EFFECTS OF TRANSFORMATIONAL LEADERSHIP ON FOLLOWERS’ FEEDBACK SEEKING, FEEDBACK PREFERENCE, AND REACTIONS TO FEEDBACK THROUGH COGNITIVE AND MOTIVATIONAL PROCESSES

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EFFECTS OF TRANSFORMATIONAL LEADERSHIP ON FOLLOWERS’
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Dissertation

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ABSTRACT

Previous research has shown that transformational leadership has positive effects on employees’ attitudes and behaviors (e.g., job satisfaction and performance, DeGroot, Kiker, & Cross, 2000; Judge & Piccolo, 2004; Lowe, Kroeck, & Sivasubramaniam, 1996), as well as organizational performance (Elenkov, 2002; Zhu, Chew, & Spangler, 2005). However, multiple issues concerning the theorization and testing of transformational leadership effects have been raised (House & Aditya, 1997). The current study took a process-oriented perspective towards transformational leadership. It tested two follower processes, one cognitive (activation of different self-identity levels; Lord & Brown, 2004) and one motivational (activation of different motivational focus; Higgins, 1999), underlying the transformational leadership effects on followers’ task motivation. Additionally, it examined how followers, as active feedback seekers, responded to transformational leader influences by showing different feedback preference, feedback-seeking willingness, and reactions to feedback. A laboratory study was conducted in which 210 undergraduate students participated as followers receiving transformational leader role manipulations and working on an in-basket task that had individual- and group-based subtasks. Results showed that by emphasizing different values, goals, and means and consequences of goal achievement or failure, leader role manipulations successfully activated participants’ different self-identity levels (i.e., individual versus collective). Participants with an activated individual self-identity showed higher task
motivation for individual-based tasks, and higher expected utility of and preference for individual performance feedback. On the other hand, participants with an activated collective self-identity had higher task motivation for group-based tasks, higher expected utility of and preference for group feedback, higher willingness to seek group performance feedback when they perceived their group performance was higher, and stronger motivational reactions to the group-level feedback manipulation. Despite these different effects, all the participants perceived the different leader role manipulations to be equally leader-like and transformational. These results supported a process-oriented approach not only for examining the transformational leadership effects, but also for better understanding the fine variations within the general transformational leadership style. Theoretical implications and empirical extensions of the current findings, and study limitations are discussed.
ACKNOWLEDGEMENTS

So, here I am, dreading to write the last couple (or it may turn out to be several, we shall see) pages of my dissertation. It is not because I struggle with the language (though some may jokingly say I do), but because I have a hard time wrapping up a period of my life that I will forever treasure. I would like to acknowledge those individuals who have made my graduate school career memorable, and are instrumental in my development during the past five years. First, I would like to thank my committee members – Dr. Paul Levy, Dr. Ramona Otega-Liston, and Dr. Aaron Schmidt. Special gratitude should be paid to Dr. Robert Lord, who always has more faith and enthusiasm in me and my research than I do myself, and to Dr. Rosalie Hall, who has provided me with a balance of guidance and autonomy, looked out for me at the crucial moments, and allowed me to learn and develop with all the patience in the world. Also, I would like to thank other current and former I-O faculty members: Dr. Dennis Doverspike, Dr. Andrea Snell, and Dr. Dan Svyantek, and the rest of the faculty at the psychology department, for passing their knowledge and support. I hope one day I can do the same for some wild-eyed, naive students as all my faculty members have done for me.

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CHAPTER I

STATEMENT OF THE PROBLEM

Leadership is one of the most researched topics in Industrial-Organizational Psychology. As one of the neocharismatic theories, transformational leadership has generated much research effort for its promising positive effects (House & Aditya, 1997). However, the roles of followers have largely been ignored in the transformational leadership literature. The current study identifies two processes within the followers, one cognitively-based (activation of different self-identity levels) and the other conatively-based (activation of different motivational orientations), as the underlying mechanisms that explain the transformational leadership effects. In addition, it uses these two processes as ways to better capture minor variations within the general transformational leadership style. Finally, the follower-centered approach is adopted by treating followers as active feedback seekers that have different feedback preferences and various levels of willingness to seek feedback, as well as different reactions to the feedback they receive.

This chapter will provide a brief review of the development of various leadership theories leading up to the inception of transformational leadership, and four specific research problems that the current study proposes to address. A schematic model that underlies the current study will also be presented.
Brief Overview of Leadership Theory

Since the trait theories in the 1930s, which focused on identifying individual characteristics associated with great leaders (see Stogdill, 1948 for a review), the literature has gone through several major shifts. In the 1950s, researchers started distinguishing categories of effective leader behaviors (e.g., initiating structure and consideration; Fleishman & Harris, 1962) with the hope that leaders could improve their success by replacing ineffective behaviors with those shown to be more effective. Later on, situational characteristics were incorporated into the consideration of effective leader behavior, which marked the contingency approach to leadership (e.g., Fiedler, 1967). Finally, the importance of followers in leadership was first emphasized by Hollander and his colleagues (Hollander & Julian, 1969). They proposed the term followship to capture the process through which followers assess leaders and take on leadership functions by participating in decision-making, goal-setting, and communication.

In the mid-1970s, yet another reorientation in leadership theories occurred, with the rise of neocharismatic theories that highlighted the link between leadership and exceptional organizational performance. Neocharismatic leadership theories explained this link in terms of constructs such as vision, empowerment, and shared values (House & Aditya, 1997). Collectively, these theories are considered a hybrid approach to leadership that includes elements of many other traditional approaches such as traits (e.g., being charismatic), behavioral orientation (e.g., creating shared vision), and situational considerations (e.g., interaction with followers; House & Aditya, 1997; Yukl & van Fleet, 1992).
One of the most prominent neocharismatic theories is the theory of transformational or charismatic leadership (Bass, 1985; Burns, 1978; House, 1977). Transformational leaders are said to offer a purpose that transcends followers’ short-term goals and focuses them on higher order objectives. As a result, followers are transformed or changed in some personal and meaningful way and thus can achieve higher levels of motivation and morality than they would otherwise (Bass, 1985; Burns, 1978). Transformational leaders engage in adaptive behaviors that help followers to generate creative solutions to novel and complex problems and to develop self-directing abilities. In particular, these adaptive behaviors include: (a) idealized influence as reflected in followers’ attributions of charisma, trust, and admiration; (b) inspirational motivation to provide meaningful and challenging goals for followers; (c) intellectual stimulation to encourage followers’ creativity; and (d) individualized consideration to mentor individual followers (Avolio, Bass, & Jung, 1999; Bass, 1985; 1988).

