

**REVISITING FUNDAMENTAL CONCEPTS OF TRANSFORMATIONAL  
LEADERSHIP THEORY: A CLOSER LOOK AT FOLLOWER  
DEVELOPMENTAL PROCESSES**

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By

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**REVISITING FUNDAMENTAL CONCEPTS OF TRANSFORMATIONAL  
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## SUMMARY

One of the fundamental ideas of transformational leadership theory is that transformational leaders develop their followers into transformational leaders. Unfortunately, there has been surprisingly little research on this topic. Although prior research has established a relationship between supervisor transformational leadership and follower transformational leadership (i.e., supervisor transformational leadership is positively related to follower transformational leadership), more research is needed to identify potential follower process variables and the interrelationships between cognitive, motivation, and behavioral variables that may be relevant to the development process of followers. This study initiated a closer examination of the process variables in three phases. First, the direct relationship between supervisor transformational leadership and various follower variables relevant to the development process was examined. Second, this study summarized the interrelationships between the process variables in a structural model, including a test of the indirect effects of supervisor transformational leadership on follower outcomes through more proximal follower variables. Third, this study explored transformational leadership theory's unique contribution to the understanding of leader-follower processes by comparing some of the relationships tested in this study to analogous relationships using other highly researched leadership styles, such as transactional leadership, initiating structure, consideration, and leader-member exchange.

The findings supported several of the hypotheses involving direct relationships between supervisor transformational leadership and the follower variables relevant to self-concept, development orientation, development motivation, development activity,

and leadership behavior. There was also support for partial mediation of the relationship between supervisor transformational leadership and the follower outcome variables (through follower developmental processes). Contrary to hypotheses, several of the alternative leadership styles showed comparable or at times better prediction of follower developmental variables, which suggests that the follower development process may not be unique to transformational leadership theory.

# **CHAPTER 1**

## **INTRODUCTION**

The theory of transformational leadership has been gaining widespread acceptance over the past two decades and has been credited by some as revolutionizing the leadership field (Hunt, 1999; Yukl & Van Fleet, 1992). The research done in this domain has indeed been promising, as studies have consistently shown that transformational leadership predicts a variety of outcomes related to leader performance and effectiveness (Judge & Piccolo, 2004; Lowe, Kroeck, & Sivasubramaniam, 1996). Moreover, the few empirical comparisons between transformational leadership and other popular leadership approaches (e.g., the Ohio State University behavioral approach) have been positive, with transformational leadership being a relatively stronger predictor of leader effectiveness and showing unique prediction over other types of leader behavior (Howell & Frost, 1989; Seltzer & Bass, 1990). Thus, studies have shown strong empirical support for transformational leadership and have established transformational leadership as a legitimate theory of leadership.

As support continues to grow for the effectiveness of transformational leaders, greater attention is needed on issues surrounding the development of transformational leadership skills and capabilities. Unfortunately, the general literature on transformational leadership development has lagged behind that of transformational leadership performance. This is surprising for both theoretical and practical reasons. Theoretically, the lack of research on transformational leadership development processes is surprising given that one of the fundamental aspects of transformational leadership theory concerns

leader development. That is, a major theoretical idea of transformational leadership theory is that transformational leaders influence their followers in such a way that the followers ultimately become leaders themselves (Bass, 1985; Burns, 1978). This developmental aspect of transformational leadership theory must be examined in greater detail if transformational leadership theory is to be fully tested and supported. From a practical perspective, the lack of development research is also surprising because organizations have much to gain from a more complete understanding of the transformational leadership development process. For example, effective employee and leadership development programs have a positive impact on the financial performance of organizations (Burke & Day, 1986; Collins & Holton, 2004; Ellinger, Ellinger, Yang, & Howton, 2002; Kaye & Jordan-Evans, 2000; Lam & White, 1998), and organizations would be better prepared to implement an effective leadership development program if they understood the development process of transformational leaders. In addition, it has been argued that challenges from inside and outside the organization have created new opportunities that place transformational leaders in high demand. An increasingly competitive global business environment requires corporations to constantly reinvent themselves and adapt to the changing nature of world commerce, and organizational strategies to cut costs and increase profitability (e.g., downsizing, flatter hierarchies) have called for transformational leaders who can maintain the commitment of followers through these changes (Conger, 1999). Organizations can more effectively keep up with the increasing demand for transformational leaders if they had a greater awareness of the development process and how their leaders are developed. Thus, it seems there are ample

opportunities for future research on transformational leadership development processes to contribute to both theory and practice.

The purpose of the present research is to examine the processes related to the leader-follower developmental relationship by using fundamental concepts from transformational leadership theory and incorporating research findings from various domains of literature. Several components of this statement of purpose deserve clarification. First, this study will rely on transformational leadership theory's inherent emphasis on leadership development within the naturally occurring context of a leader-follower relationship. As mentioned previously, a central premise of transformational leadership theory is that transformational leaders turn their followers into transformational leaders (Bass, 1985; Burns, 1978). This idea will be used as the basic foundation of this study, with the theoretical assumption being that the supervisor plays a large role (directly and indirectly) in the development of the follower into a leader.

The second aspect of this study that should be noted is the process approach to leadership development rather than an outcome approach to leadership development. That is, this study views leadership development as a process rather than just a final outcome measure of skill improvement. Although the ultimate goal of leadership development research may be to predict the improvement of actual leadership skills or attributes (note that this has already been accomplished in the literature), a process perspective allows for a broader examination of variables that could be involved in the development of those skills. Predictors and outcomes should both be considered within a developmental framework, as well as the intervening processes that link the predictors to the outcomes. The first step toward an overall system understanding would be to identify

follower process variables (e.g., cognition, motivation, other developmentally-relevant behavior) that may play a role in the leader-follower developmental relationship.

Establishing basic relationships between supervisor transformational leadership and these developmentally-relevant follower process variables would open up greater possibilities for future research that is geared toward explaining the leadership development process rather than simply describing what is developed. As such, the main focus of this study is on relationships revolving around follower process variables rather than the more typical outcome of skill improvement. In this way, an effort is made to move beyond the traditional outcome variables and instead move in favor of research on follower processes that may be relevant to the broader picture.

The third component that characterizes this study is the integration of multiple areas of literature. In examining the process perspective of transformational leadership development, this study will borrow empirical and theoretical work from the transformational leadership literature, the general employee/leadership development literature, and other literature from the psychology discipline. As will be discussed later, research on transformational leadership development in general has seldom incorporated work from outside the transformational leadership domain. This is particularly true for the lack of integration of the general employee/leadership development literature. This study will more closely examine the processes relevant to transformational leadership development by using insight from these other lines of research.

In this paper, the state of existing transformational leadership development literature will be reviewed, including a discussion of the contributions of the literature and the opportunities it has offered for further research. These opportunities will be

linked to the current study objectives. A framework of the transformational leadership development process will be presented, as well as hypotheses to initiate a test of the process relationships. The methodology used in this study for data collection will be outlined, and the results from the analyses of data will be shared. Finally, this paper will close with a discussion of the contributions of the study as well as potential limitations and next steps.

### *Overview of the Transformational Leadership Construct*

In transformational leadership theory, leadership is viewed as the “process of influencing major changes in the attitudes and assumptions of organization members (organization culture) and building commitment for major changes in the organization’s objectives and strategies” (pp. 174; Yukl & Van Fleet, 1992). The changes seen within the follower can span across various types of attitudinal, motivational, and performance outcomes, such as follower satisfaction, effort, in-role and extra-role performance, commitment, trust in the leader, and confidence (Alban-Metcalfe & Alimo-Metcalfe, 2000; Jung & Avolio, 2000; Kark, Shamir, & Chen, 2003; Kirkpatrick & Locke, 1996; Podsakoff, MacKenzie, & Bommer, 1996; Seltzer & Bass, 1990). However, transformational leadership theory goes beyond the general growth of followers, as a core objective of transformational leaders is to transform organizations by influencing followers’ empowerment and ability to manage change, and turning the followers into leaders in the process (Avolio, 2005; Avolio, 1999; Avolio & Gibbons, 1988; Bass, 1997; Bass, 1985; Kuhnert & Lewis, 1987; Yukl & Van Fleet, 1992). Thus, there is an inherent developmental component to transformational leadership theory, where transformational leadership can technically be considered a predictor and an outcome in the development

process. That is, the supervisor is a transformational leader (predictor) who develops the follower into a transformational leader (outcome). This would suggest that the characteristics to be developed by the follower in the end are the same characteristics that the leader possesses. These characteristics are defined by a set of four leadership dimensions that define transformational leadership (Avolio, 1999; Bass, 1985; Bass, 1997). These dimensions are known as idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration, though the idealized influence and inspirational motivation dimensions are often considered to reflect a single factor of overall charisma (Avolio, Bass, & Jung, 1999; Bass, 1997; Bycio, Hackett, & Allen, 1995; Tepper & Percy, 1994).

The idealized influence component refers to leaders behaving in ways that make them role models worthy of emulation, admiration, and trust by their followers. These leaders are willing to make personal sacrifices for the good of the group and organization. They earn respect by adhering to their values and setting high ethical standards. As a related dimension, the inspirational motivation component describes the leader as one who motivates and inspires their followers by articulating an appealing vision for the future and providing meaning to their followers. In terms of the third dimension, leaders who engage in intellectually stimulating behaviors question the status quo and challenge old assumptions and beliefs. They have high tolerance for failure as they encourage their followers to be creative and approach problems with new methods and perspectives. Finally, leaders who are high in individualized consideration are attentive to the individual needs of their followers. They are interested in their followers' growth and are closely involved in the coaching, mentoring, and teaching of their followers.

The transformational leadership dimensions are assessed with the Multifactor Leadership Questionnaire (MLQ) and have generally held up in prior studies through factor analysis (Avolio, Bass, & Jung, 1999; Bass, 1997; Bycio, Hackett, & Allen, 1995; Tejada, Scandura, & Pillai, 2001; Tepper & Percy, 1994). However, the transformational dimensions have often been found to be very highly correlated, and therefore a few studies employing the MLQ have found support for a higher order structure reflecting the more general construct of transformational leadership (Carless, 1998; Den Hartog, Van Muijen, & Koopman, 1997; Tejada et al., 2001). The high correlations between these dimensions within the higher order construct of transformational leadership suggest that leaders who show one type of behavior are very likely to show behaviors indicative of the other dimensions. Transformational leaders exhibit all of the leadership dimensions, and these dimensions should be viewed as a total package. Indeed, most studies testing relationships between transformational leadership and other variables have aggregated the ratings across the dimensions to measure transformational leadership at the general level of the construct (e.g., Dvir & Shamir, 2003; Judge & Piccolo, 2004; Kark, Shamir, & Chen, 2003; Sosik, Godshalk, & Yammarino, 2004). This study will remain consistent with most of prior research and conceptualize transformational leadership at the broader construct level rather than at the dimension level; discussions surrounding any research hypotheses will be in terms of overall transformational leadership.

### *Prior Empirical Work*

Prior empirical work in the realm of transformational leadership development has been limited. These existing studies have followed two lines of research. The first line of research has examined the effect of training interventions on the development of

transformational leaders and their subsequent impact on leadership outcomes (Barling, Weber, and Kelloway, 1996; Dvir, Eden, Avolio, and Shamir, 2002). These studies are not directly relevant to follower development but are informative for general development research, as they suggest that transformational leadership characteristics or behaviors can be developed within individuals.

The second line of research focuses more directly on the topic of follower development, where the leader plays a role in the development of his or her follower into a leader. These studies have investigated the direct relationship between supervisor transformational leadership and follower transformational leadership. Consistent with theory, there is evidence to suggest that supervisors/managers are more likely to be transformational leaders if the supervisors/managers to whom they report are also transformational leaders (Bass, Waldman, Avolio, & Bebb, 1987). The support for this part of the theory is encouraging and allows for further research on the processes through which such development occurs. The link between predictor (supervisor transformational leadership) and final outcome variable (follower transformational leadership) has been established, but much less is known about everything that happens in between these variables. For example, how does the transformational supervisor affect the followers' thoughts about their own development, their leadership-relevant self-concept, their motivation about development, or their intentions to pursue leadership development activities? A test of transformational leadership theory's basic principle should go beyond simple direct relationships between the transformational leadership of the supervisor/manager and subordinate. Future research needs to take a bigger perspective of the follower development process by exploring various ways through which followers

can change themselves in order to be better prepared for development. One way to accomplish this is to begin examining other types of variables that could contribute to the development process, such as the follower's leadership-relevant cognition, motivation, and behaviors. Direct relationships between the supervisor's transformational leadership and these other follower variables can be examined, but more complex relationships can also be examined such as tests of mediated effects involving predictors, processes, and various alternative outcomes. Further, more rigorous tests of theory should be pursued by exploring alternative explanations of established and potential findings. Accomplishing all of these needs may require studying several different constructs in conjunction within a larger framework of follower processes.

#### *Prior Theoretical Work*

Prior theoretical work on transformational leadership development has also been limited. Besides the general theory on transformational leadership, there have been very few researchers who have attempted to more specifically outline the process through which follower development occurs. Indeed, several researchers have called for more work in terms of conceptual frameworks and systematic research on follower development processes in general (e.g., Dvir et al., 2002; House & Aditya, 1997). One exception to the lack of literature on transformational leadership development by the follower is a model proposed by Avolio and Gibbons (1988). The model emphasizes the way in which a person (leader or follower) makes sense or meaning of their life experiences and how those experiences influence their cognitive and emotional development. The life experiences can be from work as well as other life domains. In the context of transformational leadership, leaders can provide followers with job challenges

that lead to development of new information structures. Job challenges also force the followers to face emotional stress. The acquired information structures and stressful experiences ultimately allow the follower to construct cognitively complex meaning-making systems and develop emotionally with more effective coping and emotional regulation skills, both of which are qualities that can be found in leaders. In addition, Avolio and Gibbons note that transformational leaders can further influence the emotional development of followers through intellectual stimulation and individualized consideration (two of the dimensions of transformational leadership). By encouraging open-mindedness and acceptance of other people's perspectives and opinions (an aspect of intellectual stimulation), and by showing empathy towards their followers (an aspect of individualized consideration), leaders instill the importance of these skills in the followers' for their future interactions with others.

As followers increase their cognitive and emotional development, their confidence in tackling future challenges is also increased. Along with higher self-efficacy, the more complex cognitive and emotional skills prepare the followers to face even tougher challenges down the road. This advances the meaning-making systems of followers to a larger extent, and the cognitive structures become more likely to evolve into those of their transformational leaders. The followers are now more likely to interpret new experiences differently, such as by approaching problems and challenges with creativity and sophistication rather than through simple and routine procedures that followers may have initially used earlier in their development. They may even view the new challenges as opportunities to learn. Thus, followers are more prepared to assume leadership positions through their cognitive and emotional development.

The Avolio and Gibbons (1988) model nicely addresses the aspect of transformational leadership theory that emphasizes the role of transformational leaders in developing their followers into leaders. The present study will expand on their work by presenting an updated and more detailed system of variables through which to organize and begin tests of the transformational leadership development process from the perspective of the followers. Although a few ideas from Avolio and Gibbons will be borrowed, concepts from other literature will also be integrated into the organizing framework used for this study. This includes theoretical and empirical work from the general employee and leadership development literature as well as the general transformational leadership literature. A set of relationships will be hypothesized and tested based on the framework.

#### *Overview of Current Framework*

The present study will extend previous empirical and theoretical research by taking a broader perspective on research related to the transformational leadership development process. Figure 1 displays the model and organizing framework that will be used to guide this study. It borrows from several different lines of research to outline the process of development by the followers into transformational leaders. Areas of adapted research include transformational leadership theory, general leadership development research, general employee development models, and fundamental psychological theories (social learning, self-determination, etc). Because prior research has generally neglected process type variables within the leader-follower relationship, the major focus of the study will be to establish relationships between supervisor transformational leadership and the various developmentally-relevant process variables of followers (e.g., leadership

self-concept, development orientation, development motivation, development activity), as well as to establish a network of interrelationships among these variables. Although a few of these variables have been studied in relation to transformational leadership, most of the variables are new to development-related research in the transformational leadership literature, as are the proposed interrelationships of these variables to describe the leader-follower relationship.

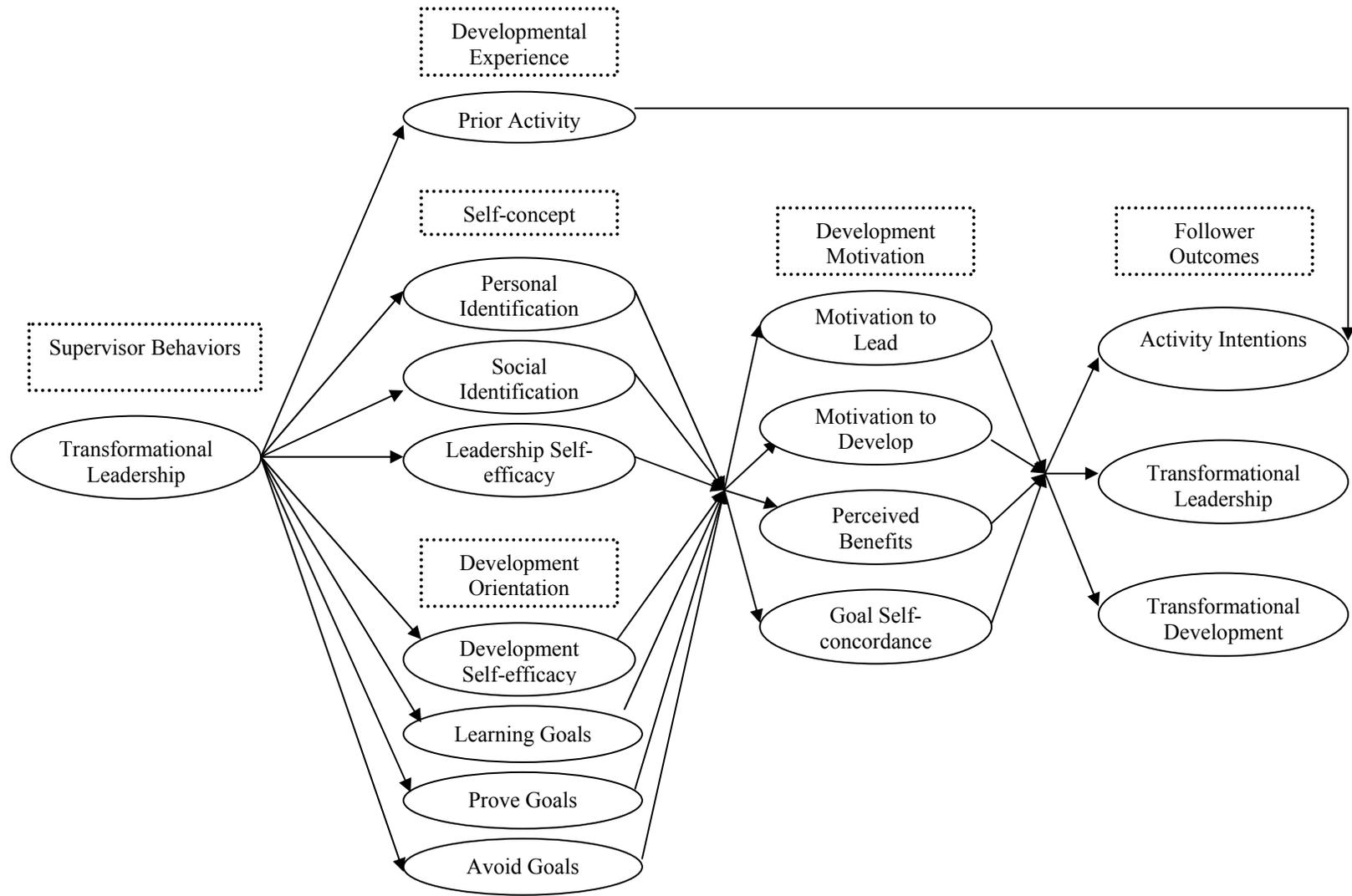


Figure 1. Organizing Framework and Model.

As shown in Figure 1, supervisor transformational leadership is expected to lead to developmentally relevant outcomes that result from more intermediate processes including the follower's self-concept, development orientation, and development motivation. An important aspect of this framework is that both the leader and follower play a role in the follower's development into a leader. The supervisor may get the ball rolling by directly influencing the cognitions and development orientation of the follower, but the follower must then follow through by showing interest in and motivation for leadership development as well as by pursuing developmental opportunities to build off of what he or she has learned from the supervisor. The supervisor helps the follower create the basic tools for development by impacting long lasting, enduring characteristics within the follower (i.e., self-concept, development orientation). The follower can then draw from these tools to actively pursue their interest in becoming a better leader (e.g., by seeking developmental opportunities to acquire additional skills, by trying to behave consistently with transformational leadership values, by attempting to improve one's leadership behavior, by applying effective leadership principles in day to day interactions with others).

The centrality of development motivation and voluntary involvement in one's development is consistent with the employee development literature. Development motivation or development involvement has been the focus of several empirical studies and theoretical work in the employee development literature, including broad and general research on employee/leadership development as well as more targeted work in such areas as performance assessment and feedback and training (Birdi, Allan, & Warr, 1997; Brutus, London, & Martineau, 1999; Colquitt, LePine, & Noe, 2000; Fishbein & Stasson,

1990; Hazucha, Hezlett, & Schneider, 1993; London & Maurer, 2003; Maurer et al., 2003; McCauley, 2001; Noe & Wilk, 1993). Surprisingly, research related to transformational leadership development has operated rather independently from the employee development literature. Even more surprisingly, research related to transformational leadership development has not incorporated general motivation principles despite follower motivation being pertinent to transformational leadership theory, as transformational leaders are thought to have a lasting impact on the follower's intrinsic motivation (Bass, 1997; Shamir et al., 1993). It seems that in order to better understand the leader-follower development process in the transformational leadership domain, more attention needs to be allocated toward examining variables relevant to development motivation, interest, and involvement. The constructs and findings from employee development research need to be addressed and incorporated into transformational leadership development research. These separate lines of research can complement each other, and the literature on transformational leadership can gain insight from the findings of employee development research. This study will follow employee development models and recognize the importance of motivation, interest, and involvement to a person's developmental process. There will be an emphasis on the proactive nature of developmental planning, striving, and pursuit that has largely been neglected in prior research examining the leader-follower relationship. In applying these concepts to transformational leadership, a follower's leadership development motivation is proposed to predict various outcomes that are indicative of the follower's effort and progress toward becoming a better leader. The outcomes included in this study pertain to the

follower's leadership performance/development as well as their intentions to pursue future development.

Figure 1 suggests that the follower's development motivation is indirectly influenced by the transformational leader in part through cognitive variables. This is consistent with recent research showing greater interest in the role of supervisor transformational leadership on follower cognitions. These studies have tested direct relationships between transformational leadership and follower cognition, as well as indirect effects where follower cognitions mediate the relationship between supervisor transformational leadership and general follower outcomes such as performance (Bass, Avolio, Jung, & Berson, 2003; Conger, Kanungo, & Menon, 2000; Dvir et al., 2002; Jung & Avolio, 2000; Kark et al., 2003; Kirkpatrick & Locke, 1996; Podsakoff et al., 1996). Although many of the cognitive variables previously examined in transformational leadership research could be relevant to the follower development process, the present study will focus on the cognitive self-concept of followers. A person's cognitive development in the form of higher level self-concepts is considered to be an important contributor to his or her development as a leader (Avolio, 2005). In addition, theoretical work on follower cognitive development suggests that self-concept variables may have implications for the motivation and self-regulatory mechanisms of followers. According to the self-concept based model of follower motivation (Shamir et al., 1993), transformational leaders influence follower motivation by first appealing to follower self-concepts, where the self-concepts of the follower and leader become congruent over time. The cognitive development and associated motivational drives can lead to positive follower outcomes, such as higher performance, commitment to the leader, self-sacrificial

behavior, organizational citizenship behavior, task meaningfulness, trust, engagement, and workplace well-being (Gardner et al., 2005; Shamir et al., 1993). Although the self-concept based model of motivation was designed for processes relevant to general follower development (i.e., becoming a better follower/worker), these ideas should also have implications for research on leadership development by the follower. More specifically, these ideas can be applied to research on followers' leadership motivation and leadership development motivation rather than general work or non-leadership types of motivation.

In addition to follower self-concept, Figure 1 suggests that the follower's development orientation can act as an intervening process between transformational leadership and follower development motivation. The notion of development orientation as predictors of more proximal motivation variables has been discussed and examined in employee development theory and research. Development orientation variables can take on a variety of forms, including cognitive variables that are developmental in focus and variables that reflect affective tendencies toward development (Colquitt et al., 2000; Maurer, 2002; Maurer et al., 2003; Maurer et al., 2008). The role of development orientation in the follower development process seems like a natural fit for transformational leadership theory given the theory's emphasis on leadership development by the follower and the general motivational characteristics of the follower (Bass, 1985; Bass et al., 1987; Burns, 1978; Kuhnert & Lewis, 1987; Shamir et al., 1993; Yukl & Van Fleet, 1992). Given that transformational leaders are expected to make major changes in the attitudes and assumptions of members, the types of major changes influenced by the leader may include the followers' way of thinking about development

and how they approach their own development (i.e., their development orientation). Thus, the framework presented for the present study has the transformational leader making enduring changes in the development orientation of the followers in addition to the self-concept of the followers. The transformational leader can influence the follower to show interest in the pursuit of their own development by impacting these person variables.

