Transformational leadership, learning goal orientation, and expectations for career success in mentor–protégé relationships: A multiple levels of analysis perspective

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Abstract

Prior research has assumed that traditional mentor–protégé relationships based on mutual learning and development orientations operate at the dyadic level of analysis. This study examines this assumption by providing a multiple levels of analysis (individual and dyad) test of the relationships among learning goal orientation, transformational leadership, and expectations of career success (career achievement, development, and balance) reported by 217 mentors and their protégés from 11 different industries. Results of within and between analysis (WABA) indicated that learning goal orientation/transformational leadership and transformational leadership/expected career balance relationships were based on differences between dyads. Learning goal orientation/expected career success and transformational leadership/expected career achievement and development relationships were based on differences between individuals. Implications for research and practice on mentoring relationships are discussed.

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"People who look through keyholes are apt to get the idea that most things are keyhole shaped.” —Unknown

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1. Introduction

Social cognitive theories of career development highlight the importance of learning and developmental relationships in elevating expectations of career success (Lent, Brown, & Hackett, 1994). Mentoring relationships in organizations represent learning and developmental relationships (Higgins & Kram, 2001). Several theories have been proposed to describe how mentor–protégé relationships form based on mutual learning and development orientations; those include theories of mentoring functions (Kram, 1985), personal learning (Lankau & Scandura, 2002), human development (Levinson, Darrow, Klein, Levinson, & McKee, 1978), social support or helping (McManus & Russell, 1997), leader–member exchange (Thibodeaux & Lowe, 1996), and transformational leadership (Sosik & Godshalk, 2000). These theories assume that the traditional mentor–protégé relationship is a dyadic-level phenomenon that develops based on mutual personal learning and development orientations of the mentor and protégé and has outcomes for both parties.

To date, this assumption has not been specified explicitly in the conceptualization of mentoring nor has it been tested explicitly in empirical work on mentoring. However, as noted by several writers (e.g., Dansereau, Alutto, & Yammarino, 1984; Glick & Roberts, 1984; Klein & Kozlowski, 2000; Rousseau, 1985), levels of analysis must be a part of both conceptualization and testing of constructs. Failure by prior researchers to address this issue is unusual since the traditional form of mentoring has typically been described as a dyadic exchange relationship that develops based on perceived similarity and mutual attraction (Ragins, 1997) and offers benefits to both mentors and protégés (Kram, 1985). This view would be manifested in between-dyad differences and within-dyad agreement in responses of mentors and protégés and indicate that mentoring relationships may operate at the dyadic level of analysis.

Other research streams indicate that mentors and protégés bring their own unique personal characteristics (e.g., Dreher & Cox, 1996), attributional, perceptual, and cognitive processes (Mullen, 1994; Ragins, 1997), and expectations (Ragins & Scandura, 1994) into their relationships. These personal attributes would be manifested in individual differences in responses of mentors and protégés and therefore indicate that mentoring relationships may operate at the individual level of analysis. Overall, therefore, these competing theoretical explanations suggest that mentoring relationships may operate at the individual and dyadic levels of analysis and beg for specification and examination of level of analysis issues in mentoring studies. Unfortunately, a complete investigation of boundary conditions for mentoring models, expressed as levels of analysis, which include a priori hypotheses and measures from multiple levels of analysis, has not yet been reported in the literature. Moreover, most previous research has examined same-source protégé or mentor ratings of variables associated with mentorship (Ragins, 1997).

To address these concerns, in the present study, two alternative levels of analysis (individuals and mentor–protégé dyads) are specified and examined with different-source (mentor and protégé) data to assess relationships among transformational leadership, learning goal orientation, and expected career success, variables associated with the traditional form of mentorship. Accordingly, we followed recommendations outlined in Klein and Kozlowski (2000) and others to explicitly consider levels of analysis issues in conceptualization and testing of these relationships. We hypothesize and test the relationships between these constructs at the individual level (the typical approach used in the literature) before asserting and testing them at a higher level of analysis (i.e., the dyadic level where the literature suggests the traditional form of mentoring relationships should operate).
The present study is valuable from both practical and theoretical viewpoints. Because organizations are increasingly using mentoring programs to enhance their human resources and organizational learning (Lankau & Scandura, 2002), our study would be helpful to developers and administrators of mentoring programs responsible for cultivating the social capital of their organizations. For example, whereas prior research has found a positive relationship between the presence of a mentor and protégés’ reports of expected career success, little is known about the developmental behaviors that help shape such expectations. Our study contributes by evaluating whether transformational leadership behaviors displayed by mentors may be associated with the expectations for career success of the protégé held by protégés and their mentors.

An additional unique contribution of this study is its combining investigation of social cognitive/learning perspectives of transformational leadership in mentoring relationships, learning goal orientation, career expectations, and levels of analysis. Our study identifies boundary conditions and appropriate levels of analysis for specifying and testing relationships between variables proposed in models of mentoring (Kram, 1985) and career development (Lent et al., 1994), and differentiates between mentoring-related constructs that operate based on differences between individuals and dyads. Most mentorship research has focused on the individual level of analysis, while describing traditional mentorships as dyadic relationships. To our knowledge, this study is the first to examine levels-of-analysis issues from both theoretical and data-analytic perspectives in the mentoring literature, and the first to respond to calls to tease out the effects of individual and dyadic attributes in the mentoring relationship (Ragins, 1997). Without an explicit accounting for levels of analysis, both conceptually and empirically, knowledge of mentoring relationships is inadequate and incomplete.

2. Theoretical background

Lent et al.’s (1994) social cognitive model of career development, based upon the work of Bandura (1986), provides the theoretical grounding for the present study. This framework emphasizes the means by which individuals learn to develop expectations of career success through personal and extrapersonal (e.g., social support) factors that heighten or lower expectations of success. Specifically, this framework proposes that personal and extrapersonal characteristics of a learning relationship influence the learning experience, which in turn influences the learner’s beliefs about his/her ability and expected outcomes. These beliefs are proposed to influence career decision-making and goal attainment directly and indirectly through enhanced interest. The present study examines associations of mentors’ and protégés’ personal (learning goal orientation) and extrapersonal (mentors’ transformational leadership) characteristics with expected outcomes (career success for protégés) in terms of both individual and dyad levels of analysis.

