A Field Study of Factors Related to Supervisors’ Willingness to Mentor Others

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Factors thought to be related to intention to mentor and perceived barriers to mentoring (i.e., willingness to mentor) were examined among 607 state government supervisors. Previous experience as a mentor, previous experience as a protégé, education level, and quality of relationship with supervisor were related to willingness to mentor others. Additionally, age, locus of control, and upward striving were related to supervisors’ intention to mentor others, but not to their perceptions of barriers to mentoring others. Job-induced tension was related to perceived barriers to mentoring, but not to intention to mentor others. Implications of the findings and suggestions for future research are presented. © 1997 Academic Press

In recent years, the topic of mentoring and its importance to employees’ career and professional development have received substantial attention in the literature. Research has consistently demonstrated that those who are mentored reap significant benefits, such as higher overall compensation, career advancement, and career satisfaction (Dreher & Ash, 1990; Fagenson, 1988, 1989; Kram, 1985; Roche, 1979; Scandura, 1992; Turban & Dougherty, 1994; Whitely, Dougherty, & Drehar, 1991). While the focus of attention in the literature has primarily been on the benefits provided to protégés, mentoring relationships may also provide rewards to the mentor. Successful mentors may gain esteem among their peers and superiors (Hunt & Michael, 1983; Kram, 1980) and find the experience to be creative, satisfying, and rejuvenating (Levinson, Darrow, Klein, Levinson, & McKee, 1978). Additionally, research indi-

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cates that mentoring others may lead to greater job satisfaction, increased motivation, and enhancement of leadership skills for mentors (Smith, 1990).

Despite the evidence supporting the positive outcomes of mentoring for both the mentor and the protégé, little attention has been directed toward examining factors that influence the initiation of mentoring relationships (Turban & Dougherty, 1994). Specifically, very little is known regarding what motivates individuals to act as mentors. One factor related to the decision to become a mentor that has recently been explored is a person’s willingness or intent to become a mentor (Ragins & Cotton, 1993; Ragins & Scandura, 1994). For years, social psychological theorists have stressed the importance of intent in predicting behavior (Fishbein & Ajzen, 1975; Locke, 1968). For example, previous research examining turnover (Mobley, 1977; Williams & Hazer, 1986) and job-transfer decisions (Brett & Reilly, 1988) have included intent or willingness as the mediating variable predictive of such behavior.

To date, the research that has examined individuals’ intentions to mentor others has focused primarily on investigating gender differences (Ragins & Cotton, 1993; Ragins & Scandura, 1994). Accordingly, the primary purpose of the present study was to extend our understanding of the initiation of mentoring relationships by proposing and empirically testing an initial research framework that encompasses both individual and situational factors thought to be related to willingness to mentor others. Willingness to mentor others was assessed by measuring both intent to mentor and perceived barriers to mentoring.

The present study also adds to the existing literature by focusing on first-line supervisors rather than mid- or higher-level managers. While most of the literature has considered the typical mentorship as occurring between a high-level manager and a fast-track protégé (Kram, 1985; Zey, 1984), mentoring relationships also occur between lower-level supervisors and their nonmanagerial employees. This seems even more likely given the flattening of the corporate hierarchy and the continuing proliferation of downsizings that have resulted in fewer mid- and high-level management positions (Byrne, 1994). It follows that responsibility for mentoring others will increasingly become incumbent upon lower-level management employees. Thus, it was deemed important to examine willingness or intent to mentor from the perspective of a supervisor.

Theoretical Framework and Rationale

While it seems likely that numerous factors might influence an individual’s willingness to mentor others, the factors in the present study were chosen based on an integration of relevant concepts, theories, and empirical research in careers, mentoring, and women in management. Moreover, we began from the basic premise that the decision to participate in a mentoring relationship is, in essence, a choice to engage in a specific form of developmental activity. Indeed, as articulated by Kram (1985), mentoring can generally be defined
as a relationship among junior and senior colleagues, or between peers, that provides a variety of developmental functions. Hence, research from the employee learning and development literature that has examined factors related to participation in developmental activities appeared relevant and was incorporated accordingly. It should be noted that the present effort was not intended to be all inclusive, but rather to provide an initial launching point that we hope will serve to stimulate discussion, additional theory, and further model development.

At the first-order level, it was determined that both individual and situational factors should be examined as correlates to willingness to mentor. In general, individual attitudes and behavior are thought to be influenced by both personal and situational characteristics (e.g., Pervin, 1989). Similarly, Hunt and Michael (1983) contended that contextual factors as well as individual characteristics influence the initiation of mentor–protégé relationships. Furthermore, Ragins and Cotton (1993) and Ragins and Scandura (1994) suggested that future research examine individual and organizational characteristics that impel individuals to engage in mentoring relationships. The learning and development literature has stressed the influence of individual and environmental factors on an individual’s desire to participate in developmental activities (e.g., Noe & Wilk, 1993).

The extant literature suggests three categories of individual-level factors that may be related to willingness to mentor: (1) demographic variables; (2) previous mentoring experience; and (3) personality variables. Demographic variables and previous mentoring experience have received some empirical attention in the literature (e.g., Olian, Carroll, & Giannantonio, 1993; Ragins & Cotton, 1993). On the other hand, although several researchers have called for studies examining the relationship between personality and willingness to mentor (Ragins & Cotton, 1993; Turban & Dougherty, 1994), empirical research has yet to be reported in this area. In the present study we attempt to replicate and extend existing research by examining the influence of demographic variables (gender, age, education level), previous mentoring experience (experience as a mentor, experience as a protégé), and personality variables (locus of control, upward striving) on willingness to mentor.