Finally, Figure 1 suggests that the prior experiences of followers can predict outcomes relevant to development involvement. These prior experiences, such as past participation in development activity, are driven by the follower's transformational leader. The prior experiences can be a result of the leader directly providing the follower with developmental opportunities (which is consistent with current models of transformational leadership development by the follower as described earlier), or the prior experiences can be those that the follower actively pursued on their own (e.g., due in part to encouragement received from the leader, or by following the developmental values instilled by the leader). Although there is theoretical work linking supervisor transformational leadership to follower leadership development experiences (Avolio & Gibbons, 1988), there has been little to no research establishing an empirical relationship between the two constructs. Moreover, the interrelationships between supervisor transformational leadership, the follower's prior development experience, and follower's striving for future developmental opportunities/experiences needs to be established. That is, prior developmental experiences can be an intermediary between supervisor transformational leadership and the follower's future pursuit of development. This is another aspect of the proactive nature of development that should be introduced into

transformational leadership research. The concepts and findings from the general employee development literature will again be used as insight for this purpose.

In sum, the current framework outlines the process through which transformational leaders develop their followers into leaders. Although transformational leadership theory places an emphasis on leadership development by the follower, there is very little empirical research on this part of the theory and even less research concerning the process through which this occurs. The framework here attempts to fill in the holes by integrating concepts from the transformational leadership and general employee/leadership development literature. The leader plays a large role in the development process of the follower, but the follower is also an active agent in his or her own striving for development. A broader system of variables needs to be included in the framework compared to current transformational leadership development literature. This includes supervisor transformational leadership, follower transformational leadership, and follower processes surrounding cognitive, affective, motivation, and behavioral variables relevant to leadership and leadership development. Supervisor transformational leadership leads to the change or activation in the followers' self-concepts and development orientation, which then influences the variables relevant to leadership development motivation. Higher development motivation on the part of the follower predicts the developmentally-relevant outcomes of this study that reflect effort and progress toward becoming a better leader, such as the follower's own leadership performance/development and future developmental intentions.

### *Initiating Tests of the Transformational Leadership Development Process*

This study will initiate a test of the transformational leadership development process based on the framework overview presented earlier. This will be organized around three major objectives. The first objective will be to examine direct relationships among the specific variables shown in Figure 1 (e.g., supervisor transformational leadership, self-concept variables, development orientation variables, leadership and leadership development motivation variables, development activity, follower transformational leadership). Because many of these variables are new to transformational leadership research in a development context, direct relationships between supervisor transformational leadership and all follower variables will be examined. Hypotheses at this phase will involve supervisor transformational leadership as a predictor and the followers' cognitive, affective, motivational, and behavioral variables as outcomes.

The second objective will be to test the system of variables as a complete model using Figure 1 as the path structure. This will provide an empirical summary of the proposed framework and interrelationship among the study variables. Specific paths between predictors, intervening variables, and outcomes will be examined. This also allows for the opportunity to establish relationships between important variables from the transformational leadership literature with important variables from the employee development literature, such as the relationship between some of the follower self-concept variables and the follower development motivation variables. In addition, the indirect effect of supervisor transformational leadership on follower development motivation through the self-concept and development orientation variables can be

examined, as well as the indirect effect of supervisor transformational leadership on the development-related outcomes through the preceding proximal variables.

For the third objective, this study will take a look at the bigger picture of the development process for transformational leadership theory. This includes a more rigorous test of transformational leadership theory by examining competing hypotheses for the relationship between supervisor transformational leadership and important follower outcomes (e.g., follower development motivation, development activity, and transformational leadership). Other approaches to leadership (i.e., transactional leadership, initiating structure leadership, consideration leadership, leader-member exchange) will be included to test the uniqueness of the leader-follower developmental relationship.

Because the follower development process is one of the concepts that separate transformational leadership from other leadership approaches, tests should be performed to show the extent to which the leader-follower relationship is unique to transformational leadership vs. other leadership approaches. This is analogous to tests of the “augmentation effect” of transformational leadership theory (Bass, 1997).

## CHAPTER 2

### DIRECT RELATIONSHIP BETWEEN TRANSFORMATIONAL LEADERSHIP AND FOLLOWER OUTCOMES

#### *Predicting Self-concept and Development Orientation*

Figure 1 suggests that supervisor transformational leadership has a direct effect on the self-concept and development orientation of the followers. The self-concept variables that will be examined in this study include personal identification, social identification, and self-efficacy for leadership. The development orientation variables in this study include the follower's goal orientation and self-efficacy for the development of leadership capability. Similar to other follower characteristics in general (Yukl & Van Fleet, 1992), the transformational leader is expected to make lasting changes in the personal characteristics of the followers examined here. The direct effect of transformational leadership on the personal and social identification of the follower has already been tested and established in prior research, but the direct effect between transformational leadership on the followers' self-efficacy for leadership, self-efficacy for leadership development, and goal orientation dimensions have not received much attention in terms of theory or hypothesis testing.

*Transformational leadership to self-concept.* One of the theoretical tenets of transformational leadership is that leaders influence follower outcomes by appealing to the self-concepts of their followers. Although there are several indicators of self-concept relevant to transformational leadership theory (Shamir et al., 1993), the followers' identification with the leader and group have received the most attention in the literature.

Identification refers to the manner in which the self is defined in relation to the leader and/or group, and the type of expressive outlet the leader's message provides for the follower. Two major types of identification have been proposed as having high relevance to transformational leadership: personal identification and social identification (Howell & Shamir, 2005; Shamir et al., 1993; Weierter, 1997).

Personal identification is characterized by admiration for the leader and finding self-direction from the leader. The follower sees the leader as possessing desirable qualities and is interested in being like the leader. The follower's self-worth is derived from fulfilling appropriate role behavior that is expected by the leader, and the well-being of the leader is valued by the follower. The result is the follower identifying with the leader and defining the self in terms of his or her relationship and interpersonal connection with the leader. The perceived high quality relationship with the leader, admiration for the leader, and desire to become like the leader provide the follower with meaning in terms of his or her self concept and the type of person he or she wants to become. According to theory, transformational leaders exert influence over their followers by role modeling appropriate behaviors, expressing inspirational goals, and demonstrating important beliefs and values (Bass, 1985; Conger & Kanungo, 1987; Shamir et al., 1993). This should impact the personal identification of the follower with the leader (Kark et al., 2003; Shamir et al., 1993).

In contrast, social identification is characterized by the follower identifying with the work group, where the followers define themselves in terms of group membership and perceive group processes and outcomes as their own successes and failures (Howell & Shamir, 2005; Shamir et al., 1993; Weierter, 1997). The transformational leader

appeals to the social identification of followers because the leader's message is centered on group mission and goals, and the leader aims to tie the group-centered message to important aspects of the follower's self-concept. Moreover, the leader's values and beliefs are internalized and seen as important for carrying out the group objectives. In this way, the leader enhances and builds meaning to the social identity of the follower and makes the follower's social identity salient to his or her self-concept. The behavior of the follower for the sake of the group becomes self-expressive, and the follower becomes motivated to enhance the group's status and achievements.

Prior studies have found a positive relationship between transformational leadership and both follower personal and social identification (Cicero & Pierro, 2007; Kark et al., 2003; Shamir, Zakay, Brainin, & Popper, 2000; Shamir, Zakay, Breinin, & Popper, 1998), as well as related constructs such as value congruence, reverence toward the leader, trust in the leader, collective identity (e.g., perceive team as cohesive, sharing same values across members), collectivist orientation (e.g., understanding that group comes before self), group cohesion, and group potency (Avolio & Bass, 1995; Bass et al., 2003; Conger et al., 2000; Dvir et al., 2002; Jung & Avolio, 2000; Kirkpatrick & Locke, 1996; Podsakoff, MacKenzie, Moorman, & Fetter, 1990; Sosik, Avolio, & Kahai, 1997). Consistent with past research, it is expected that

*Hypothesis 1a: Supervisor transformational leadership will have a positive relationship with the followers' personal identification with the leader.*

*Hypothesis 1b: Supervisor transformational leadership will have a positive relationship with the followers' social identification with the work group.*

In addition to personal identification and social identification, the follower's self-efficacy is another self-concept variable that was proposed by Shamir et al. (1993) to be predicted by transformational leadership. Self-efficacy is the judgment of one's capability to accomplish a certain level of performance (Bandura, 1997). In Shamir et al. (1993), both self-efficacy and collective efficacy were included as part of the larger set of self-concept variables that could potentially be influenced by the leader. These self-efficacy variables represent beliefs about performance capability for the self and group. Empirical research has shown support for this relationship, as transformational leadership has been found to be related to the self-efficacy and collective-efficacy of followers in performing various types of roles and activities (Bass et al., 2003; Dvir et al., 2002; Kark et al., 2003; Kirkpatrick & Locke, 1996; Rafferty & Griffin, 2004; Walumbwa, Wang, Lawler, & Shi, 2004).

These ideas will be applied and extended to the study proposed here in order to examine a specific type of self-efficacy that should be relevant to leadership. In the present study, transformational leadership is expected to predict self-efficacy for leadership, which refers to a person's confidence in his or her ability to lead others (Chan & Drasgow, 2001). Although there are no known studies that have directly examined this relationship in a leader-follower context, there are some indirect findings as well as theoretical support on which to base this hypothesis. For example, some studies have found that transformational leaders influence the self-efficacy of followers in specific tasks that may be relevant to leadership roles, such as self-efficacy for teaching direct reports in a military setting (Dvir et al., 2002). In addition, transformational leaders should influence the leadership self-efficacy of followers because these leaders exhibit

the types of behaviors that are considered to be important sources of a person's self-efficacy. According to social learning theory (Bandura, 1997; Gist & Mitchell, 1992), three of the factors that can influence a person's self-efficacy are mastery experiences (successful prior experiences in performing a behavior), vicarious experiences (seeing a social model perform the behavior successfully), and social persuasion (receiving praise for behavior). Similar concepts are found in transformational leadership theory and related literature. For example, transformational leaders provide followers with challenging experiences relevant to leadership (Avolio & Gibbons, 1988), they are seen as role models that are worthy of emulation (Avolio, 1999; Bass, 1997; Howell & Shamir, 2005), and they express confidence in their followers (Bass, 1985). These behaviors are consistent with social learning theory (Bandura, 1997; Gist & Mitchell, 1992) and should increase the leadership self-efficacy of the followers. Further, to the extent that the transformational leader instills his or her values and beliefs into the self-concept of the follower (Kark et al., 2003; Shamir et al., 1993), the followers should be more confident and better prepared to perform in a leadership role compared to followers who do not have a transformational leader. Thus, similar to other types of self-efficacy, transformational leadership is expected to have an impact on the leadership self-efficacy of the follower.

*Hypothesis 1c: Supervisor transformational leadership will have a positive relationship with the followers' self-efficacy for leadership.*

*Transformational leadership to development orientation.* The self-concept variables previously reviewed reflect the follower's cognitions relative to their current state of functioning. That is, the transformational leader influences the follower's conception of who he or she is now and what he or she can do currently. Other types of person variables that may be influenced by the transformational leader include those that are more developmentally-based, such as a person's conception of his or her own development and a person's tendencies regarding developmental challenges. These are collectively referred to as the follower's development orientation in this study. The development orientation variables that will be examined include the follower's self-efficacy for leadership development and the different dimensions of goal orientation.

Self-efficacy for development is one's belief in the capability to improve his or her skills and competencies (Maurer, 2002; Maurer et al., 2003). In the context of leadership, self-efficacy for leadership development represents a person's confidence in developing or learning new leadership skills and capabilities (Maurer & Lippstreu, 2005; Maurer & Lippstreu, 2008c). It is not performance-focused like the leadership self-efficacy construct discussed earlier, but rather involves the acquisition of new leadership-relevant KSAOs that the follower may not currently possess to any significant degree. Goal orientation, on the other hand, is a person's orientation toward potentially challenging settings that can have implications for his or her achievement and development (Dweck & Leggett, 1988; VandeWalle, 1997). According to VandeWalle (1997), the goal orientation construct is composed of three distinct dimensions that have been labeled learning orientation, performance-prove orientation, and performance-avoid orientation. A person with a high learning orientation is one who approaches a task for

the sake of learning, enjoys challenging tasks, and views failure as an opportunity to learn and improve one's mastery of the task in the future. Learning-oriented people are interested in and seek opportunities that will fulfill their need for continuous learning. In contrast, people with a performance orientation are concerned more about performing well or poorly in challenging situations rather than learning and improving from challenging situations. Those with a performance-prove orientation are interested in demonstrating their competence to others in these situations, whereas those with a performance-avoid orientation seek to avoid these types of situations because they may show a lack of ability.

Figure 1 suggests that transformational leaders are expected to make lasting changes in the follower's self-efficacy for leadership development and goal orientation. This is based on the transformational leader's interest in developing their followers into leaders, their concern for the personal growth and development of their followers, the high performance expectations they have for followers, and the confidence they express in their followers (Avolio, 2005; Avolio, 1999; Avolio & Gibbons, 1988; Bass, 1997; Bass, 1985; Kark et al., 2003; Kuhnert & Lewis, 1987; Podsakoff et al., 1990; Shamir et al., 1993; Yukl & Van Fleet, 1992). Transformational leaders are supportive of the followers' development, and supervisor support and leadership climate have been found to be a predictor of self-efficacy for development (Maurer & Tarulli, 1996; Maurer, Mitchell, & Barbeite, 2002; Maurer et al., 2003) and other learning-relevant outcomes such as motivation to learn (Colquitt et al., 2000). Similarly, work support for development (which includes supervisor support) has been found to be correlated with the learning goal orientation of employees (Maurer et al., 2008). A person's learning goal

orientation has also been found to be influenced by situational settings that emphasize the importance of approaching tasks with a learning-oriented mindset (Martocchio & Hertenstein, 2003). To the extent that the transformational leader's concern for the development and personal growth of the follower contains learning-oriented messages (Sosik et al., 2004), the follower should see an increase in his or her learning orientation. Conversely, the transformational leader's tolerance for mistakes (Avolio, 1999; Bass, 1985) should allow the follower to be less concerned about showing a lack of competence to the leader and others. This suggests that followers of transformational leaders are less likely to have an avoidant orientation toward challenging situations. Also, the high performance expectations that the leader has for the follower and the confidence instilled into the follower (House & Howell, 1992; Kark et al., 2003; Podsakoff et al., 1990; Rafferty & Griffin, 2004; Shamir et al., 1993) should provide the follower with a sense of competence as well as pride in demonstrating competence. Thus, followers of transformational leaders should be more likely to have a performance-prove orientation toward challenging situations compared to followers of less transformational leaders.

In addition, supportive leaders are thought to influence the possible self of the follower, or how a person conceptualizes what he or she could be like in the future compared to now (Markus & Nurius, 1986; Avolio 2005; Maurer, 2002).

Transformational leaders are perceived as role models by their followers, and role models are thought to be important influences on the possible selves of people because they display what is possible by example (Avolio, 2005). Maurer (2002) suggests that an accessible conception of a possible self should be positively related to self-efficacy for development because the possible self may evolve into an expectation over time as it

becomes incorporated into the person's schema. Maurer also suggests that learning goals are instrumental in the pursuit of personal growth and attaining the possible self. Finally, it has been suggested that transformational leaders provide developmental experiences in preparation for the follower to be a leader (Avolio & Gibbons, 1988). Going through these mastery developmental experiences (as well as seeing the leader as a role model and receiving encouragement from the leader) should enhance followers' confidence in succeeding in development settings (Bandura, 1997; Gist & Mitchell, 1992). From the review above, it is expected that transformational leadership will be related to the follower's self-efficacy for leadership development and goal orientation.

*Hypothesis 2a: Supervisor transformational leadership will have a positive relationship with the followers' self-efficacy for leadership development.*

*Hypothesis 2b: Supervisor transformational leadership will have a positive relationship with the followers' learning orientation.*

*Hypothesis 2c: Supervisor transformational leadership will have a positive relationship with the followers' performance-prove orientation.*

*Hypothesis 2d: Supervisor transformational leadership will have a negative relationship with the followers' performance-avoid orientation.*

### *Predicting Development Motivation*

This section will examine the direct relationship between transformational leadership and follower development motivation. The development motivation variables included in this study are motivation to lead, motivation to develop leadership capability,

perceived benefits of leadership development, and the self-concordance of leadership development goals.

Chan and Drasgow (2001) introduced the motivation to lead construct as a person's motivation to be a leader and assume leadership roles and responsibilities. It was proposed to relate to a variety of outcomes relevant to leadership and was conceptualized to be important for leadership development in general. Chan and Drasgow's motivation to lead is comprised of 3 dimensions that indicate the reasons behind a person's motivation to be a leader. People can be motivated to become a leader for affective, non-calculative, and social-normative reasons. That is, they may have a strong desire to be a leader (affective), they are not worried about the costs associated with being a leader (non-calculative), and they may believe that becoming a leader is within one's duty or obligation (social-normative). In addition to Chan and Drasgow's motivation to lead, this study will also include a more specific measure of the construct by assessing the extent to which a person is motivated to be a transformational leader. This specific measure is intended to be more directly relevant to transformational leadership.

While motivation to lead reflects a desire to be a leader and assume leadership roles, motivation to develop leadership capability is the desire to develop or improve leadership skills and attributes through effort. Motivation to lead and motivation to develop leadership capability should be related, but conceptually they are distinguishable (Maurer & Lippstreu, 2005; Maurer & Lippstreu, 2008c). It is possible for a person to be both motivated to assume a leadership role and motivated to develop his or her leadership capability (e.g., when preparing for future leadership role or brushing up to improve in current leadership role), and it is possible for a person to have one type of motivation but

not the other (e.g., person is confident in his or her current leadership capability and thus not motivated for further development). These two variables have not been previously examined in transformational leadership research in the context of the leader-follower relationship.

Perceived benefits of development refers to the belief that favorable outcomes will result from development (Birdi, Allan, & Warr, 1997; Maurer & Palmer, 1999; Maurer & Tarulli, 1994; Maurer et al., 2003; Noe & Wilk, 1993). Perceived benefits can be extrinsic, intrinsic, or organizational. Extrinsic benefits are tangible rewards that one expects from development (e.g., better pay, promotions), whereas intrinsic benefits are the more intangible rewards from development (e.g., reaching one's full potential, more interesting work, enjoyment). Organizational benefits are those that are expected to benefit the organization rather than the follower directly. Perceived benefits of development also has not been examined in prior transformational leadership research. This study will focus specifically on the perceived benefits of leadership development. Also, because transformational leaders are thought to appeal to intrinsic rewards rather than extrinsic rewards of followers (Shamir et al., 1993), the extrinsic benefits dimension will not be included as an indicator of perceived benefits of leadership development. However, the organizational benefits dimension will be included because it is consistent with the leader's emphasis on working toward group and organizational goals.

The concept of self-concordant goals is based on the theory of self-determination (Ryan & Deci, 2000), which recognizes that intentional behavior can be driven by internal or external reasons. The reasons for behavior can range on a continuum, from complete external constraints to full internalization of the behavior. Similarly, goal self-

concordance (Sheldon & Elliot, 1999) is the degree to which goals set by the self are integrated with the self and autonomously motivated (e.g., believe in the importance and value of reaching the goal vs. external pressures to reach the goal). Past studies have examined goal self-concordance in relation to transformational leadership (Bono & Judge, 2003). This study will extend prior research by looking at the self-concordance of leadership development goals rather than just general or performance-based goals.

Transformational leadership should have positive relationships with the above development motivation variables of the followers. As stated previously, one of the assumptions of transformational leadership theory is that leaders are interested in turning their followers into leaders and provide the means that help make it possible (Avolio & Gibbons, 1988; Bass, 1985; Burns, 1978; Kuhnert & Lewis, 1987). They are concerned for the follower's personal growth and development and push the follower to reach his or her full potential. They also embody important values, beliefs, and attributes toward which the followers can strive. This should motivate the follower to be a leader and motivate the follower to develop himself or herself into a leader. Like other types of follower motivation that is influenced by the transformational leader (Shamir et al., 1993), the follower's development motivation is expected to take on personal importance and meaning to the follower, where the development motivation is a genuine expression of the followers' needs and aspirations.

For example, transformational leaders are thought to expand the followers' conceptions of their possible selves, and having a well-defined possible self suggests that one will have greater and broader aspirations related to leadership compared to those who have an unclear or limited sense of possible self (Avolio, 2005). According to Avolio,

those who have a less expanded or clear sense of the possible self are likely to limit the way in which they interpret their developmental experiences and approach potentially developmental situations. As such, one's possible self can largely determine whether one even sees becoming a leader in the realm of possibilities. Moreover, the follower may become more aware of discrepancies that exist between the current self and possible self and use the leader as a role model to gauge the possible self. This suggests that followers of transformational leaders will have a greater drive toward higher level goals and reaching one's full potential at work, including becoming a leader. Consistent with these ideas, transformational leaders have been found to influence their followers' self-actualization needs, such that followers of transformational leaders have greater self-actualization needs than followers of less transformational leaders (Dvir et al., 2002). Similarly, the employee development literature suggests that a person's conception of a possible self should be related to a variety of variables relevant to one's development motivation (Maurer, 2002). As applied to the current study, the set of ideas above suggest that transformational leaders motivate their followers toward their full potential which, according to theory, is to ultimately become a leader. Followers who have a better understanding of their possible selves should be more likely to have a greater motivation to lead and motivation to develop leadership compared to followers whose possibilities are unclear or limited. In addition, they should be more likely to understand the benefits of development because their self-actualization needs and developmental needs can be achieved and fulfilled through their own development. Indeed, studies have shown that employees who perceive a need for their own development are more likely to believe that favorable outcomes will result from their development (Maurer & Tarulli, 1994, Maurer

et al., 2003). Similarly, the leader's emphasis on the followers' development into their full potential should have an effect on the self-concordance of their developmental goals. To the extent that reaching one's full potential is perceived as important to the follower and holds intrinsic value (Shamir et al., 1993), goals set for the purpose of one's leadership development should derive from internal, autonomous standards rather than external, controlled pressures.

In addition, the perception of having a supportive leader should enable the follower to feel motivated about their own development. Supportive leaders can motivate the followers by facilitating their development through encouragement and providing resources and opportunities for development. Compared to followers of unsupportive leaders, followers of supportive leaders should perceive their road to development as being easier (feeling encouraged) and thus be more motivated toward development and being a leader. Prior studies in the employee development literature have supported this relationship, as supervisor support has been found to be related to a variety of variables relevant to a person's development motivation, such as motivation to learn, development effort, attitudes and interest toward development, favorable beliefs about one's career advancement, perceived benefits of development, and favorable perceptions of development opportunities (Allen et al., 2004; Hazucha et al., 1993; Maurer & Tarulli, 1994; Maurer et al., 2003; Noe & Wilk, 1993; Tannenbaum, 1997). To the extent that transformational leaders are supportive about the follower's development, this suggests that followers of such leaders will be more motivated to assume leadership roles, motivated to develop leadership capability, see the benefits in developing themselves, and have self-concordant development goals.

Finally, an important theoretical effect of transformational leadership is the empowerment of the followers (Avolio, Zhu, Koh, & Bhatia, 2004; Conger, 1999; Conger et al., 2000; Kark et al., 2003). People who are empowered feel confident in their work, have a sense of purpose and autonomy, and believe that they have influence over strategic, administrative, or operating outcomes at work (Spreitzer, 1995). Followers of transformational leaders become empowered as transformational leaders express confidence in followers, providing meaning to the followers, suggest departure from traditional assumptions, set inspirational goals, and emphasize the followers' contribution to the organizational objectives. This sense of autonomy, influence, competence, and purpose reached through empowerment (which also happens to be important characteristics of transformational leaders) should allow the followers to be more developmentally ready to assume higher level responsibilities and thus more likely be motivated to lead others. Also, people who are confident in themselves (an important component of empowerment) are likely to have a high motivation to learn (Colquitt et al., 2000), which suggests that they will be more motivated than others to develop their leadership capability. A greater sense of purpose and autonomy should also make it more likely that followers set self-driven, intrinsic developmental goals (i.e., self-concordant goals) as opposed to developmental goals that are controlled by external constraints or pressure. Moreover, having purpose and meaning in one's work should provide followers with an incentive to develop themselves, as development would help them improve skills and capabilities that could enable them to more easily carry out and build on their sense of purpose, which may include accomplishment of group objectives. This will make the

follower more likely to be motivated to develop themselves and understand the benefits of development.

In sum, the transformational leader's concern for the follower's development, their goal of turning followers into leaders, their targeting of the followers' motivation and intrinsic effort, their influence on the empowerment of followers, and their overall supportive nature suggest that followers of these leaders will have a higher motivation relevant to being a leader and becoming a leader compared to followers of less transformational leaders.