Social cognitive theory of career development holds that goals are important for the motivation of behavior and interpretation and reaction to career outcomes (Lent et al., 1994). Learning goal-oriented individuals believe that ability can be developed and therefore exert the effort needed to develop ability, and seek to develop themselves by improving their abilities, acquiring new skills, and mastering new solutions (VandeWalle, Ganesan, Challagalla, & Brown, 2000). They are optimistic, hopeful, value challenging tasks, and raise expectations for success by maintaining task interest, remaining persistent, and escalating effort (Dweck, 1999). Learning goal orientation is a relatively stable dispositional trait that describes the extent to which individuals strive to understand something new or increase their level
of competence in a given activity (Button, Mathieu, & Zajac, 1996). Social cognitive theory suggests that such an orientation would facilitate developmental relationships such as mentoring (Bandura, 1986).

Mentoring involves an individual with more advanced experience and knowledge (mentor) who assists a less-experienced and knowledgeable individual (protégé) with personal and professional development (Levinson et al., 1978). Mentors encourage protégés to value learning by imparting wisdom about the norms, values, and mores that are specific to the organization and help advance the protégé’s career (Lankau & Scandura, 2002). Kram (1985) identified two broad functions that mentors provide to protégés: career development (i.e., sponsorship, exposure and visibility, coaching, protection, challenging assignments) and psychosocial support (i.e., role modeling, acceptance and confirmation, counseling, friendship). The career development functions provide vocational support and are associated with protégé outcomes such as job and career satisfaction, career balance, and increased expectations of career success (Ragins, 1997). Social cognitive theory suggests that social support systems (e.g., mentoring) offer role modeling and transformational behaviors that can elevate protégés’ expectations of career success.

Expectations of career success include three broad dimensions that influence individuals’ career decision-making and behavior: career achievement (e.g., reputation, learning from role), career development (e.g., promotion, growth opportunities), and career balance (e.g., work–family balance and well-being; Stephens, Szajna, & Broome, 1998). Social cognitive theory considers such expectations to include anticipated results and the value of these results to the individual, both of which may be influenced by significant others (e.g., mentors).

2.1. Mentoring and transformational leadership

There are both developmental differences and similarities between mentoring and transformational leadership. We discuss these topics in the following paragraphs and conclude that transformational leadership provides mentors with several developmental behaviors that they may display while interacting with their protégés.

2.1.1. Developmental differences

Mentoring transcends organizational boundaries and is involved with the professional and personal development of others over time. In contrast, transformational leadership usually occurs within organizational boundaries (Bass, 1985), and may involve shorter duration than mentoring relationships that usually last 6–8 years (Kram, 1985). Mentors may or may not be transformational leaders, depending on the extent to which they display transformational behavior. Transformational leaders generally influence groups of followers, but also use individualized forms of influence (Bass, 1985; Dansereau et al., 1995) as in traditional one-on-one mentoring relationships. Thus, mentoring and transformational leadership are conceptually distinct constructs, but they share several similarities (Scandura & Schriesheim, 1994).

2.1.2. Developmental similarities

Prior research suggests that mentoring functions and transformational leadership may share similar developmental natures, functions, and outcomes (Scandura & Schriesheim, 1994; Sosik & Godshalk,
Transformational leadership involves broadening and elevating followers’ goals and providing them with the values, enhanced skills, and confidence to go beyond minimally acceptable expectations of performance (Bass & Avolio, 1997). In their review of the mentoring and leadership literatures, Sosik and Godshalk (2000) concluded that mentors might exhibit various degrees of leadership behavior. Other writers have expressed similar conclusions. Allen, Poteet, Russell, and Dobbins (1997, p. 2) pointed out that mentoring others leads to “enhancement of leadership skills for mentors.” Bass (1985) suggested that mentors produce developmental effects on protégés when they display transformational behaviors such as individualized consideration and idealized influence. Gladstone (1988) argued that mentors behave as leaders when they shape values, act as examples, and define meaning for protégés.

“Mentor” is a formal or informal title/role that one takes on for the career development of the protégé, whereas “transformational leader” is a title/role that involves a (dyadic) developmental connection between individuals. Both mentoring and transformational leadership are developmental in nature because they promote learning and growth of others through the provision/display of various degrees of functions or behaviors. Transformational leaders value learning and development of followers by inspiring, intellectually stimulating, and serving as coach, teacher, and mentor (Scandura & Schriesheim, 1994). Similarly, mentors value personal learning by offering functions such as challenging job assignments that help advance the protégé’s career and coaching for achieving goals of recognition and success within the organization (Kram, 1985). Both transformational leadership and mentoring follow the principles of social cognitive theory (Bandura, 1986) because both mentors and transformational leaders act as role models who encourage learning and development, and work to develop others’ self-confidence, personal identity, and well-being. Thus, transformational leaders likely serve as mentors, and mentors likely exhibit various degrees of transformational leadership behavior.

2.1.3. Transformational leadership behaviors

According to social cognitive theory (Bandura, 1986), individuals acquire values, skills, and standards of behavior through basic social learning processes (e.g., vicarious learning, verbal persuasion) involving interactions with significant others (e.g., mentors). Transformational leadership offers mentors several behaviors to initiate and maintain developmental relationships by imparting values and standards of behavior. As a result, protégés are likely to perceive their mentors as displaying various degrees of transformational leadership behavior (i.e., idealized influence, individualized consideration, intellectual stimulation, inspirational motivation).

Idealized influence entails role modeling exemplary personal achievements, values, and/or behavior. Such behavior allows the protégé to identify with the mentor as someone who has the potential to advance the protégé’s career. Individualized consideration involves coaching, counseling, and giving personal attention to others. Such behavior encourages protégés to value learning and may raise expectations for career success. Intellectual stimulation enables others to question assumptions, to try new things, and to think of old problems in new ways. Such behavior instructs protégés to take on challenging assignments, acquire new knowledge, skills, and abilities, or to creatively balance one’s professional and personal life. Inspirational motivation entails communicating high performance expectations that activate self-fulfilling prophecies for individuals. This behavior allows the protégé to be confirmed and accepted as an important organizational contributor and to expect and work toward achieving career-related goals.

Each of the transformational behaviors has been conceptually and empirically linked to the provision of mentoring functions (Scandura & Schriesheim, 1994; Sosik & Godshalk, 2000). Thus, we focus our
theory development and testing on the application of transformational leadership by mentors who value learning as a way to heighten expectations of career success for protégés.