To date, there have not been any studies that have examined situational influences on willingness to mentor. Hunt and Michael (1983) suggested that mentoring relationships in organizations would be affected by factors related to the context of the work setting, such as type of organization, differences in careers or occupations, organizational position of the individual, and the social network or interpersonal relationships. Other related research has suggested that two aspects of the work environment influence employees’ participation in developmental activities: social support and situational constraints (Kozlowski & Hults, 1987; Noe & Wilk, 1993). We extended previous research by investigating the relationship between one variable related to social support (quality of relationship with supervisor) and one variable related to
situational constraints (job-induced stress) with willingness to mentor others. A review of the existing literature and a more detailed explanation regarding why each of the factors examined was expected to influence willingness to mentor are presented below.

**INDIVIDUAL VARIABLES**

**Demographic**

*Gender.* The resurgent interest in the concept of mentoring has been inspired, in part, by the needs of women aspiring to corporate leadership (Frey & Noller, 1986). For example, recent research has examined gender differences within the mentoring experience and has delineated unique barriers that confront women (Noe, 1988). Because management is still a primarily male-dominated field, women are less likely than men to be in formal positions to serve as mentors. Furthermore, women managers may experience numerous internal and external barriers to career advancement that require considerable time and energy to overcome (e.g., work/family issues, sex-role stereotypes, limited access to informal networks and communication channels) (Russell, 1994; Russell & Eby, 1993). In concert, these issues may make it more difficult for women than for men to devote the time and resources necessary to serve as mentors (see Russell, 1994, for a review).

The research examining gender and willingness to mentor has been somewhat mixed. For example, in a study of managers that controlled for organizational rank, Ragins and Cotton (1993) found that women anticipated greater drawbacks or obstacles to becoming a mentor than did men, but expressed similar positive intentions to serve as a mentor. In a recent study that consisted of a matched sample of male and female executives, Ragins and Scandura (1994) found no differences between men and women in expected costs, benefits, or intention to mentor others. As suggested by Ragins and Scandura, gender differences in willingness to mentor others may be a function of differences in rank. Women are fairly well represented at lower levels of management such as that represented in this study (cf. Russell, 1994). Consequently, women in supervisory positions may not perceive barriers to mentoring to the same extent as women in higher levels of management. At these lower supervisory levels, differences between men and women in their perceptions of barriers to mentoring others are apt to be less salient. It was hypothesized that:

*Hypothesis 1a:* Women and men supervisors will report similar intentions to mentor others.

*Hypothesis 1b:* Women and men supervisors will perceive similar barriers to mentoring others.

*Education level.* Another demographic variable that may be related to an individual’s desire to mentor others is his or her education level. There is some
indication that level of education may be positively related to willingness to mentor others (Campion & Goldfinch, 1983). Individuals with higher levels of education may be better equipped, better qualified, and more comfortable serving in the capacity of a mentor. Additionally, individuals who have participated in higher education may be more familiar with mentoring because many colleges have implemented mentoring programs (Jacobi, 1991; Johnson, 1989). It was predicted that:

_Hypothesis 2:_ Willingness to mentor others is positively related to an individual’s education level.

**Age.** Age should also be considered as a factor related to willingness to mentor. The role of a mentor has typically been associated with individuals at later ages, because working with a protégé can help individuals in mid-career feel needed and worthwhile (Feldman, 1988; Greenhaus & Callanan, 1994). Stage models of development (Levinson et al., 1978; Super, 1957) theorize that as individuals mature they may experience the need to teach others. Further, from a psychological perspective, the idea of generativity has been proposed as a factor influencing an individual’s desire to mentor others (Erikson, 1963). Generativity typically affects individuals who have reached middle-career and who have become concerned with making a contribution to future generations.

It seems likely that willingness to mentor would be strongest for the mid-careerist. However, Ragins and Cotton (1993) failed to find support for their hypothesis that willingness to mentor would be curvilinearly related to age. In the current study, a more linear relationship between age and willingness to mentor others is predicted. Young adults and early-careerists are most likely to assume the role of protégé to enable their professional development. Meanwhile, more experienced adults, as they approach middle career and beyond, find that mentoring others satisfies generative needs that tend to emerge at this stage (Arthur & Kram, 1989). Further, senior or late-careerists often desire to leave a legacy to their organization and may fulfill that desire by serving in the role of mentor until retirement. It seems reasonable that individuals may not be ready or willing to assume the role of the mentor until reaching mid-career; however, they may continue to be willing to mentor others well into their late-career. It was hypothesized that:

_Hypothesis 3:_ Willingness to mentor others is positively related to an individual’s age.

