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AN INVESTIGATION OF PERSONAL LEARNING IN MENTORING RELATIONSHIPS: CONTENT, ANTECEDENTS, AND CONSEQUENCES

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To examine antecedents and consequences of learning in the context of mentoring relationships, we developed a new measure of personal learning, relational job learning and personal skill development. The presence of a mentor and mentoring functions were found to be antecedents of personal learning. Job satisfaction, role ambiguity, intentions to leave a job (turnover intentions), and actual leaving (turnover) were found to be consequences of personal learning. This study also explored personal learning as a mediator between mentoring functions and organizational consequences. Implications for future research and practice are discussed.

Individuals learn a great deal through their interactions with others, especially those with different backgrounds, expertise, and seniority in their organizations (Hayes & Allinson, 1998). One important work relationship that can serve as a forum for personal learning is mentoring (Kram, 1996). Somewhat surprisingly, personal learning has not been empirically studied in the mentoring literature. The purpose of this study was to explore learning by organization members, regardless of age, organizational tenure, or career stage, that contributes to their competence and effectiveness in their organizations. This study contributes to the literature in several distinct ways. First, a taxonomy of personal learning is developed and new measures introduced. Second, causes of personal learning are explored through our examining the presence of mentoring and mentoring functions as antecedents to personal learning. Third, the impact of personal learning on consequences such as job attitudes and turnover are presented. Also, the pivotal role of personal learning as a mediator between mentoring and protégé work attitudes is examined. This theoretical and empirical integration of mentoring and personal learning should lead to some new and interesting directions in research on relational learning and career development (Hall, 1996).

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THEORETICAL OVERVIEW AND HYPOTHESES

Learning in Workplaces

In the management literature, learning has generally been studied in the context of information seeking during socialization (Morrison, 1993). Socialization is viewed as the acquisition of knowledge about performance standards, important people in an organization, organizational goals and values, and organizational jargon (cf. Chao, O'Leary-Kelly, Wolf, Klein, & Gardner, 1994). Socialization studies have focused on newcomers to organizations or job changers who seek three types of information: technical (about how to perform tasks); referent (about what others expect of them); and normative (about expected behaviors and attitudes) (Morrison, 1993). Although this research has contributed to understanding of how newcomers learn their roles and adjust to new jobs, it has not touched upon the demands for continuous learning all employees now experience, regardless of rank or career stage.

Acquiring technical job knowledge and declarative and procedural information about an organization are no longer sufficient learning outcomes. Kegan (1994) noted that in response to overwhelming environmental change, individuals must strive toward the development of higher-level mental models. Such models represent systems thinking, which is the capacity to look beyond the self and see relationships among organizational aspects. Researchers investigating adult learning have noted that such learning involves personal development and change in the behavior, attitudes, or even the personality of the learner (Rogers, 1983). Adult development is characterized by transformations in

how individuals see themselves in relation to others and requires sophisticated interpersonal skills (Merriam & Heuer, 1996). Rawson (2000) discussed the importance of "learning to learn," which involves formulating new ways of understanding, of interacting with others, and of self-perception, resulting in personal development. Kram (1996) defined "personal learning" as knowledge acquisition, skills, or competencies contributing to individual development, including the interpersonal competencies of self-reflection, self-disclosure, active listening, empathy, and feedback. Such development invokes a greater understanding of oneself "as increasingly connected to others" (Kram, 1996: 140).

The importance of interpersonal skills and organizational awareness is further highlighted by Hall's (1996) work on the "boundaryless" career. Hall suggested that the ability to regularly grow and change by learning will become indispensable for successful careers. Development will involve more self-direction, self-reliance, ability to connect with one's coworkers, and ability to think through organizational issues (Hall, 1996). Employees today must expand their awareness of the links between actions and outcomes, listen to others' viewpoints, and build competencies through working with others (Gherardi, Nicolini, & Odella, 1998; Goleman, 2001).

The literature reviewed above suggests that there are two important types of personal learning. One involves learning about the context of work to see the self in relation to others (Kegan, 1994; Merriam & Heuer, 1996). We label this type of learning "relational job learning" and define it as increased understanding about the interdependence or connectedness of one's job to others. The second type of personal learning emphasized in the literature relates to interpersonal skills (Kram, 1996). Employees need to be able to communicate effectively, listen attentively, solve problems, and be creative in developing relationships with others in the organization. We label this type of learning "personal skill development" and define it as acquisition of new skills and abilities that enable better working relationships.

