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A

A STUDY OF PEER MENTORING, MULTIPLE MENTORING AND  
OTHER ALTERNATIVES TO TRADITIONAL ONE-ON-ONE MENTORING

By  
RACHEL GONZALEZ LEVY

A dissertation submitted to the Graduate Faculty in Psychology in partial fulfillment  
of the requirements for the degree of Doctor of Philosophy, The City University of  
New York

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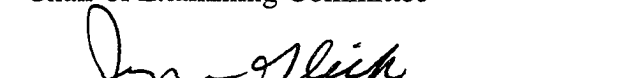
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## Abstract

A Study of Peer Mentoring, Multiple Mentoring Relationships  
and Other Alternatives to Traditional One-on-One Relationships

By Rachel Gonzalez Levy

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The primary purpose of this study was to investigate the alternatives to traditional, one-on-one mentoring. Traditionally, mentoring occurred informally between a senior person and a more junior employee of the same organization (Kram, 1988). More recently, it has become recognized that the construct of mentoring has a wide variety of meanings. The definition of mentoring used in the present study is based on a review and evaluation of the literature. *Mentors take an active interest in an individual's development and serve as coaches, tutors, counselors, sponsors and/or confidants for another with whom there is a relationship of mutual trust.* Data on mentoring experiences were collected using a web-based survey at two large organizations, a professional services firm and a Fortune 500 financial services and products company. Factor analysis confirmed prior research and found a dual-factor structure for mentoring functions: career-related and psychosocial mentoring. Analyses of variance indicated that mentors who are a respondent's direct manager provided the least amount of psychosocial mentoring while peer mentors provided the least amount of career-related mentoring, after controlling for frequency of communication. Peer mentors fulfilled the greatest levels of psychosocial mentoring functions. The study provided information on the number of employees who receive mentoring from multiple sources. Also, regression analysis showed that respondents'

prior number of mentors, age, and attitude about the importance of a mentor to success are related to current number of mentors, and self-reported career success is related to having multiple mentors. The results of this study demonstrated the positive value of utilizing measures of multiple mentoring relationships. Implications for organizational mentoring programs and mentoring research are discussed.

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A Study of Peer Mentoring, Multiple Mentoring Relationships  
and Other Alternatives to Traditional One-on-One Relationships

Mentoring in organizations was traditionally conceived as a one-on-one relationship that evolved naturally between a higher-ranking mentor and a less-experienced protégé employed within the same organization (Kram, 1988). More recently, several alternatives to the traditional, one-on-one mentoring relationship have been introduced into practice and have sparked academic research (Allen, McManus & Russell, 1999; Burlew, 1991; Duff, 1999; Eby, 1997; Haggis & Barnes-Farrell, 1998; Heimann & Pittenger, 1996; Kram & Isabella, 1985; McDougall & Beattie, 1997; Murray, 2000; Noe, 1988; Ragins & Cotton, 1999; Scandura & Schriesheim, 1994; Smith-Jentsch, Milanovich, Reynolds & Merket, 2000; Thomas, 1986; Van Eck Peluchette & Jeanquart, 2000). As a result of these alternatives to traditional mentoring, there exists a need to evaluate how mentoring is currently conceptualized and studied.

The alternatives to the traditional one-on-one mentoring relationship may be categorized in four main ways: 1) exclusiveness (one-on-one versus multiple mentors concurrently), 2) organizational level or experience of mentor (higher-level individual and manager versus peer and subordinate/individual with less experience), 3) formality of initiation (informal versus formal), 4) relative location or proximity (inside same organization versus outside). This study focused on the first two groups of these alternatives, multiple mentors and peer mentors.

The two primary objectives for this study were to 1) measure respondents' experiences across multiple current mentors relationships and 2) provide evidence for the following: having multiple mentors is related to self-reported career success and peers are effective at serving as mentors. A secondary objective was to compare formal and informal mentors.

The understanding of organizational mentoring is based largely on research that has used single-mentor measures. These single-mentor measures vary slightly across studies, but typically require the participants to report on their mentoring experiences with any single mentor. Respondents are asked most often about their current mentor or another single mentor who has influenced their careers the most. However, the single-mentor approach overlooks that some people experience mentoring from more than one mentor, a circumstance that may be becoming more common for workers today. Therefore, mentoring should be studied with a multiple-mentor approach. The present study used a multiple mentor measure, following recommendations by Smith-Jentsch, et al. (2000); Higgins and Thomas (2001), which allowed respondents to report on their experiences with several mentors rather than requiring respondents to select only one mentor on which to report.

Kram (1988) offered a framework for mentoring, which was initially published in 1985 and revised in 1988, which was developed from an in-depth study of traditional one-on-one relationships within a single corporate setting between senior and junior managers. In short, it explains that these mentors potentially fulfill two important but different functions, one career-related and the other psychosocial. This framework by Kram (1988) serves as the major foundation for organizational

mentoring research today. However, changes in the workplace have necessitated an evaluation of the conceptualization of mentoring. For example, Kram and Hall (1997) posit that mentoring may need to take on new forms in order to fit the changing organization. For example, there has been increased collaboration and dependency among peers due to the increased use of teams (Mohrman, Cohen & Mohrman, 1995). Also, with the trend toward flatter organizations (Howard, 1995) and with shorter organizational tenure (Kram & Hall, 1997), difficulties may exist in developing the strong ties typically necessary to develop a traditional, hierarchical mentoring relationship (Kram & Hall, 1997). These changes in the nature of work lead to greater peer interaction and interdependency, which has perhaps created opportunities for peers to serve as mentors. Another important change that has implications for the way that mentoring is conceptualized is that there has been an increase in the number of companies that have developed formal mentoring programs in which a protégé is matched with a mentor (Tyler, 1998).

The present study addresses the limitations with gathering data only on a single mentor, the most frequently used approach to gather data on organizational mentoring, and provides insight on the alternatives to traditional mentoring. In the next chapter, an evaluation of the literature that defines mentoring provides the rationale for reevaluating mentoring through a multiple mentor approach. Chapter 3 summarizes the limitations of the research and presents the objectives for the present study. Chapter 4 puts forth the related questions and hypotheses that address these limitations in the current study. Chapter 5 describes the analyses and results and

Chapter 6 discusses the contributions, implications, limitations and directions for future research.

The following summary defines mentoring and is based on a review and evaluation of the current literature. Mentors serve as coaches, role models, tutors, counselors, sponsors and/or confidants for another individual (Burke & McKeen, 1997; Kram, 1988). The support and guidance that are provided enhances another's professional growth and/or career advancement (Dreher & Ash, 1990; Lee & Nolan, 1998; Orpen, 1995; Scandura, 1992). It is possible to have more than one mentor at one time (Higgins & Kram, 2001; Higgins & Thomas, 2001; Smith-Jentsch et al., 2000; Van Eck Peluchette & Jeanquart, 2000), but mentoring occurs within relationships overtime (Bowen, 1985; Chao, 1992; Kram, 1988; Kram & Isabella, 1985; Rosenbach, 1989), which are marked by trust (Nolinske, 1995), and a conscious goal for the relationship is to develop the protégé's ability and/or promotability (Clawson & Kram, 1984). A mentor is *not* a person who provides a small level of support outside the context of an on-going relationship. For example, a co-worker who occasionally provides task-related advice and has no real concern for the development for the other person is *not* a mentor. Mentoring relationships may evolve naturally (e.g., Kram, 1988) or formally through organizational assistance (Ragins & Cotton, 1999). While it is possible for an immediate manager to serve as a mentor, mentoring relationships represent a special opportunity to interact with someone more senior; the standard subordinate/manager relationship is not, in and of itself, a mentoring relationship (Dreher & Cox, 1996). Mentors can be peers (Kram & Isabella, 1985), managers (Burke, McKenna & McKeen, 1991; Goh, 1991;

Scandura & Schreisheim, 1994) or other co-workers, as well as someone from outside of the organization (Kalbfleisch & Davies, 1991; Ragins & Cotton, 1999; Swerdlik & Bardon, 1988). A more detailed examination of many of these studies that define mentoring follows in Chapter 2.

## CHAPTER 2

## Review of the Literature

Mentoring Versus Developmental Relationships

The term “mentor” originated in Greek mythology in the epic, *The Odyssey*, written by Homer (n.d.). As described by Bell (1996), Mentor was a tutor who cared for and provided wise counsel to Odysseus’s son, Telemachus. Today, mentoring researchers are challenged by presumptions that mentoring relationships are inspired by “chemistry” or “magic” (Duff, 1999). It is argued that respondents may hold these presumptions and may not accurately self-select themselves as mentored or non-mentored and as a result, analyses examining group differences based on this self-selection may potentially be tainted with selection bias. Kram (1988) found that “the word *mentor* had a variety of connotations and from a research point of view it would be best not to use it” (p. 4).

In order to address the fact that “mentor” may be laden with connotations of “chemistry” or “magic,” academicians found ways of evading this “problematic” term. For example, Kram (1988), throughout the data collection phase of her research, referred to mentor and protégé as “senior person” and “junior person” and “mentoring” relationships as “developmental” ones. Study participants were asked to identify relationships “with senior managers who had taken a personal interest in them” (p.4). While Kram did not use the term mentor during data collection, she conceptualized these relationships in her results as mentoring relationships and entitled her seminal book, *Mentoring at Work: Developmental relationships in organizational life* (1988). Since Kram’s work, many studies on mentoring have been

quantitative, have used self-administered surveys and typically have focused on the experiences and perspective of the protégé/junior person. Of these studies, some have followed Kram's approach of not using the term in any portion of the data collection (e.g., Burke & McKeen, 1996, 1997; Smith-Jentsch et al., 2000; White, Dougherty & Dreher, 1991). For example, Burke and McKeen (1996) did not use the word mentor on the questionnaire, "so as not to bias the reporting" (p. 95), but these authors used mentor as a label in the results and in the title of their article.

Recently, Ragins (1999) explained that excluding the term mentor in data collection might be confusing for the respondent. "The word mentor is now a household word, and by not using that word on the survey, respondents may wonder if the researcher is asking about a relationship different from that of the mentor" (p. 229). Chao (1998) concluded that empirical studies claiming to examine mentoring that have not specified exactly what mentoring is to the participants should be regarded critically; she suggests that these studies might not be examining mentoring at all.

To summarize, there has been disagreement about which label to use during data collection. The present author agrees with recent researchers (Ragins, 1999 and Chao, 1998) that it is important to use the word "mentor" during data collection. However, the present author recommends to researchers to assess whether or not the word may be laden with connotations in the *specific* culture of the organization in which data will be gathered before deciding whether or not to use the word "mentor" during data collection.

### Functions that Mentors Fulfill

Researchers have consistently cited and praised Kram's framework of mentoring (1988) for providing orderliness to this seemingly confusing construct. Kram conducted two-hour interviews with thirty junior managers and their senior counterparts in a large northeastern public utility organization with 15,000 employees. Through content analysis of these in-depth interviews, Kram's research (1985; 1988) described the two general mentoring functions that mentors fulfill for the protégé in most mentoring relationships: career-related and psychosocial mentoring and nine specific functions subsumed within these two.

The first broad function is career-related mentoring, which includes aspects of the relationship that enhance the protégé's advancement in an organization by helping this individual "learn the ropes" of organizational life, gain exposure and obtain promotions. There are five specific functions within this. The *sponsorship* function deals with the extent to which the junior person receives the senior person's public support for desirable assignments and moves, both lateral and hierarchical. *Exposure-and-visibility* gives a junior person the opportunity to demonstrate competence with other senior managers, allowing the junior person to develop relationships with these key people. *Coaching* enhances a junior person's knowledge on how to navigate effectively in the corporate world. *Protection* involves the senior person taking the responsibility in controversial situations, as well as intervening in situations where the junior person is unlikely to perform satisfactorily. The last career-related function is the *assignment of challenging work*, which provides the junior person with training and feedback.

In contrast to career-related mentoring, the four psychosocial functions address interpersonal aspects of the relationship. As summarized by Kram (1988), *role modeling* involves the senior person setting an example for the junior person who identifies with the senior person's attitudes, values and behavior. *Acceptance-and-confirmation* from the senior person provides support and encouragement to the junior person. Through this basic trust, the junior person is more apt to take risks and try new things. During *counseling*, the senior person offers personal experience and helps the junior person resolve problems through feedback and listening. Finally, *friendship* results in mutual liking and understanding through informal exchanges about work and non-work experiences.

Dreher and Ash (1990) have described Kram's dual-function framework of mentoring as the most systematic and integrative research devoted to the processes of mentoring. These authors drew this conclusion over a decade ago and Kram's work continues to be greatly influential. Almost all research on the topic after her publication cites the work of psychosocial and career-related mentoring. In fact, each quantitative measure that is reviewed hereinafter used the framework of psychosocial and career-related mentoring as its foundation.

However, a serious limitation of Kram's research is that she does not explain how mentors at the peer or lower levels in the organization fulfill psychological and career related functions. Kram's mentoring functions were derived from a study of one-on-one relationships between junior managers (between the ages of 25 and 35) and higher-ranking managers. Also, the senior and junior managers worked within the same location, a large public utility organization. That is, these functions were

derived from informal relationships that were one-on-one, between senior and junior people who were both in management and within one organization.

An evaluation of the academic research and practitioner journal articles, reviewed next, demonstrates that studying only one-on-one, higher-level relationships is inadequate to understand more fully the mentoring process. This review of the literature illustrates that there are many alternatives to the traditional, one-on-one, internal mentoring that Kram identified over 15 years ago. The first of these alternatives that is discussed is formally initiated relationships.

#### Formal and Informal Mentoring

Mentoring has captured the interest and imagination of business professionals, perhaps as a result of often-cited articles with prominent titles such as, “Everyone Who Makes It Has a Mentor” in the Harvard Business Review by Collins & Scott (1978). More recently, there exists interest in formalizing mentoring programs at organizations. Cox (1993) found that the companies that have developed formal mentoring programs represent a variety of industries. More recently, 76% of 106 Catalyst member companies surveyed offer formal mentoring program to employees (Catalyst, 2001). The key distinction between informal mentoring and formal mentoring is the manner in which the relationship is initiated (Ragins & Cotton, 1999). While informal mentoring relationships develop naturally, formal mentoring relationships develop with organizational assistance. Ragins and Cotton (1999) describe that organizational assistance is usually in the form of either voluntary assignment or the matching of mentors and protégés.

Some researchers have studied samples comprised only of formally mentored individuals and found that formally assigned mentors are successful at fulfilling the mentoring functions identified by Kram (Allen et al, 1999; Noe, 1988). The next logical question to answer is how effective are these formal programs as compared to informal relationships? In one study that evaluated formal programs, informally mentored individuals were compared to formally mentored individuals and individuals that did not have mentors (Chao, Walz & Gardner, 1992). All three groups of individuals were compared on job satisfaction, salary and organizational socialization. Organizational socialization can be seen as a process by which a newcomer to an organization is taught and learns “the ropes” (Van Maanen & Schein, 1979). Also, those who reported having an informal or formal mentor were compared on the level of career and psychosocial mentoring they received from their mentors.

#### Mentoring measure by Noe

To measure the career and psychosocial mentoring functions that are fulfilled, Chao et al. (1992) adapted a measure developed by Noe (1988). Because Noe’s (1988) quantitative measure was among the first attempts to quantify the work of Kram (1988), his measure continues to influence other researchers conducting quantitative research on mentoring (e.g., Dreher & Ash, 1990; Koberg, Boss, Goodman, 1998; Sosik & Godshalk, 2000). Noe (1988) developed a 32-item measure based on the career and psychosocial functions to be administered to the protégés, which was then administered to school district personnel. Respondents were asked to “read each item and report on the extent to which it described their mentoring relationship” (p. 466).

Exploratory factor analysis revealed two interpretable factors, which were represented by a total of twenty-one items. The measure is reported using two scale scores, 7 items for career mentoring and 14 for psychosocial mentoring. Scale scores were calculated by computing the average of the sum of the items. It is important to note that the items originally intended to assess the extent to which the mentor *coached* the protégé loaded with the psychosocial factor. This finding is inconsistent with the Kram (1988) framework of mentoring functions where coaching is categorized as a career-related function. Noe (1988) explained that perhaps protégés perceive coaching behaviors as instrumental for self-identity; thus, coaching items would load with psychosocial functions. Another problem with this measure is the items that assessed friendship did not load with either factor and subsequently were not included into either scale. Noe's (1998) final factor solution was comprised of a career-related factor (i.e., protection, exposure and visibility, sponsorship and challenging assignments) and psychosocial factor (i.e., role modeling, counseling, acceptance and confirmation and coaching). Internal consistency was calculated for both scales ( $\alpha = .92$  for psychosocial and  $\alpha = .89$  for career-related).

Despite the analysis that demonstrated that Noe's (1988) measure was not entirely consistent with Kram's (1988) theory, Chao et al. (1992) selected these mentoring items for their study and found internal consistency to be .84 for the psychosocial factor and .79 for the career-related factor. Chao et al. altered the mentoring measure from the procedure that Noe (1988) followed to study both formal and informal protégés by adding additional questions that allowed the respondents to

self-select themselves into one of the three groups. First, respondents were provided with the following definition of a mentor.

