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MENTORING RESEARCH: A REVIEW AND DYNAMIC PROCESS MODEL

Connie R. Wanberg, Elizabeth T. Welsh and
Sarah A. Hezlett

ABSTRACT

Organizations have become increasingly interested in developing their human resources. One tool that has been explored in this quest is mentoring. This has led to a surge in mentoring research and an increase in the number of formal mentoring programs implemented in organizations. This review provides a survey of the empirical work on mentoring that is organized around the major questions that have been investigated. Then a conceptual model, focused on formal mentoring relationships, is developed to help understand the mentoring process. The model draws upon research from a diverse body of literature, including interpersonal relationships, career success, training and development, and informal mentoring. Finally, a discussion of critical next steps for research in the mentoring domain is presented.

INTRODUCTION

Mentoring refers to a one-on-one relationship between a less experienced (i.e. protégé) and a more experienced person (i.e. mentor), and is prototypically intended to advance the personal and professional growth of the less experienced individual (Mullen, 1994). Mentoring relationships can be "informal" in nature,

having developed naturally between two individuals, or they can be "formal" in nature, likely the consequence of an assigned pairing of a mentor and protégé within an organization. Due to increasing interest in leveraging human and social capital within organizations, informal and formal mentoring have gained the attention of academicians and practitioners as potentially critical developmental tools.

Research on mentoring has surged in the past decade, creating the need for a thorough review of the literature. The intent of this review is to: (1) provide a survey of empirical work on mentoring that is organized around the major questions that have been investigated; and (2) extend current understanding of mentoring relationships via an integrative, conceptual model. The first portion of the review consequently addresses the question "where are we now?", and describes research priorities for the areas discussed. The second portion of the review presents a dynamic framework for understanding and examining formal mentoring relationships. Our review complements Noe, Greenberger and Wang (2002), who described the evolution of the concept of mentoring, theoretical frameworks that have been used in studying mentoring, methodological and measurement issues pertaining to mentoring research, and attachment theory as a framework for examining mentoring.

MENTORING RESEARCH: WHERE ARE WE NOW?

Our review focuses on published, under review, and in press research on "traditional" mentoring within the workplace (Noe et al., 2002). Articles for this review were identified through searches of *ABM/Inform*, *Econlit* and *PsychInfo* databases (through December, 2002), along with queries of mentoring researchers. Studies focusing on the mentoring of students are not comprehensively summarized, but are discussed as needed to call attention to research questions, methods, and results that may be fruitful to pursue in work settings. The results of our literature search indicated the majority of the research on mentoring in the workplace has been published within the last 25 years. Although a diverse array of issues have been examined, empirical work has been concentrated in five major topic areas: (1) outcomes of mentoring; (2) the role of diversity (especially gender and race) in mentoring; (3) the role of other individual characteristics in mentoring; (4) dynamics of mentoring relationships; and (5) formal mentoring programs. We begin this section with a brief discussion of the concept of mentoring, then review each of these five major topic areas in turn.

The Concept of Mentoring

A number of authors have proposed typologies differentiating "traditional" (one-on-one, hierarchical mentoring) from other supportive workplace relationships,

such as peer mentoring and developmental networks (Eby 1997; Higgins & Kram, 2001; Missirian, 1982; Shapiro, Haseltine & Rowe, 1978; Whitley & Coetsier, 1993; Whitley, Dougherty & Dreher, 1991). Looking across these typologies, dimensions on which traditional mentoring relationships have been distinguished from other developmental relationships include the power of the more senior person, the emotional intensity of the relationship, the hierarchical distance between the participants, the social origins of the relationship, and the amount and focus of assistance provided by the more senior person. Despite differences between models and typologies of developmental relationships, it is generally agreed that mentoring is the most intense and powerful one-on-one developmental relationship, entailing the most influence, identification, and emotional involvement.

The characteristics of mentoring relationships that contribute to participants' development typically have been referred to as mentoring functions. Two broad categories of mentoring functions are widely recognized: career and psychosocial. *Career functions* are conceptualized as those mentoring functions that aid career advancement. They may include challenging assignments, coaching, exposure, protection, and sponsorship. *Psychosocial functions* help build a sense of identity, competence, and effectiveness. They may include acceptance, counseling, friendship and role modeling. These mentoring functions originally were identified in qualitative research (Kram, 1982b), and have been regularly used in subsequent quantitative research. More detailed descriptions of the functions, along with sample items from the three most well-known instruments regularly used to measure multiple mentoring functions (Ragins, 1999), are presented in Table 1. Other established instruments yield an overall index of mentoring functions (Dreher & Ash, 1990) or solely assess career functions (Whitley, Dougherty & Dreher, 1992).

There are two areas of uncertainty regarding how best to represent the construct space of mentoring functions. One area of ambiguity is how many distinct dimensions of mentoring functions there are. Research on the dimensionality of mentoring functions has been clouded by the use of principal components analysis, which does not permit strong inferences about underlying latent structures. Results of exploratory factor analyses have been mixed, with some supporting a two-function model (e.g., Noe, 1988a) and others suggesting a three-function model. Several three-factor solutions suggest role-modelling should be viewed as a distinct mentoring function, rather than as an aspect of the psychosocial mentoring function (Barker, Monks & Buckley, 1999; Burke, 1984; Ochberg, Tischler & Schulberg, 1986; Scandura & Ragins, 1993). Other studies support alternate three dimensional solutions (Steinberg & Foley, 1999; Turban & Dougherty, 1994). Two separate sets of confirmatory factor analyses, each based on data collected with different instruments, also have supported

Table 1. Mentoring Functions, Definitions, and Sample Scale Items.

Function	Definition	Sample Scale Items
Career functions		
Sponsor	Actively supporting an employee for lateral transfers and promotions	My mentor helps me attain desirable positions (MRI) Mentor gave you assignments or tasks in your work that prepare you for an administrative position (MFS)
Protect	Shielding an employee from damaging contact with key senior figures in the organization	My mentor shields me from damaging contact with important people in the organization (MRI) Mentor helped you finish assignments/tasks or meet deadlines that otherwise would have been difficult to complete (MFS)
Exposure	Giving an employee assignments that provide contact with key senior figures	My mentor helps me be more visible in the organization (MRI)
Challenging assignments	Helping an employee prepare for greater responsibility by providing challenging work and feedback that encourages skill development	Mentor helped you meet new colleagues (MFS) My mentor gives me tasks that require me to learn new skills (MRI)
Coach ^a	Sharing advice, information, and ideas that help an employee attain objectives and achieve recognition	Mentor gave you assignments that present opportunities to learn new skills (MFS) My mentor suggests specific strategies for achieving career aspirations (MRI) Mentor has shared history of his/her career with you (MFS)
Psychosocial functions		
Friendship	Sharing informal social experiences	My mentor is someone I can trust (MRI)
Counseling	Using active listening to enable an employee to explore personal concerns about self and career	My mentor guides my professional development (MRI) My mentor has demonstrated good listening skills in our conversations (MFS)
Acceptance/Confirmation	Conveying positive regard	My mentor sees me as being competent (MRI) My mentor has conveyed feelings of respect for me as an individual (MFS)
Social ^b	Participating in informal social activities one-on-one outside of work	My mentor and I frequently socialize one-on-one outside the work setting (MRI)
Parent ^b	Construing the relationship as a parent/child relationship	My mentor is like a father/mother to me (MRI)
Role modeling ^c	Serving as a model for an employee to emulate	My mentor represents someone who I want to be (MRI) I admire mentor's ability to motivate others (MFQ)

Notes: MRI = Mentoring Role Instrument (Ragins & McFarlin, 1990); MFS = Mentoring Functions Scale (Noe, 1988a); MFQ = Mentoring Functions Questionnaire (Scandura, 1992; Scandura & Ragins, 1993). Unless otherwise noted, functions were identified and defined by Kram (1985b).

^aItems measuring coaching are part of the psychosocial scale of the MFS.

^bSocial and parenting are mentoring functions that were proposed by Ragins and McFarlin (1990), drawing on observations made by Kram (1985b).

^cSome factor analytic results suggest this is a third mentoring function, distinct from career and psychosocial mentoring.

different models (Scandura & Williams, 2001; Tepper, Shaffer & Tepper, 1996). Overall, the bulk of the evidence indicates that there are at least two distinct mentoring functions (career and psychosocial), but is less clear on whether a third dimension is needed to adequately represent the construct space.

A second area of uncertainty about the construct space of mentoring functions involves whether specific, narrow mentoring functions are facets of psychosocial or career mentoring functions. For example, Kram's (1985b) classification of coaching as a career function and friendship as a psychosocial function has been followed in the development of some measures of mentoring functions (e.g. Ragins & McFarlin, 1990). In contrast, guided by the results of an exploratory factor analysis, Noe (1988a) included items assessing coaching in his measure of psychosocial mentoring and dropped items measuring friendship due to small loadings. Additional facets of psychosocial mentoring also have been proposed and studied (Ragins & Cotton, 1999; Ragins & McFarlin, 1990). While there is general agreement and support for the functions that a mentor may provide, these differences might be kept in mind during the review as the exact content of "psychosocial" or "career" mentoring may differ across studies.

Researchers have begun to consider how mentoring relates to constructs from other streams of research (e.g. McManus & Russell, 1997). This is an important step in enhancing our understanding of the nomological network in which mentoring is embedded. Most empirical work in this area has focused on exploring how mentoring differs from supervision and leadership. Two distinct lines of research have been pursued, one comparing mentoring with "typical" supervisory relationships (Burke, McKenna & McKeen, 1991; Fagenson, 1994; Horgan & Simeon, 1990b; Tepper, 1995) and one examining the relationship between leader behaviors and mentoring functions (Godsalk & Sosik, 2000; Scandura & Schriesheim, 1994; Sosik & Godshalk, 2000a; Thibodeaux & Lowe, 1996). This work has been supportive of mentoring as distinguishable from supervision and leadership.

Another question relevant to the construct of mentoring that has attracted attention concerns possible differences in the nature of formal and informal mentoring. Early researchers were skeptical about the potential of formal mentoring relationships (see, for example, Kram, 1985a). Recent evidence provides more optimistic conclusions (Ragins, Cotton & Miller, 2000). Nevertheless, formal and informal mentoring relationships do differ in significant ways (Ragins & Cotton, 1999). For this reason, as well as because of the recent interest and enthusiasm for formal mentoring programs among organizations, studies explicitly considering formal mentoring are discussed separately in our review.

As a last overall observation, definitions of mentoring have been criticized for being inconsistent (Carden, 1990; Chao, 1998; Pollock, 1995). This criticism

is valid. It is unquestionable that it would be useful for researchers to agree on a consistent definition of mentoring to use when asking participants if they have had a mentor. However, we wish to note there is a high consistency in the literature in regard to the general concept of mentoring, the more general understanding of what is meant by a traditional mentoring relationship. Progress has been made in conceptually differentiating mentoring from other kinds of developmental relationships and in empirically distinguishing mentoring from supervision and leadership. Additional clarity about the construct of mentoring can be achieved through further research on how best to represent the construct space of mentoring functions, and, as will be seen later in this review, by more carefully distinguishing between informal and formal mentoring relationships.

Mentoring Outcomes

Whether mentoring and its associated functions impact work- and career-related outcomes has been a major focus of mentoring research. Indeed, we identified one meta-analysis (Allen, Eby, Poteet, Lentz & Lima, 2002) and over 90 studies that have examined outcomes of mentoring. To characterize the individual studies, we coded each of them in terms of their focus, methodology, type of mentoring examined, source of data, and sample size (see Table 2). This analysis shows that most studies have focused on outcomes for protégés, rather than on outcomes for mentors or organizations. Furthermore, most studies have used cross-sectional survey research methods and have relied almost exclusively on self-report data. While the range of sample sizes is quite broad, from 22 to 2,371, most of the studies have had sample sizes of more than 100 participants.

In contrast to the precise categorizations on the dimensions of focus, methodology, source of data, and sample size, we were only able to categorize with certainty one in three studies in terms of *type* of mentoring examined (i.e. formal or informal). We were unable to categorize many studies because the authors did not explicitly distinguish between formal and informal relationships in the instruments or instructions provided to study participants. Without explicit instruction, respondents may have referred to either an informal or a formal mentoring relationship when answering questions about that relationship. This is a measurement issue that should be remedied in future studies.

In the rest of this section, we review the current understanding of mentoring outcomes based on the studies reported in Table 2 that have either focused on informal mentoring or have not differentiated between outcomes for informal and formal mentoring. As mentioned earlier, studies that have explicitly examined

Table 2. Characteristics of Empirical Studies Examining Mentoring Outcomes.

Category	%	Number
Focus ^a		
Protégé outcomes	96	92
Mentor outcomes	13	12
Organization outcomes	3	3
Type of mentoring		
Formal only	9	9
Informal only	11	11
Both, separated	8	8
Both, not separated	5	5
Unspecified	66	63
Research method ^b		
Survey	93	89
Interview (Qualitative)	8	8
Experimental	2	2
Research design		
Cross-sectional		
Longitudinal with two waves	88	84
Longitudinal more than two waves	9	9
Data sources ^c		
Self-report only	3	3
Dyad	81	78
Other (files, co-workers, etc.)	10	10
Sample size ^b		
Less than 100	17	16
100 to less than 300	47	47
300 to less than 500	49	47
More than 500	17	16

^a Does not add to 100% as studies may be categorized in more than one way.^b Does not add to 100% as one study did not provide sample size. Mean sample size = 324.

formal mentoring programs are reviewed separately in a later section of this paper. A caveat to the current section is that to the extent that some research has mixed individuals with informal and formal mentoring relationships, we can only report the outcomes of mentoring in general (regardless of relationship type). It is notable, however, that research on frequencies of mentoring type is suggestive of the idea that most of the mentoring relationships reported in studies with a formal/informal mix are informal in nature (e.g. Day & Allen, 2002; Godshalk & Sosik, 2000; Ragins & Cotton, 1999).

Protégé Outcomes

A fundamental, salient question in the mentoring literature has been whether mentoring relationships lead to positive outcomes for the protégé, such as higher salary and increased job satisfaction. The research in this area is fairly consistent in finding that there is an association between being a protégé and favorable outcomes. We provide a survey of this available evidence, then propose that an important next step for this literature is to attend more closely to internal validity issues in order to determine to what extent positive outcomes for the protégé can be uniquely attributed to mentoring as opposed to other factors.

Correlational relationship results. A narrative summary of the over 90 studies that have examined protégé outcomes is difficult. Fortunately, a meta-analysis on protégé outcomes was recently conducted (Allen, Eby et al., 2002), providing an overall synthesis of protégé outcome results across studies. The results of this meta-analysis are informative. First, they demonstrate that despite the large number of studies in this area, once the studies are categorized into specific relationships (e.g. mentoring-promotion, mentor-job satisfaction), the number of studies in each relationship cell is rather small. Second, the results are supportive of positive benefits of mentoring. More specifically, they show that aggregating across multiple studies, mentoring is positively related to both subjective and objective outcomes for protégés.

First, when comparing individuals who had mentors to those who did not (Allen, Eby et al., 2002), individuals with mentors had more positive subjective outcomes including higher expectations for advancement, career satisfaction, job satisfaction, career commitment, and intentions to stay at their organizations. Effect sizes for these relationships were small (Cohen, 1988), but their confidence intervals did not include zero. Individuals with mentors also had higher levels of compensation (small effect size) and promotions (medium effect size) when compared to individuals without mentors. The number of studies available in each relationship cell was small, with findings based on a range of three (promotions) to ten (job satisfaction) studies. An illustrative study that compared outcomes between those with mentors and those without is that of Prevost (2001). In a cross-sectional study of 171 army reserve nurses, individuals with mentors reported higher job satisfaction and intention to stay than individuals without mentors.

Allen, Eby et al. (2002) also examined the relationship between the amount of psychosocial and career mentoring received by individuals and both subjective and objective outcomes. Psychosocial mentoring had relationships that were small in effect size with protégé career satisfaction, job satisfaction, intention to stay with the organization, compensation, and promotions, and a relationship that was large in effect size with mentor satisfaction. Parallel to the results for psychosocial

mentoring, career mentoring had relationships that were small in effect size with protégé career satisfaction, job satisfaction, compensation, salary growth, and promotions, and a relationship that was large in effect size with mentor satisfaction. In general, relationships with the objective outcomes tended to be weaker than relationships with subjective outcomes. The number of studies available for each relationship meta-analyzed was small, ranging from 3 to 11. A recent illustrative study is that of Seibert, Kraimer and Liden (2001), who found that level of career sponsorship provided to the protégé (including sponsorship, exposure and visibility, challenging assignments, and protection) was positively related to protégé salary level, number of promotions, and career satisfaction in a sample of university alumni.

Looking beyond the meta-analysis, other protégé outcomes have been studied in a limited number of studies. Work-life balance has been studied in two samples. In a sample of female lawyers, no relationship was found between being a protégé and level of work-nonwork conflict (Wallace, 2001). Nelson, Carlson and Lankau (2001) found a relationship between level of psychosocial support and role modeling received and family interference with work, but not with work interference with family. Procedural justice has also been studied within the context of mentoring. For example, Scandura (1997) found that individuals without mentors had lower levels of procedural justice (e.g. non-protégés were less likely to report that "employees are allowed to challenge or appeal job decisions made by the manager," p. 63) than individuals with mentors. Wallace's study compared protégé and non-protégé levels of procedural justice with similar findings. Other outcomes that have been studied include job burnout (Fagan & Walter, 1982) and organizational power (Fagenson, 1988). Fagan and Walter (1982) found that individuals with more than one mentor experienced more job burnout than individuals without mentors and those with only one mentor. Fagenson (1988) reported that individuals who had a mentor reported more power in their organization, including policy influence, access to important people and resource power, than individuals who did not have a mentor.

Internal validity issues. Based upon positive empirical findings such as those just reviewed, it seems safe to conclude that research has been supportive of positive outcomes being correlated with both protégé status and the level of mentoring functions received. However, it is common to see the causal assertion that mentoring is a significant determinant of career success. Koberg, Boss and Goodman (1998), for example, stated "Mentors have been shown to affect promotion and compensation decisions and can influence career and organizational success" (p. 59). Ragins and Scandura (1997) stated "Mentoring relationships have been shown to be an important determinant in career success and advancement" (p. 945).

A detailed examination of studies on the effects of mentoring leads us to suggest, however, that research that more closely examines the extent to which mentoring is the unique driver of positive outcomes is needed. In order to more strongly establish the extent to which mentoring causally impacts career success, it is important for research not only to demonstrate that there is a relationship between mentoring and career success outcomes, but to show that mentoring precedes career success outcomes in time and that alternative explanations for the positive outcomes have been considered. Highly controlled experimental research designs where individuals from large random samples are allowed versus not allowed to have mentors are improbable, making this area of examination difficult.

Initial research on the temporal sequencing of mentoring and outcomes is promising, although less than ten studies were found that analyzed whether mentoring received at one point in time was correlated with outcomes at a later point in time. As an illustration of this type of longitudinal research, Open (1995) found that the level of career coaching reported by new workers at six months of tenure was related to the number of promotions and salary growth over their first four years. Donaldson, Ensher and Grant-Vallone (2000) found that high quality mentoring relationships measured at Time 1 were correlated with organizational commitment and self-reported level of organizational citizenship behaviors (OCB) reported six months later. Silverthart (1994) found that new life insurance agents who reported having a mentor in their agency during their first few months of work were more likely still to be with the organization at the end of the first year, to have sold more policies during that year, and to have higher confidence in their ability to succeed. Finally, controlling for protégé gender, race, firm tenure, and firm orientation activities, Higgins and Thomas (2001) found that the organizational level of an individual's set of developmental relationships measured at Time 1 was related to promotion to partner measured seven years later.