Although training programs are effective vehicles for transmitting specific technical and organizational information, we believe that personal learning is largely influenced by relationships with others in an organization. Interaction with others is a vehicle through which a person engages in reflection (thinking about the needs of the self and others) (Hall, 1996). Mentors may facilitate such learning through specific coaching behaviors. Specific behaviors include encouraging employees to step out of their own mental frames and into another's, exposing employees to different people and departments, and sharing different viewpoints so that they might see different possibilities (Ellinger & Bostrom, 1999). In addition, as Kram and Cherniss (2001) discussed, relationships with senior managers represent untapped potential for social and emotional learning. We believe that mentors may be a unique resource for the types of personal learning required of employees in today's complex and rapidly changing organizational environment.

Hypotheses

Mentors as a resource for personal learning. Mentoring has been researched in the management literature as a working relationship that contributes to personal growth and as an important organizational process (Kram, 1985). Mentoring relationships are one vehicle through which individuals can enhance personal learning (Kram, 1996). For example, mentoring was found to be important to employee coping during a major reorganization in which learning demands were increased (Kram & Hall, 1989). In addition to coping with change, a mentor provides an opportunity for a protégé to receive feedback about ideas, perceptions, and performance. Mentors also serve specific functions, such as providing vocational support, psychosocial support, and role modeling (Kram, 1985). These functions establish a protégé's sense of competence, identity, and effectiveness in his or her role in an organization. Hence, having a mentor is likely to contribute to greater personal learning for employees.

Hypothesis 1a. Protégés report higher levels of relational job learning than nonprotégés.

Hypothesis 1b. Protégés report higher levels of personal skill development than nonprotégés.

Mentoring functions and personal learning. Vocational support by mentors provides opportunities for protégés to acquire new skills through direct coaching and challenging project assignments. Through sponsorship, protégés are exposed to other views and expertise from departments other than their own, exposure that may increase understanding of interdependence among members of their organization. Therefore, the greater the vocational support provided by mentors, the more protégés should experience personal learning.

Hypothesis 2a. Vocational support from a mentor is positively related to protégés' relational job learning.

Hypothesis 2b. Vocational support from a mentor is positively related to protégés' personal skill development.

The psychosocial support provided by mentors includes counseling, affirmation, and friendship (Kram, 1985). High levels of psychosocial support engender trust, guidance, and encouragement. Protégés feel safe to ask questions, take risks, and discuss fears, anxieties, or disagreements. Candid and truthful conversations about an organization may be more likely to occur in a supportive relationship. Mentors also use feedback and active listening to help protégés resolve problems rather than provide solutions (Kram, 1985). Such support may contribute to protégés' critical thinking skills. We expected psychosocial support to be related to personal learning.

Hypothesis 3a. Psychosocial support from a mentor is positively related to protégés' relational job learning.

Hypothesis 3b. Psychosocial support from a mentor is positively related to protégés' personal skill development.

Mentors also serve as role models for protégés. If a protégé identifies with a mentor, he or she may try to emulate the mentor's attitudes, values, and behaviors (Kram, 1985). Protégés often see mentors as being more politically savvy than they are themselves and as more knowledgeable about the organization both belong to and about the "bigger picture." The desire to be like their mentors may motivate protégés to be more proactive in information seeking (McCauley & Young, 1993; Morrison, 1993), and this may result in increased learning. Through modeling or observation (Bandura, 1977), protégés may strengthen their own performance of work activities that they have seen mentors perform. For example, protégés who have observed mentors successfully facilitate team meetings may learn to regulate their own behavior in similar situations.

Hypothesis 4a. Role modeling in a mentoring relationship is positively associated with protégés' relational job learning.

Hypothesis 4b. Role modeling in a mentoring relationship is positively associated with protégés' personal skill development.

Personal learning and job attitudes. Learning yields changes in perceptions, behavior, values, and attitudes. Learning may shape how individuals in organizations respond to a work environment. Gouillart and Kelly (1995) stated that learning builds self-esteem and promotes competence and efficacy in approaching work-related problems. The more self-knowledge an employee acquires, the more he or she can contribute to an organization. Employees who experience personal learning may have more positive reactions to their work because they have greater confidence and skill. Personal learning should thus be related to protégés' work attitudes.

Today's rapidly changing work environment may increase role ambiguity (the extent to which organizational expectations about jobs and job responsibilities are unclear). Personal learning at work may decrease role ambiguity. Knowledge about various perspectives may enhance clarity about role responsibilities. Further, employees who are developing communication and problem-solving skills may become better equipped to resolve ambiguous information in their environments. Given this expectation, the following hypotheses are proposed:

Hypothesis 5a. Relational job learning is negatively associated with role ambiguity.