Mentorship is defined as an intense work relationship between senior (mentor) and junior (protégé) organizational members. The mentor has experience and power in the organization and personally advises, counsels, coaches, and promotes the career development of the protégé. Promotion of the protégé's career may occur directly through actual promotions or indirectly through the mentor's influence and power over other organizational members" (Chao et al., p. 624).

Chao et al. (1992) drew the sample from an alumni database from nine graduating classes from a large midwestern university (n=373); the sample was also supplemented with individuals from a small private institute (n= 203). The sample was mailed surveys (76% response rate) and participants were asked to complete the survey packets with the measures of career and psychosocial functioning, organizational socialization, job satisfaction, and salary.

Next, respondents were identified as non-mentored by a "0" response to the question, "How many mentors have helped you?" Informal and formal protégé group identification was based primarily on the following question: "Is/was the mentorship part of a formal organizational program?" Protégés who reported having more than one mentor were instructed to focus on their "current or most recent mentorship" (p. 624). Comparisons among formal protégés, informal protégés and non-mentored groups showed no significant differences in age, gender, organizational tenure, job tenure, organizational size or type of position (i.e., managerial or professional).

Examination of group differences on the outcomes revealed that formally mentored individuals' scores fell between the other two groups. Informally mentored individuals had significantly greater organizational socialization and job satisfaction

compared to non-mentored participants. Also, informally mentored individuals had significantly greater salary compared to respondents that were non-mentored or formally mentored.

Among only those that had mentors, analysis revealed that the informally mentored protégés received *more* career-related support than did the formally mentored protégés. In contrast, these two groups of mentored individuals *did not* significantly differ on psychosocial mentoring received. The authors called for more work in this area in order to understand more fully this lack of difference between formally mentored protégés and non-mentored individuals.

Ragins and Cotton (1999) extended Chao et al.'s research and conducted a mail survey of the same three groups of individuals (informal protégés, formal protégés and non-mentored individuals) across three occupations: engineering, social work, and journalism (n=1,248; response rate = 42%). As in the study reviewed previously, i.e., Chao et al. (1992), respondents were asked to select to which group they belonged (informal, formal and non-mentored). An informal mentor was defined as, "a higher ranking influential individual in your work environment who has advanced experience and knowledge and is committed to providing upward mobility and support to your career" (p. 535). Respondents were also provided with the following description of formal mentoring.

...some organizations have established formal mentoring programs, where protégés and mentors are linked in some way. This may be accomplished by assigning mentors or by just providing formal opportunities aimed at developing the relationship. To recap: Formal mentoring relationships are developed with organizational assistance. Informal mentoring relationships develop spontaneously, without organizational assistance (p. 535).

Self-report data were also gathered on respondents' promotion rates, compensation and levels of psychosocial and career mentoring received. It is also interesting that these authors were among the first to collect data on multiple mentors through a "history of mentoring relationship variable." Ragins and Cotton asked respondents to report how many mentoring relationships they had had over the last 10 years and to indicate which of these prior mentoring relationships were formal and which were informal. Dividing the number of prior relationships that involved formal mentors by the total number of *all* mentoring relationships created a "history of prior relationships variable." Higher values reflected a greater proportion of formal than informal mentoring relationships. Therefore, the authors had two independent variables with regard to formality of mentoring relationships: history of mentoring relationships and current mentoring relationship.

#### Mentor Role Instrument by Ragins & McFarlin

Ragins and Cotton (1999) used the Mentor Role Instrument (MRI), which was developed by Ragins and McFarlin (1990). In contrast to the measure developed by Noe (1988), which measures only the two higher-level mentoring functions of psychosocial and career-related functions, the MRI independently measures each of Kram's (1988) nine mentor roles (i.e., sponsorship, coaching, protection, challenging assignments, exposure, friendship, role model, counseling, and acceptance and confirmation). The MRI uses the term mentor and asks respondents to indicate the extent to which they agree that their mentor serves each function using a 7-point Likert scale with responses ranging from 1 (strongly disagree) to 7 (strongly agree).

Confirmatory analysis was conducted to assess the relationship between the items and the underlying constructs (i.e., the individual mentoring functions). Three items were selected to represent each sub-function. The analysis provided construct validity evidence for 9 separate constructs and the measure was found to have reliability, ranging with coefficients of .66 to .94 for the nine sub-scales. Unfortunately, even though there was evidence that the measure represents the nine mentoring functions identified by Kram (1988), Ragins and McFarlin (1990) did not conduct (or report) analyses on how the items loaded with the higher-level constructs of psychosocial and career-related functions.

Several variables were examined as possible control variables because of prior evidence that each was related to promotion rate and compensation (Ragins & McFarlin, 1990). The variables found to have high correlations with promotion rate and compensation, but low intercorrelations were selected; these were occupation, position tenure, number of career interruptions, the duration of prior mentoring relationships, and the number of those relationships involving managerial mentors.

In general, the results for the study (Ragins & Cotton, 1999) provided support for Chao et al. (1992). That is, it was found that those with informal mentors experienced the greatest level of benefits in terms of career outcomes and that formal protégés' scores often fell between those of informal protégés and non-mentored individuals. Also, in examining the differences between formal protégés and informal protégés, it was revealed that informal protégés received greater levels of career-related mentoring; there is a slight trend that they received greater levels of psychosocial mentoring; and they experienced significantly more benefits.

More specifically, in terms of the formality of the current relationship, those individuals that were informally mentored received a significantly greater amount of all career-related mentoring functions (sponsorship, exposure, coaching, protection and assignment of challenging work) compared to those whose current mentor was formally assigned. The hypothesis that informal protégés will receive great levels of psychosocial mentoring was partially supported. That is, there were no significant differences between those with a formal mentor and those with an informal mentor for Kram's (1988) psychosocial sub-function, counseling; however, informal protégés received significantly more role modeling, acceptance and confirmation and friendship than did formal protégés. Additional analysis examined the relationship between "the history of prior mentor relationships" with compensation and number of promotions. In sum, those respondents with a history of formal mentors did not earn significantly greater compensation or have a higher promotion rate than those without mentors. Those with a history of informal mentors received greater compensation *and* had a higher promotion rate than those that were not mentored. Also, these same protégés *did not* have a significantly greater promotion rate than those with a history of formal mentors, but did earn greater compensation.

These studies' results (Chao et al, 1992; Ragins & Cotton, 1999) suggest formal mentoring programs lack the effectiveness associated with informal mentoring relationships particularly in terms of career-related functions. However, there are two major limitations with the studies that have critiqued informal versus formal mentoring. The first major limitation is that the studies have lacked control over the effects of having more than one mentor at the same time. The measures that were

used in the studies reviewed (Ragins & Cotton, 1999; Chao et al., 1992) were adapted from previous studies (Noe, 1988; Ragins & McFarlin, 1990). Neither Ragins and Cotton (1999) nor Chao et al. (1992) adapted the measure to assess the mentoring functions fulfilled by multiple concurrent mentors.

In addition to lacking control over the effects of having multiple mentors at the same time, the second major limitation with the research that evaluated the formal mentoring programs is the criteria used may not fit the purpose of these programs. The two studies reviewed in this section that found unfavorable results for formal mentoring programs (Chao et al., 1992 and Ragins & Cotton, 1999) evaluated formal programs across many organizations using criteria including number of promotions and compensation. It is possible that the purpose of each of those programs varied greatly; neither article discusses this possibility. There has been support for developing formal programs with specific objectives rather than general career development objectives. For example, Heimann and Pittenger (1996) studied a formal mentoring program among organizational newcomers where newcomers were matched with a senior employee for one year. It was found that newcomers' closeness to their formally assigned mentor, which was measured with four items, was positively related to their socialization, which was measured with 15 items that measured newcomers' perceptions of the expectations for behavior, organizational norms and values. Promotions and increased compensation were not the goals of this specific program, but rather organizational socialization was. Given that the formal programs that were a part of these studies were evaluated on criteria that may or may

not have been the objectives of the formal programs, it is likely premature to conclude that formal mentoring programs lack effectiveness.

Comparing formal and informal programs was not the goal of this review and is only a secondary objective of the present study. However, this review demonstrated that employees potentially could have many mentors at the same time and formal mentoring is just one type of relationship. Also, this review introduced two measures that have been developed, evaluated and used by later research. Noe (1988) developed a two-factor measure and Ragins and McFarlin (1990) developed a measure that scores nine of Kram's (1988) individual sub-functions subsumed within psychosocial and career-related mentoring. Noe's (1988) measure is limited in that it is not consistent with Kram's framework for mentoring (1988). Further development of a mentoring measure is needed.

In general, the definitions for formal mentoring have gone through fewer adaptations and critiques compared to definitions for informal mentoring, because research studies on formal mentoring were often designed to evaluate a specific formal program (e.g., Allen et al., 1999 and Noe, 1988). Therefore, participants in these studies were asked to respond to the survey with their formally assigned mentor in mind. In contrast to the definition of formal mentors, definitions for informal mentors tend to create more ambiguity for the respondents and have created a greater challenge for researchers. Noe (1988) concluded that mentoring is poorly operationalized and the variety of definitions for mentoring, particularly informal mentors, demonstrates that the term means different things to different scholars. The major inconsistency with the definition of mentoring is *who* can serve as a mentor

(i.e., who are the interpersonal sources for mentoring). The review of the literature in the following section demonstrates that some scholars define mentors as higher-ranking individuals, whereas other scholars have examined how people at different organizational levels serve as mentors.

### Sources for Mentoring by Level of Mentor

#### Higher-level mentor

Levinson et al. (1978) said a mentor “is ordinarily several years older, a person of greater experience and seniority in the world [than the protégé]” (p. 97). Many definitions of mentor explicitly define the mentor as one who holds more organizational power and/or influence than the protégé. A mentor is “someone in a position of power who looks out for you or gives you advice, brings your accomplishments to the attention of other people who have power in the company” (Fagenson, 1989, p.312). Also, a mentor has been described as an experienced, productive individual who relates well to a less-experienced employee and facilitates his or her development by providing career guidance and psychological support (Noe, 1988). Bahniuk, Dobos and Hill (1990) used the definition of mentoring as “a tutorial relationship between a senior employee and a more junior employee in which the senior employee teaches, guides, helps, counsels, and supports the more junior employee to facilitate his or her career development” (p. 432). Other definitions share this emphasis on the difference in influence and/or organizational level (Chao et al., 1992; Dreher & Ash, 1990; Gaskill, 1991; Kalbfleish and David, 1991; Mullen & Noe, 1999; Ragins & Cotton, 1991; Ragins & McFarlin, 1990; Swerdlik & Bardon, 1988).

### Manager

In the set of definitions aforementioned, there is a lack of attention to the managers' role in mentoring. Some researchers conclude that the managers may be identified as the mentor by the protégé (Goh, 1991; Scandura & Schreisheim, 1994) and others suggest that there are differences between managers and mentors. For example, mentors proactively seek to enhance the development and education of a protégé, while a supervisor promotes the development of the subordinate to the extent demanded by their position (Atkinson, Casas and Neville, 1994). It is important to distinguish for respondents that "while it is possible for an immediate supervisor to serve as a mentor, [mentoring relationships] represent a special opportunity to interact with a senior manager. The standard subordinate/supervisor relationship is not a mentoring relationship" (Dreher & Cox, 1996, p. 301). Most of the research studies leave it up to the respondent to decide whether his or her supervisor/direct manager can serve as a mentor or not.

Burke, McKenna and McKeen (1991) studied how mentorship differs from a typical managerial relationship in seven technology companies. This study also represents one of a few studies that collected quantitative data from the mentor, rather than the protégé. The Human Resource staff identified individuals who were managers and who may have been mentors. A total of 216 potential participants were identified and 94 respondents returned completed questionnaires (a response rate of 43%). Mentoring was assessed with previously developed items (Lindholm, as cited in Burke et al.). The career-related function was comprised of 17 items that assessed degree of having career discussions, teaching or coaching, promoting or protecting

and providing exposure. Psychosocial mentoring was represented with 8 items and assessed the degree of acting as friend or counselor and providing personal support. Burke et al. studied managers who indicated that they do have a “special relationship” with a more junior employee and compared their relationship with the respondent’s relationship with a typical subordinate. The authors did not report the definition that was used for “special relationship;” therefore, it cannot be determined whether the label “mentor” was used during data collection.

Analysis revealed that there were no significant differences in the amount of career-related functions offered by managers to the protégés versus to their typical subordinates. However, managers reported that they extended significantly more psychosocial functions to their protégés than to their typical subordinates. These results support the notion that a mentoring relationship is not the same as a typical managerial/subordinate relationship. Other researchers conclude that protégés report that managerial mentors provide more career-related mentoring than non-managerial, higher-level mentors, but the same amount of psychosocial mentoring (Ragins & Cotton, 1999; Ragins & McFarlin, 1990).

While some inconsistencies exist, these studies demonstrate that whether the mentor is the protégé’s direct manager or not can be related to the amount of mentoring fulfilled (Burke, McKenna & McKeen, 1991; Ragins & Cotton, 1999; Ragins & McFarlin, 1990). In general, the research in the mentoring domain has focused on one-on-one mentoring relationships between a higher-level mentor and a less-experienced protégé, neglecting to distinguish between managerial and non-managerial mentors and also neglecting peers as a source for mentoring.

### Peers

There are several reasons for the incorporation of peers as a source for mentoring. Peers have been found to be available and helpful to organizational newcomers in gaining information on how to do their jobs and how to interact with others in the workplace (Ostroff & Kozlowski, 1992). Additionally, there has been increased dependency and interaction among workers, given the reliance on team-based work to improve the quality of products, productivity and the experience of work for its members (Guzzo, 1995). Peer mentoring should be examined seriously as a source for mentoring. It is surprising that there is a dearth of literature that examines the extent to which peer mentoring relationships can serve an alternative or complement to traditional mentoring relationships.

An early study on peer mentoring grew out of Kram's early work on mentors (1988). Through her in-depth interviews with mentors and their protégés, Kram came to the conclusion that one alternative to the higher-level mentor was peers. This second study (Kram & Isabella, 1985) was published prior to the release of Kram (1988). The authors concluded that mentors do not have to be hierarchically related to the junior person, but can be at the same level in the organization or have comparable work experience. Interview methods similar to the Kram (1988) study were used. The participants were male and female managers of a large, northeastern manufacturing company. Interviews were conducted with 15 focal people. Participants were asked to identify "relationships with colleagues that they felt supported their personal or professional growth" (p.114). Peer relationships were considered those relationships where the participant identified a peer who was not

much older than the participant and/or individuals who are at a comparable organizational level in terms of pay, status and job responsibilities. Following the Kram (1988) recommendations, the term mentor was not used.

Through content analysis of the interviews, the authors concluded that peer relationships offer an important alternative to traditional mentoring relationships by fulfilling both career functions and psychosocial functions. Kram and Isabella (1985) suggested that peers offer both technical and organizational knowledge that enables individuals to get their work done more effectively. Peers provide a different medium for career discussion. When peers discuss career options and dilemmas, they share a similar perspective that people at different organizational levels do not share. Furthermore, in contrast to a traditional mentor relationship, wherein only one individual assumes the role of the mentor, both parties in a peer relationship can assume this role.

The authors (Kram & Isabella, 1985) conclude that peers can provide both career-related and psychosocial mentoring. It has been argued, however, that mentors are truly effective only when he or she is influential within the protégé's organization (Rosenbach, 1989). Also, Hollander (1978) asserted that individuals, such as leaders, who build up "credits" from positive past performance are able to influence others more so than those who have not built up any credits. Even Kram (1988) maintained that senior-level people have more leeway than junior people do; yet she also maintained that peers could serve as mentors (Kram & Isabella, 1985). There exists a degree of uncertainty and/or inconsistency regarding the extent that peers are

effective as mentors as compared to senior-leveled people, given peers' relative lack of influence.

Perhaps it is not that peers are less effective as mentors than senior-leveled people, but because the inherent differences in authority and roles between peers and senior people, peers behave as mentors *differently* than more senior-leveled people do. Kram and Isabella (1985) concluded that while peers can serve psychosocial functions similar to a traditional mentor (i.e., a senior/higher-level mentor), the career-related *peer* mentoring is different than traditional career-related mentoring. Whereas *traditional* career-related mentoring involves sponsorship, exposure and protection, *peer* career-related mentoring involves information sharing, career strategizing and job-related feedback. For example, senior people have the authority to provide the assignment of challenging work and can utilize their reputations to provide protection to the junior person, but the extent to which peers have this authority and capability is limited. While peers may not adequately provide protection for the individual or assign the individual challenging work, peers can provide unique information sharing and career strategizing that a higher-leveled employee may not provide (Kram & Isabella, 1985). After Kram and Isabella's study, there remained a need for more evidence on how peers can serve as effective mentors, especially because peers' organizational position relative to the protégé often do not allow them to provide many traditional career-related mentoring functions.

A study by McDougall and Beattie (1997) represents one of the few follow-up studies to Kram and Isabella (1985). Peer mentoring was defined as

a process where there is mutual involvement in encouraging and enhancing learning and development between two peers, where peers are people of similar hierarchical status or who perceive themselves as equals (p. 425).