While there is budding evidence that being a protégé precedes positive outcomes, alternative or spurious explanations for the outcomes have not been sufficiently examined. For example, while Dreher and Ash (1990) concluded that individuals who reported receiving higher levels of mentoring had higher levels of income (e.g. each unit of increase in mentoring was associated with an increase in pay of \$3,236), it is possible that only a small component of this higher income should be attributed to the mentoring process. Although the researchers statistically controlled for a number of demographic, career history, and situational variables, it is possible that a substantial component of the income differential was due to individual characteristics that were not examined, such as achievement motivation, job performance, cognitive ability or emotional intelligence. Talented individuals who possess drive and commitment to their profession, career, and

organization, and who are good at developing social networks may be both more likely to get a mentor and to experience career success.

The well-established linkages between ability, conscientiousness, motivation, and job performance (Sackett, Gruys & Ellingson, 1998; Schmidt & Hunter, 1998) and between ability, motivation, and objective career success (Tharenou, 1997) support the need for research that carefully examines the association of mentoring to career success outcomes above and beyond protégé ability, motivation, and other individual characteristics such as protégé personality and job performance. Only one study focused on mentoring outcomes was found that controlled for aspects of both protégé ability and motivation (Green & Bauer, 1995). These authors observed a significant zero-order correlation between career mentoring and publications, but this relationship was not significant in a multivariate context where graduate student ability (i.e. verbal and quantitative GRE scores) and commitment (i.e. toward the graduate program and to a research career) were controlled. A minority of others have controlled only for aspects of ability (e.g. Godshalk & Sosik, in press, through college GPA and GMAT scores; and Laband & Lentz, 1995, through rankings of graduation status and LSAT scores) or have included proxies for motivation such as work centrality, desire for upward mobility, and number of hours worked per week (e.g. Aryee, Wyatt & Stone, 1996; Johnson & Scandura, 1994; Wallace, 2001; Wayne, Liden, Kraimer & Graf, 1999; Whitley & Coetsier, 1993; Whitley et al., 1991, 1992). Controls for other relevant individual characteristics, such as job performance, that may be associated with both the receipt of more mentoring and with career success have also been rare. Another issue that limits the ability to understand the unique contribution of mentoring to career outcomes is the literature's reliance on protégé self-reports. Single source methodology may inflate correlations. For example, it is possible that individuals with high negative affectivity (Watson & Clark, 1984) are both more likely to report: (a) "no one has helped me with my career"; and (b) "I dislike my job." One of the few multi-source studies found that quality of mentoring relationship was related to protégé self-reported level of OCB but not to co-worker reported level of protégé OCB (Donaldson et al., 2000). We recognize the value of self-report data and the argument that the self sometimes is in the best position to report his or her own behavior or experience, especially on subjective outcomes such as job, career, and life satisfaction; organizational commitment; and intention to turnover (Howard, 1994), but additional sources of information would contribute to the literature.

New areas of research. While the question of whether mentoring leads to positive outcomes is the primary focus of the protégé outcome literature, recent research has begun to address other questions. These include how (through what mechanisms)

the mentoring process impacts outcomes, how having more than one mentor might impact outcomes, and what negative, rather than positive, experiences may occur within mentoring relationships. To date, the mechanisms through which mentoring works (i.e. whether there are any mediators or moderators between mentoring and distal outcomes like job satisfaction) have not been well examined; very few studies were found looking at this issue. Day and Allen (2002) examined whether career motivation and self-efficacy mediated the relationship between mentoring provided and protégé outcomes. They found that career motivation fully mediated the relationship between career mentoring received and self-reported performance effectiveness, but they found only partial support for self-efficacy as a mediator of this relationship. In a second study, Lankau and Scandura (2002) found that protégé learning mediated the relationship between mentoring functions and role ambiguity and job satisfaction.

The impact of having more than one mentor on outcomes is also being examined. While findings are mixed, it does appear that having a set of mentors is related to a number of positive outcomes for protégés. For example, Higgins and Thomas (2001) found that for intention to remain and work satisfaction, the quality and character of lawyers' multiple developmental relationships explained variance above and beyond that explained by their primary mentor. Using the same sample, Higgins (2000) found that more mentoring relationships and more mentoring received were correlated with higher work satisfaction. Baugh and Scandura (1999) found that number of mentors was related to enhanced career expectations, and lower work role ambiguity. Finally, Peluchette and Jeanquart (2000) found that early in faculty members' careers having mentors from multiple sources was positively related to both objective and subjective career success and that in mid-career it was related to objective success. However, Riley and Wrench (1985) did not find a significant difference between female lawyers who had a group of mentors and those who had not had mentors in terms of perceived success or satisfaction. However, having a single, primary mentor may have some advantages over having multiple mentors. For example, Baugh and Scandura (1999) found that having more than one mentor was related to increased role conflict possibly due to conflicting advice given by different mentors. Similarly, Fagan and Walter (1982) found that having multiple mentors was related to higher job burnout for a sample of police, nurses and teachers when compared to individuals without a mentor and individuals with only one mentor. Higgins (2000) also found that having one person who provided high levels of psychosocial support was more highly related to work satisfaction than any other combination of number of mentors and level of support. Finally, Riley and Wrench (1985) compared female lawyers that reported receiving at least a given level of career mentoring from one mentor to those that reported receiving at least that same level of career mentoring from two

or more supportive individuals. This study showed that the lawyers who received support from two or more individuals had lower levels of general satisfaction than those with one mentor.

Empirical research has also begun to attend more closely to the possibility that negative experiences occur in mentoring relationships. Two empirical studies were identified that explicitly examined negative or dysfunctional experiences of mentoring. In a study of 50 faculty, graduate and undergraduate students where 26 reported some type of conflict or hurt resulting from their relationship with their mentor (Kalbfleisch, 1997), 16 conflict events were identified and categorized using factor analysis. This factor analysis found four types of conflict events: disagreement (e.g., the mentor and protégé disagreed on ideas), embarrassment (e.g., mentor embarrassed or criticized the protégé), negativity (e.g., mentor said the protégé made the mentor look bad), and request (e.g., the mentor asked the protégé for help on a project). Similarly, in a study of 156 protégés where 84 reported at least one negative mentoring relationship, Eby, McManus, Simon and Russell (2000) developed a taxonomy of negative mentoring experiences by performing a content analysis of responses to questions about protégés most negative mentoring experiences. The taxonomy consists of five broad categories including, from most to least common, problems with mentor/protégé match (i.e., dissimilar values, working styles and personalities), mentor distancing behavior (i.e., neglect of the protégé or focus on outcomes for his/herself rather than for the protégé), mentor manipulative behavior (i.e., use of inappropriate power, taking inappropriate credit, or deception of the protégé), lack of mentor expertise (i.e., lack of interpersonal or technical competence), and general dysfunctionality (i.e., the mentor had a negative attitude and/or personal problems). While these categorizations are helpful, since both studies found that over 50% of the participants reported having at least one negative experience or relationship at some time point (Eby et al., 2000; Kalbfleisch, 1997), they are only a starting point and research examining the antecedents and the consequences of dysfunctional experiences in mentoring relationships is still required.

Mentor Outcomes

Whether mentors receive positive outcomes from mentoring has also been a question of interest. In their seminal book on adult development, Levinson, Darrow, Klein, Levinson and McKee (1978) stated, "There is a measure of altruism in mentoring... But much more than altruism is involved: the mentor is doing something for himself. He is making productive use of his own knowledge and skill in middle age. He is learning in ways not otherwise possible" (p. 253). Similarly, in her well-known book on mentoring, Kram (1985b) suggested, "While helping a young adult establish a place in the adult world of work, an individual benefits from

providing support and guidance. Through helping others, a mentor gains internal satisfaction, (and) respect for his or her capabilities as teacher and advisor" (p. 3). While positive outcomes have been proposed for mentors, only a few studies have empirically examined these outcomes. From these studies it does appear that being a mentor is related to positive outcomes, although the effect size is not known.

Studies on mentor outcomes have rarely focused on the types of outcomes examined among protégés, such as to what extent mentoring leads to improved mentor compensation and promotions. Only two studies with a total sample of less than 500 individuals have examined these more distal types of outcomes. In the first study, faculty indicated that being a mentor positively affected their career satisfaction (Johnson, Yust & Fritchie, 2001). In the second, individuals who had been mentors had higher levels of self-reported career success and career satisfaction, as well as higher incomes (Collins, 1994). Limitations in this research are similar to those within the protégé research, as we cannot separate the impact of mentoring on these outcomes versus the impact of other, pre-existing characteristics of the mentor.

Instead, studies on mentor outcomes have typically focused on documenting "mentoring benefits," and have found that mentors receive both intrinsic (e.g., personal satisfaction when helping others) and extrinsic (e.g., more supporters in the organization) benefits. From interviews with over 100 executives, Zey (1984) recognized four categories of benefits that mentors receive: career enhancement, intelligence/information, advisory role (where the protégé advises the mentor) and psychic rewards. Similarly, from her interviews with mentors, Kram (1985b) identified three categories of benefits for mentors: confirmation and support from the protégé, intrinsic satisfaction for helping a younger person develop, and recognition and respect from others. Expanding on these benefit categories, Allen, Poteet and Burroughs (1997) distilled the benefits that 27 mentors reported during interviews into four categories: builds a support network (e.g., develops close relationships that may result in future benefit for the mentor), self-satisfaction (e.g., a general satisfaction in helping others), job-related self-focused (e.g., helps increase mentor's learning, visibility, or recognition) and job-related other-focused (e.g., helps to develop a competent workforce). These categories incorporate all of the benefits discussed by Zey (1984) and Kram (1985b), and introduce one category they did not identify, "job-related other-focused."

Support for Allen, Poteet and Burroughs' (1997) categorization comes from research that has looked at mentor benefits. Protégés have cited loyalty to the mentor (Burke, 1984) and mentors have listed professional and personal support (Busch, 1985) as benefits for mentors engaged in mentoring. Examples of Allen, Poteet and Burroughs' (1997) "builds a support network" category, Protégés (Burke, 1984) and mentors (Busch, 1985) listed a sense of pride in seeing individuals develop

as a benefit for mentors, and executives agreed mentoring was a "rewarding experience" (Ragins & Scandura, 1999), examples of the "self-satisfaction" category. Examples of the "job-related self-focused" category are found relatively frequently in the mentoring literature. For instance, Burke (1984) found that protégés mentioned "effectively performing subordinates...the perspective and energetic drive of youth...and recognition by others for effective mentoring" (p. 361) as benefits for mentors. In addition, Mullen and Noe (1999) found that mentors and protégés agreed that mentors sought and received technical, referent and normative information, job performance and social feedback from their protégés, and Busch (1985) found that mentors believed that mentoring enhanced their own careers by motivating them to keep up to date with their field. Finally, Ragins and Scandura (1999) found that executives agreed that being a mentor improved their job performance. No support for the "job-related other-focused" benefit category was found, although this may be because these benefits are often attributed to the organization rather than the mentor.

Allen, Poteet and Burrough's (1997) also identified four negative aspects of mentoring: time requirements, favoritism issues (e.g. it can feel uncomfortable to pay special attention to one particular person), abusive relationships (e.g. the protégé could use the relationship in a destructive fashion), and feelings of failure if the relationship did not go well. These are similar to problems previously identified by Zey (1984), although he also identified risk to the mentor's reputation and exposure of self (i.e. mentors must share their experiences including their mistakes) as issues for mentors.

Based upon the small body of research that has examined the mentor's perspective, it appears that mentors do receive benefits from being a mentor. However, there also appear to be drawbacks to the relationship that must be considered. Whether mentoring translates into outcomes for mentors similar to those examined for protégés is not clear from the scant evidence currently available.

Organization Outcomes

The organizational outcomes of mentoring stem from mentor and protégé outcomes. As such, outcomes relevant to the organization have received attention at an individual level of analysis via the research focused on protégé and mentor outcomes. Very little attention has been given to mentoring at an organizational, or aggregate, level of analysis, however. For example, do companies where mentoring is frequent have higher retention rates? Are these companies more successful by other measures? Zey's (1984) interviews with over 100 executives provide an important preliminary insight into possible organizational level outcomes. Based on the interviews, Zey (1984) identified seven organizational outcomes of mentoring: employee integration, reduction in turnover, organizational communication,

management development, managerial succession, productivity and socialization to power.

Research Priorities: Mentoring Outcomes

We see five critical priorities for research on mentoring outcomes. First, and foremost, researchers must differentiate between individuals with formal and informal mentors in their research. To the extent that formal mentoring is different from informal mentoring, outcomes may be biased or unclear when individuals with both types of mentors are included in a study without distinction. Second, future research on mentoring outcomes should carefully examine the extent to which mentoring contributes to career success outcomes above and beyond pre-existing protégé characteristics. Both longitudinal research and the careful use of relevant control variables will be useful in this regard.

Third, more research examining the mechanisms through which mentoring is related to positive outcomes is required. The mentoring literature would benefit from a clearer delineation of factors that mediate the relationship between mentoring received and more distal outcomes, such as increased compensation or promotions. We will propose a framework of proximal and distal outcomes in the second half of this paper. This progression of "digging deeper" into a criterion space is almost identical to that which has occurred in the socialization literature after Saks and Ashforth (1997) made a similar call for the distinction between proximal and distal outcomes of socialization and the understanding of the mediational paths.

A fourth area where more work is needed is in the area of mentor and organizational outcomes. For example, little is currently known about what work-related outcomes, such as improved job performance, if any, that mentors receive from mentoring. In addition, research that examines exactly what organizations gain from mentoring and the size of that gain is needed, with careful attention paid to levels of analysis issues. Finally, continued research examining the impact of multiple mentors and possible negative experiences that stem from mentoring would also be highly useful.

Mentoring and Diversity

Diversity and mentoring have been the focus of considerable research attention. In this section, research on the role of gender and race in mentoring is reviewed, combining findings from research focused on protégés, mentors, and dyads to address critical questions raised in the literature. In a following section, we expand this discussion into a deeper understanding of underlying individual and

job/career history characteristics of the protégé and mentor that are associated with mentoring received.

Mentoring and Gender

Driven by the search to understand the glass ceiling phenomenon in organizations, mentoring and gender have received substantial attention. Indeed, our literature search identified over 50 articles and two recent comprehensive reviews (O'Neill, 2002; Ragins, 1999) on this topic. The logic underlying the possible connection between mentoring and the glass ceiling is that women may be at a disadvantage in their careers in comparison to men if they are less likely to obtain a mentor, or if when they are mentored, the nature of that mentoring is different and leads to different outcomes. Compelling questions have been investigated in this literature, including: (1) do women report having had fewer mentors than men?; (2) when in a mentoring relationship do women receive different types or levels of mentoring than men?; and (3) do women reap fewer benefits from mentoring than men?

An initial question is whether women are less likely to have a mentor (Noe, 1988b; Ragins, 1989). However, Ragins' (1999) conclusion, based on her recent review in this area, is that most research has found that women are as likely to report that they have had a mentor as men. Ragins' conclusion has been supported by research that has become available since the writing of her review (e.g. see Hubbard & Robinson, 1998; McGuire, 1999; Ragins & Cotton, 1999; Witt, Smith, Smith & Markham, 2000). For example, in a study of administrators at institutions of higher education, women actually were more likely to have had a mentor early in their career than men (Hubbard & Robinson, 1998).

A second salient question in this literature addresses whether women who are in a mentoring relationship receive different amounts or kinds of mentoring than men. Differences may occur because women require different functions to succeed in organizations or because women are more likely to be in cross-gender relationships and, given the dynamics of these relationships, less mentoring may be provided (Ragins, 1997). Research in this area has not been definitive (Ragins, 1999). For example, some studies have found that women receive different amounts of career-related mentoring than men, with some finding that women receive less than men (Koberg, Boss, Chappell & Ringer, 1994; McGuire, 1999) and one finding that women receive more than men (Sosik & Godshalk, 2000b), while others have not found a difference (Burke, 1984; Burke, McKeen & McKenna, 1990; Noe, 1988a; Ragins & Cotton, 1999; Ragins & McFarlin, 1990; Scandura & Williams, 2001; Thomas, 1990; Turban & Dougherty, 1994; Witt, Smith et al., 2000). In addition, some studies have found that women receive

higher levels of psychosocial mentoring than men (Burke, 1984; McGuire, 1999; Noe, 1988a), while others have not found a difference (Koberg et al., 1998; Ragins & McFarlin, 1990; Scandura & Williams, 2001; Sosik & Godshalk, 2000b; Thomas, 1990; Turban & Dougherty, 1994; Witt, Smith et al., 2000). Finally, one study found that women receive more role modeling than men (Sosik & Godshalk, 2000b), while others have not found a difference (Burke, 1984; Ragins & Cotton, 1999; Ragins & McFarlin, 1990; Scandura & Williams, 2001).

Because of these conflicting findings, research has examined whether there are moderators to the relationship between protégé gender and mentoring received. Specifically, are there certain conditions under which women receive different types or levels of mentoring when compared to men? Initial research suggests that the gender of the mentor, the duration of the relationship, and who initiated the relationship show promise for further investigation. For example, Sosik and Godshalk (2000b) found that female protégés with male mentors reported more career development functions than female protégés with female mentors, and Ragins and Cotton (1999) found that female protégés with female mentors tended to engage in more social activities with their mentor than did female protégés with male mentors. Turban, Dougherty and Lee (2002) found that the duration of the mentoring relationship moderated the level of functions received when comparing mixed gender and same gender dyads in a graduate school setting. Specifically, same gender dyads when compared to mixed gender dyads initially had higher levels of exposure, visibility and sponsorship, psychosocial mentoring, and protection. As the relationship progressed, however, the levels of these functions increased in mixed gender dyads to the point that higher levels were eventually found in mixed gender dyads than in same gender dyads. Finally, Scandura and Williams (2001) found that who initiated the relationship moderated the quantity of mentoring received when comparing male and female protégés. Female protégés reported more mentoring than male protégés when either the mentor or both the protégé and the mentor initiated the relationship, but less when the protégé initiated the relationship.

A third important question is whether women reap fewer objective or subjective work-related outcomes from mentoring (e.g. job satisfaction, promotions) than men. Most of the research to date has not found differences between outcomes for male and female protégés (Ragins, 1999). Research is suggestive of the possibility, however, that mentor gender may be important to consider. For example, Ragins and Cotton (1999) found that having prior male mentors was related to higher compensation levels. Similarly, two studies found that female protégés with male mentors earned significantly more (Wallace, 2001) or had higher career attainment scores, a combination of compensation and position prestige (Babiuk, Hill & Darius, 1996), than female protégés with female mentors.

The combination of mentor gender with mentor race has also found to be associated with protégé compensation. Dreher and Cox (1996) and Dreher and Chargois (1998) found that protégés with Caucasian male mentors were compensated more than individuals without mentors, but that there was no statistical difference between protégés with other types of mentors and individuals without mentors. These results are supported by a study of health care executives which found that protégés with white male mentors had higher salaries than protégés with other types of mentors (Weil & Kimball, 1996).

A strong caveat to this discussion is that studies examining compensation did not consider other important explanatory variables in their analyses. One possible explanation for the difference between having a male and a female mentor may be that female mentors are, on average, at lower levels of the organization than male mentors given that women are under-represented at senior organizational levels (Federal Glass Ceiling Commission, 1995). The organizational level of mentors likely impacts the amount of power that mentors have and their ability to influence outcomes and provide rewards, like compensation, for their protégés, so it is an important variable to control for when looking at differences in compensation. Only one study (Dreher & Cox, 1996) partially considered this explanation, although they looked at the difference in levels between the protégé and the mentor, rather than the absolute level of the mentor.