**Previous Mentoring Experiences**

Kram (1985) hypothesized that decisions to mentor others may be influenced by previous mentoring experience as a mentor or as a protégé. Individuals with previous mentoring experiences have first-hand knowledge of mentoring and are more likely to be familiar with the benefits that mentoring affords. Research has generally supported this assertion. Missirian (1981) and Roche (1979) reported that mentors tended to have previous experience as a
protégé. Additionally, Ragins and Cotton (1993) found that all types of past mentoring experience (as a protégé, a mentor, or both) were positively related to willingness to mentor others. On the other hand, Olian et al. (1993) found that current mentors were more likely to express willingness to mentor others in the future, while current protégés were less willing to mentor others. They proposed that current protégés may be less inclined toward mentoring others because they assumed that they inflicted a significant burden on their mentors. Therefore, in line with most previous research, it was hypothesized that:

**Hypothesis 4a:** Willingness to mentor others is positively related to previous experience as a mentor.

**Hypothesis 4b:** Willingness to mentor others is positively related to previous experience as a protégé.

**Personal Attributes**

To date, the relationship between individual difference characteristics and willingness to mentor others has not been investigated. A number of personal attributes have the potential to influence an individual’s willingness to mentor others. Roche (1979) listed a number of characteristics of mentors that focused on the mentor’s position, power, knowledge, and respect. Hunt and Michael (1983) suggested that mentors could be characterized as individuals high in need for power who are willing to share their expertise with others. More recently, Ragins and Cotton (1993) suggested that locus of control, self-efficacy, and self-confidence might be related to the decision to mentor others. Based on these characterizations and suggestions, locus of control and upward striving were investigated in the present study.

**Locus of control.** Individuals with an internal locus of control believe that they control the events and consequences that affect their lives, while individuals with an external locus of control believe that events are the product of circumstances beyond their control (Paulhus, 1983; Rotter, 1966). Managers with an internal locus of control have been found to be more considerate (Pryer & DiStefano, 1971) and more likely to use rewards, to have respect, and to exert power (Mitchell, Smyser, & Weed, 1975). Noe (1988) suggested that internals may be more likely to participate in developmental activities because they are more likely to believe that they can improve their skills. Related research has indicated that internals are more likely to identify psychologically with their work and career (Thornton, 1978). Moreover, in their study of protégé characteristics, Turban and Dougherty (1994) found that individuals with an internal locus of control were more likely to initiate mentoring. From the perspective of the mentor, it seems likely that internals would be more interested in the developmental career opportunities afforded to those who mentor others. Additionally, internals should feel that whether or not a potential protégé learns new skills, develops contacts, and so on, is somewhat under their control. It was hypothesized that:
Hypothesis 5: Willingness to mentor others is positively related to an individual’s internal locus of control.

Upward striving. Upward striving is the desire to increase one’s job level and standard of living (Wollack, Goodale, Wijting, & Smith, 1971). Because mentoring involves assistance to others in the achievement of career goals, supervisors who are committed to upward career striving may be more likely to see the value of mentoring from the perspective of benefits provided to the protégé and the potential benefits to the mentor. Prospective mentors may identify with eager protégés and respect their efforts to obtain career success. Moreover, by investing time in someone else’s career, a mentor may garner reciprocal effects on behalf of his or her own career. As stated by Newby and Heide (1992), a good mentor may gain the reputation of “starmaker” and thus be able to develop successors for his or her own position, which may in turn directly facilitate his or her own upward movement. The development of protégés may increase the mentor’s power base, thereby increasing the mentor’s influence in the organization (Hunt & Michael, 1983). It was hypothesized that:

Hypothesis 6: Willingness to mentor others is positively related to an individual’s upward striving.

SITUATIONAL VARIABLES

Relationship with supervisor. An individual’s interpersonal relations with others can provide the social network necessary for effective mentoring. Within this social network, the quality of an individual’s relationship with his or her own supervisor may influence his or her own willingness to mentor others. Individuals who enjoy a high-quality relationship with their supervisor may be more likely to have better contacts and access to resources and will feel better equipped to mentor others. In contrast, individuals who are part of the “outgroup” may believe that they do not have much to offer potential protégés. In fact, managerial support has been found to be related to career motivation (Noe, Noe, & Bachhuber, 1990) and to an individual’s participation in developmental activities (Noe & Wilk, 1993). Accordingly, it was expected that:

Hypothesis 7: Willingness to mentor others is positively related to the quality of an individual’s relationship with his or her supervisor.

Job-induced tension. The degree of tension experienced in an individual’s job may influence his or her willingness to mentor others. Job stress has been related to employee withdrawal behaviors and lowered job performance (cf. Jamal, 1984). Individuals who are dealing with a great deal of tension in their own job may not have the energy or desire to address someone else’s career issues. Individuals may believe that mentoring others would be an additional burden on themselves. It was hypothesized that:
Hypothesis 8: Willingness to mentor others is negatively related to an individual’s job-induced stress.

METHOD

Subjects

The subjects were 607 first-line supervisors employed by a large southeastern state government. The supervisors averaged 46.82 years of age ($SD = 8.79$), 59% ($N = 353$) were male, and the median level of education achieved was the completion of a 4-year college degree. Ninety-one percent ($N = 544$) of the supervisors were white, 8.7% ($N = 52$) were African-American, and 0.4% ($N = 2$) were from other minority groups. The mean age for females was 45.58 years ($SD = 8.10$), while the mean age for males was 47.60 years ($SD = 9.11$). For males, 93.5% ($N = 330$) were white, 5.9% ($N = 21$) were African-American, and 0.6% ($N = 2$) were other minorities. For females, 87.3% ($N = 213$) were white and 12.7% ($N = 31$) were African-American. The supervisors held positions in 32 different departments within state government (e.g., Transportation, Human Services, Finance and Administration). The number of responses from each of the 32 departments varied from 1 to 91. In each department, first-line supervisors were those at the lowest managerial level who directly supervised nonmanagerial employees.