Hypothesis 5b. Personal skill development is negatively associated with role ambiguity.

Job satisfaction is an affective attitudinal response to the work environment (Weiss, Dawis, England, & Lofquist, 1967). Personal learning may be related to increased job satisfaction via employees' increased understanding of how their jobs fit in with an organization's overall mission. Experienced meaningfulness of work has been associated with increased satisfaction and motivation as well as reduced turnover (Hackman & Oldham, 1980). Employees who have developed communication and problem-solving skills may feel more competent and may receive feedback about the value of their contributions. Such feelings and feedback may foster job satisfaction.

Hypothesis 6a. Relational job learning is positively associated with job satisfaction.

Hypothesis 6b. Personal skill development is positively associated with job satisfaction.

Employees who experience personal learning may be less likely to intend to (or actually leave) an organization. Environments that encourage self-development may reduce individuals' desire to seek employment elsewhere if they are acquiring new skills and competencies that allow them to increase their self-efficacy (Gouillart & Kelly, 1995). Increased awareness about the network of relationships in which one's job is embedded may increase attachment to an organization. This job-specific knowledge investment may encourage employees

to stay rather than again "climb the learning curve" at a new organization.

Hypothesis 7a. Relational job learning is negatively associated with intentions to leave.

Hypothesis 7b. Personal skill development is negatively associated with intentions to leave.

Hypothesis 8a. Relational job learning is negatively related to actual turnover.

Hypothesis 8b. Personal skill development is negatively related to actual turnover.

The pivotal role of personal learning. Mentoring can influence a protégé's attitudinal responses to a workplace. The mentoring functions provided to an employee appear to be associated with a more positive job experience. These functions have been related to greater job satisfaction and lower intentions to leave (turnover intentions; Baugh, Lankau, & Scandura, 1996; Scandura & Viator, 1994). Mentoring has also been shown to alleviate role stress (Baugh et al., 1996). Mentoring influences attitudinal responses to work via the pivotal role of personal learning. Thus,

Hypothesis 9a. Relational job learning mediates the relationship between mentoring functions and role ambiguity.

Hypothesis 9b. Personal skill development mediates the relationship between mentoring functions and role ambiguity.

Hypothesis 10a. Relational job learning mediates the relationship between mentoring functions and job satisfaction.

Hypothesis 10b. Personal skill development mediates the relationship between mentoring functions and job satisfaction.

Hypothesis 11a. Relational job learning mediates the relationship between mentoring functions and intentions to leave.

Hypothesis 11b. Personal skill development mediates the relationship between mentoring functions and intentions to leave.

METHODS

Sample

Respondents were employees of a medium-sized not-for-profit hospital located in the southeastern United States. Health care organizations now experience many challenges: improving patient care, cutting costs, competitive pressure, rapid technological change, and increasing use of teams (Wellins, Byham, & Dixon, 1994). Hence, health care was an appropriate setting for studying personal learning demands and outcomes. A survey was distributed to 2,100 employees through interdepartmental mail in the organization, and 440 surveys were returned, for an overall response rate of 20.9 percent. The sample did not differ from the organizational population in terms of age, gender composition, or average salary. Last-wave analyses were conducted to evaluate nonresponse bias, since people who respond to later data collection waves are similar to nonrespondents (Fowler, 1993). When we ran all analyses with response wave as a control, wave was not significant, nor did the inclusion of the response wave variable result in changes in any of the regression equations.

The majority of the respondents were women (75.8 percent) and highly educated (57.8 percent held at least a bachelor's degree); 47.6 percent were white non-Hispanic; 37.4 percent, white Hispanic; 7.3 percent, black non-Hispanic; 3.6 percent, Asian; 0.9 percent, black Hispanic; and 3.0 percent designated "other" as their race. The mean age of respondents was 38.6 years, and their mean tenure in their specific profession and years of professional experience were 6.9 and 12.1 years, respectively. Almost one-third of the respondents were nurses; 4.6 percent were physicians; 8.4 percent were other health care professionals (such as psychologists); 13.0 percent were medical technicians; 18.8 percent were administrative personnel; and 24.5 percent were staff members such as clerical, security, maintenance, and food service employees.

Of the total sample, 232 (52.7%) indicated they currently had mentors in the organization. Analysis of demographic characteristics of protégés and nonprotégés indicated no significant differences in gender, race, organization tenure, or education. However, protégés were significantly younger (37.46 vs. 39.97 years) and had fewer years in their professions (11.00 vs. 13.48 years). Almost half (48.9%) reported that their mentors were their immediate supervisors.

