. (2006), "Antecedents and consequences of employee engagement", *Journal of Managerial Psychology*, Vol. 21 No. 7, pp. 600-619.
- Scandura, T.A. and Williams, E.A. (2004), "Mentoring and transformational leadership: the role of supervisory career mentoring", *Journal of Vocational Behavior*, Vol. 65 No. 3, pp. 448-468.
- Schaufeli, W.B., Salanova, M., Gonzalez-Roma, V. and Bakker, A.B. (2002), "The measurement of engagement and burnout: a confirmative analytic approach", *Journal of Happiness Studies*, Vol. 3, pp. 71-92.
- Shrout, P.E. and Bolger, N. (2002), "Mediation in experimental and non-experimental studies: new procedures and recommendations", *Psychological Methods*, Vol. 7 No. 4, pp. 422-445.
- Son, J. and Wilson, J. (2012), "Volunteer work and hedonic, eudemonic, and social well-being", *Sociological Forum*, Vol. 27 No. 3, pp. 658-681.
- Sonnentag, S. (2003), "Recovery, work engagement, and proactive behavior: a new look at the interface between nonwork and work", *Journal of Applied Psychology*, Vol. 88 No. 3, pp. 518-528.
- Wang, Y.H., Hu, C., Hurst, C.S. and Yang, C.C. (2014), "Antecedents and outcomes of career plateaus: the roles of mentoring others and proactive personality", *Journal of Vocational Behavior*, Vol. 85 No. 3, pp. 319-328.
- Wanous, J.P., Reichers, A.E. and Hudy, M.J. (1997), "Overall job satisfaction: how good are single-item measures?", *Journal of Applied Psychology*, Vol. 82 No. 2, pp. 247-252.
- Weigl, M., Hornung, S., Parker, S., Petru, R., Glaser, J. and Angerer, P. (2010), "Work engagement accumulation of task, social, personal resources: a three-wave structural equation model", *Journal of Vocational Behavior*, Vol. 77 No. 1, pp. 140-153.

Further reading

- Cammann, C., Fichman, M., Jenkins, G.D. and Klesh, J. (1983), "Michigan organizational assessment questionnaire", *Assessing Organizational Change: A Guide to Methods, Measures, and Practices*.
- Cole, D.A. and Maxwell, S.E. (2003), "Testing mediational models with longitudinal data: questions and tips in the use of structural equation modeling", *Journal of Abnormal Psychology*, Vol. 112 No. 4, pp. 558-577.
- Frazier, P.A., Tix, A.P. and Barron, K.E. (2004), "Testing moderator and mediator effects in counseling psychology research", *Journal of Counseling Psychology*, Vol. 51 No. 1, pp. 115-134.
- Lu, C., Siu, O., Chen, W. and Wang, H. (2011), "Family mastery enhances work engagement in Chinese nurses: a cross-lagged analysis", *Journal of Vocational Behavior*, Vol. 78 No. 1, pp. 100-109.

- Maertz, C.P. and Griffeth, R.W. (2004), "Eight motivational forces and voluntary turnover: a theoretical synthesis with implications for research", *Journal of Management*, Vol. 30 No. 5, pp. 667-683.
- Ragins, B.R., Lyness, K.S., Williams, L.J. and Winkel, D. (2014), "Life spillovers: the spillover of fear of home foreclosure to the workplace", *Personnel Psychology*, Vol. 67 No. 4, pp. 763-800.
- Schaufeli, W.B. and Bakker, A.B. (2004), "Job demands, job resources, and their relationship with burnout and engagement: a multi-sample study", *Journal of Organizational Behavior*, Vol. 25 No. 3, pp. 293-315.

Corresponding author

Robert W. Renn can be contacted at: robert.renn@unf.edu