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# **COGNITIVE PROTOTYPES OF THE MENTOR AND PROTÉGÉ ROLES**

A Dissertation Presented for the  
Doctor of Philosophy Degree  
The University of Tennessee, Knoxville

Stacy McManus  
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## **Abstract**

Organizational mentoring is associated with positive events and experiences for protégés, mentors, and their organizations. Research on what makes those relationships successful – and potentially replicable with formal programs – has looked at the structure of the mentorship (e.g., formal vs. informal), the demographic make up of the mentoring dyad (e.g., race, gender), and attitudinal similarity between the mentor and protégé. Generally, results have been mixed and it appears that these factors do not account for a great deal of mentorship success. Cognitive prototypes of the mentor and protégé roles may be one as yet unexplored factor that might help us better understand successful mentorships. Since no research to date has been conducted in this area, the current study investigates the nature of those cognitive prototypes by identifying their content, examining the extent to which these prototypes may be gender-typed, and how prior mentoring experiences might be related to prototype gender-typing. Results suggest that strong performance and high potential are important aspects of the prototypical protégé, and that elements of organizational power and interpersonal skills are important aspects of the prototypical mentor. There was no evidence of prototype gender-typing. Implications for research and practice also are discussed.

## **Preface**

The document that follows is a hybrid between a traditional dissertation format and a research paper. The first three chapters are the traditional version that include the introduction, literature review and hypotheses development, followed by the proposed methods. The fourth chapter of this document is similar to a typical research paper in that it begins with an abstract and introduction, then moves to a condensed literature review and hypothesis development, the actual methods and results, and discussion section. So, on the off-chance that anyone is actually reading this, starting with chapter four is probably your best bet.

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## **CHAPTER I: INTRODUCTION**

In Kathy Kram's (1985) seminal book on organizational mentoring relationships, she defined mentoring as "a relationship between a young adult and an older, more experienced adult [who] helps the younger individual learn to navigate in the adult world and the world of work. A mentor supports, guides, and counsels the young adult as he or she accomplishes this important task." (Kram, 1985:2). Kram devoted considerable attention to the potentially developmental nature of peer relationships while maintaining a distinction between those relationships and mentorships. Since then, scholars have broadened the definition of a mentoring relationship to explicitly include peer mentorships as well as mentorships that occur between individuals who are not in the same organization (e.g., Eby, 1997; Ragins & Cotton, 1999).

Kram proposed that mentoring relationships develop through four phases, which include initiation, cultivation, separation, and redefinition. During the initiation phase, which lasts between six months and a year, the relationship is established and becomes increasingly important to both members of the dyad. Cultivation is conceptualized as an elongated period (two to five years) during which the relationship provides benefits to both individuals while feelings of closeness and meaningful interaction peak. The separation phase (six months to two years) is marked by a significant change in the relationship during which the protégé acts in an increasingly autonomous fashion, or the relationship begins to wane for other reasons such as the mentor not being able to provide further support, or separation due to organizational changes. During the redefinition phase, which may last for an indefinite period of time following separation, the mentor

and protégé may come to view one another as peers, although this may not occur if the dissolution of the relationship was particularly difficult or unpleasant.

Chao's (1997) recent empirical investigation supported this framework. Specifically, Chao analyzed data collected yearly for five years from 137 male and 41 female protégés. She found that the respondents' categorizations of their mentoring relationships into one of the four developmental phases and their reports of mentorship duration were consistent with Kram's (1985) conceptualizations described above. Relationship intensity also increased as the mentorships developed. Further, Kram's hypothesized relational markers of mentorships in different phases was supported by Pollock (1995), whose study of 356 managers revealed greater relationship intensity during the cultivation stage.

In addition to proposing phases of mentorship development, Kram identified two primary functions that mentors serve for their protégés: career and psychosocial support. Career support generally involves the mentor helping the protégé learn the ropes and facilitating the protégé's career advancement. In carrying out the career support function, mentors provide their protégés with sponsorship, exposure and visibility, coaching, protection, and challenging assignments. Psychosocial support generally involves the mentor helping the protégé achieve a sense of professional identity, competence, and effectiveness. To achieve these ends, mentor activities include serving as a role model while providing acceptance and confirmation, counseling, and friendship to protégés.

Studying organizational mentoring relationships is important for several reasons. First, research indicates that protégés have tangible benefits their non-mentored counterparts lack. For instance, protégés obtain more promotions and higher salaries

(Dreher & Ash, 1990; Fagenson, 1989; Scandura, 1992; Whitely, Dougherty, & Dreher, 1991), and better organizational socialization (Ostroff & Kozlowski, 1993) than those without a mentor. Further, protégés tend to have greater career satisfaction (Fagenson, 1989; Whitely, & Coetsier, 1993), career commitment (Colarelli & Bishop, 1990), and higher overall job satisfaction (Whitely & Coetsier, 1993). While research on the benefits accrued to mentors is relatively scarce, there is evidence that mentors tend to obtain better support networks, satisfaction from helping others grow and succeed, and access to relevant information that facilitates job performance (Allen, Poteet, & Burroughs, 1997). Research on the *anticipated* benefits of being a mentor reveals that individuals expect to gain improved job performance, a loyal base of support, recognition by others, and fulfillment of their generativity needs<sup>1</sup> (Ragins & Scandura, 1999).

In addition to these individual advantages, organizations also benefit when their employees are engaged in successful mentoring relationships. For instance, protégés' intentions to leave their organizations tend to be lower than for employees without mentors (Prevosto, 2001; Viator & Scandura, 1991), thus allowing the company to avoid the financial costs associated with employee turnover. Additionally, organizations such as Cisco Systems, Southwest Airlines, and General Electric have recognized the importance of mentoring and grooming individuals for positions of greater responsibility and challenge as key factors in retaining top talent (Stein, 2000).

Because businesses have recognized the benefits of informal mentoring relationships that spring up among their employees, many companies have attempted to

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<sup>1</sup> "Generativity" is a word coined by Erikson (Erikson, E. (1963). Childhood and Society. W.W. Norton: New York.). It refers to the need of older individuals to pass on knowledge and experience they have

replicate these advantages by implementing formal mentoring programs (Burke & McKeen, 1989; Geiger-DuMond & Boyle, 1995; Zey, 1985), with organizations including AT&T Bell Laboratories, Johnson & Johnson, and Bellcore adopting such programs over fifteen years ago (Zey, 1988) and no sign in sight of this trend abating. In fact, mentoring scholars have recommended the use of formal mentoring programs as a way to remedy the problem of the “glass ceiling” encountered by women and racial minorities (e.g., Noe, 1988a; Ragins, 1989). However, it is questionable whether formal mentor programs are as effective as informal mentoring relationships (e.g., Kram, 1985; Ragins & Cotton, 1999).

Given that formal mentoring programs may fail to replicate the results of informal mentoring relationships, and the fact that recent theoretical and empirical work indicates that not all mentoring relationships are positive experiences for the participants (e.g., Eby, McManus, Simon, & Russell, 2000; Feldman, 1999; Eby & McManus, in press; Ragins & Scandura, 1997; Scandura, 1998), determining what factors affect the quality of organizational mentoring relationships is important. Researchers have typically focused on the structure of the mentoring relationship (formal v. informal; e.g., Chao, Walz, & Gardner, 1992), the gender or race of the protégé or mentor (e.g., Baugh, Lankau, & Scandura, 1996; Cox & Nkomo, 1991; Kirchmeyer, 1998; Thomas, 1990), dyadic match between protégé and mentor with respect to demographic factors, typically gender and race (e.g., Feldman, Folks, & Turnley, 1999). Dyadic similarity on attitudinal variables such as values and beliefs has also been examined on occasion (e.g., Ensher & Murphy,

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acquired over their lifetimes to younger people, creating a sense of being connected to future generations and providing a sense of living on through others.

1997; Ensher, Grant-Vallone, & Marelich, 2002; Turban, Dougherty, & Lee, 2002), although data is typically based only on the protégé's perceptions of congruence rather than actual match based on data from both the members of the dyad (but see Allen & Eby, 2003 for an exception). The results of these investigations generally show no definitive pattern of results, which suggests that other factors may be at work. One such factor may involve individuals' implicit theories, or prototypes, regarding the mentor and protégé roles.

Based on Rosch's (1975; 1978) work on cognitive categorization processes, prototypes are defined as the abstract representations of common category member attributes that serve to increase the distinctiveness of the categories, i.e., they are cognitive representations that provide the clearest examples of category membership. Her theory suggests that stimuli are organized according to their prototypicality with respect to various categories (e.g., "whiskers" would be a highly prototypical stimulus for the category "feline", but not at all prototypical - one hopes - for the category "fruit"). In interpersonal relationships, cognitive prototypes individuals hold of socially constructed roles (e.g., leader) serve as standards or expectations for behavior (e.g., Lord, Foti, & Phillips, 1982; Lord & Maher, 1991). Since violations of standards or expectations may result in less positive evaluations of mentoring relationships (Young & Perrewé, 2000), it is important to understand what those standards are and how they function in contributing to relationship quality. While there is no cognitively oriented literature in the realm of mentoring research, theory and research on person perception, cognitive categorization, and the use of these constructs in leadership research can be directly applied to understanding mentoring relationships. Thus, the purpose of the present research is to

investigate the content of mentor and protégé role prototypes, and how prototype congruence between members of mentoring dyads is related to relationship quality. Prior research on mentor-protégé similarity has focused on surface level variables, and recently moved to somewhat deeper levels of similarity by examining perceived attitudinal similarity. The current research takes the issue of similarity to the cognitive level, examining not only the content of individuals' conceptualizations of the mentor and protégé roles, but how dyadic similarity with respect to those role conceptualizations is associated with relational consequences.

Implicit role theories should be important in determining mentoring relationship quality for several reasons. For instance, informal mentoring relationships often develop based on mutual attraction (e.g., Kram, 1985) and, unlike supervisory relationships, people in informal mentoring relationships cannot rely upon organizationally prescribed sets of behaviors or activities. Consequently, these individuals are left to their own devices for evaluating the other member of the dyad, estimating the fit between the two of them, and devising norms for their interactions. Cognitive prototypes of the mentor and protégé roles may inform these activities. Furthermore, formal mentoring relationships are based on the intervention of the organization and may be more circumscribed due to the frequent description of “formal mentor as glorified trainer” (e.g., Zey, 1985). However, the term “mentor” may activate individuals’ implicit theories regarding what a mentor is, as well as what the nature of a mentoring relationship is, and people’s implicit mentoring theories may differ substantially from the organization’s “mentor-as-trainer” model. The potential difference between individually and organizationally constructed meanings of mentoring roles may result in discordant

expectations for the mentor and protégé, and may influence the quality of the relationship.

Thus, the proposed research makes a theoretical contribution by integrating research on cognitive prototypes with that on mentoring relationships, resulting in the inclusion of heretofore unexamined variables that may be substantially related to the quality of organizational mentoring relationships. Additionally, one of the most serious deficits of the extant mentoring literature is the almost complete reliance on a single perspective, usually that of the protégé. A recent article by Feldman (1999) calls for dyadic mentoring research, and the proposed study answers this call by examining data obtained from both the mentor and protégé perspectives. Finally, the proposed research will overcome some of the conceptual, measurement, and research design issues that have plagued previous investigations of mentoring relationships (e.g., deficient measures, ambiguous definitions of mentoring, single source data).

Practically, the proposed research offers several potential benefits. By understanding what factors make up individuals' mentor and protégé role prototypes, organizations will be in a better position to select and train mentors for formal programs by including information regarding the general expectations people have of mentors. Additionally, protégés in such programs may benefit from a better understanding of what their mentors are likely to expect from them. While the proposed study will provide general pictures of prototypical mentors and protégés, it is important to recognize that individuals may have different implicit theories. Thus, the results of the present study can be used by organizations to frame and encourage overt, dyadic discussions of mutual expectations which should result in better quality mentoring relationships. Such

information will also help organizations match mentors and protégés on factors beyond race, gender, and area of work-related expertise.

In summary, the current research is designed to provide insight into both the content of mentor and protégé role prototypes, and how prototype congruence between members of the dyad is related to mentoring quality. Based on prior research and theory, this study is an integrative attempt to capture a more complex set of factors that may be related to the outcomes associated with mentoring relationships. The results of the present study may both clarify and extend current thinking about the antecedents and correlates of effective mentoring, thus providing an advanced point of departure for future efforts to understand individual career success.

## CHAPTER II: REVIEW OF THE LITERATURE

Several issues are discussed in order to place the present study in an appropriate context. First, a conceptual definition of mentoring is presented that guides the development of research hypotheses. Second, the importance of studying mentoring relationship quality is discussed, followed by a review of the literature on mentoring quality along with the limitations of this research. Finally, the purpose of the current study is explained, and the construct of cognitive prototypes is introduced and integrated with research on mentoring relationships to create specific hypotheses that will be tested.

### Conceptual Definition of Mentoring

Godfather, patron, sponsor, friend, mentor: each of these terms has been used by various scholars to identify individuals who provide developmental assistance to young adults as they learn to navigate the work place, become effective contributors to their organizations, and succeed in their careers (Levinson, Darrow, Levinson, Klein, & McKee, 1978; Dalton, Thompson, & Price, 1977; Kanter, 1977; Shapiro, Haseltine, & Rowe, 1978). These different conceptualizations of career-related developmental assistance resulted in a fragmented set of developmental functions provided to junior employees. It was not until the 1985 publication of Kathy Kram's book, Mentoring at Work, that a comprehensive set of mentoring functions was derived.

Kram's extensive qualitative work and review of the literature revealed two overarching functions that mentors provide to their protégés: career-oriented and psychosocial support. Career functions are linked together in that they provide support that enhances career advancement. These forms of support include: (1) *sponsorship*, the active

nomination of an individual for desirable promotions and/or lateral moves; (2) *exposure and visibility*, the assignment of responsibilities that allow an individual to gain access to key organizational figures who may subsequently judge his or her potential for future advancement; (3) *coaching*, the provision of specific suggestions of strategies designed to facilitate an individual's accomplishment of work objectives, achievement of recognition, and the attainment of career aspirations; (4) *protection*, the shielding of a junior individual from potentially damaging interactions with senior organizational members by taking the credit or blame in controversial situations and intervening when the junior individual is in danger of producing less than satisfactory results; and (5) *challenging assignments*, the designation of specific work, usually in a supervisory relationship, that allows the junior individual to gain critical skills and knowledge directly related to successful job-related task accomplishment.

Psychosocial functions are related to each other in that they provide support that facilitates the development of a sense of professional identity, competence, and effectiveness. Kram's taxonomy of psychosocial functions includes: (1) *role modeling*, the setting of a desirable example in terms of attitudes, values, and behaviors that the junior individual identifies with and attempts to emulate; (2) *acceptance and confirmation*, the reciprocal provision of support, encouragement, positive regard, and mutual respect between the mentor and protégé; (3) *counseling*, the mentor providing a sounding board for the protégé's self-exploration, personal concerns, and internal conflicts that may inhibit a positive sense of self in the professional setting; and (4) *friendship*, the social interaction between the mentor and protégé that results in mutual

liking, understanding, and enjoyable interchanges both within and outside the work context.

As a result of her taxonomy of mentoring functions, Kram defined a mentoring relationship generally as one that enhances both an individual's personal growth and career advancement. Such relationships may occur between younger or less experienced individuals (protégés) and older or more experienced individuals (mentors) who work in the same or different organizations and functional areas. Mentors may be direct supervisors, other hierarchical superiors, intra-organizational peers of the protégé, individuals at the same or higher levels than the protégé in cross-organizational relationships (cf. Eby, 1997; Ragins & Cotton, 1999). Others interested in mentoring relationships have suggested that “reverse mentoring” is a phenomenon worth examining (Coutu, 2000). This term is intended to describe a situation in which younger members of an organization provide mentoring to those with greater organizational tenure than themselves. However, such situations typically involve the mere teaching of skills, most often technical ones, which may constitute some sort of coaching behavior but does not capture the meaning of “mentoring” as it is currently understood.

In fact, an explicit distinction between the types of developmental assistance individuals may seek and classical mentoring has been made by recent mentoring scholars (Higgins & Kram, 2001). These authors propose that individuals seek different types of assistance from a variety of people, thus creating developmental networks. Using social network theory—with its focus on network diversity and relationship tie strength—as a guide, Higgins and Kram categorize developmental relationships from the developmental beneficiary's perspective as follows: *receptive*, characterized by low

network diversity and weak ties; *opportunistic*, indicated by high network diversity and weak ties; *entrepreneurial*, consisting of high diversity and strong ties; and *traditional*, marked by low diversity and strong ties.

The “traditional” quadrant of this 2 X 2 taxonomy represents established conceptualizations of mentoring relationships, in which a protégé has strong developmental relationships with only one or two mentors. The “entrepreneurial” category is similar to the traditional, except that individuals are involved in a relatively larger number of mentorships which are likely to be at different stages of development. Based on this work as well as a recent panel discussion of several scholars in the field (Allen, Dreher, Eby, Higgins, McManus, & Ragins, 2001), the most important factors that distinguish classical mentorships from other forms of developmental support are that the nature of mentorships is both broader, encompassing psychosocial and career support, and deeper, involving richer exchanges between the mentor and protégé. Thus, individuals in mentoring relationships are not mere acquaintances, and the nature of their exchanges goes far beyond other helpful activities, such as organizational citizenship behavior or formal training. Most empirical research on mentoring relationships has attempted to study classical mentoring rather than all types of developmental networks individuals may have; the current research adopts an operationalization of the mentoring construct that explicitly aims to do so as well.

### **Importance of Studying Mentoring Relationship Quality**

Mentoring researchers typically have focused on the career-related successes that co-vary with individuals having a mentor. For instance, several researchers have found

that protégés experience more promotions (Dreher & Ash, 1990; Scandura, 1992), perceive greater career mobility and opportunity (Scandura, 1992), and earn higher salaries (Chao, Walz, & Gardner, 1992; Dreher & Ash, 1990; Whitely, Dougherty, & Dreher, 1991) than individuals without a mentor. Further, mentored individuals also report better organizational socialization (Chao et al., 1992; Ostroff & Kozlowski, 1993), higher job satisfaction (Fagenson, 1989; Seibert, 1999), less role conflict and role ambiguity (Baugh, Lankau, & Scandura, 1996), and greater procedural justice (Scandura, 1997) than those who are not protégés.

In addition to comparing mentored and non-mentored individuals, researchers have found that the amount of developmental assistance received is related to conceptually defined outcomes of organizational interest. For instance, mentoring received by protégés has been positively related to promotion rates, compensation, work satisfaction, and career satisfaction (Koberg, Boss, Chappell, & Ringer, 1994; Johnson & Scandura, 1994; Scandura, 1992; Scandura, 1997; Whitely, Dougherty, & Dreher, 1991; Whitely & Coetsier, 1993), career commitment (Colarelli & Bishop, 1990), organizational commitment (Scandura, 1997), and reduced turnover intentions (Prevosto, 2001; Viator & Scandura, 1991). Because mentoring activities are correlated with factors that are beneficial to both individuals and organizations, companies have attempted to replicate these results by implementing formal mentoring programs (Geiger-DuMond & Boyle, 1995; Stein, 2000). However, formal mentoring relationships may not be as effective as informal relationships (Kram, 1985; Ragins & Cotton, 1999), and some mentorships result in negative experiences for the participants (Eby et al., 2000; Eby & McManus, in press; Feldman, 1999; Ragins & Scandura, 1997; Scandura, 1998).

Consequently, it is important to understand what factors are related to the quality of organizational mentoring relationships.

### **Review of Existing Research on Mentoring Relationship Quality**

Scholars attempting to understand correlates of mentorship quality have conducted empirical investigations of four broad classes of variables. These are: (1) the structural components of the relationship; (2) individual characteristics of protégés and mentors; (3) dyadic congruency with respect to individual level variables; and more recently (4) perceived similarity between the mentor and protégé. Research germane to each of these areas is described below.

#### **Relationship Structure**

One potentially important variable is whether the mentoring relationship developed spontaneously (informal) or was engineered through organizational intervention (formal). Formal mentoring programs have been widely used in order to retain top employees (Stein, 2000), and have been both suggested (e.g., Noe, 1988b; Ragins, 1989) and used (e.g., Herry, 1994; Kram & Hall, 1996) in an attempt to help women and minorities break through the “glass ceiling.” Despite the growing popularity of formal mentoring programs, surprisingly little research exists that examines how formal versus informal mentoring relationships compare with respect to mentoring functions received by protégés.

The first study to fully address this issue was conducted by Chao et al. (1992). Responses from 212 informal and 53 formal protégés revealed that those in informal mentorships reported receiving more career-related support from their mentors than those

engaged in formal mentorships, and that greater career support was related to higher protégé salaries. No differences were found for the level of psychosocial support received by protégés. Further, those in formal mentoring relationships were generally no better off than those who had no mentors at all. Ragins and Cotton (1999) also focused on the experiences of protégés, comparing the responses of 510 informal and 114 formal protégés on a 33-item measure of mentoring functions. Their results revealed that those in informal relationships reported receiving more psychosocial and career development support, expressed greater satisfaction with their mentoring relationship, and reported higher levels of compensation than those in formal relationships.

Fagenson-Eland, Marks, and Amendola (1997) compared 30 formal and 16 informal protégés, finding that their responses were statistically equivalent with respect to amounts of communication, career guidance, psychosocial support, and role modeling they received from their mentors. Fagenson-Eland et al. (1997) also provide the only glimpse into how mentors' experiences may vary according to the structure of the relationship. Comparisons between 24 formal and 13 informal mentors revealed that those in informal relationships reported more frequent communication with their protégés than formal mentors reported, but there were no significant differences with respect to the amount of career guidance, psychosocial support, or role modeling formal and informal mentors reported providing to their protégés. The sample size differences among these three studies may account for the disparity in finding statistically significant differences between individuals in formal versus informal mentorships. Although the evidence is sparse and studies vary in their operationalization of the mentoring construct, it appears that informal mentoring may result in higher quality relationships.

A second potentially important structural variable is whether mentors are also their protégés' supervisors. Investigating how supervisory status of mentors affected mentoring relationship quality, Burke and McKeen (1997) examined the mentoring experiences of 280 female university graduates who had been working for an average of almost four years in their organizations. Their findings indicated that more career mentoring was received when mentors were also the respondents' supervisors, the relationship was of a longer duration, and the organizations in which they worked supported such developmental relationships. Similarly, Ragins and Cotton (1999) found that supervisory mentors provided more career, but not psychosocial, support to their protégés. Finally, there is some research indicating that subordinates may come to view high-quality leader-member exchange relationships as being equivalent to mentoring relationships (e.g., Scandura & Schriesheim, 1994; Thibodeaux & Lowe, 1996).

These findings make sense in light of the fact that supervisors are in a position to enact many of the career support functions. To the extent that supervisors are responsible for assigning work to subordinates, supervisors have a direct impact on whether those assignments are challenging. Further, regular work-related interactions between the individuals may give mentor-supervisors greater opportunities to discern areas in which their protégé-subordinates should improve, thus setting the stage for coaching behaviors. Exposure and visibility as well as sponsorship both involve the mentor providing the protégé with access to the channels that facilitate upward mobility. This may be easier to accomplish when the mentor is a supervisor, knows the organizational hierarchy, and has credibility when sponsoring a protégé because of familiarity with his/her work. Finally, supervisory mentors' natural working relationships with subordinate-protégés increases

the likelihood that a subordinate's need for protection will be identified, thus making the provision of that function more likely.

### Protégé Characteristics

In addition to the nature of the structural components of mentoring relationships, scholars have investigated the role played by individual level variables in predicting relationship quality. Protégé gender has been studied widely with regard to the type and amount of mentoring functions received, largely because scholars have been interested in factors that may explain “glass ceiling” effects and the persistent wage gap between men and women. Since mentoring is generally related to positive career events such as higher salaries and promotions, the question arises as to whether women receive lower quality mentoring than men receive.

Although Noe (1988a) found that female protégés reported receiving more psychosocial support from their mentors than male protégés reported receiving, other researchers have not replicated that result. For instance, Fagenson (1992) investigated the role of the gender of 46 protégés (57% male) in determining the amount and number of mentoring functions received, finding that protégé gender was unrelated to the receipt of any mentoring functions (i.e., career, psychosocial, or role modeling). Similarly, in a study of 608 mentored individuals employed in accounting firms, the results of Scandura and Ragins's (1993) analyses revealed no gender differences in mentoring received as assessed by a 15-item measure of global career support, global psychosocial support, and role modeling. Other researchers have also found equivalence of mentoring received by male and female protégés (e.g., Dreher & Ash, 1990; Koberg, Boss, & Goodman, 1998; Turban & Dougherty, 1994). Taken together, these results suggest that protégé gender

does not affect the amount or number of mentoring functions protégés report having received, and that additional variables should be investigated to account for gender differences in organizational rank and compensation levels.

A second protégé characteristic which could affect mentoring quality is protégé race. In one of the few studies to have examined protégé race alone, Cox & Nkomo (1991) found that Black MBA graduates reported that they received significantly less mentoring assistance than White MBA graduates reported receiving. Additional research focused on possible main effects of protégé race is necessary before any firm conclusions can be drawn.

Protégé age is a third and rarely studied characteristic investigated to explain mentoring quality. Finkelstein, Allen, & Rhoton (2003) surveyed 88 professional non-faculty employees at a large southeaster university. They found that older protégés generally reported receiving less career support, engaging in shorter mentorships, experiencing more co-learning with their mentors, and were closer in the hierarchy to their mentors than younger protégés were.

In addition to basic demographic protégé characteristics, protégé personality variables rarely have been investigated in predicting mentoring quality. Specifically, Scandura and Ragins (1993) used the Spence Personal Attributes Questionnaire to assess psychological femininity, masculinity, and androgyny in a comparison of 192 mentored and non-mentored individuals. Their results revealed that mentored men and women who described themselves as androgynous reported receiving more career and psychosocial support than individuals who described themselves as having a masculine or feminine orientation.

Finally, protégé characteristics other than gender, race, or personality were studied by Whitely, Dougherty, and Dreher (1992) in a sample of 416 business school graduates who were in the early stages of their careers as managers or professionals. Whitely et al. (1992) found that more career-oriented mentoring was received when protégés were younger, more involved in their work, from higher socio-economic status (SES) backgrounds, managers rather than professionals, and higher in the organizational hierarchy. These researchers did not investigate psychosocial mentoring.

In summary, the current research on protégé characteristics related to the types and amount of mentoring functions received by protégés is fragmented. It appears that protégé gender in itself is not related to whether one receives global psychosocial or career support, while the few studies investigating role modeling also found no protégé gender differences. Similarly, protégé gender differences in the amount of mentoring support received were not apparent. Additional research involving race, personality, and other protégé characteristics is extremely sparse, allowing no firm conclusions to be drawn.

### Mentor Characteristics

Similar to the research on protégé characteristics, most research on mentor variables has focused on race and gender. However, in this case researchers have focused on what mentor characteristics are associated with tangible benefits for protégés rather than with the quality of the relationship. For instance, Dreher and Cox (1996) studied the relationship between mentoring experiences and compensation levels of 3,623 early-career individuals who had earned MBA degrees. Those individuals, regardless of their race or gender, who had White male mentors earned almost \$17,000 more per year in

compensation than those with mentors who were minority members or women. Protégés of mentors who were not White males did not earn significantly more in annual compensation than those individuals who did not have mentors.

Building on this work, Dreher and Chargois (1998) examined the mentoring experiences and outcomes of individuals who graduated from an historically black university business school, with about half of the 170 participants being graduates of the undergraduate curriculum and half having earned their MBAs. Those participants who had White male mentors attained salaries that were almost \$10,000 higher per year than those with no mentors at all. However, there were no statistically significant differences in compensation between individuals with White male mentors and other mentors (i.e., non-White male; female), nor were there any significant differences in compensation between individuals with non-White male mentors and those who had no mentor at all.

Similarly, Ragins and Cotton (1999) reported that protégés' history of mentoring relationships with male mentors was associated with greater salary levels (almost \$19,000 more) than protégés with a history of female mentors. This effect was stronger for male protégés than for female protégés. However, Ragins and Cotton found that protégés whose current mentor was male did not report receiving more career development functions than those protégés whose current mentor was female, so career mentoring does not seem to explain the salary gap.

Since most researchers investigating the role of mentor race and gender on salary level attainment by protégés have either not investigated the mentoring functions received by protégés, or have found no differences in mentoring functions provided by mentors, it appears that these findings can be explained by the fact that White males

make up a larger percentage of the upper echelons of management in many organizations (e.g., Ragins, 1997a). Their greater access to organizationally-relevant power bases likely puts White male mentors in a better position to affect the salaries and promotions of their protégés. While exerting this sort of influence on behalf of one's protégé is a relevant mentoring behavior, it is only one type of mentoring function that could be provided to protégés. Thus, while having a White male mentor may be associated with an individual making more money, it is no guarantee that the quality of the relationship will be characterized by effective personal and career development of the protégé, or that the mentor will find the relationship rewarding. Other mentor characteristics such as personality or work-orientation have not been investigated.

#### Dyadic Match on Individual Characteristics

The majority of research on dyadic match between mentors and protégés also has focused on gender and race. Mentoring theorists (e.g., Kram, 1985; Ragins, 1989; 1997a; 1997b) have argued that same-sex mentorships are more likely to occur than cross-sex mentorships because of potential problems associated with cross-sex relationships in the workplace. The possibility of sexual attraction, tension, and innuendo may discourage cross-sex mentorships. Further, such relationships may be subjected to more public scrutiny by others and may be more subject to peer resentment than same-sex mentoring dyads.

These potential complications could not only reduce the likelihood of cross-sex mentorships, but could also have a negative impact on their quality. For example, the amount of role modeling that occurs in such relationships could be diminished because sex-role stereotypes make different types of behavior acceptable in the work place for

men and women. Furthermore, Ragins and Cotton (1999) observed that three theoretical perspectives (i.e., Tajfel's (1978) social identity theory, Byrne's (1971) similarity-attraction paradigm, and Tsui & O'Reilly's (1989) relational demography perspective) predict that same-sex relationships should be characterized by greater perceived similarity, identification, and role-modeling.

As a result of these practical and theoretical issues, researchers have investigated the quality of same-sex versus cross-sex mentorships, as well as same-race and mixed-race relationships. For example, in a study of 387 protégés working at a large private general hospital, Koberg et al. (1998) examined the role of protégé-mentor match for gender and race in explaining the amount of psychosocial support that protégés received from their mentors. The majority of protégés reported having mentors who were the same sex (61%) and same race (74%). Using Noe's (1988b) 14-item measure of psychosocial functions, Koberg et al. (1998) found that greater psychosocial support was reported by protégés in same-sex and same-race dyads than by protégés in cross-sex or cross-race dyads. These researchers did not investigate career functions.

Extending previous research, Feldman et al. (1999) examined the relationship of mentor-protégé dyadic diversity with respect to gender, nationality, and age with the amounts of task, social, and career-oriented support received by 138 interns engaged in formal (assigned) mentoring relationships during six-month overseas assignments. Their results revealed that when mentors and protégés were of different genders, and when they were of different nationalities, protégés reported receiving less task, social, and career-oriented support. Age diversity within the mentoring relationship was not related to the reported receipt of mentoring support.

In another study examining dyadic match for both race and gender, Thomas (1990) surveyed 88 Black and 107 White managers in a public utility company. Respondents provided data regarding up to four of their developmental relationships (loosely defined as mentoring or sponsorship), resulting in an analysis of 454 relationships. Thomas developed a measure of career and psychosocial support received by protégés. While same-race relationships lasted longer than cross-race relationships, same-sex dyads did not remain intact as long as cross-sex dyads. With respect to mentoring functions received, protégés in same-race mentorships reported receiving more psychosocial support, but not career assistance, than those in cross-race relationships. An examination of dyadic congruency with respect to sex revealed that same-sex relationships yielded more psychosocial and career support than did cross-sex relationships. However, other scholars have revealed virtually no relationship between the gender composition of the mentoring dyad and the amount of career or psychosocial mentoring received by protégés (Noe, 1988b; Ragins & Cotton, 1999). It is possible that these mixed results are because the duration of the mentorship was often not included in analyses. To remedy this, Turban et al. (2002) conducted a study of 220 doctoral students and their academic mentors, finding no effects for racial similarity, but that gender dissimilarity was associated with less mentoring support received in early mentorships. In more mature mentorships, Turban et al. (2002) found that mentoring support received was actually higher for those in gender dissimilar relationships.

Investigating outcomes other than the amount of mentoring functions received by protégés, Ensher and Murphy (1997) studied the formal mentoring relationships of 104 summer interns. Mentors were assigned randomly to interns to create same-race or

mixed-race relationships, all of which were same-sex dyads. Their results indicated that mentors in same-race dyads reported liking their protégés more than mentors did in mixed-race dyads. Protégés in same-race dyads reported receiving more instrumental, but not psychosocial, support from their mentors. However, race pairings had no significant relationship with protégés' reports of relationship satisfaction or their estimation of the likelihood of continuing the relationship after the internship ended.

In sum, research on dyadic match with respect to mentor and protégé race and sex has produced mixed results, suggesting that other variables may be at work in determining the quality of mentoring relationships. Similar disjointed results for race and sex have emerged in dyadic and group level research on performance ratings, satisfaction, organizational attachment, and team turnover (see Harrison, Price, & Bell, 1998, for a brief review). It may be the case that relational demography is more useful for understanding interpersonal attraction and relationship initiation than the quality of ongoing relationships, at least in part because the early positive effects of demographic similarity on relationship quality dissipate over time (Harrison et al., 1998).

Harrison et al. refer to differences between people on basic demographic characteristics (age, sex, race) as surface-level diversity, while differences in values or attitudes are called deep-level diversity. Such deep-level diversity is thought to contribute to the quality of ongoing relationships, with less diversity producing better connections between people. As Byrne's (1971) work initially pointed out, the extent to which two individuals perceive themselves to have similar values and attitudes is even more important than the actual similarity of their values and attitudes in predicting the quality of their relationship. Accordingly, some researchers have moved beyond surface-

level diversity to examine perceived similarity in the context of mentoring relationships, and this work is reviewed below.

### Perceived Similarity

Mentoring scholars rather recently have begun investigating perceived similarity as a contributing factor to mentorship quality. Byrne's (1971) similarity-attraction paradigm posited that when individuals see more similarities between themselves and another, the attraction between the two people is strengthened which increases the likelihood of them forging a relationship. This is particularly true when individuals believe they are similar to each other in terms of their values, attitudes, and beliefs. As noted by Ragins (1997a; 1997b), such perceived similarity is likely to enhance interpersonal comfort and shared social identification, which should result in better relationship quality.

The first empirical work on perceived similarity in mentorships was conducted by Burke, McKeen, and McKenna (1993) who surveyed 94 mentors working in high-technology firms and found that mentors reported giving more mentoring support to protégés who were perceived as similar to themselves in terms of intelligence, approach to procedures, personality, background, ambition, education, and activities outside of work. Second, Ensher and Murphy's (1997) study of interns engaged in formal mentorships asked mentors and protégés to estimate how similar they were to each other using 2 items developed for use in leader-member exchange (LMX) research that involve problem-solving styles, and 3 global items of similarity. These authors reported that protégés' who perceived themselves as being more similar to their mentors also reported more liking, satisfaction, and contact with their mentors.

Building on this research, Ensher et al. (2002) investigated how 144 protégés' reports of both perceived attitudinal similarity (general outlook, values, problem-solving approach) and demographic similarity (race, sex) with their mentors were related to protégés' perceptions of mentoring support received and satisfaction with the mentoring relationship. Using Scandura and Katerberg's (1988) measure of mentoring functions (psychosocial, vocational, and role modeling) and a "satisfaction with mentor" measure developed for the study, Ensher, et al. (2002) found that demographic similarity was generally unrelated to the dependent variables. The exception was counter to expectations, in that protégés in cross-sex mentorships reported more psychosocial support than those in same-sex mentorships. On the other hand, protégés' perceived attitudinal similarity was positively related to protégés' reports of all four dependent measures (vocational support, psychosocial support, role modeling, and satisfaction with the mentor).

Turban et al. (2002) also studied how protégés' perceived attitudinal similarity to their mentors was related to mentoring support received. Turban et al. (2002) collected survey data from 220 graduate students in a variety of doctoral programs, asking them to report on their relationships with an academic mentor (who may or may not have been the students' formally assigned academic advisor). Mentoring support received was assessed by an amalgamation of prior mentoring measures to which Turban et al. added some new items they had developed themselves. They found that protégés' perceived similarity to their mentors was strongly and positively related to the mentoring support they said they received from their mentors. Further, and contrary to expectations, they found that this relationship was stronger for the receipt of challenging assignments

when the mentorship was in its earlier rather than later stages of development, i.e., mentorship duration was a moderator of this relationship for one aspect of mentoring received.

Some research from the protégé's perspective on difficulties in mentorships also has examined perceived similarities between protégés and mentors. Qualitative research conducted with 156 protégés found that dyadic conflict with respect to values, work-style, and personality were most frequently cited by protégés as reasons for their most negative mentoring experiences. However, protégés' perceptions of background similarity (e.g., education, experience) with their mentors did not differentiate between protégés who had positive versus negative mentoring experiences (Eby et al., 2000).

Finally, the only study that examined how perceived similarity was related to mentors' perceptions of relationship quality was conducted by Allen and Eby (2003). Their survey data were collected from 249 individuals working in accounting-related fields or engineering firms who were currently mentors or had been mentors in the past. Allen and Eby's work revealed that mentors who perceived their protégés as similar to themselves (as assessed by a single item referring to values, interests, and personality) also reported greater mentorship quality (as assessed by a five-item measure developed for their study) and more learning from the mentorship. These relationships were moderated by mentorship duration such that stronger associations between perceived similarity and both quality and learning were found in mentorships of shorter duration, which is congruent with Turban et al.'s (2002) findings. Further, Allen and Eby (2003) also investigated gender similarity, finding no association between it and mentors' assessments of either relationship quality or learning.

Studies that evaluated both demographic and perceived similarity found that perceived similarity was more important than demographic similarity in predicting assessments of relationship quality (Allen & Eby, 2003; Ensher et al., 2002; Turban et al., 2002). Despite the fact that the bulk of the extant literature on perceptions of mentor-protégé similarity is rather new and often operationally inconsistent, it suggests that perceived similarity may be an important variable for understanding mentoring relationship quality.

### **Problems Associated with Previous Research**

As is evident from the literature review, empirical research on mentoring quality has focused most commonly on two structural elements of the mentorship (formal vs. informal; supervisory vs. non-supervisory), individual demographic and personality characteristics, and dyadic match with respect to some mentor and protégé surface-level (race, sex) and deep-level (attitudes, values) characteristics. Although these studies help to provide insights into mentoring relationship quality, several issues make it difficult to draw definitive conclusions from the extant literature. These include the conceptual clarity of the mentoring construct, related measurement deficiencies, research design and analysis issues, a fairly narrow perspective on the factors related to mentoring relationship quality, and a limited theoretical base for hypothesis development.

### **Definition and Operationalization of the Mentoring Construct**

An issue that is common in mentoring research is the failure to distinguish between a mentor and a sponsor, or to provide a clear definition for respondents to use as a reference when answering survey questions (e.g., Dreher & Ash, 1990; Dreher & Cox,

1996; Fagenson, 1989; Ragins & Scandura, 1997; Scandura, 1992). Occasionally, researchers have completely omitted any specific use of the terms “mentor” or “mentoring.” For example, although the word “mentor” never appeared on their questionnaire, and rationale for this decision was not provided by the investigators, Burke and McKeen (1997, p. 46) told their research participants that they were interested in studying developmental relationships in which “an older, more experienced individual served as a coach, tutor, counselor and confidante to a younger, less experienced individual.” The researchers then asked respondents to “think of a senior individual who has/had served these functions for [you].” However, as Ragins (1999) noted, because the term “mentor” has currently reached a state of near ubiquity in the United States culture, respondents may be confused when no reference to mentoring appears on a questionnaire and may think the researchers are interested in some other type of developmental relationship (perhaps such as those outlined by Higgins & Kram, 2001).

Other researchers have expressly given instructions to participants that more than one mentoring relationship could be used as a point of reference when responding to survey items. For example, Dreher & Ash (1990) asked respondents to “consider your career history since graduating from our program and the degree to which influential managers have served as your sponsor or mentor (this need not be limited to one person)” (p. 541). Similarly, Whitely et al. (1991) asked individuals to respond to their measure based on career mentoring they had received over their entire career spans, making it impossible to discuss any specific relationship per se. The authors noted that they “likely tapped significant secondary (vs. primary) mentoring” (p. 338). While it is worthwhile to understand how cumulative mentoring received over time from different individuals is

related to individuals' career outcomes, this approach does not allow for the study of individual relationship quality.

A somewhat different problem arises in other situations where sponsored internships are labeled as mentoring relationships. Researchers have investigated formal mentoring programs involving student interns who work in their host organizations for only a short period of time (e.g., 8 weeks, Ensher & Murphy, 1997; 6 months, Feldman et al., 1999) which, according to theoretical and empirical evidence (e.g., Kram, 1985; Chao, 1997), is only sufficient to allow a mentoring relationship to begin. Because the functions served by mentors develop over the course of the relationship, results regarding support received by sponsored interns may not generalize to established mentorships. Generalizability is also of concern in situations where both members of the dyad know ahead of time that the relationship is likely to last only for a predetermined duration, and that the "mentors" are likely to be subject to formal evaluation by their organizations with respect to how well their interns felt they were assisted by the formal program.

The differing conceptualizations of what constitutes a mentoring relationship make it difficult to compare results across studies. A related issue is the lack of a uniform operationalization of the mentoring construct. Some studies investigated only psychosocial mentoring (e.g., Koberg et al., 1998) while others examined only career mentoring (e.g., Whitely et al., 1992). Most researchers have used measures of global psychosocial and/or career support that do not sufficiently tap the nine mentoring dimensions theorized by Kram (1985). More specifically, several researchers have used some variant of Noe's (1988b) mentoring scale, which purports to assess the two broad dimensions identified by Kram (1985), but omits the sponsorship function of career

support. Coaching is placed with the psychosocial rather than career support dimension, and the friendship function is omitted altogether.

Other investigators have favored a measure created by Scandura and Katerburg (1988) that collapses functions into the two broad categories of career development and social support, but creates a third dimension for role modeling rather than containing it as a function within psychosocial support. Additionally, some researchers have created their own idiosyncratic measures of mentoring. For instance, Burke and McKeen (1997) created an 11-item measure that included four “career development functions:” career planning; taught skills; sponsorship; and feedback. They also created an 8-item measure of “psychosocial functions” that essentially assessed the degree to which the respondent felt that s/he was cared for and supported by a mentor (e.g., “[my mentor] provided support and encouragement in stressful times,” Burke & McKeen, 1997: 46). Similarly, Dreher and Ash (1990), Thomas (1990), and Whitely et al. (1991) each created their own measures that are deficient with respect to the mentoring functions theorized by Kram (1985) and that lack convincing evidence of validity and reliability.

In sum, not only has there been an inconsistent definition of the mentoring construct by various researchers, investigators often have chosen to focus on only one type of mentor support (career or psychosocial). Further, measures of career and psychosocial mentoring have generally failed to fully capture the specific theoretical functions most frequently discussed in the literature, and even when previously developed scales were used, researchers frequently omitted items in order to shorten the length of their surveys. The lack of construct clarity and the use of deficient measures

cause difficulties in making meaningful comparisons across the studies available in the extant mentoring literature.