*Hypothesis 3a: Supervisor transformational leadership will have a positive relationship with the followers' motivation to lead.*

*Hypothesis 3b: Supervisor transformational leadership will have a positive relationship with the followers' motivation to develop leadership capability.*

*Hypothesis 3c: Supervisor transformational leadership will have a positive relationship with the followers' perceived benefits of leadership development.*

*Hypothesis 3d: Supervisor transformational leadership will have a positive relationship with the self-concordance of the followers' development goals.*

### *Predicting Behavioral Outcomes*

In addition to the cognitive and motivational variables of the followers, this study will examine the relationship between supervisor transformational leadership and follower variables that are more behavioral in nature. This includes variables relevant to

the followers' participation in development activity as well transformational leadership behavior.

*Involvement in development activity.* Participation in learning and development activities is an important factor in a person's leadership development, as reflected by general theoretical models, empirical findings, and organizational programs and practices (Burke & Day, 1986; Collins & Holton, 2004; Hazucha et al., 1993; McCauley, 2001; McCauley, Ohlott, & Ruderman, 1989; McCauley, Ruderman, Ohlott, & Morrow, 1994; McCauley & Young, 1993; Vicere, 1998). Developmental experiences allow the person to improve on existing competencies as well as develop non-existing competencies. This should be no different for transformational leadership development. According to Avolio and Gibbons (1988), transformational leaders are likely to provide these experiences directly to their followers in the interest of their development into a leader, and thus the followers are likely to turn into transformational leaders. Their ideas are consistent with the theoretical notion that leaders aim to transform their followers into leaders.

The present study agrees with the Avolio and Gibbons assertion that development activities are important to the development process. However, following the employee development literature, development activities will be defined more broadly here as they can be quite diverse in nature (Birdi et al., 1997; Maurer et al., 2003; McCauley, 2001; Noe et al., 1997). For example, development activities can be voluntary or involuntary. The leader may require the follower to participate in the development activity or the leader may offer some suggestions for optional activities if he or she believes the follower can benefit from these activities. Moreover, these activities can be performed in traditional or nontraditional settings, such as at work sites or nonwork sites and during

work hours or nonwork hours. Finally, there can be various methods of development, such as formal courses (e.g., training, university courses), assessment (e.g., 360 feedback, performance appraisal, assessment centers), relationships (e.g., mentoring), and job experiences (e.g., job rotation, promotions, job enlargement).

In assessing the follower's level of development activity, this study will cover a wide range of activities to capture the broader spectrum of developmental experiences. In addition, development activities will be examined in terms of both past participation in activities and intentions to participate in future activities. The inclusion of intentions allows for an estimate of future behavior when actual future behavioral data is difficult to gather. It also provides insight into planned behavior by the follower, which has a strong motivational component associated with it. While intentions is not a direct measure of future behavior, it is considered to be a key predictor of future behavior and has been found in prior employee development studies to predict actual behavior and observed development (Ajzen, 1991; Fishbein & Ajzen, 1975; Fishbein & Stasson, 1990; Maurer & Palmer, 1999; Maurer et al., 2003).

There have not been many tests of the relationship between supervisor transformational leadership and follower development activity, and little to no research in terms of leadership development activity. Still, findings from the following limited studies are encouraging. In a laboratory experiment with an undergraduate sample, transformational leadership (as depicted by experimental scenarios) was shown to be positively related to followers' feedback seeking intentions (Levy, Cober, & Miller, 2002). In more natural settings, transformational leadership has also been found to predict followers' behaviors relevant to gaining managerial positions, which partly includes

development activity (Sosik & Godshalk, 2004). Further, transformational leaders provide psychosocial support and career development support to their followers (Scandura & Williams, 2004; Sosik & Godshalk, 2000; Sosik & Godshalk, 2004), and supportive behaviors from supervisors/managers have been found to predict participation in development activities in the general employee/development literature (Birdi, Allan, & Warr, 1997; Kozlowski & Farr, 1988; Kozlowski & Hults, 1987; Maurer & Tarulli, 1994; Tharenou, 2001). The findings above, along with the theoretical notion that transformational leaders seek to develop their followers into leaders, suggests that followers of transformational leaders will be more likely to participate in leadership development activities compared to followers of less transformational leaders.

*Hypothesis 4a: Supervisor transformational leadership will have a positive relationship with followers' past participation in leadership development activities.*

*Hypothesis 4b: Supervisor transformational leadership will have a positive relationship with followers' intentions to participate in future leadership development activities.*

*Follower transformational leadership.* As another behaviorally-related outcome, this study will examine the direct relationship between supervisor transformational leadership and follower transformational leadership. Prior studies have suggested that transformational leaders may develop others into transformational leaders. For example, people who occupy lower managerial levels are more likely to be transformational

leaders if their managers are also transformational leaders (Bass et al., 1987). Similarly, peer transformational leadership behavior has been found to predict transformational leadership; the more one's peers are transformational leaders, the more likely he or she is also a transformational leader (Bommer, Rubin, & Baldwin, 2004). In addition, a father's transformational leadership has been found to be related to the transformational leadership of his offspring (Zacharatos, Barling, & Kelloway, 2000). Similar to these studies, the current study will test the relationship between supervisor transformational leadership and follower transformational leadership. However, this study will also examine an alternative outcome that is a more specific and direct measure of transformational leadership development.

Note that the prior studies have shown that followers are more likely to be transformational leaders if their supervisor (or other important person) is also a transformational leader. Although this lends support to the idea that the leader develops the follower into a leader, it is not entirely clear whether any behavioral change occurred at any time. Rather, we only know from those studies that the supervisor and follower are both currently transformational leaders. One concern with this is if supervisor transformational leadership predicts follower transformational leadership, it does not necessarily mean that the follower developed these attributes as a result of the leader. For example, Schneider's (1987) attraction-selection-attrition model suggests that similar types of people are attracted to organizations, organizations will select similar type of people, and dissimilar people will leave the organization if they find out that they do not fit. In the context of leader-follower relationships, followers who are capable of transformational leadership and have similar characteristics as transformational leaders

may be more attracted to the prospect of working for the supervisor/manager, followers may be strongly recruited or preferred by supervisors/managers who are looking for people like them, and the followers who are unlike the supervisors/managers may be more likely to quit (leaving workers who share similar characteristics). Indeed, some authors have suggested that transformational leader-follower relationship form as a result of this attraction-selection-attrition process (Ehrhart & Klein, 2001; Klein & House, 1995). Thus, the demonstration of transformational leadership by the follower could be due to factors that may not involve development. If the research question concerns the development or improvement of skills and attributes, it would be helpful to see how current transformational leadership compares to past transformational leadership within the same individual. This would be a perceptual variable in this study, where observed development refers to whether others have perceived improvement/development in the follower's transformational leadership capability. Although this relationship would not rule out all alternative explanations regarding whether development occurred as a result of the leader, examining developmental outcomes from this perspective brings the literature a step closer in supporting the idea of follower development rather than pure self-selection. This study will replicate the relationship between supervisor transformational leadership and follower transformational leadership. This study will also examine the extent to which followers have been observed to improve on transformational leadership behaviors.

*Hypothesis 5a: Supervisor transformational leadership will have a positive relationship with follower transformational leadership.*

*Hypothesis 5b: Supervisor transformational leadership will have a positive relationship with perceived improvement/development in follower transformational leadership.*

An alternative way to test whether self-selection is responsible for the relationship between supervisor transformational leadership and follower transformational leadership is to examine whether the relationship is moderated by length of time working with the supervisor. If any kind of development on the part of the follower is occurring, we can expect the follower to become more like the transformational leader with the passage of time. A longer duration of time spent with the transformational leader would allow the leader more opportunities to develop their followers. As researchers have argued that complete transformational leadership development may not occur immediately but rather involves a long term process (e.g., Avolio, 2005; Avolio & Gibbons, 1988; Kuhnert & Lewis, 1987), followers should become increasingly transformational as they go through a series of developmental experiences and events over time. This suggests that the relationship between supervisor transformational leadership and follower transformational leadership will be stronger for followers who have worked with the leader for a longer period of time. Interestingly, the opposite pattern may be found when examining observed development/improvement as an outcome. Followers who have worked with their transformational leader for a shorter period of time may be raw and have greater room for growth. Conversely, followers who have worked with their transformational leader for a longer period of time may be closer to hitting their ceiling and reaching their full potential. For example, lifespan models suggest that cognitive

development (e.g., information processing, knowledge) is rapid in a person's early years and starts to level out (or decline) later in life (Li et al., 2004). Further, novel situations are more developmental than less novel situations as they require greater adaptation and change to an unfamiliar environment (McCauley et al., 1989; McCauley et al., 1994). New followers may need to develop rapidly in order to get up to speed with the demands of the leader. In the context of transformational leadership, the new follower may see that the other followers are already leader-like, and thus the new follower may feel motivated to develop himself or herself to get on par with the other followers. Transformational leaders are interested in getting all of their followers to reach their full potentials, and if a newcomer is behind others in his or her leadership capability, the person can close the gap by developing himself or herself as a leader. This suggests that the relationship between supervisor transformational leadership and perceived improvement/development in follower transformational leadership is stronger for followers who have spent a shorter amount of time working with their transformational supervisor.

*Hypothesis 6a: The positive relationship between supervisor transformational leadership and follower transformational leadership will be moderated by duration of their working relationship (i.e., number of years), such that the positive relationship will be stronger for working relationships that are longer in duration.*

*Hypothesis 6b: The positive relationship between supervisor transformational leadership and perceived improvement in follower transformational leadership will be moderated by duration of their working relationship (i.e., number of*

*years), such that the positive relationship will be stronger for working relationships that are shorter in duration.*

## **CHAPTER 3**

### **MODEL RELATIONSHIPS BETWEEN TRANSFORMATIONAL LEADERSHIP AND FOLLOWER VARIABLES**

This section will more closely examine the specific network of interrelationships among the study variables based on the model paths shown in Figure 1. This will include the relationships between adjacent variables shown to have direct paths in the model. The prior section already covered the direct paths from supervisor transformational leadership to follower self-concept, development orientation, and prior development experience (i.e., the variables that are directly predicted by supervisor transformational leadership in the model). The theoretical rationale for those direct model paths will not be extensively repeated here. However, this section will examine in greater detail the direct model paths among the follower variables, including the paths from follower self-concept and development orientation to follower development motivation, and the paths from development motivation to the development-related outcomes. Because many of these follower variables act as mediators between supervisor transformational leadership and the other follower variables, the indirect relationships of supervisor transformational leadership on distal variables through proximal variables will be examined.

The review of interrelationships among the variables will be organized around two sets of indirect effects. The first part involves the indirect effect of transformational leadership on development motivation through self-concept and development orientation. As part of this, the direct relationship between follower self-concept/development orientation and follower development motivation will be discussed. The second part will

be the indirect effect of transformational leadership on the follower outcome variables including development activity intentions, follower transformational leadership, and follower transformational leadership development. This second part will include discussions on the direct relationship between follower development motivation and follower outcomes. The direct and indirect relationships will be examined as part of the overall evaluation of the fit of the structural model.

*Indirect Effect on Development Motivation through Self-concept and Development Orientation*

The model in Figure 1 suggests that the self-concept and development orientation variables mediate the relationship between transformational leadership and development motivation. These relationships are based on theoretical models from both the transformational leadership literature and employee development literature. In the transformational leadership literature, Shamir et al. (1993) presented a motivational model of followers that revolves around their self-concept. According to their theory, transformational leader behaviors influence the self-concepts of followers, such that the self-concepts of the followers are implicated in relation to the values and goals advocated by the leader. The evolving self-concepts of the followers are then thought to act as the foundation on which to base their behaviors. The leader ties important values and goals to follower self-concepts in such a way that they (the values and goals) become manifested in the behaviors of followers, where the behaviors are driven by self-expression, self-worth, and the need for self-consistency. As the effort and behavior of the followers reflect important values that have been adopted as a result of the leader, the intrinsic valence of effort and goal accomplishment is increased, and the activities in which the

followers engage become more meaningful to them. The increased intrinsic motivation that arises from a more salient self-concept in turn influences various follower outcomes. For Shamir et al., the discussion surrounding follower motivation/outcomes covered general work variables that are typically found in transformational leadership research (e.g., work performance, the followers' personal commitment to the leader and mission, self-sacrificial behavior, organizational citizenship behavior, task meaningfulness). Although their theory does not specifically reference leadership development motivation, these ideas can be clearly applied to research on motivational processes concerning the followers' leadership development. To the extent that leaders seek to develop their followers into leaders by instilling important goals, values, and beliefs in their followers, the self-concepts of followers will be shifted to become more aligned with that of the leader, and the followers should strive toward and have the motivation for behaviors that are consistent with the self-concept. The congruence in the self-concept between the leader and follower should orient the follower to be more motivated about leadership and leadership development (compared to followers whose self-concepts are not aligned with the self-concept of the leader).

A similar argument can be made for development orientation as an intervening mechanism between transformational leadership and development motivation. The transformational leader's concern for the development of the followers, high performance expectations, emphasis on common goals, expressions of confidence in followers, and display of inspirational values and beliefs that are worthy of emulation should contribute to a sense of self for a follower that places high importance on development and superior performance, as well as a sense of self that reflects high confidence about expanding

one's capabilities. The resulting developmental self-understanding should orient the followers toward motivational outcomes that are consistent with the development orientation. In support of this, the types of development orientation variables included in this study have been either discussed or found as predictors of more proximal motivational variables in the employee development literature (Maurer, 2002; Maurer et al., 2008; VadeWalle, Cron, & Slocum, 2001). Thus, the development orientation variables will be examined as mediators alongside the self-concept variables that are closer to Shamir et al.'s framework. Consistent with the ideas from the transformational leadership literature and employee development literature, the current model expects the followers' personal identification, social identification, leadership self-efficacy, self-efficacy for leadership development, and goal orientation to act as intervening processes that link transformational leadership with variables relevant to development motivation, including motivation to lead, motivation to develop leadership capability, perceived benefits of leadership development, and self-concordance of leadership development goals. These effects are explained in more detail below.

Transformational leaders provide purpose and meaning to their followers by advocating an appealing vision and mission to their followers and expressing important values and beliefs that would allow successful completion of goals (Avolio, 1999; Avolio, 2005; Bass, 1985; Conger & Kanungo, 1987; Yukl & Van Fleet, 1992). These leadership behaviors should impact the followers' development motivation through their level of personal and social identification. In terms of personal identification, the follower identifies with the leader's values and beliefs and perceives the leader as being worthy of emulation (Howell & Shamir, 2005; Shamir et al., 1993; Weiarter, 1997). The leader's

message and the desirable values, beliefs, traits, and attributes possessed by the leader gives the follower a sense of meaning and self-direction for which to strive. Examples of transformational leadership qualities (Avolio, 1999; Avolio, 2005; Bass, 1985; Conger & Kanungo, 1987) that the follower may come to share or desire in themselves include a strong adoption of group goals and the strategic vision, upholding ethical standards, acting beyond one's self interests, challenging traditional assumptions and approaching problems with new perspectives, being open to the opinions of others, and the emphasis on personal growth. To the extent that followers share similar values as their leader, admire the leader, perceive the leader as a role model, and gain a sense of meaning and self-direction from the leader (all of which are characteristics of a personal identification; Howell & Shamir, 2005; Shamir et al., 1993; Weierter, 1997), they should be expected to have a higher motivation to be a leader, motivation to develop leadership capabilities, perceive the benefits of leadership development, and have leadership development goals that are intrinsically motivated. Sharing the same values and beliefs as the leader suggests that the followers can see themselves as leaders and thus be more motivated to be a leader compared to followers whose beliefs and values are less congruent than those of the leader. Further, by admiring the leader and seeing the leader as a role model, the personally identified follower should be motivated to develop the leadership capability that would allow them to emulate their role model. Similarly, the benefits of developing themselves into a leader should be apparent for the followers because development would get them closer to being like their role model and thus help them achieve the type of personal growth that is important to them. Developing themselves should also have the benefit of more easily being able to accomplish the organizational mission/goals that is

expressed by the leader and adopted by the follower, which should in the end benefit all members and entities of the organization. Also, because personally identified followers gain self-direction and a higher intrinsic motivation from the leader (Shamir et al., 1993), their developmental goals should be internally driven rather than be a product of external pressure, and they should be more aware of the intrinsic benefits of development (e.g., becoming a well-rounded person). Finally, those who develop a personal identification with the leader value the well-being of the leader and are interested in fulfilling the leader's expectations. This suggests that these followers may be willing to pursue development in the interest of pleasing of the leader (Maurer, Pierce, & Shore, 2002). They may even be willing to do this at the expense of personal sacrifice (Choi & Maitland, 1999; Halverson, Holladay, Kazama, & Quinones, 2004). Thus, the personal identification of the follower should be related to the followers' motivation to lead, motivation to develop leadership capability, perceived benefits of leadership development, and self-concordance of leadership developmental goals.

The behaviors, values, and beliefs of the leader should also impact the followers' development motivation through their social identification with the work group. Transformational leaders are thought to link the followers' self-concepts to the leaders' group-centered values and message, which leads to an internalization of the values relevant to the group goals and objectives (Shamir et al., 1993). The values and group goals instilled by the leader become shared across the group and become the accepted norms for the group. This should enable the group to perceive themselves as a unit and function toward a collective set of goals and objectives by carrying out the leader's values. The individual group members develop a sense of social identity that will help

guide their behaviors toward a common cause and base their self-expressions on the values and norms of the group. Having a social identity that reflects the values of the group suggests that the follower has incorporated the leader's values and beliefs in terms of the group's mission and thus will act accordingly when interacting with other group members. For example, the values related to individualized consideration can transfer from the leader to the work group, where the leader may initially show individualized consideration to each group member but then individualized consideration becomes the norm for the group as members consider each other's needs and provide advice for development (Avolio & Bass, 1995). Moreover, by upholding the values and norms of the group and being passionate about the group goals, the socially identified follower should be more willing to express themselves in ways that would improve group functioning and help meet the group's mission. Thus, like a transformational leader (Avolio, 1999; Avolio, 2005; Bass, 1985; Conger & Kanungo, 1987; Podsakoff et al., 1990; Shamir et al., 1993; Yukl & Van Fleet, 1992), they may understand the need for being purpose-driven toward group objectives, taking risks for the group, showing confidence in others to carry out their work, motivating others toward goals, going above and beyond normal duties for the good of the group, being considerate of others, and being open to others' opinions and new perspectives. These ideas suggest that group members who are socially identified can be role models towards each other and keep other members on track by setting the example for the group. As a result, the socially identified group member should be better prepared for leadership responsibilities and have a higher motivation to be a leader, compared to those who have less of a social identity. Further, by accepting the importance of the leader's values and beliefs for

carrying out the group's mission (Howell & Shamir, 2005; Shamir et al., 1993; Weierter, 1997), socially identified followers can target these values for development in order to better contribute to the group objectives. The salience of the same values in the follower's self-concept and the need for self-consistency suggests that followers will seek out and put greater effort towards opportunities that are meaningful and consistent with the values (Shamir et al., 1993). Becoming a better leader of the group through development would be one way through which followers can maintain and enhance the self in terms of these values, as well as eventually have an influence over other group members to ensure their contribution to the group. Followers can build on the group-centered values through leadership development so that they can be more vocal and behaviorally expressive of the values in which they strongly believe, which would in turn help the group achieve its goals. Thus, the socially identified followers should have a higher motivation to develop their leadership capability, perceive the benefits of leadership development, and set developmental goals that are important to the self.

In addition to the sharing of group goals and values, there are other aspects of a social identity through which the transformational leader can impact the follower's development motivation. For example, the follower can gain a sense of commitment and loyalty to the group itself in working toward group goals (Shamir et al., 1993). The mere dedication to the group should result in a higher motivation to lead because socially identified followers would believe that being a leader is part of one's duty to the group (e.g., if asked by peers to be a leader) and they are also not deterred by the personal costs associated with being a leader. Chan and Drasgow (2001) found that a person's collectivism (e.g., valuing collective harmony and equality, accepting of social

hierarchies, deferring goals to majority or to authorities) was positively related to motivation to lead. This suggests that a person's social identification should also be related to his or her motivation to lead. Moreover, commitment to the work group should lead to a higher motivation regarding one's development. In the organizational commitment literature, research has found that a person's commitment to the organization predicts developmentally relevant variables such as motivation to learn and pursuit of development (e.g., Colquitt et al., 2000; McEnrue, 1989). To the extent that these findings can be applied to the work group, commitment to the group should also be related to the socially identified follower's development motivation. Committed followers may be more motivated to seek development opportunities than less committed followers for the good of the group because improving their leadership skills will ultimately help the group (Brief & Motowidlo, 1986). Similarly, Maurer et al. (2002) suggested that people can pursue development for a variety of reasons, including for the sake of the work group. For socially identified followers, pursuing development for the sake of the group would be consistent with their self-concept, as development can help achieve group goals. This should increase the development motivation of the follower who identifies with the work group. Finally, transformational leaders appeal to the social identification of followers by providing meaning and purpose to the followers in terms of group goals. This makes the follower perceive themselves as a contributor and an integral part of group, and results in characteristics of empowerment such as a high level of confidence and self-esteem (Kark et al., 2003). Further confidence can be generated by the follower's interdependence with other group members, as social identification is related to perceptions of social support (Haslam, O'Brien, Jetten, Vormedal, & Penna,

2005). These feelings of confidence and perceptions of supportive peer relationships and networks can play an important role in a person's development, including his or her development motivation and capability to exhibit leadership relevant behaviors (Colquitt et al., 2000; Kram & Isabella, 1985; Maurer, 2002; McCauley & Young, 1993; Pilegge & Holtz, 1997; Spreitzer & Quinn, 1996). Thus, followers who have a social identification with their work group should be more likely to have a higher motivation to lead, motivation to develop leadership capability, perceive the benefits of leadership development, and have self-concordant developmental goals.

Self-efficacy for leadership is the third variable in this study that mediates the relationship between transformational leadership and development motivation. As the follower integrates the values and beliefs of the leader into his or her self-concept and as the leader exhibits appropriate behaviors to the follower through role modeling (Howell & Shamir, 2005; Shamir et al., 1993; Weierter, 1997), the follower should start to become more similar to the leader in values and beliefs. Moreover, the transformational leader sees the follower as a potential leader and expresses confidence in the abilities of his or her followers (Avolio & Gibbons, 1988; Bass, 1985; Burns, 1978; Conger & Kanungo, 1987). Sharing similar values as the leader and receiving the encouragement of the leader should increase the follower's confidence in his or her own leadership capability. As such, the follower's self-efficacy for leadership becomes part of his or her self-concept. Shamir et al. (1993) suggests that the incorporation of self-efficacy beliefs into the follower's self-concept can lead to motivational states that are self-expressive of the self-concept. As applied to this study, the follower's self-efficacy for leadership should impact the motivational state of the follower, and the motivational state should

reflect the follower's confidence in his or her leadership capability. Consistent with this idea, Chan and Drasgow (2001) found that self-efficacy for leadership is related to a person's motivation to lead. Thus, followers of transformational leaders who are confident in their leadership capabilities should have greater motivation to assume leadership roles compared to less confident followers. Likewise, followers who are confident in their capabilities as part of their self-concept should be motivated to maintain and enhance this aspect of their self-concept (Shamir et al., 1993). This suggests that having a high self-efficacy for leadership will orient the follower toward developing their leadership capabilities because it would further feed the sense of self-efficacy. Moreover, self-efficacy has been found to be related to task choice, task effort, and persistence in task achievement (Gist & Mitchell, 1992), and previous research in the employee development literature has shown that self-efficacy beliefs predict motivation to learn and learning in a training environment (Colquitt et al., 2000). Thus, followers who have a high self-efficacy for leadership should be more motivated about leadership development, seek out leadership development opportunities, and persist in leadership development settings. Their motivation to develop their leadership capabilities should be higher and their leadership development goals should be based on internal standards compared to followers who are less confident in their leadership capabilities. Also, the goal-focused interest of those with high self-efficacy beliefs (Gist & Mitchell, 1992) and their motivation to enhance the self-concept (Shamir et al., 1993) suggest that these followers should be more likely to perceive the benefits of developing themselves into/as a leader.

Similarly, the transformational leader's effect on the follower's self-efficacy for leadership *development* should lead to a higher development motivation on the part of follower. As transformational leaders act as role models and instill values and beliefs into their followers that become an important aspect of their self-concept (Avolio & Gibbons, 1988; Howell & Shamir, 2005; Shamir et al., 1993; Weierter, 1997), the self-concept of the followers should be expanded in terms of who they think they can become. The confidence that leaders have in their followers should increase the followers' own confidence in attaining their ideal view of leadership. The self-efficacy for leadership development of the followers should in turn predict the development motivation variables. Prior research supports the relationship between self-efficacy for development and the development motivation of employees. For example, in the general employee development literature, development self-efficacy has known relationships with perceived benefits and attitudes and interest for development (Maurer et al., 2008; Maurer et al., 2002; Maurer et al., 2003). This should translate to leadership development, where self-efficacy for leadership development should be related to motivation to develop leadership capability and perceived benefits of leadership development. Development self-efficacy should also be related to motivation to lead and goal self-concordance. Prior studies have found that a person's belief about whether humans can improve their capabilities (conceptually similar to a person's belief in improving his or her own capabilities) is related to goal-setting (choosing more difficult goals), lower anxiety, and better performance in challenging situations or developmental settings (Martocchio, 1994; Wood & Bandura, 1989). This suggests that followers who believe that they can improve their leadership capability should have developmental goals that

are internally motivated, whereas followers who are less confident in their development capability may require external pressure to set developmental goals given their lower confidence and higher anxiety. It also seems conceptually reasonable that followers who are confident in their leadership development capabilities should be more motivated about assuming a leadership position because they see leadership capabilities to be within the realm of possibilities. Conversely, followers who are less confident in their leadership development capabilities should not be as optimistic about their chances of becoming an effective leader and thus should have less of a motivation to be a leader.