With regard to experience as a mentor, 46.5% ($N = 282$) of the supervisors indicated that they had mentoring experience, while 53.5% ($N = 324$) reported no such experience. Although the differences were not significant ($\chi^2 = .66$, n.s.), 47.4% ($N = 167$) of male respondents reported having experience as a mentor, compared with 44.1% ($N = 108$) of females. With regard to experience as a protégé, 30% ($N = 179$) of the supervisors reported having no experience, whereas 70% ($N = 428$) indicated that they had experienced between one and four or more mentors. Of those responding, 68.2% ($N = 238$) of male respondents reported having experience as a protégé, whereas 72.5% ($N = 174$) of females reported having such experience. This difference was not significant ($\chi^2 = 1.25$, n.s.).

In addition to gender differences, we examined whether supervisors’ experience as a mentor or protégé varied as a function of their department. Only departments with 20 or more respondents were included in the analyses. This criterion was chosen in order to ensure that there was compliance with the sample-size assumption for the use of $\chi^2$ tests (cf. Hays, 1988). Eight of the 32 responding departments met this criteria. The results indicated that neither experience as a mentor ($\chi^2 = 5.70$, n.s.) nor experience as a protégé ($\chi^2 = 8.89$, n.s.) varied as a function of department. We also considered whether experience as a mentor or protégé varied due to the interaction between supervisors’ gender and department. With one exception, no significant differences were found. Specifically, within the department of Human Services, a greater proportion of women (77%, $N = 37$) reported having experience as a protégé than did men (54%, $N = 13$) ($\chi^2 = 3.96$, $p < .05$).
Procedure

The current study was conducted as part of an extensive training-needs assessment used to identify the training needs for all technical employees within state government. As part of this assessment, a comprehensive survey was distributed to a random sample of 1500 first-line supervisors who had nonmanagerial employees as their direct reports. Supervisors were asked to provide information on their attitudes about the organization, themselves, their own mentoring experiences in state government, and their subordinates’ training needs. Items selected for the survey were based on the relevant literature, previous needs assessment work conducted with this organization, and a series of structured interviews held with personnel and training staff employed within various departments of the organization (additional information regarding the survey is available from the first author upon request).

Completed surveys were returned directly to the researchers within an enclosed return envelope. Of the 1500 surveys, 8 were returned as undeliverable by the post office. A total of 622 of the remaining 1492 surveys were returned, for a response rate of 41.7%. Due to missing data, responses from 607 surveys were used for the analyses. To examine the generalizability of the study sample to the total population of first-line supervisors in the state government system, we compared demographic characteristics. Within the total population, 55.9% were male, 85.8% were white, and the average age was 46.84 ($SD = 9.61$). These results are similar to those obtained with the study sample, and it is believed that the sample of 607 supervisors is representative of the population of first-line state government supervisors.

Measures

The mentoring questions used in the present study were preceded by the following definition of mentoring:

Mentors are persons usually considered as more experienced, who support, train, “teach the ropes to” or sponsor others as they pursue their career goals. Although your boss, manager, and/or supervisor can be a mentor, usually a mentor does not have to involve a day-to-day formal supervisory relationship. Those that they mentor are usually referred to as “protégés.” For example, a mentor may introduce his/her protégé to others within the organization, listen to personal problems, and provide career guidance.

Due to constraints regarding survey length placed by the host organization, several of the variables described below were measured with abbreviated scales. Several steps were taken to help ensure and assess the validity and reliability of the shortened instruments. First, the items chosen were those that were general representations of the domain of the construct measured. Additionally, in the case of the Paulhus personal control scale, we used the four items that had the highest factor loadings as reported in the original validation study for internally skewed items (Paulhus, 1983). Hence, despite the fact that our versions were shorter, we endeavored to capture the content of the constructs studied.
Additionally, to provide some indication of the validity of the reduced-item scales, we ran a principal-components factor analysis with varimax rotation on the applicable four scales (Locus of Control, Upward Striving, Job-Induced Stress, and Quality of Supervisory Relationship). Four unique factors emerged, each having an eigenvalue greater than 1. Additionally, each of the 13 items loaded most highly on its respective scale, and the cross-loadings were minimal. All four factors explained a total of 67.7% of the variance (the complete results of the factor analysis are available from the first author upon request). Hence, support for the discriminant validity of the scales was obtained. To further assess the reliability of our instruments, we compared the internal consistency estimates obtained in the present study with those reported in earlier studies. As documented below, our results were quite similar to the results obtained in other studies. In sum, given the respectable reliability estimates in the current study, the similarity of our estimates with reliability estimates from previous research, and the results of the factor analysis supporting the discriminant validity of the measures, we believe that the items used to measure the study constructs were acceptable.

Except where noted, each of the items described for the following scales was measured with a 5-point Likert-type scale (1 = Strongly Disagree to 5 = Strongly Agree). The mean of the scale items was used in the analyses.