### Design and Analysis Issues

Another consistent problem with the current state of mentoring research is that it relies almost exclusively on the protégé's perspective, concentrating largely on benefits protégés report having received from their mentors. This prior research has been helpful in identifying advantages experienced by protégés, as well as highlighting organizationally desirable correlates (e.g., lower turnover rates among protégés). A few studies have focused on the mentor's point of view (e.g., Allen & Eby, 2003; Allen et al., 1997a; Allen, Poteet, Russell, & Dobbins, 1997; Allen, Poteet & Russell, 2000; Aryee, Chay & Chew, 1996; Burke et al. 1993; Eby & McManus, in press; Ragins & Cotton, 1993; Ragins & Scandura, 1994, 1999) dealing with questions ranging from why people choose to become mentors, what makes people more willing to make that choice, and both desirable and undesirable protégé characteristics. However, the relative fragmentation of this research results in much less being known about variables that may shape the mentor's experience in the relationship. Further, Feldman (1999) raises the question of whether a relationship can be classified as positive if only one of the members of the dyad views it that way. As he notes, since mentoring is by definition a relationship between two people, it is critical that both perspectives be included, particularly when the goal is to understand factors associated with mentoring quality.

Related to this issue is that much of the data for both independent and dependent variables that has been obtained and analyzed by mentoring researchers comes from a single source, most frequently from the protégé. The use of single-source data raises the

concern that statistically significant relationships could have been produced by common method variance (Campbell & Fiske, 1959), particularly when correlation-based analyses such as zero-order correlations and regression are used (Cohen & Cohen, 1983). While single-source data is often seen as a limitation of survey-based research (Podsakoff & Organ, 1986), the magnitude and effect of relying on such data remains unclear and varies considerably across contexts (e.g., Crampton & Wagner, 1994; Podsakoff, MacKenzie, Lee, & Podsakoff, 2003; Williams, Cote, & Buckley, 1989). Although reliance on single-source data may create a smaller problem when variables are potentially verifiable (Crampton & Wagner, 1994), such as salary and number of promotions, research investigating underlying mechanisms of relationship quality have depended on correlations between perceptual variables from the protégés' perspective (e.g., liking and mentoring received; Ensher & Murphy, 1997). Despite the existence of different techniques for addressing potential problems of multicollinearity due to common method variance, such as using composite factor scores, partialling out shared variance prior to analysis, standardizing variables, and multiple method factor approaches (Cohen & Cohen, 1983; Darlington, 1968; Podsakoff & Organ, 1986; Podsakoff et al., 2003), most mentoring researchers have not adequately addressed this issue.

Another research design problem stems from the fact that mentoring researchers seldom request sufficient information from respondents that would allow for the full specification of the mentoring relationship structure (e.g., formal vs. informal; supervisory vs. non-supervisory; internal vs. external; current vs. past relationship; mentor and protégé levels in their respective organizational hierarchies). As a result, potentially important moderators of mentoring quality have not been carefully examined.

In fact, most investigations of mentorship quality have examined only main effects for a relatively small number of structural, individual, or dyadic variables.

#### Narrow Perspective on Factors Related to Mentoring Quality

Mentoring quality generally has been restricted to the amount of global career and/or psychosocial support protégés report having received from their mentors. While some (e.g., Godshalk & Sosik, 2000) cite this focus as being consistent with Kram's (1985) original conceptualization, this perspective fails to capture potentially important pieces of information. For instance, the number of functions provided or received has been investigated only rarely (e.g., Ragins & Cotton, 1999). This is because the narrow conceptualization of relationship quality has led to many of the measurement problems discussed above which in turn limit investigators' ability to conduct more fine-grained analyses of mentoring. Other indicators of relationship quality have been examined infrequently, such as individuals' intentions to remain in the relationship (e.g., Ensher & Murphy, 1997), their level of satisfaction with the mentorship (e.g., Allen & Eby, 2003; Ragins & Cotton, 1999), and learning from the relationship (e.g., Allen & Eby, 2003; Lankau & Scandura, 2002). Further, Allen and Eby (2003) developed a five-item measure of mentorship quality, the first to assess this independently of mentoring functions provided, that includes questions about satisfaction, effectiveness, benefit, and high-quality of the relationship. Finally, perceptions of relationship quality from the mentors' perspective have been almost completely ignored (but see Allen & Eby, 2003 for an exception), resulting in a lopsided picture of relationship quality.

### Narrow Theoretical Base for Hypothesis Development

Although a great deal has been learned about organizational mentoring relationships over the past twenty odd years, mentoring scholars have lamented the generally atheoretical nature of much mentoring research (e.g., McManus & Russell, 1997; Ragins, 1999) and the lack of attention to underlying processes that contribute to relationship quality (Day & Allen, 2004). As is evident from the prior literature review, the majority of research regarding mentoring relationship quality has been based either explicitly or implicitly on extensions of Byrne's (1971) similarity-attraction paradigm, which holds at its core the idea that interpersonal similarity is positively related to interpersonal attraction. Relational demography (Tsui & O'Reilly, 1989) grew out of this perspective, suggesting that greater demographic characteristic dissimilarity within a dyad would result in lower quality relationships. Most researchers who examine dyadic differences in mentorships have focused on a relational demography approach, which may be better suited for studies of mentorship initiation since the effects of demographic differences on relationships may decrease the longer the individuals interact with each other (e.g., Harrison et al., 1998).

Byrne's (1971) research indicates that attitudinal similarity is particularly important in predicting interpersonal attraction. Since attitudes are changeable and can be clarified if misinterpreted, Byrne suggests that perceived dyadic attitudinal similarity can be manipulated; when it is increased, the result should be more satisfying and higher quality relationships. Demonstrating the obverse of this proposition, Harrison et al. (1998) found that attitudinal (or deep-level) differences exacerbated interpersonal problems over time. While some mentoring researchers have noted the need to move

beyond surface-level (race, sex) similarities between mentors and protégés in explaining mentoring quality (e.g., Whitely et al., 1991), it has only been very recently that such efforts have been carried out (e.g., Allen & Eby, 2003; Ensher et al., 2002; Turban, et al., 2002). Nevertheless, this extension remains based in Byrne (1971) while few other theoretical perspectives (e.g., role theory, social exchange theory, cognitive categorization theory) have been brought to bear on the task of understanding mentoring relationships in the workplace. In sum, these limitations suggest that the existing research on mentoring quality may be somewhat limited by the conceptual, measurement, research design, data analytic, and theoretical issues discussed.

### **Purpose of the Present Study**

The purpose of the present study is to extend the current understanding of mentoring relationship quality by examining it through a different theoretical lens. Specifically, the current investigation uses theory and research on role theory, leadership, and cognitive prototypes to develop specific hypotheses regarding factors that contribute to effective mentorships. Since no cognitively-oriented research has been conducted by mentoring scholars, three broad questions will be addressed in the proposed research: (1) What is the content of individuals' prototypes of mentor and protégé roles?; (2) What factors are related to role prototype congruence between members of intact mentoring dyads?; and (3) What are the relationships between role prototype congruence and indicators of mentoring relationship quality?

In addition to covering previously unexplored theoretical terrain in mentoring research, the current study attempts to overcome some of the limitations of previous

studies in several ways. First, the mentoring construct is defined and operationalized in a manner that is consistent with Kram's (1985) mentoring role theory. Second, the current research will use data representing both the mentor and protégé perspectives from individuals in intact mentoring dyads. This is important not only from a conceptual point of view, but also from a data analytic perspective. Finally, indicators of mentoring quality will be expanded beyond those used in the majority of prior research to include the amount and number of functions provided to and received by both mentors and protégés, as well as mutual satisfaction with the relationship, commitment to the relationship, and interpersonal trust within the relationship. The choice of these variables was inspired by work suggesting that team viability—the extent to which team members are satisfied with their team, participate, and intend to continue working with the team—is an important indicator of team effectiveness (Sundstrom, DeMuse, & Futrell, 1990). With the previously discussed conceptual, measurement, design, and data analytic issues taken into consideration, the basis for the theoretical extension of the current study is presented in the following section.

#### Overview and Integration Cognitive Prototypes

Rosch (1975; 1978) introduced the concept of cognitive prototypes within her theory of cognitive categorization. According to Rosch, prototypes are defined as the abstract representations of attributes belonging to members of a common category which serve to increase the distinctiveness of the categories, i.e., they are cognitive representations that provide the clearest examples of category membership. The creation of prototypes is possible because, according to Rosch's principle of family resemblance (Rosch & Mervis, 1975), there is some overlap of attributes between all the different

members of a category. While individuals also may have unique characteristics, those core attributes shared by category members provide enough consistent information to result in an abstracted prototype of the category. For instance, the “prototypical cat” is likely to possess attributes such as tail, paws, whiskers, fur, and pointy ears. These attributes overlap for most, but not all, members of the category (e.g., one breed of cat has no fur; another type has flat ears).

Since prototypes are made up of core category attributes that are most commonly shared by category members, there is a high probability that the occurrence of a core attribute will result in a particular category being accessed mentally. Rosch called this the principle of cue validity and it provides an explanation of how individuals make sense of new stimuli. For instance, the stimulus “meow” has high cue validity for “cat,” while “oink” has high cue validity for “pig.” However, “tail” could be a cue for any number of animals (or kites, for that matter) and thus has low cue validity (for a summary of Rosch’s theory, see Lakoff, 1987).

Rosch’s three principles of cue validity, family resemblance, and cognitive prototypes are strongly correlated with each other (Lord, Foti, & DeVader, 1984) and together they explain how individuals are able to cognitively categorize new stimuli. Through observation, experience, and culturally derived information, individuals are able to determine the core attributes based on family resemblance for a given category and then abstract a clear prototype of that category. When individuals encounter stimuli, those stimuli are evaluated according to their prototypicality with respect to various categories. The more overlap there is between stimulus attributes and attributes

contained with the prototype of a category, the more likely the stimulus will be evaluated as belonging to that category.

It should be noted, however, that this categorization is based on estimations of probable membership and may not be accurate. For instance, if one was told that a four-legged animal lacking fur was in a box, and then was asked to guess what that animal was, it is likely that some sort of reptile would be the guess, because “no fur” has high cue validity for reptile. As it turns out, the animal in the box is that rare fur-free cat, thus providing an example of how reliance on prototypes for categorizing new stimuli may result in inaccurate classification. Despite the fact that cognitive categorizations based on prototypes are not always correct, using prototypes to classify stimuli is advantageous because these automatic cognitive processes are more efficient than explicit analyses of new information (e.g., Lord et al., 1982; Mauer & Lord, 1991; Phillips & Lord, 1981).

While Rosch’s (1975; 1978) work on cognitive categorization processes focused on how individuals classify objects, other scholars have demonstrated that similar processes underlie person-perception (Cantor & Mischel, 1979; Fiske & Cox, 1979; Taylor, Fiske, Etcoff, & Ruderman, 1978). Researchers in the social sciences have investigated cognitive categorization processes in such domains as stereotypes and prejudice (Stangor & Schaller, 2000), knowledge of emotions (Shaver, Schwartz, Kirson, & O’Connor, 2001), and understanding of personality (Trope, Bassok, & Alon, 1984). Organizational scholars also have used cognitive categorization theory to better understand selection decisions (Perry, 1994), group performance (Martell & Guzzo, 1991), upward performance appraisals (Hauenstein & Alexander, 1991), and especially leadership (e.g., Engle & Lord, 1997; Gerstner & Day, 1994). Typically, researchers

attempt to understand what attributes are likely to lead to classification of a person into a relevant social category (e.g., “new employee;” “leader”), and how cognitive representations of the social category affect the way individuals interact with each other.

It is important to understand that cognitive prototypes work in two ways, one in which stimulus attributes are evaluated in order to determine category membership, and the other in which a stimulus’s category membership informs an individual’s attribution of category characteristics. To use leadership as an example, researchers have attempted to identify the core attributes of leadership prototypes (e.g., Lord, DeVader, & Alliger, 1986; Lord et al., 1984). Further, scholars have investigated factors that assist individuals in the process of comparing attributes of an individual to their cognitive representation of what a leader is, and then determining whether the target person fits that category. Increasing the prototypicality of specific attributes increases their cue validity, thus increasing the probability that the target person will be assigned to the leader category (e.g., Lord et al., 1982). Further, increasing the number of prototypical attributes also makes it more likely that a person will be assigned to the category of leader (e.g., Fraser & Lord, 1988).

In addition to studying what factors contribute to category classification, cognitive researchers also have examined the process by which cognitive prototypes influence the perception of a stimulus person’s category-relevant attributes. In fact, it was this process that initially spurred intense interest among leadership scholars in cognitive prototypes. Specifically, early research by Eden and Leviatan (1975) demonstrated that the four leadership factors from the Survey of Organizations could be

reproduced solely on the basis of individuals' implicit leadership theories,<sup>2</sup> i.e., the theoretical factor structure was replicated in the complete absence of information regarding supervisory behavior. Further, the obtained factor structures were not due to work experience or degree of management education. Similarly, Rush, Thomas, and Lord (1977) demonstrated that the factor structure of LBDQ XII data obtained from undergraduates under conditions of limited information was moderately to highly congruent with the factor structure obtained from field data. Variance in respondent familiarity with the leader did not account for the results.

These two seminal studies indicated that respondents were not actually rating leaders' behavior, but were basing their assessments of individuals on their cognitive representations of "leader" in the abstract, thus calling into question the validity of leadership measures. Subsequent research supported and extended the results of these investigations (e.g., Rush, Phillips, & Lord, 1981; Rush & Russell, 1988) and researchers determined that these effects most likely occur through a probabilistic reconstruction process in which individuals rely on their prototypes to decide to what degree an individual did or did not exhibit a particular behavior (i.e., intrusion bias; Rush et al., 1981; Larson, 1982; Larson, Lingle, & Scerbo, 1984). Probabilistic reconstruction is possible because prototypes contain attributes that are expected to co-vary. Thus, when a stimulus is presented that is high on one core attribute and the perceiver is not sure whether the stimulus was also high on another core attribute, a reasonable assumption is that both attributes were present.

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<sup>2</sup> Consistent with current thinking in the field (e.g., Engle & Lord, 1997), the terms "leadership prototypes" and "implicit leadership theories" are used synonymously.

Because core attributes of category members co-vary, individuals are likely to have certain expectations of individuals who have been identified as belonging to a particular category such as leader. According to Lord et al. (1982: 118), “In addition to providing a cognitively economical means of processing information, [cognitive] categorization may fulfill other functions. Assuming that the content of some categories...is widely shared, it may also provide a standard for appropriate behavior.” Certain category assignments imply certain functional relationships within social contexts. For instance, if person A assigns person B to the category of leader, the relationship between the two individuals is defined in a general functional manner, i.e., one leads and the other follows. Consequently, the category assignment itself serves as a cue for individuals to “access information about the functions that a stimulus person is likely to fulfill” (Lord et al., 1982: 105), forming the basis of interpersonal expectations (see also Lord & Maher, 1991).

According to Lord and Maher (1991), individuals use implicit theories both as a basis for interpreting the behavior of others and as a foundation for generating their own behavior. In social contexts, this not only simplifies cognitive information processing demands but also increases the stability and predictability of dyadic relationships. The use of implicit role theories should be particularly important when roles are not defined organizationally, which is the case with informal mentoring relationships, or are defined poorly, which is often the case with formal mentoring programs. Indeed, Kram (1985: 4) noted in her seminal qualitative work that in the course of her research “...it became apparent that the word *mentor* had a variety of connotations...” (italics in original) which complicated discussions of mentoring relationships. This implies that individuals had

their own cognitive mentoring role prototypes, which may have been used as the basis for interpreting their mentors' behavior, generating their own actions, and assessing the degree to which their expectations were met.

Only one study to date has attempted to investigate how role expectations are related to mentoring relationship quality. Young and Perrewé (2000) collected data from two separate samples, the first of which consisted of 215 doctoral students and assistant professors who were currently or recently in the dissertation process, where students were assumed to be protégés and provided the data for the study. The second sample consisted of 108 associate and full professors who had recently chaired a doctoral dissertation, where professors were assumed to be mentors and provided data for this part of the study. Results of their analyses revealed that protégés reported that their expectations for the relationship were met when they perceived their mentors as providing a greater amount of psychosocial, but not career, support. In the sample of mentors, the opposite was found: mentors reported that their expectations for the relationship were met when they perceived protégés as exhibiting more career, but not psychosocial, support.

Young and Perrewé conclude that "...this evidence makes clear that mentors value career-related behaviors exhibited by protégés and protégés, on the other hand, value social support behaviors exhibited by mentors," (p. 625) and then go on to attempt to explain the difference in perspectives. However, it is not clear from the methods used in this research that mentoring relationships were studied consistently. It appears that chairing a dissertation project was assumed to be equivalent to being a mentor, and that writing a dissertation was equivalent to being a protégé. However, just as a supervisor-subordinate relationship in a business organization may or may not evolve into a

mentoring relationship, a professor-student relationship may or may not become a mentorship. Even if some of the relationships reported on by respondents were mentorships, it appears that respondents may have been limited to reporting on those relationships during the dissertation writing process rather than on the relationships in their entirety. This would both explain the results and limit their generalizability. This research seems not to have demonstrated what people find important in a mentoring relationship as a whole, but what people find important during a specific task-accomplishment phase of a supervisory relationship.

Given these caveats, Young and Perrewe attempted to address an important issue: how role expectations are related to mentorship quality. As noted previously, one way to approach this issue more thoroughly is to examine people's cognitive prototypes about mentoring roles. Although cognitive prototypes generally have received a great deal of attention in the leadership literature, no research on mentor or protégé role prototypes currently exists. The present study builds a bridge between these literatures. Ultimately, the goal of the current research is examine how prototype congruence within mentoring dyads is related to the quality of mentoring relationships. In order to achieve that goal, factors that might be related to prototype congruence are examined after first addressing issues involved in the anticipated content of mentor and protégé roles. Specific hypotheses are developed in the following sections.

#### Content of Protégé Role Prototypes

Although research specifically concerning the role of individuals' actual and potential performance in attracting a mentor has been somewhat sparse, there is reason to believe that attributes indicative of performance or potential will be salient in

conceptualizations of the prototypical protégé. Kram's (1985) qualitative work indicates that senior managers are most interested in serving as a mentor to individuals who demonstrate potential for advancement. Further, Allen et al. (1997) conducted in-depth interviews with 27 mentors in order to better understand reasons that individuals choose to facilitate the development of others. One of the four general factors that was important to individuals when they considered serving as a mentor to another person involved the characteristics of the potential protégé (the other three were organizational factors, personal reasons for being a mentor, and outcomes associated with being a mentor). Allen et al.'s results demonstrated that, within the general factor of potential-protégé characteristics, three of the six over-arching reasons were performance-related: (1) the protégé exhibited behaviors indicative of high motivation; (2) the protégé was perceived as competent; and (3) the protégé exhibited a willingness to learn. Thus, according to qualitative research, protégé performance/potential is one of the important qualifications mentors look for in an individual prior to engaging in a mentoring relationship.

Three quantitative studies also have highlighted the role of individual performance in increasing one's attractiveness as a protégé to a potential mentor. First, Olian, Carroll, and Giannantonio (1993) conducted an experiment with 136 managers in the banking industry who took the role of a potential mentor to a hypothetical "paper protégé" who was characterized as a recently promoted subordinate. Their results revealed that managers were more willing to provide both career and psychosocial support to subordinates with higher levels of performance. Additionally, the managers anticipated greater personal benefits from mentoring relationships with better performing subordinates.

Second, Green and Bauer (1995) examined mentoring relationships between advisors and 233 doctoral students in the “hard sciences” (e.g., physics, chemistry, engineering) using longitudinal data collected over two years. Data collection began when students entered their doctoral programs. Using student potential (comprising GRE verbal and quantitative scores, first semester GPA, and prior research experience) measured at time one as an independent variable, Green and Bauer (1995) found that students with higher potential received more psychosocial and career mentoring, as well as research collaboration opportunities from their advisors. Third, Allen et al. (2000) surveyed 282 mentors and found that mentors were more likely to choose a protégé based on perceptions of the protégé’s ability or potential rather than on their perceptions of the protégé’s need for help. These results are in line with prior conjectures that early success, high performance, and visibility increase an individual’s chances of being selected as a protégé by a senior or more experienced individual (Dreher and Ash, 1990; Zey, 1984).

Research using protégé personality characteristics to predict whether individuals have obtained a mentor also supports this thesis. For instance, Fagenson (1992) compared personality characteristics of 46 protégés and 54 non-protégés (59% male overall), finding that individuals who had mentors were more likely to report higher needs for power and achievement, but not autonomy or affiliation, than non-protégés. No gender differences were found for these variables.

Scandura and Ragins (1993) used the Spence Personal Attributes Questionnaire to assess psychological femininity, masculinity, and androgyny in a comparison of 192 mentored and non-mentored individuals. Their results revealed that those who reported

having either masculine or androgynous orientations were more likely to have a mentor than those who reported that their orientations were feminine or undifferentiated. Other studies have found that an internal locus of control, need for achievement, self-monitoring, emotional stability, and extraversion were related to individuals obtaining a mentor (Aryee, Lo, and Kang, 1999; Burke, 1984; Tepper, 1995; Turban & Dougherty, 1994). Taken together, it appears that those individuals who described themselves as possessing characteristics that may signal future success also reported having established mentoring relationships.

The two qualitative and three quantitative studies described above, along with research on protégé personality characteristics, highlight the importance of actual or anticipated individual performance in attracting a mentor. This makes good sense given the nature of functions provided by mentors to their protégés, particularly those related to career support. Career functions include sponsorship, exposure-and-visibility, coaching, protection, and challenging assignments. It is counter-intuitive that a mentor would give challenging assignments to an individual without the expectation that s/he can succeed, nor does it make sense to sponsor an individual or provide exposure and visibility if there is not an expectation on the mentor's part that others will view the protégé's performance positively. Similarly, it is more risky to offer protection to someone who is likely to be in relatively more need of that function, i.e., someone who often makes mistakes in his or her work or causes problems.

Finally, researchers investigating the costs of serving as a mentor further demonstrate the importance of protégé performance. For instance, scholars have noted that a protégé who does not perform well can reflect negatively on the mentor's judgment

and competency as perceived by others (Kram, 1985; Ragins, 1997b; Ragins & Scandura, 1999). Along the same lines, Eby and McManus (in press) reported that protégé performance below expectations was one of the factors most often cited by mentors as a primary reason for the deterioration of their relationship, representing 34% all negative experiences reported (N=31 out of 91). Taken together, this research suggests that:

H1: Attributes indicating (a) effective protégé performance and (b) positive protégé potential will emerge as part of the protégé role prototype.

Research regarding other characteristics that individuals might see as prototypical of a desirable protégé is less cohesive. For instance, Allen et al. (1997) found three dimensions not directly related to protégé performance that nevertheless influenced individuals' decisions about whether to serve as a mentor to a particular person. Those three dimensions were: (1) the protégé was viewed as a reflection of the mentor; (2) the protégé possessed personality characteristics important to the mentor; and (3) the mentor felt that s/he could help the protégé. Clearly, the specific attributes within these dimensions are likely to vary across individuals. Further, the relative lack of systematic research on other desirable protégé characteristics prohibits the formation of additional specific hypotheses regarding the content of protégé role prototypes.

#### Content of Mentor Role Prototypes

Mentoring theorists have argued that individuals seek as their mentors people who have at least some power within their organizations (Kram, 1985; Ragins, 1989; Ragins, 1997a; Ragins, 1997b). By aligning with a powerful organizational player, protégés can obtain more positional power (Fagenson, 1988) and enjoy the benefits of reflected power from their mentors (Kram, 1985). Further, individuals with greater influence are in a

better position to exhibit some of the career development functions theorized by Kram (1985), such providing a protégé with challenging assignments, sponsoring the individual for desirable lateral or hierarchical moves, protecting the protégé from potentially harmful exposure during difficult times, and providing exposure and visibility for the protégé's successes. In the only specific investigation of the attributes related to protégés' attraction to mentors, Olian, Carroll, Giannantonio, and Feren (1988) conducted a set of three experiments involving supervisor/subordinate scenarios with a total of 675 undergraduate research participants. Their results revealed that the potential mentor's centrality to decision-makers—an indicator of power within the organization—was important in attracting potential protégés. Thus, it is proposed that:

H2: (a) Characteristics indicative of power will emerge as part of the mentor role prototype.

Furthermore, Olian et al. (1988) found that centrality to decision-makers was particularly important when the potential mentor's interpersonal skills were moderately competent. Research participants were most attracted to potential mentors who had high levels of interpersonal skills (e.g., established rapport, resolved conflict, reacted well to stress), with female research participants being more sensitive to this issue. Relatedly, Eby et al. (2000) found that interpersonal incompetence captured 13% (N=22) of the 168 behaviors that protégés reported as being characteristic of their most negative mentoring experiences. These results, taken in conjunction with the psychosocial support functions theorized by Kram (1985) that require effective interpersonal skills (e.g., friendship, counseling, and acceptance and confirmation), suggest that:

H2: (b) Characteristics indicative of effective interpersonal skills will emerge as part of the mentor role prototype.

Finally, it is possible that the mentor role is male-typed. Citing prior careers research (e.g., Kanter, 1977; McGregor, 1967; Putnam & Heinen, 1976; Schein, 1973; 1975), Ragins (1989) suggests that there is a “male managerial model” which promotes the perception of successful managers as possessing masculine characteristics. Empirical research supports the idea that male-typed characteristics more closely resemble the “prototypical successful manager” than female-typed characteristics do (e.g., Brenner, Tomkiewicz, & Schein, 1989; Heilman, Block, Martell, & Simon, 1989; Powell, Butterfield, & Parent, 2002), despite the fact that women held almost half of the managerial positions in the United States by 2001 (US Department of Labor, Bureau of Labor Statistics, 2002). Although progress has been made over the years, women still occupied few positions within the top ranks of management (Catalyst, 2002). The persistence of the male managerial model may be part of the reason for the continued presence of the glass ceiling.

Women who try to behave in ways that are more consistent with the male managerial model may, however, find that other problems emerge. For instance, research examining the prototypes that individuals have of leaders and how those prototypes were related to women’s effectiveness. When they attempted to demonstrate leadership behaviors revealed that women may find themselves in a double bind (Forsyth, Heiney, & Wright, 1997). Specifically, Forsyth et al. (1997) found that individuals who held more masculine prototypes of leaders rated female leaders as being less effective when they exhibited a relationship-oriented style (stereotype congruent behavior), but also

rated female leaders more negatively in terms of collegiality when they exhibited a task-oriented leadership style (stereotype incongruent behavior).

In other cases, the male managerial model may work against women for reasons other than their work-related behavior. For instance, a recent study by Eby, Allen, and Noble (2000) found that research participants' cognitive prototypes of the "ideal employee" for job-related relocation most closely resembled individuals in a conventional family structure (i.e., male bread-winner with a stay-at-home wife and children). To the extent that opportunities for relocation are offered to individuals based on such an "ideal employee" prototype, the "male managerial model" affects which employees have a better chance at organizational success because acceptance of job-related relocation opportunities predicts promotion rates, salary levels, and other positive career outcomes (e.g., Feldman, 1988; Veiga, 1983).

These factors serve to increase the likelihood of male-typed mentor roles in three ways. First, since desirable mentors are those who have been successful and have access to organizational power structures, the "male managerial model" that has led to men dominating the upper echelons of organizations may also result in the "male mentor model." There is some evidence that White male mentors do in fact benefit their protégés more than other mentors, at least when it comes to financial considerations (e.g., Dreher & Cox, 1996; Dreher & Chargois, 1998; Ragins & Cotton, 1999). This suggests that male mentors may have enough power to secure, or at least influence, greater financial success for their protégés.

Second, perhaps because of the difficulty women sometimes encounter when they attempt to display behaviors that lead to career success for men, women have reported

that they feel less qualified to mentor others (Ragins & Cotton, 1993). Although women were as likely as men to report being willing to mentor others when organizational rank was held constant, women tended to have lower ranks than men, and rank was positively associated with willingness to mentor others. Further, women were less willing than men to risk a negative reflection on themselves from their protégés' possible failures, and women were more likely than men to say that they lacked sufficient time to mentor others. Finally, men were more likely than women to have indicated that they were currently a mentor to someone else.

All of these factors are related to the third point, that the pool of potential female mentors is simply smaller than the pool of potential male mentors (e.g., Ragins & Cotton, 1993). Consequently, both men and women were more likely to have had a male rather than a female mentor, which would inform their cognitive representations of what a mentor is. Ragins and Cotton (1993, p. 106) specifically called for research that investigates "whether mentor roles are associated more with male than female sex role stereotypes." In response to their call, and based on theory and research discussed previously, it is hypothesized that:

H3: (a) In general, mentor prototypicality ratings will be higher for male-typed than for female-typed attributes.

H3: (b) Individuals whose prior experiences as protégés are dominated by a history of male mentors will have higher mentor prototypicality ratings for male-typed characteristics than those individuals whose prior experiences as protégés are dominated by a history of female mentors.

#### Proposed Antecedents of Dyadic Congruence for Mentor and Protégé Prototypes

Having proposed several hypotheses concerning prototype content, several possible antecedents of congruence between mentors' and protégés' prototypes of their

own and their partners' roles are discussed next. These proposed antecedents include prior mentoring experience, demographic similarity, dyadic duration, and relationship structure. First, prior mentoring experience that individuals bring to their relationships also is likely to affect the degree to which their cognitive prototypes of the mentor and protégé roles are similar. Research regarding individuals' willingness to mentor others indicates that prior mentoring experience is related to perceptions of the mentor role. Allen et al. (1997b) studied 607 first-line supervisors in state government, finding that those who had any prior mentoring experience perceived fewer barriers to mentoring others. This was particularly true for those who had many mentors in their past. Supporting and extending these results, Ragins and Scandura (1999) studied perceptions of mentoring held by 275 high-ranking executives. Individuals who had experience in both the mentor and protégé roles anticipated fewer costs and greater benefits of mentoring others than did individuals who lacked any type of prior mentoring experience. However, individuals with experience only as protégés were significantly more likely than those with experience only as mentors to report that mentors benefit from the allegiance and loyalty of the protégé, suggesting that protégé-only experience may result in a more idyllic view of the mentor role. As the authors stated "These findings suggest that individuals without mentoring experiences lack a 'realistic preview' of the relationship..." (Ragins & Scandura, 1999: 505).

While this research suggests that individuals with varying levels of prior mentoring experience may view the mentor role differently, similar research concerning the protégé role is sorely lacking. Nevertheless, applying the realistic preview concept suggests that mentoring experience levels also should be related to how individuals

perceive the protégé role. Research in other areas of organizational behavior has indicated more specifically how prior domain experience is related to knowledge structures.

For instance, in the literature on work teams, Rentsch, Heffner, & Duffy (1994) found that more experience in teams was related to the type of mental models individuals held about core teamwork knowledge (i.e., knowledge beyond that specific to the tasks). Experience was assessed with a seven-item measure developed by the first author. Rentsch et al. (1994) cite a prior study (Rentsch, 1993) in which this measure of experience was significantly correlated with participants' reports of their current team's duration and with the longest amount of time they had spent working on any team. Rentsch et al. (1994) reported that anecdotal evidence from their sample indicated that those who scored higher on the team experience measure also had been part of a greater number of teams in the past and had spent more time observing or training other teams than did those individuals who scored lower on the team experience measure. The results specifically demonstrated that those individuals who had greater team experience tended to have cognitive schemata of teamwork that were more abstract, more concise, and more consistent across methodologies (multi-dimensional scaling and freehand perceptual maps) than those individuals with less team experience. In other words, individuals' perceptions of teamwork differed structurally when they possessed differing amounts of teamwork experience. Furthermore, Rentsch and Klimoski's (2001) study of 315 team members working in 41 teams revealed greater teamwork schema agreement when teams had a higher percentage of members with more teamwork experience.

These results are in line with theory and research on cognitive prototypes which hold that prior experience with category members is critical to prototype development because it increases an individual's level of expertise about the category (e.g., Rosch, 1978; Foti & Luch, 1992). Having greater prior mentoring experience over time across relationships should lead to cognitive representations of the mentoring roles that are better defined and developed (cf. Rentsch et al., 1994), allowing individuals to more specifically identify distinguishing characteristics of category members and making it easier to subsequently identify prototypical attributes. Contrarily, individuals lacking prior experience in mentoring relationships may draw on knowledge acquired through second-hand methods (e.g., through culturally derived information; through observation of other people's experiences) and thus have more idiosyncratic and less well-defined role prototypes. Such prototypes are more like moving targets in their nature, thus making it less likely that two inexperienced individuals currently in a mentoring relationship would have the same idiosyncratic perception of the mentor and protégé roles. Further, individuals with limited mentoring experience (e.g., having had only one mentor) may choose a specific person to serve as a "mentor exemplar" thus resulting in more idiosyncratic conceptualizations of the mentor and protégé roles. Taken together, this research and theory suggests that:

H4: In intact mentoring dyads, greater congruence for (a) mentor and (b) protégé role prototypes will be observed when both members of the dyad have had substantial prior experience in mentoring relationships than when both members of the dyad have had little to no prior experience in mentoring relationships.

In addition to the dyad members' prior mentoring experiences, mentor-protégé similarity may also affect the degree to which their cognitive prototypes are congruent.

Demographic characteristic similarity between the mentor and protégé has been studied most frequently. As reviewed previously, mentoring researchers have reached different conclusions, with some finding that demographic similarity seems to benefit mentoring relationships (Feldman et al., 1999; Koberg et al., 1998), some finding no effect (Noe, 1988b; Ragins & Cotton, 1999), and others reporting mixed results (Ensher & Murphy, 1997; Thomas, 1990).

Leadership scholars have found similarly inconclusive results. For instance, Turban and Jones (1988) examined the relationship quality between 155 subordinates and 25 supervisors employed at a rehabilitation center in the southwestern United States. Their results revealed that demographic similarity with respect to race, educational level, department tenure, and age was positively related to subordinate job performance as assessed by supervisors using a single-item measure indicating the degree to which subordinates met their expectations for someone in their particular job. From the subordinate perspective, satisfaction was higher for different-race supervisors than for same-race supervisors. A later study by Liden, Wayne, & Stilwell (1993) surveyed 166 subordinates and their direct supervisors who worked in non-academic positions at two large universities. They found that demographic similarity in terms of gender, race, educational level, and age was not related to either supervisors' or subordinates' assessments of their relationship quality.

Although prior research in both mentoring and leadership domains is largely equivocal and makes for a tenuous point of departure, there is rationale from the teams literature that demographic similarity may be positively related to individuals' cognitive structures of team work. For instance, Rentsch and Hall (1994) argued that

demographically similar individuals are likely to communicate more frequently than demographically dissimilar individuals. In the team context, this increased communication should facilitate the development of similar schema between teammates about teamwork itself. Further, they argue that demographically similar individuals also are more likely to have experienced similar life events that affect the way they perceive their environments. Events or circumstances that result in people sharing a common perspective, even if it is not about the construct of interest, are purported to positively influence agreement on perceptions in other areas.

In an empirical examination of this idea, Rentsch & Klimoski (2001) used multidimensional scaling techniques to assess the team member agreement on mental schema for teamwork. Demographic variables included team members' age, education level, organizational level, and gender. Results revealed that neither age nor gender were significantly related to team member schema agreement, but that educational and organizational level similarities were positively related to team member schema agreement. It may be the case that demographic similarity also is positively related to cognitive prototype agreement with respect to the mentor and protégé roles. It may be the case that demographic similarity operates through cognitive prototype agreement with respect to the mentor and protégé roles to produces the occasionally observed relationship with mentorship quality reviewed above. While the relationship between prototype agreement and relationship quality is addressed later in this paper, it is currently proposed that:

H5: In intact mentoring dyads, dyadic congruency with respect to demographic variables (race, gender, and educational level) will be positively related to dyadic congruency for the (a) mentor and (b) protégé role prototypes.

A third variable that may affect the degree to which mentors and protégés share mentoring role prototypes is the dyadic duration of the relationship. Role theory and leader-member exchange (LMX) theory both emphasize the need for extended periods of interactions for roles to develop sufficiently. Katz and Kahn (1978) posited that individuals establish and modify their expectations and behavior with regard to their own and others' organizational roles through an iterative process of role sending, receiving, feedback, and modification. Over time, this process can help clarify the roles people take on and bring their behavior in line with role expectations.

LMX theory is also rooted in role theory. Graen and his colleagues (e.g., Dansereau, Graen, & Haga, 1975; Graen & Scandura, 1987; Graen & Uhl-Bien, 1995; Scandura, Graen, & Novak, 1986) have asserted a model of role taking, role making, and role routinization that occurs over time as a supervisor and subordinate interact. In successful relationships, the dyad members define the nature of their relationship through the development of mutually reinforcing interlocked behavior cycles. Eventually, each member of the dyad understands their own and the other's roles well enough that mutual expectations are more frequently met and the relationship is characterized by "...trust, respect, loyalty, liking, intimacy, support, openness, and honesty..." (Graen & Scandura, p. 184).

While these two theoretical perspectives have some important differences, both focus on the longitudinal development of organizationally relevant roles. In each case, successful social interactions require sufficient time for feedback loops to operate. These processes serve to clarify and reinforce mutual expectations and role conceptualizations.

Empirical research relevant to this point was conducted by Mossholder, Niebuhr, and Norris (1990), who collected data from 116 technical employees (subordinates) in an engineering division of a medium-sized industrial company. The subordinates had been working with their current supervisor for at least two months. Subordinates rated leader behavior (initiating structure and consideration; LBDQ), satisfaction with work, satisfaction with supervisor, and dyadic duration in months, while supervisors rated the performance of their subordinates. The results of Mossholder et al.'s (1990) analyses demonstrated that dyadic duration significantly moderated the leader behavior – performance relationships. Specifically, the shorter the dyadic duration, the more impact leader consideration and initiating structure had on subordinate performance.

The authors interpreted this result as indicating that, over time, subordinates came to better know what was expected of them by their supervisors, thus rendering supervisory leader behavior less important. As Mossholder et al. (1990: 385) stated, “Subordinates having long relationships with their supervisors know what behaviors are viewed as desirable, and without guidance, may be able to deliver work outcomes in a form corresponding to their particular supervisor’s standards. [Over time, subordinates may] be able to attune such behavior to the more subjective requirements every supervisor establishes.” They further note that dyadic duration may tap more subtle constructs, such as supervisor-subordinate perceptual agreement regarding subordinate performance. This is essentially an argument that, over time, individuals come to share perspectives on their role requirements by having continued interactions that provide feedback to both members of the dyad. Extending this line of thought to mentoring relationships, it is hypothesized that:

H6: In intact mentoring dyads, the duration of the current mentorship will be positively related to the level of dyadic congruence for (a) mentor and (b) protégé implicit role theories.

Finally, the structure of the mentoring relationship may contribute to role prototype agreement between mentors and protégés. Research has indicated that formal mentorships may not be as effective for protégés as informal mentorships (e.g., Chao et al., 1992; Ragins & Cotton, 1999). One reason for this may have its roots in the amount of information each individual has about the other prior to beginning a mentoring relationship. In informal, spontaneously developed relationships, individuals have evaluated each other to some extent and decided that the relationship is worth pursuing. In such cases, these decisions are likely to be made based on “chemistry” between the two people, initial perceptions of mutual similarity, and beliefs that the two individuals are compatible (e.g., Kram, 1985). In assessing compatibility, potential mentor-protégé dyad members may be seeking to determine whether the other person fits their mental image of a good mentor or a good protégé. Additionally, individuals may also assess the degree to which they believe they can be effective in meeting the other persons’ needs. In contrast, individuals in formal mentorships are often matched by organizations based on factors such as functional department affiliation (e.g., Ragins & Cotton, 1999). Such relationships are by nature more forced than informal relationships and the opportunity for early assessments regarding interpersonal fit prior to relationship initiation are not present. Consequently, it is proposed that:

H7: Individuals engaged in informal mentorships will have more similar (a) mentor and (b) protégé role prototypes than those engaged in formal mentorships.

### Prototype Congruence and Mentorship Quality

Having discussed both the possible content of mentoring role prototypes as well as factors that may predict prototype congruence within mentor-protégé dyads, it is also important to consider the relationship such congruence may have with mentorship quality. While some recent research in the teams literature has demonstrated that shared mental conceptualizations of individual roles and of teamwork in general are related to team performance in both groups (Rentsch & Klimoski, 2001) and dyads (Matthieu, Heffner, Goodwin, Salas, & Cannon-Bowers, 2000), the link between shared social role prototypes and relationship quality has received even less attention outside the teams literature.

One exception is the empirical study conducted by Engle and Lord (1997) that investigated the role played by dyadic congruence with respect to cognitive prototypes regarding performance and leadership in predicting leader-member exchange (LMX) quality. They reasoned that dyadic prototype congruence would mean that both individuals were in agreement regarding their expectations of each other and for their own behaviors toward the other. Survey data obtained from 18 supervisors and 76 of their subordinates employed in the marketing department of a mid-western electric company revealed that greater supervisor-subordinate agreement regarding implicit performance theories was positively related to supervisor's reported liking of their subordinates and to supervisors' evaluation of LMX quality with different subordinates. However, leadership prototype congruence was not significantly related to subordinates' feelings toward their supervisors or to their assessment of LMX quality, although the results tended toward the predicted direction.

Thus, there is some preliminary evidence that prototype congruence may be related to perceptions of dyadic relationship quality in organizational settings. Like LMX relationships, mentorships also are important dyadic relationships in an organizational context. These two constructs have been associated both theoretically (e.g., Sparrowe & Liden, 1997; McManus & Russell, 1997) and empirically. For instance, survey research conducted by both Scandura and Shriesheim (1994) and Thibodeaux and Lowe (1996) concluded that high-quality LMX relationships may come to resemble mentoring relationships, at least from the subordinate's point of view.

However, these two types of relationships differ in that supervisor-subordinate relationships are more organizationally determined than informal mentoring relationships. For example, supervisory relationships involve the negotiation of processes and actions that are designed to accomplish specific work goals, while informal mentorships have no organizationally mandated goals or set processes. Even in organizationally sponsored mentorships, individuals are frequently left to their own devices in determining the course and content of the relationship.

Because mentor and protégé roles often are not organizationally defined, it is important to understand how individuals conceptualize these roles and how such prototypes may influence the quality of the relationship. The lack of direction, guidelines, and explicit information regarding mutual expectations in mentorships makes the cognitive representations that individuals possess about the roles of mentor and protégé very important, as they may be the primary source of understanding an individual has regarding such relationships. The degree to which individuals in the relationship understand the roles in a similar fashion ought to be related to their perceptions of how

well the relationship is working. Further, because role prototypes serve as standards for role expectations (e.g., Lord et al., 1982; Lord & Maher, 1991) and because the degree to which expectations are met in mentoring relationships has been related to perceptions of relationship quality (Young & Perrewe, 2000), the degree to which expectations are met is likely to operate as a mediator. More formally, it is hypothesized that:

H8: (a) The degree of dyadic congruence with respect to the mentor role prototype will be positively related to the quality of the relationship as perceived by the protégé, and (b) the degree of dyadic congruence with respect to the protégé role prototype will be positively related to the quality of the relationship as perceived by the mentor.

H9: (a) Protégé perceptions of met expectations will mediate the relationship between dyadic congruence with respect to the mentor role prototype and the quality of the relationship as perceived by the protégé, and (b) mentor perceptions of met expectations will mediate the relationship between dyadic congruence with respect to the protégé role prototype and the quality of the relationship as perceived by the mentor.

To summarize, the hypotheses are as follows:

#### Hypothesis 1

Attributes indicating (a) effective protégé performance and (b) positive protégé potential will emerge as part of the protégé role prototype.