3. Hypotheses

3.1. Transformational leadership and learning goal orientation in mentoring relationships

Social cognitive theory proposes that personal (e.g., learning goal orientation) and extrapersonal social support (e.g., transformational leadership) factors operate as mechanisms that influence each other bidirectionally. As such, the learning goal orientations that mentors and protégés bring with them into their relationship may be associated with transformational leadership displayed by mentors for several reasons. First, both learning goal orientation and transformational leadership produce high levels of intrinsically motivated effort exerted by individuals (Bass, 1985; Dweck, 1999). According to social cognitive theory, such effort raises expectations of success. Heightened levels of intrinsic motivation and expectations of success are outcomes associated with the idealized influence component of transformational leadership. Learning goal-oriented mentors are likely to display idealized influence behavior by acting as inner-directed and mastery-seeking role models from whom much can be learned by learning goal-oriented protégés (Bass, 1985).

Second, the inspirational motivation component of transformational leadership instills faith in a better future, increases the intrinsic value of task accomplishment, emphasizes the symbolic and expressive aspects of work effort, and raises expectations of success (Shamir, House, & Arthur, 1993). Learning goal-oriented mentors (protégés) are poised to use (appreciate) these forms of motivation because inspiration, optimism, hope, and intrinsic motivation are closely intertwined. Social cognitive theory suggests that inspirational motivation is also likely to increase the relative value or importance of attaining career success for the protégé (Lent et al., 1994). Third, mentors and protégés who seek to develop themselves are likely to value the intellectual stimulation component of transformational leadership, because it promotes personal learning and skill development and activates achievement motives underlying learning orientations (Dweck, 1999).

Whereas learning goal orientation and transformational leadership have not been previously empirically connected, learning goal orientation has been empirically linked to leader consideration (VandeWalle et al., 2000). Leader consideration in a mentoring context would entail the mentor counseling and confirming the protégé’s self-worth and showing consideration for the protégé’s feelings. Such consideration parallels psychosocial support functions of mentoring and the individualized consideration component of transformational leadership, which is based on developing others’ competencies, coaching, and attending to socioemotional needs of others. Mentors who display individually considerate behavior possess a developmental orientation that is consistent with learning goal orientation’s emphasis on striving to increase one’s competencies. Learning goal-oriented individuals value learning and acquiring new competencies. Thus, learning goal-oriented mentors (protégés) are poised to use (appreciate) these forms of consideration. They are also likely to raise expectations for success through escalating effort (Dweck, 1999).

Moreover, the conceptual overlap of learning goal orientation and transformational leadership noted above and prior research based on social cognitive explanations of career development (e.g., Lent et al., 1994) suggest that protégés who are high on learning goal orientation are likely to be associated with
mentors who display high levels of transformational leadership and hold heightened expectations of career success for the protégé. Stated differently, learning goal-oriented protégés and mentors are likely to value the display of transformational behavior that raises expectations of career success for the protégé. When a protégé possesses a high level of learning goal orientation, the mentor is likely to recognize this and therefore have higher expectations for the protégé’s career success based on the positive (i.e., developmental) aspects of learning goal orientation discussed above. Taken together, these arguments suggest the following hypotheses:

**Hypothesis 1.** Mentors who are high in learning goal orientation will be rated by their protégés higher on transformational leadership than will mentors who are low in learning goal orientation.

**Hypothesis 2.** Mentors of protégés who are high in learning goal orientation will have higher expectations for their protégés’ career success than will mentors of protégés who are low in learning goal orientation.

What mentors who display transformational leadership expect of their protégés may influence the protégés’ motivation and performance. Reviews of the transformational leadership literature conclude that transformational leadership raises followers’ expectations for success through elevating of performance standards, Pygmalion effects, confidence-building, and empowering (Dvir, Eden, Avolio, & Shamir, 2002). Applied to mentoring, transformational leadership may influence how mentors and protégés view the probability of career success for the protégé. For example, increased confidence and empowerment, encouraged through a mentor’s inspirational motivation, may promote protégés’ striving for a certain level in the organization, or other organizational measures of achievement (e.g., promotions). Based on their high levels of self-confidence, mentors who have transformational leadership qualities may also have higher expectations for their protégés than those who lack these qualities (Bass, 1985).

As discussed above, career balance (e.g., work–family balance and well-being) is an aspect of career success (Stephens et al., 1998). Social learning of life lessons and important values, role modeled through a mentor’s idealized influence, may also broaden the way protégés define career success, to include balancing work and nonwork activities. Bass (1985) proposed that transformational leadership elevates others’ needs in Maslow’s (1954) need hierarchy from base to higher order needs, which include social needs (e.g., paying more attention to the family). Both Bass (1985) and Burns (1978) argued that transformational leadership is morally uplifting in the sense that it promotes more collectivistic values (e.g., adopting more other-oriented and family values). Bass and Avolio (1990) argued that the individualized consideration behaviors component of transformational leadership provides support for individuals who are at different career and developmental stages. Such behaviors include appreciating the unique needs and desires of others, showing empathy for a person’s work and life situation, and establishing a plan to address potential work overload.

Allen (2001) reported that such social support provided by supervisors was negatively related to work–family conflict. Moreover, Shamir et al. (1993) noted that transformational leadership frames others’ work as identity-affirming activities. Thompson and Bunderson (2001) argued that the framing of identity-affirming activities promotes work and nonwork balance; when people spend their time in identity-affirming activities, they will perceive more balance in life domains. Based on
these arguments and research based on social cognitive theory noted above, we propose the following hypothesis:

**Hypothesis 3.** Protégés who rate their mentors higher on transformational leadership will have mentors who possess higher expectations for their protégés’ career success than will protégés who rate their mentors lower on transformational leadership.

### 3.2. Levels of analysis considerations

*Levels of analysis* refer to entities or objects of study that are typically arranged in hierarchical order such that higher levels (e.g., dyads) include lower levels (e.g., individuals), and lower levels are embedded in higher levels. Levels of analysis are included in theories (i.e., relationships among variables) and provide a way to specify **boundaries**, or limits within which a theory is expected to hold (Dansereau et al., 1984). For example, a theory may hold for traditional mentor–protégé relationships (i.e., dyads) but not for multiple-mentoring relationships (i.e., groups or networks).

In mentoring research, there have been calls to incorporate levels of analysis as a way to improve specifying and testing theoretical models (Higgins & Kram, 2001; Ragins, 1997). Unfortunately, these calls have gone unheeded despite the fact that there is a lack of a clear specification of the boundary conditions on mentoring theory. However, in transformational leadership research, levels of analysis issues are receiving increased conceptual and empirical attention, and results suggest both individual-level (e.g., Dansereau et al., 1995; Yammarino & Dubinsky, 1994) and dyad-level (e.g., Yammarino, Dubinsky, Comer, & Jolson, 1997) boundaries. Given these contrasting results and linkages between mentoring and transformational leadership noted above, in the section below we use the mentoring and transformational leadership literatures to propose competing hypotheses for testing individual- and dyad-level relationships. Competing hypotheses involve choosing which one of a set of alternative formulations appears to be more plausible (Chamberlin, 1965; Dansereau et al., 1984).