Measures

Personal learning. A qualitative pilot study was first conducted to understand the types of learning that results from interactions with mentors. Drawing on interviews and the literature, we created 12 items to tap two content domains of personal learning: relational job learning and personal skill development. To examine the construct validity of these dimensions, we conducted a series of studies

to determine content, convergent, and discriminant validity.

Content adequacy of the measures was assessed with procedures outlined by Schriesheim, Powers, Scandura, Gardiner, and Lankau (1993). Junior-level honors undergraduate students made judgments about each item's consonance with theoretical definitions provided. We included five items representing performance proficiency from Chao et al.'s (1994) socialization measure to assess the distinction between personal learning and socialization. Exploratory factor analysis of the content adequacy data resulted in three factors. All items but one loaded only on their a priori factors; the exception had a double loading. However, we retained all 12 items for a deeper pilot study to further examine the construct validity of the measures. Complete results of the content adequacy study are available from the authors.

Pilot sample. Two hundred and thirty-five undergraduates who were employed part-time were recruited from junior-level business courses at a university in the southeastern United States to complete a survey that included measures of personal learning, organizational socialization, and learning goal orientation. The sample was composed of 89.9 percent Caucasians and 50.6 percent women with an average age of 20.83 years and an average length of employment of six months in their current organizations.

Measures were selected for the purpose of examining the convergent and discriminant validity of the personal learning measures. In addition to our new measure of personal learning, we included Chao et al.'s (1994) measure of organizational socialization and a dispositional measure of learning goal orientation in the questionnaire (Button, Mathieu, & Zajac, 1996). Individuals with a learning goal orientation strive to learn new things or increase their competence in a specific activity. A sample item is, "I prefer to work on tasks that force me to learn new things." We expected both dimensions of personal learning to be related to socialization (demonstrating convergent validity). Individuals being socialized about various important aspects of an organization (for example, people, history, language) are acquiring information that may improve their understanding of their relationships with others in their organization, thus achieving relational job learning. Individuals who function effectively in an organization may also better leverage opportunities for personal skill development than individuals who receive less socialization information. Although we expected that the dimensions of personal learning would be related to a learning goal orientation, we wanted to assess whether the measures of personal learning were distinct (showed discriminant validity).

An exploratory factor analysis was conducted on the 12-item measure of personal learning, under the criterion of eigenvalue greater than one. Results indicated two distinct dimensions of personal learning, with six items loading on the first factor (relational job learning) and six items loading on the second (personal skill development).

A second factor analysis was conducted with all items for personal learning (12 items, two dimensions), organizational socialization (34 items, six dimensions) and learning goal orientation (8 items, one dimension). We sought a constrained factor solution to examine the item loadings for the nine factors theoretically represented by the items. Results indicated that the nine factors accounted for 61.20 percent of the total variance. The 6 items for relational job learning loaded together on the second factor, with an eigenvalue of 4.37, and accounting for 8.09 percent of the total variance. Factor loadings ranged from .52 to .67 without any significant cross-loadings. However, 3 socialization items from the politics domain and 1 item from the people domain also loaded on this factor. Loadings for these items ranged from .43 to .48. The 6 items from the personal skill development dimension loaded together on the third factor with an eigenvalue of 4.20 and accounted for 7.79 percent of the total variance. Factor loadings ranged from .56 to .77 without significant cross-loading. Complete factor analysis results are available upon request from the authors.

Pearson correlations were computed for the two dimensions of personal learning and for the subscales of organizational socialization and learning goal orientation. As expected, the two dimensions of personal learning were moderately correlated (r = .59). Both dimensions were significantly and positively correlated with socialization and a learning goal orientation (r's = .30–.65; results are available from the authors upon request).

Results of the content adequacy study and exploratory factor analysis pilot study provide preliminary construct validity evidence for two distinct dimensions of personal learning. The 12 items representing the two dimensions of relational job learning and personal skill development were then presented in the hospital study as statements associated with the respondents' work experience in the organization rather than in the specific context of mentoring relationships. Responses were scaled from 1, "strongly disagree," to 5, "strongly agree." We conducted a confirmatory factor analysis to verify the dimensionality of the measure with the organizational sample (n = 423). The two-factor

model fit the data (GFI = .89, RMSR = .05, NNFI = .88, CFI = .90) and was better than a one-factor model (GFI = .72, RMSR = .10, NNFI = .70, CFI = .75).[1] The chi-square difference test showed the relative fit of the two-factor model to be significantly better than that of the one-factor model.