#### Hypothesis 2

Characteristics indicative of (a) power and (b) effective interpersonal skills will emerge as part of the mentor role prototype.

#### Hypothesis 3

(a) In general, mentor prototypicality ratings will be higher for male-typed than for female-typed attributes.

(b) Individuals whose prior experiences as protégés are dominated by a history of male mentors will have higher mentor prototypicality ratings for male-typed characteristics than those individuals whose prior experiences as protégés are dominated by a history of female mentors.

#### Hypothesis 4

In intact mentoring dyads, greater congruence for (a) mentor and (b) protégé role prototypes will be observed when both members of the dyad have had substantial prior

experience in mentoring relationships than when both members of the dyad have had little to no prior experience in mentoring relationships.

#### Hypothesis 5

In intact mentoring dyads, dyadic congruency with respect to demographic variables (race, gender, and educational level) will be positively related to dyadic congruency for the (a) mentor and (b) protégé role prototypes.

#### Hypothesis 6

In intact mentoring dyads, the duration of the current mentorship will be positively related to the level of dyadic congruence for (a) mentor and (b) protégé implicit role theories.

#### Hypothesis 7

Individuals engaged in informal mentorships will have more similar (a) mentor and (b) protégé role prototypes than those engaged in formal mentorships.

#### Hypothesis 8

(a) The degree of dyadic congruence with respect to the mentor role prototype will be positively related to the quality of the relationship as perceived by the protégé, and (b) the degree of dyadic congruence with respect to the protégé role prototype will be positively related to the quality of the relationship as perceived by the mentor.

#### Hypothesis 9

(a) Protégé perceptions of met expectations will mediate the relationship between dyadic congruence with respect to the mentor role prototype and the quality of the relationship as perceived by the protégé, and (b) mentor perceptions of met expectations will mediate the relationship between dyadic congruence with respect to the protégé role prototype and the quality of the relationship as perceived by the mentor.

## **CHAPTER III: METHOD**

### **Research Methods**

#### Procedure and Data Sources

Data will be collected from intact mentoring dyads using a modified version of the survey methodology recommended by Dillman (2000). The Dillman procedure was chosen because of the relatively high response rates (e.g., 50-70%) reported in previous research, thus reducing the likelihood of response bias (Salant & Dillman, 1994). Recent mentoring research using a modified version of the Dillman method has yielded response rates between 39% (Ragins, Cotton, & Miller, 2000) and 42% (Ragins & Cotton, 1999). While Dillman (2000) does not address options for obtaining data from intact dyads through “cold-mailing” techniques, the additional burden on the respondents will likely lower the response rate overall. Consequently, a broad net will be cast in the initial mailings.

Mailing lists will be obtained from three different professional associations with the goal of maximizing the number of respondents engaged in mentoring relationships of different gender combinations. This is important because much of the prior research in mentoring has had few, if any, female mentors as participants, and even fewer female mentor/male protégé mentoring dyads. Since those types of relationships are likely to be relatively low base rate phenomena (see prior discussions of the male managerial model and gender in mentoring relationships), it is important to employ a strategy that targets these under-studied individuals.

To accomplish this, labor statistics indicating gender composition of different professional specialty occupations (U.S. Department of Commerce, 2002) and both U.S. and European research on occupational gender-typing (Beggs & Doolittle, 1993; Sastre, Fouquereau, Igier, Salvatore, & Mullet, 2000) were examined. Decision criteria were that the occupations were rated for gender type in both Beggs and Doolittle (1993) and Sastre et al. (2000), that they were rated similarly across those studies, and that the most recent U. S. labor statistics indicated practical differences in the actual gender distribution of employees in those occupations. Based on these factors, professional associations from three occupational specialties were chosen for inclusion in the study. The associations reflect industries that are male-typed and male dominated (engineering), female-typed and female dominated (social work), and gender neutral (journalism). While these criteria were developed independently, used European occupational gender typing research (i.e., Sastre et al. 2000), and involved more recent labor statistics, the occupations that best met the criteria for inclusion were the same as those used by Ragins and Cotton (1999). For purposes of the proposed research, this is encouraging since they had a good response rate (42%) using a similar data collection methodology with individuals from these professional specialties.

Membership databases will be obtained from professional associations representing each of these three areas. For engineering, the membership database from the National Society of Professional Engineers will be used. For social work, the membership database from the National Association of Social Workers will be used. For journalism, the membership database from the Society of Professional Journalists will be used. Five hundred individuals will be randomly selected from each of these three

membership lists, resulting in a total of 1,500 potential initial participants (3,000 total participants are possible since those who are initially targeted in the mailing will be asked to give a questionnaire packet to their developmental partner). This random sampling process will reduce the likelihood of “coverage error” (Salant & Dillman, 1994), while the sample size is chosen to reduce sampling error. Further, a large number of potential respondents is necessary since the response rate is anticipated to be lower than that found in prior research using the Dillman (2000) method because the goal of this study is to investigate the mentoring relationships of existing dyads. Even a response rate as low as 10% would provide data from 150 intact mentor-protégé dyads, which is, for instance, almost twice the number of non-independent supervisor-subordinate dyads (76) studied by Engle and Lord (1997).

Individuals will first receive a letter notifying them that a survey packet dealing with career issues in their field will be sent to them within a week. Cover letters, surveys, and pre-paid return envelopes will then be mailed to the potential participants. Based on previous research on responses to survey mailings (see Dillman, 2000 for a review), it is expected that within two weeks the majority of those who will choose to participate in the study will respond to the questionnaire. Follow-up reminder/thank you post cards will be sent to all individuals who received the first two mailings.

Surveys will be directed toward mentors. Those who return surveys and indicate that they are currently in a mentoring relationship and would be willing to ask one of their protégés to participate will then receive a second packet with a request that it be delivered to the individuals’ protégés. Packets for protégés will contain cover letters, surveys, and pre-paid return envelopes. To increase the likelihood of mentors passing

along the protégé packets, they will be pre-stamped with room for the mentor to fill in the protégé's mailing address. This process will allow data collection from matched mentor-protégé dyads.

## **Instrumentation**

### **Demographic Information**

Demographic information including age, sex, race, educational attainment, length of time employed in their current field, organizational tenure, job tenure, current compensation, current job level/rank, number of promotions since joining the current firm, employment status (full time or part-time), and organization size will be collected from all participants. Age will be indicated in years. Sex will be 1=male, 2=female. Race will be 1=Caucasian, 2=African American, 3=Asian, 4=Hispanic, 5=Native American/Alaskan Native, 6=Other. Educational attainment will be 1=some high school, 2=high school graduate, 3=some college, 4=college graduate, 5=some post-graduate work, 6=professional degree (e.g., MBA; JD), 7=other advanced degree (e.g., PhD; MD). Length of time employed in their current field, organizational tenure, and job tenure will each be measured in years and months. Current annual compensation will be assessed in U.S. dollars and will include "salary, bonuses, commissions, stock options, and profit sharing" (Ragins & Cotton, 1999: 535).

Consistent with Ragins and Scandura (1994), current job level (rank) will be assessed by asking respondents how many decision levels are they from the tops of their organizations, using 0=CEO/President as a starting point. Thus, a response of 1 will indicate the respondent is within one decision level of the top of their organization, 2

indicates within two decision levels, 3 indicates three decision levels, and so forth. Also consistent with prior research, a promotion will be defined as “involving two or more of the following criteria: significant increases in annual salary, significant increases in scope of responsibility, changes in job level or rank, or becoming eligible for bonuses, incentives, or stock plans” (Ragins & Cotton, 1999: 535). Respondents will then indicate how many promotions they have had since joining their current firms. Employment status will be coded as 1=full time, 2=less than full time. Organization size will be assessed by reported number of employees, where 1=less than 100 employees, 2=between 100 and 299 employees, 3=between 300 and 499 employees, 4=between 500 and 699 employees, 5=between 700 and 999 employees, and 6= 1,000 or more employees. While the study hypotheses in this phase concern only sex, race, and educational attainment, the additional demographic information will be collected in order to better specify the nature and characteristics of the final sample which will have bearing on how generalizable the results may be.

#### Content of Mentor and Protégé Role Prototypes

Consistent with prior research on cognitive prototypes (e.g., Eby, Allen, & Noble, 2000; Engle & Lord, 1997; Lord, Foti, & DeVader, 1984; Kinicki, Hom, Trost, & Wade, 1995; Offermann et al., 1994), implicit theories will be assessed by having both the mentor and protégé rate the prototypicality of attributes associated with both the mentor and protégé roles. The items for the mentor role and the protégé role obtained from a pilot study will be presented in random order at the beginning of the questionnaires. Half the questionnaires will have the mentor items first, and the other half will have the protégé items first. Ratings for both sets of attributes will be made on a 7 point scale,

where 1 = “does not fit my image at all” and 7 = “fits my image extremely well” (cf. Lord et al., 1984). The items will be presented at the beginning of the questionnaire so that individuals’ lay theories can be obtained without the influence of the specific definition of a mentor or protégé that is necessary in order to collect the data on individuals’ mentoring histories and current mentoring relationships.

Each of the prototype measures will include three anti-prototypical items to ensure that respondents do not merely assign similar ratings to all items in an indiscriminate fashion (cf. Engle & Lord, 1997). Those items will be aimless, selfish, and ignorant for the prototypical mentor measure. Anti-prototypical items for the protégé measure will be apathetic, careless, and deceitful. Mean scores for each item will be calculated. Attributes will be deemed prototypical if their mean scores are greater than or equal to 5 on the 7-point scale (cf. Philips & Lord, 1982). This method is chosen over the Engle and Lord (1997) criteria, which states that traits or attributes are considered prototypical if they receive a mean rating of four or more on a five-point Likert scale. This will allow a greater range (five through seven rather than four to five) for prototypical attributes to vary.

#### Prior Mentoring Experiences

The next section on the questionnaires will deal with individuals’ prior experiences in mentoring relationships. In order to make sure that all respondents have the same point of reference for the remaining questions, the following frame of reference, adapted from an established definition (Ragins, 1989; Ragins & Cotton, 1999) and theoretical explanation (Kram, 1985), will be used: “A mentor may be generally defined as a person in one’s work environment who has advanced experience and knowledge and is

committed to helping a less experienced and knowledgeable individual (the protégé) to learn the ropes at work and to facilitating the protégé's career advancement. A mentor is also committed to helping his or her protégé achieve a sense of professional identity, competence, and effectiveness, as well as a sense of self-worth, both personally and professionally. A mentor and his or her protégé may or may not be in the same organization, may or may not have a direct supervisory relationship, and may or may not be peers." After this definition is provided, an established distinction between formal and informal mentoring relationships (Ragins & Cotton, 1999: 535) will be provided: "In order to assist individuals in their development and advancement, some organizations have established formal mentoring programs, where protégés and mentors are linked in some way. This may be accomplished by assigning mentors or by just providing formal opportunities aimed at developing the relationship. To recap: Formal mentoring relationships are developed with *organizational assistance*. Informal mentoring relationships are developed *spontaneously*, without organizational assistance" (italics in original). Following the procedure described by Ragins and Cotton (1999), individuals indicating that they were or are in a formal mentoring program will be asked to briefly describe that program. This will help ensure that participants understood the difference between formal and informal mentorships.

Research participants will be asked about their prior mentoring experiences, both as a mentor and as a protégé. Participants will be asked how many mentors they have had, including current relationships, and for each relationship to provide information on the mentor's gender, whether the relationship was formal or informal, supervisory or non-supervisory, the duration of the relationship in years or months, and whether the

relationship is ongoing. Additionally, participants will be asked how many protégés they have had, including current relationships, and for each relationship to provide information on the protégé's gender, whether the relationship was formal or informal, supervisory or non-supervisory, the duration of the relationship in years and months, and whether the relationship is ongoing. Participants who have never had a protégé will be asked to stop responding to the survey and return it to the researcher in the pre-stamped return envelope.

#### Focal Mentoring Relationship: Structure, Demography, and Duration

Individuals will be asked whether they are currently serving as a mentor to someone else. If so, the instructions will ask them to continue with the survey. Respondents will be asked how many protégés they currently have, and then asked to choose one protégé in particular and think of their relationship with that person when responding to the remaining questions. Respondents who indicate that they are not currently serving as a mentor to someone else, but have been a mentor to one or more people in the past, will be asked to choose one protégé in particular and think of their relationship with that person when responding to the remaining questions. Since the hypotheses for the current paper require current intact mentoring dyads, data from individuals reporting on past relationships will not be used for this project.

Characteristics of the focal relationship will be assessed. This will include information about how the relationship was initiated (1=I initiated the mentoring relationship myself, 2=my protégé initiated the relationship, 3=my protégé and I initiated the relationship jointly, or 4=my protégé was assigned to me in a formal mentoring program). Respondents who chose options 1, 2, or 3 to categorize their mentorship will

be coded as having an informal mentorship. Those responding to option 4 will be asked to provide a brief program description and will be coded as having a formal mentorship.

Whether the relationship is intra- or inter-organizational will be assessed by asking respondents to choose between 1=my protégé and I are in the same organization, and 2=my protégé and I are in different organizations. Following this question, the hierarchical distance between the mentor and protégé will be assessed. For those in the same organization, the stem "My protégé's position is..." will be followed by the following response options: 1=at the same organizational level as mine (i.e., a peer); 2=my immediate subordinate; 3=one level below mine, but not my immediate subordinate; and 4=other (please specify). Those participants who respond to this question with option 2 will be coded as being in a supervisory mentoring relationship. All others will be coded as non-supervisory mentoring relationships, including those in the following extra-organizational mentorships. Specifically, for participants whose protégés are in a different organization, the stem will be "My protégé's position is the equivalent of..." with the following response options: 1=similar level as mine within his/her organization; 2=equivalent of one level below my position; 3=other (please specify).

In addition to providing information about the structure of the mentorship they have selected, respondents will be asked to provide basic demographic data about their protégés (race, gender, age, and educational level following the descriptions provided previously). They will also be asked to respond to the following question assessing relationship duration: "How long have you and this protégé been in this mentoring relationship?" where responses will be requested in years and months. Finally,

respondents will be asked to reply to the following question: “On average, how many hours of contact do you have with your mentor(protégé) per month?”.

### Mentoring Relationship Quality

As the preceding review of the mentoring literature indicated, mentorship quality is often operationalized as the amount of mentoring support protégés report receiving from their mentors. According to recent meta-analytic work by Allen, Eby, Poteet, Lentz, and Lima (2004), when mentorship quality is defined differently, it has been almost exclusively as protégés' satisfaction with their mentors, and the amount of mentoring received has been the primary predictor of satisfaction. As noted above, this is a rather limited view of relationship quality. The current study operationalizes mentorship quality not only as the amount of mentoring received by protégés, but also protégé functions received by mentors; *both* mentor and protégé satisfaction with the relationship; mentor and protégé relationship commitment; mentor and protégé trust of their developmental partner; and a global assessment of relationship quality. The following sections identify the measures that will be used to tap these constructs.

### Mentoring Quality: Mentoring Functions Provided To Protégés

In order to assess mentoring functions, the Mentor Role Inventory (MRI), developed by Ragins and McFarlin (1990) and used by Ragins and Cotton (1999), will be employed. This instrument is chosen over other measures because it is more consistent with Kram's (1985) theoretical framework of mentor roles. The MRI accurately represents each of the global mentor functions (career and psychosocial) by incorporating each of the dimensions for the two types of functions (i.e., coaching, sponsorship, protection, challenging assignments, and exposure for the career roles; acceptance and

confirmation, counseling, friendship, and role modeling for the psychosocial functions). Additionally, Ragins and McFarlin (1990) included two more psychosocial roles: parent and social interactions. These two constructs were included based on Kram's (1985) discussion of mentoring relationships and gender. Specifically, she stated that protégés in cross-gender relationships may seek to avoid sexual issues by viewing the mentor as a parent, or may avoid informal social interactions for the same reason. Thus, the Ragins and McFarlin (1990) instrument is more theoretically consistent with Kram's (1985) conceptualization of mentoring roles.

The scale was developed through confirmatory factor analysis techniques and has demonstrated good reliability (ranging from .77 (protection) to .93 (social interaction) in the questionnaire development sample, and .66 (counseling) to .94 (challenging assignments) in the data set used for hypothesis testing, as well as preliminary evidence of validity (Ragins & McFarlin, 1990). This scale was also used by Ragins and Cotton (1999), with reliabilities ranging from .63 (counseling) to .91 (challenging assignments). In both studies, only one value fell below .70, indicating that the instrument sub-scales generally possess adequate reliability. Each subscale comprises three items, resulting in a total of 33 items for the measure as a whole. The response format is a 7-point Likert-type scale with responses ranging from 1 (strongly disagree) to 7 (strongly agree). The MRI will be used to collect data from protégés and can be found in Appendix A.

#### Mentoring Quality: Mentoring Functions Provided To Mentors

There are no clearly established measures specifically designed to assess functions served by protégés for mentors. However, Ragins and Scandura (1994; 1999) created and used a measure of *anticipated* benefits to mentors. These benefits were

drawn from the literature, particularly from Kram's (1985) work, and represent things mentors expect to receive from their protégés. In a sense, they are a set of anticipated "protégé functions" that, similar to mentor functions, may be more or less fulfilled in different relationships. The measure's development involved a pilot study of 110 executives and top managers which generated data for item revision and selection. The coefficient alpha for the 24 item measure was .89 (Ragins & Scandura, 1994). The measure was further revised by having 100 MBA students evaluate whether the item was a cost associated with being a mentor, a benefit, or neither. Points were assigned to the classifications, and items that received at least 70 percent of their total points in the appropriate category were retained. This resulted in a revised 20-item measure of benefits which achieved a coefficient alpha of .91 in the substantive study sample of 80 matched pairs of high-ranking male and female executives. Ragins and Scandura (1994) also demonstrated discriminant and content validity of the measure.

In subsequent work, Ragins and Scandura (1999) factor analyzed data about anticipated benefits of mentoring collected from 275 high-level executives. Using the original 24 item measure, they found five general factors: rewarding experience ( $\alpha = .89$ ); improved job performance ( $\alpha = .83$ ); loyal base of support ( $\alpha = .70$ ); recognition by others ( $\alpha = .67$ ); and generativity ( $\alpha = .61$ ). Three of the 24 items were dropped because of cross-loadings. Since the items removed in the Ragins and Scandura (1994) study formed a unique factor (generativity) in their 1999 work, and since none of the items were dropped in both studies, the full 24-item measure will be used in the current research. Because the items were developed as possible benefits a mentor might receive from one or more protégés, the items have been modified slightly to fit the present

purpose of determining the degree to which mentors' protégés provided these benefits. These modified items will be used to collect data from mentors and are presented in Appendix A. The response format for this measure will be a seven-point Likert-type scale, with responses ranging from 1 (strongly disagree) to 7 (strongly agree).

#### Mentoring Quality: Satisfaction with Mentor/Protégé

To assess protégés' satisfaction with their mentor, the Mentor Satisfaction Scale will be employed. This measure was developed and used by Ragins and Cotton (1999) and includes four items. A seven-point Likert-type scale will also be employed for this measure, with responses ranging from 1 (strongly disagree) to 7 (strongly agree). The coefficient alpha reliability estimate for this measure was .83 in the Ragins and Cotton (1999) study. This scale is utilized in its original form to collect data from protégés, as well as in a modified form to allow mentors to rate their satisfaction with their protégés. Both versions of the measure are located in Appendix A.

The Ragins and Cotton (1999) items focus on an individual's satisfaction with the other person. To assess individual satisfaction with the overall relationship, four of the five items in the global satisfaction measure developed by Rusbult, Martz, and Agnew (1998) will be used. A seven-point Likert-type scale will be used for this measure, with responses ranging from 1 (strongly disagree) to 7 (strongly agree). The omitted item is "our relationship does a good job of fulfilling my needs for intimacy, companionship, etc." which could be interpreted as being geared more toward romantic relationships than toward developmental relationships. The five-item measure has demonstrated very high reliability with Cronbach alpha estimates of .95 and .94 in two different studies (Rusbult et al., 1998). With the "needs for intimacy" item removed, which had the lowest item-

total correlation, the measure retained a high level of reliability with a Cronbach alpha estimate of .92 (Rusbult et al., 1998). This measure of global relationship satisfaction has been positively associated with dyadic adjustment, relationship closeness, trust level, liking and loving in ongoing relationships (Rusbult et al., 1998). The mentor and protégé version of the items selected for use in this study can be found below in Appendix A.

#### Mentoring Quality: Relationship Commitment

Relationship commitment will be assessed using 6 of the 7 items from a measure developed by Rusbult et al. (1998). A seven-point Likert-type scale will be used for this measure, with responses ranging from 1 (strongly disagree) to 7 (strongly agree). The omitted item was “it is likely that I will date someone other than my partner within the next year.” While this item could be reworded to focus specifically on a mentoring relationship, its inclusion would imply that it was somehow inappropriate to have more than one developmental relationship occurring at a time, an idea that is counter to prevailing wisdom suggesting that multiple developmental relationships can be quite beneficial (see, for instance, Higgins & Kram, 2001). The Cronbach alpha reliability estimate for two slightly different five-item versions of the measure was .91, and for a seven-item measure was .95 (Rusbult et al., 1998). In two out of the three versions of the measure, the “date someone other than my partner” item had the lowest item-total correlation, and in the third version it had the second lowest item-total correlation. Thus, dropping this item should not substantially reduce the measure’s reliability. Further, these items tap into three components of commitment—psychological attachment to the relationship; long-term orientation to the relationship; and intent to persist in the relationship—which have differentiated between those who stay in dating relationships

and those who leave, even when the commitment components were each measured with a single item from the scale deemed to capture the essence of the component (Arriaga & Agnew, 2001). This operationalization of relationship commitment has been positively related to other variables such as dyadic adjustment, relationship closeness, trust, and relationship duration. Both mentor and protégé versions of these items can be found below in Appendix A.

#### Mentoring Quality: Interpersonal Trust

To assess interpersonal trust, measures developed by McAllister (1995) will be used. A seven-point Likert-type scale will be used for this measure, with responses ranging from 1 (strongly disagree) to 7 (strongly agree). These measures assess two types of trust, affect-based and cognition-based, identified by Lewis and Wiegert (1985). Affect-based trust involves emotional connections to another person, such that there is true care and concern for the other, a belief in the positive intrinsic value of the relationship, and a belief that the other person feels similarly. Cognition-based trust involves one's evaluation of another's prior actions toward them, providing "good reasons" and rationale for believing that the other's actions toward one are likely to be positive and in one's best interest in the future. The measures were developed through the use of prior research, subject matter experts, and pilot testing with employed MBA and undergraduate students, resulting in the final measures which demonstrated acceptable levels of reliability with Cronbach's alpha estimates of .91 for cognition-based trust and .89 for affect-based trust. The items, worded for both mentors and protégés, are located in Appendix A below.

### Mentoring Quality: General

In a recent study of mentoring relationships from the mentor's perspective, Allen and Eby (2003) developed a general measure of relationship quality. The five-item measure demonstrated an acceptable coefficient alpha reliability estimate of .85. Further, evidence of construct validity was obtained in that the items loaded cleanly on a single factor in an analysis that included items designed to measure learning from the mentoring relationship. These five items will be used in their original form (modified for grammatical corrections) for mentors and in a parallel form for protégés. Both versions of the measure are located in Appendix A. A seven-point Likert-type scale will be used for this measure, with responses ranging from 1 (strongly disagree) to 7 (strongly agree).

### Met Expectations

Young and Perrewe (2000) developed two items to measure global met expectations in mentoring relationships. Young and Perrewe obtained a Cronbach alpha reliability estimate for their measure of .89 for the mentor sample, and .90 for the protégé sample. The following item will be added in order to create a three-item measure: "Up to this point in our relationship, my mentor/protégé has generally met my expectations of him/her." The measure will be used to collect data from both mentors and protégés, and can be found in Appendix A below. A seven-point Likert-type scale will be used, with responses ranging from 1 (strongly disagree) to 7 (strongly agree).

## **Hypothesis Testing**

Hypotheses 1(a) through 2(b) concern the content of the protégé and mentor role prototypes. To address these questions, the research participants' prototypicality ratings

of the protégé and mentor trait measures will be factor analyzed using the maximum likelihood extraction method, followed by a varimax rotation. Prototypical items, i.e., those with a mean rating above 5 on the 7 point scale, will be identified within each factor. Factor interpretation will support or refute the presence of effective performance and potential as part of the protégé role prototype (Hypotheses 1(a) and 1(b)), as well as the presence of power and effective interpersonal skills as part of the mentor role prototype (Hypotheses 2(a) and 2(b)).

Hypothesis 3(a) states that in general, mentor prototypicality ratings will be higher for male-typed than for female-typed attributes. In order to test this hypothesis, data from the pilot test will be analyzed first. This data set will contain masculinity/femininity ratings of the prototypical mentor characteristics. Using a median split, masculine attributes will be defined as those falling in the bottom half of the sample, while feminine attributes will be defined as those that fall in the top half of the sample. Using this information from the pilot study, the data from the current study sample will be collapsed into two scales consisting of the prototypicality ratings of those characteristics that previously were identified as masculine and those identified as feminine. The means of these two scales will then be compared using a simple t-test. Support for hypothesis 3(a) will be found if the mean mentor prototypicality rating for the measure made up of masculine items is greater than the mean mentor prototypicality rating for the measure made up of feminine items.

Hypothesis 3(b) states that mentor prototypicality ratings for masculine items will be greater when individuals' prior experiences as a protégé are dominated by a history of male mentors than when individuals' prior experiences as a protégé are dominated by a

history of female mentors. To test this hypothesis, data from respondents whose number of prior mentors is greater than or equal to one will be selected for inclusion. To calculate the extent to which an individuals' prior mentoring history is dominated by male or female mentors (or is balanced between the two), a new variable will be created. This variable will be the number of male mentors minus the number of female mentors. Thus, positive scores indicate prior mentoring history dominated by male mentors, negative scores indicate prior mentoring history dominated by female mentors, and scores of zero indicate a balance between male and female mentors in prior mentoring history. This information will then be used to code individuals as being in one of three groups in terms of their background as protégés. A one-way analysis of variance (ANOVA) with group level as the independent variable and mentor prototypicality ratings of the masculine attributes as the dependent variable. If significant overall differences are found, post-hoc Tukey tests will be conducted in order to determine where group differences existed. Support will be found for hypothesis 3(b) if the group whose mentoring history is dominated by male mentors rates masculine characteristics as being more prototypical than the group whose mentoring history is dominated by female mentors.

Hypothesis 4 states that, in intact mentoring dyads, when both the mentor and protégé have substantial prior mentoring experience, they will have higher congruence on both the mentor and protégé role prototypes than when both have little to now prior mentoring experience. Prior experience is operationalized here as a set of variables, including an individuals number of prior mentors, number of current mentors, the average duration of relationships with both prior and current mentors, number of prior protégés,

number of current protégés, and the average duration of relationships with both prior and current protégés. This set of variables for the mentor and for the protégé first will be summed to form a composite experience variable. Then, median splits will be used for both the mentor and protégé prior experience to create high and low experience groups for each member of the relationship. This results in four possible combinations of prior experience: both are high, both are low, mentor has more experience than the protégé, and protégé has more experience than the mentor. These four combinations will be represented in one new variable, dyadic experience, where 4=both the mentor and protégé have high amounts of prior mentoring experience; 3=mentor has more experience, 2=protégé has more experience, and 1= both the mentor and protégé have low amounts of prior mentoring experience. Dyadic experience thus becomes the independent variable.

For the dependent variables, Edwards' (1994) D score will be used to determine dyadic congruence for the mentor and protégé prototype measures. The D score represents a congruence index which is calculated by taking the square root of the mean of the squared differences of mentors' and protégés' ratings of the content-relevant adjectives. This procedure has been used by others investigating dyadic congruence on cognitive prototypes of socially constructed roles (e.g., Engle & Lord, 1997). To test the hypotheses, two one-way ANOVAs will be conducted with post-hoc Tukey tests as follow-ups to any detected significant differences between these four groups with respect to dyadic congruence on (a) mentor and (b) protégé prototypes. Significant mean differences between the high and low experience groups will indicate support for hypotheses 4(a) and 4(b).

Hypothesis 5 states dyadic congruence with respect to demographic variables (race, gender, and educational level) will be positively related to dyadic congruency for the (a) mentor and (b) protégé role prototypes. Race will be coded as being the same (0) or different (1). Similarly, gender will be coded as being the same (0) or different (1). Educational differences will be computed by subtracting the protégés' level of education from the mentor's level of education, such that negative numbers indicate the protégé has more education than the mentor, positive numbers mean that the mentor has more education than the protégé, and a value of zero means that the mentor and protégé have the same level of education. Because this hypothesis is concerned only with similarity and not the direction of educational imbalances within the dyad, the absolute value of the educational differences will be used for hypothesis testing. These three variables will be entered as an independent variable set with dyadic congruency for the cognitive prototypes of the mentor role as the dependent variable in the first equation, and dyadic congruency for the cognitive prototypes of the protégé role as the dependent variable for the second equation. Support for this hypothesis will be found if the IV set accounts for a significant amount of variance in each of the DVs.

Hypothesis 6 state that the duration of the current mentorship will be positively related to the level of dyadic congruence for the (a) mentor and (b) protégé role. This hypothesis will be tested by correlating dyadic duration with both role prototype congruence measures (described above). Significant positive correlations would provide support for this hypothesis.

Hypothesis 7 states that individuals engaged in informal mentorships will have more similar (a) mentor and (b) protégé role prototypes than those engaged informal

mentorships. Participants will be divided into two groups such that formal=0, informal=1. A one-way ANOVA would then be conducted with the two role prototype congruency evaluations as the dependent measures. Significant F-tests with mean differences in the expected direction would support this hypothesis.

Hypothesis 8(a) states that the degree of dyadic congruence with respect to the mentor role prototype will be positively related to the quality of the relationship as perceived by the protégé, and hypothesis 9(a) states that this relationship will be mediated by protégé assessment of met expectations. To test these hypotheses, Baron and Kenny's (1986) the procedure for detecting mediation will be used. First, liking will be regressed on mentor role prototype congruence. Second, protégé assessment of relationship quality will be regressed on mentor role prototype congruence. Finally, protégé assessment of relationship quality will be regressed on both mentor role prototype congruence and protégé liking of the mentor. Support for the mediation hypothesis will be found if the first two equations are significant, and if the third equation shows a significant relationship between the mediator and the DV and an insignificant relationship between the IV and the DV. If the relationship between the IV and DV is substantially reduced but remains significant, partial mediation will have been demonstrated.

Hypothesis 8(b) states that the degree of dyadic congruence with respect to the protégé role prototype will be positively related to the quality of the relationship as perceived by the mentor, and hypothesis 9(a) states that this relationship will be mediated by mentor assessment of met expectations. The same procedures described to test H8(a) and H9(a) above will be used to test these hypotheses as well.

## **CHAPTER IV: COGNITIVE PROTOTYPES OF THE MENTOR AND PROTÉGÉ ROLES**

### **Abstract**

Organizational mentoring is associated with positive events and experiences for protégés, mentors, and their organizations. Research on what makes those relationships successful – and potentially replicable with formal programs – has looked at the structure of the mentorship (e.g., formal vs. informal), the demographic make up of the mentoring dyad (e.g., race, gender), and attitudinal similarity between the mentor and protégé. Generally, results have been mixed and it appears that these factors do not account for a great deal of mentorship success. Cognitive prototypes of the mentor and protégé roles may be one as yet unexplored factor that might help us better understand successful mentorships. Since no research to date has been conducted in this area, the current study investigates the nature of those cognitive prototypes by identifying their content, examining the extent to which these prototypes may be gender-typed, and how prior mentoring experiences might be related to prototype gender-typing. Results suggest that strong performance and high potential are important aspects of the prototypical protégé, and that elements of organizational power and interpersonal skills are important aspects of the prototypical mentor. There was no evidence of prototype gender-typing. Implications for research and practice also are discussed.

### **Cognitive Prototypes of the Mentor and Protégé Roles**

Since Kram's (1985) seminal work on developmental relationships occurring in the workplace, researchers have found that organizational mentoring is associated with positive events and experiences for protégés, mentors, and businesses. For instance, protégés tend to receive more promotions (Dreher & Ash, 1990; Scandura, 1992), perceive greater career mobility and opportunity (Scandura, 1992), and earn higher salaries (Chao, Walz, & Gardner, 1992; Dreher & Ash, 1990; Whitely, Dougherty, & Dreher, 1991) than individuals without a mentor. Further, mentored individuals also report better organizational socialization (Chao et al., 1992; Ostroff & Kozlowski, 1993), higher job satisfaction (Fagenson, 1989; Seibert, 1999), less role conflict and role ambiguity (Baugh, Lankau, & Scandura, 1996), and greater procedural justice (Scandura, 1997) than those who are not protégés.

In addition to comparing mentored and non-mentored individuals, researchers have found that the amount of developmental assistance received is related to outcomes of organizational interest. For instance, mentoring received by protégés has been positively related to promotion rates, compensation, work satisfaction, and career satisfaction (Koberg, Boss, Chappell, & Ringer, 1994; Johnson & Scandura, 1994; Scandura, 1992; Scandura, 1997; Whitely, Dougherty, & Dreher, 1991; Whitely & Coetsier, 1993) and career commitment (Colarelli & Bishop, 1990). Organizations benefit from protégés' enhanced organizational commitment (Scandura, 1997), and reduced turnover intentions (Prevosto, 2001; Viator & Scandura, 1991; see Allen, Eby,

Poteet, Lentz & Lima, 2004, for a meta-analytic review of protégé and organization-related benefits associated with organizational mentoring relationships).

While research on the benefits accrued to mentors is relatively scarce, there is evidence that mentors tend to obtain better support networks, satisfaction from helping others grow and succeed, and access to relevant information that facilitates job performance (Allen, Poteet, & Burroughs, 1997). Research on the *anticipated* benefits of being a mentor reveals that individuals expect to gain improved job performance, a loyal base of support, recognition by others, and fulfillment of their generativity needs<sup>3</sup> (Ragins & Scandura, 1999).

Because mentoring activities are correlated with factors that are beneficial to both individuals and organizations, companies have attempted to replicate these results by implementing formal mentoring programs (Geiger-DuMond & Boyle, 1995; Stein, 2000). However, formal mentoring relationships may not be as effective as informal relationships (Kram, 1985; Ragins & Cotton, 1999), and some mentorships result in negative experiences for the participants (Eby et al., 2000; Eby & McManus, 2004; Feldman, 1999; Ragins & Scandura, 1997; Scandura, 1998). Consequently, it is important to understand what factors are related to the quality of organizational mentoring relationships.

Researchers have typically focused on the structure of the mentoring relationship (formal v. informal; e.g., Chao, Walz, & Gardner, 1992), the gender or race of the protégé or mentor (e.g., Baugh, Lankau, & Scandura, 1996; Cox & Nkomo, 1991;

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<sup>3</sup> “Generativity” is a word coined by Erikson (Erikson, E. (1963). Childhood and Society. W.W. Norton: New York.). It refers to the need of older individuals to pass on knowledge and experience they have

Kirchmeyer, 1998; Thomas, 1990), dyadic match between protégé and mentor with respect to demographic factors, typically gender and race (e.g., Feldman, Folks, & Turnley, 1999). Dyadic similarity on attitudinal variables such as values and beliefs has also been examined on occasion (e.g., Ensher & Murphy, 1997; Ensher, Grant-Vallone, & Marelich, 2002; Turban, Dougherty, & Lee, 2002), although data is typically based only on the protégé's perceptions of congruence rather than actual match based on data from both the members of the dyad (but see Allen & Eby, 2003 for an exception). The results of these investigations generally show no definitive pattern of results, which suggests that other factors may be at work. One such factor may involve individuals' implicit theories, or prototypes, regarding the mentor and protégé roles.

Based on Rosch's (1975; 1978) work on cognitive categorization processes, prototypes are defined as the abstract representations of common category member attributes that serve to increase the distinctiveness of the categories, i.e., they are cognitive representations that provide the clearest examples of category membership. Her theory suggests that stimuli are organized according to their prototypicality with respect to various categories (e.g., "whiskers" would be a highly prototypical stimulus for the category "feline", but not at all prototypical - one hopes - for the category "fruit"). In interpersonal relationships, cognitive prototypes individuals hold of socially constructed roles (e.g., leader) serve as standards or expectations for behavior (e.g., Lord, Foti, & Phillips, 1982; Lord & Maher, 1991). Since violations of standards or expectations may result in less positive evaluations of mentoring relationships (Young & Perrewe, 2000), it

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acquired over their lifetimes to younger people, creating a sense of being connected to future generations and providing a sense of living on through others.

is important to understand what those standards are. While there is no cognitively oriented literature in the realm of mentoring research, theory and research on person perception, cognitive categorization, and the use of these constructs in leadership research can be directly applied to understanding mentoring relationships. Thus, the purpose of this paper is to understand the content and nature of individuals' cognitive prototypes of the mentor and protégé roles.

### **Literature Review and Hypothesis Development**

Virtually all of the extant literature on mentoring in organizations is based on Kram's (1985) qualitative work which relied heavily on interviews with 18 white-collar managerial dyads comprised of young (age 25 – 35) managers and older individuals in the company that these young managers identified as having contributed to their development. In-depth interviews with this primary sample of 36 individuals was supplemented by qualitative data from 15 young managers who did not identify anyone in the organization as having helped them developmentally, and 10 top executives in the firm who provided retrospective accounts of their careers and relationships that had particularly influenced their professional development.

Kram (1985: 22) defined mentoring functions as “those aspects of a developmental relationship that enhance both individuals' growth and advancement.” Her work revealed two broad mentoring functions: career functions and psychosocial functions. Career functions are linked together in that they provide support that enhances career advancement. These forms of support include: (1) *sponsorship*, the active nomination of an individual for desirable promotions and/or lateral moves; (2) *exposure*

*and visibility*, the assignment of responsibilities that allow an individual to gain access to key organizational figures who may subsequently judge his or her potential for future advancement; (3) *coaching*, the provision of specific suggestions of strategies designed to facilitate an individual's accomplishment of work objectives, achievement of recognition, and the attainment of career aspirations; (4) *protection*, the shielding of a junior individual from potentially damaging interactions with senior organizational members by taking the credit or blame in controversial situations and intervening when the junior individual is in danger of producing less than satisfactory results; and (5) *challenging assignments*, the designation of specific work, usually in a supervisory relationship, that allows the junior individual to gain critical skills and knowledge directly related to successful job-related task accomplishment.

Psychosocial functions are related to each other in that they provide support that facilitates the development of a sense of professional identity, competence, and effectiveness. Kram's taxonomy of psychosocial functions includes: (1) *role modeling*, the setting of a desirable example in terms of attitudes, values, and behaviors that the junior individual identifies with and attempts to emulate; (2) *acceptance and confirmation*, the reciprocal provision of support, encouragement, positive regard, and mutual respect between the mentor and protégé; (3) *counseling*, the mentor providing a sounding board for the protégé's self-exploration, personal concerns, and internal conflicts that may inhibit a positive sense of self in the professional setting; and (4) *friendship*, the social interaction between the mentor and protégé that results in mutual liking, understanding, and enjoyable interchanges both within and outside the work context.

While Kram's definition of mentoring functions state that they "enhance *both individuals* growth and advancement" (Kram, 1985: 22, italics added), the functions described above are generally conceptualized in the literature as being provided by the more senior person to the more junior person. Kram (1985: 23) further states that "When a hierarchical relationship provides all of these functions, it best approximates the prototype of a mentor relationship." However, Kram (1985: 4, italics in the original) noted that as she spoke with individuals working at the organization "about mentoring, it became apparent that the word *mentor* had a variety of connotations, and that from a research point of view it would be best not to use it. This decision allowed the more general concept of developmental relationships to become the focus of inquiry."

This suggests that individuals at the company had differing cognitive prototypes of the activity of mentoring and of the mentor and protégé roles, and calls into question the claim that the fulfillment of all aspects of the two overarching developmental functions results in the prototypical mentor relationship. While there is no doubt that the functions Kram described can and do occur in relationships that have been labeled as mentoring, it is not clear that individuals' prototypes of mentor relationship roles encompass all of these functions. Rather than speculate, the current research directly assesses mentor and protégé role prototypes by drawing on cognitive categorization theory as outlined next.

#### Overview and Integration Cognitive Prototypes

Rosch (1975; 1978) introduced the concept of cognitive prototypes within her theory of cognitive categorization. As mentioned earlier, Rosch defined prototypes as the abstract representations of attributes belonging to members of a common category which

serve to increase the distinctiveness of the categories, i.e., they are cognitive representations that provide the clearest examples of category membership. The creation of prototypes is possible because, according to Rosch's principle of family resemblance (Rosch & Mervis, 1975), there is some overlap of attributes between all the different members of a category. While individuals also may have unique characteristics, those core attributes shared by category members provide enough consistent information to result in an abstracted prototype of the category. For instance, the "prototypical cat" is likely to possess attributes such as tail, paws, whiskers, fur, and pointy ears. These attributes overlap for most, but not all, members of the category (e.g., one breed of cat has no fur; another type has flat ears).

Since prototypes are made up of core category attributes that are most commonly shared by category members, there is a high probability that the occurrence of a core attribute will result in a particular category being accessed mentally. Rosch called this the principle of cue validity and it provides an explanation of how individuals make sense of new stimuli. For instance, the stimulus "meow" has high cue validity for "cat," while "oink" has high cue validity for "pig." However, "tail" could be a cue for any number of animals (or kites, for that matter) and thus has low cue validity (for a summary of Rosch's theory, see Lakoff, 1987).

Rosch's three principles of cue validity, family resemblance, and cognitive prototypes are strongly correlated with each other (Lord, Foti, & DeVader, 1984) and together they explain how individuals are able to cognitively categorize new stimuli. Through observation, experience, and culturally derived information, individuals are able to determine the core attributes based on family resemblance for a given category and

then abstract a clear prototype of that category. When individuals encounter stimuli, those stimuli are evaluated according to their prototypicality with respect to various categories. The more overlap there is between stimulus attributes and attributes contained within the prototype of a category, the more likely the stimulus will be evaluated as belonging to that category.

It should be noted, however, that such categorization is based on estimations of probable membership and may not be accurate. For instance, if one was told that a four-legged animal lacking fur was in a box, and then was asked to guess what that animal was, it is likely that some sort of reptile would be the guess, because “no fur” has high cue validity for reptile. As it turns out, the animal in the box is that rare fur-free cat, thus providing an example of how reliance on prototypes for categorizing new stimuli may result in inaccurate classification. Despite the fact that cognitive categorizations based on prototypes are not always correct, using prototypes to classify stimuli is advantageous because these automatic cognitive processes are more efficient than explicit analyses of new information (e.g., Lord et al., 1982; Mauer & Lord, 1991; Phillips & Lord, 1981).

While Rosch’s (1975; 1978) work on cognitive categorization processes focused on how individuals classify objects, other scholars have demonstrated that similar processes underlie person-perception (Cantor & Mischel, 1979; Fiske & Cox, 1979; Taylor, Fiske, Etcoff, & Ruderman, 1978). Researchers in the social sciences have investigated cognitive categorization processes in such domains as stereotypes and prejudice (Stangor & Schaller, 2000), knowledge of emotions (Shaver, Schwartz, Kirson, & O’Connor, 2001), and understanding of personality (Trope, Bassok, & Alon, 1984). Organizational scholars also have used cognitive categorization theory to better

understand selection decisions (Perry, 1994), group performance (Martell & Guzzo, 1991), upward performance appraisals (Hauenstein & Alexander, 1991), and especially leadership (e.g., Engle & Lord, 1997; Gerstner & Day, 1994). Typically, researchers attempt to understand what attributes are likely to lead to classification of a person into a relevant social category (e.g., “new employee;” “leader”), and how cognitive representations of the social category affect the way individuals interact with each other.