McDougall and Beattie (1997) used qualitative techniques, including interviews and the Critical Incident Technique (CIT). The CIT employed in this study involved asking respondents to recount a specific situation where they learned from their peer mentor, and to describe the behaviors, feelings and thoughts within the incident. Participants were full and part-time students in business graduate programs and ranged in age from 25 to 55. The majority, (78%), was employed primarily in the public sector and the remaining 22% were enrolled in full-time graduate education.

Content analyses of these interviews and CIT data revealed the benefits to these relationships were confidence building, gaining different perspectives on issues, having a sounding board, motivation, networking, having a confidant, and stress management. The one organizational-level benefit the research revealed was that peer mentoring provided the opportunity for “synergy and cross-fertilization of ideas and experience” (p. 433). McDougall and Beattie (1997) conclude that, in general, the participants were positive about the benefits of peer mentoring.

The most compelling contribution of this qualitative study was its comparative analysis between traditional and peer mentoring. Only twelve of the 27 initial participants indicated that they had experience with a traditional mentor and these individuals' experiences were studied in more detail. These participants reported feeling more inhibited and reluctant to be open about weaknesses with their traditional mentors compared to how they felt with their peer mentors. One

participant shared, “peer mentoring is more about yourself and your own feelings and confidence...and we can admit weaknesses” (p. 431). Another difference that was found in a few cases is that traditional mentors were able to provide more insight into organizational politics, perhaps due to the fact that traditional mentors hold positions within organizations where they have more access to this type of knowledge.

To sum up the study, McDougall and Beattie (1997) provided additional evidence that peers are not necessarily less effective at mentoring than traditional mentors, but rather that peer mentors behave as mentors differently than higher-level, traditional mentors. It was also found that there were a number of benefits associated with these peer relationships for the individual. An important factor that these authors add is that trust is implicit to any peer mentoring relationships, “and that without such trust, these relationships could not be sustained” (p. 434).

A later study presented at the annual meeting of the Society for Industrial and Organizational Psychology (Dallas, TX, April 1998) examined the roles that peers fulfilled for mentored and non-mentored groups (Haggis and Barnes-Farrell). Participants were categorized into mentored and non-mentored groups by their self-selection based on the following definition that was an adaptation of Bowen’s definition (as cited in Haggis and Barnes-Farrell).

Mentoring occurs when a senior person (the mentor) in terms of age, experience, [or power] undertakes to provide information, advice, and emotional support to a junior person (the protégé) in a relationship lasting over an extended period of time and marked by substantial emotional commitment by both parties (p. 6)

The objective of the research was to compare the extent peers are relied on for support among people who have a traditional mentor compared to those individuals who do not have a mentor. Peers were not defined using the term, peer mentor, but rather respondents were asked whether or not they have “a relationship with a colleague/peer which they felt supports/supported their personal or professional growth” (p.7). While this study did not use the label peer mentor, the authors relied on the peer mentoring conceptual work of Kram and Isabella (1985) to develop the “peer support” scales. As discussed previously, while psychosocial mentoring from a peer and a traditional mentoring is fairly comparable, the career-related mentoring from these two groups is less similar. Therefore, items were developed to measure peer career-related functions (information sharing, job-related feedback and career strategizing). Items were developed to reflect these three career-related functions that Kram and Isabella (1985) identified as peer mentoring. Also, items that measured the degree of mutuality of the relationship were added. Mutuality deals with the extent to which there is a two-way exchange in the relationship. As described previously, Kram and Isabella (1985) concluded that in peer mentoring relationships, both parties assume the role of mentor and that mutuality is more often a characteristic of peer relationships than traditional ones.

#### *Peer Support Measure*

Similar to Noe’s (1988) mentoring scale described previously, respondents were asked to indicate the extent to which each statement describes their relationship with their peer using a 5-point Likert-type scale. The final measure was comprised of 3 factors and 23 items. Eleven items measured psychosocial functions ( $\alpha = .91$ ). Six

items measured career-related functions as identified and described by Kram and Isabella (1985), which were sharing information, providing job-related feedback, and career strategizing ( $\alpha = .84$ ). The final factor, mutuality, was measured with six items and measured the mutual exchange between the respondent and the peer ( $\alpha = .86$ ). Exploratory analysis revealed that three factors accounted for 55% of the variance in the “peer support” measure. A second analysis was conducted and the items loaded in the same manner, demonstrating the stability of the solution. The analysis demonstrated that the data fit the three-factor solution of the peer mentoring items; these were psychosocial mentoring, career-related mentoring, and mutuality. This scale also represents the only quantitative measure designed to measure the peer mentoring functions.

Haggis and Barnes-Farrell (1998) hypothesized that among individuals with peer relationships, those *without* a higher-level mentor would report receiving *more* psychosocial mentoring from their peers than those *with* a higher-level, informal mentor. This hypothesis, if confirmed, would suggest that peers could fulfill psychosocial functions in the absence of a traditional mentor. To the authors' surprise, analyses revealed that those with mentors reported having significantly more psychosocial functions fulfilled by their peers than those without mentors. The authors of the study conclude that these findings suggest that peers serve to fulfill functions that may not be met by mentors and they conclude that even when an individual has a mentor, he/she may still require peer support. These findings serve as a contribution to the body of mentoring research in that they provide evidence that peers provide unique mentoring functions.

Another aspect of this study that should be highlighted is in the definition for mentoring, the authors emphasize the relationship between the two people involved. That is, part of the definition reads “mentoring occurs...in a relationship lasting over an extended period of time and marked by substantial emotional commitment by both parties” (Bowen, as cited in Haggis and Barnes-Farrell, p. 6). In almost all of the studies reviewed thus far, definitions of mentors and mentoring neglect the exchange or relationship between the two people. In addition to this definition provided by Haggis and Barnes-Farrell (1988) that includes the element of the relationship, there are only a few other studies that have included the relationship as part of the definition. In Kram’s (1988) influential work, mentoring was considered to be a developmental relationship that enhances both an individual’s growth and advancement. Kram co-authored an article on peer mentoring where peer mentoring was defined as “a process where there is mutual involvement in encouraging and enhancing learning and development between two peers” (Kram and Isabella, 1985, p.425). Rosenbach (1989) described a mentor relationship as one where “the relationship is based on an intellectual and emotional exchange that offers challenge and excitement” (p. 140). In sum, it is the trust, mutual commitment and continuity between a mentor and a protégé that sets mentoring relationships apart from helping relationships (Duff, 1999; Nolinske, 1995).

Haggis and Barnes-Farrell (1998) contributed much to the understanding of the roles that peers fulfill and mentoring in general. However, a major limitation with this study (Haggis and Barnes-Farrell, 1998) exists. The authors used Kram and Isabella’s work that conceptualizes the mentoring functions fulfilled by peers and did

not use the label “peer mentor” during data collection. As described previously, Haggis and Barnes-Farrell asked respondents whether or not they have “a relationship with a colleague/peer which they felt supports/supported their personal or professional growth” (p.7). Subsequently, it is difficult to conclude whether the concept studied was even peer mentoring at all. As recommended previously, the present author underscores the importance of using the term “mentor” with the respondents during data collection, assuming that it is appropriate for the specific organizational context in which data are collected.

While there is a limited amount of academic research on peer mentoring, the concept of peers as mentors has established legitimacy. In fact, there are now formal peer mentoring programs (Allen et al., 1999) and these authors suggest that a future direction of research would involve a closer examination of the role of peers as mentors. The research reviewed in this section found that even though peers lack organizational influence compared to higher-level employees, peers are perceived to be able to serve as mentors (Haggis & Barnes-Farrell, 1998; Kram & Isabella, 1985; McDougall & Beattie, 1997). Haggis and Barnes-Farrell (1998) developed a quantitative measure to examine peer mentoring that can be used for further investigation.

#### More Junior or Less Experience

A significant development in mentoring that has been introduced into organizational practices is the concept of “reverse mentoring” between a more-experienced and less-experienced individual. The objective of reverse mentoring is for the higher-level person to obtain specific benefits from the relationship. There has

been no academic research on how employees with more experience rely on less-experienced employees for mentoring. General Electric introduced a “reverse mentoring” program that has been positively evaluated anecdotally by the *Wall Street Journal* (2000, February 15). In this case, less experienced employees mentored employees with at least 15 more years experience on using technology, such as the Internet. The more mature protégés learned technical aspects of how to use the Internet and what it can be used for while they gained the confidence that they needed in order to feel more comfortable with this technology. In examining the body of academic research on mentoring and the definition of functions that mentors provide, it is concluded that little is known about “reverse mentoring.” There is no research that has examined the extent to which “reverse mentoring” occurs and what types of functions are being fulfilled. It is unlikely that a less-experienced employee will truly serve as a mentor to a senior employee.

While, these types of “reverse mentoring” programs may be more appropriately named “learning pairs,” perhaps all mentoring relationships have become more reciprocal or mutually beneficial. There has been conceptual work that suggests that more-experienced employees may begin relying on less-experienced employees for support and that today’s mentors are more likely to be co-learners (Kram and Hall, 1997). Also, Mullen and Noe (1999) concluded that mentors seek information from their protégés, such as job performance feedback, social feedback and technical information. “Reciprocal mentoring,” where higher-level mentors receive guidance from less-experienced individuals, implies some shift in the learning

in that there is an element of mutuality that did not exist in Kram's (1988) original work.

#### Location and Proximity: Internal and External Mentoring

The final defining variable for the term mentor is the relative location of the people within the relationship. Ragins and Cotton (1999) described to respondents that their "mentor may or may not be in your organization," recognizing both internal and external (i.e., cross-organizational) mentoring. Other researchers define mentors as members of the *same* organization as the protégé. For example, Chao et al. (1992) explained that "mentorship is defined as an intense work relationship between senior (mentor) and junior (protégé) organizational members" (p.624) and Ragins and McFarlin (1990) defined a mentor as "a high-ranking, influential member of your organization..." (p. 326). Still other researchers argue that individuals outside of the protégé's organization, such as people within the same profession, can serve as mentors (Swerdlik & Bardon, 1988; Kalbfleisch & Davies, 1991).

Some propose that there are meaningful differences between these two mentors that differ by their location. Ostroff and Kozlowski (1993) conducted a study on mentors and organizational socialization. Mentors were defined as only "someone at a higher level than you (in the organization)..." (p. 176). It was argued that unless a mentor who is outside of one's organization previously was employed by the protégé's organization, the outsider's ability to mentor might be severely limited. Aryee, Chay and Chew (1996) underscore this perspective on the value of having a mentor within the same organization. These authors found that managers' motivation to mentor, as measured by their self-report motivation to mentor, was related to

increased opportunities for interaction on the job. In other words, individuals are more likely to mentor if they have interactions with the potential protégés, which suggests that internal mentors have an advantage at establishing and maintaining mentoring relationships due to proximity.

It has been argued that the traditional definition of mentoring, with its assumption of sources only from within the organization, needs modification (Van Eck Peluchette & Jeanquart, 2000). There can be an advantage to having external mentors. External mentors may be invaluable for individuals who desire mobility outside of their own organization. While traditional internal mentors can promote the protégé in terms of promotions with the organization, external mentors can increase the protégé's visibility within the professional, business community, subsequently increasing the protégé's external marketability (Eby, 1997). There are only a couple studies (Catalyst, 1999; Van Eck Peluchette and Jeanquart, 2000) that examined external and internal mentoring. These studies will be discussed in the next section on multiple mentoring.

Thus far, studies on different types of mentors have been reviewed. There is a fair amount of research on formal versus informal mentoring, but there is a limited amount of research that compares peer to higher-level mentors. There has been even less research on the location of the mentor relative to the protégé. Another important and recent change to organizational mentoring research is that individuals are likely to have multiple mentoring relationships concurrently (Eby, 1997). The absence of data on more than one mentor has been described as a limitation of mentoring research that prevents a thorough examination of the process of mentoring (Dreher and Cox, 1996).

### Multiple Mentoring

Conceptualizing mentoring where the protégé can have multiple mentors concurrently is the next most valuable step that mentoring research can take. Higgins and Kram (2001), in a conceptual paper, concluded that mentoring researchers are “ready to consider mentoring as a multiple relationship phenomenon” (p. 266). Higgins and Kram conceptualize multiple developmental relationships as a developmental network, which is a subset of one’s entire social network. These authors explained that the developmental network consists of those relationships that the protégé identifies as being important to his or her career development and these relationships are simultaneously held. This theoretical article provided a context or framework for mentoring as a multiple relationship phenomenon by using core concepts from social networks theories (e.g., Burt, as cited in Higgins and Kram, 2001). There is a very limited amount of research that captures individuals’ experiences across multiple mentoring relationships.

Thomas (1986) gathered data on respondents’ experiences with multiple mentors. In his dissertation study, Thomas focused on answering other questions and the frequency or benefits of multiple mentors were not examined. Thomas recognized that respondents can experience mentoring with more than one person, but in the analysis, each *relationship* was the unit of analysis as opposed to each *respondent* and subsequently, no conclusions were drawn about the frequency or correlates of having multiple mentors. A few authors in the early 1990’s discussed the concept of multiple mentors. First, Burlew (1991) contributed a conceptual piece that concluded different mentoring functions require a different type of mentor with different skills and

knowledge, suggesting that a multiple mentor approach is required. Another published paper a few years later also discussed multiple mentoring relationships (Nolinske, 1995). A multiple mentoring relationship model applicable to fieldwork supervision for students in occupational therapy was posited. It was reported that multiple mentors give the protégé an opportunity to observe how different practitioners approach similar situations and also decrease the likelihood that conflict will occur between the mentor and the protégé, given that the protégé's time is divided among several practitioners (Nolinske, 1995). Neither of these articles was based on studies that gathered data; however, these works laid the groundwork for future research.

Later studies that collected data on multiple mentoring relationships identified the existence of multiple concurrent mentoring relationships. First, Van Eck Peluchette and Jeanquart-Barone (1996, Academy of Management meeting in Cincinnati, OH) studied the careers success of academic faculty members; this presentation was later published (Van Eck Peluchette & Jeanquart, 2000). The sample was comprised of faculty members that were non-mentored and mentored from professionals both inside and outside of their academic institution. Career success was measured with a self-report number of publications and with a subjective career success measure that was adapted from Gattiker and Larwood's measure. A sample item is "I am earning as much as I think I am worth" (p.7). This subjective career success measure assesses individual's perceptions of five facets of his or her career: job, interpersonal, hierarchical, financial and life success. This measure will be discussed in more detail at the end of this chapter.

The sample was mailed survey packets comprised of a self-reported career success scale, as well as the following three mentoring items to assess different mentor sources: 1) “Do you have a mentor within your university?” 2) “Do you have a mentor within your profession, but outside your university?” and 3) “Do you have a mentor outside your professional setting?” These questions required a yes/no response. The sample was comprised of full-time, tenure-tracked faculty members at two state universities. The sample was stratified by rank within departments, represented all disciplines on both campuses and represented professors at three career levels, which was determined by rank of faculty member (i.e., assistant professor, associate professor and (full) professor).

Analysis revealed that assistant professors had mentors from multiple sources more often than any other group. The authors explained that these individuals may establish many mentoring relationships in order to gain the emotional support needed in adjusting to the demands of their new organization and profession. Also, among other findings, assistant and associate professors with mentors from multiple sources were the most productive in terms of research productivity and subjective career success, when compared to their counterparts at the same level with mentors from a single source or with no mentors at all. The majority of full professors did not have mentors and there were no significant differences in research productivity or subjective career success.

One limitation with this study by Van Eck Peluchette and Jeanquart (2000) is that from the research article, it is difficult to ascertain whether participants were provided a definition of mentoring at all. Also, it is unclear whether respondents

knew to report only on current mentors or to include any mentors they had until the current point. Despite these limitations, this study was among the first studies to examine the relationship between career outcomes and different types of mentoring sources, including multiple mentoring relationships. The results demonstrated that people do experience mentoring with multiple people. Van Eck Peluchette and Jeanquart suggest that future researchers should continue to expand on the definition of mentoring to include a variety of possible sources for mentors.

As described in the previous section on the location of the mentor, this study by Van Eck Peluchette and Jeanquart (2000) is one of the only studies that include the location of the mentor as a variable. From an examination of the frequencies, mentoring relationships outside of the university represented 40% of all mentoring relationships. In contrast, in corporate settings and professional services firms, one study found that the percent of internal mentors to be quite high; in fact, it was found that 90% of all mentoring relationships were between protégés and mentors within the same organization (Catalyst, 1999). In sum, the extent to which external mentoring occurs is uncertain and may vary by the type of organization and the type of profession.

Smith-Jentsch et al. (2000, Annual meeting for SIOP, New Orleans) also examined individuals with more than one mentor. The authors conducted a study of peer and hierarchical (i.e., senior-level or higher-level) mentors. They examined the degree to which individuals who have one type of relationship are more likely to have the other type of relationship. The authors also tested whether the two types of mentors explain incremental variance in predicting respondents' intentions to

turnover. Turnover intentions were measured with three items (i.e., I have thought about leaving this organization, I have sought opportunities to leave this organization, I will be working at this organization 2 years from now, which was reversed-scored). The sample was comprised of professionals employed within a single government agency. The sample represented 59% of the organization's total population (n=633). Data collection meetings were held over a two-month period where at least one member of the research team administered the survey. Similar to other research (e.g., White, Dougherty & Dreher, 1991 and Burke & McKeen, 1997), this study did not use the label mentor during data collection, but conceptualized the findings as peer and hierarchical mentoring.