Respondents.[1] Participants were asked if they had a current mentor in the organization. A mentor was defined as "an influential individual in your work environment who has advanced experience and knowledge and who is committed to providing upward mobility and support to your career." These relationships can be characterized as informal since the organization did not have a formal mentoring program. Responses to the question were dummy-coded to indicate protégé or nonprotégé status. Mentoring functions were measured using 15 items developed by Scandura and Ragins (1993) and representing vocational, psychosocial, and role-modeling aspects of mentoring. Responses were on a five-point Likert-style scale ranging from "strongly disagree" (1) to "strongly agree" (5).

Role ambiguity. This outcome was measured by the six-item role ambiguity scale from Rizzo, House, and Lirtzman (1970). A sample item from this scale is, "I know exactly what is expected of me" (reverse-scored). Responses were scaled from 1 ("*strongly disagree*") to 5 ("*strongly agree*").

Job satisfaction. The 20-item short version of the Minnesota Satisfaction Questionnaire (Weiss et al., 1967) was used in this study. A respondent was asked to think about how satisfied he or she was with various aspects of the job, such as "the competence of my supervisor in making decisions" (1, "very dissatisfied," to 5, "very satisfied").

Intentions to leave. Rosin and Korabik's (1991) four-item intention to leave scale was employed in the survey instrument. A sample item from this scale is, "Are you actively searching for another job right now?" Ratings were summed over the items, with high scores indicating higher intentions to leave the organization. The scale scores were then standardized with a mean equal to zero and a standard deviation of one.

Turnover. Turnover was recorded by the human resources director for 118 employees who participated in this original study four years after data collection. Overall, 62 individuals had left the organization, a number representing a 52.5 percent turnover rate for this sample of employees. Turnover was dummy-coded so that 0 indicated the individual was still with the organization and 1 indicated that the individual had left.

Control variables. Age, education, gender, professional tenure, organizational tenure, and job type were entered first in the hierarchical regression analyses as control variables. For analyses including mentored respondents, we also entered relationship duration, hours spent with the mentor, and mentor type (supervisor or nonsupervisor) as a second block of control variables.

RESULTS

Table 1 presents means, standard deviations, and correlations for the independent and dependent variables. Vocational support was related to years of professional tenure. Psychological support was related to the duration of a mentoring relationship and the number of hours per month spent with the mentor. Relational job learning was related to organizational tenure and protégé status.

Results of a multivariate analysis of covariance (MANCOVA) indicated a overall significance ($F = 3.09$, $p < .05$) for the two types of personal learning examined together. The means for relational job learning were significantly different for protégés ($\bar{x} = 3.84$) and nonprotégés ($\bar{x} = 3.71$) and were in the expected direction. Individuals with mentors reported significantly greater learning with respect to perceptions about the network of relationships surrounding their jobs than individuals without mentors. No significant difference in personal skill development was found between protégés and nonprotégés. Hypothesis 1 was thus partially supported.

Table 2 presents results of the hierarchical regression analysis testing the hypotheses. In model 2, neither the demographic variables nor the structural characteristics of the mentoring relationship accounted for significant variance in the personal learning variables. Vocational mentoring was significantly and positively related to relational job learning, and role modeling was related to personal skill development. Thus, Hypothesis 2a and Hypothesis 4b were supported. Hypotheses 2b, 3a, 3b, and 4a were not supported.

Results of hierarchical regression analyses revealed support for Hypotheses 5a, 5b, 6a, and 6b. Both the relational job learning and personal skill development dimensions of personal learning were related to role ambiguity ($\beta = -0.24$, $p < 0.01$, $\beta = -0.20$, $p < .01$, respectively) and job satisfaction ($\beta = 0.26$, $p < .01$, $\beta = 0.24$, $p < .01$, respectively). Hypothesis 7a was confirmed. Relational job learning was negatively related to intentions to leave the

[1] GFI is the goodness-of-fit index, RMSR is the root-mean-square residual, NNFI is the nonnormed fit index, and CFI is the comparative fit index.