Finally, goal orientation should act as a mediator between transformational leadership and development motivation. The transformational leader's emphasis on the personal growth of the follower and the leader's tolerance for mistakes (Bass, 1985; Avolio, 1999) instills the need for continuous development, which should appeal to the learning goal orientation of the followers as well as prevent an avoidance goal orientation. Prior employee development research has linked goal orientation to development motivation. Learning goal orientation is correlated with perceived benefits and attitudes and interest for development (Maurer et al., 2008; Maurer et al., 2002; Maurer et al., 2003). Past research has also shown that learning-oriented people have a higher sense of task self-efficacy, exert greater effort toward the task, and show better task performance than those who are less learning oriented (Heslin & Latham, 2004; VandeWalle et al., 2001). The increased intrinsic task motivation (for the sake of learning) and confidence associated with a learning orientation should enhance one's development motivation. Because learning orientation suggests an intrinsic appreciation and enjoyment for learning and development, the learning orientation of followers should be related to the

self-concordance of developmental goals. The developmental goals of learning oriented followers will be less based on external pressures and more on personal value and enjoyment for the task (Dweck & Leggett, 1988). Also, their approach to tasks and their success in tasks should better prepare them for leadership roles (McCauley, 2001), and thus they should be more motivated to lead compared to followers who are less learning-oriented. McCauley's general leadership development model includes learning orientation as a characteristic that is indicative of an ability to learn and as a predictor to leadership development. In contrast, followers who have an avoidance orientation should be less motivated about leadership development situations because leadership development situations could be highly challenging and expose the followers' lack of ability in the domain. An avoidance orientation has been linked to lower intrinsic motivation in performing tasks, selection of less challenging goals, lower self-efficacy, and lower performance (Elliot & Harackiewicz, 1996; VandeWalle et al., 2001). The threat of negative feedback for those with an avoidance orientation should make it more difficult for them to be motivated about development and see the benefits of development. Because leadership roles can be extremely challenging compared to other types of work roles, people with an avoidant orientation should also be hesitant to take on these roles, which should result in a lower motivation to lead. Also, developmental goals that these types of followers set should be more due to external pressure (e.g., forced by the organization or out of anxiety) rather than intrinsic enjoyment.

Although the performance-avoid orientation is discouraged by the transformational leader, the leader may instill a performance-prove orientation in the follower, which should contribute to a higher development motivation. The performance-

prove orientation is activated because the high performance expectations and confidence that the leader has in the followers should give the follower a sense of pride and competence to demonstrate exceptional performance to themselves and others. Compared to followers of less transformational leaders, followers of transformational leaders should have a higher approach tendency toward challenging tasks and situations that provides an opportunity to validate their sense of competence. A show of exceptional competence also helps the follower validate themselves as an important contributor to the group. In turn, the performance-prove orientation of the follower should have positive relationships with development motivation. It has been found that people with a prove orientation have similar levels of intrinsic motivation as those with a learning orientation (Elliot & Harackiewicz, 1996). Performance-prove orientation is also positively related to amount of effort in performing tasks (VandeWalle et al., 2001) and has been linked to positive achievement oriented constructs such as conscientiousness (Zweig & Webster, 2004). Conscientious people are hard-working and achievement-oriented, and they strive for success in their tasks (Barrick & Mount, 1991; McCrae & Costa, 1987). In learning and development situations, conscientiousness has been linked to training self-efficacy, training proficiency, motivation to learn, need for autonomy, post-feedback developmental behavior, and learning (Barrick & Mount, 1991; Colquitt et al., 2000; Lee & Klein, 2002; Martocchio & Judge, 1997; Simmering, Colquitt, Noe, & Porter, 2003). It has also been found that those who are conscientious are more likely to set challenging goals for themselves and be committed to their goals (Barrick, Mount, & Strauss, 1993). This suggests that leadership and leadership development situations would be looked upon favorably by those with a higher prove orientation compared to those with a lower

prove orientation. Leadership roles are highly challenging and provide followers with an opportunity to demonstrate competence in a context where exceptional performance is highly valued by others. Also, leadership development opportunities should allow performance-prove oriented followers to display their leadership competence and show that they are ready for leadership roles. Further, the development of leadership capabilities may be viewed by followers as an opportunity to sustain their high expectations of performance, as the skill improvements from development would help the followers demonstrate better performance levels in future leadership settings. These ideas, along with high levels of intrinsic motivation, effort, and conscientiousness suggest that followers with a performance-prove orientation will be motivated to lead and develop leadership capability, understand the benefits of development, and have development goals that are intrinsically derived.

In sum, the self-concept and development orientation variables (personal identification, social identification, self-efficacy for leadership, self-efficacy for leadership development, goal orientation) are expected to mediate the relationship between transformational leadership and the follower motivational variables (motivation to lead, motivation to develop leadership, perceived benefits of leadership development, self-concordance of leadership development goals). This is based on extensions of prior theoretical work from the transformational leadership literature and employee development literature. The transformational leader instills his or her values and beliefs into the self-concept and development orientation of followers, which motivates the followers toward self-expression in terms of their self-concept and development orientation. The leader's emphasis on the personal growth and development of followers

(and the leader's interest in developing the followers into leaders) should also play a salient role in triggering the mechanism that ultimately motivates the followers toward leadership development.

*Hypothesis 7a: Follower personal identification will have a positive relationship with each of the development motivation variables (motivation to lead, motivation to develop leadership capability, perceived benefits of leadership development, self-concordance of leadership development goals).*

*Hypothesis 7b: Follower social identification will have a positive relationship with each of the development motivation variables.*

*Hypothesis 7c: Follower self-efficacy for leadership will have a positive relationship with each of the development motivation variables.*

*Hypothesis 7d: Follower self-efficacy for leadership development will have a positive relationship with each of the development motivation variables.*

*Hypothesis 7e: Follower learning orientation will have a positive relationship with each of the development motivation variables.*

*Hypothesis 7f: Follower performance-prove orientation will have a positive relationship with each of the development motivation variables.*

*Hypothesis 7g: Follower performance-avoid orientation will have a negative relationship with each of the development motivation variables.*

*Hypothesis 8: Supervisor transformational leadership will have an indirect effect on development motivation through the follower's self-concept and development orientation.*

### *Indirect Effect on Study Outcomes*

This study will test the indirect effect of transformational leadership on the developmentally-relevant follower outcomes. The outcome variables included in this study are the follower's intentions for participating in development activity, the follower's transformational leadership, and the follower's transformational leadership development. These outcome variables are directly predicted by the follower's development motivation, and thus the relationships among those direct paths will also be examined.

The current literature on follower development has generally viewed development activity in a passive sense (e.g., Avolio & Gibbons, 1988; Shamir et al., 1993; Sosik & Godshalk, 2000), where the leader may directly provide the follower with developmental experiences regardless of whether the follower is interested in pursuing such opportunities. Following the employee development literature (e.g., Birdi et al., 1997; Hazucha et al., 1993; Maurer et al., 2003; Noe & Wilk, 1993), this study recognizes that followers may also actively pursue development activities on their own rather than just being a passive recipient of developmental opportunities and advice. For example, followers may be willing to seek out developmental activities on their own if they believe that their leader is supportive of their development or if the activities will help them build on their self-concept. This suggests that the follower's developmental intentions can be driven by motivational forces. Because transformational leaders elevate the motivation of their followers and make lasting changes in the self-concept and development orientation of their followers (Shamir et al., 1993; Yukl & Van Fleet, 1992), the followers should be able to pursue their own development based on what is important to them.

In this study, supervisor transformational leadership is expected to have an indirect effect on activity intentions through the mediating mechanisms of self-concept/development orientation and development motivation. Building on the earlier discussion of the mediating role of self-concept and development orientation in predicting development motivation, the followers' development motivation should in turn predict their intentions to participate in development activity. In the employee development literature, constructs relevant to development motivation have been consistently shown to predict participation in employee development activity. For example, learning motivation, perceived benefits for development, and attitudes/interest toward development are all related to involvement in development activity and/or intentions for involvement in development activity (Birdi et al., 1997; Colquitt et al., 2000; Maurer et al., 2008; Maurer & Palmer, 1999; Maurer & Tarulli, 1994; Maurer et al., 2003; Noe & Wilk, 1993; Tharenou, 2001). Extending these findings to leadership development would suggest that followers who have a higher motivation to develop leadership capability and perceive the benefits of leadership development should be more likely to have intentions for participating in development activity. In addition, motivation to lead has been theoretically linked to development activity (Chan & Drasgow, 2001). People who are motivated to lead should be more likely to engage in development activity because developing one's leadership skills is a means through which one can qualify for a leadership role and become an effective leader. For example, those with higher managerial aspirations (e.g., wanting to be in greater position of influence) are more likely to demonstrate managerial advancement than those with lower managerial aspirations, and one way to gain managerial advancement is to participate in training and

development activity (Tharenou, 2000; Tharenou et al., 1994). Finally, it seems reasonable that followers who have self-concordant developmental goals should be more likely to participate in development activity. Those with self-concordant goals are more likely to exert effort toward their goals and attain their goals than those with less self-concordant goals (Sheldon & Elliot, 1999; Sheldon & Houser-Marko, 2001). The more developmental goals are important to a person, the more he or she should pursue those goals through effort by participating in development activity. Thus, motivation to lead and self-concordant leadership developmental goals should be related to intentions to participate in leadership development activity.

According to Figure 1, another mediating variable between transformational leadership and activity intentions is the follower's past participation in development activity. Transformational leadership should predict prior participation in development, which should in turn predict intentions to participate in development activity. The past activities for the followers may involve those that were directly provided to the follower by the leader, or they may have been activities that followers participated in on their own as a result of their leader-derived motivational tendencies. The past activities should predict future activities if the follower expects the transformational leader to provide similar activities in the future, or if favorable experiences from past activities further orient the follower toward more activity. Prior participation in development activities is a key predictor of intentions for participation in models of employee development (Maurer et al., 2008; Maurer et al., 2003). Thus, prior participation in leadership development activity should predict intentions for leadership development activity.

Finally, supervisor transformational leadership should have an indirect effect on the transformational leadership behaviors of the follower (through the follower's development motivation). As supervisor transformational leadership should in theory have an impact on the follower's development motivation (as reviewed earlier), the follower's development motivation should in turn relate to their own transformational leadership behaviors. The reasoning is that those who are interested in developing their skills or closing some kind of gap in their performance should be willing to put forth the effort in order to achieve their goal of actual behavioral development. Prior research outside the transformational leadership literature seems to support the relationship between one's motivation to accomplish goals and the actual accomplishment of the goals. As mentioned above, goals that have intrinsic importance to a person are more likely to compel the person to put forth the effort toward the goals, and this effort leads to a better likelihood of reaching the goals (Sheldon & Elliot, 1999; Sheldon & Houser-Marko, 2001). Similar findings that link motivation to behavior and achievement can be found in development-related research. For example, an employee's motivation to learn has been shown to be related to skill and knowledge acquisition in training situations (Colquitt et al., 2000). In the managerial development literature, people with higher managerial aspirations have been shown to be more likely to advance into/through managerial positions and ranks (Tharenou, 2000). Also, other managerial development research has found that managers respond to negative feedback about their performance by putting greater effort into their development (Hazucha et al., 1993), and that the target of their developmental efforts are likely to be those specific performance areas for which they wish to improve/develop (Brutus et al., 1999). The effort of pursuing development

may come from engaging in developmental experiences, which may include such diverse opportunities and challenges as accepting new leadership responsibilities, training, coaching, feedback seeking, or learning and applying new skills on the job in real time (McCauley, 2001; Noe et al., 1997). These types of developmental experiences are likely to help a manager improve his or her performance or even allow a person to move into leadership-type roles (e.g., managerial positions) that require more complex responsibilities (e.g., Hazucha et al., 1993; Tharenou et al., 1994). The link between motivation, the actual behavioral follow through on the motivation, and the accomplishment of motivational goals suggests that followers with a high motivation to lead and motivation to develop their leadership capability would be rated higher on transformational leadership behaviors, compared to those with a low motivation to lead or motivation to develop their leadership capability. Followers who have a higher motivation to lead or motivation to develop leadership should also be more likely to be perceived by others as having developed their transformational leadership behaviors over time. Likewise, followers who believe that there are benefits to leadership development and have leadership developmental goals that are intrinsically driven should be rated higher on perceptions of both transformational leadership behavior and observed development of transformational leadership behavior.

The review above and in the prior sections of this paper suggests that development motivation and past development activity mediate the relationship between transformational leadership and follower outcomes such as development activity intentions, follower transformational leadership, and follower transformational leadership development.

*Hypothesis 9a: Follower motivation to lead will have a positive relationship with each of the development-related outcome variables (i.e., intentions to participate in leadership development activity, follower transformational leadership, follower transformational leadership development).*

*Hypothesis 9b: Follower motivation to develop leadership capability will have a positive relationship with each of the development-related outcome variables.*

*Hypothesis 9c: Follower perceived benefits of leadership development will have a positive relationship with each of the development-related outcome variables.*

*Hypothesis 9d: Follower self-concordance of leadership development goals will have a positive relationship with each of the development-related outcome variables.*

*Hypothesis 9e: Follower past leadership development activity will have a positive relationship with intentions to participate in leadership development activity.*

*Hypothesis 10: Supervisor transformational leadership will have an indirect effect on all of the development-related outcomes through development motivation (and the other more distal follower mediator variables).*

## **CHAPTER 4**

### **THE BIGGER PICTURE OF TRANSFORMATIONAL LEADERSHIP THEORY**

The final objective of this study will be to take a closer look at the bigger picture of transformational leadership theory's assumption that leaders develop their followers into leaders. This will be done by examining the extent to which the follower development process is specific to transformational leadership theory as opposed to other theories of leadership. Comparisons will be made between transformational leadership and other leadership styles in predicting various outcomes that are relevant to follower development.

If one of the defining characteristics of transformational leadership theory is that followers develop into transformational leaders, research on follower development should examine the degree to which the process of follower leadership development is unique to the theory. Because most other leadership styles do not have the concept of follower leadership development fundamentally built into their theories, the other leadership styles should be expected to have less of an impact on the followers' leadership development process. The alternative leadership styles that will be used for comparison in this study include transactional leadership, initiating structure, consideration, and leader-member exchange.

Transactional leaders are contrasted with transformational leaders in transformational leadership theory, such that transformational leaders are thought to exhibit a higher form of leadership than transactional leaders (Avolio, 1999; Bass, 1985; Bass, 1997; Burns, 1978). The leadership style of transactional leaders is more

managerial in nature, as it resembles performance management types of behaviors. There are three dimensions of transactional leadership: contingent reward, active management by exception, passive management by exception. Transactional leaders focus on exchange relationships with subordinates, where leaders promise rewards to the subordinates based on previously agreed upon expectations (contingent reward). Further, leaders can take corrective action for devious behavior by actively monitoring for errors and mistakes before they are made (active management by exception) or passively reacting to errors after they have been made (passive management by exception). Transactional leadership dimensions are typically examined separately in research rather than aggregating across dimensions. Of the three dimensions of transactional leadership, the contingent reward dimension has the strongest and most consistent relationships with leader and follower outcomes (Bass, 1997; Judge & Piccolo, 2004), and it is frequently the dimension of interest in studies that have compared transformational and transactional leadership (Podsakoff et al., 1990; Tepper & Percy, 1994; Waldman, Bass, & Yammarino, 1990). The other two dimensions have weak or inconsistent relationships with outcomes and are theoretically not considered to be effective forms of leadership (Bass & Avolio, 1994; Judge & Piccolo, 2004; Waldman, Bass, & Einstein, 1987). For these reasons only contingent reward transactional leadership will be included in this study as a measure of transactional leadership.

Numerous studies have compared transformational leadership and contingent reward transactional leadership when predicting leader and follower outcomes. The first method of comparison has involved comparing the relative validities of each type of leadership. In comparing the relative validities, research has shown that transformational

leadership is a stronger (or slightly stronger) predictor of outcomes compared to transactional leadership (Bass, 1997; Judge & Piccolo, 2004). The second method of comparison has involved showing incremental variance explained in the outcome by one leadership style over another. The purpose of this method has been to test for the “augmentation hypothesis” of transformational leadership theory. That is, one of the theoretical concepts of transformational leadership theory is that transactional leadership acts as a base from which transformational leadership can grow (Avolio, 1999). Transformational leadership augments transactional leadership by contributing to the extra effort and performance of the followers. Research has supported the augmentation hypothesis by showing that transformational leadership adds unique variance over transactional leadership in predicting outcome variables (Bass, 1997). However, studies have also shown that transactional leadership uniquely predicts outcomes after controlling for transformational leadership (Judge & Piccolo, 2004). Thus, although transformational leadership is theoretically considered a higher form of leadership than transactional leadership (Avolio, 1999; Bass, 1997; Kuhnert & Lewis, 1987), these two types of leadership do not seem to be redundant constructs, and behaviors from both types of leadership should be effective for influencing the follower. Still, in terms of follower development, transformational leadership should be the more effective form of leadership due to the theoretical emphasis on the leadership development of the follower. Given the link between transformational leadership and transactional leadership in theory and research concerning traditional leadership outcomes (e.g., follower performance, satisfaction), these two types of leadership should also be compared in studies examining alternative outcomes of leadership, such as those relevant to follower development.

The next two types of leadership to which transformational leadership will be compared come from the Ohio State leadership studies. These studies developed a taxonomy of leader behavior that is organized around two categories called initiating structure and consideration (Halpin, 1957; Halpin & Winer, 1957; Yukl & Van Fleet, 1992). The initiating structure category deals with task-oriented behaviors. Leaders high in initiating structure focus on clarifying roles and task requirements, setting performance standards, and providing structure through policies and procedures. In contrast, the consideration category focuses on people-oriented behaviors. Leaders high in consideration exhibit a pattern of behavior that is indicative of having respect for followers, showing concern for followers' welfare, valuing follower input, and being pleasant and supportive. Both initiating structure and consideration have moderately-strong positive relationships with leadership outcomes (Judge, Piccolo, & Ilies, 2004).

Only a few studies have compared transformational leadership with initiating structure and consideration (Burke et al., 2006; Howell & Frost, 1989; Keller, 2006; Koene, Vogelaar, & Soeters, 2002; Seltzer & Bass, 1990). Similar to the comparisons with transactional leadership, the comparisons with initiating structure and consideration have involved examining the relative validities of each type of leadership in predicting various leadership outcomes. Transformational leadership seems to be superior or at least comparable to both consideration and initiating structure in the strength of their relationships with outcomes (Burke et al., 2006; Howell & Frost, 1989; Koene et al., 2002). Studies have also tested whether transformational leadership adds unique variance beyond initiating structure and consideration in accounting for the outcome variables. The findings show support for the incremental variance explained by transformational

leadership over the other two types of leadership (Keller, 2006; Seltzer & Bass, 1990). Note that the leadership outcomes examined in prior studies have been diverse, including such variables as leader effectiveness, follower satisfaction, climate, financial performance, and task performance. However, there are no known studies that have compared these leadership styles in the context of the follower development process.

The final leadership style that will be used for comparison purposes is based on leader-member exchange theory. According to leader-member exchange theory, leaders develop certain kinds of exchange relationships with some subordinates more than others (Dansereau, Graen, & Haga, 1975; Graen & Cashman, 1975; Yukl & Van Fleet, 1992). Subordinates who develop favorable relationships with the leader are considered to be in the “in-group” due to their loyalty and commitment to the leader. In return, the leader may provide these subordinates with greater autonomy, support, and other special benefits. Those in the “in-group” have high quality relationships with the leader. In contrast, the subordinates who are in the “out-group” have a relationship with the leader that is characterized by a standard exchange of benefits, such as complying with formal role requirements in return for compensation and continued membership in the organization. The quality of relationship between the leader and follower in these cases is not as high. Thus, relationships between the leader and follower are dyadic in nature, as one follower may have a different relationship with the leader compared to another follower.

Leader-member exchange theory has been linked to transformational leadership theory both conceptually and empirically (Basu & Green, 1997; Gerstner & Day, 1997; Graen & Uhl-Bien, 1995; Howell & Hall-Merenda, 1999; Wang et al., 2005; Yammarino

& Bass, 1990; Yukl & Van Fleet, 1992). For example, leader-member exchange and transformational leadership are highly correlated and have overlapping content between the constructs (Basu & Green, 1997; Howell & Hall-Merenda, 1999; Wang et al., 2005). Leader-member exchange is also related to several follower outcomes that are important to transformational leadership theory, such as job performance, satisfaction, organizational commitment, role clarity, and member competence (Gerstner & Day, 1997). In addition, some authors have suggested that transformational leadership represents the most advanced form of a leader-member exchange relationship (Graen & Uhl-Bien, 1995; Wang et al., 2005; Yukl & Van Fleet, 1992). Finally, leader-member-exchange may have some implications for follower development, as it has been linked to several variables that are relevant to employee development, such as supervisor support, mentoring, and development motivation (Basu & Green, 1997; Maurer et al., 2002; Scandura & Graen, 1984; Scandura & Schriesheim, 1994). This suggests that leader-member exchange has much in common with transformational leadership and should be used as a point of comparison in terms of the follower development process.

In sum, this study will test the degree to which the leadership development process is unique to transformational leadership theory. All of the alternative leadership styles have been compared to transformational leadership in prior research, but none have been compared to transformational leadership in the context of the leader-follower developmental relationship. Because leadership development by the follower is central to transformational leadership theory but not to the original conceptualizations of other theories of leadership, the developmental variables included in this study should have greater relevance to transformational leadership. This idea needs to be tested. For

example, if transactional leaders are just as successful as transformational leaders in developing their followers or motivating them toward transformational leadership development, the value of the transformational leader is diminished and the theory is challenged. Further, theoretical work suggesting that certain leadership styles may evolve into transformational leadership over time (e.g., Graen & Uhl-Bien, 1995) brings into question the unique contribution of transformational leadership theory compared to other theories of leadership. Thus, the distinction between transformational leadership and other forms of leadership should be more closely examined in terms of the follower development process.

The various leadership styles will be compared using multiple analytic approaches. The first method of comparison involves comparing the relative validities of the styles in predicting outcome variables. More specifically, this study will test for differences in correlation coefficients where different leadership styles predict the same outcomes. The second method involves testing for incremental variance explained by transformational leadership over the other leadership styles. In this study, tests will be performed to determine whether transformational leadership explains unique variance over and above the other leadership styles in predicting the outcome variables. Dominance analysis (Azen & Budescu, 2003; LeBreton, Ployhart, & Ladd, 2004) will be used as a third method to compare the leadership styles. The general dominance statistic provides a measure of relative importance for correlated predictors. It allows the predictors to be rank ordered according to the average usefulness of each predictor in explaining variance in the outcome variable.

The follower outcome variables included in these comparisons will be two of the variables relevant to development motivation (motivation to develop leadership capability, motivation to lead), the two variables relevant to leadership development activity (past activity, intentions), and the two variables relevant to follower leadership behaviors (follower transformational leadership, follower transformational leadership development).

*Hypothesis 11a: The relationship between supervisor transformational leadership and each of the motivation variables (motivation to lead, motivation to develop) will be stronger than the relationship between the other leadership styles and the motivation variables.*

*Hypothesis 11b: The relationship between supervisor transformational leadership and each of the development activity variables (past activity, intentions) will be stronger than the relationship between the other leadership styles and the development activity variables.*

*Hypothesis 11c: The relationship between supervisor transformational leadership and each of the follower transformational leadership variables (behavior, development) will be stronger than the relationship between the other leadership styles and the follower transformational leadership variables.*

*Hypothesis 12a: Supervisor transformational leadership will account for incremental variance in each of the motivation variables over and above the other leadership styles.*

*Hypothesis 12b: Supervisor transformational leadership will account for incremental variance in each of the development activity variables over and above the other leadership styles.*

*Hypothesis 12c: Supervisor transformational leadership will account for incremental variance in each of the follower transformational leadership variables over and above the other leadership styles.*

*Hypothesis 13a: Supervisor transformational leadership will have the highest relative importance (i.e., dominance statistic) in predicting each of the motivation variables compared to the other leadership styles.*

*Hypothesis 13b: Supervisor transformational leadership will have the highest relative importance in predicting each of the development activity variables compared to the other leadership styles.*

*Hypothesis 13c: Supervisor transformational leadership will have the highest relative importance in predicting each of the follower transformational leadership variables compared to the other leadership styles.*

## CHAPTER 5

### METHOD

#### *Sample and Survey Administration Procedure*

Participants were recruited through StudyResponse.com. As introduced at the 2003 annual meeting of the Society for Industrial and Organizational Psychology (Weiss & Stanton, 2003), StudyResponse is a service that matches researchers with participants willing to receive solicitations to complete surveys (typically administered over the Internet). The participant pool includes over 95,000 people, which allows for data collection opportunities that would otherwise be unavailable or challenging through more traditional methods. For example, StudyResponse provides access to the employed population, which should be an upgrade over student samples particularly in leadership-related research where perceptions of leadership are typically reported in employment settings. In addition, employed participants of StudyResponse represent a wide variety of demographic and occupational background characteristics. The diverse nature of StudyResponse samples should increase the generalizability of results to a general working population beyond what can be expected by using a sample of workers from a specific job or single organization. Targeting a diverse working sample is consistent with prior studies that have modeled the employee development process (Maurer et al., 2008; Maurer et al., 2003). Finally, data collected through StudyResponse should be less intrusive for participants than data collection that is coordinated through the participants' employers. Concerns by respondents about how the data will be used should be alleviated, thus reducing motives to respond in a favorable manner.