Due to a requirement of the overall organizational diagnosis effort, of which this study was a part, participants were asked to consider "only those experiences they had over the preceding 12 months and only those involving individuals within their own organization" (p. 17). Smith et al. (2000) developed and administered a mentoring measure that asked the following lead-in question: "In the past 12 months I have had peers at work who have..." (p. 39). Participants were given the same measure again and were asked to respond to it with regard to "hierarchical senior individuals" (p. 39). The measure was comprised of 15 items, requiring respondents to indicate the extent to which peers and hierarchical senior individuals fulfilled different mentoring functions.

The authors found a two-factor solution with an overall-peer factor and an overall-hierarchical factor fit the data. These two factors emerged as distinct yet correlated ( $r = .69$ ). This model yielded better fit indices compared to a model of

overall career-related and overall psychosocial mentoring. The fit of the data to the two-factor model indicates that the participants' responses were more distinguished and explained by the two sources for mentoring (i.e., peers and hierarchical senior individuals) compared to how the mentoring functions (i.e., overall psychosocial and overall career-related) explained the data. Two subscales were formed by averaging responses to the peer mentoring items and averaging responses to the hierarchical mentoring items ( $\alpha = .95$  and  $\alpha = .96$ , respectively). Thus, Smith et al. were unable to provide evidence for the separate career-related and psychosocial functions. The fit of the model that demonstrated an overall peer and an overall senior-level factor is not surprising because respondents were asked to "respond to the items while considering experiences they had with any and all peers within their organization..." (p.17). This instruction perhaps created a strong correlation among items even though the items were designed to measure different mentoring functions.

Analysis revealed a positive relationship between the amount of mentoring that individuals received from peers and those received from hierarchical mentors. Regression was utilized to test the hypothesis that mentoring functions by peers would contribute unique variance to the prediction of turnover intentions. The change in  $R^2 = .30$  was significant ( $p < .01$ ). The results suggest that mentoring functions provided by both types of mentors contributed uniquely to decreased turnover intentions, supporting the hypothesis.

This study (Smith et al., 2000) supported the results by Haggis and Barnes-Farrell (1998), which was previously reviewed, that people experience mentoring relationships with both peers and, at the same time, with individuals more senior to

them. However, there are limitations with the methods of this study by Smith et al. First, these authors decided not to use the term “mentor” during data collection, yet the results and the title include the term mentor. Following researchers’ more recent suggestions to use the term and a definition, which was described at the beginning of the chapter (Chao, 1998 and Ragsin 1999), the present author recommends that the term mentor should be used in research.

Also, while Smith-Jentsch et al. (2000) argue for a multiple mentor approach in their review of the literature, the measure developed and used fails to capture respondents’ experiences across multiple relationships. Specifically, the authors point out that a single mentor approach “ignores the fact that individuals may receive mentoring functions from a number of concurrent workplace relationships and that it is the sum total of these mentoring functions that should be the best predictor of organizational outcomes”(p. 5). Unfortunately, their measure does not gather data on mentoring functions from a number of concurrent workplace relationships. Respondents were asked to “consider any and all relationships” with peers and hierarchical senior individuals when responding to the mentoring measure. That is, respondents were required to aggregate the total mentoring received by peers and then again the total mentoring received from hierarchical senior individuals. A more accurate approach would entail a measure that assessed multiple relationships, where respondents could report the level of mentoring received from *each* mentor with whom they currently have a relationship.

Most recently, Higgins and Thomas (2001) used a measure that assessed multiple relationships. These authors used data that Thomas had collected from

1989-1991 at 12 large New York State law firms. In 1997, the authors followed up with a portion of the sample, contributing the first longitudinal study on the benefits of multiple developmental relationships. Employing the multiple mentor survey he developed for his dissertation (Thomas, 1986), information on up to four mentoring relationships was collected. Rather than using the term “mentor” or “senior person,” respondents were asked “to think about individuals who had been influential in their careers to date who took an active interest in and concerted action to advance their careers” and the researchers reported that they “asked for names of people who had provided developmental support, so as not to limit responses to formal or established mentoring programs” (Viator & Scandura, as cited in Higgins & Thomas, 2001, p. 232). The authors conceptualized the people who provide this development support as “developers” and did not use the word “mentor” in the title of their paper.

Information on each developer involved multiple items for psychosocial support, multiple items for career-related support, the organizational level of the developer, and the location of the developer relative to the respondent. Respondents were also asked about their assignments, training, and other work attitudes.

The authors obtained follow-up information from 17% of the original sample. Potential outcomes from mentoring relationships were measured in 1997 and were work satisfaction, intention to remain, organizational retention (i.e., same employer as in 1991), and promotion to partner. Analyses involved predicting these outcomes from their mentoring experiences at the time of the first survey. The authors used several control variables in predicting promotion to partner including law school

attended, firm, and total years of work experience following graduation from law school.

The authors concluded that the results provide evidence that the constellation perspective explains greater variance with respect to protégé career outcomes than does the traditional perspective on mentoring. For example, the number of developers in the protégé's constellation was positively significantly related with intentions to remain and work satisfaction. Also, the total amount of career assistance across all developers was positively related to retention while total amount of psychosocial support was related to work satisfaction. Results also showed that senior-level developers were predictive of career advancement, suggesting that peer mentors do not relate to upward mobility. Finally, the location of the developer (internal versus external to the same firm) was not related to career outcomes. The authors conclude that this study “demonstrates the real merits of including in our research on mentoring the multiple concurrent sources from which individuals receive developmental assistance in their careers” (p. 241).

Higgins and Thomas (2001) provided an important contribution to the study of mentoring by shedding light on the long-term benefits of multiple developers. However, more research is warranted to examine if the notion of “constellations” will generalize to “mentors;” to investigate if multiple mentoring relationships are found to be beneficial in other work settings; and to further explore peer relationships versus relationships with more senior-level or higher-level mentors.

### Moderators of number of mentors

As described in a previously reviewed study, Van Eck Peluchette & Jeanquart-Barone (2000) found that career level moderates the frequency of individuals with multiple mentoring relationships. There has been no research on other possible moderating variables of the frequency of having multiple mentors. However, gender may be another variable that influences the frequency of participating in multiple mentoring relationships. In terms of having a single mentor, research conducted in a variety of professions and organizations concludes women are as likely as men to be involved in a mentoring relationship (Dreher and Ash, 1990; Ragins & McFarlin, 1990; Cox & Nkomo; Turban & Dougherty, as cited in Kram & Hall, 1997 and Koberg, Boss & Goodman, 1998). In contrast, earlier research concludes that women are less likely to obtain a mentoring relationship compared to men (Ragins, 1989; Cook, 1979; Shapiro, Haseltine & Row, 1978). Also, number of previous mentoring relationships has been found to relate to perceived amount of role modeling and career guidance (Fagenson-Eland, Marks & Amendola, 1997). Age and organizational tenure have been discussed as correlates to having a mentor. Kram (1985) proposed that mentor and protégé interactions are more frequent during the protégé's early years with an organization and others discussed the importance of mentoring early in organizational tenure (Louis, 1980) and for those that are younger (Ragins & McFarlin, 1990). There is no research on the relationship with these variables (i.e., prior number of mentors, gender, organizational tenure, and age) with having *multiple* concurrent mentors.

### Outcomes Related to Mentoring

Conceptual work proposed that mentoring provides increased perceived mobility channels and career opportunities for the protégé (Kanter, 1977; Schein, 1978). Rosenbach (1989) maintains that having a mentor is essential for one's personal and organizational growth and development. Research has found mentoring to be related to protégé career outcomes including objective career success such as salary and promotions (Dreher & Ash, 1990; Lee & Nolan, 1998; Orpen, 1995; Ragins & Cotton, 1999; Scandura, 1992), as well as subjective career success self-ratings (Bahniuk, Dobos & Koger Hill, 1990) and perceived career opportunities (Fagenson, 1989). Mentoring was found to have positive correlation to organizational commitment and job satisfaction (Scandura, 1997), and related negatively to role stress (Baugh, Lankau & Scandura, 1996). Multiple mentors have been found to relate to research productivity and subjective career success among professors (Van Eck Peluchette & Jeanquart, 2000). Mentoring has benefited organizations because mentored employees were found to be better socialized and to have "learned the ropes" more effectively (Ostroff & Kozlowski, 1993) and it was found that employees with mentors are less likely to report intentions to leave the organization compared to those without mentors (Koberg, Boss and Goodman, 1998; Scandura & Viator, as cited in Scandura, 1997; Yoder, 1995).

The most significant limitation with the research that has examined the correlates of having mentors is that mentoring often occurs naturally and therefore, there exists difficulty in controlling for these relationships in an experiment. The research often assumes that mentoring is the antecedent and that mentoring *leads to*

the outcome (e.g., career satisfaction, greater compensation, organizational commitment). However, for example, career aspirations may be a result of having multiple mentors or in contrast, people who have great career aspirations for upward advancement may attract multiple mentors.

Another limitation with the research that examined the benefits related to mentoring is that many of these studies did not distinguish between current mentors and past mentors. Studies that include phrases such as “have you or do you have a mentor?” erroneously assume that currently having a mentor is comparable to having one several years previously. As described earlier in the evaluation of literature, the “history of mentoring variable” developed and used in Ragins and Cotton (1999) was a unique approach to obtain information on more than one relationship. The present author agrees with Ragins and Cotton (1999) and others (Baugh & Scandura, 1999) that individuals develop more than one mentoring relationship in the course of their career. However, using self-administered survey methods to study all past mentoring relationships may require a demanding level of recall on the respondents’ part. This demand will be even greater when the sample is comprised of individuals with a relatively long career. Therefore, it is suggested that with self-administered survey methods and when studying samples that are diverse in terms of career length, there should be an emphasis on studying *current* mentoring relationships.

Another compelling reason to focus on current mentoring relationships involves the four phases through which traditional, informal, one-on-one mentoring relationships evolve (Kram, 1988). More specifically, a focus on *current* mentors would likely emphasize relationships that are in phases where mentoring functions are

being fulfilled. These four phases are initiation, cultivation, separation and redefinition. The initiation phase is when the mentor and the protégé develop strong positive evaluations of one another. Cultivation is the phase when the most mentoring occurs. The separation phase is marked with a decrease in mentoring provided and an emotional separation. During the redefinition phase the career and psychosocial mentoring is less evident. Kram (1988) described that after the turmoil of the separation phase, the dominant pattern in the redefinition phase is one of friendship. It is important to note that the establishment of mentoring relationship phases has not been examined or even conceptually generalized to non-traditional mentoring relationships such as peer mentors. The present author agrees with Chao (1997) that the maximum level of mentoring functions provided to the protégé is more important than the temporal fluctuations of these mentoring functions.

When examining the outcomes of *current* mentoring relationships using a cross-sectional research design, the effects of past experiences should be considered when selecting an outcome or correlate variable. For example, variables such as current pay and number of promotions are likely to be greatly influenced by past career experiences. The present author posits that a self-report measure of career success, while subjective, is more reflective of current perceptions and attitudes towards respondents' careers as compared to other outcomes such as current compensation and number of promotions. Furthermore, while current compensation and number of promotions serve as performance indicators, Kogler Hill, Bahniuk, Dobos and Rouner (1989) describe that in addition to performance indicators, the

conceptualization of career success also includes a self-report assessment of career success and satisfaction with the career.

### Self-reported Career Success Measures

Research that has examined employees' perceptions of career success has focused on the respondents' satisfaction with their careers and specifically with their perceptions of upward potential within respondents' current organization. Fagenson (1989) assessed career opportunity/mobility with two items, including "how do you feel about your rate of advancement up the corporate ladder in your organization?" The second item was not reported in the article. More recently, Burke and McKeen (1997) used the Future Career Prospects, which was assessed with four items developed by Greenhaus, Parasuraman and Wormley, as cited in Burke and McKeen (1997). A sample item included, "I have very good prospects for promotion in this company." Self-reported career success is assessed mostly frequently as a component of job satisfaction. For example, the Career Future sub-scale of the IOR, (e.g., Index of Organization Reactions (IOR), Smith, 1962, 1972) assesses an individual's perceptions of his/her career prospects at a given company. A sample item includes, "How do your feelings about your future with the company influence your overall attitude toward your job?" (as cited in Cook, Hepworth, Wall & Warr, 1981). These measures of career success assess satisfaction within the same company to get promotions and move upward.

A limitation with the self-report measures that assess career success as hierarchical movement through an organization is that they neglect to consider the changing nature of careers. Researchers project that the opportunity for the

traditional “climbing the ladder” approach to career advancement is becoming more atypical and the lifetime organizational career will diminish. Cascio (1995) concludes that employees have committed to their own continuous development of their skills, which are often self-taught and relatively easy to transfer to other organizations. Cascio adds that individuals will have to be able to adapt to changing circumstances and to prepare for multiple careers. Also, as organizational structures flatten, as teams continue to be used to complete work, and as the trend toward leaner organizations become a more regular, integral part of organizational life, the nature of careers will continue to change (May, 1997). The existing measures that focus on satisfaction with future career opportunities within one’s current organization assume that people will stay within one organization and neglect other elements that can contribute to perceived career success.

Few studies have treated career success as movement beyond strict hierarchical movement. Gattiker (as cited in Gattiker & Larwood, 1986) utilized open-ended questions to elicit information from employees about their perceptions of career success. The content analyses of these interviews demonstrated that individuals distinguish between career success within the organization and outside it. Gattiker and Larwood (1986) concluded that career success is highly related to life success and perceived job characteristics. As described previously, Gattiker and Larwood developed a five-factor measure, which included job, interpersonal, hierarchical, financial and life success. Each factor is scored separately and range in internal consistency from .67 to .79. Gattiker and Larwood developed this measure in 1986. There has simply been a lack of additional evidence for the five-factor

framework for career success. One possible reason for the lack of support may be that each factor is scored separately, resulting in five separate scores, and researchers do not obtain an overall understanding of respondents' self-reported career success.

Another study, Catalyst (1999), measured self-reported career success and utilized four items to assess respondents' perceptions of career success generally, regarding pay and regarding their opportunities for advancement. This scale (Catalyst, 1999) assessed self-reported career success generally, rather than restricting success to upward movement. Items include, "I feel that I am successful in my career," "I am satisfied with the opportunities that exist in this organization for advancement," "I am satisfied with the pay I receive for my job" and "I am satisfied with my career progress to date." Internal reliability for 4 items that assessed career success was .77. Future research should expand the content domain of career success to include employee's perceptions for movement not only upward but also opportunities for continual learning and opportunities to use, enhance and develop their skills and talents (Hall & Mirvis, 1995).

### Summary

The mentoring literature has benefited from the expertise of academicians from different disciplines who have approached the study of this construct with different methods. "The mentoring literature is an excellent example of the interplay of qualitative and quantitative methodology in the investigation of an organizational process" (Scandura, 1998, p. 450). Kram (1985, 1988) and Kram and Isabella (1988) laid the foundation of research by identifying functions that traditional (i.e., higher-level) and peer mentors fulfill in most mentoring relationships. After their work,

mentoring researchers have been successful at studying working people and have conducted research outside of the student population. In general, the mentoring research may be restricted in that typically data are collected through self-administered survey methods and most often is studied from the perspective of the protégé. Of greater concern is that when mentoring is studied from the perspective of the protégé through self-administered survey methods, respondents are unable to accurately report on current mentoring relationships if they are involved in more than one relationship. Previous research indicates that people do experience mentoring with several mentors concurrently (Higgins & Thomas, 2001; Smith-Jentsch et al., 2000; Thomas, 1986; Van Eck Peluchette & Jeanquart, 2000).

Also, the research reviewed indicates it is important to define for respondents whether a mentor is the same or distinct from managers; whether a mentor can be located outside of the protégé's organization; whether the researcher(s) are interested in formal or informal; and whether peers or subordinates should be included as mentors. Collecting data on these aspects of each mentoring relationship will lead to a greater understanding of mentoring relationships.

Another focus of this review was the peer as a source for mentoring. An important line of research would include an examination of how peers serve as mentors, particularly compared to higher-level mentors. While "reverse mentoring" programs have been introduced into practice, the present author believes that while these types of programs certainly foster a learning environment, mentoring where the protégé is at a higher-level and/or has many more years of experience than the mentor occurs infrequently.