TABLE 1
Descriptive Statistics and Correlations[a]

Variable	Mean	s.d.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Age	38.44	9.97																	
2. Education	2.86	1.46	−.03																
3. Gender	1.24	0.43	.07	.09															
4. Professional tenure	12.05	7.04	.55**	−.01	.03														
5. Organizational tenure	7.00	7.04	.31**	−.01	.00	.45**													
6. Protégé status	0.55	0.50	−.14**	.22**	.03	−.15**	−.04												
7. Duration of relationship[b]	27.19	31.31	.34**	−.17*	−.06	.21**	.28**	.00											
8. Hours per month with mentor	42.70	52.60	.01	−.17*	−.04	.00	.04	.07	.25**										
9. Type of mentor	1.51	0.50	−.05	.22**	−.06	.00	.04	−.14*	.10	−.06									
10. Vocational support	3.89	0.66	−.02	.04	.03	.16**	.12	.20**	.11	.06	−.12	.80							
11. Psychological support	3.13	0.87	−.11	−.09	−.03	.00	−.05	.19**	.16*	.27**	.07	.41**	.81						
12. Role modeling	4.10	0.68	.01	.07	−.10	.07	.06	.34**	.14	−.02	.07	.57**	.47**	.78					
13. Personal learning: Relational job	3.78	0.55	−.03	.09	.02	.08	.11*	.14**	.08	.00	−.02	.35**	.04	.20**	.82				
14. Personal learning: Skill development	4.12	0.47	−.13*	.06	−.10	.00	.01	.06	−.03	−.06	.05	.21**	.15*	.27**	.49**	.84			
15. Role ambiguity	2.19	0.57	−.07	.00	.00	−.16**	−.06	.00	−.07	.05	.01	−.27**	.01	−.18*	−.33**	−.31**	.72		
16. Job satisfaction	3.71	0.56	.15**	.12*	.05	.17**	.08	.15**	.09	.00	−.08	.38**	.09	.29**	.40**	.35**	−.57**	.90	
17. Intentions to leave[c]	0.00	1.00	−.26**	.04	−.06	−.17**	−.07	−.07	−.10	.13	.04	−.14*	.10	−.07	−.16**	−.05	.36**	−.52**	.90

[a] Cronbach alpha reliabilities are on the diagonal. $n = 184$ for the correlations involving mentoring functions owing to the exclusion of nonmentored individuals; $n = 375$ for all other correlations.

[b] In months.

[c] Standardized with mean set equal to zero and standard deviation set equal to one.

* $p < .05$

** $p < .01$

TABLE 2
Results of Hierarchical Regression Analyses for Job Attitudes and Personal Learning[a]

	Model 1			Model 2		Model 3		
Independent Variables	**Role Ambiguity**	**Job Satisfaction**	**Intentions to Leave**	**Relational Job Learning**	**Skill Development**	**Role Ambiguity**	**Job Satisfaction**	**Intentions to Leave**
Step 1: Demographic variables								
Age	.02	−.05	−.17†	−.07	−.18*	−.03	.01	−.19*
Education	−.07	.08	−.04	−.05	.00	−.09	.09	−.04
Gender	−.03	.06	.06	−.04	−.13	−.06	.10	.04
Professional tenure	−.11	.16†	−.02	.07	.10	−.05	.11	.00
Organizational tenure	.06	−.06	.09	.11	.03	.09	−.10	.09
Nurses	.03	−.15†	.13	−.22*	.03	−.02	−.11	.14
Support staff	−.11	.07	−.08	−.03	.01	−.09	.05	−.07
Technicians	−.15	.18*	−.26**	−.01	.12	−.12	.16*	−.23**
Physicians	.01	.02	.09	.02	−.13	.00	.02	.09
Administrative staff	.02	.03	−.08	.20*	.01	.07	−.02	−.07
Other	.20**	−.15†	.20*	.08	−.04	.16†	−.10	.14
R^2	.04	.12	.13	.10	.07	.04	.12	.13
F	0.70	2.08*	2.45*	1.86	1.29	0.70	2.08*	2.45*
Step 2: Relationship variables								
Relationship duration[b]	−.07	.01	−.09	.00	−.06	−.08	.02	−.09
Hours per month with mentor	.04	−.01	.09	.04	−.07	.03	.00	.09
Type of mentor	−.04	.01	−.07	.05	.01	−.03	.00	−.07
R^2	.05	.12	.15	.11	.08	.05	.12	.15
ΔR^2	.01	.00	.02	.01	.01	.01	.00	.02
ΔF	0.49	0.22	0.91	0.18	0.32	0.49	0.22	0.91
Step 3: Mentoring functions								
Vocational support	−.23*	.22*	−.21*	.29**	.08	−.10	.12	−.19*
Psychosocial support	.16†	−.08	.18†	−.11	.01	.12	−.05	.18†
Role modeling	−.10	.19*	.04	.06	.22*	−.03	.12	.07
R^2	.12	.22	.19	.19	.15	.12	.22	.19
ΔR^2	.07	.10	.04	.08	.07	.07	.10	.04
ΔF	3.80*	6.54**	2.52†	5.32**	4.15**	3.80*	6.54*	2.52†
Step 4: Mediator								
Personal learning:								
Relational job learning						−.35**	.31**	−.01
Personal skill development						−.21*	.21*	−.14
R^2						.31	.39	.21
ΔR^2						.19	.17	.02
ΔF						19.96**	19.31**	1.59