**Willingness to mentor.** As in Ragins and Cotton (1993), willingness to mentor was conceptualized as represented by two variables: intention to mentor and perceived barriers to mentoring. Consistent with previous research, one item was used to assess the supervisor’s overall intention to mentor: “I would like to be a mentor.” Barriers to mentoring was measured with the 6-item scale developed by Ragins and Cotton (e.g., “The costs of being a mentor outweigh the benefits.”). Ragins and Cotton reported an internal consistency reliability estimate of .83 for this measure. In the present study, the internal consistency estimate of reliability for the scale was .83. Each item was reversed-coded so that higher scores indicated fewer perceived barriers to mentoring.

**Experience as a protégé.** This was measured by asking the supervisors to respond to the following statement: “In my worklife, I have had ____ mentor(s).” Responses were measured using a 5-point scale (0 to 4 or more).

**Experience as a mentor.** This was a dummy variable coded 0 if the supervisor had not previously served as a mentor and 1 if the supervisor had indicated previous experience as a mentor.

**Locus of control.** Four items from the 10-item personal control subscale of Paulhus’ (1983) Spheres of Control Scale were used to assess locus of control (e.g., “When I get what I want it’s usually because I worked hard for it.”). The complete scale includes two other 10-item subscales that measure Interpersonal Control and Sociopolitical Control. In a review of the psychometric properties of the locus of control subscale, Paulhus and Van Selst (1990) reported reliability estimates ranging from .38 to .76 based on various populations. The internal consistency reliability estimate for the scale in the present study was .75.
**Upward striving.** Three of nine items based on Wollack et al.’s (1971) Survey of Work Values upward striving subscale (Form U) were used to measure upward striving (e.g., “One should always work hard with the hope of being promoted to a higher level.”). The Survey of Work Values consists of a total of six subscales that contain nine items each (e.g., intrinsic values; attitude toward earnings). Original validation data yielded an internal consistency estimate of .55 for the upward-striving subscale (Wollack et al.). Subsequent research has reported internal consistency estimates ranging from .54 to .63 (Waters, Batlis, & Waters, 1975; Waters & Zakrajsek, 1991). The internal consistency estimate obtained in the present study was .65.

**Quality of relationship with supervisor.** Four items adapted from the seven-item Leader–Member Exchange (LMX) scale (Graen & Cashman, 1975; Scandura & Graen, 1984) were used to assess the quality of an individual’s relationship with his or her supervisor. The following items were used: “I have an extremely effective working relationship with my supervisor”; “My immediate supervisor recognizes my potential”; “I can count on my supervisor to help me at his or her expense when I really need it”; and “My supervisor understands my problems and needs.” The subjects of the items that were not included were: (1) extent individual would defend and justify the supervisor’s decisions; (2) extent individual knows where he or she stands with supervisor; and (3) inclination of supervisor to help individual solve work problems. The scale’s 1- to 4-point anchors with various descriptors were modified to the present 1- to 5-point scale. Previous studies using the full 7-item scale have reported reliabilities ranging from .84 to .86 (Scandura & Graen, 1984; Scandura, Graen, & Novak, 1986). In the current study, the internal consistency estimate of reliability for the scale was .90.

**Job-induced stress.** Three items from the 7-item job-induced anxiety subscale of House and Rizzo’s (1972) Anxiety-Stress Questionnaire (e.g., “I work under a great deal of tension.”) were used to measure job-induced stress. The complete scale contains two additional subscales that measure Somatic Tension (five items) and General Fatigue and Uneasiness (five items). The original response scale (yes/no) was adapted to form a 5-point Likert scale. House and Rizzo (1972) reported a Kuder-Richardson reliability estimate of .83 for the job-induced anxiety subscale. Additionally, Davenport and Russell (1994), using a 5-point scale, obtained an internal consistency (Cronbach’s α) of .85. The internal consistency estimate of reliability for the present shortened version of the scale was .81.

**Demographic information.** Supervisors also responded to demographic questions regarding their gender, age, race, education level, organizational tenure, and job tenure.

**Analysis**

Hierarchical regression analysis was used to test the hypotheses (Cohen & Cohen, 1983). Additionally, because all of the variables were psychological
and were measured simultaneously, the degree of multicollinearity among the variables was assessed. The Variance Inflation Factor (VIF) has been described as a measure of the dependency of the combined effect among the regressors (Montgomery & Peck, 1982). The VIF was assessed for each of the independent variables and all were found to be within the established acceptable range of 1 to 5, indicating that multicollinearity was not a serious concern in the present study.

RESULTS

Descriptive statistics and intercorrelations for all study variables are presented in Table 1. To test the hypotheses, the study variables were entered hierarchically into the regression equation in the following order: (1) demographic variables (gender, education level, age); (2) experience variables (experience as a protégé, experience as a mentor); (3) personality variables (locus of control; upward striving); and (4) situational variables (job-induced stress; quality of relationship with supervisor). Separate hierarchical regression analyses were conducted for the two dependent variables. The results of these analyses are presented in Table 2.

The standardized $\beta$ coefficients were used to determine support for each of the hypotheses. Hypotheses 1a and 1b posited no differences between men and women regarding intention to mentor and perceived barriers to mentoring. The results of the regression analyses provide full support for these hypotheses. No gender differences were found with respect to intention to mentor, as men and women indicated similar intentions ($M = 3.68$ and $M = 3.71$, respectively). There were no gender differences with regard to perceptions of barriers to mentoring, as men and women expressed moderate levels of perceived barriers ($M = 3.54$ and $M = 3.58$, respectively).