The preceding review introduced a few quantitative measures for mentoring that slightly vary from one another. As reviewed previously, Noe (1988) developed a 2-factor measure and Ragins and McFarlin (1990) developed a measure that scored nine of Kram's (1985, 1988) individual sub-functions subsumed within psychosocial and career-related mentoring. Both of these measures included the term mentor within the instructions on the survey and have primarily been used on samples with traditional, higher-level mentors. Also, both measures gather data on a single mentoring relationship, rather than capturing the respondents' experiences with all current mentors. Haggis and Barnes-Farrell (1998) developed a quantitative measure to capture the functions that peers serve as identified by Kram and Isabella (1985). These factors include psychosocial and career-related functions. The items to assess peer career-related mentoring represent the first effort to quantify this type of peer mentoring. This peer measure did not use the label "peer mentors," but rather asked respondents to respond to the survey regarding "a relationship with a colleague/peer which they felt supports/supported their personal or professional growth" (Haggis & Barnes-Farrell, 1998, p.7). Similar to most measures in the mentoring domain, respondents were asked to select only one mentor on which to report. Finally, two studies (Smith-Jentsch et al., 2000, Annual meeting for SIOP, New Orleans; Higgins & Thomas, 2001) examined multiple mentoring relationships. However, these studies have limitations, which warrant further research on mentoring that incorporates a multiple mentor perspective.

Research in the mentoring domain has been successful at uncovering the different functions that mentors fulfill and there has also been research that developed

measures to examine one-on-one relationships. Also, it has been found that mentoring is beneficial to the protégé in many ways. While there exists a foundation of research, in general, the current state of the literature is poor. Inconsistent definitions and the lack of a solid theory have hindered researchers' progress, because it is difficult to make sense from and build on this disorderly body of research. While researchers have been successful at studying mentoring in actual work settings, there has been a lack of research on mentoring for people who have more than one mentor at the same time. The present study utilized a multiple mentor measure in order to address this major limitation and more accurately assess the mentoring process.

## CHAPTER 3

## The Present Study

Statement of the Problem

The preceding review suggested several needed directions for research. One of the most important limitations of previous research is the manner in which mentoring is studied. Given that it is possible for people to have a mentoring relationship with more than one person at the same time, the present study measured mentoring in a way that captured respondents' experiences with multiple mentors.

In expanding the definition of mentoring, researchers need to proceed cautiously in managing the boundaries of this concept so that the meaningfulness of mentoring relationships is not lost. R. Noe (personnel communication, April 14, 2000) supports the definition of mentoring as existing within a one-on-one, traditional relationship. Noe warned that including all potential career and work related "helping" behaviors will not lead to a better understanding of mentoring, but rather will dilute the meaning of mentoring. Ragins and Cotton (1999) discussed that mentoring is "not an all or none phenomenon; a given mentor may provide all or just some of these functions" (p. 530), suggesting that mentoring exist on a continuum. Kram (1988) did not articulate an idea of mentoring existing on a continuum, but she did posit categories of mentors. She described that primary mentors are more exclusive, intense and rare than are secondary mentors (Kram, 1988). The question remains, however, what essentially defines a mentor as distinct from a helpful colleague? Chao (1998) rhetorically asked, "Can a person serving just one function be more accurately described as a sponsor, guide, supervisor, or peer pal?" (p. 334).

It is evident that managing the boundaries that define mentoring is a great challenge for researchers. However, the present author maintains that a more accurate and expanded definition of mentoring is needed to understand more fully the mentoring process. This definition should be based on the history of research evaluated in the prior chapter. Allen et al. (1999) stated that mentoring may include relationships with both superiors and peers and that peer mentoring should gain credence because of its importance and frequency.

...alternative forms of mentoring, such as peer relationships, appear more likely to occur and more necessary to career development, given the flattening of the corporate hierarchy, the current prevalence of jobs designed around the use of teams (Cohen, 1994), and the growing use of formal mentoring programs with business and academia (1999, p. 454).

As demonstrated in the prior chapter, an improved conceptualization includes peers as a source for mentoring. Also, an improved conceptualization incorporates the fact that individuals may experience mentoring with multiple people at the same time, rather than as an exclusive, one-on-one relationship. It is maintained that the conceptualization of mentoring can change without diluting the distinctness of this type of relationship from other professional relationships. This expanded definition should emphasize the intensity of mentoring relationships and/or that mentoring relationships are marked by trust. In self-administered survey research, a definition that is more inclusive but not entirely inclusive of *all* possible work relationships requires a carefully designed definition. Dreher and Cox (1996) simply informed respondents “while it is possible to have multiple mentors, the nature of these

relationships implies that the number of people appropriately classified as your mentor will be small” (p. 301).

### Overview of the Present Study

The purpose of the present study was to gain understanding of mentoring relationships by measuring participants’ experiences with multiple mentors. A measure of multiple mentoring relationships was adapted from existing measures to allow respondents to report experiences with each mentor. By measuring experiences across multiple mentors, it was expected that an increased understanding of mentoring would be gained.

First, this study examined the relationship between self-reported career success and having multiple mentors. The rationale for including an outcome variable in this study was to provide preliminary evidence for the utility of such an approach to studying mentoring. A better understanding of the relationship between protégé’s career success and the number of their current mentors would provide evidence about the benefits of multiple mentoring relationships.

Second, this study also examined the relationship between protégé’s characteristics and the current number of respondent’s mentoring relationships. While not central to the purpose of this study, two items were developed to assess professional aspiration and a single item assessed the respondents’ attitude about the importance of having a mentor to their success. These concepts were explored to examine their relationship with respondents’ current number of mentors.

Another main purpose of this study was to address the fact that there is a limited body of research that has examined peer mentoring. Past quantitative research

findings suggests that peers are a source for mentoring, but peer mentors have not been compared to higher-level mentors on the mentoring provided. Furthermore, there has been limited previous research that has distinguished among higher-level mentors. Mentors that hold a higher organizational/job level than their protégés can be the protégé's direct manager; higher-level mentors may also be *several* organizational/job levels above their protégés or only *one* organizational/job level higher than their protégés. Previous research suggests that whether the mentor is the protégé's *direct* manager or not can be related to the amount of mentoring fulfilled (Burke, McKenna & McKeen, 1991; Ragins & Cotton, 1999; Ragins & McFarlin, 1990). Therefore, this study investigated whether mentors at different organizational levels provide different degrees of mentoring. Researchers have suggested that increased protégé accessibility to mentors relates to the mentor fulfilling greater levels of mentoring functions (Ragins and McFarlin, 1990). Therefore, the frequency of communication with mentor was used as a covariate.

Given that there is no research on less-experienced/junior mentors and limited research on the location of the mentor relative to the protégé, no hypotheses were developed to examine these issues. The preceding review suggested many possible lines of research. This study represents an initial attempt to integrate the various dimensions or types of mentoring relationships. Given the many possible avenues of research, the variables with limited previous research and that are not crucial to the objectives of this study were excluded from hypotheses and in-depth analyses. More specifically, the locations of the mentor and less experienced/more junior mentors were limited to descriptive analyses.

As stated previously, the main objectives of the research were to study mentoring with a multiple mentor approach and to more fully understand peer mentoring and correlates of multiple mentors. Formal versus informal mentoring was also investigated. In order to accomplish these objectives, several hypotheses and research questions were developed and are presented in the next chapter.

## CHAPTER 4

### Methods

This chapter presents the hypotheses for the study and describes the sample and procedures used. This chapter also describes the procedures and analyses for developing the two mentoring scales: career-related mentoring, psychosocial mentoring. After the development of mentoring scales, the following questions and hypotheses were tested.

#### Hypotheses and Questions

##### Predictors of self-reported career success

There is little research on multiple mentoring relationships. Van Eck Peluchette and Jeanquart (2000) found that among assistant professors, having multiple mentors was related to greater subjective career success. Even though the benefits of multiple mentors in other settings have not been examined, it was hypothesized that similar results would be found and that there is a positive relationship between number of mentors and self-reported career success after considering the effects of age, organizational tenure, gender, and total number of previous mentors.

Hypothesis 1: Respondents' with more mentors will have greater self-reported career success.

##### Predictors of number of mentors

Based on prior research on the effects of job level (Van Eck Peluchette & Jeanquart-Barone, 2000; Ragins & McFarlin, 1990) it was predicted that lower-level respondents have a greater number of mentors.

Hypothesis 2: Protégés that hold positions that are lower-level in the organizational structure will report having more mentors compared to higher-level protégés.

Prior research has mixed findings regarding whether females are as likely as males to have mentoring relationships (Dreher and Ash, 1990; Ragins & McFarlin, 1990; Ragins, 1989; Cook, 1979; Shapiro, Haseltine & Row, 1978 and Koberg, Boss & Goodman, 1998). Respondents' organizational tenure (Colarelli & Bishop, 1990; Louis, 1980; Ragins, Cotton & Miller, 2000) and age (Kram, 1985 and Ragins & McFarlin, 1990) are other variables that are related to mentoring experiences.

Number of previous mentoring relationships has been found to relate to levels of psychosocial mentoring and career guidance (Fagenson-Eland, Marks & Amendola, 1997). However, there are no studies that have examined whether or not gender, organizational tenure, age, or previous number of mentors predict *multiple* mentors; therefore, the relationship between these variables with respondent's current numbers of mentors was investigated as a research question.

Question 1: Is respondents' current number of mentors related to their gender, organizational tenure, age, or prior number of mentors?

There is no research that has examined the relationship between one's attitude about the importance of having a mentor to their success and one's professional aspirations to having a mentor or multiple mentors. Therefore, these variables were added to this research as an exploratory question.

Exploratory Question: How does reported importance of having a mentor to success and professional aspirations relate to respondents' current number of mentors?

The following hypotheses and questions utilize each *relationship* as the unit of analysis.

Organizational level of mentor and mentoring provided

Prior research that has studied protégés' experiences with higher-level (i.e., senior-level) mentors concluded that supervisory/managerial mentors tend to provide more career-related mentoring than non-supervisory, higher-level mentors (Ragins & Cotton, 1999; Ragins & McFarlin, 1990). It was expected that this study would reveal similar findings; that is, higher-level managerial mentors would provide more career-related mentoring than higher-level non-managerial mentors. Higher-level non-managerial mentors included mentors that are *several* job levels above the respondent and *one* level above the respondent.

Hypothesis 3: Managerial mentors provide more career-related mentoring than higher-level, non-managerial mentors.

Prior studies (Ragins & Cotton, 1999; Ragins & McFarlin, 1990) also showed that there were *no* differences in the level of psychosocial mentoring that is provided by managerial versus non-managerial mentors. However, more research is needed to explain this finding and therefore, the psychosocial mentoring provided by managerial versus non-managerial mentors will be explored as a research question.

Question 2: Will managerial mentors or non-managerial higher-level mentors provide more psychosocial mentoring?

There exists a degree of uncertainty regarding the extent to which peers are effective as mentors compared to senior-leveled people, given peers' relative lack of

influence. Given the inherent differences in authority and roles between peers and senior people, it has been proposed that peers provide comparable psychosocial functions to higher-level mentors (Kram & Isabella, 1985). However, there is a lack of research on peers and psychosocial mentoring and therefore, this was explored as a research question.

Question 3: Will peers or higher-level mentors provide more psychosocial mentoring?

While it has been proposed that peers fulfill psychosocial mentoring functions in a comparable way compared to senior level mentors, peers offer different career-related mentoring (Haggis & Barnes-Farrell, 1998; McDougall & Beattie, 1997). Other research suggests that peers lack the experience, influence and/or ability to fulfill career-related mentoring functions (Rosenbach, 1989; Hollander, 1978; and Kram, 1988).

Hypothesis 4: Higher-level mentors provide more career-related mentoring compared to peer mentors.

#### Informal and Formal Mentors and Mentoring Provided

Protégés with formally-assigned mentors experience less mentoring than protégés involved in informal mentoring relationships (Chao, et al, 1992; Ragins & Cotton, 1999). It is expected that the results from this study will be consistent with prior research.

Hypothesis 5: Informal protégés will report a greater level of psychosocial and career-related mentoring compared to formal protégés.

The hypotheses and research questions are restated in Table 1.

### Procedures

The design of this study was a cross-sectional survey method. Prior to the collection of data, proper procedures were followed to obtain authorization from the institutional review board of human subjects at Baruch College. The research was conducted with the support and partnership with a research organization (hereinafter 'the third-party'). With the assistance of the third-party, the present author established contact with four potential organizations for participation in this study. Potential participating companies were reached by voicemail or email and the purpose of the project was communicated to them. Two organizations agreed to participate in this project. Company 1 was a global professional services firm. Company 2 was a Fortune 500 U.S. financial products and services company.

Employee participation in the research was encouraged with an email communication from a representative from each of the participating organizations. The company representative sent survey invitations via email to the invited sample thru their work email addresses. Participants received an email invitation with a hyperlink web-address that when selected, launched Internet Explorer and the survey. Once the web-based survey was launched, respondents were shown a cover letter from the third-party that indicated that participation was voluntary and confidentiality was ensured. This cover letter informed the potential participants that representatives from the participating organization would never have access to the completed surveys and the respondents would not be identifiable to their organization. Contact information (i.e., email address and phone number) for a contact at the third-party was

included so that participants were able to resolve any concerns or ask questions that they may have had. All potential participants received the same instructions and materials. All items were administered in the same order. Follow-up emails were sent approximately one week after the initial email and again about 2 weeks later.

### Sample

Both participating companies selected and invited almost 300 men and 300 women with at least one year of organizational tenure. Invited respondents from Company 1 were U.S. men and women in Client Services from two levels within this organization, senior associate and manager. With these specifications, 300 men were randomly selected. One hundred fifty women were selected from a database of participants of an intra-company network and 150 women were randomly selected. Company 2 selected 537 U.S. men and women from four levels within the company to complete the survey.

In total 1,127 survey invitations were successfully sent. At Company 1, email invitations were sent to 600 employees and ten were not received. One hundred fifty people responded, which was a 25% response rate. At Company 2, 163 people responded, which was a 30% response rate for this company. Eighty-two people logged onto the survey, but did not complete a meaningful amount of data and therefore were considered as incomplete and were not included in the analyses. A total of 314 people completed the survey, resulting in a 28% overall response rate.

Based on previously conducted survey work at the third-party, approximately a 30-35% response rate was expected. Even though a representative who was recognizable to the potential respondents (i.e., an internal representative at each

company) sent the short introductory email message, the response rate is likely negatively impacted given that the survey was administered by an outside organization. Chi-square tests between respondents and non-respondents reveal no significant difference in the proportion of respondents from Company 1 and Company 2. Respondents at both Company 1 and Company 2 were more likely to be women (62% and 64% of the samples, respectively). The total number of returned surveys, 314, provided enough statistical power and met the sample size requirements for the conditional frequencies to conduct univariate analyses (i.e., each cell  $n > 20$  to approach a normal distribution) and for factor analysis (i.e., 10 times the number of factors expected).

### Survey

First, respondents were asked to complete several items that assessed their career and career success. Then, participants were provided with the following definition of mentors.

Mentors are those individuals who serve as coaches, tutors, counselors, sponsors and/or confidants, who take an active interest your development and with whom you have a relationship of mutual trust.

*Note: Mentors can be superiors, peers, or other co-workers, or someone outside of your organization. While it is possible for your immediate manager to serve as a mentor, the standard direct-report/manager relationship, in and of itself, is not a mentoring relationship.*

And then were asked, "Think about your current professional situation. Given the above definition, how many mentors do you currently have?" Previous work by Higgins and Thomas (2001) concluded that four current mentors is a sufficient and appropriate upper limit; thus, respondents were able to report on up to four mentors.

Participants with more than four mentors were asked to select and report on those mentors that influence their career and development the most. Participants were then asked about the characteristics of each mentoring relationship: formality of initiation, organizational level of mentor, and location of mentor. Also, an item was added to assess the frequency of communication with the mentor by email, phone, or in-person was included.

To assist participants in identifying each of their mentoring relationships in terms of the level of their mentor and the formality of initiation, the following descriptions were designed into the web-based survey.

What role most closely describes your mentor?

Several job levels above you, but not Immediate Manager

One level above, but not Immediate Manager

Immediate Manager: Immediate managers are the people who assign work to you and/or to whom you directly report.

Peer: Someone with relatively the same amount of experience and does not have supervisory responsibility for your performance.

More junior or less experience: Someone who holds a position, or is in a role, that requires less experience than yours, but is someone from whom you are able to learn or get support.<sup>1</sup>

How the relationship was initiated?:

Informally: When your relationship developed naturally and/or is not organized or evaluated by your employer.

Formally:<sup>2</sup> Your employer or a professional organization to which you belong may assist and/or match pairs or groups of people for mentoring.

After completing a series of items that measured mentoring characteristics and the psychosocial and career-related mentoring provided by each mentor, these participants were then asked about their personal information/demographics,

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<sup>1</sup> Respondents were given the opportunity to indicate that they have mentors that are more junior than them. This level of the variable was not utilized in analyses.

<sup>2</sup> The programs in which these respondents were involved were not targeted to newcomers and represented several different programs at two different organizations.

including an item assessed the respondent's attitude about the importance of having a mentor to their success. Specifically, respondents were asked, "How important is having a mentor to your success." Responses ranged from 1-5: not at all important; not very important; somewhat important; very important; extremely important. Utilizing web-based survey designs, those that indicated they did not have a mentor skipped these mentoring items and the electronic survey brought them directly to the personal information/demographic questions.