Although Internet samples have not been traditionally used for data collection, there is growing evidence to support the validity of such data. Data collected over the Internet for research purposes is increasingly common, and recent critical examinations of this method of research are positive (Gosling et al., 2004; Kraut, Olson, Banaji, Bruckman, Cohen, & Couper, 2004). For example, Internet data have been shown to have similar psychometric and measurement properties as data collected through more conventional media (Krantz & Dalal, 2000; Stanton, 1998). Similarly, the StudyResponse administrators found that the results from the StudyResponse panelists' responses corresponded with the results obtained in the national poll of opinions within just a few percentage points of error on just about every question asked (J. M. Stanton, personal communication, January 13, 2006, in Maurer et al., 2008). In addition, Internet samples may also show advantages over other types of samples in terms of the completeness in their responses, statistical power (relatively easier access to large samples), and external validity (Reips, 2000; Simsek & Viega, 2001). Thus, the literature suggests that we can be reasonably confident about data collected from online samples. StudyResponse samples have been used in a variety of published studies as well as in other doctoral dissertations within the Georgia Tech School of Psychology (Harris, Anseel, & Lievens, 2008; Judge, Ilies, & Scott, 2006; Lewen, 2007; Lievens, Anseel, Harris, & Eisenberg, 2007; Maurer & Lippstreu, 2008a; Maurer & Lippstreu, 2008b; Maurer et al., 2008; Piccolo & Colquitt, 2006; Vodanovich, Wallace, & Kass, 2005).

The survey administration process involved collecting data from two different sources of raters. The first source of raters will be referred to as the respondent sample. Potential respondents were screened through StudyResponse for those who were

currently in supervisory roles at their place of employment. Six hundred sixty-seven potential respondents were identified as eligible for the study. Recruitment notices were sent to these potential participants via email. The letters contained a description of the study and a link to the survey pages. Consenting participants completed the survey in their web browsers. A reminder about the study in the form of email was sent after the first week of the initial recruitment notice. This process returned 398 completed surveys.

Although the respondents in this sample occupied supervisory roles, they will serve as the “followers” in the leader-follower relationship for this study. These “followers” provided self-report data in terms of their self-concept, development orientation, development motivation, past development activity, and development activity intentions. They also rated their own supervisors on the supervisors’ leadership style. The leadership style measures completed by the respondents will act as the predictor variables (e.g., supervisor transformational leadership) in the leader-follower relationship, whereas the rest of the measures completed by the respondent in this survey will act as the follower process and outcome variables (development activity intentions being the only outcome).

The second source of data came from the respondents’ subordinates. The respondents were asked to identify an employee with whom they work closely in a supervisory capacity. Instructions for the respondent to share information about the study to their subordinates were provided in the same recruitment email described earlier. The respondents forwarded a link to their subordinate so that the subordinate could complete a shorter, separate survey (see Piccolo & Colquitt, 2006 for a similar procedure using StudyResponse samples). Subordinates who agreed to participate completed the surveys

in their web browsers. A reminder about the study was sent after the first week of participation. Subordinates rated their supervisors (i.e., the participants from the respondent sample) on transformational leadership and transformational leadership development, which will serve as follower outcome measures. This survey was completed by 263 subordinates.

A final dataset was created by linking the data from each respondent with the data from his or her subordinate. Only cases with data from both sources of data were retained. Thus, the sample size for the final dataset was 263 participants, which reflected a 39% final response rate. Tables 1 and 2 provide the demographic characteristics of each source of data. The respondent sample consisted of mostly Caucasian males with a mean age of 37.37 (SD=8.47). Their mean total work experience was 14.83 years (SD=8.98), and their mean job tenure was 7.38 years (SD=5.41). The mean level of supervisory experience for this sample was 6.90 years (SD=6.04). Table 1 also shows that participants from the respondent sample held positions that spanned across diverse occupational categories. In terms of the subordinate sample, table 2 similarly shows that the participants mostly consisted of Caucasian males. Their mean age was 33.48 (SD=7.90) and they reported working under their current supervisor (i.e., the participant from the respondent sample) for a mean of 3.95 years (SD=3.15).

Table 1. Demographic Description of Respondent Sample (N = 263)

Variable	M	SD
Age	37.37	8.47
Years Total Work Experience	14.83	8.98
Years Job Tenure	7.38	5.41
Years Supervisory Experience	6.90	6.04
Years Working with Current Supervisor	4.85	4.04
	n	%
Gender		
Female	77	29.3
Male	185	70.3
No Response	1	.4
Race		
Caucasian	214	81.4
African American	6	2.3
Hispanic	10	3.8
Asian/Pacific Islander	27	10.3
Other	5	1.9
No Response	1	.4
Occupation		
Architecture & Engineering	8	3.0
Arts, Design, Entertainment, Sports, & Media	6	2.3
Building and Ground Cleaning & Maintenance	2	.8
Business & Financial Operations	37	14.1
Community & Social Services	11	4.2
Computer & Mathematical	29	11.0
Construction & Extraction	13	4.9
Education, Training, & Library	11	4.2
Farming, Fishing, & Forestry	1	.4
Food Preparation & Serving Related	2	.8
Healthcare Practitioners and Technical	7	2.7
Healthcare Support	8	3.0
Installation, Maintenance, & Repair	5	1.9
Legal	4	1.5
Life, Physical, & Social Sciences	3	1.1
Management	51	19.4
Military Specific	1	.4
Office & Administrative Support	14	5.3
Personal Care & Service	5	1.9
Production	25	9.5
Protective Service	3	1.1
Sales & Related	10	3.8
Transportation & Material Moving	7	2.7

Table 2. Demographic Description of Subordinate Sample (N = 263)

Variable	M	SD
Age	33.48	7.90
Years Working with Supervisor (i.e., Participant from Respondent Sample)	3.95	3.15
	n	%
Gender		
Female	85	32.3
Male	177	67.3
No Response	1	.4
Race		
Caucasian	199	75.7
African American	16	6.1
Hispanic	16	6.1
Asian/Pacific Islander	28	10.6
Other	3	1.1
No Response	1	.4

*Respondent Sample Measures – Supervisor Leadership*

*Transformational leadership – Multifactor Leadership Questionnaire.*

Respondents rated the transformational leadership of their supervisors using the Multifactor Leadership Questionnaire (MLQ-Form 5x; Avolio et al., 1999; Bass & Avolio, 2004). The MLQ consisted of 20 transformational leadership items that covered the four dimensions of idealized influence (e.g., “talks about his/her most important values and beliefs”), inspirational motivation (e.g., “articulates a compelling vision of the future”), intellectual stimulation (e.g., “re-examines critical assumptions to question whether they are appropriate”), and individualized consideration (“spends time teaching and coaching”). Ratings of leadership behavior were made on a 5-point frequency scale

ranging from 0 (not at all) to 4 (frequently, if not always). Consistent with recent studies (Avolio et al., 2004; Bass et al., 2003; Bono & Judge, 2003; Kark et al., 2003; Piccolo & Colquitt, 2006; Sosik et al., 2004), transformational leadership was treated as a general, overall construct and a single composite was created.

*Transactional leadership.* Respondents also rated their supervisors on transactional leadership. For reasons discussed earlier, only the contingent reward scale of transactional leadership was included. The 4-item scale from the MLQ was used to measure contingent reward transactional leadership (e.g., “Makes clear what one can expect to receive when performance goals are achieved”). The response scale for transactional leadership was the same as the response scale for transformational leadership (0=not at all, 4=frequently, if not always).

*Initiating structure and consideration.* Initiating structure (task-oriented) and consideration (people-oriented) leadership behaviors were measured using the Leader Behavior Description Questionnaire (LBDQ-XII; Stogdill, 1963). The initiating structure and consideration scales each consisted of 10 items. Sample items are “Lets group members know what is expected of them” (initiating structure) and “Looks out for the personal welfare of group members” (consideration). Responses were made on a scale of frequency ranging from always (1) to never (5). The respondents rated their supervisors on these behaviors.

*Leader-member exchange.* Leadership based on leader-member exchange theory is defined by the quality of interpersonal relationship that has developed between the leader and follower. This relationship-based leadership was measured using the LMX7 (Graen & Uhl-Bien, 1995), which was recommended by Gerstner and Day (1997) as the

instrument with the soundest psychometric properties. It consisted of 7 items, with an example being “How would you characterize your working relationship with your leader?” The response scale ranged from 1 to 5, but the scale type varied for each item (e.g., Likert, frequency, amount).

*Measurement model for supervisor leadership.* A confirmatory factor analysis was done to test the five-factor measurement model for the supervisor leadership measures. The five factors were transformational leadership, transactional leadership, initiating structure, consideration, and leader-member exchange. Due to the large number of items relative to sample size, item parcels were created for measures consisting of 8 or more items by taking the mean of the items assigned to each parcel (Bandalos & Finney, 2001; Little, Cunningham, Shahar & Widaman, 2002). Thus, parcels were loaded onto each factor for transformational leadership, initiating structure, and consideration, whereas items were loaded onto each factor for transactional leadership and leader-member exchange. The results of the confirmatory factor analysis showed acceptable fit for the five-factor model (CFI = .91; RMSEA = .085; SRMR = .05).

#### *Respondent Sample Measures – Self-concept*

*Personal identification.* The respondent’s personal identification with the leader was measured using a scale adapted from Kark et al. (2003). The scale consisted of 8 items and responses ranged from 1 (strongly disagree) to 7 (strongly agree). Sample items are “I highly identify with my manager” and “The values of my manager are similar to my values.”

*Social identification.* The 8-item social identification scale was also adapted from Kark et al. (2003). It was similar in content to the personal identification scale except that

the respondent reported the degree to which he or she identifies with the work group/team. Sample items are “I identify very strongly with the employees of my work group/team” and “The values of most of the employees in the work group/team are similar to my values.” Participants recorded their responses using a 1 (strongly disagree) to 7 (strongly agree) scale.

*Self-efficacy for leadership.* This 4-item scale measured the degree to which the respondent is confident in his or her leadership capability (Maurer & Lippstreu, 2008c). A sample item is “I am capable of being an effective leader in most of the groups that I work with.” Respondents provided their ratings on a 7-point scale, ranging from strongly disagree to strongly agree.

*Measurement model for self-concept.* The three-factor measurement model for the self-concept measures was tested through confirmatory factor analysis. Parcels were created for personal identification and social identification. Items were directly loaded onto the self-efficacy factor. The confirmatory factor analysis resulted in good model fit (CFI = .98; RMSEA = .08; SRMR = .03).

#### *Respondent Sample Measures – Development Orientation*

*Self-efficacy for leadership development.* The self-efficacy for leadership development scale assessed the respondent’s level of confidence in developing his or her leadership capability. It was adapted from prior work in employee development research (Maurer et al., 2008; Maurer et al., 2003). The response scale ranged from 1 (strongly disagree) to 7 (strongly agree). There were 4 items for this scale, with an example being “I can increase my leadership capabilities beyond their current levels.”

*Goal orientation.* VandeWalle's (1997) work-specific goal orientation measure was used for this study. Three dimensions were assessed with this measure. The learning orientation dimension assessed the respondents' tendencies toward challenging and learning-based opportunities (5 items), the performance-prove dimension assessed the respondents' tendencies for approaching situations in order to prove themselves (4 items), and the performance-avoid dimension assessed the respondents' tendencies for avoiding situations that may reveal their lack of ability (4 items). Respondents rated their goal orientation using a 6-point scale (strongly disagree to strongly agree). Examples of items include "I am willing to select a challenging work assignment that I can learn a lot from" (learning), "I prefer to work on projects where I can prove my ability to others" (prove), and "I prefer to avoid situations at work where I might perform poorly." (avoid).

*Measurement model for development orientation.* A confirmatory factor analysis was done on the four-factor model for development orientation, with the four factors corresponding to self-efficacy for leadership development, learning orientation, performance-prove orientation, and performance-avoid orientation. The fit of the four-factor model was acceptable (CFI = .92; RMSEA = .085; SRMR = .065).

#### *Respondent Sample Measures – Development Motivation*

*Motivation to lead.* Two measures of motivation to lead were used in this study. The first measure was based on the work by Chan & Drasgow (2001), where the motivation to lead consisted of three dimensions that reflect various reasons for assuming a leadership a role. Respondents may be motivated to lead for affective reasons (affective dimension), they may feel a sense of duty to be a leader (social-normative dimension), or they may not worry about the personal cost of being a leader (noncalculative dimension).

The measure included 9 items each for the affective dimension (e.g., “Most of the time, I prefer being a leader rather than a follower when working in a group”), social-normative dimension (e.g., “I feel that I have a duty to lead others if I am asked”), and noncalculative dimension (e.g., “I am only interested to lead a group if there are clear advantages for me” – reverse scored). The response scale ranged from 1 (strongly disagree) to 5 (strongly agree). Consistent with prior leadership development research similar to the present study (Maurer & Lippstreu, 2008c; Maurer & Lippstreu, 2009), a single overall composite was created for motivation to lead.

The second measure was a more direct measure of motivation to lead in terms of transformational leadership. Respondents rated specific leadership behavior items according to how motivated they are to be a leader that demonstrates the particular leadership behavior. In an attempt to reduce the common method variance when examining the relationship between supervisor transformational leadership and follower motivation to lead, the items from the Transformational Leadership Behavior Inventory (TLI; MacKenzie, Podsakoff, & Rich, 2001; Podsakoff et al., 1996; Podsakoff et al., 1990) was used as an alternative set of leadership items rather than items from the MLQ. The items from the TLI (adapted to reflect self-ratings rather than rating other targets) consisted of 23 items pertaining to six dimensions including identifying and articulating a vision (e.g., “having a clear understanding of where the group is going”), providing an appropriate model (e.g., “leading by example”), fostering the acceptance of group goals (e.g., “getting the group to work together for the same goal”), high performance expectations (e.g., “insisting on only the best performance”), providing individualized support (e.g., “behaving in a manner thoughtful of employees’ personal needs”), and

intellectual stimulation (e.g., “challenging employees to think about old problems in new ways”). Respondents indicated their level of leadership motivation on a 5-point response scale (not at all motivated to very motivated). The inclusion of this scale will help determine if followers have a motivation to be a transformational leader or just a leader in general.

Similar to the MLQ measure, observed transformational leadership behavior as assessed through the TLI has been treated as a single construct in recent studies (Bommer et al., 2004; Richardson & Vandenberg, 2005; Rubin, Munz, & Bommer, 2005; Schaubroeck, Lam, & Cha, 2007; Wang et al., 2005). Thus, the same was done for the motivational version of the measure.

*Motivation to develop leadership capability.* The motivation to develop leadership capability was also measured with two different scales. The first was a general motivation to develop leadership scale that was adapted from prior employee development research (Maurer et al., 2008; Maurer et al., 2003). This scale included 4 items (e.g., I feel favorably toward the idea of improving my leadership capability”). Participants responded on a 7-point scale, ranging from strongly disagree to strongly agree.

The second motivation to develop measure was specific to transformational leadership. This measure was included to help determine whether followers are motivated to develop their transformational leadership capability (as opposed to general leadership capability). For each of the leadership behaviors adapted from the TLI (Podsakoff et al., 1990), respondents indicated the degree to which they are motivated to improve the specific leadership behavior in themselves (Maurer & Lippstreu, 2008c). The response scale ranged from 1 (not at all motivated) to 5 (very motivated).

*Perceived benefits of leadership development.* The perceived benefits of leadership development scale was adapted from scales that have been created for employee development research (Maurer et al., 2008; Maurer et al., 2003). This scale included perceptions of intrinsic benefits and organizational benefits of participating in learning and development activities. Intrinsic benefits (4 items) result in interest or stimulation on the part of the participant or help the participant reach his or her full potential as a person (e.g., “Leadership training and development activities are likely to help me develop and reach my full potential as a person”), whereas organizational benefits (3 items) deal with outcomes that benefit the organization, subordinates, peers, and supervisors (e.g., “My participation in leadership-relevant learning activities would increase the overall effectiveness of my department, area or organization”). Respondents provided their ratings on a scale from 1 (disagree very strongly) to 7 (agree very strongly). Consistent with prior research (Maurer et al., 2008), a single composite of perceived benefits was created.

*Self-concordant leadership development goals.* The self-concordance of leadership development goals was assessed by following similar procedures reported in Bono & Judge (2003) and Judge et al. (2005). Respondents were asked to think about four goals that will help them become a better leader in the future. For each goal that respondents identified, they were asked four questions to indicate various reasons for pursuing the goal. The four questions corresponded to the four sources of motivation that cover the self-concordance construct (external, introjected, identified, intrinsic). The external and introjected questions are considered indicators of controlled motivation, whereas the identified and intrinsic items are considered indicators of autonomous

motivation. The external and introjected questions were “You choose this goal because somebody else wants you to or because the situation demands it” and “You pursue this goal because you would feel anxious, guilty, or ashamed if you didn’t.” The identified and intrinsic questions were “You pursue this goal because you really believe it’s an important goal to have” and “You pursue this goal because of the fun and enjoyment it provides you.” For each of these four questions, participants responded on a 9-point scale (1=not at all for this reason, 9=completely for this reason).

In order to create a composite score of goal self-concordance, the responses for each item were averaged across the four goals, which created a single score for each of the external, introjected, identified, and intrinsic scales. The identified and intrinsic scores were then summed and the external and introjected scores were subtracted from the sum to create a difference score. This is consistent with previous studies (Bono & Judge, 2003; Judge et al., 2005; Sheldon & Elliot, 1999; Sheldon & Houser-Marko, 2001).

The procedure to collect self-concordance ratings was similar to those used in prior transformational leadership research (Bono & Judge, 2003), but there were also some differences. First, this study asked respondents to think about their goals for the next twelve months, whereas Bono and Judge gave their participants a 60-day timeframe. The longer timeframe was used for this study in order to be consistent with the timeframe given in other measures in this study (see development activity measures). Second, Bono and Judge asked their participants to identify six goals, whereas this study asked respondents to identify four goals. The reason for the fewer number of goals is that this study was asking respondents to identify more specific type of goals (i.e., leadership development) than the general work goals that was the focus in Bono and Judge.

Compared to general work goals, the narrower construct of leadership development goals suggests that the range of goals available for selection by respondents is also narrower. Third, respondents in this study were not asked to enter their goals as part of their responses. Rather, they were simply asked to think about their first goal and respond to the four questions, then think about the second goal and respond to the four questions, etc. This was meant to further reduce anonymity and sensitivity concerns on the part of the participants.

*Measurement model for development motivation.* A nine-factor model for development motivation was tested in a confirmatory factor analysis. The nine factors included general motivation to lead, specific motivation to lead, general motivation to develop, specific motivation to develop, perceived benefits, external self-concordance, introjected self-concordance, identified self-concordance, and intrinsic self-concordance. Parcels were created for general motivation to lead, specific motivation to lead, and specific motivation to develop. The nine-factor model showed acceptable fit (CFI = .91; RMSEA = .07; SRMR = .09).

#### *Respondent Sample Measures – Development Activity*

*Past leadership development activity.* Respondents indicated how frequently they engaged in various types of development activities during the past 12 months (Maurer et al., 2008; Maurer et al., 2003). The activities included those that reflect traditional on-the-job development (e.g., participated in special project, either required or optional), skill acquisition (e.g., worked on a specific skill on the job), and feedback (e.g., asked feedback from supervisor), as well as traditional off-the-job activities (e.g., taken a correspondence course) and career planning (e.g., worked on a career/professional

development plan) that an employee could perform either during work or nonwork hours. Respondents used a seven-point response scale ranging from Never (0) to About six times or more (6). Prior research has treated this scale as a single composite (Maurer et al., 2008; Maurer et al., 2003).

*Leadership development activity intentions.* The same development activities were presented a second time so that respondents could indicate their intentions to participate in these activities over the next twelve months (Maurer et al., 2008; Maurer et al., 2003). Similar to past development activities, prior research has treated intentions to participate in future activity as a single composite scale.

*Measurement model for development activity.* A confirmatory factor analysis was done to test the two-factor model for development activity (Prior activities and Intentions). Parcels were created for both factors due to the large number of items. The fit of the model was (CFI = .99; RMSEA = .08; SRMR = .01).

#### *Subordinate Sample Measures – Transformational Leadership Outcomes*

For each of the MLQ items, subordinates were asked to make two separate ratings regarding their perceptions of transformational leadership as demonstrated by their supervisors (note that the participant from the respondent sample was being rated by the subordinate). For the first rating, subordinates reported the extent to which his or her supervisor exhibits transformational leadership behavior. This was the same MLQ measure completed by the respondent sample, where ratings of leadership behavior were made on a 5-point frequency scale ranging from 0 (not at all) to 4 (frequently, if not always). The second rating assessed the extent to which the subordinate has perceived development or improvement in the supervisor's leadership behavior. The same items

from the MLQ measure was used, and the instructions and scale were adapted to reflect the new rating. The response scale for observed development ranged from 1 (strongly disagree) to 7 (strongly agree). These measures were used to assess follower transformational leadership and follower transformational leadership development.

*Measurement model for subordinate-rated follower outcomes.* A two-factor model for the subordinate sample measures was tested through confirmatory factor analysis. Parcels were created for both follower transformational leadership and follower transformational leadership development. The results showed good model fit (CFI = .99; RMSEA = .05; SRMR = .02).

## CHAPTER 6

### RESULTS

#### *Analysis Strategy*

The analyses were performed in several phases. In the first phase, the direct relationship between supervisor transformational leadership and the follower variables were examined using correlations. The relevant hypotheses here included the relationships between supervisor transformational leadership and follower self-concept (hypotheses 1a-1c), development orientation (hypotheses 2a-2d), development motivation (hypotheses 3a-3d), development activity (hypotheses 4a-4b), and leadership behaviors (hypotheses 5a-5b). For hypotheses 1a through 4b, all variables were based on measures completed by the respondent sample. For hypotheses 5a and 5b, the predictor measure of supervisor transformational leadership was based on the respondent sample's perceptions of their supervisors, whereas the outcome measures of follower transformational leadership and transformational leadership development were based on the subordinate sample's perceptions of their supervisors. This phase of the analyses also tested hypotheses 6a-6b, or whether duration of working relationship moderates the relationship between supervisor transformational leadership (measure from respondent sample) and follower transformational leadership/development (measures from subordinate sample).

The phase two analyses concerned hypotheses 7 through 10, or the test of the Figure 1 model. The overall fit of the structural/path model was examined, as well as the direct paths between the specific variables shown in the figure. In addition, the fully mediated model was compared to alternative models that added direct effects from

supervisor transformational leadership to the follower outcome variables. The difference in fit between the models was examined to test for full or partial mediation. This included examining the indirect effects of supervisor transformational leadership on follower outcomes (through the intervening variables). An alternative, theoretically-driven model configuration was also tested as supplementary analyses.

During the third phase of analyses, the relationship between supervisor transformational leadership and follower process/outcome variables were examined relative to the other leadership styles (hypotheses 11a-13c). The correlation between supervisor transformational leadership and follower variables (motivation, activity, transformational leadership) were compared to the correlations between each of the alternative leadership styles and the same follower variables. A test of the difference between the correlation coefficients was performed. In addition, hierarchical regressions were performed to test for the unique variance added by supervisor transformational leadership in predicting the follower variables over and above the other leadership styles. Dominance analysis (Azen & Budescu, 2003; LeBreton, Ployhart, & Ladd, 2004) was also used to determine whether transformational leadership has the highest relative importance in predicting the follower variables. The general dominance statistic represents the squared semipartial correlation averaged across all possible subset regression models, with the dominance weights of each predictor summing to the total model R-square with all 5 predictors entered into a regression equation. The percentage of the total model R-square explained by each predictor can then be computed by dividing the dominance value by the total R-square of the overall regression model. Finally, supplementary analyses were performed to test the structural model identified in

phase 2 using the alternative leadership styles in place of supervisor transformational leadership.

Table 3 provides the means, standard deviations, and intercorrelations among the study variables. The reliabilities for each scale are also provided on the diagonal.