Our rationale for testing for individual- and dyad-level effects of mentoring is based upon **role theory** that asserts early in the role making process, the partners of the dyad form beliefs about the abilities and attitudes of each other and form expectations about the outcomes of the relationship (Graen & Scandura, 1987). Role theory is consistent with social cognitive theory that highlights a variety of cognitive, vicarious, and self-reflective processes (Bandura, 1986). The similarity–attraction paradigm further strengthens the theoretical underpinning for these views of mentoring by suggesting that partners of the dyad are attracted to each other based on similarity of attitudes and beliefs (Byrne, 1971). We suggest that the quality or richness of the mentoring relationship is based upon the degree of mentor–protégé agreement regarding learning goals, transformational leadership, and expected career outcomes for the protégé.

Agreement relates to the traditional social psychological notion of “balance” in interpersonal relationships (Graen & Scandura, 1987). According to this perspective, there should be similarity or agreement on important abilities or attitudes among the parties within an interpersonal relationship (dyad). For example, when mentors and protégés are in agreement about the amount or degree of giving and receiving of learning and development, the quality of the relationship is better and the outcomes are enhanced. A lack of agreement (or imbalance) implies a mismatch of the learning and development given to and received from the mentor and protégé, a lower quality relationship, and poorer outcomes for both. Even if the degree or amount of learning and development is low for both the mentor and protégé, yet still in agreement or balance, the relationship may be beneficial to both. It is the imbalance or lack of
agreement that can lead to difficult relationships (Atwater & Yammarino, 1997; Dansereau et al., 1995; Godshalk & Sosik, 2000; Kram, 1985).

Specifically, a general lack of mentor–protégé agreement indicates an individual-level view of the traditional form of mentoring, whereas general agreement indicates a dyadic-level view of mentoring. Stated differently, individual-level effects are based on an individual differences view, and therefore the issue of agreement is irrelevant and cannot be assessed. Dyadic-level effects are based on a dyad level of analysis, which means an agreement or bonding has occurred on the variables or associations of interest. Thus, the individual differences view means no agreement, and dyadic-level view means agreement (Dansereau et al., 1984).

Evidence suggests that mentoring, when linked to transformational leadership, can operate based on individual differences. Mentors and protégés bring their own unique personal characteristics (Dreher & Cox, 1996), attributional and perceptual processes (Ragins, 1997), information processing (Mullen, 1994), and expectations (Ragins & Scandura, 1994) into their relationships. These personal attributes would be manifested in individual differences in responses of mentors and protégés. Some prior research (e.g., Dansereau et al., 1995; Yammarino & Bass, 1990; Yammarino & Dubinsky, 1994) indicates that transformational leadership and its outcomes are based solely on individual differences, and therefore provide indirect empirical support for theoretical explanations of mentoring, when linked to transformational leadership, as an individual-level phenomenon.

The individual differences views indicates that protégés and mentors perceive learning goals and developmental behavior independently and are not in agreement regarding learning goal orientation, transformational leadership, and expectations for career success for the protégé. Independent individuals (protégés and mentors) are the focus for understanding learning goals and developmental behavior in mentoring relationships. This suggests the following hypothesis:

**Hypothesis 4.** Relationships among learning goal orientation, transformational leadership, and expectations for career success for the protégé in the context of mentoring dyads will hold at the individual level of analysis; that is, they are based on individual differences of mentors and protégés.

Alternatively, the dyad level, or differences between dyads, may serve as a basis for the traditional form of mentoring, when linked to transformational leadership. Mentors and protégés are assumed to form a dyadic or interpersonal relationship based on perceived similarity and attraction (Ragins, 1997), mutual learning (Kram, 1985), agreement on developmental behavior (Godshalk & Sosik, 2000), shared expectations (Young & Perrewe, 2000), and higher order exchanges of career-related benefits (Noe, 1988; Scandura & Schriesheim, 1994; Thibodeaux & Lowe, 1996).

Empirical support for a between-dyads view of learning and development in mentoring relationships is provided by Thibodeaux and Lowe (1996) who reported a higher order exchange of career-related benefits to be associated with mentoring functions, consistent with the leader–member exchange theory’s notion of in-group membership. In-group relationships are characterized by mutual trust, respect, liking, similarities in attitudes and beliefs, and reciprocal influence. In Thibodeaux and Lowe’s study, in-group members described their relationships with their supervisors as high-quality mentoring relationships providing career development functions, emotional support, and self-concept enhancement, whereas out-group members did not. In addition, Yammarino et al. (1997) found that transformational leadership processes for female sales managers with their male and female sales representatives were based on differences between dyads.
Allen, Poteet, and Burroughs (1997) reported that learning orientation is a protégé attractiveness feature that helps to initiate and maintain mentoring relationships and that a focus on increased learning is a positive benefit for mentors. These findings and considerable evidence supporting the similarity-attraction paradigm (e.g., Byrne, 1971; Hunt & Michael, 1983) suggest that the initiation and maintenance of mentor–protégé relationships may be a function of shared learning goal orientations by mentors and protégés. Based on these findings, we expected interpersonal attraction based on similar learning goal orientations to foster mentor–protégé compatibility, result in rapport to encourage accurate perceptions of leadership and, consequently, enhanced expectations of protégé success, as manifested in a between-dyads view of mentoring.

The between-dyads view indicates that protégés and mentors within each mentoring dyad perceive learning goals and developmental behavior similarly, and are in agreement regarding learning goal orientation, transformational leadership, and expectations for career success for the protégé. However, interactions differ from dyad to dyad, and higher level (e.g., industry) membership is not relevant for understanding the mentoring relationships. There is mutual control and influence by mentors and protégés within each dyad. In other words, independent, interpersonal relationships (involving protégés and mentors) are the focus for understanding learning goals and developmental behavior in mentoring relationships. This suggests the following competing hypothesis to Hypothesis 4:

**Hypothesis 5.** Relationships among learning goal orientation, transformational leadership, and expectations for career success for the protégé in the context of mentoring dyads will hold at the between-dyads level of analysis; that is, they are based on differences between mentor–protégé dyads (and agreement within dyads).