To use leadership as an example, researchers have attempted to identify the core attributes of leadership prototypes (e.g., Lord, DeVader, & Alliger, 1986; Lord et al., 1984) and scholars have investigated factors that assist individuals in the process of comparing attributes of an individual to their cognitive representation of what a leader is, and then determining whether the target person fits that category. Increasing the prototypicality of specific attributes increases their cue validity, thus increasing the probability that the target person will be assigned to the leader category (e.g., Lord et al., 1982). Further, increasing the number of prototypical attributes also makes it more likely that a person will be assigned to the category of leader (e.g., Fraser & Lord, 1988).

The classification function of cognitive prototypes could have important ramifications for partner selection in a variety of dyadic relationships, including mentor-protégé relationships. If we can understand what characteristics, attributes, behaviors, and activities people consider to be prototypical of these socially constructed roles, it will help us understand who is chosen as a mentor by others and why certain individuals are chosen to be protégés while others are not. Further, it might help individuals know which aspects of themselves might warrant playing up or changing in order to attract a

developmental partner with whom they would be happy and from whom they would benefit.

It is important to understand that cognitive prototypes work in two ways, one in which stimulus attributes are evaluated in order to determine category membership (as described above), and the other in which a stimulus's category membership informs an individual's attribution of category characteristics. That is, cognitive prototypes influence the perception of a stimulus person's category-relevant attributes. In fact, it was this process that initially spurred intense interest among leadership scholars in cognitive prototypes.

Specifically, early research by Eden and Leviatan (1975) demonstrated that the four leadership factors from the Survey of Organizations could be reproduced solely on the basis of individuals' implicit leadership theories,<sup>4</sup> i.e., the theoretical factor structure was replicated in the complete absence of information regarding supervisory behavior. Further, the obtained factor structures were not due to work experience or degree of management education. Similarly, Rush, Thomas, and Lord (1977) demonstrated that the factor structure of LBDQ XII data obtained from undergraduates under conditions of limited information was moderately to highly congruent with the factor structure obtained from field data. Variance in respondent familiarity with the leader did not account for the results.

These two seminal studies indicated that respondents were not actually rating leaders' behavior, but were basing their assessments of individuals on their cognitive

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<sup>4</sup> Consistent with current thinking in the field (e.g., Engle & Lord, 1997), the terms "leadership prototypes" and "implicit leadership theories" are used synonymously.

representations of “leader” in the abstract, thus calling into question the validity of leadership measures. Subsequent research supported and extended the results of these investigations (e.g., Rush, Phillips, & Lord, 1981; Rush & Russell, 1988) and researchers determined that these effects most likely occur through a probabilistic reconstruction process in which individuals rely on their prototypes to decide to what degree an individual did or did not exhibit a particular behavior (i.e., intrusion bias; Rush et al., 1981; Larson, 1982; Larson, Lingle, & Scerbo, 1984). Probabilistic reconstruction is possible because prototypes contain attributes that are expected to co-vary. Thus, when a stimulus is presented that is high on one core attribute and the perceiver is not sure whether the stimulus was also high on another core attribute, a reasonable assumption is that both attributes were present.

This process may also be important for understanding how individuals select developmental partners in organizational contexts. For instance, an individual interested in attracting a mentor could choose to be more cognizant about displaying as many attributes that are highly prototypical of the protégé role as possible. In doing so, the perceiver is likely to infer the presence of other prototypical attributes that the potential protégé has not yet exhibited. In other words, demonstrating several highly prototypical attributes of the role gives an individual some benefit of the doubt with a potential mentor, making it more likely that he or she will be selected as that person’s protégé.

Because core attributes of category members co-vary, individuals also are likely to have certain expectations of individuals who have been identified as belonging to a particular category such as leader. According to Lord et al. (1982: 118), “In addition to providing a cognitively economical means of processing information, [cognitive]

categorization may fulfill other functions. Assuming that the content of some categories...is widely shared, it may also provide a standard for appropriate behavior.” Certain category assignments imply certain functional relationships within social contexts. For instance, if person A assigns person B to the category of leader, the relationship between the two individuals is defined in a general functional manner, i.e., one leads and the other follows. Consequently, the category assignment itself serves as a cue for individuals to “access information about the functions that a stimulus person is likely to fulfill” (Lord et al., 1982: 105), forming the basis of interpersonal expectations. These expectations can be of other people in a certain role, or of oneself in enacting a given role such as leader or mentor (Lord & Maher, 1991). When cognitive prototypes are widely shared and people base both their expectations of others and their own role behavior on those prototypes, cognitive information processing demands are simplified and the stability and predictability of dyadic relationships can also be increased.

An empirical study that investigated this line of thinking was conducted by Engle and Lord (1997) investigated how dyadic congruence on cognitive prototypes of performance and leadership predicted leader-member exchange (LMX) quality. They reasoned that dyadic prototype congruence would mean that both individuals were in agreement regarding their expectations of each other and for their own behaviors toward the other. Survey data obtained from 18 supervisors and 76 of their subordinates employed in the marketing department of a mid-western electric company revealed that greater supervisor-subordinate agreement regarding implicit performance theories was positively related to supervisor’s reported liking of their subordinates and to supervisors’ evaluation of LMX quality with different subordinates. However, leadership prototype

congruence was not significantly related to subordinates' feelings toward their supervisors or to their assessment of LMX quality, although the results tended toward the predicted direction.

Thus, there is some preliminary evidence that prototype congruence may be related to perceptions of dyadic relationship quality in organizational settings. Like LMX relationships, mentorships also are important dyadic relationships in an organizational context. These two constructs have been associated both theoretically (e.g., Sparrowe & Liden, 1997; McManus & Russell, 1997) and empirically. For instance, survey research conducted by both Scandura and Shriesheim (1994) and Thibodeaux and Lowe (1996) concluded that high-quality LMX relationships may come to resemble mentoring relationships, at least from the subordinate's point of view.

However, these two types of relationships differ in that supervisor-subordinate relationships are more organizationally determined than informal mentoring relationships. For example, supervisory relationships involve the negotiation of processes and actions that are designed to accomplish specific work goals, while informal mentorships have no organizationally mandated goals or set processes. Even in organizationally sponsored mentorships, individuals are frequently left to their own devices in determining the course and content of the relationship.

Because mentor and protégé roles often are not organizationally defined, it is important to understand how individuals conceptualize these roles and how such prototypes may influence the quality of the relationship. The lack of direction, guidelines, and explicit information regarding mutual expectations in mentorships makes the cognitive representations that individuals possess about the roles of mentor and

protégé very important, as they may be the primary source of understanding an individual has regarding such relationships.

As Kram (1985) noted, individuals in her study appeared to have their own cognitive prototypes associated with organizational mentoring roles. Such prototypes may have been used as the basis for interpreting their mentors' behavior, generating their own actions, and assessing the degree to which their expectations were met. Only one study to date has attempted to investigate how role expectations are related to mentoring relationship quality.

Young and Perrewé (2000) collected data from two separate samples, the first of which consisted of 215 doctoral students and assistant professors who were currently or recently in the dissertation process, where students were assumed to be protégés and provided the data for the study. The second sample consisted of 108 associate and full professors who had recently chaired a doctoral dissertation, where professors were assumed to be mentors and provided data for this part of the study. Results of their analyses revealed that protégés reported that their expectations for the relationship were met when they perceived their mentors as providing a greater amount of psychosocial, but not career, support. In the sample of mentors, the opposite was found: mentors reported that their expectations for the relationship were met when they perceived protégés as exhibiting more career, but not psychosocial, support.

Young and Perrewé conclude that "...this evidence makes clear that mentors value career-related behaviors exhibited by protégés and protégés, on the other hand, value social support behaviors exhibited by mentors," (p. 625) and then go on to attempt to explain the difference in perspectives. However, it is not clear from the methods used

in this research that mentoring relationships were studied consistently. It appears that chairing a dissertation project was assumed to be equivalent to being a mentor, and that writing a dissertation was equivalent to being a protégé. However, just as a supervisor-subordinate relationship in a business organization may or may not evolve into a mentoring relationship, a professor-student relationship may or may not become a mentorship. Even if some of the relationships reported on by respondents were mentorships, it appears that respondents may have been limited to reporting on those relationships during the dissertation writing process rather than on the relationships in their entirety. This would both explain the results and limit their generalizability. This research seems not to have demonstrated what people find important in a mentoring relationship as a whole, but what people find important during a specific task-accomplishment phase of a supervisory relationship.

Given these caveats, Young and Perrewe attempted to address an important issue: how role expectations are related to mentorship quality. As noted previously, one way to approach this issue more thoroughly is to examine people's cognitive prototypes about mentoring roles. Although cognitive prototypes generally have received a great deal of attention in the leadership literature, no research on mentor or protégé role prototypes currently exists. The present study builds a bridge between these literatures by explicitly identifying and clarifying the nature of prototypical mentor and protégé role descriptors.

#### Content of Protégé Role Prototypes

Although research specifically concerning the role of individuals' actual and potential performance in attracting a mentor has been somewhat sparse, there is reason to believe that attributes indicative of performance or potential will be salient in

conceptualizations of the prototypical protégé. There are both qualitative and quantitative studies showing that individuals are more likely to want to be a mentor to those who demonstrate strong performance or potential, and that poor protégé performance is a perceived cost of serving as a mentor. There also is quantitative evidence that protégés have personality characteristics associated with high performance or potential to a greater extent than do those who are not protégés.

Specifically, Kram's (1985) qualitative work indicates that senior managers are most interested in serving as a mentor to individuals who demonstrate potential for advancement. Further, Allen et al. (1997) conducted in-depth interviews with 27 mentors in order to better understand reasons that individuals choose to facilitate the development of others. One of the four general factors that was important to individuals when they considered serving as a mentor to another person involved the characteristics of the potential protégé (the other three were organizational factors, personal reasons for being a mentor, and outcomes associated with being a mentor). Allen et al.'s results demonstrated that, within the general factor of potential-protégé characteristics, three of the six over-arching reasons were performance-related: (1) the protégé exhibited behaviors indicative of high motivation; (2) the protégé was perceived as competent; and (3) the protégé exhibited a willingness to learn. Thus, according to qualitative research, protégé performance/potential is one of the important qualifications mentors look for in an individual prior to engaging in a mentoring relationship.

Three quantitative studies also have highlighted the role of individual performance in increasing one's attractiveness as a protégé to a potential mentor. First, Olian, Carroll, and Giannantonio (1993) conducted an experiment with 136 managers in

the banking industry who took the role of a potential mentor to a hypothetical “paper protégé” who was characterized as a recently promoted subordinate. Their results revealed that managers were more willing to provide both career and psychosocial support to subordinates with higher levels of performance. Additionally, the managers anticipated greater personal benefits from mentoring relationships with better performing subordinates.

Second, Green and Bauer (1995) examined mentoring relationships between advisors and 233 doctoral students in the “hard sciences” (e.g., physics, chemistry, engineering) using longitudinal data collected over two years. Data collection began when students entered their doctoral programs. Using student potential (comprising GRE verbal and quantitative scores, first semester GPA, and prior research experience) measured at time one as an independent variable, Green and Bauer (1995) found that students with higher potential received more psychosocial and career mentoring, as well as research collaboration opportunities from their advisors. Third, Allen et al. (2000) surveyed 282 mentors and found that mentors were more likely to choose a protégé based on perceptions of the protégé’s ability or potential rather than on their perceptions of the protégé’s need for help. These results are in line with prior conjectures that early success, high performance, and visibility increase an individual’s chances of being selected as a protégé by a senior or more experienced individual (Dreher and Ash, 1990; Zey, 1984).

Research using protégé personality characteristics to predict whether individuals have obtained a mentor also supports this thesis. For instance, Fagenson (1992) compared personality characteristics of 46 protégés and 54 non-protégés (59% male

overall), finding that individuals who had mentors were more likely to report higher needs for power and achievement, but not autonomy or affiliation, than non-protégés. No gender differences were found for these variables.

Scandura and Ragins (1993) used the Spence Personal Attributes Questionnaire to assess psychological femininity, masculinity, and androgyny in a comparison of 192 mentored and non-mentored individuals. Their results revealed that those who reported having either masculine or androgynous orientations were more likely to have a mentor than those who reported that their orientations were feminine or undifferentiated. Other studies have found that an internal locus of control, need for achievement, self-monitoring, emotional stability, and extraversion were related to individuals obtaining a mentor (Aryee, Lo, and Kang, 1999; Burke, 1984; Tepper, 1995; Turban & Dougherty, 1994). Taken together, it appears that those individuals who described themselves as possessing characteristics that may signal future success also reported having established mentoring relationships.

The two qualitative and three quantitative studies described above, along with research on protégé personality characteristics, highlight the importance of actual or anticipated individual performance in attracting a mentor. This makes good sense given the nature of functions provided by mentors to their protégés, particularly those related to career support. Career functions include sponsorship, exposure-and-visibility, coaching, protection, and challenging assignments. It is counter-intuitive that a mentor would give challenging assignments to an individual without the expectation that s/he can succeed, nor does it make sense to sponsor an individual or provide exposure and visibility if there is not an expectation on the mentor's part that others will view the protégé's performance

positively. Similarly, it is more risky to offer protection to someone who is likely to be in relatively more need of that function, i.e., someone who often makes mistakes in his or her work or causes problems.

Finally, researchers investigating the costs of serving as a mentor further demonstrate the importance of protégé performance. For instance, scholars have noted that a protégé who does not perform well can reflect negatively on the mentor's judgment and competency as perceived by others (Kram, 1985; Ragins, 1997b; Ragins & Scandura, 1999). Along the same lines, Eby and McManus (2004) reported that protégé performance below expectations was one of the factors most often cited by mentors as a primary reason for the deterioration of their relationship, representing 34% all negative experiences reported (N=31 out of 91). Taken together, this research suggests that:

H1: Attributes indicating (a) effective protégé performance and (b) positive protégé potential will emerge as part of the protégé role prototype.

Research regarding other characteristics that individuals might see as prototypical of a desirable protégé is less cohesive. For instance, Allen et al. (1997) found three dimensions not directly related to protégé performance that nevertheless influenced individuals' decisions about whether to serve as a mentor to a particular person. Those three dimensions were: (1) the protégé was viewed as a reflection of the mentor; (2) the protégé possessed personality characteristics important to the mentor; and (3) the mentor felt that s/he could help the protégé. Clearly, the specific attributes within these dimensions are likely to vary across individuals. Further, the relative lack of systematic research on other desirable protégé characteristics prohibits the formation of additional specific hypotheses regarding the content of protégé role prototypes.

### Content of Mentor Role Prototypes

Mentoring theorists have argued that individuals seek as their mentors people who have at least some power within their organizations (Kram, 1985; Ragins, 1989; Ragins, 1997a; Ragins, 1997b). By aligning with a powerful organizational player, protégés can obtain more positional power (Fagenson, 1988) and enjoy the benefits of reflected power from their mentors (Kram, 1985). Further, individuals with greater influence are in a better position to exhibit some of the career development functions theorized by Kram (1985), such providing a protégé with challenging assignments, sponsoring the individual for desirable lateral or hierarchical moves, protecting the protégé from potentially harmful exposure during difficult times, and providing exposure and visibility for the protégé's successes. In the only specific investigation of the attributes related to protégés' attraction to mentors, Olian, Carroll, Giannantonio, and Feren (1988) conducted a set of three experiments involving supervisor/subordinate scenarios with a total of 675 undergraduate research participants. Their results revealed that the potential mentor's centrality to decision-makers—an indicator of power within the organization—was important in attracting potential protégés. Thus, it is proposed that:

H2: (a) Characteristics indicative of power will emerge as part of the mentor role prototype.

Furthermore, Olian et al. (1988) found that centrality to decision-makers was particularly important when the potential mentor's interpersonal skills were only moderately competent. Research participants were most attracted to potential mentors who had high levels of interpersonal skills (e.g., established rapport, resolved conflict, reacted well to stress), with female research participants being more sensitive to this

issue. Relatedly, Eby et al. (2000) found that interpersonal incompetence captured 13% (N=22) of the 168 behaviors that protégés reported as being characteristic of their most negative mentoring experiences. These results, taken in conjunction with the psychosocial support functions theorized by Kram (1985) that require effective interpersonal skills (e.g., friendship, counseling, and acceptance and confirmation), suggest that:

H2: (b) Characteristics indicative of effective interpersonal skills will emerge as part of the mentor role prototype.

Finally, it is possible that the mentor role is male-typed. Citing prior careers research (e.g., Kanter, 1977; McGregor, 1967; Putnam & Heinen, 1976; Schein, 1973; 1975), Ragins (1989) suggests that there is a “male managerial model” which promotes the perception of successful managers as possessing masculine characteristics. Empirical research supports the idea that male-typed characteristics more closely resemble the “prototypical successful manager” than female-typed characteristics do (e.g., Brenner, Tomkiewicz, & Schein, 1989; Heilman, Block, Martell, & Simon, 1989; Powell, Butterfield, & Parent, 2002), despite the fact that women held almost half of the managerial positions in the United States by 2001 (US Department of Labor, Bureau of Labor Statistics, 2002). Although progress has been made over the years, women still occupied few positions within the top ranks of management (Catalyst, 2002). The persistence of the male managerial model may be part of the reason for the continued presence of the glass ceiling.

Women who try to behave in ways that are more consistent with the male managerial model may, however, find that other problems emerge. For instance, research

examining the prototypes that individuals have of leaders and how those prototypes were related to women's effectiveness when they attempted to demonstrate leadership behaviors revealed that women may find themselves in a double bind (Forsyth, Heiney, & Wright, 1997). Specifically, Forsyth et al. (1997) found that individuals who held more masculine prototypes of leaders rated female leaders as being less effective when they exhibited a relationship-oriented style (stereotype congruent behavior), but also rated female leaders more negatively in terms of collegiality when they exhibited a task-oriented leadership style (stereotype incongruent behavior).

In other cases, the male managerial model may work against women for reasons other than their work-related behavior. For instance, a recent study by Eby, Allen, and Noble (2000) found that research participants' cognitive prototypes of the "ideal employee" for job-related relocation most closely resembled individuals in a conventional family structure (i.e., male bread-winner with a stay-at-home wife and children). To the extent that opportunities for relocation are offered to individuals based on such an "ideal employee" prototype, the "male managerial model" affects which employees have a better chance at organizational success because acceptance of job-related relocation opportunities predicts promotion rates, salary levels, and other positive career outcomes (e.g., Feldman, 1988; Veiga, 1983).

These factors serve to increase the likelihood of male-typed mentor roles in three ways. First, since desirable mentors are those who have been successful and have access to organizational power structures, the "male managerial model" that has led to men dominating the upper echelons of organizations may also result in the "male mentor model." There is some evidence that White male mentors do in fact benefit their protégés

more than other mentors, at least when it comes to financial considerations, anywhere from \$10,000 a year (Dreher & Chargois, 1998) to \$19,000 a year (Ragins & Cotton, 1999). This suggests that male mentors may have enough power to secure, or at least influence, greater financial success for their protégés.

Second, perhaps because of the difficulty women sometimes encounter when they attempt to display behaviors that lead to career success for men, women have reported that they feel less qualified to mentor others (Ragins & Cotton, 1993). Although women were as likely as men to report being willing to mentor others when organizational rank was held constant, women tended to have lower ranks than men, and rank was positively associated with willingness to mentor others. Further, women were less willing than men to risk a negative reflection on themselves from their protégés' possible failures, and women were more likely than men to say that they lacked sufficient time to mentor others. Finally, men were more likely than women to have indicated that they were currently a mentor to someone else.

All of these factors are related to the third point, that the pool of potential female mentors is simply smaller than the pool of potential male mentors (e.g., Ragins & Cotton, 1993). Consequently, both men and women were more likely to have had a male rather than a female mentor, which would inform their cognitive representations of what a mentor is. Ragins and Cotton (1993, p. 106) specifically called for research that investigates "whether mentor roles are associated more with male than female sex role stereotypes." In response to their call, and based on theory and research discussed previously, it is hypothesized that:

H3a: In general, mentor prototypicality ratings will be higher for male-typed than for female-typed attributes.

H3b: In general, protégé prototypicality ratings will be higher for male-typed than for female-typed attributes.

H4: Individuals whose prior experiences as protégés are dominated by a history of male mentors will have higher (a) mentor and (b) protégé prototypicality ratings for male-typed characteristics than those individuals whose prior experiences as protégés are dominated by a history of female mentors.

## **Method**

This research was conducted in two main stages and collected data from a total of 1,481 individuals. The first stage of the research involved generating and refining a pool of items for the mentor and protégé role descriptor measures. The second stage of the research investigated the factor structure and prototypicality of the final list of mentor and protégé role descriptors, how prior mentoring experience was related to prototypicality ratings, as well as the degree to which the descriptors were perceived as being masculine or feminine. Each stage of the research is described in more detail below.

### Stage 1: Role Descriptor Generation

#### ***Participants***

An initial sample of 223 individuals traveling during rush hour by commuter rail in the greater Boston metropolitan area provided data for this portion of the study. Data from 23 respondents could not be used for various reasons (e.g., missing demographic

information; respondents not employed full-time).<sup>5</sup> The final sample of 200 full-time professionals were 50% women (a gender-balanced sample by design), 86% Caucasians, in their late 30s ( $M = 37.83$ ,  $SD = 10.03$ ). Their highest educational attainment was most commonly a college (33.0%) or professional (36.5%) degree. The majority of participants worked in very large companies (1,000 or more employees; 51%) and in service organizations (52.5%). They were generally established in their fields ( $M = 11.64$  years,  $SD = 8.65$ ), with an average of 4.66 years ( $SD = 4.98$ ) in their current organizations, and an average of 3.29 years ( $SD = 3.39$ ) in their current jobs. Participants were between 3 and 4 levels below the top decision-making level ( $M = 3.37$ ,  $SD = 1.46$ ). Participants had received an average of 1.30 promotions ( $SD = 1.44$ ) since joining their current organizations, with promotions defined as involving “two or more of the following – significant increases in annual salary, significant increases in scope of responsibility, changes in job level or rank, or becoming eligible for bonuses, incentives, or stock plans.” This sample generally was well-compensated (26% of the sample made \$100,000 a year or more; 19% between \$75,000 and \$100,000; and 29% between \$45,000 and \$75,000), with total annual compensation defined to include salary, bonuses, commissions, stock options, and profit sharing.

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<sup>5</sup> More specifically, three did not provide demographic information, 3 were unemployed (one of whom indicated she was retired), and 10 were employed part-time. These 10 were employed, on average, at 70% of full time, and 7 of the 10 were women. The remaining 7 unusable surveys were all protégé measures. On these, the respondents provided lists that were exclusively about mentors. For instance, responses included words such as mentor, teacher, developer, advisor, guide, consultant, and role model. Interestingly, it was never the case that people responded to the mentor measures with lists of items that were about protégés.

### ***Procedure***

The primary researcher introduced herself to potential participants, explaining that she was completing her doctorate in industrial and organizational psychology and investigating what business professionals thought about mentoring relationships. Individuals were informed that the survey would take about 5 to 10 minutes to complete. Those who agreed to participate (86% of those asked) were each given a paper-and-pencil survey on a clipboard and instructed to begin on the first page. Those participants who requested further clarification about what was meant by a mentor or a protégé were instructed to use whatever definition they felt most comfortable with. Those who continued to request further clarification were told that whatever they thought of when they thought of a mentor or protégé was fine to use as a point of reference when responding to the measure.

### ***Measures***

Each individual responded to one of four measures. Two measures were about the mentor role, and two were about the protégé role. For each role, participants were asked to generate either “behaviors or activities” or “characteristics or attributes.” Respondents received a four-page questionnaire. The first page contained 25 blank lines on which participants were asked to spend about five minutes responding to variations on the following question: “What characteristics or attributes do you think of when you hear the word ‘mentor?’ Please use whatever definition of ‘mentor’ you think is most appropriate.” Variations in wording for the other three questionnaires were (1) replace “characteristics or attributes” with “behaviors or activities” and (2) replace “mentor” with “protégé.” For each measure, usable data were obtained from 25 men and 25 women

who were employed full time. Similar methodology has been used by scholars investigating individuals' cognitive prototypes of objects (Rosch & Mervis, 1975) and socially constructed roles such as leaders (Lord et al., 1984; Offerman, Kennedy, & Wirtz, 1994). The last three pages of the questionnaire contained the participant background questions.

### Stage 1: Compiling and Refining Role Descriptors

This section deals with the words or phrases generated by the respondents who answered the final 200 usable surveys. Responses that were commentary in nature rather than descriptive of the role were not coded (e.g., "I think of it more in a work environment."; "I wish I had a mentor!"; "I fear that a mentor/pupil relationship can become, after a time... very unhealthy and dysfunctional."). A total of 1,350 distinct items that described the protégé and mentor roles combined were coded, an average of 6.75 items per respondent. Of those items, there was a total of 630 distinct descriptors for the two mentor role measures (an average of 6.3 items per person). Of those, 237 were unique words or concepts. These comprised 85 unique descriptors from the M/CA measure, 76 unique descriptors from the M/BA measure, and 76 descriptors the two measures had in common.

Of the initial total of 1,350 items, there was a total of 720 distinct descriptors for the two protégé role measures (an average of 7.2 items per person). Of those, 271 words or phrases were unique. These comprised 99 unique descriptors from the P/CA measure, 101 unique descriptors from the P/BA measure, and 71 items the two measures had in common. To further refine the list of descriptors for both the protégé and mentor roles,

those items that appeared only once generally were removed unless they had been identified in the literature as important role characteristics, as described next.

One item (well-connected) was mentioned only once by the current research participants, and was a mentor characteristic identified in Olian et al. (1988), so it was retained. Another item mentioned once was ‘similar background as protégé’ which was retained because prior research has indicated that mentor-protégé similarity may be an important predictor of mentoring relationship quality (e.g., Allen & Eby, 2003; Ensher & Murphy, 1997; Ensher, Grant-Vallone, & Marelich, 2002; Turban, Dougherty, & Lee, 2002). Two other items mentioned once, flexible and forgiving, also were retained because they were consistent with descriptions of effective mentors (e.g., Kram, 1985). Items found in Olian et al. (1988) that were not mentioned directly by the participants in the current research included establishes rapport with protégé, structuring interactions with and options for the protégé, and resolving conflicts with the protégé. All three of these items were added to the list of mentor items. Olian, et al. also included “reacting to stress” as a mentor characteristic. This item was not added because the meaning was unclear. A study by Allen (2003) identified empathy and helpfulness as important mentor characteristics, both of which were mentioned by multiple participants in the current study. Similarly, multiple participants mentioned other items that could be found in the literature (e.g., caring, supportive, encouraging in Burke & McKeen, 1997).

For protégé role descriptors, the best point of comparison in the literature was Allen et al. (1997) because it covers personality indicators, motivational factors, competency indicators, help arousal and learning orientation as the several different categories of potential protégé-related characteristics that affect people’s decisions to

serve as a mentor to others. Eight items from Allen et al. that were not mentioned by the respondents in the current research were added to the list of protégé role descriptors: complements mentors' skills, confident, dependable, has common sense, has high capacity, honest, integrity and sense of humor. Five items mentioned by only one participant in the current study were retained because prior research suggested they may be important protégé characteristics. Specifically, the descriptors patient, shows initiative, and sociable were all suggested by Allen, et al. (1997) as key indicators that a person might make a good protégé. Similarly, "learning the ropes" is one of the key activities Kram (1985) suggested that protégés engage in, while being loyal to their mentor is another key characteristic of protégés (e.g., Kram, 1985).

Next, for both the mentor and protégé role descriptor lists, clear synonyms (e.g., smart and intelligent) were represented by the most commonly used of the pair (in this case, intelligent). This process resulted in a list of both person-based and behaviorally-based items for both the mentor and protégé roles. The resulting measures contained 101 descriptors for the mentor measure and 100 descriptors for the protégé measure. The final mentor descriptor list contained 27 items that were mentioned only on the M/CA measure, 14 that were mentioned only on the M/BA measure, 58 items mentioned on both forms, and 2 identified in the literature (see Olian et al., 1988) as important mentor characteristics but not mentioned by the study respondents. The final protégé descriptor list contained 15 items that were mentioned only on the P/CA form, 16 items mentioned only on the P/BA form, 61 items mentioned on both forms, and 8 identified in the literature (see Allen et al., 1997) as important protégé characteristics but not mentioned by the study respondents. The final item lists for both the mentor and protégé roles can

be found in Tables 1 and 2, respectively, which include role descriptors, source (i.e., which questionnaire or literature the item came from), the number of times the item was mentioned for each source, and the total number of times the item was mentioned. These descriptors were used in the next stage of the research, described below.

## Stage 2: Role Prototypes and Prior Mentoring Experiences

### ***Participants***

All participants in the second stage of the research were drawn from a research pool administered by a large private business school in the Northeastern United States. The pool consisted of current students and alumni initially recruited as volunteers unaffiliated with any particular class (i.e., there was no course extra-credit given for research participation) from 6 different colleges and universities located in large metropolitan area in New England. The pool also used “viral recruiting,” i.e., participants were encouraged to recruit their friends to participate in the research pool. These efforts resulted in a research pool of 49,609 individuals who were generally Caucasian (76%) females (67%) in their early thirties ( $M=32.37$ ,  $SD=11.51$ ).

Of the of 1,040 individuals who provided initial data for the prototypicality analysis of the mentor and protégé role descriptors, 519 responded to the mentor role descriptor measure and 521 responded to the protégé role descriptor measure. Removing those who provided suspicious data (e.g., gave all items the same rating) resulted in complete usable data from 510 mentor descriptor survey participants and 505 protégé descriptor survey participants. For the mentor descriptor survey, the 510 final participants were mostly female (374; 73%) Caucasians (393; 77%) who were an average of 29.22 years old ( $SD=8.71$ ). Based on these demographic variables, the sample had a

slightly higher percent of women (73% for the sample vs. 67% for the research pool), a similar percent of Caucasians (77% vs. 76%), who were slightly younger than the average research pool participant (29.22 years old for the sample vs. 32.37 years old for the pool). A little more than half of the sample (294; 58%) had completed college while the remaining participants were students. Of those who had completed college, their college degree was the highest level of education attained by 64% (187) of the respondents, with 16% (48) having completed some post-graduate work and the rest having earned a professional degree (40; 13.6%) or another advanced degree (16; 5.4%). The remaining three participants did not indicate their highest level of education. The college graduates had worked full-time an average of 7.02 years ( $SD=7.26$ ) and had worked part-time an average of 2.94 years ( $SD=3.08$ ). Of those enrolled in college, 60% (129) were in their junior year or above, with the rest being freshmen or sophomores. These college students had worked full-time an average of 2.56 years ( $SD=5.05$ ) and had worked part-time an average of 2.02 years ( $SD=2.57$ ).

The 505 participants for the protégé item survey were very similar to the participants described above. They were mostly female (352; 70%) Caucasians (403; 80%) around 30 years of age ( $M=30.78$ ;  $SD=9.89$ ). Comparing this sample to the research pool, we see a slightly higher percent of women (70% vs. 67%), slightly more Caucasians (80% vs. 76%), who were slightly younger than the average research pool participant (30.78 years old vs. 32.37). A little more than half of the sample (293; 58%) had completed college while the remaining participants were students. Of those who had completed college, their college degree was the highest level of education attained by 64% (188) of the respondents, with 19% (55) having completed some post-graduate work

and the rest having earned a professional degree (34; 11.6%) or another advanced degree (13; 4.4%). The remaining three participants did not indicate their highest level of education. The college graduates had worked full-time an average of 7.62 years ( $SD=7.75$ ) and had worked part-time an average of 3.45 years ( $SD=3.92$ ). Of those enrolled in college, 61% (129) were in their junior year or above, with the rest being freshmen or sophomores. One respondent did not indicate what year they were in college. These college students had worked full-time an average of 3.58 years ( $SD=5.77$ ) and had worked part-time an average of 2.28 years ( $SD=2.64$ ).

### ***Procedure***

Participants in the research pool were sent notifications listing the titles of all new studies available for their participation. Basic study information was provided, including the topic, anticipated time commitment, and compensation amount. Those individuals who chose to participate were then sent more detailed information about the research and procedures, along with a hyperlink to the online survey (see Appendix, Exhibits 1 and 2, for emails sent for the current research).

Participants were anonymous to the researcher, responding to online surveys using a 4-digit identification number. Each survey was anticipated to take between 15 and 20 minutes to complete. Participants were given a 48-hour window within which they could take the survey at the location of their choice (e.g., at home, at work). Those who completed the surveys and correctly entered their 4-digit identification code were sent \$5 by US mail along with a brief thank you note from the database administrator. The researcher reported the identification numbers of those who completed the online surveys to the database administrator who then matched the identification number to

names and addresses and mailed the compensation to participants. At no time did the researcher have access to this identifying information, nor did the database administrator have access to the data provided by respondents.

As mentioned above, a total of 1,040 individuals provided data for the prototypicality analysis of the mentor and protégé role descriptors. I also wanted to learn about their prior mentoring experiences. To do so, it was important that individuals use the same frame of reference when responding about their prior mentoring experiences which required providing a definition of what a mentor and protégé are. Since such definitions would have been inappropriate when eliciting people's cognitive prototypes of the mentor and protégé roles, a request to all 1,040 online study participants was sent about 4 weeks after the prototypicality ratings were completed asking respondents to participate in a follow-up questionnaire (see the Appendix, Exhibits 3 and 4, for the follow-up emails sent to participants). Five hundred eighty-seven individuals (58% response rate) provided data in response to this request. Two hundred seventy-five had provided prototypicality ratings for mentor role descriptors, and of those 188 (68%) reported having had at least one prior mentor. Three hundred twelve had provided prototypicality ratings for protégé role descriptors, and of those 160 (51%) reported having had at least one prior mentor. Compensation for these follow-up surveys differed from the other surveys. In this case, individuals were entered into a drawing for a \$25 gift certificate to Amazon.com and told that there would be 1 winner for every 50 respondents. A total of 10 participants were randomly selected by the researcher to win the gift certificate. The winning identification numbers were provided to the database administrator who then emailed the selected participants an electronic gift certificate.

Otherwise, the data collection procedure was the same as described above for the prototypicality rating surveys for the mentor and protégé role descriptors.

### ***Measures***

The mentor descriptor prototypicality survey contained the final 101 items, randomly ordered, from the item generation portion of the study (see Appendix, Exhibit 5 for the printed version of the survey). The directions read as follows: “In this survey, we are interested in understanding how well a variety of characteristics, attributes, behaviors and activities might fit your perception of what a mentor is. Please read each item and check the circle that indicates how well the items fits your idea of what a mentor is.” The on-line version of the survey was divided into 11 pages. The first 10 pages contained 10 words or phrases each (the tenth contained 11). Each page began with the question: “To what extent do the following words or phrases fit your idea of what a mentor is?” The respondents used a 9-point scale where 1 was “completely fails to fit my image” and 9 was “completely fits my image.” Because the goal was to uncover respondent’s cognitive prototypes of a mentor, no definition of a mentor was provided. The last page of the survey was used to collect demographic data. The same procedure was used for the 100-item protégé survey, with the directions changed to read “In this survey, we are interested in understanding how well a variety of characteristics, attributes, behaviors and activities might fit your perception of what a protégé is. Please read each item and check the circle that indicates how well the items fits your idea of what a protégé is” (see Appendix, Exhibit 6 for the printed version of this survey). This measurement is consistent with prior research on cognitive prototypes of socially constructed roles (e.g.,

Eby, Allen, & Noble, 2000; Engle & Lord, 1997; Lord, Foti, & DeVader, 1984; Kinicki, Hom, Trost, & Wade, 1995; Offermann et al., 1994).

The follow-up questionnaire (see Appendix, Exhibit 7) that assessed individuals' mentoring experiences began by asking respondents to read the following, adapted from an established definition (Ragins & Cotton, 1999) and theoretical explanation (Kram, 1985) with the following instruction and definition (Ragins & Cotton, 1999: 535):

A MENTOR may be defined generally as a person in one's work environment who has advanced experience and knowledge and is committed to helping a less experienced and knowledgeable individual (the PROTÉGÉ) to learn the ropes at work and to facilitating the protégé's career advancement. A mentor is also committed to helping his or her protégé achieve a sense of professional identity, competence, and effectiveness, as well as a sense of self-worth, both personally and professionally. A mentor and his or her protégé may or may not be in the same organization, may or may not have a direct supervisory relationship, and may or may not be peers.

After this definition was provided, an established distinction between formal and informal mentoring relationships (Ragins & Cotton, 1999: 535) was also given:

In order to assist individuals in their development and advancement, some organizations have established formal mentoring programs, where protégés and mentors are linked in some way. This may be accomplished by assigning mentors or just by providing formal opportunities aimed at developing the relationship. To recap: FORMAL mentoring relationships are developed with organizational assistance. INFORMAL mentoring relationships are developed spontaneously, without organizational assistance.

Participants were asked to keep these definitions in mind when responding to the remaining items. The survey then asked whether individuals had ever had a mentor, and if so, whether they currently had a mentor. If they did, respondents were asked to report the total number of current mentors, the number that were male vs. female, the number that were direct supervisors vs. not direct supervisors, and the number that were formal vs. informal. For participants who reported they had formal mentorships, space was

provided for them to briefly described how they were matched to their mentors.

Respondents also were asked how long, on average, they had been in their relationship with their current mentor(s).

Next, individuals were asked to report on their prior mentoring relationships.

First, they were asked to think about relationships in which they had been someone else's protégé (and explicitly instructed to *exclude* current relationships at this point).

Individuals were asked to report the *total number of **prior mentors*** they had over time, the number that were male vs. female, the number that were direct supervisors vs. not direct supervisors, and the number that were formal vs. informal. For participants who reported they had formal mentorships, space was provided for them to briefly described how they were matched to their mentors. Respondents also were asked how long, on average, they had been in their relationship with their current mentor(s).

Finally, individuals were asked to consider relationships in which they had been a mentor to someone else (and explicitly instructed to *exclude* current relationships at this point). Individuals were asked to report the *total number of **prior protégés*** they had over time, the number that were male vs. female, the number that were direct reports vs. not direct reports, and the number that were formal vs. informal. For participants who reported they had formal mentorships with their protégés, space was provided for them to briefly described how they were matched to their protégés. Respondents also were asked how long, on average, they had been in their relationship with their current protégé(s).

## Stage 2: Masculine/Feminine Ratings of Mentor and Protégé Role Descriptors

### ***Participants***

Finally, a separate group of 218 individuals rated the mentor and protégé role descriptors on a scale assessing the extent to which the role descriptors were masculine or feminine, again via an online survey using the procedure and research pool described above (see Appendix, Exhibits 8 and 9 for the email sent to recruit participants; see Appendix, Exhibits 10 and 11 for the mentor and protégé descriptor surveys of masculinity/femininity). Two surveys were removed from the analysis because of inappropriate data (e.g., all items were rated the same). The final data for the masculinity/femininity ratings of the mentor role descriptors were provided by 109 different respondents who were about 30 years of age ( $M=30.90$ ,  $SD=9.74$ ), mostly female (68; 62%) and Caucasian (82; 75%). Relative to the research pool, this sample had a slightly smaller percent of women (62% in the sample vs. 67% in the research pool) and about the same percent of Caucasians (75% vs. 76%). The research participants were slightly younger than the average research pool member (30.90 years old vs. 32.37 years old). Just over a third of the sample were college students (40; 37%), about two-thirds were college graduates (65; 60%), and four respondents did not provide information on their educational level. Of those who were college students, 75% (30) were juniors or above who had worked full time for an average of 3.66 years ( $SD=6.37$ ) and had worked part-time for an average of 1.99 years ( $SD=1.89$ ). Of those participants who graduated college, their college degree was the highest educational attainment for 63% (41) of the respondents, with 17% (11) having completed some post-graduate work, 14% (9) having earned a professional degree (e.g., MBA, JD), and 6% (4) having earned another type of

advanced degree (e.g., MD, PhD). On average, these individuals had 7.35 years (SD=6.95) full-time and 3.83 years (SD=3.91) part-time work experience.

Data for the masculinity/femininity ratings of the protégé role descriptors were provided by 107 different respondents whose average age was 31.02 (SD=8.59). These respondents were typically female (77; 72%) and Caucasian (79; 74%). Relative to the research pool, this sample had a slightly higher percent of women (72% in the sample vs. 67% in the research pool) and a slightly lower percent of Caucasians (74% vs. 76%). The sample was also slightly younger than the average member of the research pool (31.02 years old vs. 32.37 years old). In the sample, thirty-nine percent (42) were college students, while the rest were college graduates (62; 58%) with three omitting their education data. Of those who were college students, over half were juniors or above (23; 55%) who had worked an average of 2.82 years (SD=4.85) full-time and 2.44 years (SD=3.48) part-time. Of those who had graduated, their undergraduate degree was the highest level of education attained for 61% (38) of the respondents, with 16% (10) having completed some post-graduate work, 16% (10) having obtained a professional degree (e.g., MBA, JD), and 7% (4) having earned another advanced degree (e.g., PhD, MD). These individuals worked an average of 6.89 years (SD=5.90) full-time and 3.35 years (SD=2.53) part-time.

### ***Procedure***

A similar procedure was used for the masculinity/femininity ratings of mentor and protégé role descriptors as was used to assess their prototypicality. As before, respondents were drawn from a pool of individuals who had registered to be part of research projects through the business school at a large private Northeastern university.

Individuals were drawn anonymously and at random for possible participation, with the caveat that they could not have participated in any other questionnaire for this study (see the Appendix, Exhibits 3 and 4, for emails sent to those who participated in the follow-up portion of the research). Surveys were administered online and participants had 48 hours during which they could respond to the measure at their own pace on their own time. Respondents who completed the surveys and correctly entered their 4-digit research identification code were mailed \$5 and a brief thank you note in compensation and appreciation for their participation.

### ***Measures***

The items for the mentor and protégé measures were the same as the items used to collect prototypicality ratings. The instructions were varied to read “In this survey, we are interested in understanding how masculine or feminine a variety of characteristics, attributes, behaviors, and activities are considered to be. Please read each item and check the circle that indicates how masculine or feminine you think each concept is.” The survey was divided into 11 pages. The first 10 pages contained 10 words or phrases each (the tenth contained 11 for the mentor role descriptor survey). Each page began with the question “To what extent do the following words or phrases seem masculine or feminine to you?”. Participants responded using a 7-point Likert-type scale where 1 = very masculine and 7=very feminine.

### **Results**

For hypotheses about the prototypicality of mentor and protégé role descriptors, an item was deemed prototypical if the mean rating was greater than or equal to 7 on the

nine-point scale. Several other researchers (e.g., Engle & Lord, 1997; Philips & Lord, 1982) have used similar definitions of “prototypical.”

Hypothesis 1 stated that descriptors indicating (a) effective protégé performance and (b) positive protégé potential will emerge as part of the protégé role prototype. Examining the list of prototypical items (those with mean values greater than or equal to 7; see Table 3 for descriptors, means, and standard deviations) shows that respondents rated 56 out of the 100 protégé role descriptors as prototypical and suggests support for these hypotheses. For instance, prototypical items suggesting high performance include performs above expectations, stands out among peers, capable, and diligent. Prototypical items suggesting positive protégé potential include has high potential, up and coming, ready for challenges, and being groomed to be his/her mentor’s successor. Several items could indicate effective performance and/or positive potential, depending on the context, such as hard-working, focused, intelligent, talented and high capacity. Most items rated as non-prototypical (i.e., mean values less than 7) generally do not indicate either effective performance or high potential, with the following exceptions: on the fast-track, demonstrates leadership, and effective communicator. Keeping in mind these exceptions, Hypotheses H1(a) and H1(b) are generally supported.