Table 3. Means, Standard Deviations, and Intercorrelations among Study Variables

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Supv. Transformational	2.68	.65	.94													
2. Personal Identification	5.17	1.23	.71	.94												
3. Social Identification	5.48	1.00	.58	.70	.93											
4. Leadership Self-efficacy	5.84	.90	.47	.41	.55	.90										
5. Development Self-efficacy	5.50	.98	.44	.47	.51	.54	.88									
6. Learning Goals	4.83	.76	.48	.39	.56	.70	.67	.87								
7. Prove Goals	4.41	.87	.34	.42	.48	.35	.53	.45	.80							
8. Avoid Goals	3.66	1.27	.08	.24	.12	-.05	.19	-.03	.40	.89						
9. Gen Motivation to Lead	3.40	.38	.24	.14	.3	.51	.24	.53	.07	-.46	.77					
10. Gen Motivation to Develop	5.66	.89	.41	.40	.59	.63	.63	.65	.40	.01	.51	.87				
11. Spec Motivation to Lead	3.87	.53	.35	.26	.48	.65	.44	.65	.23	-.15	.54	.66	.92			
12. Spec Motivation to Develop	3.88	.52	.40	.33	.55	.60	.55	.68	.30	-.09	.50	.71	.84	.91		
13. Perceived Benefits	5.50	.88	.46	.45	.66	.52	.58	.61	.48	.20	.33	.71	.58	.71	.91	
14. Self-concordance	2.41	4.19	.13	.02	.12	.26	.11	.31	-.11	-.49	.50	.29	.40	.43	.24	.95
15. Prior Activities	2.86	1.43	.24	.34	.31	.19	.37	.25	.40	.49	-.12	.25	.12	.18	.38	-.15
16. Intentions	2.75	1.56	.24	.36	.29	.15	.35	.22	.41	.47	-.12	.25	.09	.15	.36	-.17
17. Follower Transformational	2.90	.55	.49	.41	.48	.52	.53	.55	.41	.05	.29	.49	.43	.49	.50	.22
18. Follower Development	5.33	.93	.48	.51	.51	.53	.58	.49	.42	.13	.27	.55	.39	.47	.56	.14
19. Supv. Transactional	2.71	.70	.85	.62	.56	.44	.41	.44	.32	.04	.18	.40	.35	.43	.45	.21
20. Supv. Initiating Structure	3.82	.61	.73	.66	.63	.58	.51	.53	.50	.19	.23	.48	.43	.48	.52	.15
21. Supv. Consideration	3.46	.56	.68	.67	.52	.41	.22	.38	.18	-.17	.35	.30	.35	.36	.32	.27
22. Supv. LMX	3.75	.71	.71	.79	.64	.57	.44	.50	.38	.04	.29	.42	.47	.43	.41	.16

Note. Supv. = supervisor; Gen = general; Spec = specific; LMX = leader-member exchange.  
 p < .05 for r > .11. p < .01 for r > .15. p < .001 for r > .20.

Table 3 (*continued*).

Variable	15	16	17	18	19	20	21	22
15. Prior Activities	.98							
16. Intentions	.94	.99						
17. Follower Transformational	.27	.25	.92					
18. Follower Development	.31	.35	.69	.96				
19. Supv. Transactional	.24	.23	.44	.46	.75			
20. Supv. Initiating Structure	.34	.31	.53	.54	.74	.88		
21. Supv. Consideration	.02	.01	.35	.31	.64	.63	.75	
22. Supv. LMX	.23	.20	.46	.49	.65	.71	.76	.90

### *Direct Relationships between Transformational Leadership and Follower Variables*

*Transformational leadership and self-concept.* Hypotheses 1a through 1c predicted that transformational leadership would be positively related to the follower self-concept variables, including personal identification, social identification, and self-efficacy for leadership. As shown in Table 3, the three hypotheses were supported as transformational leadership had moderate to strong positive correlations with all of the follower self-concept variables. Thus, followers with transformational leaders were more likely to have a higher personal identification with the leader, social identification with the work group, and self-efficacy for leadership compared to followers whose supervisors were rated lower on transformational leadership.

*Transformational leadership and development orientation.* Hypotheses 2a through 2d predicted that transformational leadership would be related to follower development orientation. Specifically, positive relationships were expected between transformational leadership and self-efficacy for leadership development, learning orientation, and performance-prove orientation. A negative relationship was expected between transformational leadership and performance-avoid orientation. According to Table 3, all hypotheses except hypothesis 2d were supported. Transformational leadership was significantly and positively related to self-efficacy for leadership development, learning orientation, and performance-prove orientation, but not significantly related to performance-avoid orientation.

*Transformational leadership and development motivation.* Transformational leadership was predicted to have positive relationships with follower development motivation, including motivation to lead (hypothesis 3a), motivation to develop

leadership capability (hypothesis 3b), perceived benefits of leadership development (hypothesis 3c), and self-concordance of leadership development goals (hypothesis 3d). Table 3 shows that hypothesis 3a was supported. Transformational leadership was significantly and positively related to motivation to lead, measured in terms of both general leadership motivation and transformational leadership motivation. The same was true for motivation to develop leadership capability; transformational leadership was positively related to both measures of motivation to develop leadership capability (general leadership scale and transformational-specific scale). In addition, support was found for the positive relationship between transformational leadership and perceived benefits of leadership development (hypothesis 3c), as well as the positive relationship between transformational leadership and self-concordant leadership development goals (hypothesis 3d). However, the correlation between transformational leadership and self-concordant development goals was rather weak.

*Transformational leadership and development activity.* Hypotheses 4a and 4b predicted that transformational leadership would be positively related to followers' prior participation in leadership development activity as well as intentions to participate in future leadership development activity. These hypotheses were supported (see Table 3). Followers with transformational leaders were more likely to have been involved in past leadership development activity, compared to followers whose leaders were perceived to be less transformational. Followers with transformational leaders were also more likely to have intentions to participate in leadership development activity in the near future.

*Transformational leadership and follower transformational outcomes.*

Transformational leadership was expected to have positive relationships with follower

transformational leadership and follower transformational leadership development.

Consistent with hypotheses 5a and 5b, transformational leadership had moderate to strong positive relationships with both of the follower outcomes (see Table 3). Thus, followers who have transformational leaders were more likely to be transformational leaders towards their own subordinates, and they were more likely to have been perceived by their subordinates as showing development in their transformational leadership behavior.

#### *Duration of Working Relationship as Moderator*

The duration of working relationship between the follower and his/her supervisor was examined as a moderator for the relationship between supervisor transformational leadership and follower transformational leadership/leadership development (hypotheses 6a and 6b). In order to measure duration of working relationship, the follower was asked how long his/her current supervisor has supervised his/her work.

The results of the moderated regression analyses are provide in Table 4. The analyses were performed separately for each of the two outcome variables. For each regression model, supervisor transformational leadership and duration of working relationship were entered together into the first step of the model, and the interaction term was entered into the second step. Evidence for a moderated effect was examined by determining whether the interaction term explained significant incremental variance in predicting each of the follower outcomes. According to Table 4, duration of working relationship did not moderate the relationship between supervisor transformational leadership and follower transformational leadership. Duration of working relationship also did not moderate the relationship between supervisor transformational leadership and

follower transformational leadership development. Thus, hypotheses 6a and 6b were not supported.

Table 4. Moderated Regression Analysis: Duration of Working Relationship as Moderator of Supervisor-Follower Relationships

Step	$\beta$	$R^2$	$\Delta R^2$	F	$\Delta F$
DV: Follower Transformational					
1. Supv. Transformational	.50***	.26	.26	43.58***	43.58***
Duration of Relationship	.05				
2. Supv. Transformational	.52***	.26	.00	29.00***	.14
Duration of Relationship	.12				
Interaction	-.09				
DV: Follower Development					
1. Supv. Transformational	.49***	.24	.24	40.28***	40.28***
Duration of Relationship	.01				
2. Supv. Transformational	.55***	.25	.00	27.20***	1.03
Duration of Relationship	.23				
Interaction	-.24				

Note. Supv. = supervisor  
 \* $p < .05$  \*\* $p < .01$  \*\*\* $p < .001$ .

### *Test of Structural Models*

The model in Figure 1 was tested using LISREL 8.50, with each scale from the path model loading as the single indicator for its construct. The error variance for each indicator was estimated by taking 1 minus the reliability of the scale and multiplying this value by the scale's variance. The overall fit of the model was examined as well as the individual hypothesized paths between the constructs (hypotheses 7 through 10). The same scales from the prior correlational analyses were used for the current model testing.

For the motivation to lead and motivation to develop constructs, I elected to use the specific measure for motivation to lead and the general measure for motivation to develop. The psychometric properties of the specific motivation to lead scale were stronger than the general motivation to lead scale (e.g., reliabilities, factor loadings in measurement model). The specific measure also has greater variability in ratings. The limited variance in the general measure may be due to the sample characteristics, as recruitment was limited to people who are already in positions of leadership, thus perhaps making general leadership motivation more tightly bound as opposed to motivation on a specific type of leadership behavior. Also, the relationship between transformational leadership and the specific scale ( $r = .35$ ) was stronger compared to the general scale ( $r = .24$ ), and these correlations were significantly different [ $t(260) = -1.97, p < .05$ ]. Finally, there is more agreement in recent literature about the dimensionality of the TLI measure (on which the specific measure is based) compared to the Chan and Drasgow (2001) measure (on which the general measure is based). Most recent studies using the TLI focus on a single overall composite (Bommer et al., 2004; Richardson & Vandenberg, 2005; Rubin et al., 2005; Schaubroeck et al., 2007; Wang et al., 2005), whereas studies

examining motivation to lead have approached the construct measurement in various ways including using a single overall composite, looking at each dimension separately, or even excluding some dimensions from theory and research altogether (Hendricks and Payne, 2007; Kark and Van Dijk, 2007; Maurer and Lippstreu, 2008c; Van Iddekinge, Ferris, and Heffner, 2009).

For the decision to use the general motivation to develop scale over the specific scale, an effort was made to reduce collinearity in the path model, as the relationship between the two specific scales was very strong ( $r = .84$ ). Note that the relationships involving the general and specific motivation to develop scales with the other variables showed negligible differences for the most part, with any difference due to stronger relationships for the general scale compared to the specific scale (see Table 3). For example, transformational leadership did not show differential relationships with the general and specific motivation to develop scales ( $r = .41$  vs.  $r = .40$ ). Thus, there was justification in this study to use the general motivation to develop scale alongside the specific motivation to lead scale. All subsequent analyses involving these constructs will focus on these scales.

In addition to the hypothesized paths in Figure 1, several other non-directional bivariate relationships were predicted in the path model based on prior research and theory and were also expected to correlate here. These were relationships between personal and social identification (Kark et al., 2003); relationships among self-efficacy for leadership, self-efficacy for leadership development, and goal orientation constructs (Dweck and Leggett, 1988; Maurer, 2002; Maurer & Lippstreu, 2008c; Maurer et al., 2008; Zweig & Webster, 2004; VandeWalle, 1997); relationships among motivation to

lead, motivation to develop, and perceived benefits of development (Maurer, 2002; Maurer & Lippstreu, 2009; Maurer & Lippstreu, 2008c); perceived benefits with self-concordant development goals (Ryan & Deci, 2000); follower leadership development with development activity intentions (Avolio, 2005; Avolio, 1999; Avolio & Gibbons, 1988); and follower transformational leadership with follower transformational leadership development (Bass, 1985; Bass et al., 1987).

*The hypothesized fully mediated model.* The fit of the hypothesized fully mediated model was  $\chi^2(54, N = 263) = 294.03, p < .001$ ; CFI = .92; RMSEA = .13; SRMR = .13. Figure 2 presents the significant paths and their standardized coefficients. Several of the hypothesized relationships were statistically significant. Transformational leadership significant predicted prior development activity, personal identification, social identification, self-efficacy for leadership, self-efficacy for leadership development, learning orientation, and performance-prove orientation. However, the path from transformational leadership to performance-avoid orientation was not significant. This pattern of relationships was consistent with the bivariate correlations presented earlier.

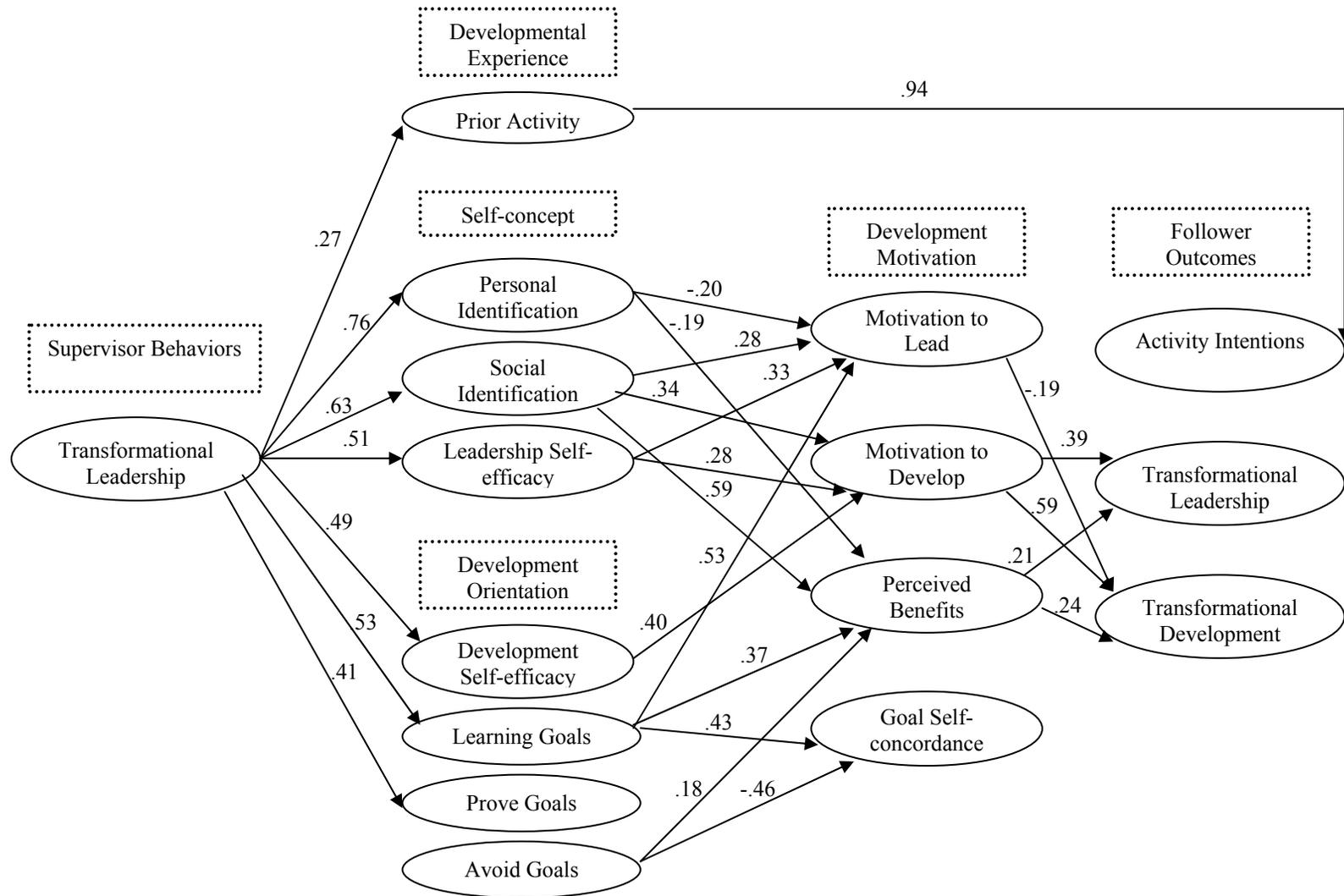


Figure 2. Observed Fully Mediated Path Model. Only significant paths and their standardized coefficients are shown.

Several of the paths from the self-concept and development orientation variables to the development motivation variables were also significant as expected. Social identification was positively related to motivation to lead, motivation to develop, and perceived benefits; self-efficacy for leadership was positively related to motivation to lead and motivation to develop; self-efficacy for leadership development was positively related to motivation to develop; learning orientation was positively related to motivation to lead, perceived benefits, and goal self-concordance; and performance-avoid orientation was negatively related to goal self-concordance. In terms of the paths from development motivation to the follower outcomes, both motivation to develop and perceived benefits had positive relationships with follower transformational leadership and follower transformational leadership development. Also as predicted, prior development activity significantly predicted intentions to participate in future development activity.

Contrary to hypotheses, Figure 2 also shows several expected relationships that were nonsignificant. The predictors with nonsignificant paths to motivation to lead included self-efficacy for leadership development, performance-prove orientation, and performance-avoid orientation. Motivation to develop was not significantly predicted by personal identification or by any of the goal orientation variables. Perceived benefits was not significantly predicted by either of the self-efficacy variables or by performance-prove orientation. The predictors with nonsignificant paths to goal self-concordance were personal identification, social identification, self-efficacy for leadership, self-efficacy for leadership development, and performance-prove orientation. In predicting the follower outcomes, nonsignificant paths were found from motivation to lead to both intentions and follower transformational leadership, from motivation to develop to intentions, from

perceived benefits to intentions, and from goal self-concordance to all of the follower outcomes.

Finally, there were a few significant relationships that were unexpectedly in the wrong direction. Performance-avoid orientation was positively related to perceived benefits, personal identification was negatively related to motivation to lead and perceived benefits, and motivation to lead was negatively related to transformational leadership development. The negative relationships for personal identification and motivation to lead are likely to be statistical artifacts given that the bivariate correlations are positive. The positive relationship from performance-avoid orientation to perceived benefits, however, was consistent with the correlation between these two variables. In sum, partial support was found for hypotheses 7b, 7c, 7d, 7e, 7g, 9b, 9c, and 9e, while no support was found for hypotheses 7a, 7f, 9a, or 9d. Thus, the only hypothesized predictors with complete lack of support in the model were personal identification, performance-prove orientation, motivation to lead, and self-concordant leadership development goals. All other predictors showed some support for the hypothesized relationships.

*Revisions to the fully mediated model.* The overall fit of the hypothesized model was less than ideal. As such, possible additional paths between the endogenous constructs were revisited based on theory. A further review of the literature (Gist & Mitchell, 1992; Kraiger, Ford, & Salas, 1993; Maurer, 2002; Maurer & Lippstreu, 2008c; Noe et al., 1997) suggested that paths could be added from prior development activities to each of the four development orientation variables (self-efficacy for leadership development, learning orientation, performance-prove orientation, and performance-avoid orientation). For

example, Maurer (2002) suggested that involvement in development activity can strengthen an employee's learning and development orientation, as the employee's self-awareness and interests evolve as result of successful involvement in development activity. Similarly, Gist & Mitchell (1992) discussed how mastery experiences can lead to greater confidence in a given task domain. In the context of the current study, we can expect followers who have participated in leadership development activity to have a higher self-efficacy for leadership development, a higher learning orientation, a higher performance-prove orientation, and a lower performance-avoid orientation.

The fit of the revised model was  $\chi^2(50, N = 263) = 206.40, p < .001$ ; CFI = .95; RMSEA = .11; SRMR = .10. Figure 3 presents the significant paths and their standardized coefficients. The pattern of relationships for Figure 3 was consistent with that of Figure 2. The only exception was a new significant path from self-efficacy for leadership development to perceived benefits. This relationship was positive as predicted. For the newly added paths in the revised model, prior development activity had positive relationships with self-efficacy for leadership development, learning orientation, performance-prove orientation, and performance-avoid orientation. The only surprising result was the positive relationship between prior development activity and performance-avoid orientation, where a negative relationship was expected.

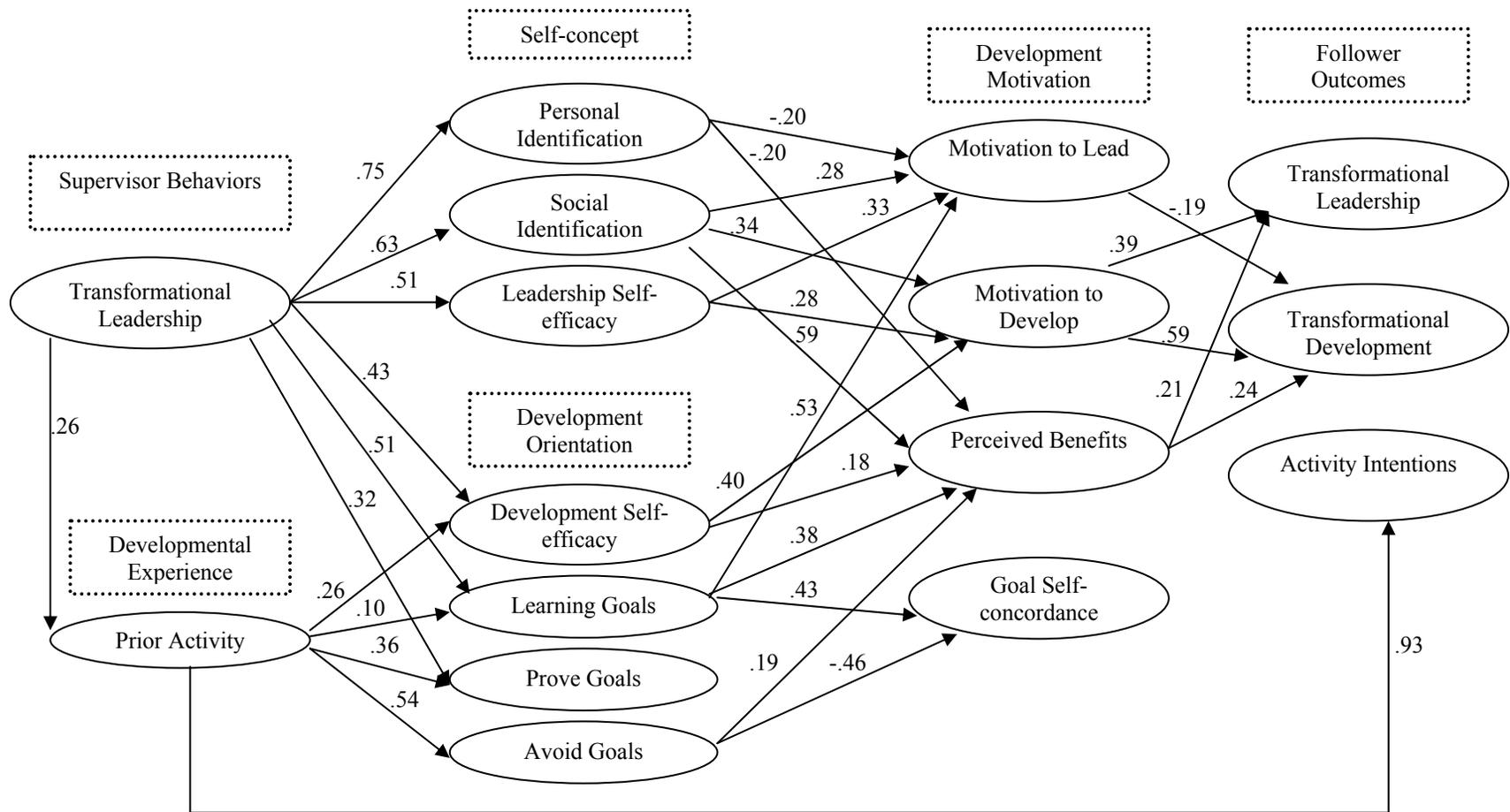


Figure 3. Revised Observed Fully Mediated Path Model. Only significant paths and their standardized coefficients are shown.

*Partially mediated model.* A partially mediated model was tested by adding direct paths from supervisor transformational leadership to the follower variables (with all other estimated paths from the Figure 3 model remaining the same). Two different models were tested and compared against the Figure 3 model. In the first model, direct paths were added from supervisor transformational leadership to each of the follower development motivation variables. This was done to examine whether self-concept and development orientation partially mediated the relationship between transformational leadership and development motivation. The fit of this partially mediated model was  $\chi^2(46, N = 263) = 202.85, p < .001$ ; CFI = .95; RMSEA = .11; SRMR = .10. A chi-square difference test indicated that the fit of this model was not significantly different from the fit of the fully mediated model in Figure 3 ( $\Delta\chi^2[4, N = 263] = 3.55, ns$ ). In addition, none of the direct paths from transformational leadership to the development motivation variables were significant. Thus, the fully mediated model is preferred over the partially mediated model as it is more parsimonious.

In the second partially mediated model, direct paths were added from supervisor transformational leadership to each of the follower outcome variables (development activity intentions, follower transformational leadership, follower transformational leadership development). All other aspects of the Figure 3 model remained the same. The purpose of this model was to determine whether the relationship between supervisor transformational leadership and follower outcomes was partially mediated by all of the intervening follower process variables, including self-concept, development orientation, and development motivation. The fit of this partially mediated model was  $\chi^2(47, N = 263) = 179.00, p < .001$ ; CFI = .95; RMSEA = .10; SRMR = .08. A chi-square difference test

indicated that this model fit significantly better than the fully mediated model with direct paths from transformational leadership removed ( $\Delta\chi^2[3, N = 263] = 27.40, p < .001$ ). Figure 4 shows the significant standardized path coefficients for the partially mediated model. The original significant paths from the Figure 3 model were also significant in Figure 4. One exception was the dropped path from perceived benefits to follower transformational leadership in the partially mediated model. In terms of the direct paths added from transformational leadership to the follower outcomes, supervisor transformational leadership significantly predicted follower transformational leadership and follower transformational leadership development. Thus, the follower process variables were partial mediators of the relationship between supervisor transformational leadership and the follower outcome variables.