[a] All standardized regression coefficients are from the final step in the analyses. $n = 172$.
[b] In months.
† $p < .10$
* $p < .05$
** $p < .01$

organization ($\beta = -0.16$, $p < .01$); however, personal skill development was not significantly related to this outcome.

We used logistic regression analysis to examine the relationship between the personal learning variables and turnover. Age, professional tenure, and the three job attitudes (role ambiguity, job satisfaction, and turnover intentions) were also included in the model, as they have been theorized to be related to turnover (Mobley, 1977). The results indicated a model chi-square of 17.30 ($p < .05$) and a minus-two log likelihood of 120.69. Years in one's professional occupation ($\beta = -0.10$, $p < .01$) and personal skill development ($\beta = -1.41$, $p < .05$) were significantly, negatively related to actual turnover. Employees with fewer years in their profession and less reported personal skill development were more likely to leave the organization.

These results represent further evidence of the construct validity of the personal learning measure.

We tested the mediator hypotheses with Baron and Kenny's (1986) traditional mediation analysis using hierarchical regression. Complete mediation is evidenced by a nonsignificant relationship between predictor and dependent variables once the mediator in question is included (Baron & Kenny, 1986). Comparison of the standardized regression coefficients of the mentoring functions in models 1 and 3 (Table 2) provides a test of Hypotheses 9a–11b.

The results indicated three findings of complete mediation. Relational job learning fully mediated the relationship between vocational support and role ambiguity. The regression coefficient for vocational support goes from -0.23 ($p < .05$) in model 1 to -0.10 (n.s.) in model 3. Hypothesis 9a is partially supported. A similar mediation result was found for job satisfaction. The regression coefficient decreases from 0.22 ($p < .05$) in model 1 to 0.12 (n.s.) in model 3 once relational job learning is accounted for in the model. Personal skill development was also found to completely mediate the relationship between role modeling and job satisfaction ($\beta = 0.19$, $p < .05$, model 1, vs. $\beta = 0.12$, n.s., model 3). Hypotheses 10a and 10b were partially supported. Hypotheses 11a and 11b did not receive any support; personal learning did not mediate the relationship between mentoring functions and turnover intentions.

DISCUSSION

The new personal learning variables introduced in this research were significantly related to role ambiguity (negatively) and job satisfaction (positively). Relational job learning was significantly and negatively related to intentions to leave. Personal skill development was significantly, negatively correlated with actual turnover for a subsample of respondents. These results support the importance of the role that personal learning about others' perspectives and new skills may play in the development of greater role clarity at work as well as overall satisfaction with work. Also, learning about one's connectedness to others in the organization may reduce thoughts of leaving, while specific skill development learning appears to impact actual turnover of employees.

Our findings support Kram and Hall's (1996) assertion that mentors are a valuable resource for "learning organizations." The results of this study showed that vocational support was positively related to relational job learning. Protégés who are sponsored for projects or challenging assignments that increase their exposure to other people in their organization may be more likely to develop a "macroscopic" understanding of the organization through these networks. However, psychosocial support and role modeling were not found to be significantly associated with this type of personal learning.

This study showed, contrary to hypothesis, that nonprotégés experienced the same level of skill development as protégés. Given the demand for new skills in organizations, nonprotégés may develop skills through other means, such as peers, team participation, and formal education and training programs. For mentored individuals in this study, role modeling was significantly associated with skill development, but vocational support and psychosocial support were not. Imitating a mentor's skills and practices appears to play an important role in influencing protégés' learning. This finding is consistent with Bandura's (1977) social learning theory. Protégés who admire their mentors and view them as role models may be more attentive to their mentors' behaviors and more likely to try behaviors that they observe their mentors accomplishing successfully. By observation and imitation, protégés may strengthen their own skills.

Findings from this study indicate that personal learning may explain how mentoring functions influence job attitudes. Relational job learning was found to mediate the relationship between vocational support and role ambiguity and that between vocational support and job satisfaction. The vocational support provided by mentors helps protégés increase their understanding of their job context, which may result in less confusion about the expectations associated with their roles in the organization and greater job satisfaction. Personal skill development was also found to mediate the relationship between role modeling and job satisfaction. Having a role model may result in greater job satisfaction owing to social learning effects on skill development. These findings highlight the importance of mentors being proactive in managing mentoring relationships to ensure that they are resulting in personal learning.