To facilitate further understanding of both prototypical and non-prototypical descriptors, the data were reduced into a smaller number of components while capturing as much of the total variation in the original 100 descriptors as possible by using a principle components factor analysis with varimax rotation on all the protégé prototypicality ratings. Eight interpretable factors emerged with eigenvalues greater than 1. To make factors more interpretable, .50 was used as the loading value cutoff and items

with significant cross-loadings were omitted from the results. Table 4 presents the names, items, loadings, and percent variance accounted for by the eight factors which were labeled Eager Achiever; Guided Learner; Classic Performer; Easy to Get Along With; Stand Out; Toady; Political Climber; and Needs Help. Interestingly, the factors Easy to Get Along With; Toady; Political Climber; and Needs Help were made up only of items that were not prototypical. This point is addressed further in the discussion section.

Hypothesis 2a stated that characteristics indicative of power will emerge as part of the mentor role prototype. Hypothesis 2b stated that characteristics indicative of effective interpersonal skills will emerge as part of the mentor role prototype.

Respondents rated 80 of the 101 mentor role descriptors as being prototypical (i.e., 79% had a mean rating of 7 or more on a 9-point scale). Table 5 contains the full list of mentor descriptors, with prototypical items indicated in bold type along with their mean ratings and standard deviations. As the table shows, several descriptors suggest that a mentor possessing these qualities would be likely to have organizational and professional power, e.g., respected, influential, leader, accomplished, successful, expert, strong, and well-connected. Effective interpersonal skills were also reflected in the descriptors rated prototypical by the respondents, such as supportive, giving feedback, helpful, approachable, encouraging, motivator, and easy to talk to. Descriptors that were not rated as prototypical included emotionally-oriented items (e.g., compassionate, forgiving, loving) that reflect a stance that is more personal than professional in nature. Other non-prototypical items such as supervisor, talent creation, parental, grooming another for promotion, safety net, and guardian would require power to enact, but in and of

themselves have a stronger flavor of either positional power (e.g., supervisor, parental), molding another individual to fit organizational needs (e.g., talent creation, grooming another for promotion), or protective activities (e.g., safety net, guardian). Together, then, the data support Hypotheses 2(a) and (b), at least with respect to particular types of interpersonal skills and individual power.

To better understand both prototypical and non-prototypical mentor role descriptors, principle components factor analysis with varimax rotation was conducted using all of the mentor prototypicality ratings. Six interpretable factors with eigenvalues greater than one were retained. As before, the loading value cut-off was .50 and items with significant cross-loadings were removed. The results are located in Table 6, which shows names, items, loadings, and percent variance accounted for by the six factors, which were labeled Supportive Role Model; Well-Established; Professional Director; Connected Confidante; Caring Protector, and Even-keeled. The majority of the descriptors loading onto the Caring Protector and Even Keeled factors were non-prototypical, a point which is addressed further in the discussion section.

Hypothesis 3(a) stated that mentor prototypicality ratings will be higher for male-typed than female typed attributes. The test of this hypothesis used data from the 109 individuals who provided ratings of how masculine or feminine they thought the 101 mentor attributes were. Using a median split, half the items were coded as masculine and half were coded as feminine (see Table 7 for descriptor names, means, and standard deviations). Next, two scales were created from the mentor prototype data, one that included the masculine items, and one that included the feminine items. A paired sample t-test was selected to compare the scale means because it compares the means of two

variables from a single group. This procedure computes the differences between the values of each variable, then tests whether the average difference is statistically significant from zero. In this case, the mean prototypicality rating for the masculine mentor items was 7.38 (SD=1.25) and the mean prototypicality rating for the feminine mentor items was 7.33 (SD=1.29). The t-test found that the .05 mean difference was statistically significant ( $t=2.539$ ,  $df=509$ ,  $p<.05$ ). This means that the masculine mentor items were rated as more prototypical than the feminine mentor items, supporting hypothesis 3(a). However, given the large sample size (and thus degrees of freedom) this result is highly unlikely to be practically significant.

Hypothesis 3(b) stated that protégé prototypicality ratings will be higher for male-typed than female typed attributes. The test of this hypothesis used data from the 108 individuals who provided ratings of how masculine or feminine they thought the 100 protégé attributes were. Using the same procedure as above, the items were divided into masculine and feminine groups using a median split (see Table 8 for descriptor names, means and standard deviations). Masculine and feminine protégé prototype scales were then created, as above. The paired sample t-test revealed no statistically significant difference ( $t=0.826$ ,  $df=504$ ,  $ns$ ) between the mean prototypicality rating for the masculine protégé items ( $M=6.93$ ,  $SD=1.10$ ) and the mean prototypicality rating for the feminine protégé items ( $M=6.91$ ,  $SD=1.13$ ). Thus, hypothesis 3(b) was not supported.

Hypothesis 4 stated that individuals whose prior experiences as protégés are dominated by a history of male mentors will have higher (a) mentor and (b) protégé prototypicality ratings for male-typed characteristics than those individuals whose prior experiences as protégés are dominated by a history of female mentors. To test this

hypothesis, participants were asked to provide information on their prior experiences as protégés. They indicated the number of mentors they had in the past and how many of those mentors were male and female. One hundred eighty-eight of the respondents reported having a mentor in the past, one of whom was omitted from this analysis because of missing data for mentor gender. The remaining 187 respondents reported having a total of 757 prior mentors, averaging 4.05 (SD=1.92) prior mentors per respondent, with a nearly even split between male (49%) and female (51%) prior mentors.

To determine the extent to which individuals' histories were dominated by male or female mentors, the number of female mentors individuals had was subtracted from the number of male mentors individuals had, resulting in scores ranging from  $-7$  to  $+6$  where negative numbers mean history is dominated by female mentors and positive numbers mean history is dominated by male mentors. The vast majority of participants fell within the  $\pm 3$  range (174), with 27 of those having an equal number of male and female prior mentors who were removed from the analyses. This left 89 individuals whose prior history was dominated by male mentors and 71 individuals whose prior history was dominated by female mentors.

These two groups were compared on how they rated the prototypicality of masculine mentor descriptors. Item masculinity and femininity was determined by ratings obtained by a separate sample of respondents as described previously. As before, mentor items were divided into two scales: those that were rated masculine, and those that were rated feminine. Results of an ANOVA indicated that whether participants' history was dominated by male or female mentors was not significantly related to how

prototypical of the mentor role they thought masculine items were ( $M=7.67$ ,  $SD=.77$ ;  $M=7.54$ ,  $SD=.91$  respectively;  $F_{(1,159)} = 1.17$ , *ns*), failing to support hypothesis 4(a).

Hypothesis 4(b) stated that individuals whose prior experiences as protégés are dominated by a history of male mentors will have higher protégé prototypicality ratings for male-typed characteristics than those individuals whose prior experiences as protégés are dominated by a history of female mentors. The same procedure described above was used in this case. A different set of individuals provided data on the prototypicality of protégé items. From this sample of 505 participants, 160 respondents reported having a mentor in the past for a total of 637 prior mentors, averaging 3.98 ( $SD=1.67$ ) prior mentors per respondent, with a nearly even split between male (53%) and female (47%) prior mentors.

The extent to which individuals' histories were dominated by male or female mentors was determined as above, subtracting the number of female mentors individuals had from the number of male mentors individuals had, resulting in scores ranging from -4 to +7 where negative numbers mean history is dominated by female mentors and positive numbers mean history is dominated by male mentors. Again, the vast majority of participants fell within the  $\pm 3$  range (119), with 41 of those having an equal number of male and female prior mentors who were removed from the analyses. This left 67 individuals whose prior history was dominated by male mentors and 52 individuals whose prior history was dominated by female mentors.

These two groups were compared on how they rated the prototypicality of masculine protégé descriptors. Item masculinity and femininity was determined by ratings obtained by a separate sample of respondents as before, and protégé items were

divided into two scales: those that were rated masculine, and those that were rated feminine. An ANOVA was conducted comparing the means of the prototypicality ratings, revealing that those whose mentoring history was dominated by male mentors rated the masculine protégé items as being just as prototypical of the role as did those whose mentoring history was dominated by female mentors ( $M=6.83$ ,  $SD=1.20$ ;  $M=6.84$ ,  $SD=.98$ , respectively;  $F_{(1,118)} = .001$ , *ns*), thus failing to support hypothesis 4(b).

Finally, an examination of the prototypicality ratings against the frequency with which role descriptors were mentioned during the item-generation portion of the study raises the possible question of whether cognitive prototypes were found at all in the current study. One would expect a strong positive correlation between frequency and prototypicality. In this case, the correlation is not perfect for either set of role descriptors. For the mentor role descriptors, of the 42 descriptors mentioned by 5 or more participants in the item generation portion of the study, 5 were rated as being non-prototypical. Of the 42 descriptors mentioned by 2 or fewer participants in the item-generation portion of the study, 14 were rated as being non-prototypical. For the protégé role descriptors, of the 35 descriptors mentioned by 5 or more participants during item generation, 12 were rated as being non-prototypical. Of the 41 descriptors mentioned by 2 or fewer participants, 23 were rated as non-prototypical.

Additionally, for the protégé descriptor factor analysis, one factor consisting entirely of non-prototypical items (Easy to Get Along With) accounted for more variance (7.5%) in the data than did the next emergent factor (Stand Out) which accounted for 4% of the variance in the data. One would expect that the prototypical factors would account for more variance than non-prototypical factors.

On the other hand, all scales created from the protégé role factors achieved coefficient alpha reliability estimates greater than .70 except Political Climber which was .63. The other reliability estimates were as follows: Eager Achiever, .98; Guided Learner, .96; Classic Performer, .94; Easy to Get Along With, .91; Stand Out, .90; Toady, .76; and Needs Help, .80. Additionally, scales created from the mentor role factors also achieved satisfactory coefficient alpha reliability estimates and were as follows: Supportive Role Model, .99; Well-Established, .93; Professional Director, .83; Connected Confidant(e), .91; Caring Protector, .89, and Even Keeled, .75.

Additionally, a confirmatory factor analysis revealed for the protégé role factors an acceptable CMIN/DF ratio of 4.21 (CMIN=13,871, DF=3,293) and RMSEA of 0.080, though the CFI (comparing the specified model to the independence model) was .74. For the mentor role factors, the CFA revealed an acceptable CMIN/DF ratio of 4.82 (CMIN=11,891, DF=2,469) and an almost acceptable RMSEA of 0.087, though the CFI (again comparing the specified model to the independence model) was .78.

Finally, intraclass correlation coefficients for prototypical mentor and protégé items were computed using two-way mixed effects for absolute agreement. Single measures ICC, which estimates the agreement among raters on individual item scores, was .57 for prototypical mentor role descriptors and .48 for prototypical protégé role descriptors. The average measures ICC, which estimates the agreement among raters on the average score across items, was .99 for the prototypical mentor role descriptors and .98 for the prototypical protégé role descriptors.

## Discussion

This is the first study to identify individuals' cognitive prototypes of the mentor and protégé roles. As such, it contributes to our understanding of the different characteristics, attributes, behaviors and activities individuals may expect from people who occupy these roles. To summarize results, items indicating effective protégé performance and positive protégé potential were rated as prototypical by respondents, as predicted and consistent with prior literature (e.g., Allen et al., 1997; Allen et al., 2000; Green & Bauer, 1995; Kram, 1985; Olian et al., 1993). Respondents rated mentor power and effective interpersonal skills as being prototypical of the mentor role, also as predicted and consistent with prior literature (e.g., Olian, et al., 1988; Ragins, 1997a; Ragins 1997b; Kram, 1985). Contrary to predictions based on the “male managerial model” (Ragins, 1989), there was no evidence that either the mentor or protégé role prototypes are gender-typed. A fuller explanation of the results and their implications for research and practice follows below.

### Mentor Role Cognitive Prototype Content

When the mentor role descriptor prototypicality ratings were subjected to principal components factor analysis to reduce the data into more cohesive dimensions, factors that emerged were Supportive Role Model, Well-Established, Professional Director, Connected Confidante, Caring Protector and Even Keel. Table 9 shows the extent to which these factors map on to Kram's (1985) typology of classic mentor functions. This comparison indicates that several classic mentoring functions generally were *not* represented in the results of the current study, and those functions tended to be

career-related functions. Specifically, Kram's (1985) functions of Sponsorship, Exposure and Visibility, and Challenging Assignments were not found in the current study.

Although a factor emerged in the current work that was labeled Caring Protector which maps onto Kram's Protection function, only one item (friend) in the factor was rated as prototypical of the mentor role. Interestingly, three of these four classic mentor functions involve the mentor's role in mediating between the protégé and others outside the developmental dyad, such as helping the protégé expand his or her network, or providing protection from others with whom the protégé might have damaging interactions. These types of extra-dyadic activities seem to be beyond the prototypical mentor role as revealed in this study.

Providing Challenging Assignments, on the other hand, is an intra-dyadic function that is typically provided in a supervisory mentorship, according to Kram (1985). However, in the current study the item "supervisor" was not rated as prototypical of the mentor role. This suggests that while supervisory relationships may come to resemble mentorships over time (e.g., Scandura & Shriesheim, 1994; Thibodeaux & Lowe, 1996), a supervisor does not appear to be a role that people view as being part of the prototypical mentor role.

The fifth career function identified by Kram (1985), Coaching, also did not emerge cleanly in the current study, although several prototypical items from two observed factors (Supportive Role Model and Professional Director) are consistent with the Coaching function. Those items include providing guidance, showing how to do things, directing, and being an advisor and teacher from the Supportive Role Model factor, and being a trainer and structuring interactions with and options for the protégé

from the Professional Director factor. Although Kram's classic career functions were not strongly represented in the current study, seven of the eight role descriptors making up the factor Well-Established (successful, professional, expert, intelligent, accomplished, established, and leader) were rated as prototypical. While it is easy enough to imagine that a well-established individual might, for instance, be a good provider of the classic mentor function Exposure and Visibility for a junior person in the organization, it seems that what people actually think of as being key for the mentor role is less the actual career functions that such an individual can serve and more the characteristics indicating the *possibility* of serving mentoring functions. Thus, it may be the case that mentor role prototypes imply rather than directly contain traditional career functions.

In general, then, the current study did not find that Kram's (1985) classic career functions are represented explicitly in people's cognitive prototypes of the mentor role. Further, several clearly career-related items were rated as non-prototypical in the current study, including guardian, safety net, grooming another for promotion, talent creation, supervisor, and creating a successor. Revisiting the idea that one function of cognitive prototypes of socially constructed roles is to set people's expectations of individuals filling such roles (e.g., Lord, Foti, & Phillips, 1982; Lord & Maher, 1991), it may be the case that these active career-related functions are not necessarily expected of mentors. If this is the case, one would expect that protégés who receive such functions would be especially satisfied with mentors who provide them because they exceed expectations.

Interestingly, qualitative research by Eby and McManus (2002) on protégés' most positive mentoring experiences revealed that mentor behavior in such relationships included facilitating extra-organizational networking; providing intellectually challenging

assignments that broadened rather than narrowed skills; facilitating the development of key intra-organizational relationships that were hierarchical, lateral, and cross-functional; and providing career strategy input and individualized feedback. Almost all of these activities represent the type of career-related functions that were found to exist by Kram (1985) but were not a part of the mentor role prototype according to the current research. Putting these pieces together, the current study suggests that a plausible explanation for why those particular mentoring behaviors were central to protégés' most positive mentoring experiences is that those behaviors may be above and beyond what the typical expectations are of the mentor role.

This is interesting because several benefits often touted as being related to having a mentor are career-related (e.g., more promotions, higher compensation; see Allen et al., 2004 for a review). Perhaps it is the case that it is harder in terms of time, effort, ability, and/or risk for individuals to provide the types of beneficial career-related behaviors noted by Eby and McManus (2002) relative to psychosocial types of behaviors. For instance, one's ability to provide Exposure and Visibility to a protégé is limited by the extent of one's own professional network and willingness to share that network with a protégé. On the other hand, it is not particularly difficult or risky to serve as a sounding board to a protégé (Counseling). This kind of difference could affect the frequency with which such behaviors are enacted by mentors, which would, in turn, affect protégé experiences of the mentor role and thus individuals' cognitive prototypes of it. Future research could specifically investigate this issue to shed light on why cognitive prototypes of the mentor role appear to only imply the possibility of career-related

behaviors (as the Well-Established factor suggests) rather than actual behaviors themselves.

Returning to the comparison between Kram's (1985) classic mentor functions and the results of the current study, one can see in Table 9 that there is much greater correspondence between the two sets of results for psychosocial functions. An amalgamation of Kram's Role Modeling, Acceptance and Confirmation, and Counseling is represented in the Supportive Role Model factor identified in the current research. In fact, the ten highest-rated mentor descriptors in the current research all loaded onto the Supportive Role Model factor, suggesting that this is a critical set of characteristics and behaviors that individuals think of as defining their mental image of what a mentor is.

Other researchers have isolated role modeling as a third general mentoring function (separate from career and psychosocial functions) when conducting research on mentoring relationships (e.g., Scandura & Katerburg, 1988). The current study suggests that this separation reflects individuals' conceptualizations of what the mentor role is, though it appears that part of what is helpful about role modeling is that it be done in a supportive, encouraging fashion. This supportive aspect of role modeling often is not assessed in current mentoring research and doing so could help further clarify what makes some mentoring relationships more effective than others. Additionally, Kram's (1985) Counseling function is represented to an extent by the Connected Confidante factor that emerged in the current research, and the item "friend" was rated as prototypical in the current study which maps to Kram's Friendship function.

Overall, then, the mentor role descriptors rated as prototypical in the current study were more reflective of the classical psychosocial mentoring functions than the classical

career-related mentoring functions. To the extent that psychosocially-oriented behaviors and characteristics are not enacted by those occupying the mentor role, one could hypothesize that protégés would report unsatisfactory mentoring relationships.

Qualitative research by Eby et al. (2000) that focused on protégés' most negative mentoring experiences revealed that interpersonal problems such as distancing behavior, manipulative behavior, and interpersonal incompetence were at the root of many dysfunctional relationships. It may be that, in addition to the hurtful nature of such behaviors themselves, protégés found these types of mentor behaviors especially problematic because they violate core expectations about what the mentor role is.

It is also worth noting that descriptors generated for the mentor role were generally positive or at worst neutral in terms of desirability (e.g., no one suggested descriptors with negative connotations such as abusive, power-hungry, etc.), despite the fact that prior research has demonstrated that mentors can and do engage in dysfunctional behavior with their protégés (e.g., Eby, et al., 2000; Feldman, 1999; Scandura, 1998). In fact, the items generated by the participants for the mentor role descriptors overlap substantially with characteristics of an *ideal* mentor identified by Allen and Poteet (1999). Since the focus of this study was to understand individuals' cognitive prototypes of the mentor role generally (rather than the ideal version), no "ideal mentor" items were added to the current measure. However, many of the items found by Allen and Poteet also were generated by research participants in the current study. More specifically, the following mentor characteristics were identified in both studies: listening, communication, patience, knowledge/expertise, empathy for/understanding of others, honesty/dependability, providing structure, having common sense/being pragmatic,

confidence, openness, sharing experience, sharing information/perspective, leader/leadership qualities, allowing the protégé to learn/try things on own, flexibility, teaching, giving feedback, and fairness.

While one would not expect to see dysfunctional behavior rated as prototypical by respondents, it is interesting to note that these areas were not represented during the mentor role descriptor generation phase of this research. This suggests that people may have an overly idealized view of what mentor is, expecting only the good and not recognizing the potential dark side of mentoring relationships. One implication of this is that formal mentoring programs should be designed to help participants recognize the signs of a potentially toxic mentor, how to deal with difficult behavior, and when to seek help from another or exit the relationship entirely. Mentors in such programs should also be educated on potential dysfunctional behavior and made aware what will not be tolerated by the program sponsors or administrators. It seems as though individuals do, to some extent, anticipate problematic protégé behavior as the discussion below will indicate, so this type of intervention may be particularly useful when directed toward the mentor role.

#### Protégé Role Cognitive Prototype Content

Turning now to consider protégé role prototypes, we see that descriptors indicating strong performance and high potential emerged as being prototypical of the protégé role as expected based on the prior literature (e.g., Olian et al., 1993; Green & Bauer, 1995; Allen, et al., 2000). Additionally, three of the five descriptors with the highest prototypicality ratings were willing to learn, learning, and motivated. This dovetails with research by Allen (2004) and Allen, et al. (1997) which showed that

individuals value both motivation and a willingness to learn in protégés, and that willingness to learn is an important factor in the protégé selection process (Allen, 2004). The current research suggests that this may be at least in part because a willingness to learn fits individuals' cognitive prototypes of what a protégé is.

When the protégé descriptor prototypicality ratings were subjected to principal components factor analysis to reduce the data into more cohesive dimensions, the themes of performance, potential and learning were represented in four of the first five factors: Eager Achiever, Guided Learner, Classic Performer, and Stand Out. It seems from the convergence of findings across studies that willingness to learn, strong performance and high potential all are core parts of the protégé role prototype. Interestingly, protégé performance below expectations and unwillingness to learn were the two components of marginally effective relationship experiences as reported by mentors in a qualitative study conducted by Eby and McManus (2004). The results of the current study suggest that such findings may be due to the violation of mentors' expectations when protégés fail to enact core prototypical role behavior.

One emergent factor, Easy to Get Along With, was made up entirely of non-prototypical descriptors. Contrasting this with the results for the mentor role highlights that attributes which would likely help facilitate interpersonal interactions are important to individuals' mentor role prototypes but not to their protégé role prototypes. This raises the question of whether people may expect the mentor to shoulder the majority of the burden in making sure that the interactions with the protégé are effective and lack the interpersonal friction that can lead to less helpful interactions. If this is true, then it

would be especially useful for formal mentoring programs to help mentors develop such interpersonal skills.

Interestingly, the “dark side” of the protégé role is represented in the current study by the descriptors participants generated in the first stage of this research. Individuals conceived of potentially problematic and less desirable protégé attributes captured in the factors Toady and Political Climber. These types of behaviors were found by Eby and McManus (2004) to be dysfunctional protégé behaviors that mentors had experienced in their mentoring relationships. The fact that individuals in the current study generated these less desirable protégé role descriptors suggests that there may be more awareness of how a protégé can contribute to problematic mentorships. If so, potential mentors may be in a better position to either avoid choosing an individual who exhibits these behaviors as a protégé, or may be better equipped to deal effectively with these types of behaviors once they emerge. It may also be the case that those individuals who mentioned the descriptors that loaded on these factors may have had negative experiences watching someone they thought was less deserving than themselves become a protégé to a desired mentor. By framing those protégés as “toadies” or “political climbers,” individuals may simply have been finding a way to make their situation more palatable while retaining a positive view of self.

Finally, a factor containing two items (inexperienced, needs guidance) was observed and labeled Needs Help. The items on this factor also were not rated as being prototypical of the protégé role. This dovetails with prior research by Allen (Allen, et al., 1997; Allen, 2004) that suggest individuals are *not* motivated to mentor others by the others’ need of assistance. As more evidence mounts that this may in fact be the case, the

question is raised again as to whether mentoring actually helps protégés achieve more in their careers or if their success would have occurred anyway because they are strong, motivated performers with high potential who are willing to learn. As Allen et al. (2004) noted, there has not yet been a longitudinal investigation of mentoring relationships that would provide the best evidence one way or another of whether mentoring actually affects protégé performance and achievement or is merely a correlate of protégé success. For now, it appears that characteristics and behavior that indicate one needs help are not part of individuals' cognitive prototypes of the protégé role, nor are they likely to motivate others to serve as a mentor to such individuals. Taken together, the results with respect to the content of the protégé role prototype suggest that individuals who would like to be categorized by other (potential mentors) as protégés should exhibit a strong willingness to learn and high performance/potential, taking care to *not* signal that one needs help.

#### ***Additional Prototypicality Ratings of Note***

As a final note on the prototypicality ratings of mentor and protégé role descriptors, three sets of ratings of particular items are worth noting. First, it is interesting that in the protégé role descriptor prototype ratings, “peer” was in the bottom 10 ( $M=5.81$ ;  $SD=2.035$ ) and ranked dead last in the mentor role descriptor prototype ratings ( $M=5.63$ ;  $2.255$ ). This suggests that individuals do not tend to consider a “peer” as mentor or a protégé, i.e., peer does not seem to fit people's cognitive prototypes of a developmental partner. This is unfortunate to the extent that peers can provide some important mentoring functions (e.g., Kram and Isabella, 1983; Russell & McManus, in press). However, this result also makes sense given the terminology used, which was the

traditional “mentor” and “protégé” rather than the more generic “developmental partner.” Future research could investigate differences in cognitive prototypes of such traditional vs. generic roles. If there is evidence that people have poor conceptualizations of other types of developmental partners, it might be useful for organizations to help individuals think more broadly about where and how they find developmental career support while recognizing that people seem to retain traditional perspectives on mentoring generally.

Second, neither of the specific age-related items (“older” on the mentor role descriptor measure and “young” on the protégé role descriptor measure) were rated as prototypical by the respondents. This suggests people might be more open to mentor-protégé pairings where age is not terribly different between the two members. There is little research currently available that addresses mentor and protégé age. In the one study found on the topic, Finkelstein, Allen, & Rhoton (2003) reported that older protégés generally said they received less career support, engaged in shorter mentorships, experienced more co-learning with their mentors, and were closer in the hierarchy to their mentors than younger protégés were. It is possible that while the outcomes for older protégés may be different than for younger ones, age-related items may not be part of mentor or protégé role prototypes and so may not be important drivers or barriers for establishing mentorships. Future research could directly test this idea directly by assessing individuals’ willingness to mentor others who are older, younger or of a similar age could shed light on whether there are potential disparities in age-related access to mentors.

Finally, similarity with one’s dyadic partner was not rated as prototypical for either the mentor or protégé role descriptor. This is noteworthy because dyadic similarity

has been thought to be an important antecedent of high-quality mentoring relationships. Based implicitly or explicitly on Byrne's (1971) similarity-attraction paradigm, a good deal of research has been devoted to understanding how dyadic similarity in terms of race, gender, background and attitudes is related to mentoring relationship quality (Koberg, et al., 1998; Feldman, et al., 1999; Thomas, 1990; Noe, 1988b; Ragins & Cotton, 1999; Turban et al., 2002; Ensher & Murphy, 1997; Burke, McKeen, & McKenna, 1993; Ensher et al., 2002; Eby et al., 2000; Allen & Eby, 2003). However, the results of these research efforts generally do not converge, with some finding that similarity enhances relationship quality and others finding it does not. Perhaps that is because dyadic similarity on demographic and attitudinal variables do not seem to be core to the role prototypes that individuals hold, and so are not part of individuals' expectations of a developmental partner. When this is the case, other factors, such as the extent to which individuals share cognitive prototypes of the mentor and protégé roles may be more important for relationship success. As mentioned earlier, Engle and Lord's (1997) research on leader-member exchange relationships provides some preliminary evidence that role prototype congruence may be related to perceptions of dyadic relationship quality in organizational settings. Research investigating the extent to which mentor and protégé role prototype similarity in intact mentoring dyads is related to relationship quality would help determine if such findings extend to mentoring relationships.

### ***Gender-Typing of Mentoring Role Prototypes***

In addition to the content of the mentor and protégé role prototypes, the current research also investigated the extent to which these roles were gender-typed, and whether

prior experience affected gender-typing. The results indicated statistical evidence that the mentor role may be somewhat male-typed, consistent with the literature on the “male managerial model” (e.g., Ragins, 1989). However, while the results were statistically significant, the absolute difference in mean prototypicality ratings between the masculine and feminine mentor role descriptors was small (.05) and the degrees of freedom were large (509), which suggests that this is highly unlikely to be a practically significant result. Additionally, no evidence was found that the protégé role was gender typed. This suggests that the difficulty some researchers have reported that women have in securing a mentor is not due to the gender-type of the protégé role and suggests other issues may be at play (e.g., individuals may prefer same-sex developmental relationships in order to avoid potentially harmful sexual innuendo, either real or perceived, within the relationship; e.g., Kram, 1985). Finally, having a history of mostly male or mostly female mentors was not related to the gender-typing of either the mentor or protégé role.

### ***Additional Implications for Future Research***

Future research can build on the current findings in several ways. First, the content of the mentor and protégé role prototypes found in the current study should be further evaluated. For instance, content validation studies that use confirmatory methodologies (e.g., card sorts by subject matter experts, empirical prototypicality ratings subjected to confirmatory factor analysis) could enhance confidence in the prototypical role descriptors found here and potentially lead to further refinement of these role prototypes. Research also could investigate the ways in which individuals use these prototypes to make choices about whether and how to engage with prototypical vs. non-prototypical mentors and protégés. For instance, lab studies manipulating the

prototypicality of paper protégés could be used to understand others' willingness to mentor those stimulus people, which would provide evidence indicating the extent to which the protégé prototype found in the current study directs people's classification of others as potential protégés. Additionally, manipulating mentor prototypicality could help shed light on the types of interactions individuals would expect to have with more or less prototypical mentors, as well as the kinds of benefits they would expect to receive in relationships with more or less prototypical mentors. Such studies may also reveal which attributes of the respective role prototypes are relatively more important to prototype content.

With respect to the nature of the role prototypes in the current study, some interesting observations can be made about the observed prototypicality ratings that suggest additional avenues of research. For instance, relative to mentor role descriptors, far fewer of the protégé role descriptors were rated as prototypical (80 out of 101 vs. 56 out of 100 respectively). Further, the mean ratings for protégé descriptors were generally lower than those for the mentor descriptors. Specifically, 10 mentor role descriptors had average prototypicality ratings greater than 8, while no protégé role descriptors had an average prototypicality rating that high (willing to learn was the highest with a mean rating of 7.95), and more protégé descriptor ratings than mentor descriptor ratings were in the range of 6-7. These observations suggest that respondents' understanding of the protégé role may be more nuanced than their understanding of the mentor role. In the two samples used in the current study to rate mentor or protégé role prototypicality, about twice as many respondents reported having been a protégé than reported having been a mentor themselves in the past.

This suggests that, as a group, respondents were more familiar with the protégé role, having enacted it more often than the mentor role. Prior theory and research on cognitive prototypes holds that experience with category members is critical to prototype development because it increases an individuals' level of category expertise (e.g., Rosch, 1978; Foti & Luch, 1992). Research by Rentsch, Heffner, & Duffy (1994) on work teams has found that more experience in teams was related to the type of mental models individuals held about core teamwork knowledge (i.e., knowledge beyond that specific to the tasks). Their results demonstrated that those individuals who had greater team experience tended to have cognitive schemata of teamwork that were more abstract, concise, and consistent across methodologies than those individuals with less teamwork experience.

Research on mentoring relationships also has found differences in how people perceive the mentor role based on their prior experiences in mentoring relationships (Allen, et al., 1997b; Ragins & Scandura, 1999). Specifically, individuals with any prior experience in mentoring relationships perceived fewer barriers to mentoring others (Allen et al., 1997b), and those with experience in both the mentor and protégé roles anticipated fewer costs and greater benefits of mentoring others than did individuals who lacked any type of prior mentoring experience (Ragins & Scandura, 1999). However, individuals with experience only as protégés were significantly more likely than those with experience only as mentors to report that mentors benefit from the allegiance and loyalty of the protégé, suggesting that protégé-only experience may result in a more idyllic view of the mentor role (Ragins & Scandura, 1999).

Observations of the prototypicality ratings for the mentor role descriptors in the current research, which resulted in about 80% of the descriptors being rated as prototypical and several being rated extremely highly, along with the overlap of several role descriptors with characteristics of “the ideal mentor” reported by Allen and Poteet (2004), suggest that respondents may have an overly-idealized and somewhat monolithic view of the mentor role that does not allow for finer distinctions between descriptors. Having greater prior mentoring experience over time across relationships should lead to cognitive representations of the mentoring roles that are better defined and developed (cf. Rentsch et al., 1994), allowing individuals to more specifically identify distinguishing characteristics of category members and making it easier to subsequently identify prototypical attributes. Contrarily, individuals lacking prior experience in mentoring relationships may draw on knowledge acquired through second-hand methods (e.g., through culturally derived information; through observation of other people’s experiences) and thus have more idiosyncratic and less well-defined role prototypes.

Different aspects of prior experience could be further examined to determine how they affect mentor and protégé role prototypes. As mentioned above, there may be systematic differences in prototype content depending on how many roles an individual has played before (none, protégé only, or mentor only). The number of prior relationships is another aspect of experience that may affect prototype content. The more mentorships individuals have experienced, the greater their exposure to the relevant categories of mentor and protégé as enacted by a variety of individuals. This should reduce reliance on role exemplars and create more rounded understandings of the roles, in turn leading to more consistent and concise role prototypes.

The length of those prior relationships may also affect the content and structure of mentoring role prototypes. Role theory and leader-member exchange (LMX) theory both emphasize the need for extended periods of interactions for roles to develop sufficiently. Katz and Kahn (1978) posited that individuals establish and modify their expectations and behavior with regard to their own and others' organizational roles through an iterative process of role sending, receiving, feedback, and modification. Over time, this process can help clarify the roles people take on and bring their behavior in line with role expectations. Here, the focus is on the longitudinal development of organizationally relevant roles where successful social interactions require sufficient time for feedback loops to operate. These processes serve to clarify and reinforce mutual expectations and role conceptualizations.

Empirical research relevant to this point was conducted by Mossholder, Niebuhr, and Norris (1990) who investigated the relationships between different types of leader behavior demonstrated by supervisors and their subordinates' performance. The results indicated that in relationships of relatively short duration, supervisory leadership behavior had a greater impact on subordinate performance than in relationships of relatively longer duration. Mossholder et al. (1990) suggested that dyadic duration may tap more subtle constructs, such as supervisor-subordinate perceptual agreement regarding subordinate performance. In essence, over time individuals come to share perspectives on their role requirements by having continued interactions that provide feedback to both members of the dyad.

Similarly, mentors and protégés who are in longer relationships have the opportunity to engage in a meaningful role-making process that would affect their

understanding of each others' and their own roles – what to expect from the other and how to behave toward the other. While relationship duration is likely to lead to role prototype agreement within single dyads, having multiple long-term mentorships in both the protégé and mentor roles should together contribute to less idiosyncratic and variable cognitive prototypes of these roles.

Finally, the structure of prior mentorship experiences may also affect the content and nature of individuals' role prototypes. Research has indicated that formal mentorships may not be as effective for protégés as informal mentorships (e.g., Chao et al., 1992; Ragins & Cotton, 1999). One reason for this may be that formal mentoring programs often are designed to achieve specific organizational goals which narrows the prescribed focus of the mentoring activities that occur in these relationships. To the extent that individuals' prior experiences are dominated by such restricted relationships, the cognitive prototypes they develop for the mentor and protégé roles are likely to be restricted as well. Similarly, prior experiences limited to supervisory mentorships are likely to lead to mentoring role conceptualizations that are useful only in such structurally defined relationships. In sum, future research investigating how these different aspects of prior experience – number of roles played, number of prior relationships, relationship duration, and relationship structure – could shed light on the nature and content of mentor and protégé role prototypes held by individuals with different experience profiles.

Such research would lay the foundation for further investigation of how different experience profiles may be related to role expectations and enactment, and to mentoring relationship quality. While some recent research in the teams literature has demonstrated that shared mental conceptualizations of individual roles and of teamwork in general are

related to team performance in both groups (Rentsch & Klimoski, 2001) and dyads (Matthieu, Heffner, Goodwin, Salas, & Cannon-Bowers, 2000), the link between shared social role prototypes and relationship quality has received even less attention outside the teams literature. As noted previously, research by Engle and Lord (1997) is an exception to this and also demonstrated a positive link between shared social role prototypes and relationship quality. The degree to which individuals in the relationship understand the roles in a similar fashion ought to be related to their perceptions of how well the relationship is working. Further, because role prototypes serve as standards for role expectations (e.g., Lord et al., 1982; Lord & Maher, 1991) and because the degree to which expectations are met in mentoring relationships has been related to perceptions of relationship quality (Young & Perrewe, 2000), the degree to which expectations are met is likely to operate as a mediator. In sum, individuals in a mentorship who have similar role prototypes may be more likely to have similar expectations for their respective roles, be more likely to enact the types of behaviors their mentoring partner expects of them, and experience better relationships.

The discussion to this point has treated the results as though they do provide evidence of cognitive prototypes of both the mentor and protégé role. As noted in the results section, however, there is the possibility that there is more than one prototype of each role, or that there is no prototype of either role. While the coefficient alpha reliability estimates of the scales created based on the factors found in the exploratory factor analysis were all, save one, above the standard .70, the CFA results suggest that the measurement model could be improved somewhat to fully achieve consistent support for the model among the different indicators of fit. The observed differences between the

frequency with which a role descriptor was generated and the prototypicality ratings of descriptors also call into question whether any cognitive prototype has been found in this study, as do the moderate item ICCs of prototypical items for both roles. It may be the case that what was found here are two semantic networks that surround the constructs of mentor and protégé rather than prototype vectors. Although thematically the results are in line with predictions about prototype content and dovetail with prior research, the factors observed here may not represent universal role prototypes but rather relatively coherent sets of related concepts that may be differentially held by people with varying levels of expertise.

Future research can help address these issues in several ways. To begin, research could examine the thematic content of individuals' generative responses to what they think of when they think of a mentor or a protégé. This could shed light on common themes and themes that tend to co-vary with each other, i.e., those that appear consistently together within different individuals responses. Consistent themes would be candidates for prototypical role conceptualizations. Divergent themes would suggest idiosyncratic impressions of these socially constructed roles that may result from inconsistent experiences of the roles or inexperience with the roles. Thus, examining emergent themes from data collected from experienced and inexperienced individuals would be important for comparative purposes.

Research using subject matter expert panels to evaluate the prototypicality of generated items or themes by card sorting techniques. Experts would be those who have had substantial experience in both the mentor and protégé role in multiple relationships of varying duration and structure. Most likely, these will be people with substantial

organizational experience as well who will have had the opportunity to observe and hear about the experiences of other individuals in a variety of mentoring relationships. The combination of direct and indirect experience should make such individuals particularly aware of what is and is not central to the conceptualization of the mentor and protégé roles.

Understanding the degree of agreement, or the lack thereof, among individuals who rate the prototypicality of mentor and protégé role descriptors may also be an area of fruitful future investigation. Research that conducts a fine-grained analysis of statistical agreement and convergences for different role descriptors may reveal those with high agreement among raters. Items with high agreement that are also rated as being prototypical would be good candidates for the role prototype vector.

Finally, the current research used the entire range of prototypical to non-prototypical items in the interpretation of factors found in the exploratory analyses. Other researchers (e.g., Offerman et al., 1994) have used trimmed versions of identified factors to clarify the nature of cognitive prototypes for the socially constructed role of leader. It would be interesting to compare the a full vs. trimmed version of the factors identified to determine whether there is stability in the interpretations, differences in prototypicality ratings, or in the results of subsequent content validation efforts using subject matter experts. Additionally, the current research considered all factors with eigenvalues greater than 1 as important to the understanding of mentor and protégé role cognitive prototypes. Using a scree plot, however, would have reduced the number of protégé factors, for example, to either two (Eager Achiever, Guided Learner) or four (those two plus Classic Performer and Easy to Get Along With), depending on which step

in the stair function one chose to stop. Follow-up studies evaluating the agreement and prototypicality of the reduced number of role descriptors could help clarify which, if any, are part of a prototype vector and which are idiosyncratically used descriptors.

### Limitations and Conclusions

Like all research, this has its limitations. While the item-generation portion of the study collected data from white-collar employees with a good deal of work experience and compensation levels that indicate managerial jobs, those who provided data for the prototypicality ratings of the mentor and protégé roles included some who were still college students. It would be interesting to find out if similar role descriptor prototypicality ratings would be obtained from a more uniformly organizationally experienced sample. Additionally, while the sample that provided the mentor and protégé role descriptors was balanced with an equal number of men and women, the two samples rating the prototypicality of the role descriptors were mostly female. Specifically, the sample that provided mentor role ratings was 73% female, and the sample that provided protégé role ratings was 70% female. Note that both of these percentages are slightly higher than the percentage of women in the overall research pool (67%). This suggests that there may have been a slight self-selection process occurring with females choosing to participate in the research at a slightly higher rate than would be expected from a random sample. However, even if the sample had mirrored the research pool exactly, the about two-thirds of the participants would have been female. Either way, the gender imbalance in the current study raises the question of how generalizable these results may be. If a gender-balanced sample or one dominated by male respondents

produced similar results, it would enhance confidence in the generalizability of the current results.

All respondents were living in the northeastern United States, an area of the country known for more liberal politics and high concentration of institutions of higher education. Replicating these results using data from individuals in other geographic regions would help address whether such cultural differences affect individuals' understanding of developmental roles. More specifically, data from regional areas where individuals view men and women as being more different than similar to each other and as conforming more to gender stereotypes may produce gender-typed cognitive prototypes. Similarly, the current data were gathered in the U.S. It could be fruitful to examine whether and how different countries, especially those that have relatively high masculine or feminine cultures, differ in terms of how gender-typed their prototypes are of the mentor and protégé role.

It also is possible that the prototypical mentor role descriptors found in the current research represent an overly-idealized conceptualization of the mentor role which, as discussed earlier, may be because the sample as a whole had more experience in the protégé role than in the mentor role. Future research should use a sample of individuals with more experience in the mentor role in order to determine any similarities and differences in the mentor role prototype observed in the current study. Additionally, research that specifically investigates individuals' cognitive prototypes of "typical mentor" and "ideal mentor" roles would help distinguish the two constructs from each other. Finally, while the methodology used in the current study has reliably led to the discovery of cognitive prototypes of other socially constructed roles such as leader (e.g.,

Eby et al., 2000; Engle & Lord, 1997; Lord et al., 1984; Kinicki et al., 1995; Offermann et al., 1994), the current results cannot rule out the possibility that more than one or no cognitive prototype might exist for each of the mentor and protégé roles which would qualify the implications for research and practice that follow.

With these limitations and cautions in mind, there are some implications from the current research for individuals and practitioners. For individuals hoping to attract a mentor, the current research suggests it would be helpful to exhibit behaviors and characteristics consistent with strong performance, high potential, and willingness to learn. Potential barriers to attracting a mentor include behaving in ways that suggest a political or manipulative motivation for gaining a mentor, and behaving in ways that suggest a need for help. For individuals who would like to be seen as a mentor, the current research suggests it would be helpful to exhibit behaviors and characteristics consistent with power and effective interpersonal skills. Actively working to attain the status of being considered well-established by others may also be useful. Both of these implications for individuals are based on the categorization process that cognitive prototypes help facilitate: given a set of attributes and activities, does this person match my idea of what a mentor or a protégé is?

When individuals are designated by themselves or others as a mentor or protégé, their own cognitive prototypes will inform what behaviors and characteristics they exhibit, while others' role prototypes will affect their expectations of their developmental partners. It is possible that the relatively consistent finding that formal mentoring is not as effective as informal mentoring is because the label "mentor" activates individuals' cognitive prototypes of what a mentor is, which then leads them to expect a specific set

of behaviors and characteristics that may not be met. This suggests that practitioners responsible for the creation and implementation of formal mentoring programs could benefit from assessing participants' prior experiences in mentoring relationships and the expectations those experiences have led participants to form over time. Overtly discussing expectations and commonly held prototypical attributes for each role would help level-set all participants expectations which should enhance their satisfaction with formal mentorships. Similarly, clearly communicating organizational objectives for the mentoring program provides another benchmark against which participants can assess the effectiveness of their formal mentorships. It is also important that formal mentoring program sponsors and administrators monitor the relationships throughout the duration of the program to ensure that individuals are appropriately enacting their roles and that their expectations are being met by their developmental partners.