In conclusion, it does not appear that women report having had fewer mentors than men. In contrast, we cannot definitively answer whether women in mentoring relationships receive different amounts or kinds of mentoring functions than men because of inconsistent research findings. Finally, the answer to whether women gain fewer benefits than men from mentoring is unclear. It does appear that there may be a difference between compensation for protégés based upon the gender or the race and gender of the mentor, but we do not know why this occurs or whether there are differences for other outcome variables.

Mentoring and Race

Paralleling the impact of the glass ceiling in organizations for women, few minorities hold top positions in organizations (Federal Glass Ceiling Commission, 1995). This has led researchers to ask questions (similar to those asked for gender and mentoring) about the role of mentoring and career success among minorities in organizations. Critical questions that have been posed include: (1) do minorities report having had fewer mentors than Caucasians?; (2) when in a mentoring relationship do minorities receive different amounts or kinds of mentoring than Caucasians?; and (3) do minorities reap fewer career-related benefits from mentoring than Caucasians? While there has been considerable research dedicated to understanding the relationship between mentoring and

gender, less research has focused on mentoring and race. We found less than 20 empirical studies looking at race, compared to over 50 looking at gender.

One basic question is whether minorities are less likely to have a mentor than Caucasians. Most studies have found that minorities are not less likely than Caucasians to have a mentor (Dreher & Cox, 1996; Greenhaus, Parasuraman & Wormley, 1990; McGuire, 1999; Mobley, Jaret, Marsh & Lim, 1994; Steinberg & Foley, 1999; Thomas, 1990; Witt Smith et al., 2000). The samples from these studies were quite diverse, including MBA alumni (Dreher & Cox, 1996), managers (Greenhaus et al., 1990; Thomas, 1990), managers and non-managers (McGuire, 1999), Army personnel (Steinberg & Foley, 1999), professionals (Mobley et al., 1994) and university faculty (Witt Smith et al., 2000), lending generalizability to the conclusion. However, one study did find that African-American public accounting employees were less likely to have informal mentors than Caucasians (Viator, 2001b). There are two possible explanations for this finding. First, as suggested by the author, this may be a special case due to the extreme lack of African-Americans at senior levels in public accounting firms. Second, given that this study distinguished between formal and informal mentors and found that African-Americans were more likely to have formal mentors than Caucasians but less likely to have informal mentors, this finding may reflect the lack of clear delineation between formal and informal mentors in the majority of the literature.

A second important question is whether minorities report receiving different types and levels of mentoring functions. In terms of overall levels of mentoring received, we can not draw any conclusions as there has been little research focused on this question and results to date have been inconsistent. While two studies found that African-Americans and Caucasians received similar amounts of mentoring (Blake-Beard, 1999; Steinberg & Foley, 1999), one study found that minorities received less mentoring (Cox & Nkomo, 1991).

In terms of specific mentoring functions received, studies have generally found that minorities do not report less career mentoring than Caucasians. The majority of the studies that have investigated the amount of career functions received by protégés have either found no difference between Caucasian and African-American protégés (Thomas, 1990; Viator, 2001b) or no difference between homogeneous dyads and heterogeneous dyads, regardless of the gender-race mix (Witt Smith et al., 2000). In fact, one study found that minorities actually received more career mentoring than Caucasians (Kobberg et al., 1994).

It is not clear whether there is a difference in terms of psychosocial mentoring received, because research results are varied. Two studies found that minorities reported receiving either less psychosocial support (Kobberg et al., 1998) or less social support (Viator, 2001b) than Caucasians, but Thomas (1990) found that protégé race was not related to receipt of psychosocial mentoring. At the dyad

level, two studies have found that protégés in same race dyads reported higher levels of psychosocial functions than protégés in cross race dyads (Koberg et al., 1998; Thomas, 1990). These findings are supported by Viator's (2001b) results that African-American mentors provided more social support and role modeling than other mentors to African-American protégés. However, Witt Smith et al. (2000) did not find any difference in the amount of psychosocial support reported in dyads that were homogeneous in terms of gender and race compared to heterogeneous dyads.

A final critical question is whether minorities receive fewer objective or subjective work-related outcomes from mentoring than Caucasians. Similar to the finding for gender and mentoring, research is suggestive of the possibility that the combination of mentor race and gender may be important to consider. As discussed above, studies have found that Caucasian male mentors are associated with higher compensation for protégés, when compared to protégés with other types of mentors and to individuals without mentors (Dreher & Chargeois, 1998; Dreher & Cox, 1996; Weil & Kimball, 1996). A caveat to these findings is that we cannot assume a causal relationship as the studies did not control for important alternative explanatory variables, such as the mentor's level in the organization.

Race differences in other objective and subjective outcomes have been examined in a limited number of studies, yielding inconsistent results. In an analysis of university faculty, mentoring was significantly related to subjective outcomes of intent to turnover and affective commitment for Caucasians (Witt Smith et al., 2000) but not for minorities. However, in a study that looked at networking groups and African-American MBA alumni, Friedman, Kane and Cornfield (1998) found that having a mentor was significantly related to career optimism for these African-Americans. In addition, Blake-Beard (1999) found that for satisfaction with career progress, which was associated with mentoring, there was no significant difference between Caucasian and African-American female protégés.

In conclusion, it does not appear that minorities report having had fewer mentors than Caucasians, although minorities may have had fewer informal mentors. In terms of amounts or kinds of mentoring, it appears from a limited number of studies that there may be no difference between Caucasians and minorities in the level of career-related mentoring reported, although results for psychosocial mentoring are mixed and so no conclusion can be drawn. Finally, the answer to whether minorities gain fewer benefits than Caucasians from mentoring is unclear. It does appear that there may be a difference between compensation for protégés based upon the race and gender of the mentor, but we do not know why this occurs or whether there are differences for other outcome variables.

Research Priorities: Mentoring and Diversity

Diversity has primarily been examined in terms of gender and race in the mentoring literature. While other types of diversity may be interesting to study, including age and sexual orientation, more mentoring research examining gender and race is still necessary. For mentoring and gender, targeted research is needed that focuses on whether there is a link between gender and outcomes such as compensation, and why such linkages may occur. More research on moderators of gender/mentoring relationships is especially appealing. Are there situations or conditions under which one gender receives less mentoring than another? When conducting this research, potentially confounding factors that correlate with gender, and may be the underlying cause of any differences that might be found, must be carefully considered. For example, as O'Neill (2002) stated in her review of gender and race in mentoring, "what appear(s) to be stereotypical gender differences may be misleading when the mentor's gender is confounded with other factors, such as rank" (p. 7).

Given the paucity of research on mentoring and race, the first and most important research priority is more research. Questions requiring further research include whether minorities receive equivalent mentoring to Caucasians, and whether the outcomes of mentoring are different for minorities and Caucasians. In this context, researchers must attend to three critical issues. First, researchers must differentiate between formal and informal mentoring. It is possible that the proportion of formal mentoring relationships to total mentoring relationships is higher for minorities than for Caucasians and this difference may distort empirical results. Second, it is important that racial groups in addition to African-Americans be examined. Most research to date has studied African-Americans (Blake-Beard, 1999; Bridges & Perotti, 1993; Cox & Nkomo, 1991; Dreher & Chargeois, 1998; Friedman et al., 1998; Greenhaus et al., 1990; Kabatfleisch & Davies, 1991; Steinberg & Foley, 1999; Thomas, 1990; Viator, 2001b; Weil & Kimball, 1996). Only one study was found that examined Asians (Goto, 1999), two looked at minority groups separately (Dreher & Cox, 1996; Koberg et al., 1998) and two used a variety of groupings depending on the analysis being conducted (Turban et al., 2002; Witt Smith et al., 2000). Some studies combined different minorities into one group (see Koberg et al., 1994; McGuire, 1999; Mobley et al., 1994; Turban et al., 2002; Witt Smith et al., 2000). Although we recognize the difficulty of finding sufficient samples of minorities to study, it should be recognized that the experiences of minority groups may not be similar. Finally, when conducting this research, potentially confounding factors that correlate with race (e.g., organizational level of protégé), and may be the underlying cause of any differences that might be found, must be carefully considered to help understand why any differences appear.

Other Correlates of Mentoring

Researchers have investigated an informative array of protégé and mentor characteristics as predictors of mentoring in addition to gender and race. Consistent with other research on mentoring, more attention has been devoted to protégé characteristics than mentor characteristics.

Protégé Characteristics

Knowledge of how protégé characteristics influence mentoring informs our understanding of the development and process of mentoring relationships. From a practical vantage point, this information may be useful in identifying employees who will flourish as protégés or in assisting employees who may find it challenging to establish and maintain productive mentoring relationships. Questions about protégé characteristics that have been investigated include: (1) what motivates individuals to seek mentors?; (2) what characteristics do mentors seek in protégés?; (3) what differentiates individuals who have mentors from those who don't; and (4) how are protégé characteristics related to mentoring received? Table 3 provides examples of the many protégé characteristics that have been studied across these four questions and introduces the general rationale for considering each variable for inclusion in the nomological network of mentoring. It should be noted that data for some of these variables (i.e. demographics and job/career history) have been included as control variables in several studies, rather than their being the focus of research.

Characteristics associated with motivation to seek mentors. Relatively little research has been directed towards the first issue – understanding employees' motivation to seek out mentors. Initial research indicated having a mentor was a universal task of early adulthood (Levinson et al., 1978), suggesting there were not individual differences in motivation to be a protégé. Darling (1986) reported being surprised when her interviews with successful business people revealed that some individuals were not interested in having a mentor. She determined individuals without mentors often had childhood experiences with adults marked by a lack of trust, respect, and/or relevance. Consistent with these findings, Kram (1988) suggested a number of variables that might affect the kind of developmental relationships individuals sought, including attitudes towards authority, conflict, and intimacy; values about work and learning; and self competence perceptions. More recently, a few quantitative studies have investigated how personality traits, demographic characteristics, and job/career history variables relate to motivation to find a mentor.

Two studies were located that examined how personality traits are related to behaviors directed towards initiating mentoring relationships (Aryee, Lo & Kang,

Table 3. Hypotheses on Protégé Characteristics and Mentoring: A Summary of the Informal Mentoring Literature.

Protégé Characteristic	Hypothesis	Sample Researchers	Research Volume ^a
Competence	Social exchange theory: Working with a more competent protégé has more short- and long-term benefits.	Olian, Carroll and Giannantonio (1993)	Small
Personality traits			
Negative affectivity	Those high in negative affectivity will attempt to avoid the stress and tension likely to arise during the challenging opportunities provided by mentors.	Turban and Dougherty (1994)	Minimal
Extraversion	Due to their proactivity and sociability, those high in extraversion will be more involved in mentoring relationships.	Aryee, Lo and Kang (1999)	Minimal
Self-monitoring	High self-monitors will be more aware of the value of mentoring for career success.	Turban and Dougherty (1994)	Minimal
Type A personality	Their drive to excel will lead those with a Type A personality to have mentoring relationships.	Aryee et al. (1999)	Minimal
Locus of control	Those with an internal locus of control are more likely to perceive that they can improve their skills.	Colarelli and Bishop (1990)	Minimal
Need for affiliation	Mentoring relationships provide the opportunity to affiliate.	Fagenson (1992)	Minimal
Need for autonomy	Protégés depend upon their mentors.	Fagenson (1992)	Minimal
Need for achievement	Mentoring relationships are instrumental for achievement.	Fagenson (1992)	Minimal
Need for power	Mentoring relationships are an avenue for attaining power.	Fagenson (1992)	Minimal
Femininity	Data on mentoring and gender roles available from research on gender differences in career progression.	Kirchmeyer (1998, 2002)	Minimal
Masculinity	Data on mentoring and gender roles available from research on gender differences in career progression.	Kirchmeyer (1998, 2002)	Minimal
Self-esteem	Individuals high in self-esteem will have the confidence to handle the challenging opportunities provided by mentors.	Turban and Dougherty (1994)	Minimal
Learning goal orientation	Stronger learning goal orientation will be associated with greater appreciation of mentor functions and enhanced motivation to learn from the mentor.	Gedshalk and Sosik (in press)	Minimal
Attitudes	Individuals whose work and careers are more important to their identity will be more involved at work and in mentoring.	Aryee, Wyatt and Stone (1996)	Small
Demographics			
Marital status	Greater work-life conflict will limit married individuals' capacity to participate in mentoring relationships.	Olian et al. (1993)	Small

Table 3. (Continued)

Protégé Characteristic	Hypothesis	Sample Researchers	Research Volume ^a
Education	Education credentials may be used as a proxy for potential in allocating scarce developmental resources. Individuals with more education will be more involved in their jobs.	Whitely, Dougherty and Dreher (1992) Koberg, Boss, Chappell and Ringer (1994) Olian, Carroll, Giannantonio and Ferren (1988) Whitely et al. (1992) Whitely et al. (1992)	Moderately large
Age	Younger employees are less experienced and want more mentoring to address feelings of insecurity.		Large
SES	Informal norms discourage older employees from being protégés. Perceived similarity encourages senior managers to work with protégés of higher SES.		Small
Job/career history			
Tenure	Primarily studied as a control variable; by definition those with greater experience are less likely to need mentoring.	Fagenson (1989)	Moderate
Organizational rank	Negative, if the supply of mentors is smaller at higher levels. Positive, if mentoring is a reward or if the need for mentoring is greater.	Whitely et al. (1992), Koberg et al. (1994)	Moderately large
Work experience	By definition, less experienced employees should be more likely than those with greater experience to be a protégé.	Olian et al. (1988)	Moderate
Continuity of work history	Studied as a control variable.	Dreher and Ash (1990)	Moderate
Average hours worked	Since it may be a proxy for drive to excel or job involvement, the same arguments apply.	Whitely and Coetsier (1993), Whitely et al. (1992)	Small

^aThis column is intended to provide readers with a sense of how much attention has been devoted to studying different characteristics, rather than give an exact count of the number of independent samples. Categorization is based on the number of published studies on informal mentoring relationships that reported relationships between the predictor variable and mentoring criteria: minimal (1-3 studies), small (4-9 studies), moderate (10-19 studies), moderately large (20-29 studies); large (30 or more studies). A minimal number of studies included more than one independent sample; some samples were used in more than one study.

1999; Turban & Dougherty, 1994). Individuals with less negative affectivity, greater extraversion, higher self-monitoring, a propensity towards Type A personality, and greater self-esteem were more likely to report performing behaviors likely to lead to a mentoring relationship. Across the two studies, the relationship between locus of control and initiating behaviors diverged. Multivariate analyses suggested initiating behaviors mediate the relationship between personality traits and mentoring received (Aryee et al., 1999; Turban & Dougherty, 1994).

A few studies have scrutinized how demographics relate to employees' motivation to be a protégé. Based on one study, it appears that employees who are not married put more effort into initiating mentoring relationships (Turban & Dougherty, 1994). Evidence on whether education is associated with initiating behaviors is mixed, with no relationship reported in one study (Turban & Dougherty, 1994) and better educated individuals reporting more initiating behaviors in another (Aryee et al., 1999). The relationship between age and motivation to seek a mentor is also ambiguous. Age does not appear to be related to fears about initiating a mentoring relationship. Perceptions of others' willingness to provide mentoring, or concerns about how others view the relationship (Burke & McKeen, 1997; Ragins & Cotton, 1991). However, despite experimental evidence that younger individuals find having a mentor more appealing (Olian, Carroll, Giannantonio & Ferren, 1988), a single study found older employees report more behaviors directed towards initiating mentoring relationships (Aryee et al., 1999). This study also suggested SES is not related to initiating behaviors. Based on this body of research, it is difficult to firmly connect many demographic characteristics of employees with their motivation to have mentors.

Researchers also have explored the link between employees' career or job history variables and their motivation to be protégés. Ragins and Cotton (1991) found employees with more organizational tenure and higher rank perceived fewer barriers to gaining access to mentors. On the other hand, neither tenure nor rank was associated with fears about initiating relationships. Unexpectedly, a couple of studies found work experience was not related to interest in having a mentor (Olian et al., 1988) or attempts to initiate mentoring relationships (Turban & Dougherty, 1994). In conclusion, preliminary evidence seems to suggest there are individual differences in motivation to seek a mentor. Based on only single studies, some employee attributes have not been linked to efforts to find a mentor (e.g. SES, work experience). Other research has found personality traits (i.e. negative affectivity, extraversion, self-monitoring, Type A personality, and self-esteem) and one demographic variable (i.e. marital status) account for variance in behaviors directed towards initiating informal mentoring relationships. Two studies suggest these behaviors mediate the relationship between employee personality traits and mentoring received.

Protégé characteristics sought by mentors. Researchers have devoted relatively little attention to identifying the attributes mentors seek in protégés. Based on an analysis of interviews with 27 mentors, Allen, Poteet and Borroughs (1997) identified six higher-order factors that attract mentors to protégés. Mentors look for protégés who are competent, motivated, display a strong learning orientation, and have certain personality traits (e.g., people-oriented, honest, confident, dependable, patient, and flexible). In addition, employees who arouse mentors' desire to help and remind mentors of themselves are appealing as protégés. In a second study, Allen and her colleagues (Allen, Poteet & Russell, 2000) found mentors (particularly female mentors) were more likely to base their selection of protégés on perceived ability and motivation than on perceived need for help. An experiment supports the importance of employees' competence in their attractiveness to potential mentors. Bank managers anticipated greater rewards and indicated greater interest in providing mentoring functions when a hypothetical scenario described a high-performing, rather than a moderately-performing, potential protégé (Olian, Carroll & Giannantonio, 1993). Another finding of this experiment was that managers anticipated greater rewards and intended to provide more career mentoring to married men and unmarried women.

Although there have been few studies conducted on the topic, ability and motivation stand out as desirable protégé characteristics. Yet, mentors also seem to have interest in working with protégés who need help, remind mentors of themselves, have a strong learning orientation, and demonstrate key personality traits.

Characteristics differentiating employees with and without mentors. In attempting to differentiate employees with and without mentors, researchers have investigated a variety of variables. Factors that have *not* distinguished those with and without mentors include early promotion rate (Fagenson, 1989), academic performance in post-secondary school (Judge & Bretz, 1994; Laband & Lentz, 1995), LSAT scores (Laband & Lentz, 1995), locus of control (Colarelli & Bishop, 1990), need for affiliation, need for autonomy (Fagenson, 1992), femininity (Kirchmeyer, 1998, 2002), and career continuity (Judge & Bretz, 1994; Kirchmeyer, 1998). In contrast, protégés appear to be higher on need for achievement, need for power (Fagenson, 1992), and job involvement (Aryee & Chay, 1994). Job tenure may have a weak, negative relationship with access to mentors (Judge & Bretz, 1994). The relationship of masculinity – the constellation of attributes traditionally comprising the male gender role (e.g., assertiveness, individualism, and instrumentality) – to having a mentor is unclear. Concurrent data suggests a positive relationship, but longitudinal data indicates no relationship (Kirchmeyer, 1998, 2002). Evidence also is mixed regarding whether individuals with and without mentors differ in terms of marital status (Colarelli & Bishop, 1990; Judge & Bretz,

1994; Kirchmeyer, 1998; Laband & Lentz, 1995), education (Colarelli & Bishop, 1990; Judge & Bretz, 1994; Lankau & Scandura, 2002), age (Broadbridge, 1999; Colarelli & Bishop, 1990; Fagenson, 1989; Lankau & Scandura, 2002; Nielson et al., 2001; Ragins & Cotton, 1991; Ragins et al., 2000), SES (Dreher & Cox, 1996; Judge & Bretz, 1994), organizational tenure (Fagenson, 1989; Kirchmeyer, 1998; Lankau & Scandura, 2002; Ragins & Cotton, 1991; Ragins et al., 2000), organizational rank (Broadbridge, 1999; Fagan & Fagan, 1983; Fagan & Walter, 1982; Gaskill & Sibley, 1990; Ragins & Cotton, 1991; Ragins et al., 2000; Steinberg & Foley, 1999; Vlaior & Scandura, 1991), work experience (Kirchmeyer, 1998; Laband & Lentz, 1995), and hours worked per week (Judge & Bretz, 1994; Nielson et al., 2001).