### Measures

#### *Career Success and Career Aspirations*

The self-reported career success measure was comprised of ten items that assessed the respondents' perceptions of their careers and an additional two items were added to the survey that assessed professional aspirations. There is no research on the role that professional aspirations may have on having a mentor, therefore, the relationship between professional aspirations and multiple mentoring was explored. These two items were "my aspirations for professional achievement are high" and "I would like to advance to a position where I can have great influence on policy or strategy decisions." All items on the career scale were measured on a 5-point strongly disagree to strongly agree scale where higher values reflect stronger agreement.

Exploratory factor analysis was used. The self-reported career success items emerged as one factor; the two additional professional aspirations emerged as another, explaining 62.5% of the total variance among these career items. There was a slight,

significant positive correlation between the factors ( $r=.15$ ,  $p<.01$ ). These items and the factor loadings are listed in table 2.

On the basis of the factor analysis results, scale scores were calculated by computing the average of the sum of the items that loaded on each factor. The self-reported career success internal consistency reliability estimate was high, .92. As to be expected because of a low number of items, the internal consistency reliability for the career aspirations factor was lower, .83

### *Mentoring Scales*

To create scales for the mentoring functions, existing measures were used for the primary source for items. More specifically, these items were selected from studies that were used in published studies (Allen, et al., 1999; Noe, 1990; Ragins & McFarlin, 1990), a paper presented at professional conference (Smith-Jentsch, et al., 2000) and a dissertation (Thomas, 1986). Additional items provided by Haggis and Barnes-Farrell (1998) were added to measure the career-related mentoring that peers fulfilled (6 items). These career-related mentoring functions are information sharing, career strategizing and job-related feedback.

The present author reviewed existing items and selected two items for each sub-function that best reflected the description Kram (1988) provided. Items that lacked construct validity evidence from the previous studies were excluded from consideration. Items were also evaluated in terms of standard item writing criteria (e.g., neither double-barreled nor confusing). Given that these items were administered to each person as many as four times (i.e., one time for each mentor), scales scores were created only for overall psychosocial mentoring and overall career-

related mentoring. The number of items necessary to create scores for each mentoring sub-function would have resulted in a lengthy survey that would have likely negatively impacted the response rate.

All items were slightly modified for consistency in tense. Also, items were slightly modified to be applicable to different mentoring types. For example, to make the item “my mentor informs me of the unwritten rules of my organization” applicable to external mentors, the words “or profession” were added to the end of the item. This adapting was important because the items could otherwise be biased against certain types of mentor due to item wording.

Seven subject matter experts (SMEs) reviewed the entire survey packet in order to determine the clarity of the definition and instructions and the appropriateness of the items to represent mentoring. Additionally, SMEs were asked to respond to all parts of the survey, including the definition of mentoring and the cover letter. The average time to complete the survey ranged from 5-20 minutes, depending on the SME’s number of mentors. Slight revisions were made and then redistributed to five additional people for feedback. Next, a small sample of potential participants at each participating organization served as a target group to ensure that the language was consistent with their company’s vernacular. Three people provided feedback at Company 1 and six people provided feedback at Company 2.

Exploratory factor analysis was used to examine the relationship between observed variables (i.e., the items) and the underlying factors. This analysis examined how each of the mentoring items relate and if the items are consistent with

Kram's (1988) framework of two separate but related factors, career-related and psychosocial mentoring.

While the two factors have a strong relationship ( $r=.49$ ), the scree plot, matrices results, eigenvalues, and previous research suggest that the items are best explained with two factors. These two factors explained 63% of the total variance. As expected, the psychosocial mentoring items loaded on one factor, while the traditional career-related items loaded on a second factor. However, the additional "new" peer career-related mentoring items were split; the peer-related mentoring (i.e., career strategizing) loaded with the psychosocial scale and the remaining two "new" peer-career-related items (i.e., providing job-related feedback and information sharing) loaded with the second factor, career-related functions.

This analysis showed that the peer mentoring functions identified by Kram & Isabella (1985) and quantified by Haggis, and Barnes-Farrell (1998) converge with the psychosocial and career-related mentoring functions identified by Kram (1988) and quantified by Allen, et al. (1999); Noe (1990); Ragins & McFarlin (1990); Smith-Jentsch, et al. (2000) and Thomas (1986). More specifically these two factors were: 1) overall career-related mentoring (sponsoring, assigning challenging assignments, exposure and visibility, protecting, coaching, providing job-related feedback, information sharing) and 2) overall psychosocial mentoring (counseling, friendship, acceptance and confirmation, role-modeling, career strategizing). A total of 24 items represent the psychosocial and career-related mentoring scales (10 items and 14 items, respectively). Rotation was used for non-orthogonal factors, which demonstrated stability in the two-factor structure for the mentoring items. Therefore,

scales scores were created for psychosocial mentoring and career-related mentoring by averaging the items that loaded on each factor accordingly. There was high internal reliability for the psychosocial mentoring and career-related mentoring scales (.92, .95, respectively). Table 3 lists the items, the mentoring functions, and the factor loadings for these items.

#### *Characteristics of Mentoring Relationships*

Data were collected on the characteristics of the mentoring relationships. These were two different levels of formality of initiation (formal and informal), five levels of organizational level of mentor (several job levels above respondent, but not immediate manager; one level above, but not immediate manager; immediate manager; peer; more junior or less experience) and four levels of location (internal to the same organization and same office, internal to the same organization and different offices, different organizations, mentor not in workforce). Also, information on the frequency of communication was added ranging from values 1-5 (frequently, about weekly, bi-weekly to monthly, monthly to quarterly, less than quarterly).

#### *Other Items*

An additional 7 items were added for the sole purposes of future research and for company feedback. Specifically, three open ended items, one career item, two background items, and two mentoring characteristic items were included. These items are not included in any analyses for the present study.

This chapter presented the creation of four scales: self-reported career success, career aspirations, psychosocial mentoring functions, and career-related

mentoring functions. The hypotheses and questions presented earlier in this chapter were then tested. The analyses used and results are described in the next chapter.

## CHAPTER 5

### Results

This chapter begins with an overview of the demographic and descriptive results at the two data collection sites. The results for the hypotheses and research questions described in the prior chapter then follow.

#### Demographic Results by Company

The sample at Company 1, the professional services firm, was largely comprised of White/non-Hispanic respondents (81.3% of the sample); in contrast, 46.3% of the respondents at Company 2, the financial products and services company, were White/non-Hispanic respondents. The Company 2 sample was older than the sample at Company 1. Also, the mean number of years of work experience and organizational tenure at Company 2 is greater than the means for the sample at Company 1. There were no differences in the sample in the representation by gender. See Table 4 for demographic results by company.

#### Descriptive Results by Company

Table 5 provides means and standard deviations for the four scales for the total sample and for each company. There were non-significant differences between companies on the means for self-reported career success, career aspirations, and psychosocial mentoring. However, *t*-test of independent means showed that the amount of career-related mentoring for Company 1 was significantly greater than at Company 2 ( $t=4.00, p<.01$ ). Cohen's  $d=.37$ , indicating between a small and medium effect.

Table 6 reports the characteristics of mentoring relationships (i.e., location, initiation of relationship, level of mentor, frequency of communication). Chi-square tests between company and formality of initiation demonstrated that these variables were not associated. Chi-square tests revealed lack of independence (i.e., association) between level of mentors, company and location of mentors, and frequency of communication. For example, respondents from Company 1 (i.e., the professional services firm) were more likely to have their immediate manager as a mentor compared to respondents from Company 2 (i.e., the financial products and services company). That is, 38% of the mentoring relationships at Company 1 are with immediate managers in contrast to 10% at Company 2. Also, respondents at Company 1 are more likely to have a mentor that is in close proximity (i.e., work at their same company at their same location) compared to respondents from Company 2 (i.e., financial products and services company). Moreover, respondents at Company 1 met with their mentors with greater frequency than their counterparts at Company 2.

As indicated in Table 7, chi-square tests showed there is an association between proximity to the mentor and frequency of communication at both companies.

#### Predictors of Self-reported Career Success

Hypothesis 1 stated respondents with more mentors would report greater self-reported career success. Multiple linear regression analyses were conducted for each company, which tested the value of the respondents' current number of mentors in predicting respondents' self-reported career success in addition to respondent gender, organizational tenure, age, and prior number of mentors. The intercorrelation matrix of variables in the regression is displayed in Table 8.

The separate results for Company 1 and Company 2 follow.

*Predictors of Self-reported Career Success Company 1*

As indicated on Table 9, the total  $R^2$  is .16; that is, age and current number of mentors explained a total of 16% of the variance in self-reported career success at Company 1. Age was negatively related to self-reported career success at this company and current number of mentors was positively related to self-reported career success. Respondent's gender, organizational tenure, and prior number of mentors were non-significant.

*Predictors of Self-reported Career Success Company 2*

As indicated on Table 9, the total  $R^2$  is .03; that is, the single significant predictor at Company 2, current number of mentors, explained a total of 3% of the variance in self-reported career success. Respondent's gender, age organizational tenure, and prior number of mentors were non-significant.

Predictors of Number of Mentors

Table 10 displays the descriptive frequencies of respondents' gender, company, organizational level, age, organizational tenure, number of previous mentoring relationships, and attitude about the importance of having a mentor by those with zero, one and multiple mentoring relationships. Among other findings, 58.7% of respondents from Company 1 and 39.3% of the respondents from Company 2 currently have two or more mentors. The relationship between these individual variables with current number of mentors was further examined.

Hypothesis 2 stated that protégés that hold positions that are lower-level in the organizational structure would report having more mentors compared to higher-level

protégés. At Company 1, *t*-test of independent means showed that the mean number of mentors did not significantly vary by respondent organizational level, failing to provide evidence for Hypothesis 2 ( $t = .55$ ,  $p = .58$ ). Cohen's  $d = .09$ .

Hypothesis 2 was not tested at Company 2, because the survey resulted in a large number of missing or incorrect level data at Company 2. While not equivalent to one's organizational level, respondent organizational tenure and age were used as a proxy to organizational level and were included in the following analysis as predictor variables.

Question 1 examined is respondents' current number of mentors related to their gender, organizational tenure, age, or prior number of mentors? At the same time, the analysis included an exploratory question about how the respondents' attitude about the importance of having a mentor and respondents' professional aspirations would relate to respondents' current number of mentors. The inter-correlations of these variables are displayed in Table 11.

The separate results for Company 1 and Company 2 follow.

#### *Predictors of Current Number of Mentors Company 1*

Overall, a total of 17% of the variance in current number of mentors was explained by respondent's age, prior number of mentors, and attitude about the importance of having a mentor. As displayed in Table 11, gender, organizational tenure and career aspirations were non-significant. Results for the final model with all variables entered show that as age increases, the number of mentors decreases. Also, the greater the number of prior mentors predicts the greater the number of current

mentors. Finally, the more importance the respondents placed on mentoring for their success, the greater the number of current mentors they reported.

#### *Predictors of Current Number of Mentors Company 2*

Overall, a total of 17% of the variance in current number of mentors was explained and the regression yielded similar results as Company 1. That is, results for the final model with all variables entered show that as age increases, the number of mentors decreases. Also, the number of prior mentors positively relates to the number of current mentors. Finally, the more importance the respondents placed on mentoring for their success, the greater the number of current mentors they reported.

Table 12 displays the beta coefficients, the  $R^2$  and change in  $R$  statistics for both data collection sites.

#### Types of Mentors and Mentoring Provided

To test the remaining hypotheses and questions, the scale scores for psychosocial mentoring and career-related mentoring were used as dependent variables. As stated previously, the following hypotheses and questions utilized each *relationship* as the unit of analysis. Univariate analyses were conducted to test overall effects of level of mentor and formality of initiation. Interaction terms were not included in the analysis<sup>3</sup>. Frequency of communication was used as a covariate. Covariates are useful when they relate to the dependent variable, but are not of primary interest to the research (Everitt & Wykes, 1999). Covariates investigate the mean scores for groups if the groups' frequency of contact were equal, i.e., the differences on frequency of communication are statistically equated. Frequency of

communication had a small, but significant, relationship with psychosocial mentoring ( $r=.15, p<.001$ ) and a significant, relationship with career-related mentoring ( $r=.37, p<.001$ ), indicating the greater the frequency of communication with mentor, the greater the psychosocial and career-related mentoring received.<sup>4</sup>

#### Level of Mentor and Mentoring Provided

Due to a lack of sample size in the peer mentor condition, the data collection sites were collapsed to test these hypotheses and questions. It was estimated that for these analyses, 64 was the minimum sample size for each conditional frequency.<sup>5</sup>

The adjusted means for career-related and psychosocial mentor by level of mentor are displayed in Table 13 for the total sample and a discussion of these analyses follows.

#### *Level of Mentor<sup>6</sup> and Psychosocial Mentoring*

Level of mentor was comprised of four categories: (1) several job levels above, but not immediate manager (2) one level above, but not immediate manager, 3) immediate manager and 4) peer mentor. A univariate analysis was conducted with frequency of communication as the covariate, level of mentor as the independent/factor variable and psychosocial mentoring as the dependent variable. Results for the analysis of variance on psychosocial mentoring by level of mentor indicated a significant overall effect  $F(3, 474) = 7.56, p<.001$ , indicating significant mean differences on psychosocial mentoring by level of mentor.

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<sup>3</sup> Exploratory analyses suggested a non-significant interaction.

<sup>4</sup> The scale for frequency of communication was reversed so that higher values indicate greater frequency of communication.

<sup>5</sup> Determined considering a medium effect size and  $\alpha = .05$  (Cohen, 1992)

<sup>6</sup> More junior, less-experienced mentors were not included in analyses.

Post-hoc tests examined all mean differences on psychosocial mentoring by the level of mentor. Question 2 asked would managerial mentors or non-managerial, higher-level mentors provide more psychosocial mentoring? As displayed in Table 13, results indicated that managers provided significantly *less* psychosocial mentoring compared to all other levels: 1) several job levels above, not manager; ( $p < .01$ ) 2) one level above, not manager; ( $p < .01$ ) and 3) peer ( $p < .001$ ), controlling for frequency of communication with mentor.

Question 3 asked would peers or higher-level mentors provide more psychosocial mentoring. In addition to the large mean difference between peers and direct managers, peers also fulfilled significantly more psychosocial mentor functions than the two other categories of higher-level mentors i.e., several job levels above, but not manager ( $p < .05$ ) and one level above, but not manager ( $p < .05$ ). These results indicate that peer mentors fulfilled significantly greater psychosocial mentoring functions compared to all levels of higher-level mentors.

#### *Level of Mentor and Career-related Mentoring*

A univariate analysis was conducted on career-related mentoring by level of mentor controlling for frequency of communication. Results for this univariate analysis indicated a significant overall effect  $F(3, 472) = 5.78, p < .001$  suggesting significant mean differences on career-related mentoring by level of mentor. Post-hoc tests examined all mean differences by level of mentor.

Hypothesis 4 predicted higher-level mentors would provide more career-related mentoring than peer mentors. Results were consistent with the hypothesis and indicated that peers provide significantly *less* career-related mentoring compared to

three other level of mentors: 1) several job levels above, not manager; 2) one level above, not manager; and 3) direct manager. That is, the post-hoc analysis found that peers provide the least amount of career-related mentoring- significantly less than all other level mentors ( $p < .01$ ), supporting Hypothesis 4.

Hypothesis 3 stated that mentors that are managers would provide more career-related mentoring than other higher-level mentors (i.e., several job levels above, but not manager and one level above, but not manager). This was not supported once controlling for frequency of communication. Directionally, direct managers provided the most career-related mentoring compared to other higher-level mentors, but when controlling for frequency of communication, these mean differences became non-significant.

#### Formality of Initiation and Mentoring Provided

The second independent variable was the formality of the initiation, which was comprised of two levels: formal and informal. Frequency of communication was used as a covariate for these analyses as well.

Hypothesis 5 stated that informal protégés would report a greater level of psychosocial and career-related mentoring compared to formal protégés. Results indicated a significant overall effect for mean differences on psychosocial mentoring  $F(1, 484) = 47.02, p < .001$  and on career-related mentoring  $F(1, 484) = 21.69, p < .001$  by formality of initiation. Informal mentors fulfilled significantly greater career-related mentoring and psychosocial mentoring functions compared to formal mentors after controlling for frequency of communication with mentor, supporting Hypothesis

5. The adjusted means for career-related and psychosocial mentor by formality of initiation are displayed in Table 14 for the total sample.

## CHAPTER 6

### Discussion

The goal of this study was to contribute to the theoretical foundation of mentoring research, which has implications for the way organizational mentoring is conceptualized in future research and practice. Until now, the vast majority of studies on organizational mentoring is based on survey methods that asked respondents to report only on a single mentor, neglecting to examine mentoring as it occurs for many people. This current study utilized a multiple mentor measure that more accurately assessed the mentoring process and demonstrated that a multiple mentor measure is crucial for a comprehensive understanding of mentoring in the workplace. This chapter summarizes the contribution of the present study, reviews its findings and limitations, suggests directions for future research, and discusses the implications for practice.