Finally, to the extent that formal mentoring programs become activities that are evaluated in ways similar to performance assessments, it is important to understand how behavioral ratings are related to cognitive prototypes of the mentor and protégé roles, as other researchers have done for cognitive prototypes of leadership and behavioral ratings (e.g., Larson, 1982; Lord, Binning, Rush & Thomas, 1978; Rush, Phillips & Lord, 1981; Rush, Thomas & Lord, 1977). In the case of leadership research, the factor structure of commonly used leadership measures could essentially be recreated by individuals who were relying largely on their own ideas of what a leader was. Until we understand how mentoring effectiveness ratings are or are not influenced by prototypes, practitioners responsible for administering formal mentoring programs should collect data only for developmental and not administrative purposes.

As the first step in identifying people's cognitive prototypes of the mentor and protégé role, the current research contributes to the literature on mentoring by incorporating a different theoretical basis that ultimately could be used to understand mentorship quality. As future research continues to search for and refine cognitive prototypes of the mentor and protégé roles, the application of cognitive categorization theory to this content domain may help to clarify some of the key attributes that could affect selection of an individual as a mentor or protégé, role enactment, and expectations of developmental partners.

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## **APPENDICES**

## Appendix A with Measurement Items

### **Mentor Role Inventory (Ragins & McFarlin, 1990; Ragins & Cotton, 1999)**

My mentor...

#### *(SPONSOR)*

helps me attain desirable positions.  
uses his/her influence to support my advancement in the organization.  
uses his/her influence in the organization for my benefit.

#### *(COACH)*

helps me learn about other parts of the organization.  
gives me advice on how to attain recognition in the organization.  
suggests specific strategies for achieving my career aspirations.

#### *(PROTECT)*

protects me from those who may be out to get me.  
“runs interference” for me in the organization.  
shields me from damaging contact with important people in the organization.

#### *(EXPOSURE)*

helps me be more visible in the organization.  
creates opportunities for me to impress important people in the organization.  
brings my accomplishments to the attention of important people in the organization.

#### *(FRIENDSHIP)*

is some one I can confide in.  
provides support and encouragement.  
is someone I can trust.

#### *(SOCIAL)*

and I frequently get together informally after work by ourselves.  
and I frequently socialize one-on-one outside the work setting.  
and I frequently have one-on-one, informal social interactions.

#### *(PARENT)*

is like a father/mother to me.  
reminds me of one of my parents.  
treats me like a son/daughter.

#### *(ROLE MODEL)*

serves as a role model for me.  
is someone I identify with.  
represents who I want to be.

*(COUNSELING)*

serves as a sounding board for me to develop and understand myself.  
guides my professional development.  
guides my personal development.

*(ACCEPTANCE)*

accepts me as a competent professional.  
sees me as being competent.  
thinks highly of me.

**Protégé Role Measure (Adapted from Ragins & Scandura, 1994; 1999)**

Mentoring this protégé:

*(REWARDING EXPERIENCE)*

gives me a sense of fulfillment by allowing me to pass on my wisdom to another person.  
is one of the most positive experiences of my career.  
makes me feel better about myself.  
yields rewards for me that more than compensate for the costs of being this person's mentor.  
helps me gain a sense of satisfaction by passing my insights on to my protégé.  
provides advantages that far outweigh the drawbacks.  
increases my creativity.

*(IMPROVED JOB PERFORMANCE)*

improves my own job performance.  
has a positive impact on my job.  
provides a relationship that is rejuvenating my job.  
provides a catalyst for innovation.  
has a positive impact on my job performance.

*(RECOGNITION BY OTHERS)*

helps me gain positive recognition in my organization for assuming this mentoring role.  
helps me achieve recognition from my superiors for developing my protégé's talents.  
increases my status among my peers because of my mentoring relationship with my protégé.

*(GENERATIVITY)*

has allowed me to relive my life through my protégé.  
gives me a sense of immortality

My protégé:

seems like a younger version of myself. (generativity)

is a positive reflection on my own competency. (improved job performance)  
is someone I can count on to be a loyal supporter. (loyal base of support)  
is one of my trusted allies. (loyal base of support)  
enhances my reputation. (cross-loaded item)  
is an important source of support for me. (cross-loaded item)  
is a positive reflection on my judgment. (cross-loaded item)

**Satisfaction with Mentor Scale (Ragins & Cotton, 1999)**

My mentor:

is someone I am satisfied with.  
fails to meet my needs. (R)  
disappoints me. (R)  
has been effective in his/her role.

**Satisfaction with Protégé Scale (Adapted from Ragins & Cotton, 1999)**

My protégé:

is someone I am satisfied with.  
fails to meet my needs. (R)  
disappoints me. (R)  
has been effective in his/her role.

**Satisfaction with Mentoring Relationship (mentor version; adapted from Rusbult, Martz, & Agnew, 1998)**

My relationship with my protégé is:

something I feel satisfied about.  
better than others' relationships with their protégés.  
close to ideal.  
makes me very happy.

**Satisfaction with Mentoring Relationship (protégé version; adapted from Rusbult, Martz, & Agnew, 1998)**

My relationship with my mentor is:

something I feel satisfied about.  
better than others' relationships with their protégés.  
close to ideal.  
makes me very happy.

**Affective-based Trust (mentor version; adapted from McAllister, 1995)**

My protégé and I have a sharing relationship in that we can both freely share our ideas, feelings, and hopes.

I can talk freely to my protégé about difficulties I am having at work and know that (s)he will want to listen.

Both my protégé and I would feel a sense of loss if one of us were transferred and could no longer work together.

If I shared my problems with my protégé, I know (s)he would respond constructively and caringly.

I would have to say my protégé and I have both made considerable emotional investments in our working relationship.

**Affective-based Trust (protégé version; adapted from McAllister, 1995)**

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Both my mentor and I would feel a sense of loss if one of us were transferred and we could no longer work together.

If I shared my problems with my mentor, I know (s)he would respond constructively and caringly.

I would have to say my mentor and I have both made considerable emotional investments in our working relationship.

**Cognitive-based Trust (mentor version; adapted from McAllister, 1995)**

My protégé approaches his/her role with professionalism and dedication.

Given my protégé's track record, I see no reason to doubt his/her competence and preparation for his/her work.

I can rely on my protégé not to make things more difficult for me by carelessness.

Most people, even those who aren't close friends of my protégé, trust and respect him/her.

Other associates of mine who must interact with my protégé consider him/her to be trustworthy.

If people knew more about my protégé and his/her background, they would be more concerned and monitor his/her work more closely. (R)

**Cognitive-based Trust (protégé version; adapted from McAllister, 1995)**

My mentor approaches his/her role with professionalism and dedication.

Given my mentor's track record, I see no reason to doubt his/her competence and preparation for his/her work.  
I can rely on my mentor not to things make more difficult for me by carelessness.  
Most people, even those who aren't close friends of my mentor, trust and respect him/her.  
Other associates of mine who must interact with my mentor consider him/her to be trustworthy.  
If people knew more about my mentor and his/her background, they would be more concerned and monitor his/her work more closely. (R)

**Mentorship Commitment (mentor version; adapted from Rusbult et al., 1998)**

When thinking about my relationship with my protégé...

I want our relationship to last a very long time.  
I am committed to maintaining our relationship.  
I would not feel very upset if our relationship were to end in the near future. (R)  
I feel very attached to our relationship—very strongly linked to my protégé.  
I want our relationship to last forever.  
I am oriented toward the long-term future of our relationship (for example, I imagine we will still have a relationship several years from now).

**Mentorship Commitment (protégé version; adapted from Rusbult et al., 1998)**

When thinking about my relationship with my mentor...

I want our relationship to last a very long time.  
I am committed to maintaining our relationship.  
I would not feel very upset if our relationship were to end in the near future. (R)  
I feel very attached to our relationship—very strongly linked to my mentor.  
I want our relationship to last forever.  
I am oriented toward the long-term future of our relationship (for example, I imagine we will still have a relationship several years from now).

**General Mentorship Quality (mentor version; adapted from Allen & Eby, 2003)**

The mentoring relationship between my protégé and me is very effective.  
I am very satisfied with the mentoring relationship my protégé and I have.  
I am being effectively utilized as a mentor by my protégé.  
My protégé and I enjoy a high-quality relationship.  
Both my protégé and I benefit from our mentoring relationship.

**General Mentorship Quality (protégé version; adapted from Allen & Eby, 2003)**

The mentoring relationship between my mentor and me is very effective.  
I am very satisfied with the mentoring relationship my mentor and I have.  
I am being effectively utilized as a protégé by my mentor.  
My mentor and I enjoy a high-quality relationship.  
Both my mentor and I benefit from our relationship.

**Met Expectations (mentor version; Young & Perrewé, 2000, adapted & augmented)**

So far, I have received what I expected to receive from my relationship with my protégé.  
In retrospect, I didn't get when I anticipated from my relationship with my protégé. (R)  
Up to this point in our relationship, my protégé has generally met my expectations of him/her.

**Met Expectations (protégé version; Young & Perrewé, 2000, adapted & augmented)**

So far, I have received what I expected to receive from my relationship with my mentor.  
In retrospect, I didn't get when I anticipated from my relationship with my mentor. (R)  
Up to this point in our relationship, my mentor has generally met my expectations of him/her.

## Exhibit 1: Participation E-mail for Mentor Prototype Ratings

Dear <NAME>,

Thank you for signing up to participate in the CLER study, *What is a Mentor?*. Organizations and individuals are increasingly interested in creating effective relationships between mentors and protégés. In this study, we are interested in understanding what people think of when they think of a mentor. This survey asks you to evaluate the extent to which different characteristics, attributes, behaviors, and activities fit your image of what a mentor is.

We expect the survey to take no longer than 15 to 20 minutes to complete. Please remember that there are no right or wrong answers. Your participation is voluntary, and you are free to withdraw from the study at any time. The researchers will not be able to link your survey responses to you, so your data will remain completely confidential.

If you complete the survey, we will send you a \$5 money order. At the end of the survey, you will be asked to enter your four-digit passcode which is located at the bottom of this email. We suggest that you print this email or write down your passcode so you can access it easily when you are finished responding to the survey. **In order to receive payment, the four-digit passcode you enter on the survey must match the four-digit passcode in this email.**

In order to send you the money order, we also must have correct, up-to-date information about you, including your SSN or visa information, and your current mailing address. If you did not enter this information at the time you registered, or if it has changed since you registered, please go to <http://www.hbs.edu/cler/update.html> and update your profile. If the data you provided to us is inaccurate, outdated, or missing you will not receive payment for your participation. Please allow 4-6 weeks to receive payment.

The link to the on-line survey is located below. You will have until <TIME> <DATE> to complete the survey. If you have any problem accessing the survey or have any questions directly related to completing the survey, please contact [cler@hbs.edu](mailto:cler@hbs.edu).

Thank you very much for participating in our research. We appreciate your time and your opinions!

<http://www.surveymonkey.com/s.asp?u=647621085214>

**Your four-digit passcode is:<XXXX>**

## Exhibit 2: Participation E-mail for Protege Prototype Ratings

Dear <NAME>,

Thank you for signing up to participate in the CLER study, *What is a Protégé?*. Organizations and individuals are increasingly interested in creating effective relationships between mentors and protégés. In this study, we are interested in understanding what people think of when they think of a protégé. This survey asks you to evaluate the extent to which different characteristics, attributes, behaviors, and activities fit your image of what a protégé is.

We expect the survey to take no longer than 15 to 20 minutes to complete. Please remember that there are no right or wrong answers. Your participation is voluntary, and you are free to withdraw from the study at any time. The researchers will not be able to link your survey responses to you, so your data will remain completely confidential.

If you complete the survey, we will send you a \$5 money order. At the end of the survey, you will be asked to enter your four-digit passcode which is located at the bottom of this email. We suggest that you print this email or write down your passcode so you can access it easily when you are finished responding to the survey. **In order to receive payment, the four-digit passcode you enter on the survey must match the four-digit passcode in this email.**

In order to send you the money order, we also must have correct, up-to-date information about you, including your SSN or visa information, and your current mailing address. If you did not enter this information at the time you registered, or if it has changed since you registered, please go to <http://www.hbs.edu/cler/update.html> and update your profile. If the data you provided to us is inaccurate, outdated, or missing you will not receive payment for your participation. Please allow 4-6 weeks to receive payment.

The link to the on-line survey is located below. You will have until <TIME> <DATE> to complete the survey. If you have any problem accessing the survey or have any questions directly related to completing the survey, please contact [cler@hbs.edu](mailto:cler@hbs.edu).

Thank you very much for participating in our research. We appreciate your time and your opinions!

<http://www.surveymonkey.com/s.asp?u=178551048054>

**Your four-digit passcode is:<XXXX>**

### Exhibit 3: Follow-Up Recruitment Letter to Participants in Mentor Prototype Study

Dear CLER participant,

Thank you for your recent completion of the on-line survey, *What is a Mentor?* The researcher, who does not have access to your email or other personal information, would like to obtain follow-up information about the survey participants' experiences in mentoring relationships. The information about the short follow-up online survey is listed below:

**Study Description:** In this follow-up online study, we are interested in understanding what kinds of mentoring relationships people have experienced. This online survey asks you to provide basic information about whether you have been a mentor or a protégé, and if so, to provide brief information about the nature of those relationships (e.g., whether they were with supervisors, how long they lasted). We expect this short survey to take no longer than 5 to 10 minutes to complete.

**Compensation:** Participants who complete the survey and correctly enter their four digit passcode will be entered in a drawing for a \$25 Amazon.com gift certificate. There will be one gift certificate winner for every 50 survey respondents. Winners will receive their \$25 gift certificates via email. Please allow two weeks for notification.

**Survey Process:** For this study, you will use the following four digit passcode: <enter passcode number here>. At the end of the survey, you will be prompted to enter the passcode *exactly* as it appears above in order to qualify for the \$25 Amazon.com gift certificate drawings. The survey is currently available online at the following URL link: <http://www.surveymonkey.com/s.asp?u=535441231102>

Thank you for your continued participation in the CLER research database. If you need to update your CLER profile, or if you have trouble accessing the survey, please go to our web page at <http://www.hbs.edu/cler/update.html> or email [cler@hbs.edu](mailto:cler@hbs.edu) for more information.

Thanks,  
Heather  
Subject Pool Administrator  
CLER: <http://www.hbs.edu/cler/>  
Harvard Business School  
mailto: [cler@hbs.edu](mailto:cler@hbs.edu)

#### **Exhibit 4: Follow-Up Recruitment Letter to Participants in Protégé Prototype Study**

Dear CLER participant,

Thank you for your recent completion of the on-line survey, *What is a Protégé?* The researcher, who does not have access to your email or other personal information, would like to obtain follow-up information about the survey participants' experiences in mentoring relationships. The information about the short follow-up online survey is listed below:

**Study Description:** In this follow-up online study, we are interested in understanding what kinds of mentoring relationships people have experienced. This online survey asks you to provide basic information about whether you have been a mentor or a protégé, and if so, to provide brief information about the nature of those relationships (e.g., whether they were with supervisors, how long they lasted). We expect this short survey to take no longer than 5 to 10 minutes to complete.

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Thank you for your continued participation in the CLER research database. If you need to update your CLER profile, or if you have trouble accessing the survey, please go to our web page at <http://www.hbs.edu/cler/update.html> or email [cler@hbs.edu](mailto:cler@hbs.edu) for more information.

Thanks,  
Heather  
Subject Pool Administrator  
CLER: <http://www.hbs.edu/cler/>  
Harvard Business School  
mailto: [cler@hbs.edu](mailto:cler@hbs.edu)

## Exhibit 5: Mentor Prototypicality Rating Survey

What is a Mentor?

In this survey, we are interested in understanding how well a variety of characteristics, attributes, behaviors, and activities might fit your perception of what a mentor is.

Please read each item and check the circle that indicates how well the item fits your idea of what a mentor is.

To what extent do the following words or phrases fit your idea of what a mentor is?

|                                        | Completely<br>fails to fit<br>my image | Greatly<br>fails to<br>fit my<br>image | Moderately<br>fails to fit<br>my image | Slightly<br>fails to<br>fit my<br>image | Neutral | Slightly<br>fits my<br>image | Moderately<br>fits my<br>image | Greatly<br>fits my<br>image | Completely<br>fits my<br>image |
|----------------------------------------|----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------------|---------|------------------------------|--------------------------------|-----------------------------|--------------------------------|
| Inspiration                            |                                        |                                        |                                        |                                         |         |                              |                                |                             |                                |
| Thoughtful                             |                                        |                                        |                                        |                                         |         |                              |                                |                             |                                |
| Confidante                             |                                        |                                        |                                        |                                         |         |                              |                                |                             |                                |
| Flexible                               |                                        |                                        |                                        |                                         |         |                              |                                |                             |                                |
| Creating a<br>successor                |                                        |                                        |                                        |                                         |         |                              |                                |                             |                                |
| Loving                                 |                                        |                                        |                                        |                                         |         |                              |                                |                             |                                |
| Establishes<br>rapport with<br>protégé |                                        |                                        |                                        |                                         |         |                              |                                |                             |                                |
| Giving of his/her<br>time              |                                        |                                        |                                        |                                         |         |                              |                                |                             |                                |
| Educated                               |                                        |                                        |                                        |                                         |         |                              |                                |                             |                                |
| Established                            |                                        |                                        |                                        |                                         |         |                              |                                |                             |                                |
| Kind                                   |                                        |                                        |                                        |                                         |         |                              |                                |                             |                                |
| Dependable                             |                                        |                                        |                                        |                                         |         |                              |                                |                             |                                |
| Has a positive<br>attitude             |                                        |                                        |                                        |                                         |         |                              |                                |                             |                                |
| Challenging                            |                                        |                                        |                                        |                                         |         |                              |                                |                             |                                |
| Communicator                           |                                        |                                        |                                        |                                         |         |                              |                                |                             |                                |
| Easy to talk to                        |                                        |                                        |                                        |                                         |         |                              |                                |                             |                                |
| Pragmatic                              |                                        |                                        |                                        |                                         |         |                              |                                |                             |                                |
| Knowledgeable                          |                                        |                                        |                                        |                                         |         |                              |                                |                             |                                |
| Disciplined                            |                                        |                                        |                                        |                                         |         |                              |                                |                             |                                |
| Friend                                 |                                        |                                        |                                        |                                         |         |                              |                                |                             |                                |
| Guardian                               |                                        |                                        |                                        |                                         |         |                              |                                |                             |                                |
| Compassionate                          |                                        |                                        |                                        |                                         |         |                              |                                |                             |                                |
| Encouraging                            |                                        |                                        |                                        |                                         |         |                              |                                |                             |                                |
| Job training                           |                                        |                                        |                                        |                                         |         |                              |                                |                             |                                |
| Forgiving                              |                                        |                                        |                                        |                                         |         |                              |                                |                             |                                |
| Experienced                            |                                        |                                        |                                        |                                         |         |                              |                                |                             |                                |
| Counseling                             |                                        |                                        |                                        |                                         |         |                              |                                |                             |                                |

## Exhibit 5: Continued

|                                 |  |  |  |  |  |  |  |  |  |
|---------------------------------|--|--|--|--|--|--|--|--|--|
| Cooperative                     |  |  |  |  |  |  |  |  |  |
| Similar background as protégé   |  |  |  |  |  |  |  |  |  |
| Fair                            |  |  |  |  |  |  |  |  |  |
| Open                            |  |  |  |  |  |  |  |  |  |
| Showing how to do things        |  |  |  |  |  |  |  |  |  |
| Peer                            |  |  |  |  |  |  |  |  |  |
| Honest                          |  |  |  |  |  |  |  |  |  |
| Approachable                    |  |  |  |  |  |  |  |  |  |
| Provides perspective            |  |  |  |  |  |  |  |  |  |
| Directing                       |  |  |  |  |  |  |  |  |  |
| Good character                  |  |  |  |  |  |  |  |  |  |
| Role model                      |  |  |  |  |  |  |  |  |  |
| Supportive                      |  |  |  |  |  |  |  |  |  |
| Older                           |  |  |  |  |  |  |  |  |  |
| Professional                    |  |  |  |  |  |  |  |  |  |
| Successful                      |  |  |  |  |  |  |  |  |  |
| Enthusiastic                    |  |  |  |  |  |  |  |  |  |
| Helps protégé                   |  |  |  |  |  |  |  |  |  |
| Unselfish                       |  |  |  |  |  |  |  |  |  |
| Understanding                   |  |  |  |  |  |  |  |  |  |
| Nurturing                       |  |  |  |  |  |  |  |  |  |
| Interested                      |  |  |  |  |  |  |  |  |  |
| Intelligent                     |  |  |  |  |  |  |  |  |  |
| Courageous                      |  |  |  |  |  |  |  |  |  |
| Facilitator                     |  |  |  |  |  |  |  |  |  |
| Confident                       |  |  |  |  |  |  |  |  |  |
| Strong                          |  |  |  |  |  |  |  |  |  |
| Leader                          |  |  |  |  |  |  |  |  |  |
| Learning                        |  |  |  |  |  |  |  |  |  |
| Expert                          |  |  |  |  |  |  |  |  |  |
| Motivator                       |  |  |  |  |  |  |  |  |  |
| Respected                       |  |  |  |  |  |  |  |  |  |
| Non-judgmental                  |  |  |  |  |  |  |  |  |  |
| Caring                          |  |  |  |  |  |  |  |  |  |
| Positive influence              |  |  |  |  |  |  |  |  |  |
| Parental (maternal or paternal) |  |  |  |  |  |  |  |  |  |
| Organized                       |  |  |  |  |  |  |  |  |  |
| Partner                         |  |  |  |  |  |  |  |  |  |

## Exhibit 5: Continued

|                                                           |  |  |  |  |  |  |  |  |  |
|-----------------------------------------------------------|--|--|--|--|--|--|--|--|--|
| Patient                                                   |  |  |  |  |  |  |  |  |  |
| Giving feedback                                           |  |  |  |  |  |  |  |  |  |
| Gives protégé space to try new things                     |  |  |  |  |  |  |  |  |  |
| Generous                                                  |  |  |  |  |  |  |  |  |  |
| Influential                                               |  |  |  |  |  |  |  |  |  |
| Good example                                              |  |  |  |  |  |  |  |  |  |
| Provides guidance                                         |  |  |  |  |  |  |  |  |  |
| Resource                                                  |  |  |  |  |  |  |  |  |  |
| Resolves conflicts with protégé                           |  |  |  |  |  |  |  |  |  |
| Helpful                                                   |  |  |  |  |  |  |  |  |  |
| Respectful                                                |  |  |  |  |  |  |  |  |  |
| Responsible                                               |  |  |  |  |  |  |  |  |  |
| Grooming another for a promotion                          |  |  |  |  |  |  |  |  |  |
| Safety net                                                |  |  |  |  |  |  |  |  |  |
| Sharing experience                                        |  |  |  |  |  |  |  |  |  |
| Non-confrontational                                       |  |  |  |  |  |  |  |  |  |
| Good listener                                             |  |  |  |  |  |  |  |  |  |
| Calm                                                      |  |  |  |  |  |  |  |  |  |
| Sounding board                                            |  |  |  |  |  |  |  |  |  |
| Coach                                                     |  |  |  |  |  |  |  |  |  |
| Structuring interactions with and options for the protégé |  |  |  |  |  |  |  |  |  |
| Shows empathy                                             |  |  |  |  |  |  |  |  |  |
| Supervisor                                                |  |  |  |  |  |  |  |  |  |
| Advocate                                                  |  |  |  |  |  |  |  |  |  |
| Takes another person under his/her wing                   |  |  |  |  |  |  |  |  |  |
| Talent creation                                           |  |  |  |  |  |  |  |  |  |
| Teacher                                                   |  |  |  |  |  |  |  |  |  |
| Teamwork                                                  |  |  |  |  |  |  |  |  |  |
| Committed                                                 |  |  |  |  |  |  |  |  |  |
| Trainer                                                   |  |  |  |  |  |  |  |  |  |
| Insightful                                                |  |  |  |  |  |  |  |  |  |
| Advisor                                                   |  |  |  |  |  |  |  |  |  |
| Welcoming                                                 |  |  |  |  |  |  |  |  |  |
| Well-connected                                            |  |  |  |  |  |  |  |  |  |

### Exhibit 5: Continued

|              |  |  |  |  |  |  |  |  |  |
|--------------|--|--|--|--|--|--|--|--|--|
| Wise         |  |  |  |  |  |  |  |  |  |
| Accomplished |  |  |  |  |  |  |  |  |  |

#### Demographic Information

11. Age \_\_\_\_\_

12. Sex:

- a. Male
- b. female

13. Race:

- a. Caucasian
- b. African American
- c. Asian
- d. Hispanic
- e. Native American /Alaskan Native
- f. Other (please specify)

14. Education

- a. Current college student (GO TO Question #15)
- b. College graduate (GO TO Question #16)

15. What year are you currently in college?

- a. Freshman
- b. Sophomore
- c. Junior
- d. Senior
- e. Fifth-year senior
- f. Other (please specify)

16. What is the highest level of education you have attained so far? (If you are currently an undergraduate student, please skip this question and go to Question #17.)

- a. College graduate
- b. Some post-graduate work
- c. Professional degree (e.g., MBA, JD, MSW)
- d. Other advanced degree (e.g., PhD, MD)

17. Please write in your undergraduate major or concentration.

18. What type of school is your undergraduate college or university?

- a. Four-year public
- b. Four-year private

### Exhibit 5: Continued

- c. Four-year for profit
  - d. Two-year public
  - e. Two-year private
  - f. Two-year for profit
19. What is the setting of your undergraduate college or university?
- a. Urban
  - b. Suburban
  - c. Rural
20. What is the location of your undergraduate college or university?
- a. New England (CT, MA, ME, NH, RI, VT)
  - b. Middle Atlantic (NJ, NY, PA)
  - c. South Atlantic (DC, DE, GA, FL, MD, NC, SC, VA, WV)
  - d. East North Central (IL, IN, MI, OH, WI)
  - e. East South Central (AL, KY, MS, TN)
  - f. West North Central (IA, KS, MN, MO, ND, NE, SD)
  - g. West South Central (AR, LA, OK, TX)
  - h. Mountain (AZ, CO, ID, MT, NM, NV, UT, WY)
  - i. Pacific (AK, CA, HI, OR, WA)
  - j. Other (please specify)
21. What is the size of your undergraduate college or university?
- a. Small (fewer than 2,000 students)
  - b. Medium (2,000 to 5,000 students)
  - c. Large (5,000 to 10,000 students)
  - d. Very large (more than 10,000 students)
22. Organizational work experience
- a. I have never worked in an organization
  - b. I have worked part-time in an organization
  - c. I have worked full-time in an organization (e.g., a summer internship)
23. Considering all your work experience in an organization, how many total years have you worked either full-time or part-time?
- a. Years full time \_\_\_\_\_
  - b. Years part time \_\_\_\_\_
24. CONGRATULATIONS! You have now completed the survey!

Please use the space provided below to enter your four-digit passcode as it appears in the email from [cler@hbs.edu](mailto:cler@hbs.edu). This will allow us to process your payment.  
Thank you for participating in our research!

## Exhibit 6: Protégé Prototypicality Rating Survey

What is a Protégé?

In this survey, we are interested in understanding how well a variety of characteristics, attributes, behaviors, and activities might fit your perception of what a protégé is.

Please read each item and check the circle that indicates how well the item fits your idea of what a protégé is.

To what extent do the following words or phrases fit your idea of what a protégé is?

|                                           | Completely<br>fails to fit<br>my image | Greatly<br>fails to fit<br>my image | Moderately<br>fails to fit<br>my image | Slightly<br>fails to fit<br>my image | Neutral | Slightly<br>fits my<br>image | Moderately<br>fits my<br>image | Greatly<br>fits my<br>image | Completely<br>fits my<br>image |
|-------------------------------------------|----------------------------------------|-------------------------------------|----------------------------------------|--------------------------------------|---------|------------------------------|--------------------------------|-----------------------------|--------------------------------|
| Quick learner                             |                                        |                                     |                                        |                                      |         |                              |                                |                             |                                |
| Capable                                   |                                        |                                     |                                        |                                      |         |                              |                                |                             |                                |
| Open                                      |                                        |                                     |                                        |                                      |         |                              |                                |                             |                                |
| Loyal                                     |                                        |                                     |                                        |                                      |         |                              |                                |                             |                                |
| Sharing success<br>with his/her<br>mentor |                                        |                                     |                                        |                                      |         |                              |                                |                             |                                |
| Has high<br>capacity                      |                                        |                                     |                                        |                                      |         |                              |                                |                             |                                |
| Malleable                                 |                                        |                                     |                                        |                                      |         |                              |                                |                             |                                |
| Sociable                                  |                                        |                                     |                                        |                                      |         |                              |                                |                             |                                |
| Goal-oriented                             |                                        |                                     |                                        |                                      |         |                              |                                |                             |                                |
| Job shadowing                             |                                        |                                     |                                        |                                      |         |                              |                                |                             |                                |
| Helpful                                   |                                        |                                     |                                        |                                      |         |                              |                                |                             |                                |
| Stands out<br>among peers                 |                                        |                                     |                                        |                                      |         |                              |                                |                             |                                |
| Establishing<br>oneself<br>professionally |                                        |                                     |                                        |                                      |         |                              |                                |                             |                                |
| Trainee                                   |                                        |                                     |                                        |                                      |         |                              |                                |                             |                                |
| Lackey                                    |                                        |                                     |                                        |                                      |         |                              |                                |                             |                                |
| Obedient                                  |                                        |                                     |                                        |                                      |         |                              |                                |                             |                                |
| Practices new<br>skills                   |                                        |                                     |                                        |                                      |         |                              |                                |                             |                                |
| Go-getter                                 |                                        |                                     |                                        |                                      |         |                              |                                |                             |                                |
| Caring                                    |                                        |                                     |                                        |                                      |         |                              |                                |                             |                                |
| Flexible                                  |                                        |                                     |                                        |                                      |         |                              |                                |                             |                                |
| Self-promoting                            |                                        |                                     |                                        |                                      |         |                              |                                |                             |                                |
| Knowledgeable                             |                                        |                                     |                                        |                                      |         |                              |                                |                             |                                |
| Being taken<br>under someone's<br>wing    |                                        |                                     |                                        |                                      |         |                              |                                |                             |                                |
| Patient                                   |                                        |                                     |                                        |                                      |         |                              |                                |                             |                                |

## Exhibit 6: Continued

|                                                |  |  |  |  |  |  |  |  |  |
|------------------------------------------------|--|--|--|--|--|--|--|--|--|
| Learning                                       |  |  |  |  |  |  |  |  |  |
|                                                |  |  |  |  |  |  |  |  |  |
| Student                                        |  |  |  |  |  |  |  |  |  |
| On the fast-track                              |  |  |  |  |  |  |  |  |  |
| Following his/her mentor                       |  |  |  |  |  |  |  |  |  |
| Team player                                    |  |  |  |  |  |  |  |  |  |
| Performs above expectations                    |  |  |  |  |  |  |  |  |  |
| Apprentice                                     |  |  |  |  |  |  |  |  |  |
| New to his/her field                           |  |  |  |  |  |  |  |  |  |
| Attentive                                      |  |  |  |  |  |  |  |  |  |
| Sense of humor                                 |  |  |  |  |  |  |  |  |  |
| Disciple                                       |  |  |  |  |  |  |  |  |  |
| Being groomed to be his/her mentor's successor |  |  |  |  |  |  |  |  |  |
| Energetic                                      |  |  |  |  |  |  |  |  |  |
| Responsive                                     |  |  |  |  |  |  |  |  |  |
| Seeking guidance                               |  |  |  |  |  |  |  |  |  |
| Demonstrates leadership                        |  |  |  |  |  |  |  |  |  |
| Dedicated                                      |  |  |  |  |  |  |  |  |  |
| Willing to learn                               |  |  |  |  |  |  |  |  |  |
| Intern                                         |  |  |  |  |  |  |  |  |  |
| Accepts feedback and/or constructive criticism |  |  |  |  |  |  |  |  |  |
| Eager                                          |  |  |  |  |  |  |  |  |  |
| Learning the ropes                             |  |  |  |  |  |  |  |  |  |
| Emulates his/her mentor                        |  |  |  |  |  |  |  |  |  |
| Inspired                                       |  |  |  |  |  |  |  |  |  |
| Motivated                                      |  |  |  |  |  |  |  |  |  |
| Focused                                        |  |  |  |  |  |  |  |  |  |
| Has high potential                             |  |  |  |  |  |  |  |  |  |
| Peer                                           |  |  |  |  |  |  |  |  |  |
| Ready for challenges                           |  |  |  |  |  |  |  |  |  |
| Good listener                                  |  |  |  |  |  |  |  |  |  |
| Hard-working                                   |  |  |  |  |  |  |  |  |  |
| Innovative                                     |  |  |  |  |  |  |  |  |  |

## Exhibit 6: Continued

|                                      |  |  |  |  |  |  |  |  |  |
|--------------------------------------|--|--|--|--|--|--|--|--|--|
| Sponge                               |  |  |  |  |  |  |  |  |  |
| Independent                          |  |  |  |  |  |  |  |  |  |
| Inexperienced                        |  |  |  |  |  |  |  |  |  |
| Needs guidance                       |  |  |  |  |  |  |  |  |  |
| Ambitious                            |  |  |  |  |  |  |  |  |  |
| Effective communicator               |  |  |  |  |  |  |  |  |  |
| Kind                                 |  |  |  |  |  |  |  |  |  |
| Asking questions                     |  |  |  |  |  |  |  |  |  |
| Receives guidance                    |  |  |  |  |  |  |  |  |  |
| Assistant                            |  |  |  |  |  |  |  |  |  |
| Networking                           |  |  |  |  |  |  |  |  |  |
| Looks up to his/her mentor           |  |  |  |  |  |  |  |  |  |
| Being given opportunities for growth |  |  |  |  |  |  |  |  |  |
| Political                            |  |  |  |  |  |  |  |  |  |
| Willing to take risks                |  |  |  |  |  |  |  |  |  |
| Young                                |  |  |  |  |  |  |  |  |  |
| Developing new skills                |  |  |  |  |  |  |  |  |  |
| Observing                            |  |  |  |  |  |  |  |  |  |
| Does grunt work for his/her mentor   |  |  |  |  |  |  |  |  |  |
| Responsible                          |  |  |  |  |  |  |  |  |  |
| Diligent                             |  |  |  |  |  |  |  |  |  |
| Similar to his/her mentor            |  |  |  |  |  |  |  |  |  |
| Seeking advancement                  |  |  |  |  |  |  |  |  |  |
| Educated                             |  |  |  |  |  |  |  |  |  |
| Complements mentor's skills          |  |  |  |  |  |  |  |  |  |
| Collaborator                         |  |  |  |  |  |  |  |  |  |
| Sycophant                            |  |  |  |  |  |  |  |  |  |
| Talented                             |  |  |  |  |  |  |  |  |  |
| Dependable                           |  |  |  |  |  |  |  |  |  |
| Underling                            |  |  |  |  |  |  |  |  |  |
| Up and coming                        |  |  |  |  |  |  |  |  |  |
| Empathetic                           |  |  |  |  |  |  |  |  |  |
| Shows initiative                     |  |  |  |  |  |  |  |  |  |
| Enthusiastic                         |  |  |  |  |  |  |  |  |  |

## Exhibit 6: Continued

|                                             |  |  |  |  |  |  |  |  |  |
|---------------------------------------------|--|--|--|--|--|--|--|--|--|
| Mentor's<br>"chosen one"                    |  |  |  |  |  |  |  |  |  |
| Confident                                   |  |  |  |  |  |  |  |  |  |
| Has common<br>sense                         |  |  |  |  |  |  |  |  |  |
| Crafty                                      |  |  |  |  |  |  |  |  |  |
| Honest                                      |  |  |  |  |  |  |  |  |  |
| Integrity                                   |  |  |  |  |  |  |  |  |  |
| Charismatic                                 |  |  |  |  |  |  |  |  |  |
| Intelligent                                 |  |  |  |  |  |  |  |  |  |
| Career-oriented                             |  |  |  |  |  |  |  |  |  |
| Discovering and<br>researching new<br>ideas |  |  |  |  |  |  |  |  |  |

## Demographic Information

11. Age \_\_\_\_\_

12. Sex:

- a. Male
- b. female

13. Race:

- a. Caucasian
- a. African American
- b. Asian
- c. Hispanic
- d. Native American /Alaskan Native
- e. Other (please specify)

14. Education

- a. Current college student (GO TO Question #15)
- b. College graduate (GO TO Question #16)

15. What year are you currently in college?

- a. Freshman
- b. Sophomore
- c. Junior
- d. Senior
- e. Fifth-year senior
- f. Other (please specify)

### Exhibit 6: Continued

What is the highest level of education you have attained so far? (If you are currently an undergraduate student, please skip this question and go to Question #17.)

- a. College graduate
- b. Some post-graduate work
- c. Professional degree (e.g., MBA, JD, MSW)
- d. Other advanced degree (e.g., PhD, MD)

16. Please write in your undergraduate major or concentration.

17. What type of school is your undergraduate college or university?

- a. Four-year public
- b. Four-year private
- c. Four-year for profit
- d. Two-year public
- e. Two-year private
- f. Two-year for profit

18. What is the setting of your undergraduate college or university?

- a. Urban
- b. Suburban
- c. Rural

19. What is the location of your undergraduate college or university?

- a. New England (CT, MA, ME, NH, RI, VT)
- b. Middle Atlantic (NJ, NY, PA)
- c. South Atlantic (DC, DE, GA, FL, MD, NC, SC, VA, WV)
- d. East North Central (IL, IN, MI, OH, WI)
- e. East South Central (AL, KY, MS, TN)
- f. West North Central (IA, KS, MN, MO, ND, NE, SD)
- g. West South Central (AR, LA, OK, TX)
- h. Mountain (AZ, CO, ID, MT, NM, NV, UT, WY)
- i. Pacific, (AK, CA, HI, OR, WA)
- j. Other (please specify)

20. What is the size of your undergraduate college or university?

- a. Small (fewer than 2,000 students)
- b. Medium (2,000 to 5,000 students)
- c. Large (5,000 to 10,000 students)
- d. Very large (more than 10,000 students)

**Exhibit 6: Continued**

21. Organizational work experience
- a. I have never worked in an organization
  - b. I have worked part-time in an organization
  - c. I have worked full-time in an organization (e.g., a summer internship)
22. Considering all your work experience in an organization, how many total years have you worked either full-time or part-time?
- a. Years full time \_\_\_\_\_
  - b. Years part time \_\_\_\_\_
23. CONGRATULATIONS! You have now completed the survey!  
Please use the space provided below to enter your four-digit passcode as it appears in the email from [cler@hbs.edu](mailto:cler@hbs.edu). This will allow us to process your payment.

Thank you for participating in our research!

## **Exhibit 7: Follow-Up Questionnaire of Participants' Prior Mentoring Experiences**

### **Mentoring Relationship Experiences**

#### **Mentoring: Working Definitions**

Before responding to the following questions, please take a moment to read the definitions provided below:

A MENTOR may be defined generally as a person in one's work environment who has advanced experience and knowledge and is committed to helping a less experienced and knowledgeable individual (the PROTÉGÉ) to learn the ropes at work and to facilitating the protégé's career advancement. A mentor is also committed to helping his or her protégé achieve a sense of professional identity, competence, and effectiveness, as well as a sense of self-worth, both personally and professionally. A mentor and his or her protégé may or may not be in the same organization, may or may not have a direct supervisory relationship, and may or may not be peers.

In order to assist individuals in their development and advancement, some organizations have established formal mentoring programs, where protégés and mentors are linked in some way. This may be accomplished by assigning mentors or just by providing formal opportunities aimed at developing the relationship. To recap: FORMAL mentoring relationships are developed with organizational assistance. INFORMAL mentoring relationships are developed spontaneously, without organizational assistance.

Now, with these definitions in mind, please respond to the following questions about your CURRENT AND PRIOR MENTORING EXPERIENCES.

- 1) Have you EVER – now or in the past – had a mentor, i.e., have you ever been a protégé?
  - a) Yes
  - b) No

#### **Current Experience as a Protégé**

- 2) Do you CURRENTLY have a mentor?
  - a) Yes
  - b) No
- 3) How many mentors do you currently have?

### **Exhibit 7: Continued**

- 4) Of your current mentors, how many are...
  - a) Male
  - b) Female
  - c) Direct supervisors
  - d) Not direct supervisors
  - e) Formal relationships
  - f) Informal relationships
- 5) If you are involved in a FORMAL mentoring relationship(s), please BRIEFLY describe how you were matched with your mentor(s).
- 6) On average, how long have you been in a mentoring relationship with your current mentor(s)?
  - a) 1 – 6 months
  - b) 7 – 12 months
  - c) 13 – 18 months
  - d) 19 – 24 months (2 years)
  - e) 25 – 30 months
  - f) 31 – 36 months (3 years)
  - g) 37 – 42 months
  - h) 43 – 48 months (4 years)
  - i) 49 – 54 months
  - j) 55 – 60 months (5 years)
  - k) 61 – 66 months
  - l) 67 – 72 months (6 years)
  - m) 73 – 78 months
  - n) 79 – 84 months (7 years)
  - o) 85 – 90 months
  - p) 91 – 96 months (8 years)
  - q) 97 months or more

#### **Prior Experience as a Protégé**

- 7) Excluding any current mentors, how many mentors have you had over the course of your career?
- 8) Of your prior mentors, how many were...
  - a) Male
  - b) Female
  - c) Direct supervisors
  - d) Not direct supervisors
  - e) Formal relationships
  - f) Informal relationships

### **Exhibit 7: Continued**

- 9) If you are involved in a FORMAL mentoring relationship(s), please BRIEFLY describe how you were matched with your mentor(s).
- 10) On average, how long have you been in a mentoring relationship with your current mentor(s)?
- a) 1 – 6 months
  - b) 7 – 12 months
  - c) 13 – 18 months
  - d) 19 – 24 months (2 years)
  - e) 25 – 30 months
  - f) 31 – 36 months (3 years)
  - g) 37 – 42 months
  - h) 43 – 48 months (4 years)
  - i) 49 – 54 months
  - j) 55 – 60 months (5 years)
  - k) 61 – 66 months
  - l) 67 – 72 months (6 years)
  - m) 73 – 78 months
  - n) 79 – 84 months (7 years)
  - o) 85 – 90 months
  - p) 91 – 96 months (8 years)
  - q) 97 months or more

#### **Experience as a Mentor**

- 11) Have you EVER – now or in the past – had a protégé, i.e., have you ever been a mentor?
- a) Yes
  - b) No

#### **Current Experience as a Mentor**

- 12) Do you CURRENTLY have a protégé?
- a) Yes
  - b) No
- 13) How many protégés do you currently have?

## **Exhibit 7: Continued**

14) Of your current protégés, how many are...

- a) Male
- b) Female
- c) Direct supervisors
- d) Not direct supervisors
- e) Formal relationships
- f) Informal relationships

15) If you are involved in a FORMAL mentoring relationship(s), please BRIEFLY describe how you were matched with your protégé(s).

16) On average, how long have you been in a mentoring relationship with your current protégé(s)?