In conclusion, demographic and job/career history variables do not consistently seem to distinguish between employees with and without mentors. On the other hand, a limited number of studies suggest protégés may differ from non-protégés on a few personality traits (i.e. need for achievement and need for power), attitudes (i.e. job involvement), and career/job history variables (i.e. job tenure).

Protégé characteristics and mentoring received. A relatively large proportion of research on protégé characteristics has explored how these attributes relate to the nature of mentoring received. A majority of these studies have been focused on the level of mentoring functions received, but a few have investigated frequency of mentor-protégé contact. Protégé attributes studied included individual difference variables, such as abilities, personality, and attitudes, as well as demographic characteristics and job/career history variables.

The few studies examining the link between protégés' competence and mentoring functions received have obtained mixed results (Godshalk & Sosik, in press; Mullen, 1998; Whitley et al., 1992). The inconsistencies may arise from differences in how competency was conceptualized and measured. In one sample, a moderate, positive correlation suggested protégés perceived as more competent by their mentors tend to receive more mentoring functions (Mullen, 1998; Mullen & Noe, 1999). In a second study, employees' job search strategies – argued to be an indicator of their interpersonal skills – were also positively and significantly associated with career mentoring (Whitley et al., 1992), albeit weakly. On the other hand, protégés' scores on cognitive tests were not associated with mentoring functions received (Godshalk & Sosik, in press).

Three studies examining the relationship between protégés' personality traits and mentoring functions received have found some meaningful relationships. Higher protégé extraversion, greater self-esteem, less negative affectivity, and Type A personality have been associated with receiving more of at least some mentoring functions (Aryee et al., 1999; Turban & Dougherty, 1994). The

evidence on whether or not locus of control and self-monitoring are related to mentoring functions has diverged across studies (Aryee et al., 1999; Turban & Dougherty, 1994). Other traits, such as need for power, achievement, autonomy, and affiliation were unrelated to mentoring functions and the frequency of mentor-protégé interactions (Fagenson, 1992). In related research on mentoring and individual differences, protégés higher on learning goal orientation received more career, psychosocial, and role modeling functions (Godshalk & Sosik, in press).

A handful of studies have reported relationships between job attitudes and mentoring received. Based on a single study, job involvement may have a small, positive relationship with psychosocial functions (Koberg et al., 1998). Four studies on the relationship between protégé attitudes (job involvement, work centrality, and career identity salience) and career mentoring have yielded diverging results (Aryee & Chay, 1994; Aryee, Wyatt & Stone, 1996; Cox & Nkomo, 1991; Whitley et al., 1991).

More data are available on the relationship between demographic characteristics and mentoring received. Based on five studies, it is unclear whether or not marital status is related to the level of mentoring functions received (Burke & McKeen, 1996; Dreher & Ash, 1990; Seibert, Kraimer & Liden, 2001; Turban & Dougherty, 1994; Whitley et al., 1991). A relatively large number of studies have investigated the relationship between education and mentoring functions. Although there are exceptions (e.g. Godshalk & Sosik, 2000; Sosik & Godshalk, 2000a, b), most have found little relationship between protégés' education level and the mentoring functions they receive (e.g. Aryee, Wyatt & Stone, 1996; Lankau & Scandura, 2002; Lyness & Thompson, 2000; Whitley & Coetsier, 1993). This research, however, often has been based on samples with restricted levels of education. One study of more heterogeneous protégés reported education level had a small positive relationship with psychosocial functions (Koberg et al., 1998). The relationship between protégés' age and mentoring functions has been studied relatively often, but this research has yielded contradictory results. Although a number of studies have found no relationship between age and mentoring functions (e.g. Blake-Beard, 1999; Chao, 1997; Gilbert & Ivancevich, 1999; Scandura & Ragins, 1993), at least five have reported older employees receive less of at least some mentoring functions (e.g. Cox & Nkomo, 1991; Fagenson, 1992; Ragins & McFarlin, 1990; Scandura & Williams, 2001; Sosik & Godshalk, 2000a). Several have indicated the opposite (Aryee et al., 1999; Burke & McKeen, 1997). Note that if the relationship between protégé age and mentoring functions received is, in fact, curvilinear the observed pattern of results might arise if the age ranges of protégés varied across studies. Research on the relationship between age and the frequency of mentor-protégé interactions also is divided (Fagenson, 1992; Mullen, 1998).

A few studies have examined how protégés' SES relates to mentoring received.

Most (Aryee et al., 1999; Dreher & Ash, 1990; Whitley & Coetsier, 1993; Whitley et al., 1992), but not all (Blake-Beard, 1999), of this research suggests individuals with higher SES receive more mentoring. In general, the relationships between protégés' demographic characteristics and mentoring received remain unclear.

A moderate proportion of the studies examining the question of how protégé characteristics relate to mentoring received have scrutinized variables that are a function of protégés' job or career history. These variables include tenure, rank, work experience, continuity of work history and average hours worked per week. Research linking organizational tenure to mentoring functions has not yielded completely consistent results. Although in more than half a dozen studies, protégés' organizational tenure has not been substantially associated with receiving mentoring (Aryee, Wyatt & Stone, 1996; Burke & McKeen, 1997; Fagenson, 1989; Koberg et al., 1994, 1998; Lankau & Scandura, 2002; Lyness & Thompson, 2000), both significant positive and significant negative relationships have been observed for at least some functions in other samples (Gilbert & Ivancevich, 1999; Higgins & Thomas, 2001; Wayne et al., 1999). Among expatriates, assignment tenure does not appear to be related to receiving mentoring (Bolino & Feldman, 1992) and psychosocial (Koberg et al., 1998) mentoring functions; others suggest rank is unrelated to mentoring received (e.g. Bahnik, Doboss & Hill, 1990; Bolino & Feldman, 2000; Fagenson, 1992; Gaskill & Sibley, 1990; Ragins & McFarlin, 1990; Scandura & Ragins, 1993). One study of accountants found protégé rank was unrelated to career mentoring, positively related to psychosocial mentoring, and had a curvilinear relationship with role modeling (Barker et al., 1999). Research relating work experience to mentoring functions also has been inconclusive. Although the results of a few studies suggest protégés with more work experience may receive fewer career mentoring functions (Dreher & Ash, 1990; Turban & Dougherty, 1994; Whitley et al., 1992), more than half a dozen studies have found no evidence that work experience is related to mentoring functions (e.g. Aryee, Wyatt & Stone, 1996; Blake-Beard, 1999; Whitley et al., 1991). In two studies, a positive relationship was reported between professional experience and career mentoring (Higgins & Thomas, 2001; Lankau & Scandura, 2002). Although most studies have found that continuity of work history is unrelated to mentoring functions (e.g. Burke & McKeen, 1996; Dreher & Ash, 1990; Seibert, Kraimer & Liden, 2001; Turban & Dougherty, 1994; Whitley & Coetsier, 1993), there are exceptions suggesting those without career interruptions receive slightly more career mentoring (Aryee, Wyatt & Stone, 1996). The results of a handful of studies reporting relationships between the average hours protégés work each week and

career mentoring have been mixed (Aryee, Wyatt & Stone, 1996; Nielson et al., 2001; Wayne et al., 1999; Whitley & Coetsier, 1993; Whitley et al., 1991, 1992). In conclusion, a few studies have hinted at intriguing relationships between mentoring functions received and several protégé characteristics, including ability, personality, and learning orientation. Results regarding demographic and job/career history variables and mentoring functions received have been inconsistent. Differences in range restriction across samples may account for some of the variability in these results. For example, studying a cohort of graduates from one or two business schools constrains the possible values of education, and, to a lesser extent related variables, such as age, tenure and work experience, attenuating correlations with mentoring functions. In future research, careful attention to the impact of sampling procedures on range restriction may be helpful in clarifying how demographic and job/career history variables relate to the nature of mentoring received.

Mentor Characteristics

A comprehensive understanding of the role of mentor characteristics in mentoring relationships would be of tremendous practical value, enabling protégés to seek out effective mentors, permitting seasoned employees to assess their capacity to serve as mentors, and informing organizations how to select and train mentors. However, only a small proportion of the literature on mentoring has considered mentors' attributes. Mentor characteristics studied have included competence (i.e. abilities, knowledge, and skills), personality, self-esteem, demographics, and job/career history variables, including past experiences in mentoring relationships. Table 4 provides an overview of hypotheses regarding these attributes. Key questions that have been explored include: (1) what characteristics do protégés seek in mentors?; (2) what affects experienced employees' motivation to serve as mentors; and (3) how do experienced employees' characteristics relate to the mentoring they provide? The following review is organized around these questions.

Mentor characteristics sought by protégés. The limited information available suggests protégés consider a wide array of characteristics when seeking a mentor. From surveys of retail managers, Gaskill (1991) concluded the characteristics protégés seek in mentors include abilities (ability to develop subordinates, take risks, and share knowledge), knowledge (related to the organization, individuals in the organization, and to organizational power), personality traits (open-mindedness, upwardly oriented), and job membership characteristics (high position in the organization, rank/status in the organization, and respect from others). This information may be weighed and combined in a complex fashion by employees seeking mentors. In three experiments, Olian et al. (1988) provided undergraduates seeking

Table 4. Hypotheses on Mentor Characteristics and Mentoring Provided: A Summary of the Informal Mentoring Literature.

Mentor Characteristic	Hypothesis	Sample Researchers	Research Volume ^a
Competence	Experienced employees with better skills (e.g. interpersonal) will be more appealing as mentors because they will be better able to serve mentoring functions.	Olian, Carroll, Giannantonio and Ferren (1988)	Minimal
Personality traits			
Negative affectivity	Included as a control variable.		Minimal
Positive affectivity	Senior employees who tend to be in a good mood would be seen as more approachable.	Aryee, Chay and Chew (1996)	Minimal
Self-monitoring	Mentors high in self-monitoring will be more likely to seek information from their protégés.	Mullen and Noe (1999)	Minimal
Locus of control	Experienced employees with a more internal locus of control would be more likely to perceive they could have a positive impact on others' professional growth.	Allen, Poteet, Russell and Dobbins (1997)	Minimal
Upward striving	Due to identification with potential protégés' desire to advance and the possibility of improving their own power, those higher in upward striving will be more willing to mentor others.	Allen, Poteet, Russell and Dobbins (1997)	Minimal
Altruism, helpfulness	Being generous, kind, and helpful, those higher in altruism would be more motivated to mentor.	Aryee, Chay and Chew (1996)	Minimal
Self-esteem/Career challenges	Individuals high in self-esteem and those who are experiencing fewer career challenges will have more psychological resources to devote to mentoring.	Kram (1988), Aryee, Chay and Chew (1996)	Small
Learning goal orientation	Due to their own love of learning and mastery focus, those higher on learning goal orientation will provide more mentoring.	Godshalk and Sosik (in press)	Minimal

Table 4. (Continued)

Mentor Characteristic	Hypothesis	Sample Researchers	Research Volume ^a
Demographics			
Education	Better educated individuals would be more qualified to serve as mentors and may have more familiarity with mentoring, leading them to feel more comfortable in the role.	Allen, Poteet, Russell and Dobbins (1997)	Small
Age	Younger employees seek mentors; mid-career employees seek protégés to gain a sense of fulfillment from teaching others. Employees nearing retirement may be less interested in mentoring as they begin to withdraw from work.	Levinson, Darrow, Klein, Levinson and McKee (1978)	Moderate
Job/career history			
Tenure	Employees with more tenure may feel more qualified to serve as mentors.	Ragins and Cotton (1993)	Small
Organizational rank	Employees higher in the organizational hierarchy are likely to have more experience and feel more comfortable as mentors.	Ragins and Cotton (1993)	Moderate
Power	More powerful senior employees would be sought out as mentors because they would be able to help protégés' careers more.	Olian et al. (1988)	Minimal
Span of control	Included as a control variable or in exploratory study.	Tepper, Brown and Hunt (1993), Burke, McKeen and McKenna (1993)	Minimal
Experience in mentoring relationships	Those who have experienced the benefits of being a protégé and/or mentor will see providing mentoring as more valuable.	Ragins and Cotton (1993)	Moderate

^aThis column is intended to provide readers with a sense of how much attention has been devoted to studying different characteristics, rather than give an exact count of the number of independent samples. Categorization is based on the number of published studies on informal mentoring relationships that reported relationships between the predictor variable and mentoring criteria: minimal (1–3 studies), small (4–9 studies), moderate (10–19 studies), moderately large (20–29 studies); large (30 or more studies). A minimal number of studies included more than one independent sample; some samples were used in more than one study.

Characteristics associated with motivation to mentor. In studying motivation to mentor, researchers have examined personality, demographics, and job/career history variables. Initial data suggest motivation to mentor is positively related to some personality traits, including positive affectivity, (internal) locus of control, upward striving, and altruism (Allen, Poteet, Russell & Dobbins, 1997; Aryee, Chay & Chew, 1996). On the other hand, one study found organizational self-esteem was not associated with the perceived appeal of providing mentoring functions (Aryee, Chay & Chew, 1996). With regard to demographic variables, supervisors with more education appear to perceive fewer barriers to mentoring and have greater intentions to serve as a mentor than those with less education (Allen et al., 2000; Allen, Poteet, Russell & Dobbins, 1997). Although age is not related to perceived barriers to mentoring, older employees may be slightly less likely to intend to serve as mentors (Allen et al., 2000; Allen, Poteet, Russell & Dobbins, 1997; Ragins & Cotton, 1993). A similar pattern of relationships has been observed for organizational tenure (Allen, Poteet, Russell & Dobbins, 1997; Ragins & Cotton, 1993). In contrast, Ragins and Cotton (1993) found a very weak, but significant, trend for employees at higher levels in the organizational hierarchy to have greater intentions to mentor others. Higher ranking employees also reported slightly fewer drawbacks in being a mentor than those at lower levels. The size of this effect was small. Taken together, these results suggest motivation to mentor is affected by a variety of individual difference variables.

One career history variable that has been prominent in the handful of studies that have attempted to predict experienced managers' motivation to mentor is prior experience in mentoring relationships. Although there are exceptions (Olian et al., 1993), most studies suggest experience in mentoring relationships fosters more favorable views of being a mentor. Experience as a protégé, as a mentor, or both has been associated with lower perceived costs of being a mentor and greater

intentions to mentor (Allen, Poteet, Russell & Dobbins, 1997; Olian et al., 1993; Ragins & Cotton, 1993; Ragins & Scandura, 1999). The relationship between the perceived costs of mentoring and intentions to mentor also appear to be moderated by experience in mentoring relationships. Among those without experience in mentoring relationships, intentions to mentor may not be related to perceived costs. In contrast, among those with experience in mentoring relationships, executives who perceived mentoring as having high costs had much lower intentions to mentor than those who perceived mentoring as having low costs (Ragins & Scandura, 1999). In addition to underscoring the importance of prior experience in mentoring relationships, this research highlights the complexity of the construct of motivation to mentor.

Implicit in researchers' use of willingness or intentions to mentor as dependent variables is the idea that these variables are important determinants of mentoring. However, the one study that has tested this assumption found no relationship between superiors' willingness to mentor and subordinates' reports of mentoring functions received (Tepper, Brown & Hunt, 1993). Additional research should be conducted to evaluate the generalizability of this finding and assess whether motivation to mentor, in fact, mediates the relationship between the individual differences of experienced employees and providing mentoring.

Mentor characteristics and mentoring provided. A handful of studies have investigated relationships between the characteristics of experienced employees and the mentoring they provide. In these investigations, the criteria used have included serving as a mentor (vs. not), mentoring functions, and the frequency of mentor-protégé communication. The predictors studied parallel those examined in research on motivation to mentor. They are competence, personality, demographics, and job/career history variables, including experience in mentoring relationships.

Despite descriptive research suggesting open-mindedness, patience, and honesty are important traits for mentors to possess (Allen & Poteet, 1999; Allen, Poteet & Burroughs, 1997; Gaskill, 1991), few studies have examined the relationships among mentors' stable individual differences and the mentoring they provide. In the single study considering mentors' cognitive ability, meaningful relationships with mentoring functions were not observed (Godshalk & Sosik, in press). With regard to personality, results have varied depending upon the traits assessed. For example, Rotundo and Perrewé (2000) examined the relationship between employees' negative affectivity and their self-reported attempts to mentor younger employees. Employees higher on negative affectivity were less likely to provide mentoring, but these results were significant only for employees who felt they were experiencing a career plateau (i.e. were unlikely to be promoted). Mullen and Noe (1999) found neither mentors' nor protégés' ratings of mentors'

self-monitoring were related to career or psychosocial functions. In contrast, Fagenson (1992) observed that mentors rated by their protégés as being more helpful communicated more frequently with their protégés and were seen as providing more career, psychosocial, and role modeling functions (Fagenson, 1992).

In related research, a handful of studies have explored the premise that individuals faced with problems in their own careers are unlikely to have the psychological resources to serve as mentors. The results of this research have been divided, varying according to how "psychological resources" has been conceptualized and measured. Two studies suggest employees with higher work-related self-esteem are more likely to have protégés and serve both career and psychosocial mentoring functions (Horgan & Simeon, 1990a; Mullen, 1998). On the other hand, studies investigating career experiences suggest career satisfaction and perceptions of experiencing a career plateau are unrelated to acting as a mentor. Career success is related to serving as a role model, but not to career and psychosocial functions (Burke, 1984; Campion & Goldfinch, 1983; Rotundo & Perrewé, 2000). Additional research in this area would be helpful in clarifying how career challenges affect mentoring. From a practical viewpoint, it would be worthwhile to know whether managers must have positive career experiences in order to be effective mentors.

Preliminary research suggests mentors' learning goal orientation may play a role in the mentoring process. In a recent study, mentors' learning goal orientation was positively associated with psychosocial, career, and role-modeling functions (Godshalk & Sosik, in press). Further research on this individual difference construct should prove interesting.

Mentors' demographic characteristics – specifically education and age – have been more extensively studied than other mentor attributes. Four studies of the relationship between mentor's education level and mentoring provided were located. The two studies examining the relationship of mentors' education with the frequency of mentor-protégé communication yielded diverging results (Fagenson-Eland, Marks & Amendola, 1997; Mullen, 1998). There is little evidence that education is related to mentoring functions served (Burke, McKeen & McKenna, 1993; Fagenson-Eland et al., 1997; Mullen, 1998; Sosik & Godshalk, 2000b).

Mentor's age has been scrutinized in a handful of studies, yielding a pattern of results that is difficult to interpret. A study of water-management plant employees indicated that older employees are more likely to report that they have tried to serve as a mentor (Rotundo & Perrewé, 2000), but two studies have observed no significant differences between the ages of those who act as mentors and those who do not (Broadbridge, 1999; Campion & Goldfinch, 1983). Age appears to be unrelated to how much mentors interact with their protégés (Fagenson-Eland et al., 1997; Mullen, 1998). Some, but not all, studies have found older mentors provide fewer psychosocial functions (Burke, 1984; Burke et al., 1993; Fagenson-Eland

et al., 1997; Godshalk & Sosik, 2000; Sosik & Godshalk, 2000b, in press). Most studies have found no relationship between mentors' age and other mentoring functions (Burke, 1984; Burke et al., 1993; Fagenson-Eland et al., 1997; Godshalk & Sosik, 2000; Sosik & Godshalk, in press), although there are exceptions to this trend (Sosik & Godshalk, 2000b). One study suggests mentors' age is not related to protégés' perceptions of the relationship's effectiveness (Godshalk & Sosik, 2000). Restriction of range should be evaluated as a contributor to the lack of observed relationships between mentors' demographic characteristics and mentoring provided.