Transformational leaders are often contrasted with transactional leaders, who are focused on the exchange of resources between followers and themselves (Bass, 1985; Burns, 1978). More specifically, transactional leaders use contingent reward to clarify expectations and reward followers properly when they meet the standards. They may also engage in management by exception, which means that they are relatively unengaged when things are going well but take corrective actions when followers fail to meet expectations. Transactional leaders are believed to be more mechanical and thus less effective in today’s ever-changing business environment (Bass, Avolio, Jung, & Berson, 2003).
Since its introduction, transformational leadership has received extensive research attention. Indeed, several meta-analyses (e.g., DeGroot et al., 2000; Judge & Piccolo, 2004; Lowe et al., 1996) have shown that transformational leadership positively relates to employees’ job satisfaction, organizational commitment, motivations, and in-role and extra-role performance. Despite the large amount of research effort devoted to transformational leadership and its promising results, there are theoretical and empirical gaps in our understanding that have yet to be addressed. Particularly, House and Aditya (1997) argue that transformational leadership theory suffers from inadequate or disproved explanations of the process through which leader behaviors are linked to followers’ attitudes and behaviors. In addition, they identified similarities between transformational leadership theory and other neocharismatic theories, and called for better conceptualizations to refine and distinguish between the different constructs. Finally, they hinted that the outcomes of transformational leadership may be different at various organizational levels: individual, group, or organization as a whole.

In sum, the purpose of the current study is to address the research issues raised by House and Aditya (1997) concerning the transformational leadership theory, with a special focus on the role of followers. It seeks to answer four specific research issues concerning: (a) the psychological processes of the followers through which transformational leadership has its effects; (b) variations within the broader transformational leadership style; (c) the active roles of followers; and (d) transformational leadership outcomes and their implications at multiple levels. In order to address these four issues, the current research follows the schematic model presented in
Figure 1. This model suggests that subtle differences in transformational leader behaviors elicit specific internal processes in the followers, which in turn result in various follower attitudinal and motivational outcomes. The following sections will provide a brief discussion of the four issues, followed by an overview of the study. In the next Chapter, a more detailed literature review will be presented and specific hypotheses will be proposed to outline how the current research will address these four issues.

**Figure 1. Schematic Model of the Study.**

**Critiques of Transformational Leadership Theory Literature**

House and Aditya (1997) criticized the insufficient theorization and testing of processes underlying transformational leadership effects as the most serious flaw requiring research attention. The theory of transformational leadership relies on Maslow’s needs motivation theory (see Maslow, 1987) to explain how leaders are able to
transform followers to achieve higher level motivation and positive attitudes. However, many elements of Maslow’s theory are not supported by empirical tests (Wahba & Bridwell, 1975). Thus, there is still a need to provide a psychologically-based explanation of how transformational leaders influence their followers.

The current study takes a general process-oriented approach and applies it to transformational leadership. In the current work, leadership is defined as a process (Day, 2001; Graen & Scandura, 1987; Lord & Brown, 2004; Lord & Maher, 1991) through which leaders influence followers, rather than defining it by leaders’ characteristics or behaviors. Instead of concentrating on the social exchange aspects of this process (e.g., Day, 2001; Graen & Scandura, 1987), a more follower-centered perspective is taken by placing the influencing processes within the followers. In other words, the assumption is that transformational leaders influence followers by selectively activating internal processes which have cognitive, affective, and motivational consequences.

As shown in Figure 1, the current study focuses on two specific categories of processes internal to followers: cognitive and motivational processes. In terms of cognitive processes, it is proposed that transformational leaders influence which self-identity levels are activated in their followers. Lord and Brown (2004; Lord, Brown, & Freiberg, 1999) proposed that specific leader traits and behaviors may make different levels of followers’ self-identity more salient. This, in turn, can direct followers’ cognitive and motivational resources to be consistent with that specific level. The current study focuses on two specific self-identity levels, and argues that transformational leaders
may differentially activate followers’ individual or collective self-identity. This then selectively orients followers’ motivations towards either individual- or group-level tasks.

In addition to cognitive processes, transformational leaders are also proposed to activate followers’ motivational processes. Lord and Brown (2004) argued that leaders can affect followers’ self-regulation systems, and by doing so, motivate followers to strive for higher performance. One way that leaders may affect followers’ self-regulation is by differentially engaging their approach or avoid motivational orientations. Carver and Scheier (1998) suggest that approach motivational orientations guide one towards pursuing positive, desirable outcomes, whereas avoid motivational orientations guide one to prevent negative, undesirable end states. By differentially engaging followers’ approach or avoid motivational orientations, transformational leaders may influence how followers frame the tasks and their subsequent goal-striving motivations and behaviors.

Thus, the current study hopes to address the criticism of inadequate focus on processes underlying transformational leadership by highlighting two important psychological mechanisms internal to followers: cognitive processes of self-identity activation and motivational processes of motivational orientation engagement. This represents a movement away from the approach seen in the current literature, which takes as a starting point the transformational leadership behaviors as specified by Bass (1985; 1988), and then attempting to identify processes which link them to follower outcomes. Instead, the current study focuses on the cognitive and motivational processes seen in the center box of Figure 1 and explores how they link both to the left box of leader behaviors, and the right box of follower outcomes.
House and Aditya (1997) also called for further clarification of the transformational leadership construct. Since their review appeared, there has been continuous research effort devoted to exploring the dimensionality of transformational leadership and to further validate its measurement (e.g., Avolio et al., 1999; Bycio, Hackett, & Allen, 1995; Den Hartog, Van Muijen, & Koopman, 1997). Despite these efforts, it is noted that while there are ample studies comparing transformational leadership versus transactional leadership effects, very little attention has been paid to the variations within the broad transformational leadership style, and how these variations may have different implications for the effects of transformational leadership. Furthermore, researchers continue to disagree on the dimensionality of transformational leadership. They thus adopt slightly different definitions and measures of transformational leadership, which adds to the lack of construct clarity.

Again, the current study attempts to address this issue from a process-oriented perspective. Arguably, it is the underlying cognitive and motivational processes of the follower, rather than the leader behavioral dimensions, that capture and define transformational leadership. Instead of debating whether a specific behavior such as reward contingency should be included as a dimension of transformational leadership, or comparing the effects of its inclusion or exclusion, the current study uses two distinct cognitive and motivational processes to describe the specific variations within the broad style of transformational leadership. In other words, the different combinations of cognitive and motivational processes activated by the transformational leader serve as the basis to identify the unique elements within transformational leadership. Therefore, in the
current study, when investigating the variations *within* the broad transformational leadership style, attention is paid to the different processes elicited by the transformational leaders (i.e., the middle box in Figure 1), rather than to the different transformational leader behaviors (i.e., the left box in Figure 1).