### 4. Method

#### 4.1. Sample and procedure

Two-hundred forty-five adult students enrolled in a masters of business administration program in a large public university in the northeast were invited to participate in the study for course credit. The final sample consisted of 217 participants, because 23 potential participants were not involved in a mentoring relationship and 5 potential participants’ questionnaires were unusable as a result of missing data. Participants were *full-time corporate employees* from various industries who were currently involved in either formal or informal mentoring relationships. The industries included mining (1%), construction (3%), manufacturing (24%), transportation/communications/public utilities (9%), wholesale trade (2%), retail trade (2%), financial/insurance (11%), real estate (11%), health and legal services (24%), government (3%), and biotechnology (10%). Study variables were not significantly different across the industry categories.

Mentoring relationships ranged in length from 1 to 15 years, with an average of 2.7 years. Participants ranged in age from 21 to 56 years, with an average age of 31. They had worked, on average, 4.8 years with their companies and had a range of company tenure from 4 months to 25 years. Sixty-one percent of the participants were male, and the vast majority (82%) was Caucasian. The remaining 18% of the sample consisted of African American (3%), Hispanic (1%), Asian (12%), and nonresponding (2%) participants.
Data were collected through two questionnaires, which were distributed to participants in class, completed outside of class, and returned directly to the researchers. The first questionnaire was completed by the protégé and included items measuring the protégé’s learning goal orientation and expected career outcomes, the mentor’s leadership behaviors, and demographic information. A definition of mentoring was provided to participants both orally prior to distribution of the questionnaires, as well as written on the survey forms:

Mentoring relationships are characterized by a close, professional relationship between two individuals—one usually more senior in some regard. The mentor and protégé may or may not be with the same company. Mentoring is defined as a pairing of a more skilled or experienced person with a lesser skilled or experienced one, with the goal [either implicitly or explicitly stated] of having the lesser skilled person grow and develop specific career-related competencies. Your mentor may or may not be your manager (Kram, 1985).

Participants responded as protégés and handed out a second questionnaire to their mentors. The second questionnaire, completed by the protégé’s mentor, included items measuring learning goal orientation, leadership behavior, expected career outcomes for the protégé, and demographic information. This questionnaire was mailed by each mentor directly to the researchers using a preaddressed, stamped return envelope. Eighty-four percent (182 participants) were in informal mentoring relationships while 16% (35 participants) were in formal mentoring relationships. Forty-seven percent of mentors were supervisors of the protégés. Ninety percent of the mentors held at least first-line management positions where leadership behavior is expected. Study variables were not significantly different across the mentor’s management level, informal versus formal, or supervisory versus nonsupervisory relationship categories.

4.2. Measures

4.2.1. Learning goal orientation

Mentors’ and protégés’ self-reported learning goal orientation were measured using eight items developed by Button et al. (1996). A sample item reads “The opportunity to learn new things is important to me.” Prior research suggests that learning goal orientation may be a multidimensional construct (Pintrich, 2000). However, results of principal components factor analysis with varimax rotation generated a single factor for learning goal orientation items for mentors (α=.86) and protégés (α=.86), accounting for 51% and 50% of the total variance explained, respectively. These results supported using a single scale to measure learning goal orientation for mentors and protégés. Items assessing learning goal orientation were measured on a five-point scale ranging from 1 (disagree strongly) to 5 (agree strongly).

4.2.2. Mentor’s transformational leadership behavior

Mentor’s transformational leadership behavior was measured using 20 items from the Multifactor Leadership Questionnaire (MLQ-Form 5X; Bass & Avolio, 1997). Mentors (and protégés) were asked to judge how frequently the mentor exhibited specific behaviors measured by the MLQ-5X. Mentors completed the self-rating form of the MLQ-5X and protégés completed the other-rating form. Behavior was measured on a five-point frequency scale ranging from 0 (not at all) to 4 (frequently, if not always).
Sample items from each transformational leadership four-item subscale (protégé form) include the following: (a) **idealized influence—behavior** (“considers the moral and ethical consequences of decisions”), (b) **idealized influence—attribute** (“goes beyond self-interest for the good of the group”), (c) **inspirational motivation** (“talks optimistically about the future”), (d) **intellectual stimulation** (“suggests new ways of looking at how to complete assignments”), and (e) **individualized consideration** (“considers an individual as having different needs, abilities, and aspirations from others”). Prior research (e.g., Bycio, Hackett, & Allen, 1995) indicates that the MLQ subscales of transformational leadership may be conceptually but not empirically distinct. Because of these empirical findings and results from factor analyses, we followed prior research (e.g., Godshalk & Sosik, 2000; Yammarino et al., 1997) and considered transformational leadership as one 20-item scale computed by averaging participants’ responses to the 20 items comprising the five subscales. Comparable transformational leadership scales were created for each mentor self-rating and protégé observation.

### 4.2.3. Expectations for career success

Three outcome measures for protégés were also obtained via questionnaire responses from both protégés and mentors. These measures tap the anticipated results of career success and the value of these results that social cognitive theory considers (Bandura, 1986). Specifically, general expectations of career success for the protégé were assessed in terms of career achievement, career balance, and career development using three scales adapted from Stephens et al. (1998). Career achievement was measured using four items [e.g., “I (My protégé) have (has) the opportunity to make important and meaningful contributions to my organization”]; career balance was measured using three items [e.g., “The equilibrium between my (protégé’s) personal and professional lives will not be upset as a result of career opportunities”]; and career development was measured using three reverse coded items [e.g., “I do not expect promotions and desirable career development opportunities for me (my protégé) in my organization”]. All items were measured on a five-point scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Prior research suggests that the three measures of expected career success are conceptually distinct (Stephens et al., 1998). However, career development and career achievement scores were highly correlated (for protégés, $r=.62, p<.001$; for mentors, $r=.69, p<.001$). In addition, results of principal components factor analysis with Varimax rotation generated a two-factor model for expected career success for mentors and protégés. For mentors, the first factor consisted of items measuring **career achievement** and **career development** ($x=.87$) that accounted for 50% of the total variance, while the second factor consisted of items measuring **career balance** ($x=.78$) that accounted for 11% of the total variance. Similar results were obtained for protégés; the first factor ($x=.84$) accounted for 49% of the total variance and the second factor ($x=.78$) accounted for 9% of the total variance. These results supported measuring expectations for career success for the protégé in terms of career balance and by combining career achievement and career development into a single measure called **career achievement/development**.