A mélange of variables that are a function of senior manager's career and job history have been related to the amount of mentoring they provide. The small number of studies investigating mentors' tenure suggest job tenure is not associated with efforts to provide mentoring (Rotundo & Perrewé, 2000), career tenure is unrelated to serving as a mentor (Campion & Goldfinch, 1983), organizational tenure is not associated with mentor-protégé contact (Fagenson-Eland et al., 1997), and job and organizational tenure are not substantially related to mentoring functions (Burke et al., 1993; Fagenson-Eland et al., 1997). In contrast, one study found organizational tenure is positively related to employees' efforts to provide mentoring (Rotundo & Perrewé, 2000). From the handful of studies investigating mentors' organizational rank, it is unclear whether individuals at higher organizational levels are more likely to serve as mentors (Broadbridge, 1999; Steinberg & Foley, 1999). Results generally suggest rank is unrelated to mentoring functions (Burke et al., 1993; Fagenson-Eland et al., 1997; Sosik & Godshalk, 2000b), although there are exceptions to this trend (Scandura & Viator, 1994; Struthers, 1995). One study was located on a related variable: mentors' power (Fagenson, 1992). This study suggests protégés' perceptions of their mentors' influence are negatively related to psychosocial functions, but unrelated to career functions, role-modelling and communication frequency. Two studies considering mentors' span of control yielded diverging results on how number of subordinates relates to mentoring functions (Burke et al., 1993; Tepper et al., 1993).

Only a few studies have examined the relationship between experiences in mentoring relationships and providing mentoring. Compared to employees without mentors, those who have been protégés appear to be more likely to mentor others (Campion & Goldfinch, 1983; Fagan & Fagan, 1983; Fagan & Walter, 1982). The results of one study suggest that this effect is ongoing. Managers who had received mentoring were more likely than those who did not to mentor more than one person (Broadbridge, 1999). There is also some evidence that individuals who have participated in more mentoring relationships provide more career functions to their current protégés. However, in the same study, experience in mentoring relationships was not significantly associated with psychosocial or

role modeling functions (Fagenson-Eland et al., 1997). Although tentative, these results suggest being a protégé may help prepare individuals to serve as mentors. In conclusion, initial data suggest mentoring provided is positively associated with mentors' helpfulness, learning goal orientation, and past experience in mentoring relationships. In contrast, research to date suggests general cognitive ability, self-monitoring, education, and tenure may not account for meaningful variance in mentoring functions.

Research Priorities: Other Correlates of Mentoring

The influence of individual characteristics other than race and gender in mentoring relationships has received a modest amount of attention within the literature on mentoring. More research has been dedicated to understanding the influence of protégé characteristics than mentor characteristics. As a caveat, this research has relied on cross-sectional, correlational methods. To the extent that protégé and mentor characteristics are malleable, observed relationships may indicate mentoring is a cause, rather than a consequence of these variables. Longitudinal research in this area would be highly useful.

A few protégé characteristics stand out as meriting additional study. First, as mentioned earlier, relatively little research has been devoted to understanding how employees' abilities and skills affect their experiences as protégés, particularly the nature of mentoring functions they receive. Second, research on protégés' personality traits has uncovered some thought-provoking relationships. As will be discussed in more detail later, research examining whether proactive individuals receive more mentoring will be informative. In addition, it is striking research has generally not taken advantage of current models of personality being utilized in research in work settings – specifically, the five factor model of personality and related frameworks (Hough & Ones, 2001; Hough & Schneider, 1996; Schneider & Hough, 1995). Studies examining individual traits from the five factor model have yielded promising results.

There are also gaps in the mentor characteristics that have been examined. First, empirical research on the cognitive attributes of mentors is lacking. Only one study was located that attempted to assess mentors' abilities (Godshalk & Sosik, in press). Although substantial relationships between mentors' self-reported scores on a general test of cognitive ability and protégé reports of mentoring functions were not observed, it seems likely that more specific mentor knowledge, skills, and abilities affect their attractiveness and effectiveness as mentors. Second, it may be valuable to investigate more systematically the effect of less stable mentor characteristics on mentoring. Implicit in research on mentor's self-esteem, career situation, job stress, and number of subordinates is the idea that individuals whose resources, whether psychological or temporal, are being stretched will be less willing and less

able to mentor others. To date, research on this topic has yielded mixed results. In future research, it would be informative to clarify what hinders mentoring. Third, research on some mentor demographics (e.g., marital status) and some predictor-criterion combinations (e.g., the relationship between age and serving as a mentor) is sparse. In the future, it would be informative to address these gaps, where there is a theoretical reason to expect meaningful relationships. Finally, quantitative research has not been directed towards understanding how interests and values affect the decision to be a mentor and the mentoring functions served. It has been argued that from the mentor's perspective, the benefits of being a mentor include helping others succeed and leaving a legacy. It seems likely that individuals whose values or interests are not aligned with the benefits will not devote time and energy to mentoring.

While most research has examined protégé *or* mentor characteristics as predictors of the mentoring received in the relationship, an increased amount of research with data collected from matched mentor/protégé pairs would also be helpful. With the exception of research on diversity, most research has collected data from only one member of the mentor/protégé dyad (for examples of other exceptions, see Ensher & Murphy, 1997; Godshalk & Sosik, in press; Scandura & Schriesheim, 1994; Wayne et al., 1999). There is a wealth of information that could be gained from studying *both* members of the mentoring relationship, and we urge research in this area to collect data from mentor/protégé pairs more frequently. Analysis of dyads would allow us to delve into a deeper understanding of mentoring relationships (Kashy & Levesque, 2000) and would help to decrease mono-method bias concerns.

Based on prior theory and research, four categories of dyad characteristics appear to be particularly promising foci for future research. First, the concept of similarity underpins many of the arguments advanced for why mentoring relationships composed of mentors and protégés of different genders or races will be more challenging and less productive than those involving mentors and protégés of the same race or gender (e.g., Dreher & Cox, 1996; Noe, 1988b). Differences are thought to hamper mentoring relationships, similarity to facilitate them. Protégé perceptions of similarity are positively associated with mentoring functions (Burke et al., 1993; Ensher & Murphy, 1997; Nielson et al., 2001).

One of these studies also reported the correlation between mentor perceptions of similarity to the protégé and protégé perceptions of similarity to the mentor was only 0.22 (Ensher & Murphy, 1997). Clarification of what dimensions or attributes affect protégés' and mentors' perceptions of similarity would be helpful. A second important dyad characteristic to investigate is the pattern of protégé and mentor personality traits. Research on other kinds of relationships suggests that mentoring relationships may be affected by the combination of traits

demonstrated by mentors and protégés. For example, in a study of roommates, mean levels of certain traits (extraversion and conscientiousness) were related to conflicts about the relationship. Task-related conflicts, as well as the frequency of conflicts, were associated with differences in extraversion (Bono, Boles, Judge & Lauver, 2002). It seems likely that the interaction of protégé and mentor characteristics will affect an array of relationships characteristics, such as those specified in our conceptual model.

A third critical dyad characteristic may be the congruence between mentors' and protégés' approach to handling potentially sensitive issues. In a study of cross-face work relationships, Thomas (1993) identified two strategies that relationship participants used to handle the issue of race: denial/suppression and direct engagement. When both parties in the relationship used the same strategies, both career and psychosocial functions were present. In contrast, only career functions were provided when the preferred style of the parties diverged. Additional research on how styles or approaches to handling conflict affect relationship characteristics and mentoring received would be valuable.

A final dyad characteristic that may be worthwhile to study further is whether or not both members of the relationship work within the same organization. Mentors who are external to the protégé's organization may not be able to provide the same kinds of support as those internal to the organization (Ostroff & Kozlowski, 1993; Ragins, 1997, 1999). Based on this reasoning, protégés with "external" mentors have occasionally been excluded from research studies (e.g., Ostroff & Kozlowski, 1993). Preliminary data supports this conclusion. For example, one longitudinal study found new insurance agents with "internal" mentors had a higher first year "survival" rate than those with "external" mentors. Of the survivors, those with "internal" mentors also sold more policies (Silverhart, 1994). There is also some evidence that internal and external mentors may differ in terms of the mentoring functions they serve (Godshalk & Sosik, in press). More research is needed to clarify how the employment of mentors and protégés with the same vs. different organizations shapes relationship characteristics, mentoring functions, and – ultimately – outcomes experienced.

Dynamics of Mentoring Relationships

A small body of research has been directed towards understanding the dynamics of mentoring relationships. Two broad questions have been investigated. Researchers taking a more "macro" view have asked: How do mentoring relationships evolve over time? Those taking a more "micro" perspective have inquired: How do mentors and protégés interact with and influence each other?

Phases of Mentoring Relationships

Researchers addressing the first question have attempted to identify the phases through which mentoring relationships progress. Based on interviews with mentors and/or protégés (Kram, 1982; Missirian, 1985b; Pollock, 1995), several models describing the course of informal mentoring relationships have been developed (Pollock, 1995). Although these models diverge in some ways, all recognize a preliminary stage in which the mentor and protégé meet and begin evaluating the possibility of having a relationship, an "active" stage in which the mentor assists the protégé, and a terminative phase in which the mentor and protégé either transform the nature of their relationship or end it (Kram, 1985b; Missirian, 1982; Phillips, 1977, cited in Carden, 1990; Pollock, 1995).

Two studies have directly tested models of the phases of mentoring relationships (Chao, 1997; Pollock, 1995). Both examined how career and psychosocial functions varied across the phases of mentoring relationships. Each provided some support for the idea that mentoring relationships have a preliminary initiation phase before entering a more active phase. Career and psychosocial functions increased as mentoring relationships progressed from the early to middle phase. Contrary to the models of mentoring phases, neither study found evidence that career and psychosocial functions decrease as mentoring relationships move from the middle to late stages. However, both studies had methodological limitations that made it difficult to observe changes in the later stages of mentoring relationships. Chao (1997) pointed out the past-tense wording of the items in her study may have led protégés in the later phases of mentoring relationships to respond based on the mentoring functions they had experienced during the "height" of their mentoring relationships. Pollock's (1995) use of cut-scores to differentiate individuals with and without mentors may have resulted in protégés in the late stages of mentoring relationships being categorized as not having mentors. Overall, there is relatively little empirical evidence with which to evaluate models describing the phases of mentoring relationships.

Mentor-Protégé Interactions

Despite the fact that definitions emphasize mentoring as involving intense, interpersonal relationships, research on how mentors and protégés interact is limited. A handful of studies have illustrated the complexity of mentor-protégé interactions, highlighting a number of ways in which protégés and mentors influence each others' perceptions, affect, and behaviors.

The work of several researchers indicates that the amount and kind of ingratiation and influence tactics used by employees affect the mentoring they receive. Judge and Bies (1994) reported a small positive correlation between supervisor-focused influence tactics and having access to a mentor. Supervisor-focused influence tactics, such as praising one's supervisor and agreeing with his

or her opinions, are directed towards improving the supervisor's affect toward the subordinate. Although significant, the relationship between job-focused influence tactics and access to a mentor was weak. Job-focused influence tactics involve self-promotional efforts aimed at making one appear more competent, such as making others aware of job-related accomplishments. Consistent with these results, employees in Hong Kong who used more ingratiation tactics reported receiving more career mentoring (Aryee, Wyatt & Stone, 1996). Ingratiation included four kinds of assertive behaviors used to gain the approval of those who control significant rewards, including doing favors, conforming to the target's opinions, making positive evaluative comments about the target, and using self-presentation to convince the target of the speaker's competence. Note that these behaviors reflect elements of both the supervisor-focused and job-focused tactics studied by Judge and Bies (1994). One study suggests that gender may moderate the effectiveness of protégés' influence tactics. According to the gender congruity theory of power, women are perceived favorably when – congruent with the gender stereotype of women – they use power indirectly (Tepper et al., 1993). Consistent with this theory, Tepper and her colleagues observed women who used weaker upward influence tactics received slightly more psychosocial mentoring from their supervisors, while men who used stronger influence tactics received more career mentoring. Taken together, these three studies indicate that the receipt of mentoring is actively shaped by protégés' use of influence and ingratiation tactics.

One innovative line of inquiry has explored how protégés and mentors influence one specific kind of behavior: information seeking. Mullen (1994) proposed that mentors and protégés mutually seek a variety of information from each other, including technical, referent, and normative information, along with performance and social feedback. Mentoring functions, relationship closeness, method of relationship initiation (mentor-, protégé-, or organization-initiated), contextual variables, mentor characteristics, and protégé characteristics influence the extent of information seeking. In a study of 161 mentors and 140 protégés from 17 organizations in the U.S., Mullen and Noe (1999) tested hypotheses derived from this framework. Partial support was obtained. Based on information provided by mentors, the results of a series of hierarchical regression analyses suggested mentors' information seeking was related to the extent to which the mentor was influenced by his or her protégé, mentors' perceptions of whether the protégé thought information seeking was appropriate, perceived protégé competence, and by career mentoring. On the other hand, based on similar analyses using data from protégés, only perceptions of the appropriateness of information seeking were significantly associated with information seeking. This thought-provoking research tentatively suggests how mentors interact with their protégés may be shaped by a variety of factors.

Other researchers have investigated the relationship between mentoring functions and relationship characteristics, such as trust, reciprocity, and mentor-protégé interdependence. In a study of 108 faculty mentors and 215 protégés who were currently doctoral students or assistant professors in management, Young and Perrewé (2000) found met expectations partially mediated the relationship between mentoring functions and perceptions of relationship effectiveness and trust. An interesting finding was that the mentoring function associated with met expectations differed for mentors and protégés. Psychosocial support was associated with protégés' met expectations, while mentors' met expectations appeared to be driven by perceptions of the protégés responding appropriately to career functions. In related research, positive associations between mentoring functions and satisfaction with mentoring relationships have been reported in other studies (Ensher & Murphy, 1997; Ragins & Cotton, 1999). Other researchers have observed mentoring functions have moderate, positive relationships with protégés' perceptions of mentor-protégé reciprocity (Ensher, Thomas & Murphy, 2001) and with mentors' reports of the extent to which their protégés influence them – a measure of relationship closeness (Mullen, 1998; Mullen & Noe, 1999). Allen, Day and Lentz (2002) found protégés' interpersonal comfort with their mentors was strongly and positively related to the mentoring functions they reported receiving and their perceptions of the quality of their relationships. On the other hand, Burke and McKeen (1997) reported emotional distance had a small association with psychosocial functions and, at most, a weak association with four career mentoring functions. Further research is needed to clarify how mentoring functions and other relationship characteristics influence one another.

Research Priorities: Dynamics of Mentoring Relationships

Only a small amount of research has been directed towards understanding the dynamics of mentoring relationships. Both "macro" and "micro" approaches have been used, providing a preliminary understanding of how mentoring relationships evolve and how mentors and protégé relate to one another. The "macro" research suggests mentoring functions may not be constant over time, increasing from early to middle phases of the relationship. As noted in our discussion of the role of gender in mentoring relationships, how mentoring functions change over the duration of the relationship may depend upon the characteristics of mentors and protégés (Turban et al., 2002). Additional research on factors influencing the evolution of mentoring relationships would be helpful. A particularly interesting question is whether formal and informal mentoring relationships have similar phases.

The small number of "micro" studies have linked mentoring functions to relationship characteristics and protégé influence tactics. An important theme of this research is that the protégé is an active participant in mentoring relationships,

rather than a passive beneficiary of the mentor's benevolent attention. Preliminary evidence suggests mentors' behaviors and views of their mentoring relationships may be shaped by a variety of factors, including mentoring functions, protégé behaviors, and protégé characteristics. Social psychological literature on relationships can be used to contribute guiding frameworks and hypotheses to this line of research. We provide examples of the application of the literature on relationships to mentoring in our conceptual model introduced later in this review. In studying mentoring dynamics from either a "macro" or "micro" perspective, research with multiple time waves is critical.

Mentoring in the Context of Formal Mentoring Programs

Due to differences between informal and formal mentoring, and because formal mentoring has gained the attention of organizations as a potential management developmental tool, we discuss research on formal mentoring separately in this section. We begin with a general overview, responding to two questions: (1) how are formal and informal mentoring different?; and (2) how are organizations using formal mentoring programs? We then provide a summary of available research on formal mentoring programs.

Overview

According to Ragins and Cotton (1999), formal and informal mentoring relationships differ according to three key dimensions: the initiation of the relationship; the structure surrounding the relationship; and other aspects of the relationship. While informal mentoring relationships develop naturally over time, formal mentoring relationships are typically initiated through some type of organizational matching process. While there are no structural rules governing informal relationships, formal mentoring programs may include several elements of structure, such as suggested guidelines about how often dyads should meet, suggestions about possible topics to discuss, a goal setting process for the protégé, training sessions to prepare both mentors and protégés for the experience, and a specified duration for the relationship. Although some formal relationships may last longer, the minimum duration as specified by the program is typically between 6 and 12 months.

Other aspects of the relationship may differ as well (Ragins & Cotton, 1999). For example, because the relationship did not develop naturally, some formal mentors may be less motivated to be in the relationship than informal mentors. Matches of formal mentors with protégés may result in dyads from different functional units, possibly impeding the ability of the mentor to fully provide assistance to the protégé. Also, it is possible that some of the mentors identified do not have

appropriate coaching or communication skills. While a protégé would likely not be naturally attracted to a mentor without good coaching or communication skills, it is plausible that a mentor without these skills could be assigned in a formal mentoring situation. Finally, because formal programs increase the visibility of a mentoring relationship, mentors in a formal program may be less willing than informal mentors to engage in mentoring that might be perceived by others as favoritism.

While not all organizational mentoring programs have specified goals, a common goal of formal mentoring programs is to promote the careers, development, and performance of protégés at a managerial level. While organizations turn to an array of techniques to develop their leaders, including 360-degree feedback, assessment centers, executive coaching, action learning, classroom training, and e-learning (see, for example, McCauley & Hezlett, 2001), mentoring uniquely involves the sharing of experience and information between current leaders and future leaders. An accompanying goal for some of the formal programs focused on careers, development, and/or performance is a desire to increase diversity at higher levels of the organization by placing a program focus on women and minorities (Douglas & McCauley, 1999).

Organizations also frequently use formal mentoring programs with new hires (usually managers or college graduates) to give individuals a head start in acquiring an understanding of the organization and how to best be effective (Douglas & McCauley, 1999; Ragins et al., 2000). According to Chao, O'Leary-Kelly, Wold, Klein, and Gardner (1994), organizational newcomers encounter a barrage of issues to learn about and do, including the need to: (1) learn job tasks and responsibilities and become proficient on the job; (2) learn about organizational politics, organizational goals and values, and the organization's history; (3) become familiar with the organization's technical language, jargon, traditions, customs, and stories; and (4) establish relationships with others within the organization. While other means of socialization are available (e.g. formal orientation training programs), mentoring is viewed by some organizations as an effective means of assisting and developing new employees.