As mentioned earlier, the current study takes a follower-oriented approach when examining the processes underlying the effects of transformational leadership. In addition to placing these processes within followers, the current study also examines followers’ active participation in the leader-member exchange relationship. Previous work (e.g., Hollander & Julian, 1969; Lord, Foti, & De Vader, 1984) has asserted that followers play an integral role in leadership perceptions and attributions. However, less attention has been paid to how followers may influence leadership outcomes. This omission is especially critical for the transformational leadership literature because theory suggests that it is the interaction between transformational leaders and their followers that transforms the followers. To address this deficiency, the current study proposes and tests the idea that followers are active feedback seekers (e.g., Ashford & Cummings, 1983; 1985) in the leader-follower relationship.

In addition, treating followers as feedback seekers provides another possible pathway to explain the motivational effects of transformational leaders. A major outcome of feedback seeking is the instrumental value of the feedback in improving individuals’ task performance (Ashford et al., 2003). This mechanism may also apply to the transformational leadership literature. Thus, by exploring the types of feedback followers prefer, their willingness to seek feedback, and their perceptions of feedback utility, the
current study seeks to establish feedback-seeking as a means through which followers respond to transformational leaders.

Finally, House and Aditya (1997) raised the question of whether transformational leaders have similar effects for different organizational units, i.e., individual employees, work teams, and organizations as a whole. They speculated that transformational leaders may only affect followers in close proximity, and that their effects may wear off if followers discontinue contact with the leaders. Interestingly, such speculation was partially supported by Lowe et al.’s (1996) meta-analysis. Their results indicated that middle-level supervisors were perceived to be more transformational than higher-level CEOs. This counterintuitive finding could be attributed to the closer contact subordinates tend to have with their immediate supervisors than with top-level executives. Nevertheless, it suggests that transformational leaders may have different effects at various organizational levels.

Because the current study takes a follower-centered approach, it attempts to address the multilevel implications of transformational leadership effects by looking at how followers respond to demands and information pertaining to different organizational levels. In other words, while followers may take different roles related to different levels within the organization (e.g., individual employees versus work team members), their internal processes as activated by the transformational leader may determine the relative weights they give to each role. As a result, the leader may influence whether they devote more resources to either individual- or group-based tasks and respond more strongly to
feedback concerning their individual or team performance based on the leaders’ influence.

Overview of the Current Study

In sum, the current study takes a process-oriented approach to empirically examine the effects of a collection of transformational leader behaviors on followers’ task motivations. It is argued that the processes underlying transformational leadership rest within followers, and that these processes may help define variations within the transformational leadership style. It is also asserted that followers actively participate in the exchange relationship with the leader by seeking feedback. Finally, the study explores how transformational leaders may have different implications at multiple levels.

An experimental research design was used, manipulating the proposed leadership processes of self-identity and motivational orientation activations and measuring their motivational effects on followers. Specifically, participants were exposed to similar leader messages depicting transformational and contingent reward leader behaviors and characteristics. However, these scripts emphasized different aspects of self-identity and motivational focus, which were designed to activate different cognitive and conative processes. Participants then performed an in-basket task, which included both group- and individual-oriented components. Participants’ prioritizations of and subsequent performance on these different components were considered as an outcome of differential activation of different identity levels. After the task session, their preference for different types of feedback, and their willingness to seek feedback regarding their performance on different components were measured. Finally, they received a feedback manipulation
consisting of feedback of opposite valence for performance at individual and group levels. Their affective and motivational reactions to the feedback were used as indicators for the multilevel implications of leader effects.

With the results from the current study, a more integrated, process-oriented approach to transformational leadership can be explored to better understand the underlying mechanisms of such leader influence. The next Chapter provides an extensive literature review of the four issues highlighted by the current Chapter. Hypotheses are proposed and discussed. Chapter III outlines the methodology adopted by the current study. Results are presented in Chapter IV and discussion and implications of the results are presented in Chapter V. Finally, a summary of the current research is presented in Chapter VI
CHAPTER II
LITERATURE REVIEW

The current chapter reviews the existing literature relevant to four aspects of transformational leadership: (a) the processes through which transformational leaders influence followers; (b) the variations within the broad transformational leadership style; (c) the active roles of followers; and (d) leadership outcomes and their implications at multiple levels. Hypotheses pertaining to each issue are proposed throughout this Chapter. At the end of the Chapter is a table which summarizes the hypotheses.

Processes Underlying Transformational Leadership Effects

There has been a substantial amount of research effort devoted to examining the construct validity of transformational leadership (e.g., Avolio et al., 1999; Bycio et al., 1995; Den Hartog et al., 1997). Although these studies have not always drawn the same conclusions regarding the dimensions of transformational leadership, they have provided a generally useful taxonomy for categorizing leader behaviors into patterns which define different leadership styles. However, researchers have not completely elucidated the psychological processes through which these leader behaviors influence subordinates. It is assumed that as long as leaders engage in those very generally-described “effective transformational leadership behaviors,” they will motivate followers to perform better. Unfortunately, this assumption does not address criticisms that are very similar to those
directed at earlier leadership theories about the need for flexibility and the consideration of situational characteristics.

I argue that a process-oriented approach is necessary to further our understanding of transformational leaders’ motivational effects, consistent with the process-based definition of leadership (e.g., Day, 2001; Graen & Scandura, 1987; Lord & Brown, 2004; Lord & Maher, 1991) adopted by the current study. Particularly, the current study argues that leaders influence followers’ motivations by selectively activating internal processes which have cognitive, affective, and motivational consequences. The following discussion will first introduce a heuristic model that guides the selection of follower internal processes to be included in the current study. It will then elaborate how transformational leaders may influence these processes to achieve their motivational effects.

According to Kanfer and Klimoski’s (2002) triarchic model, affect, cognition, and conation (motivation) play important roles as individuals integrate the internal and external pressures that jointly influence their thoughts and behaviors. Although these three components are viewed as reciprocally related and are proposed to have both independent and joint effects on individuals’ actions, affect is seen as the central component. The current research relies on this framework, and explores transformational leaders’ effects via their influence on followers’ cognitive and motivational processes. In turn, followers’ emotional reactions are expected to vary as a function of these different cognitive and motivational processes. This study focuses only on a subset of the possible cognitive and motivational processes through which leaders may have effects. There may
be many additional conscious and non-conscious processes through which leaders can influence followers, such as goal-setting.