### Findings

#### Multiple Mentors

First, other mentoring research that has measured the mentoring provided by only a single mentor is an incomplete account for potentially a large number of people. That is, forty-nine percent of the sample had more than one mentor (i.e., 55% of the men and 45.5% of the women reported two or more current mentors). This finding is comparable to a previous study with attorneys (Higgins & Thomas, 2001), but it shows greater multiple mentors than reported in the academic setting. Van Eck Peluchette and Jeanquart-Barone (2001) found 14% of Professors had multiple mentors, 21% of Associate professors and 28% of Assistant Professors. These two

previous studies serve as a comparison for the present study, but are limited. More specifically, Van Eck Peluchette and Jeanquart-Barone did not collect data on the mentoring functions fulfilled by each mentor, and Higgins and Thomas studied multiple “developmental sources from which individuals receive assistance in their careers,” but not mentors. Therefore, the present study was the first to demonstrate the merit of gathering data on the mentoring functions provided by multiple mentors. The present study provides support to the thesis that a multiple mentoring approach more accurately captures experiences with mentoring.

#### Psychosocial and Career-related Mentoring

This study showed that mentoring is comprised of an overall psychosocial mentoring factor and an overall career-related mentoring factor, which is consistent with prior research (e.g., Allen, et al. 1999; Noe, 1990; Ragins & McFarlin, 1990; Smith-Jentsch, et al., 2000 and Thomas, 1986). More specifically, the first factor was psychosocial mentoring (counseling, acceptance and confirmation, role-modeling, friendship, and career strategizing). Then, the second factor was overall career-related mentoring. This factor was comprised of traditional career-related mentoring (sponsorship, exposure-and-visibility, coaching, protection and assigning challenging work) together with peer career-related mentoring (information sharing and job-related feedback). Kram (1988) described that both traditional and peer career-related mentoring aid in organizational advancement and therefore are more similar than different. The present study was the first to quantitatively measure both traditional and peer career-related mentoring and through factor analysis, support Kram’s assertion.

### Self-Reported Career Success and Correlates of Multiple Mentors

The current study showed that self-reported career success was positively related to number of mentors, supporting Hypothesis 1. In other words, at both organizations, respondents who reported greater career success also reported having more mentors. Other research has found a mentor to be related to protégé career outcomes including self-reported career success (Bahniuk, Dobos & Koger Hill, 1990) and perceived career opportunities (Fagenson, 1989). The finding is also consistent with previous research that found professors with multiple mentors had the highest research productivity and subjective career success compared to their counterparts with a single mentor or with no mentors at all (Van Eck Peluchette & Jeanquart, 2000).

There were differences in the predictors of self-reported career success at the two data collection sites. At the financial products and services company only number of current mentors predicted self-reported career success, whereas at the professional services firm, age also predicted self-reported career success. More specifically, at the professionals services firm, older employees reported less career success. This difference may be due to the influence of different organizational contexts, performance management processes, and career development systems. It may be that at firms, advancement opportunities become increasingly rare as employees age and approach the Partner level; this type of organizational system can influence employees' self-reported career success as employees grow older and move through the ranks. It should be noted that the mean age in years and the age range, as displayed on Table 1, indicated that the respondents were younger at professional

services firm (Company 1) than at Company 2. Therefore, this difference may also be due to the age of the respondents. It is noteworthy, however, that the consistent finding across both organizational data collection sites was the predictive value of current number of mentors in explaining unique variance in self-reported career success. This finding suggests that multiple mentors are related to perceived career success.

#### Predictors of Multiple Mentors

The present study also explored a series of research questions and provided evidence for the predictors of having multiple mentors. These predictors were consistent across both data collection sites and include 1) having prior mentoring relationships, 2) placing importance on having a mentor, and 3) age. The positive relationship between current number of mentors with the number of *prior* mentors is consistent with other research, which concluded prior experience with a mentoring relationship is related to an individual's willingness to enter another mentoring relationship in the future (Ragins & Cotton, 1993). The present study is the first to examine respondent's attitude about the importance of mentoring to success and its relationship with current number of mentors. Results showed that *current* number of mentors is positively related to the respondent's attitude about the importance of having a mentor for their success. These results suggest that some people prioritize having a mentor, because they feel they received benefits from having a mentor in the past. Also, results suggest that a successful mentoring relationship predicts having future mentoring experiences.

The results did not indicate that lower-level respondents have a greater number of mentors, failing to support Hypothesis 2. At Company 1 there were non-significant differences between the lower-level (i.e., Senior Associate) and higher-level (i.e., Manager) respondents. However, given that the Senior Associate level directly proceeds the Manager level, there is likely limited variability in this data to show an effect of level on number of mentors. At Company 2, the organizational level data were not interpretable due to the large amount of missing data and therefore organizational level was not analyzed for Company 2. While there were inconclusive results regarding the relationship between organizational level and the number of mentors, at both data collection sites younger respondents have a greater number of mentors than those who are older. This result may be explained by prior research, which concluded that lower-level employees may establish many mentoring relationships in order to gain the emotional support needed in adjusting to the demands of their new organization and profession (Van Eck Peluchette & Jeanquart, 2000). That is, younger individuals may have more areas and issues for which mentors can provide support, knowledge and guidance and therefore, have more mentoring relationships than older individuals. Also, it is likely that older individuals more often are the mentor rather than the protégé.

#### Level of Mentor and Mentoring Provided

In prior research, the amount of time spent with the mentor has been found to relate to the amount of career-related and psychosocial mentoring provided (Allen, Russell & Maetzke, 1997; Burke & McKeen, 1997; Heimann & Pittenger, 1996). In the present study, frequency of communication related strongly to the amount of

career-related and psychosocial mentoring provided, making this variable an appropriate covariate.

One of the primary objectives of this research was to study peers as mentors. This study showed that peer mentors provided *some* level of career-related mentoring, but are not as effective at fulfilling career-related functions compared to higher-level mentors, supporting Hypothesis 4. Specifically, peers provided significantly *less* career-related mentoring than all other higher-level mentors while controlling for frequency of communication. Other research suggests that peers lack the experience, influence and/or ability to fulfill career-related mentoring functions (Rosenbach, 1989; Hollander, 1978; and Kram, 1988).

While peer mentors were limited in fulfilling career-related mentoring functions, peers mentors fulfilled the *most* psychosocial mentoring functions compared to *all* higher-level mentors. Results also indicated that direct managers provided the least amount of psychosocial mentoring compared to all other level mentors. These findings provide support for prior qualitative research, which concluded protégés may be more inhibited and reluctant to be open about weaknesses with their higher-level/more senior mentors. Peer mentoring provides an opportunity to admit weaknesses (McDougall and Beattie, 1997) and to obtain a point of view from someone who comes from a comparable place in the organization or profession (Kram and Isabella, 1985). Perhaps protégés are less willing to rely on their direct managers for the type of support that may make them appear like they are experiencing problems or difficulties. That is, managers can make many decisions about the short-term and long-term tasks and projects for their direct reports and the

protégé may risk future projects or credibility if they reveal too much to their managerial mentor. Alternatively, the interactions between individuals and their direct managers may be almost entirely task-focused, which can come at the expense of having discussions that are psychosocial in nature.

Lastly, contrary to what was expected, the present study found that higher-level mentors, (i.e., several levels above but not direct manager; one-level above but not direct manager; or direct manager) provided similar levels of career-related mentoring while controlling for the effects of frequency of communication. That is, managerial and non-managerial higher-level mentors did *not* differ significantly on the career-related mentoring functions they fulfilled and therefore, hypothesis 3 was not supported. The mean scores were in the hypothesized direction, where managerial mentors had the highest means, suggesting these mentors provide the most career-related mentoring. However, the effect of level among the higher-level mentors was not strong enough to support the hypothesis when controlling for the frequency of communication. Therefore, the lack of significance may be explained by a lack of statistical power or it may suggest that when controlling for frequency of communication, higher-level mentors fulfill similar levels of career-related mentoring.

#### Formality of Relationship and Mentoring Provided

The results of the present study also indicated that formality of the initiation of the relationship strongly related to the amount of mentoring provided, supporting hypotheses 5. As hypothesized, informal mentors were found to fulfill greater levels of both psychosocial and career-related mentoring after controlling for frequency of

communication. Prior research has consistently found that protégés with informal mentors report receiving more career-related mentoring than protégés with formal mentors. Also, previous research found that the amount of psychosocial mentoring informal mentors provide approached a significant difference compared to the amount received by formal mentors (Chao et al, 1992; Ragins & Cotton, 1999). While informal mentors fulfill more mentoring functions than formal mentors, formal mentors can fulfill some career-related and psychosocial mentoring functions (Chao, et al., 1992; Noe, 1988; and Ragins and Cotton, 1999). While the results of the present study suggest that formal mentoring lacks a quality that occurs in informal mentoring, formal programs can be used to support organizational change efforts (Eby, 1997), for example, to develop a work environment where mentoring occurs naturally. Also, formal mentoring programs should not be considered a substitute for informal mentoring, but rather should be offered in partnership with informal relationships (Ragins & Cotton, 1999).

#### Limitations with the Present Study and Future Research

Despite the proliferation of research on mentoring during the past decade, more research should be conducted on the alternative forms of mentoring and the nature of these relationships. While the present study greatly contributes to our understanding of multiple mentoring and peer mentoring, some limitations exist, substantiating the importance of more research of this kind. First, the sample was comprised of the “target” population for both participating companies and the response rate raises some concern for the generalizability of results. First, while these limitations are recognized, the two field settings in which data were collected yielded

relatively high external validity of the results to other large organizations as compared to the generalizability of a student sample. Respondents' organizational tenure varied and employees were from different workgroups at one company and different levels at the second company. In other words, the sample was comprised of individuals that conduct different types of activities and are diverse in terms of years of work experience. It is suggested that future research examine multiple mentoring relationships among employees from another industry to examine the generalizability of the results and to make additional effort to achieve a higher response rate. To increase the response rate, researchers can add communication materials to the process. First, a pre-survey letter could improve the interest in participating in the survey. Also, communication that encourages participation from a high level executive rather than a functional or departmental manager, which were the roles of the contacts in the present study, could positively influence the response.

Another limitation of this study is its susceptibility to mono-method bias and mono-source bias. Even though methodological steps were taken to facilitate accurate self-reports, such as confidentiality and voluntary participation, these procedures do not rule out the biases associated with self-report measures, including socially desirable answers. Despite this common limitation, self-report survey methods continue to be utilized because they do provide great insight on individuals' perceptions. Future research should examine the benefits of multiple mentoring relationships by collecting outcome measures from another source besides the respondent (e.g., employee records). Also, studies on mentoring from the perspective of the mentors continue to be underrepresented. While this study provided evidence

that individuals do indeed have mentoring relationships with multiple mentors, future research should examine multiple mentoring from the perspective of the mentor.

Because this study utilized cross-sectional design, causality cannot be assessed. A limitation of the mentoring research in general is that mentoring often occurs naturally and therefore, there exists difficulty in controlling for them in an experiment. Of course, research that focuses solely on an evaluation of a mentoring program can use experimental and quasi-experimental designs (see Seibert, 1999). However, when studying informal relationships, researchers are restricted in the methods from which to choose. Researchers warn the relationship between mentoring and work outcomes should be interpreted with caution, because the non-experimental methods preclude causal conclusions (Burke & McKeen, 1997). For example, the findings of the present study may suggest that self-reported career success is a result of having multiple mentors or in contrast, successful people may attract multiple mentors. The lack of control of employees' informal relationships is a methodological limitation that precludes the use of random assignment for experimental and quasi-experimental methods. Future research can focus on the evaluation of formal mentoring programs, utilize quasi-experimental methods and subsequently can make causal conclusions about the effects of formal mentoring. Allen et al. (1999) evaluated a formal mentoring program using cross-sectional data collection methods. Collecting pre-test data in addition to post-test data will improve the conclusions that can be drawn from such studies.

Given that some topics were outside of the domain of the present study, this study did not look in-depth at several different areas, on which future research would

provide greater insight. This study did not analyze the more-junior mentor in depth. Only 2 percent of all mentoring relationships were between the respondent and someone more junior to them. "Reciprocal mentoring," or "reverse mentoring" where senior-level professionals receive support from less-experienced individuals have received some attention (Catalyst, 2002; Wall Street Journal, 2000, February 15) and imply some shift in the learning in that there is an element of mutuality that did not exist in Kram's (1988) original work. Future research should examine the concept of mutuality, which deals with the extent to which there is a two-way exchange in the relationship. It is of interest to consider the idea that all mentoring relationships have gained an element of mutuality, whether the mentor is a peer, manager, or other higher-level individual.

Future research should explore the extent to which being in the same organizational location or increasing communication between a mentor and protégé can improve mentoring relationships. This study indicated that protégés who work in the same location as their mentor are more likely to meet several times per week and about weekly; in contrast, those respondents who do not work in the same location as their mentors are more likely to meet less frequently. Future research on this area could potentially influence the structure of formal mentoring programs; mentors and protégés may be advised to communicate on a regular, frequent basis. In contrast, for example, regular and frequent communications may not necessarily be beneficial; some research has demonstrated that protégés with formal mentors in their same department expressed significantly less satisfaction with the relationship than those with mentors outside of the department (Ragins et al., 2000). Researchers should

continue to investigate the individual and organizational factors that contribute to successful formal mentoring relationships, including the relative location of the mentor and protégé and their frequency of contact, because there is a need to more fully understand the reasons for the relative lack of effectiveness of formal mentors compared to informal ones.

Future research should also examine organizational factors that relate to mentoring relationships between employees and their immediate managers. This study found that respondents at the professional services firm were more likely to report that their immediate managers serve as their mentor compared to respondents at the financial products and services company. Perhaps the project team structure or managerial training at the professional services firm facilitates mentoring between employees and their direct managers. Conversely, perhaps geographic dispersion of employees at the financial products and services company hinders these types of mentors; most mentoring relationships at this data collection site were with mentors in a different location. Also, the respondents varied demographically by company. For example, the respondents at the financial products and services company were more likely to be an ethnic/racial minority and on average were ten years older than the respondents at the professional services firm. Additional research is needed to examine how personal demographic variables may relate to having a manager who also is a mentor.

Finally, more research can be conducted on the correlates of having a mentor. The present study found that at both data collection sites, organizational tenure, gender, and career aspirations did not predict current number of mentors. Other

authors have called for more research on the relationship between personality traits and mentoring (Ragins & Scandura; 1999; Fagenson, 1992; Turban & Doherty, 1994).

### Implications for Practice

Organizations must recognize the importance and benefits of multiple mentors for their employees. The results show the positive relationship between current number of mentors and self-reported career success, which included feeling favorably about future career opportunities, skill development, and success relative to peers.

Results also indicated that the more a respondent felt that having a mentor is important for success, the greater their current number of mentors. This finding suggests that communicating and conveying the value of mentoring in organizations may increase the mentoring that occurs in the work environment. Prior research had recommended that counselors and human resource management professionals could provide information to individuals who would then be more likely to take the initiative to seek out alternative sources for mentoring relationships such as peers or professional associations (Eby, 1997). In addition to communicating the benefits of mentoring relationships, organizations can do more to convey the organization's support for the natural development of mentoring relationships. For example, organizations can recognize these relationships' through the performance appraisal system, integrate mentoring initiatives as part of the career development program, and create informal opportunities for employees to interact (Ragins, 1997). Findings also indicated that having multiple mentors varies by age. The results of the present study do not suggest that older, more experienced employees would *not* benefit from

multiple mentors, but rather, the findings simply demonstrate that younger employees employ this approach more often than older employees. Perhaps older employees have a more difficult time finding a mentor given there are fewer people with more experience than they have. Organizations should consider encouraging and educating *all* their employees about peer mentoring. Alternatively, older employees may feel they have reached a point where they do not need a mentor. Organizations should target these individuals to become mentors to multiple protégés.

The present study found that the organizational level of the mentor related to the amount of career-related and psychosocial mentoring functions fulfilled after controlling for the effects of frequency of communication. For example, mentoring initiatives in organizations should consider the limited role that peers have to fulfill career-related mentoring functions. While peers can provide some career-related mentoring, the present study shows the value of peer mentors to fulfill psychosocial functions. Recognizing that their protégés may be apprehensive about sharing problems or challenges that are psychosocial in nature with higher-level mentors, direct managers and other higher-level mentors can first encourage open dialogue or alternatively, connect their protégés with peers or recommend professional associations or networks where the interaction with peers will be greater.

Finally, even though results showed that informal mentors provide more mentoring than formal mentors do, it is important for organizations to recognize formal mentoring as one of many relationships of which employees can be a part. Organizations seeking to develop formal mentoring programs should consider how

increased frequency of communication between mentor and protégé relates to greater amount of mentoring provided.

The results of this study can inform organizations of the mentoring alternatives to traditional, one-on-one mentoring relationships and can help practitioners with the development and design of mentoring programs and initiatives. In addition to practical issues, this study addressed the limitations with the understanding and knowledge of mentoring in the body of research. This study expanded the definition of mentoring to include a variety of possible sources for mentors, including peers. This study also sheds light on the frequency and correlates of multiple mentoring relationships. It is well recognized that the construct of mentoring has a wide variety of meanings. This study is the first to take a comprehensive assessment of experiences across current mentoring relationships. This assessment confirmed the conclusion drawn from an evaluation of the body of research. That is, mentoring exists in many forms and can be offered by a variety of people.

Table 1  
Hypotheses and Research Questions

*Predictors of self-reported career success*

Hypothesis 1: Respondents with more mentors will report greater self-reported career success.