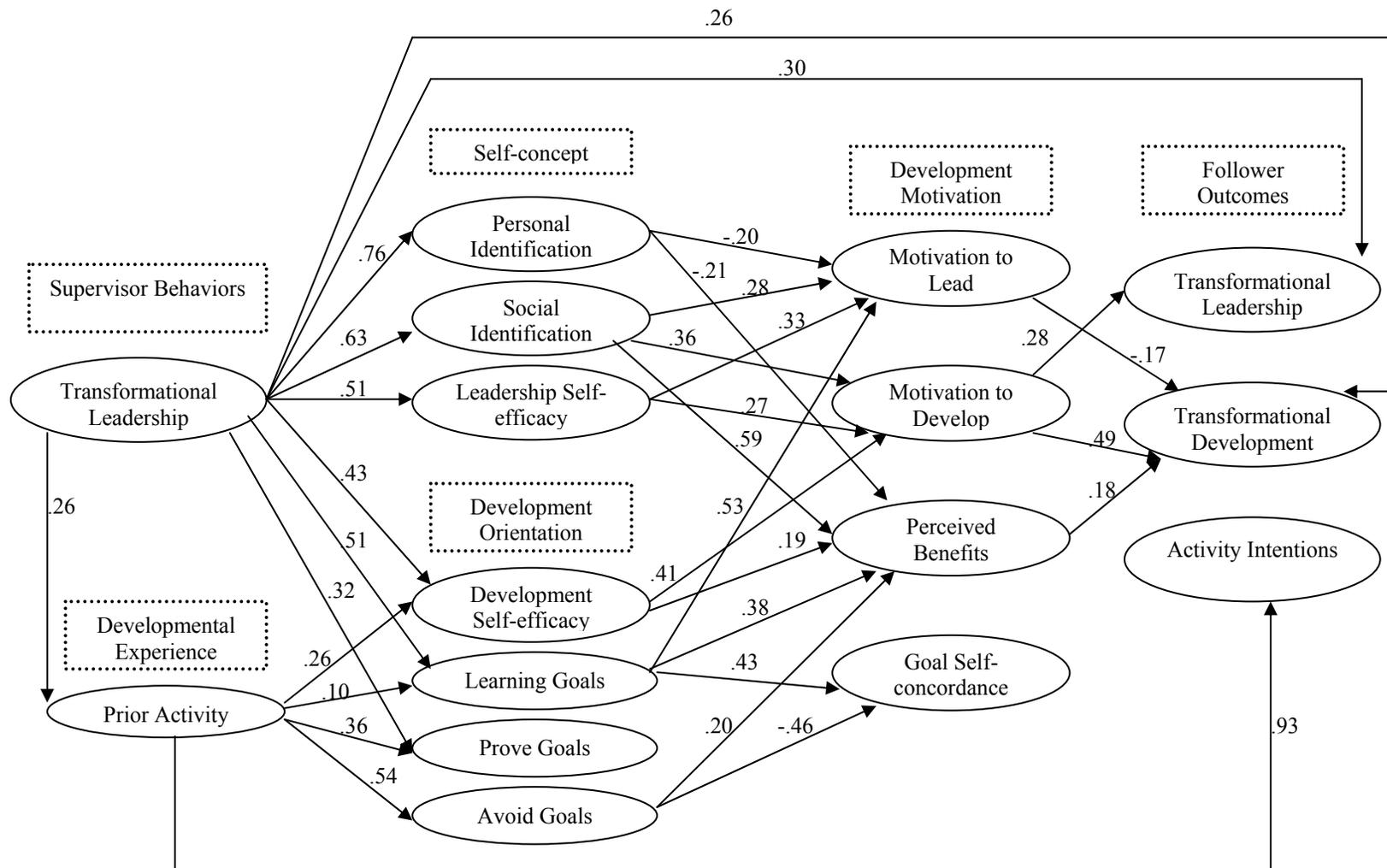


Figure 4. Observed Partially Mediated Path Model. Only significant paths and their standardized coefficients are shown.

The indirect effects of the final partially mediated model are provided in Table 5. Focusing on the indirect effect of supervisor transformational leadership on the follower variables, we can see that supervisor transformational leadership had significant positive indirect effects on self-efficacy for leadership development, performance-prove orientation, and performance-avoid orientation through prior development activities. Supervisor transformational leadership also had significant indirect effects on all of the development motivation variables through follower self-concept and development orientation. Finally, supervisor transformational leadership had significant indirect effects on all of the follower outcome variables (development activity intentions, follower transformational leadership, follower transformational leadership development) through the preceding set of follower process variables. Of these relationships, the indirect effects of transformational leadership on performance-avoid orientation and development activity intentions were not supported by the earlier analyses in this study. Transformational leadership was not significantly related to performance-avoid orientation in the bivariate correlational analyses, and development activity intentions was not significantly predicted by any of the follower development motivation variables in the path model.

In sum, transformational leadership had significant indirect effects with several of the distal follower variables. Taken together with the comparison of model fit between the fully mediate model and the partially mediated model, there was support for partial mediation over full mediation. The relationship between supervisor transformational leadership and the follower outcomes was partially mediated by the follower process variables.

Table 5. Standardized Indirect Effects for Partially Mediated Path Model

Variable	Supv. Transf.	Prior Activities	Personal Identif.	Social Identif.	Lead. SE	Develop. SE	Learning Goals	Prove Goals	Avoid Goals
Development Self-efficacy	.07**								
Learning Goals	.03								
Prove Goals	.09**								
Avoid Goals	.14**								
Motivation to Lead	.39**	-.04							
Motivation to Develop	.52**	.08*							
Perceived Benefits	.52**	.18**							
Self-concordance	.12*	-.26**							
Intentions	.25**	.01	.00	.01	-.01	.02	-.03	.01	.02
Follower Transformational	.23**	.03	-.07*	.19**	.08	.13*	.14*	-.02	-.02
Follower Development	.27**	.09**	-.08	.23**	.07	.24**	.05	.01	.03

*Note.* Columns contain predictors and rows contain outcomes; Supv. Transf. = Supervisor Transformational; Identif. = identification; Lead. SE = self-efficacy for leadership; Develop. SE = self-efficacy for development.  
\*p<.05 \*\*p<.01.

*Supplementary analyses – alternative model configuration.* The model in Figure 4 was based on the integration of prior theoretical and empirical work from the transformational leadership literature and employee development literature. At times, this required reconciliation of discrepancies between the two bodies of work. For example, the Shamir et al. (1993) framework suggests that self-efficacy is one of the self-concept variables that is directly predicted by transformational leadership, which puts self-efficacy as one of the more distal predictors in the model. On the other hand, employee development models suggest that self-efficacy should be alongside perceived benefits in a way that is more proximal to development motivation (Maurer and Lippstreu, 2008c; Maurer et al., 2008; Maurer et al., 2003). In those models, self-efficacy and perceived benefits were considered motivation variables that predicted more specific types of motivation variables such as motivation to develop. Thus, employee development models have suggested that individual domain variables predict the motivation variables of self-efficacy and perceived benefits, which in turn predict development motivation.

In order to accommodate transformational leadership theory and employee development models while maintaining parsimony in this study, self-efficacy was considered a self-concept variable, whereas perceived benefits was pushed farther in the sequence to be grouped with other motivation variables under development motivation. However, because employee development models have suggested that self-efficacy belongs alongside perceived benefits to predict development motivation, an alternative model configuration can be examined in which perceived benefits is pulled back alongside self-efficacy as another development orientation variable. As such, transformational leadership would predict perceived benefits (and the other self-

concept/development orientation variables), which would in turn predict development motivation (motivation to lead, motivation to develop, self-concordance). This alternative configuration would still allow the model to generally remain consistent with employee development work without overly sacrificing transformational leadership theory (i.e., self-efficacy still predicted by transformational leadership; self-efficacy and benefits predict development motivation).

Another aspect of the model that should be revisited involves the relationship between motivation to lead and motivation to develop. The Shamir et al. (1993) framework for transformational follower motivation did not differentiate between the various layers of motivation. In contrast, recent findings in leadership development research have suggested that motivation to lead mediates the relationship between other person variables and motivation to develop leadership (Maurer and Lippstreu, 2008c). Thus, as part of the alternative configuration being examined here, motivation to lead is expected to directly predict motivation to develop rather than motivation to lead directly predicting the follower outcomes.

In sum, an alternative model was examined with two major changes made on top of the Figure 4 model: 1) perceived benefits was pulled back alongside the other development orientation variables, and 2) motivation to lead was expected to predict motivation to develop rather than the follower outcomes. Also, similar to the prior model, several non-directional bivariate relationships between constructs were predicted based on previous research and theory. These were relationships between personal and social identification (Kark et al., 2003); relationships among self-efficacy for leadership, self-efficacy for leadership development, goal orientation constructs, and perceived benefits

(Dweck and Leggett, 1988; Maurer, 2002; Maurer & Lippstreu, 2008c; Maurer et al., 2008; Maurer et al., 2003; Zweig & Webster, 2004; VandeWalle, 1997); follower leadership development with development activity intentions (Avolio, 2005; Avolio, 1999; Avolio & Gibbons, 1988); and follower transformational leadership with follower transformational leadership development (Bass, 1985; Bass et al., 1987).

The fit of the alternative model was  $\chi^2(53, N = 263) = 221.75, p < .001; CFI = .94; RMSEA = .10; SRMR = .08$ . Figure 5 shows the model paths that were significant and their standardized coefficients. For structural aspects of the model that were unchanged, the pattern of results for the Figure 5 model was similar to Figure 4 model. The exceptions were that social identification no longer predicted motivation to lead or motivation to develop, and learning goals no longer predicted self-concordance of developmental goals. Also, the negative paths from personal identification were no longer significant, but these were likely statistical anomalies in the earlier model. In terms of the revised aspects of the model, supervisor transformational leadership and prior development activities positively predicted perceived benefits; perceived benefits had significant positive relationships with motivation to lead, motivation to develop, and goal self-concordance; and motivation to lead had a significant positive relationship with motivation to develop. These relationships were expected and are consistent with theory.

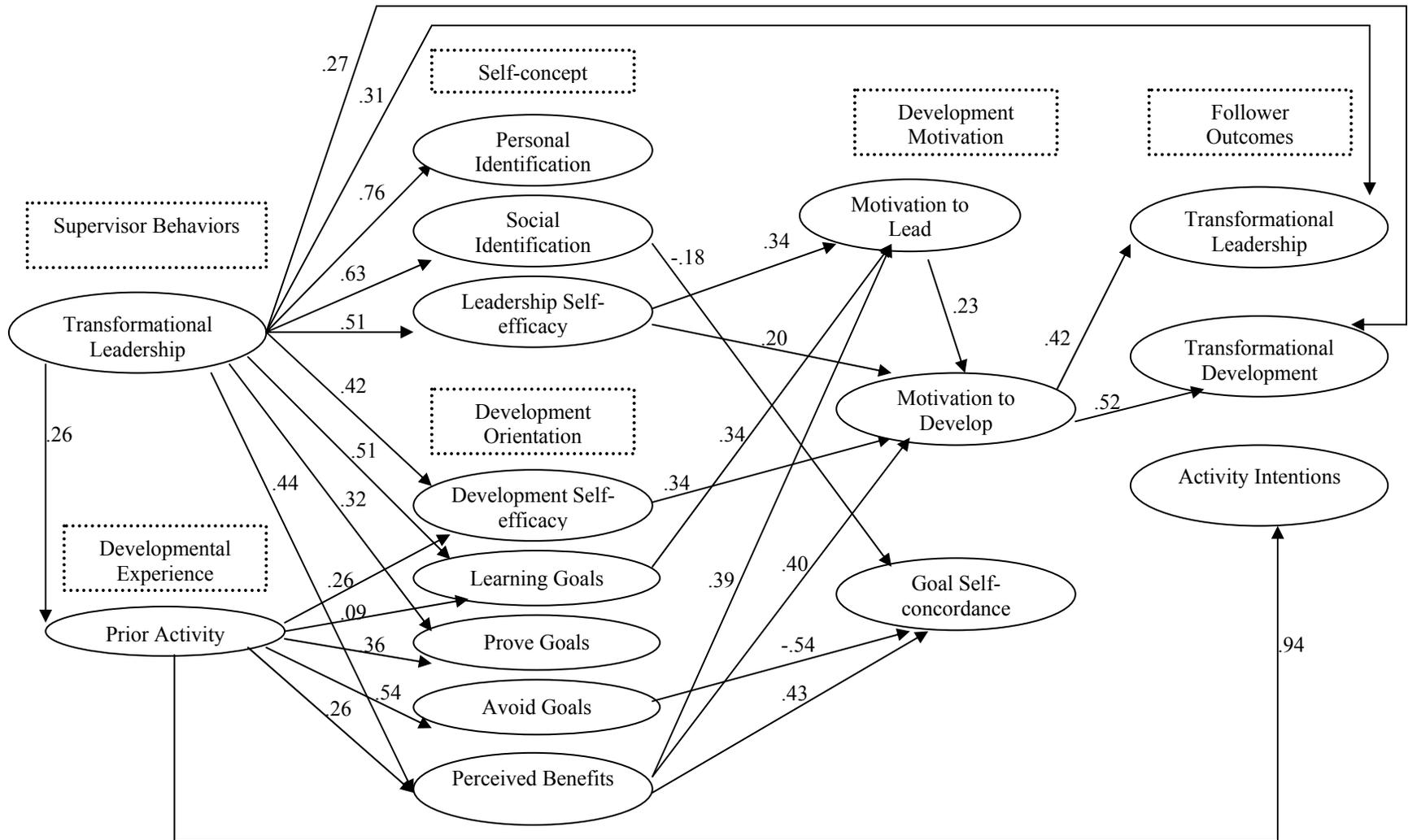


Figure 5. Alternative Partially Mediated Path Model. Only significant paths and their standardized coefficients are shown.

The indirect effects are provided in Table 6. Supervisor transformational leadership had significant indirect effects on all of the development orientation (except learning goals), development motivation, and follower outcomes variables. This includes the indirect effect of transformational leadership on perceived benefits through prior development activity, which was new to this model. Also, self-efficacy for leadership and perceived benefits both had significant indirect effects on motivation to develop through motivation to lead. This supports prior research and theory (Maurer and Lippstreu, 2008c).

Table 6. Supplementary Analyses – Standardized Indirect Effects for Alternative Partially Mediated Path Model

Variable	Supv. Transf.	Prior Activity	Personal Identif.	Social Identif.	Lead. SE	Develop SE	Learn. Goals	Prove Goals	Avoid Goals	Benefits	Mot. To Lead
Development Self-efficacy	.07**										
Learning Goals	.03										
Prove Goals	.09**										
Avoid Goals	.14**										
Perceived Benefits	.07**										
Motivation to Lead	.39**	.00									
Self-concordance	.13*	-.22**									
Motivation to Develop	.52**	.13**	-.03	.02	.08*	-.02	.08	-.03	-.03	.09**	
Intentions	.24**	.01	.00	.01	.00	.00	-.01	.00	.02	-.01	.00
Follower Transformational	.23**	.04	-.03	.04	.11**	.13**	-.01	-.01	-.08*	.23**	.09**
Follower Development	.26**	.08**	-.05	.08*	.14**	.18**	-.04	.00	-.03	.22**	.12**

*Note.* Columns contain predictors and rows contain outcomes; Supv. Transf. = Supervisor Transformational; Identif. = identification; Lead. SE = self-efficacy for leadership; Develop. SE = self-efficacy for development; Learn. Goals = learning goals; Mot. To Lead = motivation to lead.

\*p<.05 \*\*p<.01.

The results above suggest that the model from Figure 5 is preferable to the model in Figure 4. Although the fit is slightly lower in the alternative model, the alternative model is cleaner in that several of the awkward negative relationships due to collinearity are gone. Also, the theoretical integrity of the model was not compromised but rather refined to incorporate more of the detailed findings from employee/leadership development research. This was done while generally maintaining the significant relationships from the prior model. Some paths became nonsignificant in the alternative model. However, this may be due to these variables not adding any unique variance over other variables in the model when predicting the same outcomes.

#### *Comparison of Leadership Styles*

*Differences between correlation coefficients.* The relationship between transformational leadership and the follower variables of interest (motivation to lead, motivation to develop, prior development activity, development activity intentions, follower transformational leadership, follower transformational leadership development) were compared against the relationship between the alternative leadership styles (transactional leadership, initiating structure, consideration, leader-member exchange) and the same follower variables. The correlations in Table 3 were tested for significant differences. The results showed little support for hypotheses 11a through 11c. Transformational leadership had a stronger relationship with motivation to develop compared to a consideration style of leadership [ $r = .41$  vs.  $r = .30$ ;  $t(260) = 2.43$ ,  $p < .05$ ]. Transformational leadership also had a stronger relationship than consideration with prior development activity [ $r = .24$  vs.  $r = .02$ ;  $t(260) = 4.66$ ,  $p < .001$ ], intentions for future development activity [ $r = .24$  vs.  $r = .01$ ;  $t(260) = 4.89$ ,  $p < .001$ ], follower

transformational leadership [ $r = .49$  vs.  $r = .35$ ;  $t(260) = 3.23$ ,  $p < .01$ ], and follower transformational leadership development [ $r = .48$  vs.  $r = .31$ ;  $t(260) = 3.90$ ,  $p < .001$ ]. In contrast, leader-member exchange was the stronger predictor of motivation to lead compared to transformational leadership [ $r = .47$  vs.  $r = .35$ ;  $t(260) = -2.87$ ,  $p < .01$ ], and initiating structure had a stronger relationship with prior development activity compared to transformational leadership [ $r = .34$  vs.  $r = .24$ ;  $t(260) = -2.33$ ,  $p < .05$ ]. All other differences between the correlations comparing transformational leadership with the other leadership styles were nonsignificant. Thus, transformational leadership in general was not the strongest predictor of the follower variables. It was the strongest predictor only in comparison to consideration style of leadership

*Incremental variance of transformational leadership.* Table 7 shows the incremental variance of transformational leadership over the other leadership styles in predicting the follower variables. The incremental variance of transformational leadership was first examined against each of the alternative leadership styles separately. According to Table 7, transformational leadership showed incremental variance over transactional leadership in predicting motivation to develop, follower transformational leadership, and follower transformational leadership development. Transformational leadership also uniquely predicted follower transformational leadership and follower transformational leadership development over and above initiating structure. Transformational leadership accounted for significant incremental variance over consideration for all of the follower variables of interest. Finally, there was significant incremental variance over leader-member exchange in predicting motivation to develop, development activity intentions, follower transformational leadership, and follower transformational leadership

development. Thus, follower transformational leadership and follower transformational leadership development were the only outcome variables for which there was significant incremental variance of transformational leadership over each of the other leadership styles. This supports hypothesis 12c but does not support hypotheses 12a or 12b.

In order to test the extent to which hypothesis 12c would be supported, this study also examined the incremental variance of transformational leadership over all of the other leadership styles combined. The results showed that transformational leadership uniquely predicted follower transformational leadership over and above the combined set of alternative leadership styles. However, it did not uniquely predict follower transformational leadership development over and above all other leadership styles.

Table 7. Incremental Variance of Supervisor Transformational Leadership over Alternative Styles in Predicting Follower Outcomes

Step	Motivation to Lead		Motivation to Develop		Prior Activities		Intentions		Follower Transf.		Follower Develop.	
	$\beta$	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$	$\Delta R^2$
Model 1												
1. Transactional	.19		.20		.15		.10		.11		.18	
2. Transformational	.19	.01	.24 <sup>a</sup>	.02 <sup>a</sup>	.11	.00	.16	.01	.39 <sup>c</sup>	.04 <sup>c</sup>	.33 <sup>b</sup>	.03 <sup>b</sup>
Model 2												
1. Initiating Structure	.38 <sup>c</sup>		.39 <sup>c</sup>		.35 <sup>c</sup>		.30 <sup>c</sup>		.36 <sup>c</sup>		.40 <sup>c</sup>	
2. Transformational	.07	.00	.12	.01	-.02	.00	.02	.00	.22 <sup>b</sup>	.02 <sup>b</sup>	.19 <sup>a</sup>	.02 <sup>a</sup>
Model 3												
1. Consideration	.21 <sup>b</sup>		.05		-.26 <sup>b</sup>		-.28 <sup>c</sup>		.03		-.04	
2. Transformational	.21 <sup>b</sup>	.02 <sup>b</sup>	.37 <sup>c</sup>	.08 <sup>c</sup>	.42 <sup>c</sup>	.09 <sup>c</sup>	.43 <sup>c</sup>	.10 <sup>c</sup>	.46 <sup>c</sup>	.12 <sup>c</sup>	.51 <sup>c</sup>	.14 <sup>c</sup>
Model 4												
1. LMX	.45 <sup>c</sup>		.27 <sup>c</sup>		.13		.07		.23 <sup>b</sup>		.29 <sup>c</sup>	
2. Transformational	.03	.00	.22 <sup>b</sup>	.02 <sup>b</sup>	.14	.01	.19 <sup>a</sup>	.02 <sup>a</sup>	.33 <sup>c</sup>	.05 <sup>c</sup>	.28 <sup>c</sup>	.04 <sup>c</sup>
Model 5												
1. Transactional	.04		.06		.06		.03		-.03		.05	
Initiating Structure	.23 <sup>a</sup>		.33 <sup>c</sup>		.37 <sup>c</sup>		.34 <sup>c</sup>		.34 <sup>c</sup>		.34 <sup>c</sup>	
Consideration	-.05		-.15		-.50 <sup>c</sup>		-.47 <sup>c</sup>		-.14		-.29 <sup>c</sup>	
LMX	.39 <sup>c</sup>		.23 <sup>a</sup>		.27 <sup>b</sup>		.20		.18 <sup>a</sup>		.31 <sup>c</sup>	
2. Transformational	-.10	.00	.06	.00	.06	.00	.14	.00	.23 <sup>a</sup>	.01 <sup>a</sup>	.16	.01

Note. All predictor variables (rows) are supervisor variables. All outcome variables (columns) are follower variables. Regression coefficients represent standardized coefficients with all predictors entered into the regression. Transf. = Transformational; Develop. = Development.

<sup>a</sup>p<.05 <sup>b</sup>p<.01 <sup>c</sup>p<.001.

*Relative importance of leadership styles.* The results of the dominance analysis are provided in Table 8. The D statistic in the table indicates the relative importance of each leadership style in predicting each of the follower variables. For the motivation and development activity variables, transformational leadership was far behind the other leadership styles in contributing to the overall model R-square. The relative importance in predicting follower transformational leadership was more favorable, with transformational leadership showing greater relative importance over most of the other leadership styles except for initiating structure. In predicting follower transformational leadership development, leader-member exchange and initiating structure were both stronger predictors compared to transformational leadership. These results generally indicate a lack of support for hypotheses 13a through 13c.

Table 8. General Dominance Analysis

Predictor	Motivation to Lead		Motivation to Develop		Prior Activities		Intentions		Follower Transf.		Follower Develop.	
	D	D (%)	D	D (%)	D	D (%)	D	D (%)	D	D (%)	D	D (%)
Transformational	.03	11.00	.04	16.49	.02	9.34	.02	12.49	.07	22.56	.07	18.80
Transactional	.03	11.10	.04	16.00	.02	9.86	.02	9.97	.05	15.47	.06	15.74
Initiating Structure	.06	26.11	.09	36.11	.07	36.03	.06	35.20	.10	33.56	.11	32.27
Consideration	.03	12.22	.02	8.78	.06	29.19	.06	30.21	.03	8.85	.03	9.62
LMX	.10	39.56	.06	22.62	.03	15.58	.02	12.12	.06	19.55	.08	23.58

*Note.* All predictor variables (rows) are supervisor variables. All outcome variables (columns) are follower variables. Transf. = Transformational; Develop. = Development. The sum of the dominance weights for each predictor equals the  $R^2$  for the overall model (all 5 predictors in regression equation). D (%) = D divided by overall model R-square. Overall  $R^2$  for predicting each of the follower outcomes: motivation to lead ( $R^2=.25$ ), motivation to develop ( $R^2=.25$ ), prior activities ( $R^2=.21$ ), intentions ( $R^2=.18$ ), follower transformational ( $R^2=.31$ ), follower development ( $R^2=.35$ ).

*Supplementary analyses – extent of model application.* The leadership comparison findings suggest that follower leadership development is indeed relevant for the alternative leadership styles. There may be some theoretical basis for this, including general social processes that apply to a wide range of leadership approaches. For example, social learning theory (Bandura, 1997; Gist & Mitchell, 1992) suggests that followers can learn leadership-relevant behaviors and beliefs from their leaders through observation/modeling, receiving positive feedback/encouragement, and receiving opportunities to try new leadership behaviors. These experiences should facilitate the growth of the follower into a better leader while enhancing the followers' confidence in succeeding in leadership development settings (Bandura, 1997; Gist & Mitchell, 1992). The experiences should also give the follower something for which to strive through emulation, as well as create an identity that values group-oriented interests (Howell & Shamir, 2005; Shamir et al., 1993; Weierter, 1997).