Transformational leader effects through followers’ cognitive self-processes. Lord and Brown (2004) proposed a new model to conceptualize leader effects on followers. They argue that leadership involves linking leaders’ characteristics with subordinates’ self-systems within a control theory framework. Their approach implies that leadership is a process through which leaders change the way followers envision themselves. Leaders may do this in part by influencing a specific aspect of the followers’ self-concepts called the self-identity level (Lord & Brown, 2004).

The self-concept is conceptualized as an overarching knowledge structure that organizes information and behaviors relevant to oneself (Kihlstrom & Klein, 1994; Markus & Wurf, 1987; Oyserman, 2001). Part of individuals’ self-concepts involve their identity, which refers to their definition of the self. Self categorization theory (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987) suggests that there are two ways individuals can define themselves. Personal identity derives from identifying the constellation of traits that is unique to oneself, whereas social identity stems from identifying one’s similarities with others. Subsequent literature suggests that social identity can be further divided into a relational self-identity, where individuals define themselves based on their relationships with specific others, and a collective self-identity, where they define themselves in terms of group membership (Brewer & Gardner, 1996; Sedikides & Brewer, 2001).
Lord and Brown (2004; Lord et al., 1999) argued that followers’ specific levels of self-identity are differentially activated by specific leader traits and behaviors. Once activated, the particular level of self-identity can then direct followers’ cognitive and motivational resources to activities consistent with that level. For example, leaders may activate different follower identity levels, which has implications for followers’ subsequent justice perceptions (Selenta, Lord, & Brown, 2004). Specifically, Selenta et al. (2004) suggested followers with an activated individual level self-identity are likely to be most concerned with distributive justice, because it indicates the fairness of rewards to the individual. The resulting justice perceptions are likely to influence followers’ subsequent task and extra-role performance. In contrast, Selenta et al. suggest that procedural justice perceptions are considered most important and influential for followers with an activated collective level self-identity, because this aspect of justice highlights their value as a group member as described by Lind and Tyler’s (1988) group value theory. Finally, Selenta et al. suggest that followers with an activated relational identity are most influenced by their interactional justice perceptions, since these perceptions most directly address their major concern with establishing high quality relationships with the exchange partner.

While the argument that transformational leaders may influence followers’ self-identity levels has been proposed before (e.g., Shamir, House, & Arthur, 1993), it has not received much research attention (Kark, Shamir, & Chen, 2003). The limited empirical studies appear to support the notion that leaders can influence subordinates’ identification level, and their subsequent behaviors. For example, Paul, Costley, Howell, Dorfman,
Trafimow (2001) found that charismatic leadership style made followers’ collective self-concepts more salient, while an individualized consideration leadership style led to the higher salience of followers’ individual self-concepts. Kark et al. (2003) found that transformational leaders increased subordinates’ identification both with the leader and the organization. The former type of identification led to higher dependency on the leader, whereas the latter type of identification led to higher organization-based self-esteem and collective efficacy. Finally, studies with military samples found that leaders who increased followers’ identification with their units could increase their willingness to contribute to group goals (e.g., Shamir, Zakay, Brainin, & Popper, 1998; 2000). These studies provide preliminary support for the proposition that leadership processes may occur through changing or activating followers’ self-identity levels.

The abovementioned studies indicate that researchers have begun to examine the self-related processes through which transformational leaders exercise their influences. However, their results paint a somewhat puzzling picture regarding which level of self-identity is activated by transformational leadership. Paul et al.’s (2001) work suggests that different elements of transformational leadership (i.e., charisma and individualized consideration) can activate different levels of follower self-identity. On the other hand, such differentiated effects were not observed in other studies (e.g., Kark, et al. 2003) which measured transformational leadership as encompassing both charisma and individualized consideration. Additionally, studies conducted by Shamir and his colleagues (Shamir et al., 1998; 2000) adopted a slightly different definition and measurement of charismatic leader behaviors. They found that within the military
context, charismatic leaders are those who exhibit supportive behaviors, display exemplary roles, and emphasize ideology and collective identity (Shamir et al., 1998). As a result of the emphasis on collective identity and shared values, their results showed that charismatic leadership activated followers’ collective self-identity. Thus, there seems to be evidence both for and against the idea that different aspects of transformational leadership can make salient either an individual or a collective identity.

Current study: Proposed leadership → identity → outcomes relationships. In order to address this confusion, the current study looks more closely at the generic cognitive process of self-identity activation that is proposed to underlie transformational leadership. Unlike previous studies which examined predominantly the links between transformational leadership with followers’ collective self-identity, the current study argues that it is the links with followers’ self-systems, rather than the activation of any specific level of identity, through which transformational leadership has effects. In other words, transformational leaders can activate followers’ individual or collective self-identity, depending on the strategic choices they make in the content of their transformational behaviors. These behaviors can be adopted to emphasize either individual- or group-level goals, values, challenges, and rewards or punishments associated with accomplishing or failing the standards associated with a particular identity level.

In other words, transformational leaders may engage in adaptive behaviors such as idealized influence, inspirational motivation, and individualized consideration, yet still place different emphases on the group or individual. For example, leaders may stress
shared values and cooperation (idealized influence), articulate a challenging vision at the organizational level (inspirational motivation), and express interest in mentoring and working with the group as a whole (individualized consideration), in order to activate followers’ collective self-identity. However, alternatively, they may stress unique values and competition, articulate a challenging vision at the individual level, and express interest in mentoring and working with individual employees, in order to activate those followers’ individual self-identity. Importantly, in both situations the leader has engaged in transformational behaviors, but with different results for the followers’ identity levels.

In the current study, in order to enhance the effects of the leader scripts that will be used to manipulate followers’ identity levels, reward contingency is incorporated as part of the transformational leadership scripts. According to Bass (1985), contingent reward (reward or punishment based on follower performance) is an important component of transactional leadership. However, in subsequent studies, researchers have disagreed on whether contingent reward necessarily characterizes only transactional leadership, and on its relationship with transformational leadership (e.g., Bass et al., 2003; Bycio et al., 1995; Goodwin, Wofford & Whittington, 2001; Den Hartog et al, 1997). The more recent view is that contingent rewards that incorporate intrinsic recognition and motivation can be seen as a bridge to transformational leadership. This is especially so when the recognition is individually-based, a condition analogous to the individualized consideration element of transformational leadership (Bass et al., 2003; Waldman, Bass, & Yammarino, 1990). Other studies have also included contingent reward as part of transformational leadership (e.g., Wofford, Goodwin, & Whittington,
Thus, in the current study, information regarding contingent reward is treated as an integral part of a set of leadership scripts used to manipulate followers’ motivational orientations and identity levels in a manner typically associated with transformational leadership.