Formal mentoring programs vary in their quality, or the extent to which they are planful efforts versus haphazard pretenses of a formal mentoring program (Single & Muller, 2001). At the haphazard extreme, an organization might assign mentors to protégés, have a social for the pairs to meet one another, and then passively hope that the mentors and protégés will meet again to discuss something of an unspecified nature. A more planful approach involves making careful matches of mentors and protégés, making suggestions about how often mentors and protégés should meet, conducting training to offer suggestions about what mentors and protégés might discuss and how mentoring relationships work, conducting

follow-up checks to see how the relationship is working, and having mentors and protégés develop objectives for the relationship (Gaskill, 1993; Newby & Heide, 1992; Tyler, 1998; Zey, 1985). Kram and Bragar (1992) suggest six components that are essential to a high quality formal mentoring program: (1) specific objectives and an identified target population; (2) a process to select and match protégés with mentors; (3) an orientation that involves suggestions on maintaining the relationship as well as expectation setting; (4) communication with involved parties about the intent of the program; (5) a monitoring and evaluation process; and (6) a coordinator to provide support to participants. The authors further note that formal programs will be most effective when they are clearly linked to business goals, when they are consistent with other human resources practices and policies, and when they are implemented with "effectiveness rather than expediency in mind" (p. 228). Despite salient differences between informal and formal mentoring (Ragins & Cotton, 1999) and the widespread use of formal mentoring on the part of organizations (Barbian, 2002), two issues were apparent in our review of the literature. First, a large proportion of researchers have not asked the protégés in their studies whether their mentors were acquired naturally or instead through a formal mentoring program. As mentioned earlier in this review, this failure to assess the origin of mentoring relationships acts as a significant barrier to the clear understanding of the effectiveness of formal and informal relationships. Second, there is a striking dearth of research on formal mentoring. Our review identified less than twenty-five empirical studies focused on the outcomes associated with formal mentoring programs in organizations. Of these, almost half were focused on peer mentoring or alternatively did not provide sufficient methodological rigor, sample size, and/or measurement information to summarize. The remaining thirteen studies provided information regarding three important questions about formal mentoring programs in organizations. First, how do outcomes for formal program participants compare to outcomes for individuals *without* mentors? Second, how do outcomes for formal program participants compare to outcomes for individuals with *informal* mentors? Finally, what does empirical research suggest about the association between formal mentoring program characteristics and program outcomes?

Formal Mentoring Versus No Mentoring

Four studies have compared the outcomes reported by individuals with formal mentors to those of individuals reporting no mentor. The goal of these studies has been to evaluate what formal mentoring programs can achieve in comparison to a person not having had a mentor. For example, Chao, Walz, and Gardner (1992) compared individuals with formal mentors to those without mentors on the outcomes of organizational socialization, job satisfaction, and salary. Ragins and

Cotton (1999) compared individuals with formal mentors to those without mentors on levels of compensation and promotion rates.

In the Chao et al. (1992) study, formal protégés reported more favorable outcomes than employees without mentors on three dimensions of socialization (understanding the goals/values of the organization, politics, and people). Formal protégés did not differ from those without mentors on three other dimensions of socialization (language, history, and performance proficiency) or on levels of job satisfaction or salary. Ragins and Cotton (1999) found individuals with formal mentors did not have higher levels of compensation or promotion rates than individuals without mentors.

It is critical, when evaluating and interpreting these first two comparisons between formal mentoring and no mentoring, to recognize that both studies included individuals across a variety of organizations and that there was no control for the quality or purpose of the formal mentoring programs that were evaluated. Some participants were undoubtedly part of very high quality mentoring programs, while others were likely involved in programs that did little more than match individuals together and send them on their way with little or no guidance. If there were more participants from haphazardly developed formal mentoring programs than from carefully implemented programs, the results of these studies may be biased toward portraying formal mentoring as less effective. It is important, then, to interpret the Chao et al. (1992) and Ragins and Cotton (1999) studies as comparisons of individuals in formal mentoring programs in general (regardless of the quality or purpose of the program) to individuals without mentors. We cannot generalize the results of these studies to a carefully planned formal mentoring program without additional data.

Ragins et al. (2000) recognized the importance of taking into account the quality and purpose of formal mentoring programs. Using the same sample as Ragins and Cotton (1999), these authors found that individuals with satisfying formal mentoring relationships (as opposed to unsatisfying or marginal) had higher levels of career commitment, organizational commitment, and organizational self-esteem than individuals without mentors.

In the only other study to date that has compared outcomes of formally mentored individuals to those without mentors, Seibert (1999) noted that certain types of people may participate (or be asked to participate) in formal mentoring programs, making it difficult to compare participants to non-participants with a non-experimental and/or cross-sectional examination. Using a quasi-experimental design, Seibert (1999) examined the effectiveness of a formal mentoring program for new employees at a Fortune 100 company by comparing 43 participants with a control group of 18 individuals that had reported never having had a mentor. Participants and control group members were assigned to their conditions by graduation

major and date; analyses showed no differences between the two groups at Time 1 of the study. One year later, the employees participating in the mentoring program reported higher levels of job satisfaction than the non-participants in the control group. There were no differences between the participants and non-participants on organizational commitment, work-role stress, or self-esteem at work.

In conclusion, although few in number, studies comparing formal mentoring to no mentoring have generally portrayed positive outcomes associated with formal mentoring, including higher levels of socialization, career commitment, organizational commitment, and organizational self-esteem. While one study (Ragins & Cotton, 1999) did not portray positive outcomes, the outcomes examined were limited and the quality of the participant's programs was not controlled. More controlled research involving random assignment of participants to formal mentoring versus no mentoring would be useful in further comparing the benefits associated with formal mentoring.

Formal Mentoring Versus Informal Mentoring

Three of the studies noted in the previous section (Chao et al., 1992; Ragins & Cotton, 1999; Ragins et al., 2000) along with three additional studies (Allen, Day & Lentz, 2002; Fagenson-Eland et al., 1997; Vtior, 2001a) have compared the outcomes received by protégés with informal mentors and those received by protégés with formal mentors. The goal of these comparisons has been to evaluate to what extent formal mentoring relationships can mimic the outcomes of informal mentoring relationships.

Allen, Day and Lentz's (2002) study included 53 formal protégés and 65 informal protégés from two organizations. Although results showed that individuals in formal and informal relationships had similar levels of interpersonal comfort with their mentors, individuals in informal relationships reported higher levels of career mentoring and higher quality mentoring relationships than individuals in formal relationships. Controlling for length of mentorship, Chao et al. (1992) also found that individuals in formal mentoring relationships reported receiving lower levels of career-related mentoring functions than individuals in informal mentoring relationships.

While results from Allen, Day and Lentz (2002) and Chao et al. (1992) suggest individuals in formal relationships receive lower levels of career functions from their mentors, Fagenson-Eland et al. (1997) found whether the relationship was informal or formal was not associated with the level of career functions reported by protégés. Instead, formal protégés reported lower levels of psychosocial functions than informal protégés in this study. Vtior's (2001a) analysis of multiple subsamples showed that, in comparison to informal mentoring, formal mentoring was less frequently associated with lower levels of role ambiguity, role conflict,

perceived environmental uncertainty, and turnover intentions. His conclusions, however, should be accepted with caution. Specifically, the number of individuals with formal mentors in some of his groups was extremely small (e.g. 14 senior managers reported having formal mentors, and Viator analyzes female and male senior managers separately, further reducing the sample size). Furthermore, his results are difficult to interpret as several participants had *both* formal and informal mentors.

Ragins and Cotton (1999) is the only study to date that has compared informal and formal protégés on mentoring received at the specific function level, rather than aggregating function subscales into the total of career-related functions or the total of psychosocial-related functions. This is an important step toward understanding the nature of the differences in mentoring between informal and formal mentoring relationships. Formal protégés in this study reported lower levels of mentoring in comparison to informal protégés on almost every mentoring function (e.g. on the dimensions of sponsoring, coaching, protection, challenging assignments, exposure, friendship, social support, role modeling, and acceptance). No differences were found between formal and informal protégés on the dimensions of parenting and counseling. Formal protégés also reported lower compensation than individuals with informal mentors.

Again, as was the case with formal/no mentoring comparisons, these studies have not controlled for the characteristics of the formal mentoring programs or have not specified the characteristics of the formal mentoring programs that were used in the comparisons. Although Ragins et al. (2000) did not compare the functions received by individuals with informal mentors to those with formal mentors, this study found that individuals with high levels of satisfaction with their formal mentors did not differ from individuals with high satisfaction with their informal mentors on all six outcomes in their study, including career commitment, job satisfaction, organizational commitment, organizational self-esteem, promotion satisfaction, intentions to quit, and procedural justice. These authors concluded "...the view that informal mentoring relationships will automatically be more beneficial than formal mentoring relationships is apparently too simplistic; the level of satisfaction in a relationship appears to be the key variable" (p. 1187).

In conclusion, studies comparing formal mentoring to informal mentoring generally portray informal mentoring as more effective, although recent research by Ragins et al. (2000) suggests that individuals with high levels of satisfaction with their formal mentors did not differ in outcomes observed from individuals with high satisfaction with their informal mentors. This result suggests that formal mentoring relationships have the *potential* to reap the same benefits as informal mentoring relationships.

Program Characteristics

Three studies to date have directly addressed the relationship between formal mentoring program characteristics and program outcomes. Ragins et al. (2000) examined the hypothesis that formal programs that are designed to be most similar to informal relationships would be the ones perceived as most effective. Specifically, their hypothesis was that programs would be viewed as most effective and would result in more positive career and job attitudes when: (1) participation was voluntary; (2) mentors and protégés were allowed to participate in the matching process; (3) the program was aimed at career development rather than general job orientation; (4) guidelines for frequency of meetings were offered; and (5) recognition for mentors was offered. Results showed that while programs were perceived as marginally more effective if the mentor entered the program voluntarily, protégé choice was not significantly related to perceived effectiveness. The method of matching mentors and protégés was not predictive of perceived effectiveness. Programs aimed at career development were associated with higher levels of protégé satisfaction with opportunities for promotion, but the objectives of the program had no relationship to the overall perceived effectiveness of the program. Formal programs that offered guidelines for meeting frequency were perceived as more effective than those without guidelines. Mentor recognition was not related to perceived effectiveness or career outcomes for the protégé.

Viator (1999) examined the role of matching process, goal setting, and meeting frequency guidelines in formal mentoring programs by surveying certified public accountants working in large public accounting firms. Most protégés indicated that their formal mentoring program had meeting frequency guidelines (69.2%) and required the protégés to set goals and objectives (62.8%). Viator reported that meeting more frequently and setting goals was related to higher protégé satisfaction with the mentorship. His results showed variability in how protégés were matched with their mentors, with 197 participants indicating they had input into the selection of their mentor and 113 participants indicating no input. For protégés indicating they had input, the type of input varied. For example, some firms assigned the protégés a mentor from a "top choices" list; others surveyed the protégé regarding needs and objectives. Protégés that were not allowed input into the matching process were less satisfied with their mentors and were more likely to report their needs were not met in comparison with protégés given input. Results from Klaus (1981), although based on a very small sample size ($n = 18$), similarly suggested participant input into the matching process was associated with higher perceived relationship effectiveness.

Four additional studies, although not specifically focused on understanding the role of program characteristics, highlight the importance of opportunity to interact and frequency of meeting within the formal mentoring environment. In

Noe's (1988a) study of 39 protégés and 43 mentors from a formal mentoring program for educators, mentors spent an average of four hours with their one to four protégés over a period of six months. More frequent meeting was related to perceived quality of interaction with the mentor and higher psychosocial benefits. Three primary barriers to interaction were identified: lack of time, conflicting work schedules, and geographic separation. Studies by Heimann and Pittenger (1996) and Orpen (1997), although based on small samples, also suggest the importance of opportunity to interact and dyad relationship closeness in a formal mentoring program. Finally, an investigation of 77 protégés starting new businesses found that protégé perceptions of business success were predicted by the frequency with which they had contact with their mentors and the level of advice on legal, technical, financial, and marketing issues provided by their mentors (Waters, McCabe, Kiellerup & Kiellerup, 2002).

In conclusion, research has suggested that formal program characteristics such as frequency of meeting guidelines, specified program objectives, or participant input into the matching process may be related to the outcomes of a formal mentoring program and should be examined in future studies of formal mentoring. Specifically, it is important both to understand the role of program characteristics in outcomes achieved by formal programs as well as to control for the quality of programs in research comparing formal mentoring to informal mentoring or no mentoring. However, results on program characteristics are so preliminary, with few studies having addressed this issue, that our understanding of the role of program characteristics and other antecedents of effective mentoring outcomes is still very limited.

Research Priorities: Formal Mentoring

Continued research examining the benefits of formal mentoring are needed. A primary need, however, is for researchers to make attempts to differentiate between "quality" and more poorly planned mentoring programs when doing so. Otherwise, the conclusion may be that formal mentoring programs do not work, when actually it is simply that poorly planned mentoring programs do not work but more organized, plantful programs do work. To conduct these examinations, we need a clearer idea of what constitutes a quality mentoring program. Furthermore, a conceptual framework to guide examinations of formal mentoring is sorely needed. In the next section, we attempt to provide such a framework to guide future research on formal mentoring.

FORMAL MENTORING: A CONCEPTUAL FRAMEWORK

Research in the area of formal mentoring programs is at an exciting stage. A small number of studies on formal mentoring have now been conducted and have

helped to develop a preliminary understanding of formal mentoring programs and their outcomes. To assist further understanding of and research on formal mentoring programs, we develop a conceptual model that allows us to suggest propositions relevant to four salient questions. First, what outcomes might formal mentoring programs achieve? Second, what is the nature of the mentoring that occurs in a formal mentoring relationship? Third, what are the antecedents of positive outcomes in a formal mentoring context? Finally, what is the process through which formal mentoring leads to positive outcomes?

Our conceptual model was developed with reference to a diverse body of literature, including that on interpersonal relationships, career success, training and development, and informal mentoring. The result of our efforts, shown in Fig. 1, is applicable in informal, as well as formal contexts; a primary exception is the box labeled "program antecedents," surrounded by a double-dashed box. While we hope that the model also extends research and thinking in the informal domain, due to the critical dearth of discussion and research on formal mentoring programs in stark contrast to the widespread organizational use of these programs (Barbian, 2002), we focus the following discussion of this conceptual model within the formal mentoring context.

Mentoring Outcomes

We differentiate between two broad classes of formal mentoring outcomes. The first are several distal outcomes that may be attained by the protégé, mentor, and organization. The second are more proximal outcomes including protégé change and satisfaction with the assigned mentor and the mentoring program.

Distal Outcomes

Findings from Ragins et al. (2000) suggest that, assuming individuals are in a satisfactory relationship, formal mentoring has the potential to reap the same distal outcomes as informal mentoring. Following the example of Hunt and Michael (1983), we conceptualize these outcomes at three levels of analysis: protégé outcomes, mentor outcomes, and organizational outcomes.

At the protégé level, we conceptualize the formal mentoring process as a potential means for advancing an individual's career success. The career success literature differentiates between extrinsic career success (represented by more observable career achievement indices, such as promotions or ascendancy and compensation level) and intrinsic success (represented by more subjective reports of job satisfaction, career satisfaction and commitment, and life satisfaction) (see, for example, Boudreau, Boswell & Judge, 2001; Judge, Cable, Boudreau & Bretz, 1995; Judge, Higgins, Thoresen & Barrick, 1999; Seibert, Kraimer &

Crant, 2001). The distinction clarifies that more promotions and higher compensation are not the only route to success, and recognizes that some individuals are more concerned with "psychological success," or whether they have lived a satisfying life (Hall & Mirvis, 1996).

Our model shown in Fig. 1 also portrays outcomes at the mentor and organizational level. The processes and specific means by which mentors benefit from the formal mentoring process are not elaborated in our model; instead our focus will surround the target of the formal mentoring program, the protégé, and to a lesser extent the resulting outcomes for the organization. We note, however, that mentor benefits such as personal satisfaction that have been reported by mentors in the informal mentoring context are also expected to appear in the formal mentoring context.

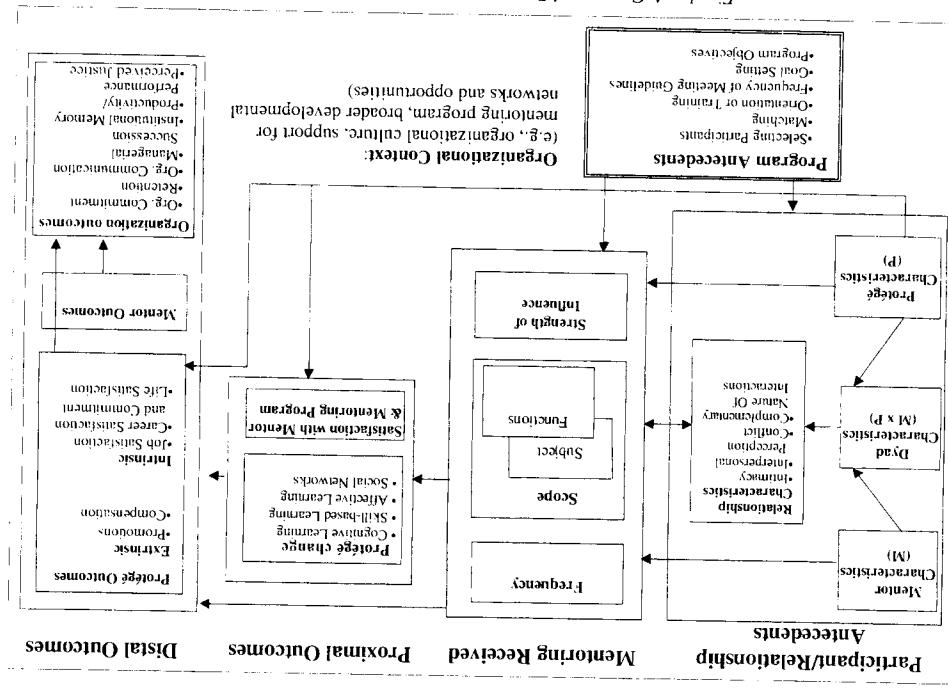
Organizational outcomes are expected to be generated from the proximal and distal outcomes of the protégé and mentor, as well as from the people relevant to the organization that the protégé and mentor impact and interact with (e.g., customers and co-workers). These organizational outcomes may be as diverse as improved organizational commitment, retention, organizational communication, managerial succession, institutional memory, productivity or job performance, and perceived justice. As a caveat, organizational level outcomes are limited not only by the effectiveness of the formal mentoring program and the relationships that are formed, but also by the number of participants in the program (Kram & Bragan, 1992). If the organization launches only ten partnerships, organizational-level outcomes will be commensurate with the small number of pairs. Furthermore, the net organizational outcome could be negative if program costs are high and active participation in the program low, if matched pairs develop only superficial relationships, or if there is perceived injustice on the part of individuals who wanted to be in the mentoring program (Kram, 1985a). This suggests assessments of the organizational benefits of mentoring programs need to be conducted at the aggregate level, taking into account all stakeholders.

Proximal Protégé Outcomes

Research to date has not carefully delineated the proximal areas of impact that monitoring – formal or informal – may have upon the protégé, although exciting new advances into this area have recently appeared (see, for example, Lankau & Scandura, 2002). Our model first suggests four potential areas of *protégé change* (cognitive learning, skill-based learning, affective-related learning, and social networks) that may, at least in part, drive the achievement of more distal extrinsic and intrinsic career success outcomes in a formal mentoring context.

Three of the areas of protégé change (cognitive, skill-based, and affective learning) were derived from Kraiger, Ford and Salas's (1993) classification of

Fig. 1. A Conceptual Process Model of Formal Mentoring.



learning outcomes that stem from training interventions. Following Kraiger et al.'s conceptualization, we use *cognitive learning* to represent enhancements in declarative knowledge, procedural knowledge, strategic or tacit knowledge, knowledge organization, or cognitive strategies that may occur as a result of the mentoring relationship. For example, the mentoring process may result in the protégé gaining new declarative knowledge (e.g., information about the company's history and politics), developing job-related mental models (e.g., about how to be successful in his or her organization), or learning new cognitive strategies (e.g., planning, problem solving, decision making, creative thinking, self-regulation). *Skill-based learning* would involve the improvement of technical (e.g., report writing, running a meeting) or motor skills (e.g., jewelry repair, stitching up a head wound). *Affective-based learning* could be attitudinal (e.g., changes in self-awareness or values, improved tolerance for diversity, or reconciliation of work/life balance issues) or motivational (e.g., representing changes in the protégé's motivational disposition, self-efficacy, or goal setting).