Limitations

One limitation is the study's use of self-report measures, which raises the possibility that common source method variance produced inflated correlations (Crampton & Wagner, 1994). Since the variables under study were attitudinal, it was necessary to assess the perceptions of employees directly. However, in future research, a learning measure could have a source other than the employee involved, perhaps a mentor or supervisor.

Another limitation of the study is the cross-sectional design, which limits any inference of causation between the variables. It is plausible that individuals who have more of a learning orientation and are proactive about their personal learning are more likely to be in mentoring relationships. Similarly, an argument can be made that employees who are more satisfied with their jobs are more likely to interact with others in the workplace and experience personal learning. The results of the turnover study did indicate that turnover was related to personal skill development, which was assessed four years prior to the turnover data collection. Clearly, additional longitudinal studies are needed to further understand the dynamic of the relationship between learning and attitudes. The response rate of 21 percent is also a limitation. Although this low response rate raises issues of sample representativeness, we conducted various analyses and employed control variables to assess the extent to which these differences influenced the variables of interest in this study.

Implications for Practice

In a highly competitive labor market, the challenge of retaining satisfied and productive employees has become a top priority. In view of our findings that personal learning may be associated with important job attitudes, organizations need to examine the mechanisms and opportunities in their environment that facilitate learning how to learn from others. Cross-functional work teams, quality improvement teams, peer discussion groups, mentoring circles, and job rotation programs are a few ways organizations can foster personal learning.

The results of this study show that an important source of personal learning is a mentoring relationship. Many organizations are implementing formal mentoring programs and providing training to potential mentors on how to mentor because of the research evidence supporting the benefits of mentoring. This study suggests that training programs for mentors should cover learning as an objective of the relationship. Mentors should help employees conceptualize their roles in a learning organization. Mentors should consider how assignments and projects can be organized to maximize their protégés' learning and improve connections with others in their organization. Mentors also need to look for opportunities to be models of behaviors that are important for their protégés' skill development. Protégés can work in partnership with mentors to manage their personal learning. Human resource managers can facilitate learning by helping mentor-protégé dyads create learning contracts and evaluate the learning process. Candid discussions of learning could inform a mentor that a protege is in need of more challenging assignments or an opportunity to work on a project team that will stimulate learning.

Future Research

For this research, a new scale was created to measure personal learning. We followed recommended procedures for the construction of measures (Schriesheim et al., 1993) and conducted a pilot study to examine the convergent and discriminant validity of the measures. Yet future research is needed to further assess the reliability and construct validity of the measure for different samples in other settings. We studied the behavioral outcome of turnover; future research might address job performance. Personality characteristics and motivation may enhance or impede an employee's ability to experience personal learning. Also, contextual characteristics of an organization, such as reward structures, work design, and organizational structure, can influence social interaction patterns and demands for learning.

Kram and Hall (1996) suggested that organizations face environments of diversity and turbulence and that mentors will become "co-learners" with their protégés. Mullen (1994) suggested that mentors may use protégés as a source of information and social feedback. Future research on mentoring should examine learning from the mentor's perspective and look at what mentors learn from protégés. Research could be conducted on examining whether similarity in the cognitive styles of a mentor and protégé influence the development of the mentoring relationship and personal learning (Hayes & Allinson, 1996). In addition, this study did not consider other work relationships that may contribute to personal learning. Individuals have many additional nodes in their competence networks, such as team members, supervisors, mentors outside their organizations, and professional associations. Future research should examine how other relationships influence personal learning.

We hope that this research will prompt some new and interesting work on relational learning and career development. The results of this study suggest that personal learning plays an important role in an organization. Individuals who experience personal learning may have positive feelings about their work and organization, and they may be less likely to quit. Through vocational support and role modeling, mentors provide opportunities for employees to develop competencies. Also, personal learning appears to be pivotal in the relation-

ship between mentoring and attitudes toward work. Mentoring may set up a dialogue between mentors and protégés, and the process of learning through interaction with others may be the key element through which mentoring translates into the benefits reported in many studies. It may be beneficial to place less emphasis on particular mentor-protégé pairings in future mentoring research and practice and instead to focus more on what is learned and how it is learned through the relationship. This emphasis on learning within mentor-protégé relationships may help to clarify the role of mentoring at work.

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