*Predictors of number of mentors*

Hypothesis 2: Protégés that hold positions that are lower-level in the organizational structure will report having more mentors compared to higher-level protégés.

Question 1: Is respondents' current number of mentors related to their gender, organizational tenure, age, or prior number of mentors?

Exploratory Question: How does reported importance of having a mentor and professional aspirations relate to respondents' current number of mentors?

*Characteristics of mentoring relationships and mentoring provided*

*Level of mentor*

Question 2: Will managerial mentors or non-managerial higher-level mentors provide more psychosocial mentoring?

Hypothesis 3: Managerial mentors provide more career-related mentoring than higher-level, non-managerial mentors.

Question 3: Will peers or higher-level mentors provide more psychosocial mentoring?

Hypothesis 4: Higher-level mentors provide more career-related mentoring compared to peer mentors.

*Formal versus Informal mentors*

Hypothesis 5: Informal protégés will report a greater level of psychosocial and career-related mentoring compared to formal protégés.

Table 2  
Factor Loadings for Career Success and Career Aspiration Items

	Factor 1	Factor 2
I am able to make progress toward my career objectives through the work that I do.	<b>.859</b>	.107
I am satisfied with the opportunities that I have to develop my skills.	<b>.809</b>	.060
My job gives me a chance to do challenging work.	<b>.800</b>	.042
My job gives me the chance to learn new skills and develop my talents.	<b>.799</b>	.001
I am satisfied with the advancement opportunities in this organization.	<b>.746</b>	.248
In comparison to my peers, I feel successful in my career.	<b>.742</b>	.085
I have good prospects for promotion in this company.	<b>.720</b>	.204
I am satisfied with my career progress to date.	<b>.718</b>	.268
I have developed skills that will help me to gain opportunities in the future.	<b>.693</b>	.164
The type of work that I do interests me.	<b>.598</b>	.168
I would like to advance to a position where I can have great influence on policy or strategy decisions	.196	<b>.878</b>
My aspirations for professional achievement are high.	.211	<b>.860</b>

Table 3  
 Mentoring Items, Functions and Factor Loadings for Career-Related and Psychosocial

Survey item	Sub-function	Initial Function	Fac 1 career	Fac 2 psych
<i>My mentor...</i>				
... is someone I can confide in.	Friendship	PSYC-SOC	.282	<b>.856</b>
... and I discuss things that I can't talk about to most people.	Friendship	PSYC-SOC	.236	<b>.828</b>
... serves as a sounding board for me.	Counseling	PSYC-SOC	.388	<b>.820</b>
... is someone with whom I identify.	Role-modeling	PSYC-SOC	.390	<b>.810</b>
...demonstrates good listening skills in our conversations.	Counseling	PSYC-SOC	.367	<b>.756</b>
... helps me define my career goals or professional roles.	Career Strategizing	PEER-CR	.598	<b>.713</b>
... discusses career advancement strategies with me.	Career Strategizing	PEER-CR	.451	<b>.713</b>
... thinks highly of me.	Acceptance & Confirmation	PSYC-SOC	.499	<b>.706</b>
... is someone I try to be like.	Role-modeling	PSYC-SOC	.519	<b>.703</b>
... has asked me for suggestions regarding issues she/he has encountered at work.	Acceptance & Confirmation	PSYC-SOC	.454	<b>.560</b>
... provides me with opportunities to learn new skills.	Assignment of Challenging Work	TRAD-CR	<b>.837</b>	.302
... helps me attain desirable assignments or positions.	Sponsorship	TRAD-CR	<b>.824</b>	.274
... brings my accomplishments to the attention of important people.	Exposure and Visibility	TRAD-CR	<b>.794</b>	.410
... uses his/her influence for my benefit.	Sponsorship	TRAD-CR	<b>.782</b>	.413
... finds ways to increase my contact with key people	Exposure and Visibility	TRAD-CR	<b>.779</b>	.411
... challenges me to learn new skills.	Assignment of Challenging Work	TRAD-CR	<b>.777</b>	.432
... shares knowledge about work-related matters.	Information Sharing	PEER-CR	<b>.759</b>	.546
... provides me with job performance feedback.	Job-related Feedback	PEER-CR	<b>.753</b>	.365
... critically reviews my work.	Job Related Feedback	PEER-CR	<b>.751</b>	.278
... helps me get through challenging tasks.	Protection	TRAD-CR	<b>.747</b>	.622
... helps me avoid pitfalls or potential problems.	Protection	TRAD-CR	<b>.690</b>	.682
... shares strategies for how to get things done around here.	Coaching	TRAD-CR	<b>.670</b>	.595
... shares information that has helped in getting my job done.	Information Sharing	PEER-CR	<b>.649</b>	.597
... informs me of the unwritten rules of my profession or organization.	Coaching	TRAD-CR	<b>.604</b>	.556

Table 4  
Summary of Personal Demographics for Sample by Total and by Company

	Total N=313	Company 1 n=150	Company 2 n=163
Sex			
Male	35.7%	37.6%	34.0%
Female	64.3%	62.4%	66.0%
Race/ethnicity			
American Indian/Native American	0%	0%	0%
Asian-American/Pacific Islander	9.2%	11.1%	7.5%
Black/African-American	22.0%	2.8%	39.4%
Hispanic	5.9%	4.9%	6.9%
White/non-Hispanic	62.8%	81.3%	46.3%
Organizational level at Company 1 from lower to higher level			
Senior Associate	--	36.1%	--
Manager	--	63.9%	--
Organization level at Company 2 from lower to higher level			
Level 3	--	--	6.7%
Level 4	--	--	16.0%
Level 5	--	--	25.2%
Level 6	--	--	12.9%
Missing (other or incorrect data)	--	--	39.2%
Age in Years			
Mean (sd)	36.6 (8.2)	31.7 (5.8)	41.3 (7.4)
Range		24-50	23-64
% younger than 30	27.2%	49.0%	6.5%
% 31-39	37.9%	42.8%	33.3%
% 40+	34.9%	8.2%	60%
Years of work experience			
Mean (sd)	11.4 (6.81)	7.7 (4.3)	14.9 (6.88)
Range		2-30	1-35
% 5 or less years	22.9%	36.9%	9.9%
% More than 5; less than 15	43.2%	55.7%	31.7%
% 15 or more years	33.9%	7.4%	58.4%
Years of organizational tenure			
Mean (sd)	5.87 (3.83)	5.17 (2.48)	6.51 (4.67)
Range		1-14.08	.92-28
% 4 or less years	38.9%	38.3%	39.5%
% More than 4; less than 7 years	27.7%	32.9%	22.8%
% More than 7 years	33.4%	28.9%	37.7%

Table 5  
Summary of Descriptive Statistics for Study Measures for Total and by Company

Total	N	Mean (range)	Sd
Self-reported career success <sup>a</sup> ( $\alpha = .92$ ); 10 items	313	3.69	.74
Career Aspiration <sup>a</sup> ( $\alpha=.83$ ); 2 items	313	4.21	.81
Psychosocial mentoring <sup>a</sup> ( $\alpha=.92$ ); 10 items	493	3.69	.86
Career-related mentoring** ( $\alpha=.95$ ); 14 items	493	3.39	.97
Company 1			
Self-reported career success	150	3.77 (2.0-5.0)	.69
Career Aspiration	150	4.26 (1.0-5.0)	.77
Psychosocial mentoring	267	3.66 (1.2-5.0)	.86
Career-related mentoring	267	3.54 (1.0-5.0)	.92
Company 2			
Self-reported career success	163	3.61 (1.5-5.0)	.77
Career Aspiration	163	4.18 (1.0-5.0)	.84
Psychosocial mentoring	226	3.72 (1.0-5.0)	.85
Career-related mentoring	226	3.20 (1.0-5.0)	1.00

<sup>a</sup> non-significant differences by company

\*\*mean scores significantly different by company ( $t=4.00$ ,  $p<.01$ ).

Table 6  
Summary of Percentage Frequency of Mentoring Relationships Characteristics by Total and by Company

	Total N=487	Company 1 n= 265	Company 2 n= 222
Location of Mentor <sup>7</sup>			
Same org./same site (close proximity)	52.6%	<b>67.9%</b>	<b>34.2%</b>
Different location	47.5%	<b>32.1%</b>	<b>65.7%</b>
Same org./different site	25.9%	21.9%	30.6%
Different org.	18.3%	7.9%	30.6%
Mentor not in workforce	3.3%	2.3%	4.5%
Mentoring relationship started...			
Informally	64.7%	<b>68.3%</b>	<b>60.4%</b>
Formally	35.3%	<b>31.7%</b>	<b>39.6%</b>
Organizational/job level of mentor <sup>8</sup>			
Several job levels above, but not immediate manager	31.5%	<b>28.0%</b>	<b>35.6%</b>
One level above, but not immediate manager	28.8%	<b>22.3%</b>	<b>36.5%</b>
Immediate manager	25.1%	<b>37.9%</b>	<b>9.9%</b>
Peer	12.3%	<b>9.5%</b>	<b>15.8%</b>
More Junior or Less Experience <sup>9</sup>	2.3%	<b>2.3%</b>	<b>2.3%</b>
Frequency of communication by email, phone or in-person <sup>10</sup>			
Frequently	32.6%	<b>42.3%</b>	<b>20.9%</b>
About weekly	16.9%	<b>19.2%</b>	<b>14.1%</b>
Bi-weekly to monthly	20.2%	<b>16.6%</b>	<b>24.5%</b>
Monthly to quarterly	24.1%	<b>15.8%</b>	<b>34.1%</b>
Less than quarterly	6.2%	<b>6.0%</b>	<b>6.4%</b>

<sup>7</sup> Chi-square test between percent with close proximity vs. different location by company was significant (p<.01).

<sup>8</sup> Chi-square test between levels of mentor by company was significant (p<.01).

<sup>9</sup> Due to low sample size and purpose of this study, these relationships were excluded from all additional analyses.

<sup>10</sup> Chi-square test between frequency of communication with mentor by company was significant (p<.01).

Table 7  
Location of Mentor and Frequency of Communication by Company

Company 1	Location of Mentor	
	Same location	Not working at same site
Frequency of communication by email, phone or in-person**		
Frequently	52.8%	20.0%
About weekly	18.9%	20.0%
Bi-weekly to monthly	10.6%	29.4%
Monthly to quarterly	11.1%	25.9%
Less than quarterly	6.7%	4.7%
Company 2		
Frequency of communication by email, phone or in-person**	Same location	Not working at same site
Frequently	44.7%	8.3%
About weekly	18.4%	11.8%
Bi-weekly to monthly	21.1%	26.4%
Monthly to quarterly	13.2%	45.1%
Less than quarterly	2.6%	8.3%

\*\* Chi-square test between frequency of communication and location of mentor is significant ( $p < .01$ ).

Table 8  
Inter-correlation Matrix for Variables in Multiple Regressions Explaining Self-reported Career Success

	Company 1	1	2	3	4	5	6
1	Career Success	1.0					
2	Current mentors	.31**	1.0				
3	Age	-.22**	-.26**	1.0			
4	Organizational Tenure	.12	-.04	.20*	1.0		
5	Gender	-.12	-.06	.05	-.26**	1.0	
6	Prior # of mentors	.17*	.26**	.1	.22**	-.07	1.0
	Company 2	1	2	3	4	5	6
1	Career Success	1.0					
2	Current mentors	.17*	1.0				
3	Age	-.03	-.27*	1.0			
4	Organizational Tenure	.01	-.03	.30**	1.0		
5	Gender	-.03	.04	.08	-.05	1.0	
6	Prior # of mentors	.07	.19*	.08	.04	.04	1.0

\*p<.05

\*\*p<.01

Table 9  
Summary for Multiple Regression Predicting Self-reported Career Success

Company 1		Beta <sup>11</sup>	R <sup>2</sup>	Δ R <sup>2</sup>
Step 1	Organizational tenure	.128	.016	.016
2	Gender	-.082	.030	.014
3	Age	-.172*	.080	.050**
4	Number of prior mentors	.100	.108	.028*
5	Number of current mentors	.252**	.162	.054**
Company 2				
Step 1	Organizational tenure	.035	.002	.002
2	Gender	.007	.002	.000
3	Age	.013	.003	.001
4	Number of prior mentors	-.009	.004	.001
5	Number of current mentors	.173*	.030	.026*

(\*p<.05;\*\*p<.01)

<sup>11</sup> Standardized regression coefficients reported

Table 10  
Number of Mentors for Total Sample by Respondent Individual Variables

	None, currently no mentors	1 mentor	2 or more mentors
Gender			
Male (n=111)	18.9%	26.1%	55.0%
Female (n=200)	20.0%	34.5%	45.5%
Company			
1 (n=150)	11.3%	30.0%	58.7%
2 (n=163)	27.6%	33.1%	39.3%
Level of Respondent			
Senior Associate (n=63)	20.6%	25.4%	54.0%
Manager (n=123)	14.6%	30.9%	54.5%
Level 3 (n=11)	18.2%	45.5%	36.4%
Level 4 (n=26)	15.4%	42.3%	42.3%
Level 5 (n=41)	29.3%	36.6%	34.1%
Level 6 (n=21)	33.3%	28.6%	34.1%
Age of Respondent			
% younger than 30 (n=81)	7.4%	33.3%	59.3%
% 31-39 (n=113)	13.3%	28.3%	58.4%
% 40+ (n=104)	35.6%	31.7%	32.7%
Years of organizational tenure			
% 4 or less years (n=121)	16.5%	35.5%	47.9%
% More than 4; less than 7 years (n=86)	22.1%	26.7%	51.2%
% More than 7 years (n=104)	22.1%	29.8%	48.1%
Number of prior mentors			
% Zero; no previous mentors (n=129)	11.6%	23.3%	65.1%
% 1-2 (n=262)	15.3%	18.3%	66.4%
% 3 or more (n=156)	4.5%	11.5%	84.0%
Importance of mentor			
% Not at all/not very important (n=23)	17.4%	13.0%	69.6%
% Somewhat important (n=133)	21.8%	25.6%	52.6%
% Very/ extremely important (n=399)	7.3%	15.5%	77.2%

Table 11

Intercorrelations of Variables Explaining Current Number of Mentors

	Company 1	1	2	3	4	5	6	7	8
1	Current mentors	1.0							
2	Organizational level (not used in analyses)	-.05	1.0						
3	Organizational Tenure	-.04	.44**	1.0					
4	Gender	-.06	-.15	.26**	1.0				
5	Age	-.26**	.35**	.20*	.05	1.0			
6	Career Aspirations	.07	.13	-.09	-.18*	-.12	1.0		
7	Importance of mentor	.25**	.17*	.06	-.01	-.08	.23**	1.0	
8	Prior # of mentors	.26**	.17*	.22*	-.07	.10	-.12	.27**	1.0
	Company 2	1	2	3	4	5	6	7	7
1	Current mentors	1.0							
2	Organizational level (not used in analyses)	-.10	1.0						
3	Organizational Tenure	-.03	.24*	1.0					
4	Gender	.04	-.03	-.05	1.0				
5	Age	-.27*	.15	.30**	.08	1.0			
6	Career Aspirations	.16	.22*	-.15	-.25**	-.10	1.0		
7	Importance of mentor	.18*	-.13	-.12	.10	.04	.20*	1.0	
8	Prior # of mentors	.19*	.17	.04	.04	.08	.10	.18*	1.0

\*p&lt;.05

\*\*p&lt;.01

Table 12

Summary of Regression Predicting Number of Current Mentors

Company 1		Beta <sup>12</sup>	R <sup>2</sup>	$\Delta R^2$
	Organizational tenure	-.064	.002	.002
	Gender	-.050	.008	.006
	Age	-.255**	.069	.061**
	Career Aspirations	-.008	.070	.000
	Importance of Having a mentor	.174*	.125	.055**
	Number of prior mentors	.240**	.174	.049**
Company 2				
	Organizational tenure	.115	.000	.000
	Gender	.014	.000	.000
	Age	-.324**	.083	.083**
	Career Aspirations	.067	.099	.016
	Importance of Having a mentor	.203*	.148	.049**
	Number of prior mentors	.161*	.172	.025*

\*p&lt;.05

\*\*p&lt;.01

<sup>12</sup> Standardized regression coefficients reported

Table 13

Summary of Adjusted Means for Psychosocial and Career-related Mentoring by Level of Mentor

	Adjusted mean Psychosocial mentoring	Adjusted mean Career-related mentoring
Several levels above, but not manager	3.77*	3.48
One level above, but not manager	3.72*	3.39
Manager	3.43**^	3.57
Peer	4.04	2.99**

\* significantly less than peer mentors (p<.05)

^ significantly less than peer mentors (p<.001)

\*\*significantly less than other senior level mentors(p<.01)

Table 14  
Summary of Adjusted Means for Psychosocial and Career-related Mentoring by  
 Formality of Initiation

	Adjusted mean Psychosocial mentoring	Adjusted mean Career-related mentoring
Informal	3.89	3.54
Formal	3.35***	3.14***

\*\*\*significantly less than informal mentoring relationships ( $p < .001$ )

eta for psyc and formal= .11

eta for formal and career = .17

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