The last area of protégé change (*social networks*), rather than being an individual learning outcome, involves changes in relationships, specifically the protégé's social integration and development of social capital. This increased social integration and development of social capital will be expected to occur if the formal mentor helps the protégé develop his or her network, for example by taking the protégé along to business functions, or introducing the protégé to colleagues. These introductions may result in an expanded social network that provides the protégé with other sources of contacts, advice, social support, or strategic information (Podolny & Baron, 1997).

The specification of these change outcomes helps to unfold the mentoring process by better describing the mechanisms through which mentoring may lead to increased extrinsic and intrinsic career success (i.e., mentoring leads to increased career success, at least in part, through protégé change). For example, a protégé, as a result of discussions with his or her mentor, may develop a strong mental model for what it takes to succeed in the organization. It is this new understanding that may be largely responsible for the protégé's later success in getting a promotion. Similarly, mentor-protégé discussions on topics such as improved role clarity, how best to pursue one's career objectives, and strategies for maintaining work-life balance have the potential to increase the protégé's job, career, and life satisfaction. The number and placement of one's social resources have also been empirically linked to career success measures including current salary, number of promotions over one's career, and career satisfaction (see, for example, Seibert, Kraimer & Liden, 2001). Consequently, in regard to the relationship between protégé change and career success we suggest:

Proposition 1. Higher levels of protégé cognitive, skill-based, and affective learning and the expansion of social networks will be associated with increased probability of promotion and higher compensation as well as higher job satisfaction, career satisfaction, career commitment, and life satisfaction.

Importantly, not all learning outcome areas need to be affected for distal outcomes to be influenced. For example, a protégé may be strongly impacted by the mentoring process only in regard to his or her self-efficacy and self-presentation skills. Although the mentoring may not affect the individual in other areas, the changes in the protégé on self-efficacy and self-presentation are sufficient to improve his or her job performance and chances for promotion.

Proposition 2. Significant protégé change in one area, rather than multiple areas, may positively impact extrinsic and/or intrinsic distal outcomes.

Our model specifies two additional proximal outcomes, *satisfaction with mentor and the mentoring program*. Although listed together, these outcomes are distinct; one can be high and the other low or both could be high or low. Ragins et al. (2000) found protégé satisfaction with mentor was related to an array of perceptual outcomes, including higher protégé career commitment, job satisfaction, organizational commitment, and perceived opportunities for promotion. Perceived program effectiveness was related to all of these outcomes with the exception of perceived opportunities for promotion. We suggest that mentor and program satisfaction are likely to impact, in a positive direction, the career success outcomes for the protégé that are more affective in nature (i.e., job satisfaction). The more objective career success outcomes are proposed to be affected through the protégé change outcomes or directly through mentor actions (to be described later). We propose:

Proposition 3. Protégé satisfaction with one's mentor and the mentoring program will have a positive impact on protégé job satisfaction, career satisfaction, career commitment, and life satisfaction.

Mentoring Received

Central to the conceptual model is the mentoring received in the relationship. Drawing upon the interpersonal relationship literature and specific conceptualizations of relationship closeness (Berscheid, Snyder & Omoto, 1989), we suggest formal mentoring can be described in terms of its frequency, scope, and strength of influence.

Frequency, Scope, and Strength of Influence. Frequency refers to the prevalence of meetings between the mentor and protégé, influencing the amount of time mentors and protégés spend together. Berscheid et al. (1989) reasoned that "the more time

people spend together, the more opportunity they have to influence each other's thoughts and behaviors" (p. 794). We similarly suggest that simply spending time together is an important starting point for mentors and protégés in a formal mentoring program.

Scope indicates the breadth of mentoring functions received by the protégé (Kram, 1985b) in tandem with the breadth of subjects addressed or discussed during the duration of the mentoring relationship. At the highest level of scope of mentoring received would be a relationship that involved a realm of career and psychosocial-related mentoring functions and covered a variety of subjects. At a low level of scope of mentoring received, discussions may be focused on one topic of interest to the protégé (e.g., increasing assertiveness), and the functions provided by the mentor might fall primarily into the coaching and counseling domains.

Recognition of the subject aspect of the scope of mentoring permits a fuller understanding of the range of issues being discussed in the mentoring relationship and helps to ensure the content validity of assessments of mentoring functions that involve subject content. For example, the Mentor Role Instrument examines coaching through a three item scale. The items include: My mentor . . . "Helps me learn about other parts of the organization"; "Gives me advice on how to attain recognition in the organization"; and "Suggests specific strategies for achieving career aspirations" (Ragins & Cotton, 1999, p. 550). Other coaching topics that may be salient in formal relationships (e.g., resolving a current work challenge, work life balance) are not assessed through these items. When used, this may make it appear as if a relationship did not involve coaching if the coaching focused on areas that are not represented in the scale's items.

Strength of influence refers to the degree to which individuals are influenced by the mentoring received. Specifically, the strength of the influence of the mentoring received can vary. Some formal mentors may meet frequently with their protégés, sharing ideas and counsel, but their suggestions and ideas are superficial, they are not discussed in sufficient depth, or they do not meet protégé needs and are thus not influential. Some (e.g., "mentor assigned responsibilities to you that have increased your contact with people in the district who may judge your potential for future advancement"), but not all (e.g., "mentor has shared history of his/her career with you") current mentoring items capture the concept of strength of influence (examples taken from Noe, 1988a, p. 469).

The concepts of frequency, scope, and strength of influence are important to understanding the nature of the mentoring received by an individual. We highlight the importance of these concepts with the following proposition.

Proposition 4. Higher frequency, scope, and influence of mentoring received within a formal mentoring program will be associated with more extensive protégé change and higher satisfaction with the mentor and program.

We suggest that the relationship between mentoring received and more distal career success outcomes for the protégé is partially, but not fully, mediated by protégé change and mentor and program satisfaction. First, it is our expectation that formal mentoring exerts at least part of its impact on the more distal career outcomes through its effect on protégé change (cognitive learning, skill-based learning, affective learning, and improving social networks) and mentor and program satisfaction. However, it is also possible for formal mentoring to impact the distal career outcomes directly. For example, if the mentor were to exert any protection or sponsorship functions without the knowledge of the protégé, these functions could directly influence the protégé's career success without impacting the protégé's learning or mentor or program satisfaction. We propose:

Proposition 5. The relationship between mentoring received and more distal career success outcomes for the protégé is partially, but not fully, mediated by protégé change and satisfaction.

Sponsorship, protection, and exposure. Here we elaborate on our expectations regarding the receipt of three specific mentoring functions within a formal mentoring relationship. While acknowledging that all traditionally accepted mentoring functions (e.g., Kram, 1985b) can occur in a formal mentoring relationship, we suggest that the level of sponsorship, protection, and exposure received by protégés in formal relationships will be quite low, especially in comparison to their receipt of other mentoring functions (e.g., coaching, challenging, role modeling, acceptance and confirmation, counseling, and friendship). Sponsorship, protection, and exposure all require the mentor to use his or her influence on behalf of the protégé, something less likely to take place within a limited duration (e.g., one year) formal mentoring program that may also involve protégé/mentor dyads that are separated geographically. Furthermore, while sponsorship, protection, and exposure functions are not prohibited, these functions are not explicitly encouraged or communicated as being part of relationships in formal mentoring programs. The emphasis of formal mentoring programs is typically on the protégés achieving self-reliance, rather than teaching them to depend on the sponsorship or protection of a senior person (Clutterbuck, 2002). Furthermore, an organization's suggestion that formal mentors engage in functions such as sponsorship, protection, or exposure could lead to organizational justice problems among non-participants or participants not receiving such functions (Kram, 1988). Indeed, many organizations use the term "mentee" rather than "protégé" to refer to the more junior participants in a formal mentoring program. The formal definition of protégé, "one who is protected, trained, or guided by an influential person" (*Merriam Webster Dictionary*, 1995, p. 418) is distasteful to organizations that do not endorse "protection" as a formalized mentoring function. Specifically, to delineate our

expectation regarding the scope of mentoring received in a formal relationship, we propose:

Proposition 6. Sponsorship, protection, and exposure will occur only rarely in a formal mentoring environment.

Given Proposition 6, studies comparing formal and informal mentoring programs in terms of their effectiveness should examine mentoring functions at the specific function level (e.g., sponsorship) rather than combining the functions to form broader career-related and psychosocial-related function scales. Sponsorship, protection, and exposure are typically regarded as career-related mentoring functions. If career-related mentoring functions are computed as a sum of sponsorship, protection, and exposure along with coaching and challenging work, formal programs evaluated with current mentoring function measures will likely appear as less effective than informal relationships even when formal programs do not desire their dyads to be entering into the sponsorship, protection, and exposure domains.

Participant/Relationship Antecedents

Our conceptual model portrays protégé, mentor, and dyad characteristics, along with characteristics of the protégé/mentor relationship, as important antecedents to the mentoring received in a formal mentoring program. We describe the role of these antecedents, beginning with the characteristics of the protégé/mentor relationship.

Relationship Characteristics

Drawing upon the relationship literature (see, for example, Hinde, 1995, 1997), we identified four primary relationship characteristics (intimacy, interpersonal perception, conflict, and complementary nature of interactions) that are expected to be critical antecedents to the mentoring that is received by protégés in formal mentoring relationships.

Intimacy refers to the closeness that the formal mentor and the protégé are able to achieve in their assigned relationship. This closeness is indexed by the extent to which the two individuals reveal themselves to each other cognitively or emotionally, and is related to the level of trust and comfort in the relationship (Hinde, 1995). Ragins and Cotton (1999) suggest that establishing intimacy or closeness within a formal relationship is a unique challenge. They note, for example, that the mentor and protégé "recognize that the relationship is short-term and that the mentor may be assigned to another protégé after the relationship is over" (p. 531). To the extent that intimacy in the formal relationship is achieved,

we expect that a protégé will be more likely to meet with the mentor and to disclose concerns about work-related issues, even when the issues are not comfortable ones to discuss. Likewise, within relationships with higher levels of intimacy it is expected that the mentor will be more likely to confess previous work-related mistakes or personal "tricks of the trade" (Kalbfleisch & Davies, 1993, p. 403).

Hinde (1995) conceptualizes interpersonal perception as the extent to which two individuals in a relationship feel understood. Translating to the formal mentoring context, his ideas suggest that mentors and protégés will meet more frequently and engage in more meaningful discussion if they understand one another and feel understood by one another. Hinde's work suggests several levels of understanding and perceived understanding in the relationship are important. For example, it is ideal if the mentor understands how the protégé sees himself (e.g., the mentor knows that the protégé believes his presentations are effective), yet sees the protégé as he/she really is (e.g., the mentor recognizes that the protégé needs to improve his presentation style). It is furthermore important that the protégé feels understood. For example, a protégé discussing work/life balance issues might feel misunderstood if he or she feels that the mentor interprets the discussion as a lack of work commitment. Finally, the relationship has higher levels of interpersonal perception to the extent the mentor also feels understood by the protégé, and the extent to which the mentor and protégé see their relationship in similar terms.

We define conflict as "a process in which one party perceives that its interest are being opposed or negatively affected by another party" (Wall & Callister, 1995, p. 517). Although Kalbfleisch (1997) focused on conflicts within student/mentor relationships, we speculate that the types of conflict that were identified in these relationships could also translate to the formal context, including conflicts stemming from disagreement, embarrassment, negativity, or requests that are made on the part of the mentor that are perceived to be inappropriate or illegitimate to the protégé. We subsume under the umbrella of conflict any "lack of agreement or acceptance of where power lies" that may occur in the mentoring relationship (Hinde, 1995, p. 7) as well as dysfunctional behaviors leading to conflict in the relationship (Scandura, 1998). Conflict may generate anger, stress, or distrust of the other party, and may reduce both the quality and amount of communication between the two individuals (Wall & Callister, 1995). Despite its negative connotation, conflict can be constructive if the issues are trivial, important to discuss, and/or if the two members are committed to maintaining the relationship (Hinde, 1995). Complementary nature of interactions reflects the extent to which mentor and protégé exchanges involve a rich and satisfactory interplay between each members' needs and offerings (Hinde, 1995). To the extent that a protégé has certain development goals that the mentor has the experience and ability to assist him or her with, a relationship has the potential to include interactions that

are complementary in nature. Specifically, one partner has a need (e.g., how to handle a particularly demanding client) that the other partner can address. The interactions are even more complementary if they fulfill needs for both partners, for example, if the mentor feels fulfilled by sharing his or her knowledge.

Consistent with our review of the handful of studies exploring the dynamics of informal and formal mentoring relationships (e.g., Ensher, Thomas & Murphy, 2001; Heimann & Pittenger, 1996; Mullen, 1998; Mullen & Noe, 1999; Orpen, 1997), these relationship characteristics are expected to have a reciprocal relationship with mentoring received by the protégé. First, relationships characterized at any given time by more intimacy, greater feelings of being understood, the absence of destructive conflict, and higher complementarity are likely to lead to more mentoring. Reciprocally, the more frequently individuals meet, and the more mentoring that occurs in the relationship, the more likely intimacy and interpersonal perception will increase. However, more mentoring received may not automatically lead to reduced conflict or increased complementarity. We propose:

Proposition 7. Higher intimacy, higher interpersonal perception, lower levels of conflict, and higher complementarity within the relationship are expected to facilitate a higher frequency, broader scope, and stronger influence of mentoring.

Proposition 8. Higher levels of frequency, scope, and influence of mentoring are expected, in turn, to increase the intimacy and interpersonal perception within the relationship.

Mentor, Protégé, and Dyad Characteristics

Each member of the formal mentoring relationship brings to the relationship his or her unique demographic background, ability levels, personality, attitudes, and job/career history. The relationship literature (Berscheid, Lopes, Ammarazalorso & Langenfeld, 2001; Hinde, 1997) suggests that while the unique characteristics of each individual are important, the interaction of the characteristics of two individuals is particularly critical in determining the characteristics of the relationship. For example, Kelley et al. (1983) gave the example that the unique interaction between the characteristics of the two individuals is predictive of whether two individuals strike "it off well" or have "a special chemistry for each other" (p. 55).

There has been relatively little attention given to the interaction among protégé and mentor characteristics beyond interactions among the race and gender of the protégé and mentor (Ragins, 1999). An exception to this is recent work by Godshalk and Sosik (in press). In a study of mentors and protégés who may have been engaged in either formal or informal relationships, Godshalk and Sosik found that when both the mentor and protégé had high levels of learning goal orientation, a high level of mentoring was reported. In contrast, when members

of the dyad had different or low levels of learning goal orientation, lower levels of mentoring were reported. Our model would suggest that this unique interaction of mentor and protégé characteristics (including demographic background and other individual differences) influences the mentoring received through its influence on the characteristics of the relationship. Specifically, a nice mesh of the multitude of characteristics of the mentor and protégé influences the development of a relationship that is more intimate, where individuals understand one another, that is lower in conflict, and higher in interactions that are complementary. Consider a mix of race, ethnicity, gender, age, disability, or sexual orientation between the mentor and protégé (Ragins, 2002). While dissimilarities on some of these characteristics might make it difficult for pairs to achieve intimacy and interpersonal perception, this dissimilarity may be overcome if both members of the dyad have high levels of openness to experience and agreeableness (McCrae & Costa, 1996) or use similar strategies to address potentially divisive issues (Thomas, 1993).

In summary, we propose that characteristics of the dyad will play an important role in influencing the characteristics of the relationship that is formed between the mentor and the protégé.

Proposition 9. The characteristics of the dyad, represented by the rich interaction of the myriad protégé and mentor characteristics, will influence the level of intimacy, interpersonal perception, conflict, and complementarity in a formal mentoring relationship.

We do not wish to discount the role that that the unique characteristics of the mentor and protégé can play in the mentoring process. Our model portrays mentor and protégé characteristics as impacting the mentoring received not only through the dyad and relationship characteristics, but also directly. We additionally portray protégé characteristics as having a direct effect on both the proximal and distal outcome variables. These direct paths between the protégé's characteristics and the developmental outcomes are supported by recent meta-analytic work in the training literature (Colquitt, LePine, & Noe, 2000). Specifically, these authors found that individual characteristics had both direct and indirect relationships with training motivation, learning levels, transfer of training, and job performance, rather than being fully mediated through more proximal variables.

We expect the same protégé and mentor characteristics that have been found in the informal mentoring literature to be associated with higher levels of mentoring received, and refer the reader back to our section on predictors within the informal mentoring context. We wish to highlight, however, our expectations around one personality characteristic, proactivity, that has not been widely discussed within the informal mentoring literature. Our review of the formal mentoring process along with the career success literature highlighted proactivity as an important

protégé characteristic that would seem to drive the frequency of meetings between the mentor and the protégé, as well as the scope of topics discussed.

Proactivity is an individual's tendency to engage in activities meant to influence one's environment (Batemann & Crant, 1993). Proactivity is significantly related to two of the five dimensions of the Big Five model of personality, extraversion (0.25) and conscientiousness (0.43) and is also related to need for achievement, need for dominance, and participation in charitable activities and professional associations (Batemann & Crant, 1993). Because individuals with proactive personalities tend to identify opportunities and follow through with them, seek solutions to barriers in their way, and show initiative in other important ways (Seibert, Crant & Kraimer, 1999), we expect that proactivity is likely to impact the frequency of meetings that the protégé requests with the mentor. Many formal mentoring programs suggest that the protégé take the initiative in the mentoring relationship; that the protégé should not rely on the mentor to schedule meetings and goals for the relationship (Coley, 1996). This may be difficult for a protégé who feels uncomfortable "bothering" the mentor, or who tends to shy away from seeking out advice or counsel. We expect that protégés with a proactive disposition will be more likely to schedule regular meetings with the mentor, rather than waiting to hear from the mentor. We further expect that proactive individuals will be more likely to help guide the mentoring process, bringing questions and setting goals for the relationship. Finally, because proactivity has been shown to be associated with both intrinsic and extrinsic career success outcomes (Seibert et al., 1999), we expect that this characteristic will also have a direct impact on both the proximal and distal mentoring outcomes. We propose:

Proposition 10. Higher levels of protégé proactivity will be associated with a higher frequency, scope, and influence of mentoring, increased protégé change, and more positive intrinsic and extrinsic career success outcomes.

Program Characteristics

Based on our literature review, we identified six primary program characteristics proposed to have direct implications for the mentoring that will occur in a formal relationship. In addition, we propose that certain program components may be in the position to influence relationship characteristics.

First, criteria for the *selection of participants* seems to vary across formal mentoring programs. While the issue of who should participate in the program (e.g. new hires, high potentials, or all managers) is specific to each program's objectives, an issue that is relevant to all programs is whether participation

is voluntary or required. Practitioners seem to agree that results of formal mentoring programs will be best if participation is voluntary on the part of the mentor (Gaskill, 1993; Gray & Gray, 1990; Newby & Heide, 1992). Mentors participating voluntarily are expected to be more motivated to be involved in the relationship, and will make themselves more accessible to their protégés than those "arm-twisted" by their organizations to be in the program. Although the effect size was small, Ragins et al. (2000) found that protégés perceived programs as more effective if their mentor had entered the program voluntarily.

In contrast, there is less support for the idea that it is critical for protégés to participate in formal mentoring programs voluntarily. Protégé voluntary participation was not significantly related to perceived program effectiveness in the Ragins et al. (2000) study, and it is not uncommon for organizations to include all individuals in a given group (e.g. new hires) in a formal program. Most individuals included in a formal program are likely pleased that they have been included in the program, given the program's intent is commonly to benefit their careers. Nevertheless, research has developed solid support for the importance of allowing individuals to participate in decisions regarding their training and development (Quinones, 1997). We surmise that voluntary participation may impact frequency of meeting for both parties, with fewer meetings occurring on the average among mentors and protégés required to be in the program.

Proposition 11. Voluntary participation on the part of mentors and protégés will be related to higher frequency of meeting.