Overall, instead of arguing that transformational leadership takes effects solely by activating followers’ collective self-identity, or distinguishing which element of transformational leadership results in followers’ heightened individual or collective self-identity level, the current study concentrates on the actual cognitive process, and suggests that transformational leaders may flexibly influence both individual and collective identities. This perspective is illustrated in Figure 1 by indicating that a collection of leader behaviors will jointly influence followers’ activation of different levels of self-identity.

Hypothesis 1a: Transformational leader scripts activate followers’ individual self-identity when they emphasize individual values and goals, competition, and the rewards and punishments associated with individual goals.

Hypothesis 1b: Transformational leader scripts activate followers’ collective self-identity when they emphasize shared values, group goals, cooperation, and the rewards and punishments associated with group goals.

Once a specific level of self-identity is activated, it is expected to influence followers’ task motivations by directing their mental resources to be consistent with that identity level (Brickson, 2000; Lord & Brown, 2004). Particularly, those with an activated individual self-identity are motivated to become independent from others and to express their unique attributes. Those with an activated collective self-identity seek to fit in with relevant others and to fulfill their obligation as group members (Markus & Kitayama, 1991). Many empirical studies provide evidence that individuals’ self-identity
levels influence their motivations either directly or indirectly. For example, Chen and Welland (2002) showed that self-identity levels directly dictate the type of goals individuals pursue (e.g., individual identity: pursuing one’s own goals; collective identity: pursuing interdependent group goals). Self-identity also influences the relative weights given to competitive goals in classic public goods dilemma as demonstrated in studies by De Cremer and his colleagues (e.g., De Cremer & Van Vugt, 1999; De Cremer & van Dijk, 2002). They found that participants whose collective identity was primed increase their contribution to the public goods, and reduced the amount of resources reserved for their own personal gain.

In addition to the direct influence, self-identity levels can have more indirect effects on individuals’ motivations by moderating the paths through which thoughts are transformed into actions. For example, participants primed with individual self-identity formed their behavioral intentions based on their own attitudes, while those primed with collective self-identity based their behavioral intentions on their subjective value norms (Ybarra & Trafimow, 1998). Also, it was found that priming a specific value (e.g., concerns for environment: Verplanken & Holland, 2002; or self versus social evaluation: Parker, 2001) made individuals pay more attention to information associated with that value, and to behave according to that value. However, this effect was stronger when the value was congruent with one’s chronic self-concept. Taken together, these results suggest that followers’ self-identity levels should have effects on motivation through goal choices, as reflected in the relative importance attributed to individual versus group goals.
Hypothesis 2a: Followers with an activated individual self-identity will have higher task motivation for individual-based tasks than those with an activated collective self-identity.
Hypothesis 2b: Followers with an activated collective self-identity have higher task motivation for group-based tasks than those with an activated individual self-identity.

Transformational leader effect through followers’ conative process. In addition to the self-concept, Lord and Brown (2004) also suggested that leaders can also impinge on followers’ motivation by affecting their self-regulation systems directly. It has been well-established that self-regulation mechanisms rely on two discrete motivational systems: the approach system and the avoid system (Carver & Scheier, 1998). The approach system regulates goal-striving for attaining desirable outcomes. In other words, under approach motivational systems, individuals put efforts into reducing the discrepancy between their current state and pleasant goal states. The avoid system regulates goal-striving for preventing unpleasant outcomes. In other words, under avoid motivational systems, individuals put efforts into enlarging the discrepancy between their current state and unpleasant goal states (Carver, 2001; Carver & Scheier, 1998). These two systems have been linked to individuals’ general positive and negative affect (e.g., Carver, 2001), differential sensitivity to specific emotional responses (e.g., Shah & Higgins, 2001), differential responses to positive and negative role models (e.g., Lockwood, Jordan, & Kunda, 2002), speed to initiate tasks relevant to goal achievement (Freitas, Liberman, Salovey & Higgins, 2002), and persistence on the task when interrupted or discouraged (e.g., Freitas, Liberman & Higgins, 2002). In sum, these studies demonstrated that approach and avoid systems have distinctive effects on one’s self-regulation activities and task motivations.
The distinction between approach and avoid systems can be incorporated into the consideration of leadership processes. Transformational leaders may influence followers’ conative processes by making different self-regulation subsystems more salient. Leaders may articulate a challenging vision (i.e., inspirational motivation: Bass, 1985) that stresses either pursuing an ideal outcome to engage followers’ approach system, or preventing a disastrous outcome to engage their avoid system. Also, transformational leaders may emphasize either the rewards associated with achieving the goal, or the punishment associated with failing the goal (reward contingency: Bass, 1985). Through the heightened relevance of the approach or avoid system, followers may be differentially motivated to tackle the task in a specific manner, evaluate their own performance differently, and respond to situational setbacks of their goal pursuit with different levels of persistence. Thus, the current study proposes that transformational leadership can selectively engage followers’ approach or avoid motivational system and examines the subsequent effects of such selective engagement on followers’ behavior and affective responses. This is indicated in Figure 1, which suggests that a collection of leader behaviors has combined effects on setting an approach or avoid goal for followers.

**Hypothesis 3a:** Transformational leader scripts activate followers’ approach motivational orientation when they articulate goals such as achieving desirable and pleasant end states, and emphasize rewards associated with goal accomplishment.

**Hypothesis 3b:** Transformational leader scripts activate followers’ avoid motivational orientation when they articulate goals such as avoiding undesirable and unpleasant end states, and emphasize punishment associated with goal failure.

The current study takes the perspective that the transformational leader’s influences on the follower’s level of self-identity and the activation of an approach or
avoid goal are largely distinctive from each other. This perspective is consistent with Schwartz’s (1992) value circumplex model. In the circumplex model, values are categorized based on their individual or social orientation (termed “focus on individual outcomes” and “focus on social context outcomes” in his model), and an orthogonal dimension of whether they imply approaching positive outcomes or avoiding negative consequences (termed “focus on opportunity” and “focus on organization” in his model).

However, it is possible that self-identity level and motivational orientation interrelate. As Kanfer and Klimoski (2002) suggested in their model, cognitive and motivational processes are naturally related and may have reciprocal effects on each other. Some research has shown that individuals with a dominant individual self-construal put more emphasis on approach-goal-oriented information, whereas those with a dominant interdependent self-construal put more emphasis on avoid-goal-oriented information (Lee, Aaker, & Gardner, 2000). Thus, there may be some natural association between certain levels of identity, and certain motivational orientations. If so, the effects of what are intended to be independent leader script manipulations may be enhanced, or neutralized, depending on the combination of target processes. This potential for interacting effects will be investigated in the current study, even though the initial assumption is that the effects of identity level and goal type are independent.