### 4.3. Descriptive statistics

Table 1 presents descriptive statistics for all study variables. We calculated separate reliabilities (Cronbach’s alpha) for mentors and protégés to determine the internal consistency of the scales. All scales yielded reliabilities deemed appropriate for further analysis.
4.4. Data analysis

Hypotheses 1–3 were tested with Pearson correlations. To test for and draw conclusions about level effects (Hypotheses 4 and 5), we used within and between analysis (WABA; Dansereau et al., 1984), a multiple-level data analytic technique (see Dansereau & Yammarino, 2000; Yammarino & Markham, 1992, for details on this technique). We chose WABA due to its statistical rigor and useful statistical tests to examine the appropriate level of analysis for the proposed relationships (Schriesheim, Cogliser, & Neider, 1995).

Yammarino et al. (1997) described the three steps in WABA. First, the WABA I procedure is followed whereby each variable is assessed at a particular level to determine whether it varies primarily between, within, or both between and within the units of interest (e.g., dyads). Within and between $\eta$s are used to assess the source of variation, and they are tested with $F$ tests of statistical significance and $E$ tests of practical significance.

Second, the WABA II procedure is followed whereby each relationship among variables is assessed at a particular level to determine whether the covariation is primarily between, within, both between and within, or neither between nor within the entities of interest. Between- and within-cell correlations are used to assess covariation among the variables, and their difference is tested with $Z$ tests of statistical significance and $A$ tests of practical significance. In addition, each between- and within-cell correlation is tested with $t$ tests of statistical significance and $R$ tests of practical significance.

Third, the WABA I and WABA II results are combined in the WABA equation to draw an overall conclusion (i.e., inference) from the data. Specifically, within and between components, which total to the traditional raw score correlation, are examined to draw an inference about the level of analysis at which effects operate.

### Table 1

Means, standard deviations, alphas, and correlations among study variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>$M$</th>
<th>$SD$</th>
<th>$\alpha$</th>
<th>Correlations</th>
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<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td><strong>Protégé ratings</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Learning goal orientation</td>
<td>4.44</td>
<td>.44</td>
<td>.86</td>
<td>–</td>
</tr>
<tr>
<td>2. Transformational leadership</td>
<td>3.00</td>
<td>.60</td>
<td>.94</td>
<td>.29***</td>
</tr>
<tr>
<td>3. Career achievement/development</td>
<td>3.66</td>
<td>.61</td>
<td>.84</td>
<td>.18**</td>
</tr>
<tr>
<td>4. Career balance</td>
<td>3.39</td>
<td>.80</td>
<td>.78</td>
<td>.18**</td>
</tr>
<tr>
<td><strong>Mentor ratings</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Learning goal orientation</td>
<td>4.43</td>
<td>.48</td>
<td>.86</td>
<td>.22***</td>
</tr>
<tr>
<td>6. Transformational leadership</td>
<td>3.08</td>
<td>.44</td>
<td>.90</td>
<td>.13*</td>
</tr>
<tr>
<td>7. Career achievement/development</td>
<td>3.52</td>
<td>.70</td>
<td>.87</td>
<td>–.02</td>
</tr>
<tr>
<td>8. Career balance</td>
<td>3.49</td>
<td>.74</td>
<td>.78</td>
<td>.11</td>
</tr>
</tbody>
</table>

Based on responses of 217 protégés and their 217 mentors comprising unique mentoring dyads.

* $p < .05$.
** $p < .01$.
*** $p < .001$. 

In this study, data were collected from mentors and protégés working together in mentoring dyads embedded in organizations within 11 different industries. Aspects of industry contexts can influence mentoring relationships (Higgins & Kram, 2001, p. 275). We did not hypothesize industry-level effects. However, we conducted industry-level analyses to rule out the potential for any higher level (i.e., industry-level) effects as suggested by multilevel researchers (e.g., Dansereau & Yammarino, 2000). Results indicated that none of the relationships operate at the industry level of analysis; but mostly reflect individual differences in the responses of mentors and protégés. Detailed results are available from the first author.

For the individual differences view of learning orientation and developmental behavior in mentoring relationships, results should indicate variation and covariation both between and within dyads and between and within industries, and equivocal effects should be evidenced at these levels. In conjunction with significant individual level (raw score) correlations, these findings suggest that individual differences are present. Inference of individual differences in the present study requires results that are significant between and within both industries and dyads, and significant raw score correlations (Yammarino et al., 1997). As such, learning orientation, transformational leadership, and expectations of protégé career success would be individual-level phenomena.

Alternatively, if industry-level results are equivocal but results indicate significant variation and covariation between and not within dyads, then there is mentor–protégé agreement on the variables within the dyads. In conjunction with significant individual-level correlations, these findings would be evidence of between-dyads differences. To infer between-dyads differences, results that are significant between and within industries, significant between dyads, and nonsignificant within dyads are required (Yammarino et al., 1997). As such, learning orientation, transformational leadership, and expectation of protégé career success would be dyad-level phenomena.

5. Results

5.1. Results of correlation analysis

Results shown in Table 1 indicate that mentors’ self-reports of learning goal orientation were significantly and positively related to protégés’ ratings of their mentors’ transformational leadership ($r=.34, p < .001$), supporting Hypothesis 1. Contrary to Hypothesis 2, protégés’ self-reports of learning goal orientation were not significantly related to mentors’ ratings of expected career balance ($r=-.02, ns$) and career achievement/development ($r=.11, p < .10$) for protégés. Hypothesis 3 was partially supported. Protégés’ ratings of their mentors’ transformational leadership were significantly and positively related to their mentors’ ratings of expected career balance for protégés ($r=.22, p < .001$), but not to their mentors’ ratings of expected career achievement/development for protégés ($r=-.03, ns$).

5.2. Aggregation of mentor–protégé individual-level data to dyad-level

To determine the appropriateness of aggregating the present study’s individual-level data to the dyad-level, we computed the ICC (1), ICC (2), and $r_{wg}$ values for the study variables. Specifically, ICC (1) values were for learning goal orientation, .22; for transformational leadership, .30; for expected career achievement, .38; and for expected career balance, .29. ICC (2) values were for learning goal orientation,
.36; for transformational leadership, .46; for expected career achievement, .55; and for expected career balance, .45. Mean $r_{wg}$ values were for learning goal orientation, .92; for transformational leadership, .96; for expected career achievement, .91; and for expected career balance, .85. Moreover, the following percentages of dyads had $r_{wg}$ values greater than the .7 criterion: for learning goal orientation, 92%; for transformational leadership, 99%; for expected career achievement, 92%; and for expected career balance, 85%. Taken together, these results indicate that dyad-level conceptualization of these variables is meaningful.