Another program characteristic is the *method of matching protégés and mentors*. Two issues are of interest: (1) how much participant input to use in the matching process; and (2) what makes a good match. First, organizations vary in the extent that their participants contribute to the matching process (Viator, 1999). On the higher extreme of participant input, organizations allow mentors or protégés to choose one another or allow participants to specify their three top partner choices (Coley, 1996). In the middle of the spectrum, an organization may survey and then match the protégé and mentor on business-related criteria (e.g. area protégé wants to gain experience in), human interest factors (e.g. hobbies, interests), learning styles, and/or geographical location (Forret, 1996; Gaskill, 1993; Hale, 2000; Tyler, 1998). At the low participation extreme (no input), mentors and protégés are matched by the program planner without being solicited for any type of information.

Expert opinion seems to favor allowing the protégé to have some level of input into the matching process. For example, Chao et al. (1992) endorsed participant input by comparing "random assignment of protégés to mentors" to "blind dates" (p. 634). Research by Viator (1999) suggests that allowing the protégé to

have input into the matching process, whether that input is more extensive (where protégés are allowed to choose among mentors) or less extensive (where protégés are instead surveyed for information that is used in the matching process) is associated with higher protégé satisfaction with the mentor. While Ragins et al. (2000) found no relationship between method of matching (protégé choice versus no choice) and protégé satisfaction with the mentor, their measurement combined mentors and protégés that were assigned to each other without any input at all with those that were assigned following a survey of interests into a "no choice" category. It is likely that protégé input leads to increased protégé psychological ownership of and commitment to the mentoring process, and that it facilitates the relationship by matching individuals having more in common. Furthermore, protégés matched with mentors based on their business goals and interests may be more likely to be in a relationship that meets their developmental needs. In following, we suggest that protégé input in the matching process is likely to be associated with increased mentor/protégé intimacy, interpersonal perception, complementarity of interactions, meeting frequency, and strength of influence. Specifically, we propose:

Proposition 12. Formal mentoring programs that match individuals through a method that solicits participant input (i.e. either through allowing choice of partner or by eliciting interests and goals from the participants) will have pairs with higher levels of intimacy, interpersonal perception, complementarity, meeting frequency, and strength of influence.

Assuming the organization is going to make matches based on protégé input, the literature gives little guidance about what concrete factors should be used to develop an effective match. The mentoring literature is supportive of the mentor and protégé having some similarities (e.g., to facilitate comfort in the relationship). For example, the results of three empirical studies found that perceptions of similarity are positively associated with mentoring functions (Burke et al., 1993; Enscher & Murphy, 1997; Nielson et al., 2001). The dimensions on which similarity was rated were fairly broad in scope, including intelligence, personality, background, procedures, and activities outside of work (Burke et al., 1993), values and attitudes concerning work and family balance (Nielson et al., 2001), and "outlook, perspective, and values" (Enscher & Murphy, 1997, p. 469).

Despite this support for similarity between the mentor and protégé, it is also believed that individuals will develop most if exposed to views and experiences unlike their own (see, for example, Hale, 2000). Although our recommendation is generic in nature (e.g., we are unable to propose specific scales or items to make this recommendation more concrete), we propose that the most effective matches will be those where the mentor and protégé are matched on at least one dimension so they have something in common as a basis for the relationship (whether it be

a common interest in baseball or both having children of the same age) and on at least one dimension that is suggestive of the mentor having a skill or background that complements the protégé's needs. We propose that this approach will enhance the level of intimacy, interpersonal perception, and complementarity of interactions in a relationship. Specifically, by matching individuals so that they have at least something in common, their level of intimacy and interpersonal perception may be enhanced. By matching protégés to mentors that may be able to meet their needs, the complementarity of the interactions will be enhanced. We propose:

Proposition 13. Organizations that are more effective at matching protégés and mentors with a basis of similarity (e.g., an interest in common) but some complement of each others' needs will have mentor/protégé pairs with higher levels of intimacy, interpersonal perception, and complementary interactions.

We put forth an additional proposition about geographical proximity. Many formal mentoring programs now match protégés with mentors in other locations, sometimes overseas, and contact has to be primarily over the phone and through e-mail. Indeed, there are an increasing number of e-mentoring programs, programs through which mentors and protégés are connected through e-mail, web sites, and electronic discussion lists (Singel & Muller, 2001). We acknowledge the necessity of assigning protégés to mentors in other locations; this is sometimes unavoidable (Jossi, 1997). However, evidence is suggestive that formal mentoring programs that involve long-distance mentoring will not be as effective as mentoring programs whose participants can meet face-to-face. For example, Burke et al. (1993) found that office proximity was related to provision of more mentoring, and opportunities for interaction on the job have been identified as an important predictor of the level of mentoring provided in a number of studies (Aryee, Chay & Chew, 1996; Noe, 1988a). Based on this research, we suggest that pairs in more proximal locations will report higher meeting frequency, mentoring scope, and strength of influence.

Proposition 14. Protégés more proximally located to their mentors will report higher levels of meeting frequency, mentoring scope, and strength of influence. Berscheid et al. (1989) suggest that even though individuals can be close when separated by distance, they will likely not be as close as individuals who spend time together in person. Although pairs can be encouraged to communicate frequently despite geographical separation, we expect that pairs in more proximal locations will report higher levels of intimacy and interpersonal perception than individuals separated by greater distance.

Proposition 15. Protégés more proximally located to their mentors will report higher levels of relationship intimacy and interpersonal perception.

Authors outlining "best practice" guidelines for formal mentoring programs suggest that an *orientation or training session* be provided for mentors and protégés (e.g., Phillips-Jones, 1983). Orientations for protégés may include information about the purpose of the program, discussions about mentoring functions, benefits, and limitations; and exercises or handouts on handling conflicts that may occur during the relationship (Forret, 1996). Forret suggests that it is important that the program facilitator clarifies expectations, for example by discussing whether the formal mentoring program is meant to help the protégé's general introduction to the organization or their career development. Orientations for mentors might similarly include discussions about mentoring responsibilities, functions, benefits, and limitations, along with workshops on mentorship skills such as listening and problem solving methods (Gaskill, 1993).

We first propose three means by which program orientations might have an impact on relationship characteristics. To the extent that the orientation provides quality training on avoiding destructive conflict in the mentoring relationship (e.g., by providing a discussion of appropriate roles and potentials for abuse of power in the relationship) along with conflict resolution information, we propose that program orientations can reduce the occurrence, level, and seriousness of destructive conflict in the mentor/protégé relationships. To the extent that the orientation provides quality information about listening skills and skills that can enhance interpersonal perception, we propose that orientations can improve the level of interpersonal perception in mentor/protégé relationships. Last, we propose that programs that suggest activities that mentors may engage in with protégés (see for example, Coley, 1996) and means by which the protégé and mentor can begin to develop their relationship can positively enhance the level of intimacy experienced by individuals in the relationship.

Proposition 16. Effective orientations for the mentor and protégé will reduce destructive conflict and increase the intimacy and interpersonal perception in the protégé/mentor relationship.

Some organizations discuss *guidelines for frequency of meeting* at orientation (e.g., suggesting meetings of once or twice a month over the duration of the program). Findings by both Viator (1999) and Ragins et al. (2000), along with studies suggesting more frequent meetings are associated with more mentoring (Burke et al., 1993; Mullen, 1998; Waters et al., 2002), are supportive of setting frequency of meeting guidelines. The mentor is typically a person of more seniority and influence than the protégé. Although some protégés may not be bothered by this seniority, we propose that frequency of meeting guidelines give protégés both the permission and expectation that they are to contact their mentors, reducing issues related to intimidation or reluctance to bother the mentor. Frequency of meeting guidelines are also

proposed to guard against the protégé and mentor getting so busy with their work that they feel they cannot take the time out to meet (Noe, 1988a); the guidelines may act as a work assignment or meeting that has been previously agreed upon. In the absence of meeting guidelines it is easy for time to pass quickly and for protégés and mentors to more easily discount the need to meet. We propose the following:

Proposition 17. Protégés in programs with frequency of meeting guidelines will meet with their mentors more often than protégés in programs without frequency of meeting guidelines.

Orientation sessions for protégés in mentoring programs focused on development may request that participants conduct a skills assessment. A *goal setting process* can then be used to encourage protégés to specify competencies or issues they wish to work on in the mentoring relationship (Coley, 1996). Newby and Heide (1992) note that protégé goals for the relationship "help to delineate differences between present and desired levels of performance, identify the needed resources, and serve as reference points for comparison and adjustment as changes are attempted" (p. 10). A wealth of research in work, educational, and training contexts supports the notion that goals are motivational in nature, showing individuals who develop challenging and concrete goals exert more effort (Kanfer, 1990; Locke & Latham, 2002) and that more motivated individuals learn more and acquire more knowledge and skills (Colquitt et al., 2000). The nature of protégé goals are also expected to influence the mentoring received. Kram and Bragar (1992) note that some protégés are more interested in receiving career-related functions such as coaching, while others are more interested in receiving psychosocial functions, such as support and counseling. We propose that individuals who set goals will meet more frequently with their mentors, due to having a clear picture of what they wish to achieve. We also propose that the nature of the goal will influence the nature of the mentoring received.

Proposition 18. Protégés that set specific and challenging goals to work on through their mentoring relationship will meet more frequently with their mentor.

Proposition 19. The nature of protégé goals will influence the scope of the mentoring received.

Last, we propose that *program objectives* (the purpose of the mentoring program) will influence the nature of the mentoring that occurs and the outcomes achieved. Consistent with Kram and Bragar (1992), we feel it is important to recognize that the focus of mentoring within programs that are for newcomers (e.g., having a socialization objective) will be different from the focus of mentoring within

other programs, such as those developed for high potential managers (e.g., having a management development or succession planning objective). As in any other training or development evaluation effort, the outcomes examined should parallel the program objectives (Gray & Gray, 1990). Indeed, Ragins et al. (2000) found that programs aimed at career development were associated with higher levels of protégé satisfaction with opportunities for promotion than programs aimed at socialization. We propose the following:

Proposition 20. The nature of the program objectives will influence the scope of the mentoring received and thus ultimately the outcomes achieved.

Organizational Context

Importantly, we have enclosed our model within an outer box representing the "organizational context" in order to portray formal mentoring relationships as embedded within a larger organizational context. Salient to the organizational context is the organization's culture, or its members' characteristic values and attitudes (Ashkanasy & Jackson, 2001). For example, relevant to mentoring programs focused on employee development are the organization's deeply ingrained values and beliefs about the importance of continuous learning and development (London & Smith, 1999). Relevant to mentoring programs focused on socialization would be the messages the organization sends about the importance of newcomers gaining a facilitated introduction to the organization.

To illustrate the importance of culture, consider a protégé whose job involves demanding, heavily scheduled days and many evenings of working late. This protégé may place priority on his or her pressing job demands, postponing meetings with his or her mentor until soon the year devoted to the mentoring program has passed. Protégés surrounded by a climate emphasizing continuous learning may be more likely to *make* the time for the meetings with the mentor, having been persuaded that development time is critical. Similarly, mentors may have more motivation to spend time with protégés when they perceive that mentoring is a valued organizational activity (Aryee, Chay, & Chew, 1996). We propose:

Proposition 21. Organizations with cultures that communicate values and attitudes supportive of the mentoring program's objectives will have mentor/protégé dyads that will meet more frequently.

At a more micro level, it is also important that mentors and protégés perceive that their supervisors are supportive of their involvement in the mentoring program. Research, for example, suggests that perceived supervisory support

for development activity is associated with higher levels of voluntary learning and development activity on the part of employees (see, for example, Maurer & Tarulli, 1994; Noe & Wilk, 1993).

Proposition 22. To the extent that the mentor's and protégé's superiors are supportive of their involvement in the mentoring program, mentoring program outcomes are expected to be enhanced.

Also relevant are other training and developmental opportunities that are available to the protégé (Tharenou, 1997). For example, a mentor's counseling may help the protégé realize that he or she needs some intensive presentation skills training. If presentation skills training or a referral to such training is available within the organization, the protégé may be more likely to act upon that developmental need. In other words, we propose that protégé change can be enhanced by the existence of employee development workshops or related development opportunities. To take this one step further, it is important to consider the existence of other opportunities when predicting career success outcomes to avoid attributing career success uniquely to mentoring when mentoring was supplemented by other development opportunities.

Proposition 23. Protégé change and more distal career success outcomes will be enhanced by the existence of employee development workshops or related development opportunities.

Finally, several other contextual factors are relevant to the mentoring process and outcomes within the organizational context. An organization's size, structure, and compensation and promotional opportunities may limit the observation of increased promotions and compensation as a result of the mentoring program. For example, mentoring may have more potential to influence promotions within a large organization with long promotion ladders and high vacancy rates in higher positions (Tharenou, 1997). We suggest:

Proposition 24. Other contextual factors are relevant to the outcomes observed as a consequence of a formal mentoring program, including an organization's size, structure, and compensation and promotional systems.

Dynamic Aspects of Conceptual Model

Our model is a dynamic process model. First, it is conceivable that the importance of some predictors in our model varies over the duration of the relationship (Zaheer, Albert & Zaheer, 1999). The predictive role of dyad characteristics may

be especially dynamic in nature, changing over the duration of the relationship. For example, demographic dissimilarity may result in less mentoring early in the relationship, but may actually be beneficial later in the relationship (see, for example, Turban et al., 2002), although this may depend on the complex interplay of other characteristics mentioned earlier such as the openness to experience and agreeableness of both members.

Importantly, levels of any of the variables in the model may change substantially during the relationship. For example, the scope, frequency, and strength of influence of protégé/mentor interactions may change over time. This change in mentoring received could occur due to a wide variety of reasons. As the protégé changes both as a result of the formal mentoring program as well as from becoming more experienced in the organization, his or her needs and goals may change. Mentors or protégés may experience an increase in workload, making it difficult to meet. If conflict occurs (Scandura, 1998) or if a relationship is not meeting the protégé's or mentor's expectations (Young & Perrewé, 2000), frequency of meeting may decline or the relationship may be terminated. One of the two individuals in the partnership may alternatively be relocated, leave the company, or be laid off, leading to termination of the relationship. Finally, most formal programs come to a conclusion after one year's duration. It is unknown how many of these dyads continue into an informal relationship, or to what extent learning based on the mentor's advice and teachings continue even after the relationship is ended.

A final important issue is that protégé perceptions of the mentoring experience may be dynamic and may not initially reflect its actual benefits. For example, due to low perception accuracy (Atwater & Yammarino, 1997), the protégé may change as a result of the mentoring program but not realize it. The social influence literature, for example, argues that the norms, values, and beliefs of an influence agent may have an effect on an individual without that individual's realization (Forgas & Williams, 2001). Dijksterhuis (2001) also presents evidence that individuals unknowingly change their behavior to match the behavior of individuals they are in close contact with, mimicking both basic behaviors such as gestures or posture to more complex behaviors such as helpfulness. Alternatively, the protégé may realize they have changed, but may not attribute the change to the mentoring program. This failure to attribute the change to the mentoring program might be either unintentional (the individual might believe they would have changed without the mentoring program) or intentional (individuals motivated to succeed in an organization may be motivated, if asked, to attribute their change to their own efforts, rather than acknowledging the helpfulness of the mentoring program). The protégé's perceptions may, however, change over time (Zaheer et al., 1999). A few years after the mentoring experience, the protégé may be better able to appreciate the relationship and the benefits of that relationship. This

speaks to caution when relying on self-report measures, although assessment of protégé change through other means is also very challenging.

Summary

Our conceptual model represents a preliminary attempt to portray the antecedents and outcomes of mentoring received within a formal mentoring context. One contribution of the model is the "unfolding" of the mentoring criterion space, represented in our model through proximal and distal outcomes. Also important is the delineation of variables expected to be predictive of successful formal mentoring experiences and the process through which these antecedents lead to successful outcomes. Finally, another contribution of the model is its integration of useful theory and research from related literatures, such as the career success literature and the social psychology literature on relationships. For example, the social psychology literature on relationships helped to guide our delineation of "relationship characteristics" that emerge as a direct result of the mentor/protégé dyad combination and our conceptualization of mentoring received as involving the tripartite scope, frequency, and strength of influence.

Given the limited research on formal mentoring, we hope our model will stimulate more empirical research in this area. Most studies of formal mentoring programs in organizations have compared outcomes for individuals in formal programs to outcomes for individuals with informal mentors or without mentors, rather than looking at factors that may differentiate between formal programs that are successful versus not successful. Although our model was discussed within the context of formal mentoring, researchers will benefit from using the model to direct their research efforts on informal mentoring. Indeed, the model's components, excluding the program characteristics, are applicable in the informal context. We chose specifically to present the model within the formal mentoring context to stimulate future theory building and research in the formal arena.

It is likely our model will also be useful for practitioners managing formal mentoring program efforts. Day and Allen (2002) recently suggested that "if program administrators knew the precise factors that contribute to beneficial outcomes they could put these factors to use in mentor training" (p. 25). While our model is far from precise, it is suggestive and informative of the many factors that may play a role in mentoring program success. On the outcome side, we also hope to convey that "mentoring program success" is highly dependent on the goals of both the organization and the protégé.

As a last note, we suggest several caveats. First, we acknowledge that the model may be difficult to test in its entirety due to the large number of variables

within its realm. Second, refinement of the model will be required to more explicitly incorporate the role of additional concepts and variables relevant to the mentoring experience. Simply due to the vast number of potential variables and paths, it was difficult to include all variables that have been mentioned in the mentoring literature and all conceivable paths in the model. Finally, we note that examination of the model may require development of new measurement scales. As an example, some items in current mentoring function scales incorporate what we conceptualize as relationship characteristics (e.g., trust or intimacy) into the assessment of mentoring functions. For example, the Mentor Role Instrument reprinted in Ragins and Cotton (1999) includes "is someone I can trust" to assess the friendship dimension (p. 550). Future mentoring function scale revisions may attempt to capture mentoring functions separately from relationship characteristics.

CONCLUSIONS

In 1988(b), Noe suggested that "research regarding the benefits of mentoring relationships is in its infancy" (p. 66). Since then, research has advanced our understanding of the benefits as well as drawbacks of mentoring relationships, and has delved further into related and important branches of research including the construct space of mentoring, mentoring within the context of diversity, other correlates of mentoring received, relationship dynamics, and formal mentoring programs. While a great deal of research has been conducted on mentoring in the last decade, our assessment is that the mentoring literature is still very young; perhaps analogous to a primary school level. As with a child in primary school, continued stimulation and insight is highly critical for the mentoring literature. We hope this review and the conceptual model provided within are useful in directing future research.

In addition to relying on conceptual frameworks such as the one we provided, attention to several methodological issues in future mentoring research will help move the mentoring literature forward. Specifically, researchers need to provide clear and consistent definitions of mentoring to study participants (important so a participant would not be considered a protégé in one study and without a mentor in the next), differentiate between formal and informal mentoring, ensure measurement instruments are content valid and psychometrically sound, rely less on protégé self-reports, incorporate more dyad analysis into research, increase the use of longitudinal research, and include appropriate control variables. Researchers' attention to these methodological issues when evaluating and refining models of mentoring will foster the maturation of the field.

NOTE

1. This meta-analysis includes studies that examined formal and informal relationships, although the majority were focused on informal mentoring relationships. At the time of our review, the meta-analysis was under review. Given that revisions of the meta-analysis may include computational changes or additional studies, we provide results at a general rather than specific level. The authors reported average correlations weighted by sample size as indicators of effect size (without corrections for other artifacts due to the small number of studies available). We indicate whether the authors found small (i.e., 0.30 or less), medium (i.e., 0.30–0.49) or large (i.e., 0.50 or higher) effect sizes (Cohen, 1988) in the relationships they analyzed rather than providing the exact effect size.

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