- a) 1 – 6 months
- b) 7 – 12 months
- c) 13 – 18 months
- d) 19 – 24 months (2 years)
- e) 25 – 30 months
- f) 31 – 36 months (3 years)
- g) 37 – 42 months
- h) 43 – 48 months (4 years)
- i) 49 – 54 months
- j) 55 – 60 months (5 years)
- k) 61 – 66 months
- l) 67 – 72 months (6 years)
- m) 73 – 78 months
- n) 79 – 84 months (7 years)
- o) 85 – 90 months
- p) 91 – 96 months (8 years)
- q) 97 months or more

Prior Experience as a Mentor

17) Excluding any current protégés, how many protégés have you had over the course of your career?

18) Of your prior protégés, how many were...

- a) Male
- b) Female
- c) Direct supervisors
- d) Not direct supervisors
- e) Formal relationships
- f) Informal relationships

### **Exhibit 7: Continued**

19) If you were involved in a FORMAL mentoring relationship(s), please BRIEFLY describe how you were matched with your protégé(s).

20) On average, how long have you been in a mentoring relationship with your prior protégé(s)?

- a) 1 – 6 months
- b) 7 – 12 months
- c) 13 – 18 months
- d) 19 – 24 months (2 years)
- e) 25 – 30 months
- f) 31 – 36 months (3 years)
- g) 37 – 42 months
- h) 43 – 48 months (4 years)
- i) 49 – 54 months
- j) 55 – 60 months (5 years)
- k) 61 – 66 months
- l) 67 – 72 months (6 years)
- m) 73 – 78 months
- n) 79 – 84 months (7 years)
- o) 85 – 90 months
- p) 91 – 96 months (8 years)
- q) 97 months or more

Congratulations!

You have successfully completed the survey on Mentoring Relationship Experiences.

Thank you for your participation!

Please enter your 4-digit code below. Doing so will qualify you for a drawing to win a \$25 gift certificate to Amazon.com

## **Exhibit 8: Participation E-mail for Mentor Descriptor Masculinity/Femininity Ratings**

Dear <NAME>,

Thank you for signing up to participate in the CLER study, *Masculinity and Femininity Ratings: Survey I*. In this study, we are interested in understanding the extent to which different traits and behaviors seem to be more “male” or more “female,” so we are asking you to rate different characteristics on their masculinity/femininity.

We expect the survey to take no longer than 15 to 20 minutes to complete. Please remember that there are no right or wrong answers. Your participation is voluntary, and you are free to withdraw from the study at any time. The researchers will not be able to link your survey responses to you, so your data will remain completely confidential.

If you complete the survey, we will send you a \$5 money order. At the end of the survey, you will be asked to enter your four-digit passcode which is located at the bottom of this email. We suggest that you print this email or write down your passcode so you can access it easily when you are finished responding to the survey. **In order to receive payment, the four-digit passcode you enter on the survey must match the four-digit passcode in this email.**

In order to send you the money order, we also must have correct, up-to-date information about you, including your SSN or visa information, and your current mailing address. If you did not enter this information at the time you registered, or if it has changed since you registered, please go to <http://www.hbs.edu/cler/update.html> and update your profile. If the data you provided to us is inaccurate, outdated, or missing you will not receive payment for your participation. Please allow 4-6 weeks to receive payment.

The link to the on-line survey is located below. You will have until <TIME> <DATE> to complete the survey. If you have any problem accessing the survey or have any questions directly related to completing the survey, please contact [cler@hbs.edu](mailto:cler@hbs.edu).

Thank you very much for participating in our research. We appreciate your time and your opinions!

<http://www.surveymonkey.com/s.asp?u=30911085516>

**Your four-digit passcode is:<XXXX>**

## **Exhibit 9: Participation E-mail for Protégé Descriptor Masculinity/Femininity Ratings**

Dear <NAME>,

Thank you for signing up to participate in the CLER study, *Masculinity and Femininity Ratings: Survey II*. In this study, we are interested in understanding the extent to which different traits and behaviors seem to be more “male” or more “female,” so we are asking you to rate different characteristics on their masculinity/femininity.

We expect the survey to take no longer than 15 to 20 minutes to complete. Please remember that there are no right or wrong answers. Your participation is voluntary, and you are free to withdraw from the study at any time. The researchers will not be able to link your survey responses to you, so your data will remain completely confidential.

If you complete the survey, we will send you a \$5 money order. At the end of the survey, you will be asked to enter your four-digit passcode which is located at the bottom of this email. We suggest that you print this email or write down your passcode so you can access it easily when you are finished responding to the survey. **In order to receive payment, the four-digit passcode you enter on the survey must match the four-digit passcode in this email.**

In order to send you the money order, we also must have correct, up-to-date information about you, including your SSN or visa information, and your current mailing address. If you did not enter this information at the time you registered, or if it has changed since you registered, please go to <http://www.hbs.edu/cler/update.html> and update your profile. If the data you provided to us is inaccurate, outdated, or missing, you will not receive payment for your participation. Please allow 4-6 weeks to receive payment.

The link to the on-line survey is located below. You will have until <TIME> <DATE> to complete the survey. If you have any problem accessing the survey or have any questions directly related to completing the survey, please contact [cler@hbs.edu](mailto:cler@hbs.edu).

Thank you very much for participating in our research. We appreciate your time and your opinions!

<http://www.surveymonkey.com/s.asp?u=28601085423>

**Your four-digit passcode is:<XXXX>**

## Exhibit 10: Masculinity-Femininity Rating Survey of Mentor Role Descriptors

How masculine or feminine are these concepts?

In this survey, we are interested in understanding how masculine or feminine a variety of characteristics, attributes, behaviors, and activities might be considered to be.

Please read each item and check the circle that indicates how masculine or feminine you think each concept is.

To what extent do the following words or phrases seem masculine or feminine to you?

|                                  | Very Masculine | Masculine | Somewhat Masculine | Neutral | Somewhat Feminine | Feminine | Very Feminine |
|----------------------------------|----------------|-----------|--------------------|---------|-------------------|----------|---------------|
| Inspiration                      |                |           |                    |         |                   |          |               |
| Thoughtful                       |                |           |                    |         |                   |          |               |
| Confidante                       |                |           |                    |         |                   |          |               |
| Flexible                         |                |           |                    |         |                   |          |               |
| Creating a successor             |                |           |                    |         |                   |          |               |
| Loving                           |                |           |                    |         |                   |          |               |
| Establishes rapport with protégé |                |           |                    |         |                   |          |               |
| Giving of his/her time           |                |           |                    |         |                   |          |               |
| Educated                         |                |           |                    |         |                   |          |               |
| Established                      |                |           |                    |         |                   |          |               |
| Kind                             |                |           |                    |         |                   |          |               |
| Dependable                       |                |           |                    |         |                   |          |               |
| Has a positive attitude          |                |           |                    |         |                   |          |               |
| Challenging                      |                |           |                    |         |                   |          |               |
| Communicator                     |                |           |                    |         |                   |          |               |
| Easy to talk to                  |                |           |                    |         |                   |          |               |
| Pragmatic                        |                |           |                    |         |                   |          |               |
| Knowledgeable                    |                |           |                    |         |                   |          |               |
| Disciplined                      |                |           |                    |         |                   |          |               |
| Friend                           |                |           |                    |         |                   |          |               |
| Guardian                         |                |           |                    |         |                   |          |               |
| Compassionate                    |                |           |                    |         |                   |          |               |
| Encouraging                      |                |           |                    |         |                   |          |               |
| Job training                     |                |           |                    |         |                   |          |               |
| Forgiving                        |                |           |                    |         |                   |          |               |
| Experienced                      |                |           |                    |         |                   |          |               |
| Counseling                       |                |           |                    |         |                   |          |               |
| Cooperative                      |                |           |                    |         |                   |          |               |

**Exhibit 10: Continued**

|                                 |  |  |  |  |  |  |  |
|---------------------------------|--|--|--|--|--|--|--|
| Similar background as protégé   |  |  |  |  |  |  |  |
| Fair                            |  |  |  |  |  |  |  |
| Open                            |  |  |  |  |  |  |  |
| Showing how to do things        |  |  |  |  |  |  |  |
| Peer                            |  |  |  |  |  |  |  |
| Honest                          |  |  |  |  |  |  |  |
| Approachable                    |  |  |  |  |  |  |  |
| Provides perspective            |  |  |  |  |  |  |  |
| Directing                       |  |  |  |  |  |  |  |
| Good character                  |  |  |  |  |  |  |  |
| Role model                      |  |  |  |  |  |  |  |
| Supportive                      |  |  |  |  |  |  |  |
| Older                           |  |  |  |  |  |  |  |
| Professional                    |  |  |  |  |  |  |  |
| Successful                      |  |  |  |  |  |  |  |
| Enthusiastic                    |  |  |  |  |  |  |  |
| Helps protégé                   |  |  |  |  |  |  |  |
| Unselfish                       |  |  |  |  |  |  |  |
| Understanding                   |  |  |  |  |  |  |  |
| Nurturing                       |  |  |  |  |  |  |  |
| Interested                      |  |  |  |  |  |  |  |
| Intelligent                     |  |  |  |  |  |  |  |
| Courageous                      |  |  |  |  |  |  |  |
| Facilitator                     |  |  |  |  |  |  |  |
| Confident                       |  |  |  |  |  |  |  |
| Strong                          |  |  |  |  |  |  |  |
| Leader                          |  |  |  |  |  |  |  |
| Learning                        |  |  |  |  |  |  |  |
| Expert                          |  |  |  |  |  |  |  |
| Motivator                       |  |  |  |  |  |  |  |
| Respected                       |  |  |  |  |  |  |  |
| Non-judgmental                  |  |  |  |  |  |  |  |
| Caring                          |  |  |  |  |  |  |  |
| Positive influence              |  |  |  |  |  |  |  |
| Parental (maternal or paternal) |  |  |  |  |  |  |  |
| Organized                       |  |  |  |  |  |  |  |
| Partner                         |  |  |  |  |  |  |  |

## Exhibit 10: Continued

|                                                           |  |  |  |  |  |  |  |
|-----------------------------------------------------------|--|--|--|--|--|--|--|
| Patient                                                   |  |  |  |  |  |  |  |
| Giving feedback                                           |  |  |  |  |  |  |  |
| Gives protégé space to try new things                     |  |  |  |  |  |  |  |
| Generous                                                  |  |  |  |  |  |  |  |
| Influential                                               |  |  |  |  |  |  |  |
| Good example                                              |  |  |  |  |  |  |  |
| Provides guidance                                         |  |  |  |  |  |  |  |
| Resource                                                  |  |  |  |  |  |  |  |
| Resolves conflicts with protégé                           |  |  |  |  |  |  |  |
| Helpful                                                   |  |  |  |  |  |  |  |
| Respectful                                                |  |  |  |  |  |  |  |
| Responsible                                               |  |  |  |  |  |  |  |
| Grooming another for a promotion                          |  |  |  |  |  |  |  |
| Safety net                                                |  |  |  |  |  |  |  |
| Sharing experience                                        |  |  |  |  |  |  |  |
| Non-confrontational                                       |  |  |  |  |  |  |  |
| Good listener                                             |  |  |  |  |  |  |  |
| Calm                                                      |  |  |  |  |  |  |  |
| Sounding board                                            |  |  |  |  |  |  |  |
| Coach                                                     |  |  |  |  |  |  |  |
| Structuring interactions with and options for the protégé |  |  |  |  |  |  |  |
| Shows empathy                                             |  |  |  |  |  |  |  |
| Supervisor                                                |  |  |  |  |  |  |  |
| Advocate                                                  |  |  |  |  |  |  |  |
| Takes another person under his/her wing                   |  |  |  |  |  |  |  |
| Talent creation                                           |  |  |  |  |  |  |  |
| Teacher                                                   |  |  |  |  |  |  |  |
| Teamwork                                                  |  |  |  |  |  |  |  |
| Committed                                                 |  |  |  |  |  |  |  |
| Trainer                                                   |  |  |  |  |  |  |  |
| Insightful                                                |  |  |  |  |  |  |  |
| Advisor                                                   |  |  |  |  |  |  |  |
| Welcoming                                                 |  |  |  |  |  |  |  |

### Exhibit 10: Continued

|                |  |  |  |  |  |  |  |
|----------------|--|--|--|--|--|--|--|
| Well-connected |  |  |  |  |  |  |  |
| Wise           |  |  |  |  |  |  |  |
| Accomplished   |  |  |  |  |  |  |  |

#### Demographic Information

11. Age \_\_\_\_\_

12. Sex:

- a. Male
- b. female

13. Race:

- a. Caucasian
- b. African American
- c. Asian
- d. Hispanic
- e. Native American /Alaskan Native
- f. Other (please specify)

14. Education

- a. Current college student (GO TO Question #15)
- b. College graduate (GO TO Question #16)

15. What year are you currently in college?

- a. Freshman
- b. Sophomore
- c. Junior
- d. Senior
- e. Fifth-year senior
- f. Other (please specify)

16. What is the highest level of education you have attained so far? (If you are currently an undergraduate student, please skip this question and go to Question #17.)

- a. College graduate
- b. Some post-graduate work
- c. Professional degree (e.g., MBA, JD, MSW)
- d. Other advanced degree (e.g., PhD, MD)

17. Please write in your undergraduate major or concentration.

**Exhibit 10: Continued**

18. What type of school is your undergraduate college or university?
  - a. Four-year public
  - b. Four-year private
  - c. Four-year for profit
  - d. Two-year public
  - e. Two-year private
  - f. Two-year for profit
19. What is the setting of your undergraduate college or university?
  - a. Urban
  - b. Suburban
  - c. Rural
20. What is the location of your undergraduate college or university?
  - a. New England (CT, MA, ME, NH, RI, VT)
  - b. Middle Atlantic (NJ, NY, PA)
  - c. South Atlantic (DC, DE, GA, FL, MD, NC, SC, VA, WV)
  - d. East North Central (IL, IN, MI, OH, WI)
  - e. East South Central (AL, KY, MS, TN)
  - f. West North Central (IA, KS, MN, MO, ND, NE, SD)
  - g. West South Central (AR, LA, OK, TX)
  - h. Mountain (AZ, CO, ID, MT, NM, NV, UT, WY)
  - i. Pacific, (AK, CA, HI, OR, WA)
  - j. Other (please specify)
21. What is the size of your undergraduate college or university?
  - a. Small (fewer than 2,000 students)
  - b. Medium (2,000 to 5,000 students)
  - c. Large (5,000 to 10,000 students)
  - d. Very large (more than 10,000 students)
22. Organizational work experience
  - a. I have never worked in an organization
  - b. I have worked part-time in an organization
  - c. I have worked full-time in an organization (e.g., a summer internship)
23. Considering all your work experience in an organization, how many total years have you worked either full-time or part-time?
  - a. Years full time \_\_\_\_\_
  - b. Years part time \_\_\_\_\_

**Exhibit 10: Continued**

24. CONGRATULATIONS! You have now completed the survey!

Please use the space provided below to enter your four-digit passcode as it appears in the email from [cler@hbs.edu](mailto:cler@hbs.edu). This will allow us to process your payment.

Thank you for participating in our research!

### Exhibit 11: Masculinity-Femininity Rating Survey of Protégé Role Descriptors

How masculine or feminine are these concepts?

In this survey, we are interested in understanding how masculine or feminine a variety of characteristics, attributes, behaviors, and activities might be considered to be.

Please read each item and check the circle that indicates how masculine or feminine you think each concept is.

To what extent do the following words or phrases seem masculine or feminine to you?

|                                     | Very Masculine | Masculine | Somewhat Masculine | Neutral | Somewhat Feminine | Feminine | Very Feminine |
|-------------------------------------|----------------|-----------|--------------------|---------|-------------------|----------|---------------|
| Quick learner                       |                |           |                    |         |                   |          |               |
| Capable                             |                |           |                    |         |                   |          |               |
| Open                                |                |           |                    |         |                   |          |               |
| Loyal                               |                |           |                    |         |                   |          |               |
| Sharing success with his/her mentor |                |           |                    |         |                   |          |               |
| Has high capacity                   |                |           |                    |         |                   |          |               |
| Malleable                           |                |           |                    |         |                   |          |               |
| Sociable                            |                |           |                    |         |                   |          |               |
| Goal-oriented                       |                |           |                    |         |                   |          |               |
| Job shadowing                       |                |           |                    |         |                   |          |               |
| Helpful                             |                |           |                    |         |                   |          |               |
| Stands out among peers              |                |           |                    |         |                   |          |               |
| Establishing oneself professionally |                |           |                    |         |                   |          |               |
| Trainee                             |                |           |                    |         |                   |          |               |
| Lackey                              |                |           |                    |         |                   |          |               |
| Obedient                            |                |           |                    |         |                   |          |               |
| Practices new skills                |                |           |                    |         |                   |          |               |
| Go-getter                           |                |           |                    |         |                   |          |               |
| Caring                              |                |           |                    |         |                   |          |               |
| Flexible                            |                |           |                    |         |                   |          |               |
| Self-promoting                      |                |           |                    |         |                   |          |               |
| Knowledgeable                       |                |           |                    |         |                   |          |               |
| Being taken under someone's wing    |                |           |                    |         |                   |          |               |
| Patient                             |                |           |                    |         |                   |          |               |
| Learning                            |                |           |                    |         |                   |          |               |

### Exhibit 11: Continued

|                                                |  |  |  |  |  |  |  |
|------------------------------------------------|--|--|--|--|--|--|--|
| Student                                        |  |  |  |  |  |  |  |
| On the fast-track                              |  |  |  |  |  |  |  |
| Following his/her mentor                       |  |  |  |  |  |  |  |
| Team player                                    |  |  |  |  |  |  |  |
| Performs above expectations                    |  |  |  |  |  |  |  |
| Apprentice                                     |  |  |  |  |  |  |  |
| New to his/her field                           |  |  |  |  |  |  |  |
| Attentive                                      |  |  |  |  |  |  |  |
| Sense of humor                                 |  |  |  |  |  |  |  |
| Disciple                                       |  |  |  |  |  |  |  |
| Being groomed to be his/her mentor's successor |  |  |  |  |  |  |  |
| Energetic                                      |  |  |  |  |  |  |  |
| Responsive                                     |  |  |  |  |  |  |  |
| Seeking guidance                               |  |  |  |  |  |  |  |
| Demonstrates leadership                        |  |  |  |  |  |  |  |
| Dedicated                                      |  |  |  |  |  |  |  |
| Willing to learn                               |  |  |  |  |  |  |  |
| Intern                                         |  |  |  |  |  |  |  |
| Accepts feedback and/or constructive criticism |  |  |  |  |  |  |  |
| Eager                                          |  |  |  |  |  |  |  |
| Learning the ropes                             |  |  |  |  |  |  |  |
| Emulates his/her mentor                        |  |  |  |  |  |  |  |
| Inspired                                       |  |  |  |  |  |  |  |
| Motivated                                      |  |  |  |  |  |  |  |
| Focused                                        |  |  |  |  |  |  |  |
| Has high potential                             |  |  |  |  |  |  |  |
| Peer                                           |  |  |  |  |  |  |  |
| Ready for challenges                           |  |  |  |  |  |  |  |
| Good listener                                  |  |  |  |  |  |  |  |
| Hard-working                                   |  |  |  |  |  |  |  |
| Innovative                                     |  |  |  |  |  |  |  |
| Sponge                                         |  |  |  |  |  |  |  |

### Exhibit 11: Continued

|                                      |  |  |  |  |  |  |  |
|--------------------------------------|--|--|--|--|--|--|--|
| Independent                          |  |  |  |  |  |  |  |
| Inexperienced                        |  |  |  |  |  |  |  |
| Needs guidance                       |  |  |  |  |  |  |  |
| Ambitious                            |  |  |  |  |  |  |  |
| Effective communicator               |  |  |  |  |  |  |  |
| Kind                                 |  |  |  |  |  |  |  |
| Asking questions                     |  |  |  |  |  |  |  |
| Receives guidance                    |  |  |  |  |  |  |  |
| Assistant                            |  |  |  |  |  |  |  |
| Networking                           |  |  |  |  |  |  |  |
| Looks up to his/her mentor           |  |  |  |  |  |  |  |
| Being given opportunities for growth |  |  |  |  |  |  |  |
| Political                            |  |  |  |  |  |  |  |
| Willing to take risks                |  |  |  |  |  |  |  |
| Young                                |  |  |  |  |  |  |  |
| Developing new skills                |  |  |  |  |  |  |  |
| Observing                            |  |  |  |  |  |  |  |
| Does grunt work for his/her mentor   |  |  |  |  |  |  |  |
| Responsible                          |  |  |  |  |  |  |  |
| Diligent                             |  |  |  |  |  |  |  |
| Similar to his/her mentor            |  |  |  |  |  |  |  |
| Seeking advancement                  |  |  |  |  |  |  |  |
| Educated                             |  |  |  |  |  |  |  |
| Complements mentor's skills          |  |  |  |  |  |  |  |
| Collaborator                         |  |  |  |  |  |  |  |
| Sycophant                            |  |  |  |  |  |  |  |
| Talented                             |  |  |  |  |  |  |  |
| Dependable                           |  |  |  |  |  |  |  |
| Underling                            |  |  |  |  |  |  |  |
| Up and coming                        |  |  |  |  |  |  |  |
| Empathetic                           |  |  |  |  |  |  |  |
| Shows initiative                     |  |  |  |  |  |  |  |
| Enthusiastic                         |  |  |  |  |  |  |  |

### Exhibit 11: Continued

|                                             |  |  |  |  |  |  |  |
|---------------------------------------------|--|--|--|--|--|--|--|
| Mentor's<br>"chosen one"                    |  |  |  |  |  |  |  |
| Confident                                   |  |  |  |  |  |  |  |
| Has common<br>sense                         |  |  |  |  |  |  |  |
| Crafty                                      |  |  |  |  |  |  |  |
| Honest                                      |  |  |  |  |  |  |  |
| Integrity                                   |  |  |  |  |  |  |  |
| Charismatic                                 |  |  |  |  |  |  |  |
| Intelligent                                 |  |  |  |  |  |  |  |
| Career-oriented                             |  |  |  |  |  |  |  |
| Discovering and<br>researching new<br>ideas |  |  |  |  |  |  |  |

### Demographic Information

11. Age \_\_\_\_\_

12. Sex:

- a. Male
- b. female

13. Race:

- a. Caucasian
- b. African American
- c. Asian
- d. Hispanic
- e. Native American /Alaskan Native
- f. Other (please specify)

14. Education

- a. Current college student (GO TO Question #15)
- b. College graduate (GO TO Question #16)

15. What year are you currently in college?

- a. Freshman
- b. Sophomore
- c. Junior
- d. Senior
- e. Fifth-year senior
- f. Other (please specify)

**Exhibit 11: Continued**

16. What is the highest level of education you have attained so far? (If you are currently an undergraduate student, please skip this question and go to Question #17.)
- a. College graduate
  - b. Some post-graduate work
  - c. Professional degree (e.g., MBA, JD, MSW)
  - d. Other advanced degree (e.g., PhD, MD)
17. Please write in your undergraduate major or concentration.
18. What type of school is your undergraduate college or university?
- a. Four-year public
  - b. Four-year private
  - c. Four-year for profit
  - d. Two-year public
  - e. Two-year private
  - f. Two-year for profit
19. What is the setting of your undergraduate college or university?
- a. Urban
  - b. Suburban
  - c. Rural
20. What is the location of your undergraduate college or university?
- a. New England (CT, MA, ME, NH, RI, VT)
  - b. Middle Atlantic (NJ, NY, PA)
  - c. South Atlantic (DC, DE, GA, FL, MD, NC, SC, VA, WV)
  - d. East North Central (IL, IN, MI, OH, WI)
  - e. East South Central (AL, KY, MS, TN)
  - f. West North Central (IA, KS, MN, MO, ND, NE, SD)
  - g. West South Central (AR, LA, OK, TX)
  - h. Mountain (AZ, CO, ID, MT, NM, NV, UT, WY)
  - i. Pacific (AK, CA, HI, OR, WA)
  - j. Other (please specify)
21. What is the size of your undergraduate college or university?
- a. Small (fewer than 2,000 students)
  - b. Medium (2,000 to 5,000 students)
  - c. Large (5,000 to 10,000 students)
  - d. Very large (more than 10,000 students)

**Exhibit 11: Continued**

22. Organizational work experience
- a. I have never worked in an organization
  - b. I have worked part-time in an organization
  - c. I have worked full-time in an organization (e.g., a summer internship)
23. Considering all your work experience in an organization, how many total years have you worked either full-time or part-time?
- a. Years full time \_\_\_\_\_
  - b. Years part time \_\_\_\_\_
24. CONGRATULATIONS! You have now completed the survey!

Please use the space provided below to enter your four-digit passcode as it appears in the email from [cler@hbs.edu](mailto:cler@hbs.edu). This will allow us to process your payment.

Thank you for participating in our research!

**Table 1: Final List of Mentor Role Descriptors**

| <b>Mentor Role Descriptors</b>      | <b>Source<sup>6</sup></b> | <b># Times Mentioned</b> | <b>Total # Times Mentioned</b> |
|-------------------------------------|---------------------------|--------------------------|--------------------------------|
| 1. Teacher                          | 1,2                       | 1=24, 2=30               | 54                             |
| 2. Provides guidance                | 1,2                       | 1=24, 2=23               | 47                             |
| 3. Advisor                          | 1,2                       | 1=10, 2=13               | 23                             |
| 4. Experienced                      | 1,2                       | 1=14, 2=7                | 21                             |
| 5. Good listener                    | 1,2                       | 1=13, 2=6                | 19                             |
| 6. Role model                       | 1,2                       | 1=7, 2=11                | 18                             |
| 7. Helps protégé                    | 1,2                       | 1=8, 2=9                 | 17                             |
| 8. Knowledgeable                    | 1,2                       | 1=13, 2=4                | 17                             |
| 9. Leader                           | 1,2                       | 1=7, 2=9                 | 16                             |
| 10. Friend                          | 1,2                       | 1=10, 2=5                | 15                             |
| 11. Helpful                         | 1,2                       | 1=13, 2=4                | 15                             |
| 12. Patient                         | 1,2                       | 1=11, 2=4                | 15                             |
| 13. Sharing experience              | 1,2                       | 1=3, 2=12                | 15                             |
| 14. Encouraging                     | 1,2                       | 1=4, 2=7                 | 11                             |
| 15. Supportive                      | 1,2                       | 1=6, 2=4                 | 10                             |
| 16. Intelligent                     | 1,2                       | 1=7, 2=2                 | 9                              |
| 17. Caring                          | 1, 2                      | 1=4, 2=4                 | 8                              |
| 18. Coach                           | 1,2                       | 1=1, 2=7                 | 8                              |
| 19. Good example                    | 1,2                       | 1=4, 2=4                 | 8                              |
| 20. Older                           | 1                         | 1=8                      | 8                              |
| 21. Trainer                         | 1,2                       | 1=3, 2=5                 | 8                              |
| 22. Honest                          | 1,2                       | 1=4, 2=3                 | 7                              |
| 23. Interested                      | 1,2                       | 1=3, 2=4                 | 7                              |
| 24. Kind                            | 1,2                       | 1=5, 2=2                 | 7                              |
| 25. Wise                            | 1,2                       | 1=6, 2=1                 | 7                              |
| 26. Communicator                    | 1,2                       | 1=3, 2=3                 | 6                              |
| 27. Compassionate                   | 1,2                       | 1=3, 2=3                 | 6                              |
| 28. Confidante                      | 1,2                       | 1=2, 2=4                 | 6                              |
| 29. Giving feedback                 | 2                         | 2=6                      | 6                              |
| 30. Learning                        | 1,2                       | 1=2, 2=4                 | 6                              |
| 31. Parental (maternal or paternal) | 1,2                       | 1=2, 2=4                 | 6                              |
| 32. Understanding                   | 1,2                       | 1=4, 2=2                 | 6                              |
| 33. Unselfish                       | 1                         | 1=6                      | 6                              |
| 34. Committed                       | 1,2                       | 1=3, 2=2                 | 5                              |
| 35. Creating a successor            | 1, 2                      | 1=4, 2=1                 | 5                              |
| 36. Directing                       | 2                         | 2=5                      | 5                              |
| 37. Expert                          | 1,2                       | 1=4, 2=1                 | 5                              |
| 38. Giving of his/her time          | 1,2                       | 1=4, 2=1                 | 5                              |
| 39. Nurturing                       | 1,2                       | 1=1, 2=4                 | 5                              |
| 40. Professional                    | 1,2                       | 1=3, 2=2                 | 5                              |
| 41. Respected                       | 1,2                       | 1=1, 2=4                 | 5                              |
| 42. Supervisor                      | 1,2                       | 1=2, 2=3                 | 5                              |
| 43. Advocate                        | 1                         | 1=4                      | 4                              |
| 44. Counseling                      | 2                         | 2=4                      | 4                              |
| 45. Resource                        | 1,2                       | 1=2, 2=2                 | 4                              |

<sup>6</sup> Source refers to which questionnaire participants who mentioned this descriptor were responding: 1= Characteristics and Attributes questionnaire; 2 = Behaviors and Activities questionnaire.

**Table 1: Continued**

| <b>Mentor Role Descriptors</b>            | <b>Source<sup>7</sup></b> | <b># Times Mentioned</b> | <b>Total # Times Mentioned</b> |
|-------------------------------------------|---------------------------|--------------------------|--------------------------------|
| 46. Respectful                            | 1,2                       | 1=1, 2=3                 | 4                              |
| 47. Shows empathy                         | 1                         | 1=4                      | 4                              |
| 48. Challenging                           | 1                         | 1=3                      | 3                              |
| 49. Enthusiastic                          | 1,2                       | 1=2, 2=1                 | 3                              |
| 50. Gives protégé space to try new things | 2                         | 2=3                      | 3                              |
| 51. Has a positive attitude               | 1,2                       | 1=2, 2=1                 | 3                              |
| 52. Insightful                            | 1,2                       | 1=1, 2=2                 | 3                              |
| 53. Inspiration                           | 1,2,                      | 1=2, 2=1                 | 3                              |
| 54. Open                                  | 1,2                       | 1=2, 2=1                 | 3                              |
| 55. Organized                             | 1                         | 1=3                      | 3                              |
| 56. Partner                               | 1,2                       | 1=1, 2=2                 | 3                              |
| 57. Responsible                           | 1,2                       | 1=2, 2=1                 | 3                              |
| 58. Sounding board                        | 1,2                       | 1=1, 2=2                 | 3                              |
| 59. Strong                                | 1                         | 1=3                      | 3                              |
| 60. Accomplished                          | 1                         | 1=2                      | 2                              |
| 61. Approachable                          | 1,2                       | 1=1, 2=1                 | 2                              |
| 62. Calm                                  | 2                         | 2=2                      | 2                              |
| 63. Confident                             | 1,2                       | 1=1, 2=1                 | 2                              |
| 64. Cooperative                           | 1                         | 1=2                      | 2                              |
| 65. Courageous                            | 1,2                       | 1=1, 2=1                 | 2                              |
| 66. Dependable                            | 1                         | 1=2                      | 2                              |
| 67. Disciplined                           | 1                         | 1=2                      | 2                              |
| 68. Easy to talk to                       | 1                         | 1=2                      | 2                              |
| 69. Educated                              | 1                         | 1=2                      | 2                              |
| 70. Established                           | 1                         | 1=2                      | 2                              |
| 71. Facilitator                           | 1                         | 1=2                      | 2                              |
| 72. Fair                                  | 1,2                       | 1=1, 2=1                 | 2                              |
| 73. Generous                              | 1                         | 1=2                      | 2                              |
| 74. Good character                        | 1                         | 1=2                      | 2                              |
| 75. Grooming another for a promotion      | 2                         | 2=2                      | 2                              |
| 76. Guardian                              | 2                         | 2=2                      | 2                              |
| 77. Influential                           | 1                         | 1=2                      | 2                              |
| 78. Job training                          | 2                         | 2=2                      | 2                              |
| 79. Loving                                | 1,2                       | 1=1, 2=1                 | 2                              |
| 80. Motivator                             | 1,2                       | 1=1, 2=1                 | 2                              |
| 81. Non-confrontational                   | 2                         | 2=2                      | 2                              |
| 82. Non-judgmental                        | 1                         | 1=2                      | 2                              |
| 83. Peer                                  | 1                         | 1=2                      | 2                              |
| 84. Positive influence                    | 1,2                       | 1=1, 2=1                 | 2                              |
| 85. Pragmatic                             | 1                         | 1=2                      | 2                              |
| 86. Provides perspective                  | 1                         | 1=2                      | 2                              |
| 87. Safety net                            | 2                         | 2=2                      | 2                              |
| 88. Showing how to do things              | 2                         | 2=2                      | 2                              |
| 89. Successful                            | 1,2                       | 1=1, 2=1                 | 2                              |

<sup>7</sup> Source refers to which questionnaire participants who mentioned this descriptor were responding: 1= Characteristics and Attributes questionnaire; 2 = Behaviors and Activities questionnaire.

**Table 1: Continued**

| <b>Mentor Role Descriptors</b>                                 | <b>Source<sup>8</sup></b>  | <b># Times Mentioned</b> | <b>Total # Times Mentioned</b> |
|----------------------------------------------------------------|----------------------------|--------------------------|--------------------------------|
| 90. Takes another person under his/her wing                    | 1                          | 1=2                      | 2                              |
| 91. Talent creation                                            | 1,2                        | 1=1, 2=1                 | 2                              |
| 92. Teamwork                                                   | 2                          | 2=2                      | 2                              |
| 93. Thoughtful                                                 | 1                          | 1=2                      | 2                              |
| 94. Welcoming                                                  | 2                          | 2=2                      | 2                              |
| 95. Flexible                                                   | 1                          | 1=1                      | 1                              |
| 96. Forgiving                                                  | 2                          | 2=1                      | 1                              |
| 97. Similar background as protégé                              | 1                          | 1=1                      | 1                              |
| 98. Well-connected                                             | 1 and Olian, et al. (1988) | 1=1                      | 1                              |
| 99. Establishes rapport with protégé                           | Olian, et al. (1988)       |                          |                                |
| 100. Resolves conflicts with protégé                           | ibid                       |                          |                                |
| 101. Structuring interactions with and options for the protégé | ibid                       |                          |                                |

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<sup>8</sup> Source refers to which questionnaire participants who mentioned this descriptor were responding: 1= Characteristics and Attributes questionnaire; 2 = Behaviors and Activities questionnaire.

**Table 2: Final List of Protégé Role Descriptors**

| <b>Protégé Role Descriptors</b>                    | <b>Source<sup>9</sup></b> | <b># Times Mentioned</b> | <b>Total # Times Mentioned</b> |
|----------------------------------------------------|---------------------------|--------------------------|--------------------------------|
| 1. Learning                                        | 1,2                       | 1=10, 2=18               | 28                             |
| 2. Student                                         | 1,2                       | 1=14, 2=14               | 28                             |
| 3. Being groomed to be his/her mentor's successor  | 1,2                       | 1=9, 2=10                | 19                             |
| 4. Young                                           | 1,2                       | 1=11, 2=8                | 19                             |
| 5. Ambitious                                       | 1,2                       | 1=13, 2=4                | 17                             |
| 6. Talented                                        | 1,2                       | 1=13, 2=4                | 17                             |
| 7. Apprentice                                      | 1,2                       | 1=10, 2=6                | 16                             |
| 8. Following his/her mentor                        | 1,2                       | 1=4, 2=9                 | 13                             |
| 9. New to his/her field                            | 1,2                       | 1=9, 2=3                 | 12                             |
| 10. Trainee                                        | 1,2                       | 1=7, 2=5                 | 12                             |
| 11. Intelligent                                    | 1,2                       | 1=9, 2=2                 | 11                             |
| 12. Good listener                                  | 1,2                       | 1=2, 2=8                 | 10                             |
| 13. Has high potential                             | 1,2                       | 1=7, 2=3                 | 10                             |
| 14. Inexperienced                                  | 1,2                       | 1=7, 2=3                 | 10                             |
| 15. Receives guidance                              | 1,2                       | 1=3, 2=7                 | 10                             |
| 16. Up and coming                                  | 1,2                       | 1=7, 2=3                 | 10                             |
| 17. Hard-working                                   | 1,2                       | 1=3, 2=6                 | 9                              |
| 18. Willing to learn                               | 1,2                       | 1=6, 2=3                 | 9                              |
| 19. Developing new skills                          | 1,2                       | 1=3, 2=5                 | 8                              |
| 20. Underling                                      | 1,2                       | 1=5, 2=3                 | 8                              |
| 21. Assistant                                      | 1,2                       | 1=5, 2=2                 | 7                              |
| 22. Looks up to his/her mentor                     | 1,2                       | 1=1, 2=6                 | 7                              |
| 23. Observing                                      | 2                         | 2=6                      | 6                              |
| 24. Eager                                          | 1,2                       | 1=4, 2=2                 | 6                              |
| 25. Emulates his or her mentor                     | 1,2                       | 1=3, 2=3                 | 6                              |
| 26. Lackey                                         | 1,2                       | 1=3, 2=3                 | 6                              |
| 27. Seeking guidance                               | 1,2                       | 1=2, 2=4                 | 6                              |
| 28. Similar to his or her mentor                   | 1,2                       | 1=5, 2=1                 | 6                              |
| 29. Needs guidance                                 | 1                         | 1=5                      | 5                              |
| 30. Accepts feedback and/or constructive criticism | 2                         | 2=5                      | 5                              |
| 31. Being taken under someone's wing               | 1,2                       | 1=1, 2=4                 | 5                              |
| 32. Collaborator                                   | 1,2                       | 1=3, 2=2                 | 5                              |
| 33. Demonstrates leadership                        | 1,2                       | 1=1, 2=4                 | 5                              |
| 34. Empathetic                                     | 1,2                       | 1=4, 2=1                 | 5                              |
| 35. Quick learner                                  | 1,2                       | 1=3, 2=2                 | 5                              |
| 36. Asking questions                               | 2                         | 2=4                      | 4                              |
| 37. Discovering and researching new ideas          | 2                         | 2=4                      | 4                              |
| 38. Does grunt work for his/her mentor             | 2                         | 2=4                      | 4                              |
| 39. Attentive                                      | 1,2                       | 1=3, 2=1                 | 4                              |
| 40. Capable                                        | 1,2                       | 1=3, 1=1                 | 4                              |

<sup>9</sup> Source refers to which questionnaire participants who mentioned this descriptor were responding: 1= Characteristics and Attributes questionnaire; 2 = Behaviors and Activities questionnaire.

**Table 2: Continued**

| <b>Protégé Role Descriptors</b>          | <b>Source<sup>10</sup></b> | <b># Times Mentioned</b> | <b>Total # Times Mentioned</b> |
|------------------------------------------|----------------------------|--------------------------|--------------------------------|
| 41. Dedicated                            | 1,2                        | 1=1, 2=3                 | 4                              |
| 42. On the fast-track                    | 1,2                        | 1=1, 2=3                 | 4                              |
| 43. Practices new skills                 | 1,2                        | 1=2, 2=2                 | 4                              |
| 44. Willing to take risks                | 1,2                        | 1=1, 2=3                 | 4                              |
| 45. Mentor's "chosen one"                | 1                          | 1=3                      | 3                              |
| 46. Motivated                            | 1                          | 1=3                      | 3                              |
| 47. Networking                           | 1                          | 1=3                      | 3                              |
| 48. Open                                 | 1                          | 1=3                      | 3                              |
| 49. Team player                          | 2                          | 2=3                      | 3                              |
| 50. Career-oriented                      | 1,2                        | 1=2, 2=1                 | 3                              |
| 51. Disciple                             | 1,2                        | 1=2, 2=1                 | 3                              |
| 52. Energetic                            | 1,2                        | 1=1, 2=2                 | 3                              |
| 53. Goal-oriented                        | 1,2                        | 1=2, 2=1                 | 3                              |
| 54. Innovative                           | 1,2                        | 1=1, 2=2                 | 3                              |
| 55. Knowledgeable                        | 1,2                        | 1=1, 2=2                 | 3                              |
| 56. Performs above expectations          | 1,2                        | 1=1, 2=2                 | 3                              |
| 57. Responsible                          | 1,2                        | 1=1, 2=2                 | 3                              |
| 58. Seeking advancement                  | 1,2                        | 1=2, 2=1                 | 3                              |
| 59. Sycophant                            | 1,2                        | 1=2, 2=1                 | 3                              |
| 60. Charismatic                          | 1                          | 1=2                      | 2                              |
| 61. Crafty                               | 1                          | 1=2                      | 2                              |
| 62. Enthusiastic                         | 1                          | 1=2                      | 2                              |
| 63. Malleable                            | 1                          | 1=2                      | 2                              |
| 64. Self-promoting                       | 1                          | 1=2                      | 2                              |
| 65. Sponge                               | 1                          | 1=2                      | 2                              |
| 66. Diligent                             | 2                          | 2=2                      | 2                              |
| 67. Educated                             | 2                          | 2=2                      | 2                              |
| 68. Establishing oneself professionally  | 2                          | 2=2                      | 2                              |
| 69. Job shadowing                        | 2                          | 2=2                      | 2                              |
| 70. Peer                                 | 2                          | 2=2                      | 2                              |
| 71. Ready for challenges                 | 2                          | 2=2                      | 2                              |
| 72. Sharing success with his/her mentor  | 2                          | 2=2                      | 2                              |
| 73. Stands out among peers               | 2                          | 2=2                      | 2                              |
| 74. Being given opportunities for growth | 1,2                        | 1=1, 2=2                 | 2                              |
| 75. Caring                               | 1,2                        | 1=1, 2=1                 | 2                              |
| 76. Flexible                             | 1,2                        | 1=1, 2=1                 | 2                              |
| 77. Focused                              | 1,2                        | 1=1, 2=1                 | 2                              |
| 78. Go-getter                            | 1,2                        | 1=1, 2=1                 | 2                              |
| 79. Helpful                              | 1,2                        | 1=1, 2=1                 | 2                              |
| 80. Independent                          | 1,2                        | 1=1, 2=1                 | 2                              |
| 81. Inspired                             | 1,2                        | 1=1, 2=1                 | 2                              |
| 82. Intern                               | 1,2                        | 1=1, 2=1                 | 2                              |

<sup>10</sup> Source refers to which questionnaire participants who mentioned this descriptor were responding: 1= Characteristics and Attributes questionnaire; 2 = Behaviors and Activities questionnaire.

**Table 2: Continued**

| <b>Protégé Role Descriptors</b> | <b>Source<sup>11</sup></b> | <b># Times Mentioned</b> | <b>Total # Times Mentioned</b> |
|---------------------------------|----------------------------|--------------------------|--------------------------------|
| 83. Kind                        | 1,2                        | 1=1, 2=1                 | 2                              |
| 84. Obedient                    | 1,2                        | 1=1, 2=1                 | 2                              |
| 85. Political                   | 1,2                        | 1=1, 2=1                 | 2                              |
| 86. Responsive                  | 1,2                        | 1=1, 2=1                 | 2                              |
| 87. Effective communicator      | 1                          | 1=2                      | 2                              |
| 88. Patient                     | 1                          | 1=1                      | 1                              |
| 89. Shows initiative            | 1                          | 1=1                      | 1                              |
| 90. Sociable                    | 1                          | 1=1                      | 1                              |
| 91. Learning the ropes          | 2                          | 2=1                      | 1                              |
| 92. Loyal                       | 2                          | 2=1                      | 1                              |
| 93. Complements mentor's skills | Allen, et al. (1997)       |                          |                                |
| 94. Confident                   | Allen, et al. (1997)       |                          |                                |
| 95. Dependable                  | Allen, et al. (1997)       |                          |                                |
| 96. Has common sense            | Allen, et al. (1997)       |                          |                                |
| 97. Has high capacity           | Allen, et al. (1997)       |                          |                                |
| 98. Honest                      | Allen, et al. (1997)       |                          |                                |
| 99. Integrity                   | Allen, et al. (1997)       |                          |                                |
| 100. Sense of humor             | Allen, et al. (1997)       |                          |                                |

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<sup>11</sup> Source refers to which questionnaire participants who mentioned this descriptor were responding: 1= Characteristics and Attributes questionnaire; 2 = Behaviors and Activities questionnaire.