5.3. Results of WABA

Table 2 summarizes results from within- and between-dyads analyses. These results are based on protégé–mentor reports for learning goal orientation, transformational leadership, and expected career success measures. For transformational leadership, expected career achievement/development, and expected career balance, both the $E$ and $F$ tests of the $\eta$s are significant. These variables display significant protégé–mentor agreement and vary primarily between dyads. Learning goal orientation is interpreted as equivocal at the dyad level, varying both within and between dyads. The results of the $A$ and $Z$ tests indicate that, for the learning goal orientation/transformational leadership and transforma-

<table>
<thead>
<tr>
<th>Level and relationships</th>
<th>$\eta_s$ *</th>
<th>Correlations b</th>
<th>Components c</th>
<th>Raw score correlations d</th>
<th>Inference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dyad (protégé–mentor)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>Learning goal orientation and</td>
<td></td>
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<td>Transformational leadership</td>
<td>.78*</td>
<td>.63</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expected career achievement/development</td>
<td>.80 ***</td>
<td>.59</td>
<td>.53 ***</td>
<td>.20</td>
<td>.33†</td>
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<tr>
<td>Expected career balance</td>
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<td>Transformational leadership and</td>
<td></td>
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<tr>
<td>Expected career achievement/development</td>
<td>.14</td>
<td>.23</td>
<td>.09</td>
<td>.08</td>
<td>.17**</td>
</tr>
<tr>
<td>Expected career balance</td>
<td>.29 ***</td>
<td>.03</td>
<td>.19</td>
<td>.01</td>
<td>.20 **</td>
</tr>
</tbody>
</table>

*a Significant $E$ test (†) and $F$ test (*) results of the difference between the within and between etas are indicated for each variable.

*b Significant between- and within-cell correlations, based on $R$ and $t$ test results, are bold. Significant $A$ test (†) and $Z$ test (*) results of the difference between the within- and between-cell correlations are indicated for each relationship.

*c Significant $A$ test (†) results of the difference between the within and between components are included for each relationship.

*d Significant raw score correlations, based on $R$ (†) and $t$ test (*) results, are indicated.

*e Analyses are based on $N = 434$ mentors and their protégés and $J = 217$ mentor–protégé dyads. All relationships are based on mentor–protégé matched reports. Relationships are tested based on ratings of each variable made by both the mentor and protégé.

*p < .05.

**p < .01.

† 15 degree.
tional leadership/expected career balance relationships, the significant between-dyads correlations (.53 and .29) differ significantly from the analogous within-dyads correlations.

Moreover, results of $A$ tests indicate that for the relationship between learning goal orientation and transformational leadership, the between-dyads components differ significantly from the within-dyads components. The results of the $R$ and $t$ tests indicate that the individual-level raw score correlations for all relationships are statistically significant and is also practically significant for the learning goal orientation/transformational leadership relationship. Overall, therefore, these findings mean that the learning goal orientation/transformational leadership and transformational leadership/expected career balance relationships operate at the dyad level of analysis (supporting Hypothesis 5), whereas the other relationships of interest operate based on individual differences in responses of protégés and mentors (supporting Hypothesis 4).

6. Discussion

6.1. Traditional individual-level inferences

This study specified and examined, with different-source (mentor and protégé) data, relationships among learning goal orientation, transformational leadership, and expected career success for the mentor–protégé relationships as proposed in Hypotheses 1–3. The results in Table 1 indicate significant and positive cross-source associations emerged for learning goal orientation and transformational leadership, and transformational leadership and expected career balance relations. These results provide empirical support for theories of transformational leadership (e.g., Bass, 1985; Shamir et al., 1993) and mentoring (e.g., Allen, Poteet & Burroughs, 1997; Higgins & Kram, 2001; McManus & Russell, 1997) that link developmental behavior to intrinsic motivation and elevated expectations of followers/protégés.

Study results are also compatible with social cognitive theories of career development (e.g., Lent et al., 1994), which propose that personal (e.g., learning goal orientation) and extrapersonal social support (e.g., transformational leadership) factors promote personal learning experiences and subsequent positive outcome expectations. Social cognitive theories place a heavy emphasis on the relation of goals, social learning, expected outcomes, and action. Learning goal orientation can shape a protégé’s imagined consequences of developing unique talents and contributions at work (expected career achievement/development) and reconciling professional and personal values (expected career balance), which are important to future career behavior. Thus, learning goal-oriented mentors, who agree with their protégés that learning is an important objective, may be predisposed toward exhibiting transformational leadership behavior that may raise protégés’ expectations of career success.

6.2. Levels of analysis inferences

The results in Table 2 provide support for both individual- and dyadic-level assertions (Hypotheses 4 and 5) based on the extant literature. Associations among three of the four variables of interest held at the between-dyads level of analysis, displaying significant between-dyads differences, and within-dyads agreement, for the learning goal orientation/transformational leadership and transformational leadership/expected career balance relationships. These findings are consistent with the work of Yammarino and Dubinsky (1992) and Yammarino et al. (1997), who obtained dyad-level results for relations between
transformational leadership and follower expectations of performance success. They are also compatible with the work of Ragins and McFarlin (1990) and Turban, Dougherty, and Lee (2002), which suggested the importance of actual or perceived similarity in attitudes, dispositions (e.g., learning goal orientation), and perceived behaviors (e.g., transformational leadership) in mentor–protégé dyads.

Our dyadic level effects mean an agreement or bonding between mentors and protégés has occurred on the aforementioned associations. The statistically and practically significant $\eta$s in Table 2 indicate that transformational leadership and the expected career success measures display significant mentor–protégé agreement and vary primarily between dyads, meaning bonding has occurred on these variables. These findings are compatible with the work of Young and Perrewe (2000), which demonstrated shared expectations in dyadic mentoring relationships.

Individual-level effects were also obtained for the learning goal orientation/expected career achievement and development, learning goal orientation/expected career balance, and transformational leadership/expected career achievement and development relationships. These findings are compatible with the work of Button et al. (1996), which suggested that learning goal orientation is an individual difference variable, and with individual differences-based theories of mentoring (e.g., Ragins, 1997; Ragins & Scandura, 1994), which suggest that outcome expectations are a function of an individual’s disposition and attributional and cognitive processes.