Variations within the Broad Transformational Leadership Style

Comparison between transformational leadership and other leadership styles.

Ample research has compared and contrasted the effects of transformational or charismatic leadership with effects of other leadership types. Transformational leadership
is most commonly compared and contrasted with transactional leadership. For example, field studies have found that transformational leadership behaviors had a positive relationship with followers’ satisfaction with the group or the leader, whereas transactional leadership behaviors had no or a negative relationship with followers’ satisfaction (e.g., Gellis, 2001; Wofford et al., 1998). Also, followers of transformational leaders were found to have higher job satisfaction than those of transactional leaders (e.g., Pillai, Schriesheim, & Williams, 1999). In addition to satisfaction, transformational leadership was found to be positively associated with perceived leader effectiveness, while transactional leadership was found to have a negative relationship (e.g., Gellis, 2001; Wofford et al., 1998). In terms of interactions with leaders, transformational leadership was positively related to high quality leader-member exchange (LMX) as rated by followers, while transactional leadership was negatively related to LMX (e.g., Howell & Hall-Merenda, 1999). These studies support the claim that transformational leadership is more effective in generating followers’ positive reactions than transactional leadership.

Field studies have also provided evidence that transformational leadership, in comparison with transactional leadership, has more positive implications for followers’ behaviors. Some studies have used more subjective measures (i.e., self-ratings) and found that transformational leaders were associated with higher follower performance and effort (e.g., Gellis, 2001). Other studies used performance ratings from other sources (such as direct supervisors), and found that transformational leadership was positively associated with higher follower task performance (Howell & Hall-Merenda, 1999; Pillai et al., 1999) and organizational citizenship behaviors (Pillai et al., 1999; MacKenzie, Podsakoff, &
Rich, 2001). Still other research examined objective performance measures such as sales volume and also supported the positive effect of transformational leaders (MacKenzie et al., 2001). Transformational leaders were also found to encourage more follower creativity (e.g., Elenkov, 2002) and safety practices to reduce minor injury at work (e.g., Zohar, 2002).

Apart from individual performance measures, research has also examined transformational leadership effects on unit or organizational performance. It has been found that transformational leadership was positively associated with unit performance, while transactional leadership had limited impact (e.g., Bass et al., 2003; Howell & Avolio, 1993). Finally, it was found that transformational leadership had positive effects on organizational performance (defined as organizations meeting their objectives) above and beyond the effects associated with transactional leadership (e.g., Elenkov, 2002). Overall, these results support the assertion that transformational leaders, in comparison with transactional leaders, have more positive effects on followers’ performance.

In addition to the field studies, laboratory experiments also have also provided evidence that transformational leadership results in distinctive outcomes. For example, Jung and Avolio (2000) found that transformational leaders had positive effects on individuals’ performance quality on a brainstorming task in which they were asked to find ways to improve an educational program. Those who received the transformational leader manipulation generated more innovative recommendations to improve the program and had higher satisfaction with the leader. However, the high quality performance was achieved at the expanse of reduced performance quantity. On the other hand, the
transactional leader manipulation had minimal effect on participants’ performance, and participants were less satisfied with the leader. Such findings were replicated in Hoyt and Blascovich’s (2003) study with three-person groups performing a similar task. In their study, the transformational leadership manipulation led to higher qualitative group performance and satisfaction with the leader, but lower quantitative group performance, in comparison with transactional leadership manipulation. These experiments demonstrate that transformational and transactional leadership styles have different implications for individual and group performance.

Other studies investigated the different patterns of interaction between followers and transformational or transactional leaders, and explored how different leadership styles could interact with other environmental factors to influence followers’ performance. For example, Deluga and Souza (1991) found that participants who were exposed to the transformational leader role were more likely to use rational persuasion as an influencing tactic to change leaders’ decisions than those who were exposed to the transactional leader role. Shea and Howell (1999) found that in a laboratory setting, charismatic leaders alleviated the negative effects of lacking task feedback on participants’ performance across trials. On the other hand, participants who were exposed to the non-charismatic leadership manipulation and no performance feedback had the lowest level of overall performance. In sum, these studies provide support for the general distinction between transformational leadership and other leadership types.

The abovementioned studies clearly distinguished the effects of transformational leadership on outcomes from those of other leadership styles. However, research interest
has been limited in questioning whether there are variations within the broad transformational leadership style, and how these variations may have different implications for the effects of transformational leadership. Arguably, by using the term “transformational leadership” to refer to different facets of adaptive behaviors, researchers who compared the effects of different leadership styles have also unintentionally examined the potential effects of variations within the broad transformational leadership style. In other words, when studies manipulate transformational leadership differently and show differential effects, they may provide some clues about how variations in transformational leader behaviors may result in different follower outcomes. Earlier discussion of transformational leadership effects on self-identity levels has provided one example of such general coverage and its potential issues. The following discussion will use another example both to illustrate this issue, and to show how the current study proposes to take a process-oriented perspective towards variations within the transformational leadership style.

Variations within transformational leadership style. The example derives from a closer examination of how different studies comparing effects of transformational and transactional leadership on followers’ satisfaction in field settings with measured leadership construct. As discussed earlier, Gellis (2001), Pillai et al. (1999), and Wofford et al. (1998) all found that followers of transformational leaders were more satisfied with the leader than followers of transactional leaders. However, all three studies defined transformational and transactional leadership slightly differently. Gellis (2001) defined transformational leadership as consisting of the four adaptive behaviors as listed earlier:
idealized influence (including only leader behaviors), inspirational motivation, intellectual stimulation, and individualized consideration. The transactional leadership measures included three facets: contingent reward, active management by exception (leaders clarifying goals for followers and closely monitoring their progress), and passive management by exception (leaders reacting to problems resulting from followers’ low performance). Pillai et al. (1999) also included the four adaptive behaviors as listed earlier. However, the element of idealized influence used by Gellis included only leaders’ behavioral characteristics rather than the both behavioral and personal attributes as included in Pillai et al.’s study. Additionally, Pillai et al. conceptualized transactional leadership as including only the facet of contingent reward. Finally, Wofford et al. (1998) took yet another approach, treating contingent reward as part of transformational leadership rather than transactional leadership. These different operationalizations of the transformational leadership style suggest that when evaluating the effects of transformational leadership across these studies, the comparison arguably implies both between-leadership-style differences and within-style variations.