Hypothesis 2 stated that willingness to mentor others would be positively related to education level. Full support was found for this hypothesis. Individuals with higher levels of education reported greater intentions to mentor others and perceived fewer barriers to mentoring than did individuals with lower levels of education. Hypothesis 3, which asserted a positive relationship between age and willingness to mentor others, was not supported. Age was not related to perceived barriers to mentoring, and the significant relationship between age and intention to mentor was in the opposite direction to that predicted. Contrary to our expectations, older supervisors expressed fewer intentions to mentor others relative to younger supervisors.

Hypotheses 4a and 4b predicted positive relationships between previous experience as a mentor and willingness to mentor, and previous experience as a protégé and willingness to mentor, respectively. These hypotheses were fully supported. Individuals who reported having previously served as a mentor expressed greater intentions to mentor and fewer perceived barriers than did individuals who did not report having previous experience as a mentor. Individuals with more experience as a protégé indicated fewer perceived
TABLE 1
Means, Standard Deviations, and Intercorrelations among Study Variables

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<td>5. Age</td>
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<td>6. Experience as a</td>
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<tr>
<td>mentor</td>
<td>2.34</td>
<td>1.04</td>
<td>-1.8</td>
<td>-0.0</td>
<td>-0.1</td>
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<td>7. Experience as a</td>
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<tr>
<td>protégé</td>
<td>2.34</td>
<td>1.04</td>
<td>-1.8</td>
<td>-0.0</td>
<td>-0.1</td>
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<tr>
<td>8. Locus of control</td>
<td>4.21</td>
<td>56</td>
<td>-1.5</td>
<td>-0.5</td>
<td>-1.6</td>
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<tr>
<td>9. Upward striving</td>
<td>3.46</td>
<td>1.20</td>
<td>-1.2</td>
<td>-1.2</td>
<td>-2.6</td>
<td></td>
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<td>10. Quality of relationship with supervisor</td>
<td>3.62</td>
<td>1.04</td>
<td>-1.8</td>
<td>-0.0</td>
<td>-0.1</td>
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<td>11. Job-induced stress</td>
<td>3.24</td>
<td>1.20</td>
<td>-1.8</td>
<td>-0.0</td>
<td>-0.1</td>
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</table>

*a* Measures based on a 5-point scale (1 = Strongly Disagree to 5 = Strongly Agree). Higher values represent greater intention to mentor, fewer perceived barriers, internal locus of control, greater upward striving, greater quality of supervisory relationship, and greater job-induced stress.

*b* Coded: 0 = male; 1 = female.

*c* Item based on a 8-point scale (1 = Some high school work to 8 = Graduate degree).

*d* Coded: 0 = no experience; 1 = experience.

*p* ≤ .05.

**p* ≤ .01.
TABLE 2

Results of Hierarchical Regression for Intention to Mentor and Perceived Barriers to Mentoring

<table>
<thead>
<tr>
<th>Variable</th>
<th>Intention to mentor</th>
<th>Perceived barriers to mentoring</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>β</td>
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<tr>
<td>Individual factors</td>
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<td></td>
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<td>Step 1: Demographics</td>
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<tr>
<td>Gender</td>
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<td>.01</td>
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<tr>
<td>Education level</td>
<td>.09</td>
<td>.18***</td>
</tr>
<tr>
<td>Age</td>
<td>-.01</td>
<td>-.09*</td>
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<tr>
<td>Step 2: Experience</td>
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<tr>
<td>Experience as a protégé</td>
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<td>.11**</td>
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<tr>
<td>Experience as a mentor</td>
<td>.65</td>
<td>.32***</td>
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<td>Step 3: Personality</td>
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<tr>
<td>Locus of control</td>
<td>.22</td>
<td>.12**</td>
</tr>
<tr>
<td>Upward striving</td>
<td>.19</td>
<td>.15***</td>
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<td>Situational factors</td>
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<td>Step 4</td>
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<td>Job induced stress</td>
<td>.02</td>
<td>.02</td>
</tr>
<tr>
<td>Quality of relationship with supervisor</td>
<td>.10</td>
<td>.09*</td>
</tr>
</tbody>
</table>

Note. N = 526. For Intention to Mentor, the overall model accounted for 21% of the variance (F = 15.46, p < .001). For Perceived Barriers to Mentoring, the overall model accounted for 19% of the variance (F = 13.27, p < .001).

* p ≤ .05.
** p ≤ .01.
*** p ≤ .001.
barriers and greater intentions to mentor than did individuals who reported less protégé experience.

Hypothesis 5 asserted a positive relationship between internal locus of control and willingness to mentor others, while Hypothesis 6 predicted a positive relationship between upward striving and willingness to mentor. Partial support was found for these hypotheses. Individuals characterized by an internal locus of control or a greater degree of upward striving reported greater intentions to mentor others than did individuals with an external locus of control or a lower degree of upward striving. However, neither locus of control nor upward striving were related to perceived barriers to mentoring.

Hypothesis 7 postulated a positive relationship between an individual’s quality of relationship with his or her supervisor and a willingness to mentor others. Full support was found for this hypothesis. Individuals who reported higher-quality relationships with their supervisor expressed greater intentions to mentor others and fewer perceived barriers to mentoring compared to individuals who considered their relationships with their supervisor to be of relatively lower quality.

Hypothesis 8 predicted a negative relationship between job-induced stress and willingness to mentor others. Partial support was found for this hypothesis. Individuals who reported less job-induced stress perceived fewer barriers to mentoring than did individuals with more job-induced stress. In contrast, job-induced stress was not significantly related to intention to mentor.