6.3. Implications

Given these results, there are several implications for future research. First, the relationships among variables derived from social cognitive theory and tested in the present study seem reasonable and generally supported. Second, the dyadic level of analysis assertions derived from the mentoring literature may need some rethinking, given the individual-level effects shown in Table 2. Variables and proposed relationships in traditional mentoring relationships cannot be assumed to operate at a particular level of analysis; levels of analysis must be specified and tested. The measurement of variables at a particular level does not guarantee their operation at that level and therefore requires testing (Yammarino & Dubinsky, 1994). Mentoring research would be enhanced by incorporating levels of analysis as boundary conditions in conceptualization, measurement, and testing procedures. As Higgins and Kram (2001, p. 283) noted “it is now time to reconsider the boundaries of mentoring.”

In the present study, dyadic-level effects for learning goal orientation/transformational leadership and transformational leadership/expected career balance relationships mean that mentors form unique one-to-one developmental relationships with their protégés. These relationships are independent of one another, independent of industry, and display mentor–protégé agreement within each dyad on transformational leadership and expectations of career balance. Agreement on the dimensions of focus may explain how mentors and protégés initiate and maintain relationships based on perceived similarity and attraction (Turban et al., 2002).

In terms of management practice, results of this study suggest that levels of analysis issues as they relate to mentoring relationships may be important. Specifically, designers, trainers, and administrators of mentoring programs should be aware of how levels of analysis relate to mentoring processes and specific outcomes operating in their organizations. For example, if transformational leadership and its outcomes are encouraged and trained on a dyadic basis involving both mentors and their protégés, but each member of the mentoring dyad perceives these notions differently (on an individual basis), the benefits of mentoring will not accrue. This study’s results suggest that developing high levels of career
balance with mentors’ display of transformational leadership should occur on a dyadic basis for each unique mentor–protégé relationship. However, developing high levels of career achievement and development with mentors’ display of transformational leadership should occur on an individual basis for each unique protégé, independent of the mentor. To do otherwise would seemingly be inappropriate and not maximize the benefits of mentoring.

Establishing and maintaining an organizational culture that encourages learning nurtured in rich developmental relationships may result in stronger dyadic bonds between mentors and their protégés, thus fostering protégés’ career development, personal learning, work satisfaction, and commitment. Given adequate time and resources, training mentors to value mutual learning in their relationships with protégés may establish balance or agreement among mentors and protégés regarding the importance of learning and development and enhance protégés’ expectations and subsequent realizations of career success. Learning goal orientation is best characterized as a somewhat stable individual difference variable, but evidence exists that it may also be influenced by situational characteristics, such as leadership within a specific context (Ames, 1992; Ames & Archer, 1987; Button et al., 1996). For example, Ames and Archer’s (1987) findings suggested that children of mothers with different achievement goals may be encouraged to pursue different types of achievement activities and may experience different types of expectations.

If inadequate resources limit the practicality of training on learning goal orientation, selecting, and matching mentors and protégés based on learning goal orientation may maximize the amount of transformational leadership displayed (perceived) by mentors (protégés). For example, if a learning goal-oriented mentor focuses on displaying intellectual stimulation and idealized influence when mentoring a similarly learning goal-oriented protégé, the mentor’s and protégé’s shared expectations of career success for the protégé may be greatly enhanced. Conversely, if a learning goal-oriented mentor displays such transformational behaviors when mentoring a protégé who is not oriented toward learning, the protégé’s expectations of career success may be stifled because the protégé may not find value in responding to the mentor’s intellectually stimulating approach toward learning how to achieve career success. Therefore, matching processes may be critical to successful structuring of mentoring relationships.

6.4. Limitations

Several limitations of the present study warrant attention in future research before conclusions of the study are accepted. First, 84% of our sample was involved in informal dyadic mentoring relationships. Chao, Walz, and Gardner (1992) noted distinctions in processes and outcomes associated with formal and informal mentoring relationships. Whereas dyadic mentoring relationships represent the traditional form of mentoring relationships and have been identified as the appropriate level of analysis for examining traditional mentorship (Ragins, 1997), other work has identified peer mentoring and “developmental networks” as sources of learning and development in which protégés receive mentoring functions from multiple mentors (Higgins & Kram, 2001). Thus, caution should be exercised when generalizing results of this study to formal, peer, or networked mentoring relationships.

Second, this study’s results were based upon measures of transformational leadership used as proxy measures of psychosocial and career development mentoring functions, because these constructs have been conceptually and empirically connected in prior research (e.g., Sosik & Godshalk, 2000). To provide empirical comparisons of the links between transformational leadership and mentoring
functions, we also collected data for protégés’ ratings of psychosocial support and career development using Noe’s (1988) measure. Consistent with results reported in Sosik and Godshalk (2000), these scales correlated at $r = .75$ ($p < .001$) and $r = .32$ ($p < .001$), respectively, with protégés’ ratings of transformational leadership, and $r = .25$, $p < .001$, and $r = .01$, ns, respectively, with mentors’ ratings of transformational leadership. Whether this study’s findings would replicate for actual measures of mentoring functions provided by informal and formal mentors and their protégés is an issue for future research.

Third, career success was measured in terms of expectations. While such measures are frequently described as developmental outcomes in the literatures on transformational leadership and career development, they are weak indicators of development and career success. Future research should collect objective measures such as salary level or promotions.

Fourth, mentoring processes and outcomes change over time (Kram, 1985), are subject to attrition effects or disbanding due to perceived dissimilarity or dysfunctionality (Scandura, 1998) and are influenced by organizational factors (Ragins, 1997). A cross-sectional study that does not control for organization-level effects like the present investigation cannot fully capture the dynamics of any mentoring theory, including those predicting attrition effects in which dissimilar or dysfunctional relationships fail. Perhaps relations among learning goal orientations, transformational leadership, and expectations for career success in mentoring shift from one level (e.g., individual) to another (e.g., dyadic) or become cross-level (i.e., hold across at least two levels) over the phases of mentoring. Future longitudinal work could test these ideas using WABA or alternative multilevel data analytic tools.

Finally, conclusions regarding levels of analysis are dependent on the specific measures and sample used in the study, and therefore additional research designed to test levels issues in the mentoring context is needed. All studies share this limitation, but none have attempted to address it in the mentoring literature prior to our work. It is our hope that this study motivates future researchers to identify boundary conditions and appropriate levels of analysis for specifying and testing relationships among transformational leadership, learning goal orientation, and other variables proposed in models of mentoring.

References