**Table 3: Protégé Role Descriptors Means, Standard Deviations, and Prototypicality Designation**

(**bold** items are prototypical)

| <b>Protégé Role Descriptor</b>                        | <b>Mean</b> | <b>SD</b> | <b>Protégé Role Descriptor</b>                        | <b>Mean</b> | <b>SD</b> |
|-------------------------------------------------------|-------------|-----------|-------------------------------------------------------|-------------|-----------|
| <b>Willing to learn</b>                               | 7.95        | 1.525     | <b>Loyal</b>                                          | 7.18        | 2.085     |
| <b>Being given opportunities for growth</b>           | 7.78        | 1.527     | <b>Being groomed to be his/her mentor's successor</b> | 7.18        | 1.920     |
| <b>Learning</b>                                       | 7.72        | 1.635     | <b>Educated</b>                                       | 7.16        | 1.721     |
| <b>Motivated</b>                                      | 7.72        | 1.523     | <b>Knowledgeable</b>                                  | 7.14        | 1.778     |
| <b>Has high potential</b>                             | 7.71        | 1.547     | <b>Quick learner</b>                                  | 7.05        | 1.972     |
| <b>Hard-working</b>                                   | 7.68        | 1.516     | <b>Innovative</b>                                     | 7.00        | 1.795     |
| <b>Focused</b>                                        | 7.66        | 1.615     | Has common sense                                      | 6.98        | 1.749     |
| <b>Seeking advancement</b>                            | 7.64        | 1.557     | Energetic                                             | 6.91        | 1.735     |
| <b>Receives guidance</b>                              | 7.64        | 1.643     | Trainee                                               | 6.89        | 2.205     |
| <b>Eager</b>                                          | 7.64        | 1.610     | On the fast-track                                     | 6.87        | 1.872     |
| <b>Developing new skills</b>                          | 7.61        | 1.476     | Integrity                                             | 6.84        | 1.798     |
| <b>Being taken under someone's wing</b>               | 7.59        | 1.974     | Demonstrates leadership                               | 6.84        | 1.869     |
| <b>Observing</b>                                      | 7.59        | 1.560     | Intern                                                | 6.83        | 2.053     |
| <b>Following his/her mentor</b>                       | 7.56        | 1.832     | Complements mentor's skills                           | 6.82        | 1.800     |
| <b>Looks up to his/her mentor</b>                     | 7.56        | 1.611     | Job shadowing                                         | 6.80        | 2.100     |
| <b>Career-oriented</b>                                | 7.53        | 1.627     | Effective communicator                                | 6.76        | 1.745     |
| <b>Ambitious</b>                                      | 7.50        | 1.627     | Similar to his/her mentor                             | 6.73        | 1.800     |
| <b>Dedicated</b>                                      | 7.49        | 1.588     | Open                                                  | 6.70        | 2.025     |
| <b>Intelligent</b>                                    | 7.48        | 1.576     | Flexible                                              | 6.68        | 1.904     |
| <b>Shows initiative</b>                               | 7.47        | 1.572     | Charismatic                                           | 6.67        | 1.787     |
| <b>Enthusiastic</b>                                   | 7.47        | 1.540     | Honest                                                | 6.67        | 1.811     |
| <b>Apprentice</b>                                     | 7.46        | 1.930     | Helpful                                               | 6.66        | 1.981     |
| <b>Accepts feedback and/or constructive criticism</b> | 7.45        | 1.734     | Collaborator                                          | 6.65        | 1.708     |
| <b>Up and coming</b>                                  | 7.44        | 1.502     | Willing to take risks                                 | 6.63        | 1.833     |
| <b>Establishing oneself professionally</b>            | 7.39        | 1.746     | Disciple                                              | 6.62        | 1.990     |
| <b>Ready for challenges</b>                           | 7.39        | 1.566     | Assistant                                             | 6.61        | 2.058     |
| <b>Go-getter</b>                                      | 7.38        | 1.728     | Malleable                                             | 6.61        | 2.030     |
| <b>Mentor's 'chosen one'</b>                          | 7.38        | 1.764     | Young                                                 | 6.57        | 1.949     |
| <b>Capable</b>                                        | 7.38        | 1.942     | Networking                                            | 6.54        | 1.857     |
| <b>Diligent</b>                                       | 7.36        | 1.572     | Team player                                           | 6.49        | 2.061     |
| <b>Student</b>                                        | 7.36        | 1.880     | Patient                                               | 6.46        | 1.863     |
| <b>Learning the ropes</b>                             | 7.36        | 1.829     | Sponge                                                | 6.36        | 2.346     |
| <b>Goal-oriented</b>                                  | 7.36        | 2.056     | Independent                                           | 6.35        | 2.139     |
| <b>Has high capacity</b>                              | 7.35        | 1.956     | Sociable                                              | 6.18        | 2.051     |
| <b>Emulates his/her mentor</b>                        | 7.35        | 1.769     | Caring                                                | 6.17        | 1.987     |
| <b>Stands out among peers</b>                         | 7.34        | 1.776     | Crafty                                                | 6.15        | 1.967     |
| <b>Performs above expectations</b>                    | 7.32        | 1.735     | Obedient                                              | 6.08        | 2.101     |
| <b>Inspired</b>                                       | 7.32        | 1.641     | Needs guidance                                        | 5.92        | 2.138     |
| <b>Asking questions</b>                               | 7.31        | 1.601     | Underling                                             | 5.90        | 2.202     |
| <b>Confident</b>                                      | 7.31        | 1.510     | Kind                                                  | 5.90        | 1.847     |
| <b>Attentive</b>                                      | 7.29        | 1.671     | Self-promoting                                        | 5.87        | 2.152     |
| <b>Practices new skills</b>                           | 7.29        | 1.703     | Empathetic                                            | 5.84        | 1.850     |

**Table 3: Continued**

| <b>Protégé Role Descriptor</b>               | <b>Mean</b> | <b>SD</b> | <b>Protégé Role Descriptor</b> | <b>Mean</b> | <b>SD</b> |
|----------------------------------------------|-------------|-----------|--------------------------------|-------------|-----------|
| <b>Sharing success with his/her mentor</b>   | 7.28        | 2.021     | Peer                           | 5.81        | 2.035     |
| <b>Responsive</b>                            | 7.26        | 1.639     | New to his/her field           | 5.77        | 2.084     |
| <b>Talented</b>                              | 7.25        | 1.576     | Sense of humor                 | 5.55        | 1.961     |
| <b>Discovering and researching new ideas</b> | 7.23        | 1.702     | Does grunt work for mentor     | 5.50        | 2.324     |
| <b>Responsible</b>                           | 7.23        | 1.642     | Sycophant                      | 5.27        | 2.115     |
| <b>Seeking guidance</b>                      | 7.22        | 1.833     | Inexperienced                  | 5.10        | 2.185     |
| <b>Good listener</b>                         | 7.21        | 1.634     | Political                      | 5.09        | 2.221     |
| <b>Dependable</b>                            | 7.20        | 1.610     | Lackey                         | 4.02        | 2.420     |

**Table 4a: PCFA Results for Protégé Prototype Ratings**

(**bold** items are prototypical; percent variance accounted for is listed below each factor)

| <b>Eager Achiever</b><br>22.4%                 |                | <b>Guided Learner</b><br>14.7%                        |                |
|------------------------------------------------|----------------|-------------------------------------------------------|----------------|
| <b>Protégé Role Descriptor</b>                 | <b>Loading</b> | <b>Protégé Role Descriptor</b>                        | <b>Loading</b> |
| Shows initiative                               | .839           | Receives guidance                                     | .821           |
| <b>Intelligent</b>                             | .834           | <b>Learning the ropes</b>                             | .794           |
| <b>Enthusiastic</b>                            | .824           | <b>Apprentice</b>                                     | .780           |
| <b>Confident</b>                               | .799           | <b>Following his/her mentor</b>                       | .779           |
| <b>Discovering &amp; researching new ideas</b> | .773           | <b>Being taken under someone's wing</b>               | .764           |
| <b>Talented</b>                                | .757           | <b>Seeking guidance</b>                               | .759           |
| <b>Responsible</b>                             | .755           | <b>Emulates his/her mentor</b>                        | .753           |
| <b>Hard-working</b>                            | .752           | <b>Student</b>                                        | .715           |
| <b>Ready for challenges</b>                    | .747           | <b>Looks up to his/her mentor</b>                     | .700           |
| <b>Innovative</b>                              | .745           | Intern                                                | .677           |
| Has common sense                               | .728           | <b>Learning</b>                                       | .656           |
| <b>Dependable</b>                              | .728           | <b>Willing to learn</b>                               | .649           |
| <b>Diligent</b>                                | .724           | <b>Asking questions</b>                               | .648           |
| <b>Ambitious</b>                               | .705           | <b>Being groomed to be his/her mentor's successor</b> | .626           |
| <b>Focused</b>                                 | .697           | <b>Observing</b>                                      | .621           |
| <b>Has high potential</b>                      | .684           | <b>Being given opportunities for growth</b>           | .619           |
| <b>Motivated</b>                               | .674           | Trainee                                               | .611           |
| Willing to take risks                          | .669           | <b>Accepts feedback and/or constructive criticism</b> | .562           |
| <b>Career-oriented</b>                         | .666           |                                                       |                |
| Charismatic                                    | .652           |                                                       |                |
| Independent                                    | .650           |                                                       |                |
| Effective communicator                         | .650           |                                                       |                |
| <b>Educated</b>                                | .647           |                                                       |                |
| <b>Dedicated</b>                               | .625           |                                                       |                |
| <b>Responsive</b>                              | .621           |                                                       |                |
| <b>Inspired</b>                                | .611           |                                                       |                |
| Demonstrates leadership                        | .592           |                                                       |                |
| <b>Good listener</b>                           | .586           |                                                       |                |
| <b>Eager</b>                                   | .572           |                                                       |                |
| <b>Up and coming</b>                           | .560           |                                                       |                |
| <b>Seeking advancement</b>                     | .551           |                                                       |                |
| Energetic                                      | .540           |                                                       |                |
| Collaborator                                   | .538           |                                                       |                |

**Table 4b: PCFA Results for Protégé Prototype Ratings**

(continued; **bold** items are prototypical; percent variance accounted for is listed below each factor name)

| <b>Protégé Role Descriptor</b>             | <b>Classic Performer<br/>7.7%</b> | <b>Easy to get along with<br/>7.5%</b> | <b>Stand Out<br/>4.0%</b> | <b>Toady<br/>3.8%</b> | <b>Political Climber<br/>2.3%</b> | <b>Needs Help<br/>2.0%</b> |
|--------------------------------------------|-----------------------------------|----------------------------------------|---------------------------|-----------------------|-----------------------------------|----------------------------|
| <b>Capable</b>                             | .782                              |                                        |                           |                       |                                   |                            |
| <b>Goal-oriented</b>                       | .768                              |                                        |                           |                       |                                   |                            |
| <b>Sharing success with his/her mentor</b> | .766                              |                                        |                           |                       |                                   |                            |
| <b>Has high capacity</b>                   | .757                              |                                        |                           |                       |                                   |                            |
| <b>Loyal</b>                               | .750                              |                                        |                           |                       |                                   |                            |
| Open                                       | .723                              |                                        |                           |                       |                                   |                            |
| Malleable                                  | .711                              |                                        |                           |                       |                                   |                            |
| <b>Quick learner</b>                       | .682                              |                                        |                           |                       |                                   |                            |
| Job shadowing                              | .647                              |                                        |                           |                       |                                   |                            |
| Caring                                     |                                   | .768                                   |                           |                       |                                   |                            |
| Kind                                       |                                   | .744                                   |                           |                       |                                   |                            |
| Sense of humor                             |                                   | .667                                   |                           |                       |                                   |                            |
| Team player                                |                                   | .626                                   |                           |                       |                                   |                            |
| Empathetic                                 |                                   | .614                                   |                           |                       |                                   |                            |
| Helpful                                    |                                   | .601                                   |                           |                       |                                   |                            |
| Flexible                                   |                                   | .596                                   |                           |                       |                                   |                            |
| Patient                                    |                                   | .588                                   |                           |                       |                                   |                            |
| <b>Stands out among peers</b>              |                                   |                                        | .612                      |                       |                                   |                            |
| <b>Knowledgeable</b>                       |                                   |                                        | .584                      |                       |                                   |                            |
| On the fast-track                          |                                   |                                        | .507                      |                       |                                   |                            |
| <b>Establishing oneself professionally</b> |                                   |                                        | .507                      |                       |                                   |                            |
| <b>Go-getter</b>                           |                                   |                                        | .503                      |                       |                                   |                            |
| Lackey                                     |                                   |                                        |                           | .701                  |                                   |                            |
| Does grunt work for his/her mentor         |                                   |                                        |                           | .695                  |                                   |                            |
| Underling                                  |                                   |                                        |                           | .629                  |                                   |                            |
| Sycophant                                  |                                   |                                        |                           | .581                  |                                   |                            |
| Obedient                                   |                                   |                                        |                           | .544                  |                                   |                            |
| Networking                                 |                                   |                                        |                           |                       | .529                              |                            |
| Political                                  |                                   |                                        |                           |                       | .513                              |                            |
| Self-promoting                             |                                   |                                        |                           |                       | .430*                             |                            |
| Inexperienced                              |                                   |                                        |                           |                       |                                   | .794                       |
| Needs guidance                             |                                   |                                        |                           |                       |                                   | .669                       |

\* The loading of .430 for self-promoting fell below the .50 cut-off point. However, this was the only factor that the item loaded on and its presence helps clarify the nature of the factor. Therefore, it was retained but interpretation should be a bit more cautious than for the other items.

**Table 5: Mentor Role Descriptors Means, and Standard Deviations, and Prototypicality Designation**

(**bold** items are prototypical)

| Mentor Role Descriptor                         | Mean | SD    | Mentor Role Descriptor                                           | Mean | SD    |
|------------------------------------------------|------|-------|------------------------------------------------------------------|------|-------|
| Role model                                     | 8.16 | 1.611 | <b>Welcoming</b>                                                 | 7.41 | 1.651 |
| <b>Provides guidance</b>                       | 8.16 | 1.493 | <b>Thoughtful</b>                                                | 7.40 | 1.684 |
| <b>Provides perspective</b>                    | 8.10 | 1.473 | <b>Expert</b>                                                    | 7.38 | 1.762 |
| <b>Knowledgeable</b>                           | 8.05 | 1.607 | <b>Strong</b>                                                    | 7.37 | 1.730 |
| <b>Supportive</b>                              | 8.05 | 1.508 | <b>Disciplined</b>                                               | 7.35 | 1.722 |
| <b>Positive influence</b>                      | 8.04 | 1.510 | <b>Patient</b>                                                   | 7.33 | 1.651 |
| <b>Giving feedback</b>                         | 8.03 | 1.449 | <b>Established</b>                                               | 7.33 | 1.843 |
| <b>Good example</b>                            | 8.03 | 1.544 | <b>Resolves conflicts with protégé</b>                           | 7.32 | 1.653 |
| <b>Helps protégé</b>                           | 8.02 | 1.583 | <b>Confidante</b>                                                | 7.31 | 1.794 |
| <b>Advisor</b>                                 | 8.02 | 1.500 | <b>Trainer</b>                                                   | 7.28 | 1.763 |
| <b>Helpful</b>                                 | 7.97 | 1.439 | <b>Professional</b>                                              | 7.26 | 1.777 |
| <b>Approachable</b>                            | 7.95 | 1.605 | <b>Unselfish</b>                                                 | 7.26 | 1.714 |
| <b>Giving of his/her time</b>                  | 7.95 | 1.688 | <b>Learning</b>                                                  | 7.24 | 1.808 |
| <b>Encouraging</b>                             | 7.94 | 1.600 | <b>Cooperative</b>                                               | 7.21 | 1.656 |
| <b>Motivator</b>                               | 7.94 | 1.506 | <b>Nurturing</b>                                                 | 7.19 | 1.889 |
| <b>Experienced</b>                             | 7.94 | 1.612 | <b>Caring</b>                                                    | 7.19 | 1.735 |
| <b>Wise</b>                                    | 7.92 | 1.535 | <b>Advocate</b>                                                  | 7.18 | 1.736 |
| <b>Resource</b>                                | 7.90 | 1.545 | <b>Fair</b>                                                      | 7.18 | 1.743 |
| <b>Respected</b>                               | 7.88 | 1.568 | <b>Friend</b>                                                    | 7.18 | 1.755 |
| <b>Communicator</b>                            | 7.87 | 1.650 | <b>Open</b>                                                      | 7.16 | 1.718 |
| <b>Inspiration</b>                             | 7.86 | 1.648 | <b>Generous</b>                                                  | 7.14 | 1.723 |
| <b>Takes another person under his/her wing</b> | 7.85 | 1.642 | <b>Well-connected</b>                                            | 7.14 | 1.778 |
| <b>Insightful</b>                              | 7.85 | 1.485 | <b>Sounding board</b>                                            | 7.13 | 1.848 |
| <b>Intelligent</b>                             | 7.84 | 1.620 | <b>Non-judgmental</b>                                            | 7.12 | 1.913 |
| <b>Responsible</b>                             | 7.84 | 1.555 | <b>Structuring interactions with and options for the protégé</b> | 7.11 | 1.803 |
| <b>Easy to talk to</b>                         | 7.84 | 1.651 | <b>Kind</b>                                                      | 7.08 | 1.696 |
| <b>Interested</b>                              | 7.83 | 1.564 | <b>Job training</b>                                              | 7.06 | 1.782 |
| <b>Good character</b>                          | 7.82 | 1.632 | <b>Shows empathy</b>                                             | 7.05 | 1.730 |
| <b>Showing how to do things</b>                | 7.78 | 1.624 | <b>Calm</b>                                                      | 7.01 | 1.816 |
| <b>Committed</b>                               | 7.75 | 1.573 | Facilitator                                                      | 6.95 | 1.680 |
| <b>Gives protégé space to try new things</b>   | 7.74 | 1.545 | Organized                                                        | 6.93 | 1.744 |
| <b>Influential</b>                             | 7.74 | 1.607 | Pragmatic                                                        | 6.84 | 1.730 |
| <b>Has a positive attitude</b>                 | 7.73 | 1.706 | Compassionate                                                    | 6.83 | 1.814 |
| <b>Establishes rapport with protégé</b>        | 7.72 | 1.695 | Older                                                            | 6.76 | 1.957 |
| <b>Dependable</b>                              | 7.72 | 1.630 | Creating a successor                                             | 6.74 | 2.015 |
| <b>Good listener</b>                           | 7.69 | 1.596 | Teamwork                                                         | 6.72 | 1.879 |
| <b>Respectful</b>                              | 7.69 | 1.641 | Supervisor                                                       | 6.67 | 1.994 |
| <b>Sharing experience</b>                      | 7.69 | 1.645 | Forgiving                                                        | 6.53 | 1.816 |
| <b>Understanding</b>                           | 7.69 | 1.598 | Flexible                                                         | 6.47 | 1.810 |
| <b>Honest</b>                                  | 7.69 | 1.643 | Similar background as protégé                                    | 6.38 | 1.954 |
| <b>Leader</b>                                  | 7.66 | 1.663 | Loving                                                           | 6.36 | 1.995 |
| <b>Teacher</b>                                 | 7.66 | 1.554 | Talent creation                                                  | 6.36 | 1.974 |
| <b>Confident</b>                               | 7.65 | 1.565 | Courageous                                                       | 6.31 | 1.891 |
| <b>Enthusiastic</b>                            | 7.64 | 1.594 | Parental (maternal or paternal)                                  | 6.12 | 2.088 |
| <b>Directing</b>                               | 7.63 | 1.663 | Grooming another for a promotion                                 | 5.99 | 2.296 |
| <b>Accomplished</b>                            | 7.61 | 1.635 | Partner                                                          | 5.99 | 2.082 |
| <b>Challenging</b>                             | 7.60 | 1.662 | Safety net                                                       | 5.91 | 2.187 |
| <b>Educated</b>                                | 7.54 | 1.778 | Guardian                                                         | 5.79 | 2.046 |
| <b>Counseling</b>                              | 7.52 | 1.692 | Non-confrontational                                              | 5.72 | 2.084 |
| <b>Coach</b>                                   | 7.47 | 1.769 | Peer                                                             | 5.63 | 2.255 |
| <b>Successful</b>                              | 7.44 | 1.775 |                                                                  |      |       |

**Table 6a: PCFA Results for Mentor Prototype Ratings**

(**bold** items are prototypical; percent variance accounted for is listed below each factor name)

| <b>Supportive Role Model</b><br>27.4% |                |                                                |                |
|---------------------------------------|----------------|------------------------------------------------|----------------|
| <b>Mentor Role Descriptor</b>         | <b>Loading</b> | <b>Mentor Role Descriptor</b>                  | <b>Loading</b> |
| <b>Provides guidance</b>              | .794           | <b>Advisor</b>                                 | .647           |
| <b>Positive influence</b>             | .786           | <b>Enthusiastic</b>                            | .638           |
| <b>Approachable</b>                   | .772           | <b>Patient</b>                                 | .633           |
| <b>Good example</b>                   | .766           | <b>Sharing experience</b>                      | .623           |
| <b>Supportive</b>                     | .764           | <b>Gives protégé space to try new things</b>   | .619           |
| <b>Helpful</b>                        | .763           | <b>Has a positive attitude</b>                 | .617           |
| <b>Provides perspective</b>           | .753           | <b>Welcoming</b>                               | .613           |
| <b>Good listener</b>                  | .742           | <b>Takes another person under his/her wing</b> | .609           |
| <b>Giving feedback</b>                | .726           | <b>Showing how to do things</b>                | .604           |
| <b>Role model</b>                     | .721           | <b>Communicator</b>                            | .601           |
| <b>Good character</b>                 | .710           | <b>Confident</b>                               | .593           |
| <b>Understanding</b>                  | .707           | <b>Dependable</b>                              | .589           |
| <b>Responsible</b>                    | .706           | <b>Unselfish</b>                               | .577           |
| <b>Encouraging</b>                    | .704           | <b>Open</b>                                    | .576           |
| <b>Respectful</b>                     | .698           | <b>Wise</b>                                    | .561           |
| <b>Motivator</b>                      | .698           | <b>Generous</b>                                | .555           |
| <b>Honest</b>                         | .697           | <b>Influential</b>                             | .538           |
| <b>Interested</b>                     | .695           | <b>Directing</b>                               | .538           |
| <b>Committed</b>                      | .682           | <b>Non-judgmental</b>                          | .533           |
| <b>Helps protégé</b>                  | .677           | <b>Shows empathy</b>                           | .530           |
| <b>Resource</b>                       | .673           | <b>Teacher</b>                                 | .527           |
| <b>Insightful</b>                     | .661           | <b>Counseling</b>                              | .514           |
| <b>Easy to talk to</b>                | .650           | <b>Knowledgeable</b>                           | .512           |

**Table 6b: PCFA Results for Mentor Prototype Ratings**

(continued; **bold** items are prototypical; percent variance accounted for is listed below each factor name)

| <b>Mentor Role Descriptor</b>                                            | <b>Well<br/>Estab-<br/>lished<br/>10.6%</b> | <b>Profes-<br/>sional<br/>Director<br/>8.5%</b> | <b>Connected<br/>Confi-<br/>dant(e)<br/>8.1%</b> | <b>Caring<br/>Protector<br/>8.0%</b> | <b>Even<br/>keeled<br/>4.3%</b> |
|--------------------------------------------------------------------------|---------------------------------------------|-------------------------------------------------|--------------------------------------------------|--------------------------------------|---------------------------------|
| <b>Successful</b>                                                        | .780                                        |                                                 |                                                  |                                      |                                 |
| <b>Professional</b>                                                      | .730                                        |                                                 |                                                  |                                      |                                 |
| <b>Expert</b>                                                            | .702                                        |                                                 |                                                  |                                      |                                 |
| <b>Intelligent</b>                                                       | .653                                        |                                                 |                                                  |                                      |                                 |
| <b>Accomplished</b>                                                      | .640                                        |                                                 |                                                  |                                      |                                 |
| <b>Established</b>                                                       | .622                                        |                                                 |                                                  |                                      |                                 |
| Older                                                                    | .610                                        |                                                 |                                                  |                                      |                                 |
| <b>Leader</b>                                                            | .527                                        |                                                 |                                                  |                                      |                                 |
| <b>Trainer</b>                                                           |                                             | .649                                            |                                                  |                                      |                                 |
| Supervisor                                                               |                                             | .636                                            |                                                  |                                      |                                 |
| Grooming another for a<br>promotion                                      |                                             | .635                                            |                                                  |                                      |                                 |
| <b>Structuring interactions<br/>with and options for the<br/>protégé</b> |                                             | .586                                            |                                                  |                                      |                                 |
| <b>Inspiration</b>                                                       |                                             |                                                 | .698                                             |                                      |                                 |
| <b>Thoughtful</b>                                                        |                                             |                                                 | .697                                             |                                      |                                 |
| <b>Confidante</b>                                                        |                                             |                                                 | .674                                             |                                      |                                 |
| <b>Establishes rapport with<br/>protégé</b>                              |                                             |                                                 | .640                                             |                                      |                                 |
| Flexible                                                                 |                                             |                                                 | .628                                             |                                      |                                 |
| Guardian                                                                 |                                             |                                                 |                                                  | .701                                 |                                 |
| Loving                                                                   |                                             |                                                 |                                                  | .647                                 |                                 |
| Compassionate                                                            |                                             |                                                 |                                                  | .631                                 |                                 |
| Parental (maternal or<br>paternal)                                       |                                             |                                                 |                                                  | .628                                 |                                 |
| <b>Friend</b>                                                            |                                             |                                                 |                                                  | .577                                 |                                 |
| Courageous                                                               |                                             |                                                 |                                                  | .557                                 |                                 |
| Forgiving                                                                |                                             |                                                 |                                                  | .554                                 |                                 |
| Non-confrontational                                                      |                                             |                                                 |                                                  |                                      | .699                            |
| <b>Calm</b>                                                              |                                             |                                                 |                                                  |                                      | .539                            |

**Table 7: Mentor Role Descriptors Masculinity/Femininity Ratings**

(**bold** items are masculine; *italicized* items are the median)

| Mentor Role Descriptor                                           | Mean | SD    | Mentor Role Descriptor          | Mean | SD    |
|------------------------------------------------------------------|------|-------|---------------------------------|------|-------|
| <b>Creating a successor</b>                                      | 2.68 | 1.070 | <b>Provides guidance</b>        | 4.04 | .906  |
| <b>Strong</b>                                                    | 2.71 | 1.094 | <b>Safety net</b>               | 4.05 | 1.054 |
| <b>Coach</b>                                                     | 2.75 | .987  | <b>Respectful</b>               | 4.06 | .800  |
| <b>Courageous</b>                                                | 2.81 | 1.180 | <i>Talent creation</i>          | 4.10 | .885  |
| <b>Challenging</b>                                               | 3.06 | .931  | <i>Committed</i>                | 4.10 | .896  |
| <b>Leader</b>                                                    | 3.06 | .998  | Partner                         | 4.13 | .968  |
| <b>Directing</b>                                                 | 3.19 | .866  | Honest                          | 4.15 | .791  |
| <b>Established</b>                                               | 3.24 | .860  | Positive influence              | 4.15 | .734  |
| <b>Job training</b>                                              | 3.31 | .889  | Learning                        | 4.16 | .751  |
| <b>Disciplined</b>                                               | 3.32 | 1.044 | Advocate                        | 4.18 | .895  |
| <b>Influential</b>                                               | 3.32 | .905  | Giving feedback                 | 4.19 | .919  |
| <b>Professional</b>                                              | 3.36 | .887  | Has a positive attitude         | 4.21 | .746  |
| <b>Expert</b>                                                    | 3.36 | .814  | Sounding board                  | 4.22 | 1.163 |
| <b>Supervisor</b>                                                | 3.39 | .795  | Insightful                      | 4.27 | .892  |
| <b>Confident</b>                                                 | 3.40 | .985  | Interested                      | 4.28 | .783  |
| <b>Trainer</b>                                                   | 3.41 | .843  | Generous                        | 4.29 | .907  |
| <b>Older</b>                                                     | 3.43 | .854  | Cooperative                     | 4.33 | .924  |
| <b>Experienced</b>                                               | 3.44 | .726  | Organized                       | 4.37 | .943  |
| <b>Accomplished</b>                                              | 3.49 | .881  | Inspiration                     | 4.38 | .989  |
| <b>Establishes rapport with protégé</b>                          | 3.50 | 1.015 | Communicator                    | 4.38 | 1.304 |
| <b>Guardian</b>                                                  | 3.50 | 1.317 | Approachable                    | 4.39 | .943  |
| <b>Respected</b>                                                 | 3.51 | .859  | Non-judgmental                  | 4.41 | 1.050 |
| <b>Well-connected</b>                                            | 3.53 | 1.131 | Helpful                         | 4.43 | .751  |
| <b>Successful</b>                                                | 3.53 | .812  | Friend                          | 4.43 | .774  |
| <b>Wise</b>                                                      | 3.54 | .942  | Enthusiastic                    | 4.45 | .877  |
| <b>Pragmatic</b>                                                 | 3.54 | .996  | Flexible                        | 4.46 | .928  |
| <b>Facilitator</b>                                               | 3.55 | 1.088 | Giving of his/her time          | 4.49 | .867  |
| <b>Grooming another for a promotion</b>                          | 3.59 | 1.208 | Encouraging                     | 4.51 | .968  |
| <b>Advisor</b>                                                   | 3.66 | .787  | Supportive                      | 4.54 | .948  |
| <b>Motivator</b>                                                 | 3.66 | 1.006 | Unselfish                       | 4.55 | .948  |
| <b>Knowledgeable</b>                                             | 3.68 | .679  | Parental (maternal or paternal) | 4.56 | 1.062 |
| <b>Role model</b>                                                | 3.68 | .815  | Sharing experience              | 4.56 | 1.008 |
| <b>Resource</b>                                                  | 3.69 | .791  | Counseling                      | 4.61 | .923  |
| <b>Structuring interactions with and options for the protégé</b> | 3.69 | .990  | Calm                            | 4.62 | 1.048 |
| <b>Similar background as protégé</b>                             | 3.70 | .739  | Patient                         | 4.66 | .939  |
| <b>Showing how to do things</b>                                  | 3.70 | 1.175 | Forgiving                       | 4.69 | .920  |
| <b>Educated</b>                                                  | 3.71 | .582  | Teacher                         | 4.69 | .942  |
| <b>Peer</b>                                                      | 3.78 | .809  | Understanding                   | 4.83 | 1.005 |
| <b>Intelligent</b>                                               | 3.83 | .559  | Welcoming                       | 4.87 | .968  |
| <b>Good character</b>                                            | 3.83 | .646  | Easy to talk to                 | 4.91 | .958  |
| <b>Gives protégé space to try new things</b>                     | 3.87 | .798  | Open                            | 4.92 | 1.038 |
| <b>Responsible</b>                                               | 3.90 | .820  | Kind                            | 4.93 | .879  |
| <b>Good example</b>                                              | 3.91 | .756  | Non-confrontational             | 4.94 | 1.049 |
| <b>Dependable</b>                                                | 3.93 | 1.043 | Thoughtful                      | 4.99 | .957  |
| <b>Takes another person under his/her wing</b>                   | 3.94 | .950  | Good listener                   | 5.08 | 1.078 |
| <b>Confidante</b>                                                | 3.94 | 1.339 | Shows empathy                   | 5.12 | .983  |
| <b>Provides perspective</b>                                      | 3.94 | .931  | Compassionate                   | 5.16 | .925  |
| <b>Teamwork</b>                                                  | 3.99 | .826  | Caring                          | 5.19 | .891  |
| <b>Helps protégé</b>                                             | 3.99 | .928  | Loving                          | 5.20 | .931  |
| <b>Fair</b>                                                      | 4.00 | .733  | Nurturing                       | 5.94 | .974  |
| <b>Resolves conflicts with protégé</b>                           | 4.03 | 1.027 |                                 |      |       |

**Table 8: Protégé Role Descriptors Masculinity/Femininity Ratings**

(**bold** items are masculine, based on a median split; *italicized* item is the median)

| <b>Protégé Role Descriptor</b>                        | <b>Mean</b> | <b>SD</b> | <b>Protégé Role Descriptor</b>                 | <b>Mean</b> | <b>SD</b> |
|-------------------------------------------------------|-------------|-----------|------------------------------------------------|-------------|-----------|
| <b>Political</b>                                      | 2.78        | 1.144     | Trainee                                        | 3.97        | .936      |
| <b>Self-promoting</b>                                 | 2.86        | 1.201     | Quick learner                                  | 4.00        | 1.124     |
| <b>Willing to take risks</b>                          | 2.93        | 1.130     | Motivated                                      | 4.05        | 1.119     |
| <b>Demonstrates leadership</b>                        | 3.04        | 1.181     | Complements mentor's skills                    | 4.05        | .985      |
| <b>Go-getter</b>                                      | 3.07        | 1.231     | Looks up to his/her mentor                     | 4.06        | .998      |
| <b>On the fast-track</b>                              | 3.10        | 1.046     | Integrity                                      | 4.06        | .960      |
| <b>Establishing oneself professionally</b>            | 3.17        | 1.277     | Student                                        | 4.06        | .712      |
| <b>Being groomed to be his/her mentor's successor</b> | 3.21        | 1.353     | Energetic                                      | 4.07        | 1.151     |
| <b>Disciple</b>                                       | 3.29        | 1.124     | Practices new skills                           | 4.08        | 1.047     |
| <b>Ambitious</b>                                      | 3.31        | 1.284     | Developing new skills                          | 4.09        | .759      |
| <b>Mentor's 'chosen one'</b>                          | 3.31        | 1.269     | Diligent                                       | 4.10        | 1.027     |
| <b>Apprentice</b>                                     | 3.33        | 1.122     | New to his/her field                           | 4.10        | .868      |
| <b>Lackey</b>                                         | 3.36        | 1.067     | Young                                          | 4.12        | .939      |
| <b>Confident</b>                                      | 3.44        | 1.215     | Collaborator                                   | 4.15        | 1.227     |
| <b>Networking</b>                                     | 3.45        | 1.075     | Sponge                                         | 4.15        | 1.053     |
| <b>Seeking advancement</b>                            | 3.47        | 1.269     | Learning                                       | 4.22        | .805      |
| <b>Ready for challenges</b>                           | 3.47        | 1.127     | Dedicated                                      | 4.25        | 1.166     |
| <b>Stands out among peers</b>                         | 3.47        | 1.168     | Responsible                                    | 4.27        | .977      |
| <b>Being given opportunities for growth</b>           | 3.48        | 1.216     | Inexperienced                                  | 4.27        | .708      |
| <b>Sense of humor</b>                                 | 3.50        | 1.067     | Needs guidance                                 | 4.28        | .888      |
| <b>Hard-working</b>                                   | 3.51        | 1.160     | Crafty                                         | 4.30        | 1.354     |
| <b>Goal-oriented</b>                                  | 3.52        | 1.449     | Inspired                                       | 4.30        | 1.021     |
| <b>Charismatic</b>                                    | 3.56        | 1.207     | Dependable                                     | 4.32        | 1.069     |
| <b>Has high potential</b>                             | 3.56        | 1.057     | Intern                                         | 4.36        | .983      |
| <b>Up and coming</b>                                  | 3.57        | 1.065     | Honest                                         | 4.36        | .936      |
| <b>Does grunt work for his/her mentor</b>             | 3.57        | 1.091     | Loyal                                          | 4.38        | 1.329     |
| <b>Career-oriented</b>                                | 3.63        | 1.307     | Malleable                                      | 4.39        | 1.131     |
| <b>Has high capacity</b>                              | 3.63        | 1.217     | Observing                                      | 4.39        | .919      |
| <b>Team player</b>                                    | 3.64        | 1.262     | Accepts feedback and/or constructive criticism | 4.39        | 1.044     |
| <b>Independent</b>                                    | 3.67        | 1.358     | Sharing success with his/her mentor            | 4.41        | 1.189     |
| <b>Innovative</b>                                     | 3.69        | 1.085     | Obedient                                       | 4.44        | 1.304     |
| <b>Learning the ropes</b>                             | 3.71        | .971      | Being taken under someone's wing               | 4.49        | 1.168     |
| <b>Knowledgeable</b>                                  | 3.75        | 1.029     | Enthusiastic                                   | 4.50        | 1.076     |
| <b>Sycophant</b>                                      | 3.75        | .953      | Willing to learn                               | 4.52        | .945      |
| <b>Discovering and researching new ideas</b>          | 3.79        | 1.158     | Effective communicator                         | 4.55        | 1.442     |
| <b>Emulates his/her mentor</b>                        | 3.79        | 1.037     | Receives guidance                              | 4.62        | .897      |
| <b>Peer</b>                                           | 3.80        | .956      | Responsive                                     | 4.62        | 1.264     |
| <b>Job shadowing</b>                                  | 3.80        | 1.004     | Asking questions                               | 4.68        | .948      |
| <b>Eager</b>                                          | 3.81        | 1.056     | Flexible                                       | 4.79        | 1.166     |
| <b>Similar to his/her mentor</b>                      | 3.82        | .969      | Attentive                                      | 4.79        | 1.088     |
| <b>Shows initiative</b>                               | 3.84        | 1.056     | Assistant                                      | 4.82        | 1.053     |
| <b>Focused</b>                                        | 3.85        | 1.235     | Sociable                                       | 4.85        | 1.212     |
| <b>Capable</b>                                        | 3.87        | 1.065     | Helpful                                        | 4.89        | 1.160     |
| <b>Intelligent</b>                                    | 3.88        | .749      | Seeking guidance                               | 4.90        | 1.098     |
| <b>Underling</b>                                      | 3.90        | .890      | Patient                                        | 5.14        | 1.128     |
| <b>Following his/her mentor</b>                       | 3.91        | 1.077     | Kind                                           | 5.31        | 1.169     |
| <b>Talented</b>                                       | 3.93        | .861      | Open                                           | 5.34        | .961      |
| <i>Has common sense</i>                               | 3.95        | 1.269     | Good listener                                  | 5.42        | 1.108     |
| <b>Performs above expectations</b>                    | 3.96        | 1.236     | Empathetic                                     | 5.42        | 1.073     |
| <b>Educated</b>                                       | 3.96        | .879      | Caring                                         | 5.79        | .972      |

**Table 9: Comparison between Kram’s Classic Mentor Functions and Observed Factors in the Current Research**

| <b>Kram (1985) Classic Mentor Functions</b>                                                                                                                                                                                                                                                      | <b>Related Factors in Current Research</b>                                                                                                                                                                                                                    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Sponsorship</b> , the active nomination of an individual for desirable promotions and/or lateral moves                                                                                                                                                                                        | Not found in current study                                                                                                                                                                                                                                    |
| <b>Exposure and Visibility</b> , the assignment of responsibilities that allow an individual to gain access to key organizational figures who may subsequently judge his or her potential for future advancement;                                                                                | Not found in current study                                                                                                                                                                                                                                    |
| <b>Coaching</b> , the provision of specific suggestions of strategies designed to facilitate an individual’s accomplishment of work objectives, achievement of recognition, and the attainment of career aspirations;                                                                            | In <b>Supportive Role Model</b> (provides guidance, advisor, showing how to do things, directing, teacher) and related to <b>Professional Director</b> (trainer and structuring interactions with and options for the protégé are the two prototypical items) |
| <b>Protection</b> , the shielding of a junior individual from potentially damaging interactions with senior organizational members by taking the credit or blame in controversial situations and intervening when the junior individual is in danger of producing less than satisfactory results | <b>Caring Protector</b> , though only one role descriptor (friend) was prototypical                                                                                                                                                                           |
| <b>Challenging Assignments</b> , the designation of specific work, usually in a supervisory relationship, that allows the junior individual to gain critical skills and knowledge directly related to successful job-related task accomplishment                                                 | Not found in current study                                                                                                                                                                                                                                    |
| <b>Role Modeling</b> , the setting of a desirable example in terms of attitudes, values, and behaviors that the junior individual identifies with and attempts to emulate;                                                                                                                       | <b>Supportive Role Model</b>                                                                                                                                                                                                                                  |
| <b>Acceptance and Confirmation</b> , the reciprocal provision of support, encouragement, positive regard, and mutual respect between the mentor and protégé;                                                                                                                                     | <b>Supportive Role Model</b>                                                                                                                                                                                                                                  |
| <b>Counseling</b> , the mentor providing a sounding board for the protégé’s self-exploration, personal concerns, and internal conflicts that may inhibit a positive sense of self in the professional setting                                                                                    | Some descriptors in <b>Supportive Role Model</b> (provides perspective, resource, advisor, counseling) that may be related to personal discussions and <b>Connected Confidante</b>                                                                            |
| <b>Friendship</b> , the social interaction between the mentor and protégé that results in mutual liking, understanding, and enjoyable interchanges both within and outside the work context.                                                                                                     | The role descriptor “ <b>friend</b> ” was the only prototypical descriptor in the factor labeled <b>Caring Protector</b>                                                                                                                                      |

## Vita

Stacy Elaine McManus was born to Maxine and Ben McManus on October 31, 1968 in West Lafayette, Indiana where her father was completing his doctorate at Purdue in Agricultural Economics. The family moved to Knoxville, Tennessee in the spring of 1969 where they gained a new member of the family, Amy McManus, in 1971. Stacy graduated from Bearden High School in 1986, then attended Auburn University as a Presidential Scholar with a major in Psychology. She graduated in 1990, then moved to Lubbock, Texas where she earned her Masters degree from Texas Tech University in clinical psychology in 1992. Stacy subsequently moved back to Knoxville where she co-developed a thirty-three home community, Claybrook Court. She earned an MBA in 1995 from the University of Tennessee as a Gower Scholar where she was recognized for her leadership as a student in the program. The MBA program introduced Stacy to Industrial and Organizational Psychology, and she decided to pursue her doctorate in that area with an eye toward developing an academic career.

Stacy moved to Somerville, Massachusetts in 1999, becoming a Visiting Fellow at Harvard University and a research associate at the business school. In 2001, Stacy accepted a position as a tenure-track assistant professor at the Molson School of Business at Concordia University in Montreal, Quebec, Canada where she was nominated for an undergraduate teaching award. After a tumultuous year marked by unrest in the substantial Palestinian and Israeli immigrant student populations at the university, Stacy decided to return to Harvard Business School. During her time there, she co-authored several HBS case studies, one of which, *The Ritz-Carlton Hotel Company*, became an

HBS best-seller. Additionally, Stacy developed and taught classes at the Harvard Extension School, including *Organizational Behavior* and *Principles and Practices of Organizational Learning*.

During this time, she continued her collaborative work with authors on articles related to mentoring in organizations that were published in the *Journal of Vocational Behavior* and co-authored a paper on research methods that was published in the *Academy of Management Review*. She presented her research and organized symposia at multiple regional, national, and international meetings including the Southern Management Association, Society of Industrial and Organizational Psychology, and the Academy of Management. Stacy also was active in the Academy of Management, serving on the Leadership Council and as chair of the Mentoring Committee for two years. In 2005, Stacy made the switch from academia to consulting and accepted a position with Monitor Executive Development, a part of the Monitor Group, where she is responsible for the design, development and delivery of highly customized executive development experiences.