Overall, the results for both sets of regression analyses indicated that the total model demonstrated significant explanatory power. The $R^2$ of .21 ($F = 15.46, p < .001$) indicates that the study variables accounted for a significant amount of variance in intention to mentor others and the $R^2$ of .19 ($F = 13.27, p < .001$) shows that the study factors were related to perceived barriers to mentoring others.

Supplementary Analyses

Several additional analyses were conducted to further our understanding of factors related to willingness to mentor others. While no specific hypotheses were formed, we examined the unique variance accounted for in the dependent variables by the individual versus situational factors. As can be seen in Table 2 for intention to mentor others, the two situational variables entered as a group did not account for unique variance beyond that accounted for by the individual variables. On the other hand, the two situational variables did account for unique variance in the prediction of perceived barriers to mentoring others. To investigate whether the individual variables, as a group, would account for unique variance in the prediction of both dependent variables beyond that of the situational variables, a separate set of regression analyses was completed where the entry order of the study variables was reversed. That is, for both dependent variables, the situational variables were first entered into the regression equation, and then the seven individual vari-
ables were entered as a group. With regard to intention to mentor others, the results demonstrate that the individual variables accounted for unique variance beyond that of the situational variables ($\Delta R^2 = .20, F = 18.64, p < .001$). The individual variables also contributed uniquely to the prediction of perceived barriers to mentoring others ($\Delta R^2 = .15, F = 13.87, p < .001$).

An additional set of regression analyses was conducted in an attempt to determine the most parsimonious model for each dependent variable. Specifically, a backward solution regression analysis was conducted for each dependent variable. As described by Kerlinger and Pedhazur (1973), with all independent variables entered into the regression equation, the backward solution examines the unique contribution of each independent variable to the prediction of the dependent variable. The variables that do not uniquely and significantly contribute to the prediction of the dependent variable are removed from the equation. When all remaining variables possess unique predictive significance, the analysis is concluded.

The results of these analyses were consistent with those presented in Table 2. That is, the variables found to be nonsignificant in the hierarchical analyses were those that were removed from the analyses using the backward-solution model. Specifically, for intention to mentor, gender- and job-induced stress were eliminated from the equation ($R^2 = .21, F = 19.91, p < .001$). For perceived barriers to mentoring others, gender, age, locus of control, and upward striving were deleted from the equation ($R^2 = .18, F = 23.00, p < .001$).

**DISCUSSION**

The present study extended past research regarding factors related to an individual’s willingness to mentor others in several ways. First, an initial framework for examining willingness to mentor others that included both individual and situational variables was presented. The study was among the first to empirically link personality and situational factors with willingness to mentor others. Moreover, the present research differed from others in that it used a sample of first-line supervisors from diverse jobs and departments. The results indicated that intention to mentor others was significantly related to one’s previous experience as a mentor, previous experience as a protégé, education level, age, locus of control, upward striving, and quality of relationship with supervisor. Supervisors’ perceptions of barriers to mentoring others were related to their previous experiences as mentors, previous experiences as protégés, education level, quality of relationship with their supervisors, and job-induced stress.

A key finding in this study was that previous experience as a mentor was related to an individual’s willingness to mentor others. Additionally, experience as a protégé was related to a willingness to mentor others. These findings are congruent with the model of behavioral consistency that proposes that past behavior is predictive of future behavior (Wernimont & Campbell,
That is, those who have engaged in mentoring activities in the past are more likely to do so in the future.

Additionally, our results indicated that men and women first-line supervisors had similar intentions to mentor others and that there were no differences between men and women in perceived barriers to mentoring. Taken together with the results of previous research (Ragins & Cotton, 1993; Ragins & Scandura, 1994), these findings may suggest that if gender differences do exist with respect to perceived barriers of mentoring, then these differences may be more likely to occur at the middle level of management. That is, women at mid-levels of the organization may be more likely to perceive barriers to mentoring than their male counterparts or than lower- or higher-level female managers. Women in mid-level positions who are still faced with the glass ceiling, as well as issues of tokenism, limited role models, and reduced access to networks, may believe that these salient obstacles hamper their ability to mentor others (Russell, 1994). The women in the present study occupied first-line supervisory positions where the numbers of men and women are roughly equal. Hence, while exposed to these same issues, these women may not experience these stereotypes to quite the same degree as women in middle-level managerial positions. Nevertheless, while this proposition appears tenable, it remains to be empirically tested.

Another potential explanation for the divergent findings regarding gender differences across studies may reside in the nature of the setting. Different organizational climates or cultures might result in gender differences with regard to perceived barriers to mentoring others. Women working in an environment conducive to their development may not perceive more drawbacks to the mentoring role than do men. In fact, within an academic setting, Allen, Maetzke, and Russell (in press) found that female MBA students were significantly more willing than male MBA students to serve as peer mentors.

Interestingly, the results of the present study indicated that although age was not related to perceived barriers to mentoring others, there was a negative relationship between age and intentions to mentor others. Older supervisors reported less intention to serve as mentors than did their younger counterparts. While this finding was unexpected, it can possibly be explained by the fact that the present study sampled supervisors at lower levels of management (i.e., first-line supervisors). Older supervisors who occupy these lower-level management positions may have plateaued in their careers, and thus were less willing to assume extrarole behaviors. On the other hand, early-careerists who have attained lower-level management positions may be optimistic about their future within the organization and thus be more willing to engage in future mentorships. Regardless, these findings indicate that organizations should help ensure that their older, lower-level management employees are made aware of the benefits of serving as a mentor.