As pointed out earlier, the current study focuses on the generic follower internal processes that can be engaged by transformational leaders and attempts to establish that transformational leaders may influence followers through multiple processes. In doing so, I hope to address the second issue of the general lack of study of variations within the broad transformational leadership style. The discussion of transformational leadership effects on followers’ self-identity levels and on satisfaction with leaders has provided examples of how it can be problematic and misleading when researchers used the same
term to refer to slightly differently-defined or -measured constructs. Additionally, it shows that when variations within the transformational leadership style are identified on the basis of leaders’ personal and behavioral characteristics, the potential number of different combinations can be very large and difficult to categorize.

On the other hand, defining variations within transformational leadership on the basis of the different follower processes that leaders may activate may be a viable alternative. This alternative has two advantages. The first advantage is that such definition ensures a fair comparison. When variations of transformational leadership are conceptualized as different combinations of adaptive behaviors, making comparisons across different combinations may not always be reasonable. These combinations may differ qualitatively (including different adaptive behaviors) and/or quantitatively (including different number of adaptive behaviors). Due to those differences, to examine the different effects of different combinations may give some combinations an unfair advantage over others. In addition, when the specific combination included only limited types of adaptive behaviors, it may raise the question whether this combination can still be considered as transformational leadership.

However, when variations of transformational leadership are defined as activating different follower internal processes, making comparisons across variations can be seen as examining the qualitative differences of those variations. Leaders may exhibit the same adaptive behaviors designed to illicit different processes. For example, as discussed earlier, the inspirational motivation behavior can be used to highlight goals at either the individual or group level. This way, the comparison between different variations can be
seen as starting at the same ground. It also avoids deviation from the definition of transformational leadership.

The second advantage of adopting a process-oriented definition for variations within transformational leadership is that it allows for a closer examination of effects of leadership. Leadership processes can arguably be considered as having a more proximal link with the outcomes than leader characteristics do. Thus, defining variations on the basis of processes provides a direct test of the mechanisms underlying the different variations. For those two advantages, the current study will examine the variations within transformational leadership following a process-oriented perspective.

As mentioned earlier, various leader scripts that will be used in the current study are designed to activate followers’ different internal processes. Since the variations between scripts should only reflect qualitative differences, followers should perceive the leaders portrayed by the different scripts to exhibit similar sets of adaptive behaviors and thus to be equally transformational. Such similar perceptions can be taken as evidence supporting the first advantage of using a process-oriented approach to study variations within transformational leadership.

**Hypothesis 4:** Leader scripts that activate different follower internal processes (cognitive and conative) will be perceived as equally transformational.

**Active Roles of Followers**

**Brief overview of follower-oriented leadership theories.** The recognition of followers’ roles in leadership processes can be traced to Hollander and his colleagues (Hollander & Julian, 1969). Hollander proposed that leadership should be considered as an exchange process in which both leaders and followers take part. Followers’
expectations and perceptions of leaders are important in shaping the nature of the relationship, and thus the effectiveness of leaders (Hollander, 1985; 1992a; 1992b; Hollander & Julian, 1969). Hollander first suggested the term *followship* to capture the process through which followers establish leadership perceptions and actively participate in the leader-member exchange process.

As a result of the growing attention to followers’ roles in leadership processes, leader categorization theory (Lord, Foti, & De Vader, 1984) was proposed, which suggests that the match between followers’ leader prototypes, and their perceptions of their current leader’s characteristics determines their leadership perceptions. Other theorists have put even stronger emphasis on followers by taking a *follower-centric* approach to leadership (e.g., Meindl, 1993; 1995). Meindl argued that leadership is a social construction process through which followers “make sense” of the exchange relationship by attributing situational characteristics to the leader and leadership. In other words, leadership is in the eye of beholders and cannot exist outside of followers’ subjective interpretations and attributions (Meindl, 1995). In addition to the individual level, researchers have also extended the emphasis of followers to the group level. For example, Hogg’s (2001) social identity theory suggested that leadership perceptions derived from the match between leader characteristics and group members’ shared leader prototype. Paster, Meindl, and Mayo (2002) demonstrated that group members influenced each other’s attributions of leader charisma, and they noted that such influence was especially strong when members interacted more frequently. Overall, this body of
literature underlines the importance of considering followers as an integral part of leadership perception and attribution processes.

Unfortunately, followers’ active roles in the leadership process are less frequently examined in the context of the outcomes of transformational leadership. Previous studies have linked transformational or charismatic leader characteristics with followers’ increased job satisfaction (e.g., Conger, Kanungo, & Menon, 2000) and performance (e.g., Bass et al., 2003; Conger et al., 2000; De Cremer & van Knippenberg, 2002; Dvir, Eden, Avolio, & Shamir, 2002). Also, meta-analyses found that transformational leadership was related to higher leader effectiveness as rated by followers (DeGroot et al., 2000; Judge & Piccolo, 2004; Lowe et al., 1996) and followers’ job satisfaction, organizational commitment, individual, and group performance (DeGroot et al., 2000; Judge & Piccolo, 2004). However, these studies have focused primarily on leader characteristics and do little to increase our understanding of how followers may actively take part in the leadership process.

In order to address this deficiency, the current study proposes that followers are active feedback seekers (e.g., Ashford & Cummings, 1983; 1985) in the leader-follower relationship. As discussed earlier, it is proposed that transformational leaders can activate followers’ different self-identity levels cognitively (Hypothesis 1), and engage their approach or avoid motivational subsystems by articulating different messages (Hypothesis 3). Followers’ cognitive and motivational processes as engaged by leaders are expected to influence their subsequent feedback seeking behavior and thus their task motivations. Particularly, followers’ self-identity levels and motivational orientation
(approach or avoid goals) are expected to influence their preferred type of feedback, the expected feedback utility, and willingness to seek feedback.

**Leader effects on preference for feedback types and perceived feedback utility.**

Not much empirical research has examined how leaders may influence followers’ feedback-seeking intentions or behaviors. An exception is a study by Levy, Cober, and Miller (2002) which suggested that different types of leader behaviors had varied effects on followers’ willingness to seek information. Levy et al. manipulated leader characteristics by creating transformational (individualized consideration) and transactional (management by exception) leader scripts and then examining the effects on participants’ feedback-seeking intentions. When participants perceived leaders to be more transformational, they were more willing to seek feedback.

Similarly, a field study by Madzar (2001) found that subordinates who perceived their supervisors to be more transformational (as opposed to transactional) sought more feedback from their leaders. Madzar also found that supervisors with different leadership styles influenced the type of feedback followers sought. Transactional leaders increased followers’ technical and referent feedback-seeking behaviors (feedback concerning task-performance), presumably because these types of feedback are closely related to the reward contingency. Although these studies indicated the potential impact of leaders on followers’ feedback-seeking intentions and behaviors, they are limited in two ways. First, they assume that the same general style of leader behavior (transformational or transactional) will have universal effects on followers’ feedback-seeking intentions and behaviors, rather than considering the potential for varying effects within a single
leadership style. Second, they fail to examine leadership as a process, and simply jump to an investigation of its impact.