Prior studies in the general leadership literature lend support to the social learning relationship. Research has found that followers are similar to their leaders in behavior, attitudes, and interaction patterns (Bowers and Seashore, 1966; Ouchi and Maguire, 1975; Stogdill, 1955). Followers may perhaps adopt the leadership style of the leader (i.e., follower learning initiating structure style from a leader who uses initiating structure), but it may also be possible for the follower to learn other styles of leadership (e.g., transformational behaviors) from the same leader. This is because there is overlap across the leadership styles, where a leader who shows one style is likely to show other styles (Avolio et al., 1999; Conger and Kanungo, 1994; Ehrlich, Meindl, and Viellieu, 1990; Howell and Hall-Merenda, 1999; Seltzer and Bass, 1990). In addition, leaders who are

supportive of development tend to have followers who are motivated toward development and who pursue development, thus providing followers with developmental encouragement and mastery experiences (Birdi et al., 1997; Colquitt et al., 2000; Hazucha et al., 1993; Maurer and Tarulli, 1994; Maurer et al., 2003; Noe and Wilk, 1993). This is important given that all of the leadership styles in this study are supportive about the development of their followers to some degree.

For example, Avolio et al. (1999) found that transactional leadership items and individualized consideration items (i.e. the development-focused dimension from transformational leadership) loaded on the same factor in a measurement model. They suggested that transactional leadership lays the groundwork for building trust and developmental expectations of followers due to a consistent honoring of contracts over time. Also, leaders who score higher on initiating structure and consideration are more likely to be concerned about the development of their followers (Evans, 1974; Gruenfeld and Weissenberg, 1966). Being developmentally supportive should be closely linked to the consideration style of leadership as it is defined by people-oriented behaviors, such as having respect for followers, showing concern for followers' welfare, valuing follower input, and being pleasant and supportive. In terms of initiating structure, leadership is characterized by task-oriented behaviors with a focus on clarifying roles and task requirements, setting performance standards, attaining goals, and providing structure through policies and procedures (Halpin, 1957; Halpin & Winer, 1957; Yukl & Van Fleet, 1992). Meeting performance expectations is an integral part of the leader-follower relationship, and one way to accomplish this would be for the leader to keep up with the development of his or her followers. In support of this, Gruenfeld and Weissenberg (1966)

found that leaders higher in initiating structure have more favorable attitudes toward developmentally-oriented performance appraisal systems. The emphasis on performance expectations and associated focus on development seems to pay off for the follower in the form of greater motivation, organizational commitment, job involvement, and internal locus of control (Aldag and Brief, 1977; Dale and Fox, 2008; Ehrlich et al., 1990; Evans, 1974; Judge et al., 2004), all of which are sources of an employee's development motivation and activity (Birdi et al., 1997; Colquitt et al., 2000; Maurer and Palmer, 1999; Maurer et al., 2003). Finally, prior studies on leader-member-exchange have shown that leader-member exchange is related to several variables that are relevant to follower development, such as supervisor support, mentoring, development motivation, and organizational commitment (Basu & Green, 1997; Gerstner & Day, 1997; Scaduto, Lindsay, and Chiaburu, 2008; Scandura & Graen, 1984; Scandura & Schriesheim, 1994, van Dam, Oreg, and Schyns, 2008). Maurer et al. (2002) suggested that the strong interpersonal relationship between the leader and follower may lead to a mutual exchange of benefits for the follower and leader, where the follower pursues activities that benefit the leader (e.g., learning more about the job, obtaining new skills) and the leader provides the follower with support, encouragement, and further development opportunities in return.

In sum, the combination of social learning and developmentally supportive behaviors by the leader should enable the follower to prepare for his or her own development. This helps explain the leadership style comparison results presented earlier. Indeed, some of the relationships for the alternative styles were strong in predicting the outcomes and some were superior to transformational leadership. In particular, leader-

member exchange and initiating structure were the two styles that showed the most promise in their relationship with the outcome variables. These results challenge the theory of transformational leadership. Note, however, that the lack of support for the leadership style comparison hypotheses does not necessarily imply that the theoretical framework in the present study will fit the other leadership styles. Although some of the alternative leadership styles were better predictors of the outcome variables compared to transformational leadership, it is possible that the current model configuration is insufficient in explaining the network of relationships between the alternative leadership style and follower variables. In that instance, the study's model could fit worse for the alternative leadership styles. On the other hand, a good model fit for the alternative styles would further suggest that the transformational follower development process is not exclusive to transformational leadership theory. Thus, supplementary analyses were done to test the fit of the study model while using two of the leadership styles that had the strongest prediction with the outcomes. The model in Figure 5 was retested by replacing supervisor transformational leadership with leader-member exchange. A second model was tested by replacing supervisor transformational leadership with initiating structure.

The fit of the model using leader-member exchange in place of supervisor transformational leadership was  $\chi^2(53, N = 263) = 262.50, p < .001$ ; CFI = .93; RMSEA = .12; SRMR = .07. These fit statistics do not appear to be as favorable as those for the transformational leadership model. Moreover, the Akaike Information Criterion (Akaike, 1987), which can be used to compare models that are not nested, was lower for the transformational leadership model (AIC = 367.60) relative to the leader-member exchange model (AIC = 403.03). This further suggests that the transformational

leadership model is the better model. Due to the lower fit for the leader-member exchange model and the greater theoretical relevance of the model to transformational leadership theory, the leader-member exchange model will not be examined further here.

The fit of the initiating structure model was  $\chi^2(53, N = 263) = 157.92, p < .001$ ; CFI = .96; RMSEA = .09; SRMR = .05; AIC = 318.44. This shows that the initiating structure model fit better than the transformational leadership model. Figure 6 shows the significant paths and standardized coefficients for the initiating structure model. Table 9 provides the indirect effects. The pattern of relationships for this model (i.e., paths that are significant or nonsignificant) is similar to the transformational leadership model, with the exception of prior activity no longer significantly predicting learning goals (this path in the transformational model was significant but rather weak). In the initiating structure model, the direct paths from supervisor leadership to the follower variables seemed to be stronger in general compared to the transformational leadership model. The indirect paths from initiating structure to the distal follower variables also seem to be just as strong or even stronger than the analogous indirect paths in the transformational leadership model. The only clear advantages that the transformational leadership model seems to have over the initiating structure model are the direct effects from motivation to develop to the follower outcomes, and the indirect effects involving several of the follower process variables to other follower variables. Overall, the results of the initiating structure model are consistent with the leadership comparison results using correlation, regression, and dominance analysis.

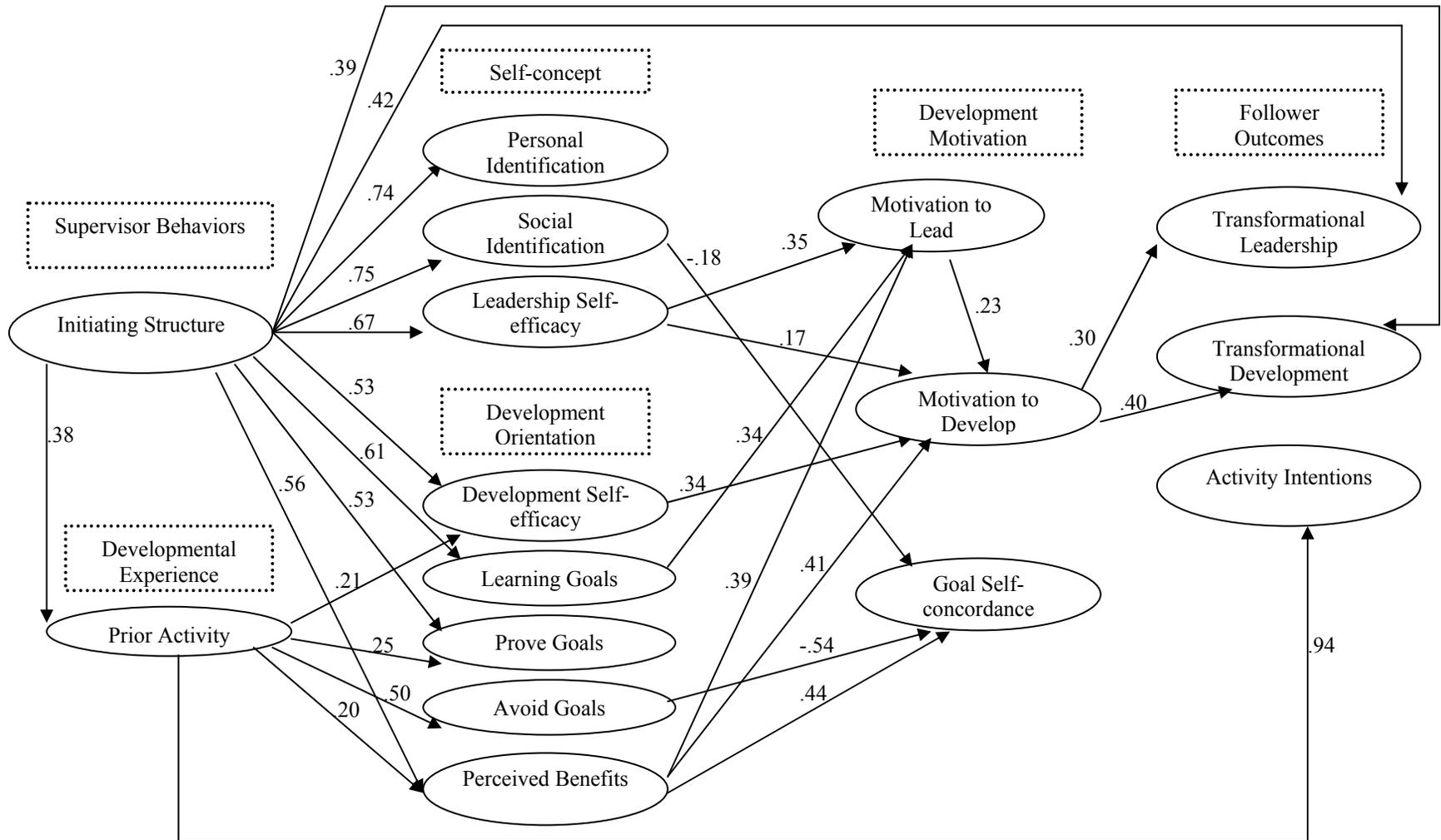


Figure 6. Partially Mediated Path Model – Initiating Structure. Only significant paths and their standardized coefficients are shown.

Table 9. Supplementary Analyses – Standardized Indirect Effects for Alternative Partially Mediated Path Model (with Initiating Structure)

Variable	Initiat. Struct.	Prior Activity	Personal Identif.	Social Identif.	Lead. SE	Develop SE	Learn. Goals	Prove Goals	Avoid Goals	Benefits	Mot. To Lead
Development Self-efficacy	.08**										
Learning Goals	.02										
Prove Goals	.10**										
Avoid Goals	.19**										
Perceived Benefits	.08**										
Motivation to Lead	.49**	-.01									
Self-concordance	.10	-.21**									
Motivation to Develop	.64**	.09*	-.03	.02	.08*	-.02	.08	-.03	-.03	.09**	
Intentions	.37**	.01	.00	.01	.00	.01	-.01	.00	.02	-.01	.00
Follower Transformational	.20**	.01	-.01	.02	.07*	.09*	.01	-.02	-.08*	.18**	.07*
Follower Development	.25**	.05*	-.03	.05	.10*	.13**	-.02	-.01	-.03	.18**	.09**

*Note.* Columns contain predictors and rows contain outcomes; Initiat. Struct. = Initiating Structure; Identif. = identification; Lead. SE = self-efficacy for leadership; Develop. SE = self-efficacy for development; Learn. Goals = learning goals; Mot. To Lead = motivation to lead.

\*p<.05 \*\*p<.01.

## **CHAPTER 7**

### **DISCUSSION**

The objective of the present study was to more closely examine the fundamental basis of transformational leadership theory, which states that transformational leaders develop their followers into leaders. There has been very little empirical research to date that has gone beyond tests of basic theoretical relationships. Prior studies have established a direct relationship between the transformational leadership behaviors of the leader and the transformational leadership behaviors of the follower. However, the processes surrounding this basic relationship was not well understood, and the theoretical limits/robustness of this relationship had not undergone much scrutiny.

This study took a broader perspective on the issue of follower development by examining a larger set of variables that were thought to be theoretically relevant to the transformational leadership development process. By taking a process approach to development, greater explanatory power can be achieved in interpreting the leader-follower developmental relationship. Potential follower variables that may contribute to developmental processes can be cognitive, motivational, and behavioral in nature, and these variables can act as intermediate mechanisms through which the leader influences the follower's development into a leader. Although the transformational leadership literature offered a few suggestions in terms of follower process variables to include in this study, there were other neglected bodies of literature that needed to be reviewed in an effort to complement existing transformational leadership research. In particular, concepts and findings from the general employee and leadership development literature

were incorporated into this study. It seemed reasonable that research related to follower development could gain insight from outside research that has focused specifically on an employee's development. The theoretical framework in this study was based on contributions from both the general transformational leadership literature (adapted to the leadership development context) and the employee/leadership development literature. The framework was used to guide the study hypotheses.

This study first examined the direct relationships between supervisor transformational leadership and the various follower variables relevant to leadership development. Supervisor transformational leadership was significantly related to all of the follower variables except for performance-avoid orientation. Some of these relationships were consistent with findings from prior research, including the positive relationship between supervisor transformational leadership and follower personal/social identification (Cicero & Pierro, 2007; Kark et al., 2003; Shamir, Zakay, Breinin, & Popper, 2000; Shamir, Zakay, Breinin, & Popper, 1998), and the positive relationship between supervisor transformational leadership and follower transformational leadership (Bass et al., 1987). The other follower variables included in this study had not been examined relative to their direct relationship with supervisor transformational leadership. These were self-efficacy for leadership, self-efficacy for leadership development, goal orientation dimensions, motivation to lead, motivation to develop leadership capability, perceived benefits of leadership development, self-concordance of leadership development goals, leadership development activity (past activity and intentions), and perceived development of transformational leadership behavior. Thus, the current study

established several new relationships between supervisor transformational leadership and various follower variables relevant to leadership development.

In addition, none of the follower variables in this study had been previously examined as part of a larger system of interrelationships within the transformational leader-follower developmental process. Competing structural models were tested to determine whether the follower process variables fully or partially mediated the relationships between supervisor transformational leadership and the follower outcome variables. The best fitting model was the partially mediated model where direct paths were added from supervisor transformational leadership to follower outcomes. Several of the hypothesized paths as well as indirect effects were significant. Thus, follower self-concept, development orientation, and development motivation acted as intervening variables of the supervisor-follower transformational relationship, but these process variables did not completely account for the relationship between supervisor transformational leadership and follower transformational leadership/leadership development.

Next, a theoretically-driven, alternative model configuration was tested to examine a second approach for integrating research from the employee development literature. In this model, motivation to lead directly predicts motivation to develop, and perceived benefits is pulled back alongside self-efficacy and the other development orientation variables. The resulting model in Figure 5 had slightly lower fit but was cleaner and stayed loyal to theory while generally maintaining the same pattern of relationships as the comparison model. Thus, this model was preferred over the other transformational leadership models.

One unexpected but interesting finding of the study was the role of performance-avoid orientation in the follower development process. Although supervisor transformational leadership was unrelated to follower performance-avoid orientation, prior development activity had a significant positive relationship with performance-avoid orientation in the final transformational leadership model. This is inconsistent with current theory and past employee development research (Maurer & Lippstreu, 2008c; Maurer et al., 2008; VandeWalle, 1997; VandeWalle et al., 2001). One possible explanation for the unexpected findings is the state of economic conditions, which was characterized by high unemployment and recession at the time of data collection (Bureau of Labor Statistics, 2009). As job losses continued to grow, employees may have had a heightened sense of anxiety about protecting their own positions within the organization. The threat of job loss may force employees to seek development to keep skills up-to-date, and a reduction in the labor force means that remaining employees must pick up the slack by learning additional responsibilities. Because developmental experiences tend to be novel and challenging (McCauley et al., 1994), participating in such activities is likely to expose one's current lack of skills and ability. Negative feedback could be anxiety-provoking and may be viewed as a threat to job security, which could in turn trigger an avoidant orientation. Consistent with this idea, leaders cast in unfamiliar developmental settings (and settings where proving oneself becomes salient) are more likely to feel threatened with personal loss than leaders cast in more familiar settings (McCauley et al., 1994). Anxiety such as this is generally associated with having an avoidant orientation (Elliot and McGregor, 1999; VandeWalle, 1997).

The final objective of this study was to examine whether transformational leadership was a stronger predictor of follower outcomes compared to other styles of leadership. Prior to the current study, leadership style comparisons had never been made relative to the follower development process. The findings in this study indicated that the other leadership styles were better predictors or at least comparable predictors of leadership development motivation and leadership development activity. There was more support for supervisor transformational leadership's stronger relative prediction of follower transformational leadership. However, even in this situation initiating structure explained more variance in predicting follower transformational leadership. Thus, although supervisor transformational leadership explained unique variance over and above other leadership styles in predicting follower transformational leadership, it was not as powerful a predictor as initiating structure.

Past studies have examined transformational leadership with alternative leadership styles in predicting other types of outcomes such as leader effectiveness, team performance, various satisfaction measures, organizational commitment, and organizational citizenship behavior. These studies have found that transformational leadership adds significant incremental variance above alternative leadership styles in predicting other types of outcomes (Judge & Piccolo, 2004; Keller, 2006; Seltzer & Bass, 1990). However, similar to this study, prior studies have shown mixed support when examining validity coefficients of multiple leadership styles (Burke et al., 2006; Judge & Piccolo, 2004; Howell & Hall-Merenda, 1999; Koene et al., 2002; Lee, 2005; Lee, 2007; Wang et al., 2005). In terms of the validity coefficients, these studies have found transformational leadership to be superior, only slightly better, comparable, or sometimes

worse in predicting follower outcomes. No prior studies have used dominance analysis to compare transformational leadership to other leadership styles, and no other studies have compared detailed structural models of follower development across leadership styles.

The results of the leadership style comparisons showed that initiating structure had the strongest results of all the leadership styles. This suggests that initiating structure would be a solid alternative if follower leadership development is the goal. One could argue that compared to transformational leadership, initiating structure should in fact be more strongly related to the follower development variables. Several of the follower variables in this study are developmental in focus, and this type of focus happens to be consistent with the goals of an initiating structure style of leadership. That is, these leaders are task-oriented and have an influence over their employees through performance management, and developmental feedback is one tool that managers frequently use in organizations to manage the performance of their employees. Consistent with this idea, there is some evidence to suggest that leaders with an initiating structure style of leadership see performance appraisal systems as an opportunity to develop their followers (Gruenfeld & Weissenberg, 1966). Thus, it seems reasonable for initiating structure to have strong relationships with the follower development variables.

However, a caveat should be mentioned before initiating structure is viewed as the preferred leadership style for predicting the follower development process. First, initiating structure is associated with a prevention approach to self-regulation in followers (Neubert et al., 2008). In contrast, transformational leaders are thought to evoke a promotion focus in their followers (Kark and Van Dijk, 2007). A prevention focus is a self-regulatory approach where followers are driven and motivated by the need to ensure

security, avoid losses, or fulfill duties and obligations, whereas followers with a promotion focus are driven and motivated by the need for growth, exploration, or the attainment of aspirations and ideals (Higgins, 1997; Higgins, 1998). Thus, a follower who works with an initiating structure leader may have different reasons for engaging in development activity compared to a follower who works with a transformational leader. Note that having a promotion focus is closer to having a true employee development orientation (Maurer, 2002). As such, the prevention focus may not be ideal in the long run. Given that situational triggers can induce one focus over another (Higgins, 1997), what happens when there is an environmental reduction in the threat of loss or negative consequences, such as when the economic recession improves, a change occurs in organizational culture toward greater creativity/tolerance for mistakes, or when working under a new manager who puts less emphasis on rules and structure? The follower may no longer have the drive to pursue continuous development when negative consequences and threats to the self are not as salient. The stability and generalizability of the findings related to initiating structure should be addressed with future research. There was some evidence in this study to suggest that future research in this area may be worthwhile, and that initiating structure is indeed more likely to predict a prevention focus in their followers compared to transformational leadership. Follow-up analyses showed that initiating structure had significantly stronger relationships than transformational leadership with both performance-prove goals [ $r = .50$  vs.  $r = .34$ ;  $t(260) = -4.05$ ,  $p < .001$ ] and performance-avoid goals [ $r = .19$  vs.  $r = .08$ ;  $t(260) = -2.47$ ,  $p < .05$ ], whereas there was no significant difference between the leadership styles in predicting learning goals [ $r = .53$  vs.  $r = .48$ ;  $t(260) = -1.31$ , ns]. However, goal orientation is not a perfect measure of

regulatory focus, and future studies on leadership development may wish to measure the regulatory focus construct more directly to test these ideas in a development context.

The results of the leadership style comparison in this study were rather disappointing for mainstream transformational leadership theory, but still provide important insight for further theoretical development. The results call into question the extent to which transformational development is unique to transformational leadership theory. A greater effort may be needed in the future to integrate the various leadership styles with one another into a comprehensive theory. Some authors have already proposed this possibility by discussing how one leadership style can complement another leadership style (Avolio et al., 1999; Bass, 1997; Graen & Uhl-Bien, 1995). Alternatively, it may be more useful to avoid differentiating the various leadership styles for the prediction of follower development. Rather, one may simply refer to leadership in a general sense without referring to a specific style of leadership. This would be possible if a general leadership-related construct is common to several styles of leadership (e.g., influence, power, dominance), with this underlying construct explaining the comparable prediction of follower development across leadership styles. The leadership styles in this study were highly interrelated, which suggests that there is overlap across the various styles of leadership. Thus, future research may wish to investigate the shared variance among leadership styles in more detail in order to conceptualize leadership and leadership development more broadly. Some existing leadership development models have already taken the approach of outlining the leadership development process without regard to any particular style (London & Maurer, 2004; Maurer & Lippstreu, 2008c; McCauley, 2001), so incorporating follower development into those existing models may be a viable option.

Despite the lack of support for the hypotheses involving the leadership style comparisons, this study established several direct relationships between transformational leadership and the follower variables and modeled a network of relationships among these constructs. Organizations seeking to develop followers into transformational leaders may still be effective by relying on supervisors who are transformational leaders to develop their followers. The findings in this study have a few implications for an organization's leadership development program. The premise of this study implies that organizations with transformational leaders should expect to see their followers develop into transformational leaders themselves. This should be a rather fluid and automatic process assuming transformational leaders exist in the organization. Not only will the leader impact the follower's own leadership capability, the leader is also likely to develop the follower's self-concept, development orientation, and development motivation along the way. As a result, organizations could benefit from a culture being created that is characterized by a strong sense of group identity and tendency/interest toward self-development. Organizations that are defined by such a continuous learning culture tend to have better financial performance (Ellinger et al., 2002). However, it is reasonable to assume that many organizations may not currently have a pool of transformational leaders to initiate the follower development process. For these organizations, there are additional steps that can be taken to facilitate the development process. A selection, assessment, and training approach can be taken for organizations lacking in transformational leaders. First, the instrument used in this study to measure transformational leadership can be used to assess current leaders and coach them in developmental areas (Bass & Avolio, 2004). Second, structured interviews or assessment

centers may be developed based on competency models related to transformational leadership, and these tools can be used to select transformational leaders into the organization. Third, a training program can be implemented based on transformational leadership theory. Current leaders can be trained on transformational leadership principles to develop their leadership capability (Barling et al., 1996; Dvir et al., 2002). The training program should be accompanied by organizational support for transformational leadership principles, as constraints in a post-training environment can inhibit the effectiveness of the training program (Belling, James, & Ladkin, 2004; Tracey, Tannenbaum, & Kavanagh, 1995).

Although the contributions of this study addressed many questions about the follower development process, this study should be considered an initial step in what could ultimately become a larger stream of development related research. This study was correlational and cross-sectional in nature, and the set of variables and relationships included in this study may not be exhaustive or comprehensive. However, the results of this study should open up the opportunity for further research to focus on other relevant questions (e.g., exploring narrower construct definitions, the role of self-selection in the development process, testing for boundary conditions, examining peer transformational relationships rather than strictly supervisor-subordinate relationships) as well as opportunities to use more controlled and complex research designs (e.g., field experiments, longitudinal studies). Further, the lack of support of several of the hypothesized relationships in this study raises additional questions regarding the general process model. Future studies may revisit or refine the current model with other developmentally-relevant variables. As mentioned above, more theoretical integration

between transformational leadership and the other leadership styles may be needed. There is clearly ample room for further research in any direction. Given the lack of attention to one of the most central ideas of transformational leadership theory, the hope of this study is to generate more interest and research in the follower development process as influenced by the leader.

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