Additionally, organizations should take note that education level was positively related to willingness to mentor others. Within the current study, indi-
Individuals who possessed higher levels of education had greater intentions to mentor and perceived fewer barriers than did individuals with less education. It may be that individuals with higher levels of education feel more proficient serving in the capacity of a mentor, as they may have a more developed knowledge and skill base from which to draw. Consequently, organizations may need to ensure that their mentors either have or are provided with additional educational experiences.

The results also suggest that personality factors can impact an individual’s intention to mentor others. Both internal locus of control and upward striving were positively associated with intention to mentor others, but not with perceived barriers to mentoring. One potential explanation for these findings is that while internals and externals perceived similar barriers to mentoring, those with a more internal locus of control view the barriers as more surmountable, and thus express greater intentions to mentor. Perceived barriers to mentoring may be viewed similarly by individuals with varying degrees of upward striving; however, the individual with a greater degree of upward striving may be more likely to believe that the barriers to mentoring are worth overcoming.

With regard to the situational factors, the results indicated that the quality of an individual’s relationship with his or her supervisor was related to willingness to mentor others. It is possible that an individual who has a higher-quality relationship with his or her supervisor, which may itself include some aspects of a mentoring relationship, in turn possesses greater expectancy, efficacy, and desire to engage in this type of relationship with others. The results also demonstrated that individuals experiencing greater levels of job-induced stress expressed intentions to mentor others similar to the intentions of individuals experiencing lower levels of stress. However, those reporting greater stress also reported greater perceived barriers to mentoring. Hence, while individuals working under greater perceived stress levels are likely to be more acutely aware of the barriers associated with mentoring, their intent to engage in a mentoring relationship does not appear to be deterred.

**Limitations and Future Research**

Several limitations to the present study should be acknowledged. First, the data in the study were collected from one source. Hence, the extent to which the results were spurious due to common method variance cannot be fully determined. However, a review of the intercorrelation matrix reveals a number of uncorrelated relationships, indicating that common method variance is probably not an issue of major concern. In addition, given that the participants in this study were all first-line supervisors within state government, the generalizability of the present research may be limited by the sample and the setting. However, it should be noted that participants held positions in a variety of diverse jobs and departments (e.g., accounting, nursing, engineering, law enforcement, human services). Nevertheless, future research should attempt
to replicate these findings with supervisors in other settings. Another potential limitation of the present study was the use of a one-item measure for intention to mentor. While problematic, when viewed in conjunction with the measure of perceived barriers to mentoring, we believe that supervisors’ willingness to mentor was adequately captured.

Several avenues appear ripe for future research. First, longitudinal research is needed to substantiate whether or not individuals who express an interest in mentoring others actually participate in mentoring activities. Specifically, research is needed to establish the link between attitudes, intentions, and actual mentoring behavior. While research has begun to look at factors related to willingness to mentor others, the importance of the intent–behavior relationship has not been clearly articulated. In addition, studies are needed to examine how cognitions regarding the belief that mentoring will be advantageous, expected, and appreciated by others influences willingness to mentor.

The results obtained in the present study also are indicative of directions for additional research. For example, research should address whether forms of skill and knowledge development (e.g., training programs, management development) other than formal education enhance an individual’s desire to mentor others. With regard to previous mentoring experience, research should go beyond an experience/no experience framework and assess the factors that influence perceived value or quality of the mentoring experience, from the perspective of both the protégé and the mentor. For example, the favorableness or quality of the previous mentoring experience may be likely to influence willingness to engage in future mentoring activities.

Other researchers have proposed additional individual difference variables that may be related to willingness to mentor others, such as feedback seeking (Mullen, 1994). Future research should test other characteristics that may be related to willingness to mentor others, such as need for socialized power, growth-need strength, self-efficacy in mentoring, and the propensity to engage in organizational citizenship behaviors. Additionally, more research is needed to show how organizational or situational factors impact the opportunity for mentoring. Factors such as organizational turmoil (e.g., restructuring, downsizing), which often result in many employees feeling overworked and insecure regarding their own job status, would seem to have a negative impact on the opportunity for and the occurrence of mentoring relationships (Kozlowski, Chao, Smith, & Hedlund, 1993).

Finally, additional research is needed that goes beyond examining protégé and mentor characteristics in isolation and that begins to look at the intermix of different variables within mentorship dyads that result in more beneficial mentoring experiences. For example, the interaction between protégé and mentor age, race, or personality dynamics may influence the effectiveness of a mentoring relationship, as well as an individual’s interests in serving as a mentor or a protégé. Other theoretical networks, such as interpersonal attraction, exchange theory, and career-stage literature, could provide additional avenues for guiding mentoring research.
In summary, very little is known regarding the initiation of mentoring relationships by the mentor. The present study contributes to this body of research by uncovering factors significantly related to a first-line supervisor’s willingness to mentor others. Given the importance of mentoring to the career development of both mentors and protégés, research aimed at further refinement of a framework for examining factors that influence the decision to mentor others seems warranted.

REFERENCES


WILLINGNESS TO MENTOR


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