Instead of focusing on leader characteristics, the current study suggests that the followers’ cognitive and conative processes (as influenced by leaders) will have the most direct impact on their feedback-seeking intentions and preferences. Followers’ levels of self-identity, and their approach or avoid goal, should make them more sensitive to, or more eager for, specific types of feedback. For example, leadership that heightens followers’ individual self-identity will make them more interested in individual performance feedback information. On the other hand, leadership that heightens followers’ collective self-identity will make them more interested in group performance feedback information. This differential preference may occur as those with individual self-identity perceive feedback at the individual level more useful in helping them improve their subsequent performance, whereas those with collective self-identity perceive feedback at the group level more beneficial.

A similar argument has been proposed regarding the effects of the cultural dimension of individualism-collectivism on individuals’ feedback-seeking characteristics (de Luque & Sommer, 2000). Employees from an individualist culture are more attentive to feedback concerning their own performance, whereas those from a collectivist culture are more interested in feedback concerning work group performance. Morrison, Chen, and Salgado’s (2004) empirical study found that newcomers of an organization located in Hong Kong (a collectivist culture) were less likely to seek individual-based information than newcomers of an organization located in US (an individualist culture). Also, when a
goal was considered highly relevant to one’s own self, individuals had increased interest in seeking feedback regarding their own performance (Trope & Pomerantz, 1998). These related areas of study further suggest that followers’ activated self-identity will have implications for their preferred feedback level, and their perceived feedback utility.

Hypothesis 5a: Followers with an activated individual self-identity have higher preference for individual performance feedback than those with an activated collective self-identity.

Hypothesis 5b: Followers with an activated collective self-identity have higher preference for group performance feedback than those with an activated individual self-identity.

Hypothesis 6a: Followers with an activated individual self-identity have higher expected feedback utility for individual feedback than those with an activated collective self-identity.

Hypothesis 6b: Followers with an activated collective self-identity have higher expected feedback utility for group feedback than those with an activated individual self-identity.

In addition, the current study proposes that transformational leaders can also influence followers’ feedback preferences by making their approach or avoid goal more salient. Specifically, followers should prefer feedback that best corresponds with their discrepancy reduction or enlargement efforts. In other words, a leadership process that taps followers’ approach regulatory system should make them more attentive to the discrepancy reduction information. In contrast, a leadership process that activates followers’ avoid regulatory system should make them more interested in the discrepancy enlargement information.

There has not been much empirical study of how individuals’ regulatory focus (i.e., approach versus avoid goals) influences their preference for different types of feedback. Rather, the existing studies focus on how positive or negative feedback could
have different motivational effects on individuals, depending on their motivational orientation (Forster, Grant, Idson, & Higgins, 2001). For example, Forster, Grant, Idson, and Higgins (2001) found that people with a general promotion or approach orientation were more motivated to perform after receiving feedback of positive valence that indicated that their performance level was well above average. However, people with a general prevention or avoid orientation were more motivated to perform after receiving negatively-valenced feedback that suggested that their performance level was well below average.

A more recent study replicated this finding with experimentally manipulated goals. Van-Dijk and Kluger (2004) found that those who were assigned an approach goal were more motivated after receiving positive feedback, whereas those who were assigned an avoid goal were more motivated after receiving negative feedback. In these studies, the feedback information was manipulated and given to participants, rather than being sought by them. However, these studies have demonstrated that participants with different motivational orientations have differential sensitivity to positive or negative feedback. Because positive feedback is related to success and negative feedback implies failure, it can be argued that when given a feedback-seeking opportunity, differential sensitivity will result in participants favoring more success-framed or failure-framed feedback. In other words, followers with an approach goal will be more sensitive to and interested in feedback that is framed in a distance-from-success, or discrepancy-reducing, manner. On the other hand, those with an avoid goal will seek information that is framed in a distance-from-failure, or discrepancy-enlarging, manner. It is important to note that
these different preferences are for the framing of the feedback, rather than the valence of the feedback. In other words, it is possible to deliver negative feedback with a success-framing (e.g., feedback indicating that current state is very far away from success), or positive feedback with a failure-framing (e.g., feedback suggesting that the current state is very far away from failure).

Hypothesis 7a: Followers with an activated approach motivational orientation have higher preference for success-framed feedback content than those with an activated avoid motivational orientation.

Hypothesis 7b: Followers with an activated avoid motivational orientation have higher preference for failure-framed feedback content than those with an activated approach motivational orientation.

Willingness to seek feedback. Willingness to seek feedback is considered as an important predictor of individuals’ feedback-seeking frequency (Ashford, Blatt, & VandeWalle, 2003). The current study focuses on participants’ willingness to seek different types of feedback as a function of three variables: activated self-identity levels, motivational orientation, and perceived performance level. The distinctive effects of the first two variables on followers’ feedback seeking behaviors have been discussed and hypothesized in earlier sections. The following discussion will focus on the third variable, and how it can interact with the other two to influence participants’ willingness to seek feedback.

According to Ashford et al. (2003), one determinant of feedback-seeking behavior is ego defense and enhancement. This self-protection mechanism related to participants’ avoidance of feedback-seeking in fear of potential negative feedback (e.g., Ashford & Cummings, 1983; Wood, 1989). This may be especially so when individuals have a performance orientation, or the tendency to want to demonstrate superior ability and
avoid showing inferior ability (e.g., Butler, 1992; 1993; 1999). On the other hand, those with a learning orientation, or the tendency to acquire skills and understandings, may be less affected by the potential ego threat, and more willing to seek feedback regardless of the potential for negative feedback (e.g., Tuckey, Brewer, & Williamson, 2002; VandeWalle, Ganesan, Challagalla, & Brown, 2000). It has been argued that when performers actively seek feedback themselves, it is more difficult to subsequently distort or discount negative feedback (Ashford et al., 2003). Therefore, they are more likely to employ an escape strategy to avoid seeking feedback when they perceive the potential of negative feedback.

Following this line of logic, the current study proposes a three-way interaction between followers’ self-identity level and motivational orientation as activated by leaders, and their perceived performance level, on their feedback seeking intentions for individual versus group performance information. Followers’ self-identity level, as argued earlier, should direct their attention to be more willing to seek individual (individual self-identity) or group (collective self-identity) feedback. When the leader also elicits an approach goal, such effects are expected to occur regardless of their performance level. As discussed earlier, those with a learning orientation are more likely to perceive feedback-seeking as beneficial for their development of skills, and thus are less affected by the potential negativity of feedback (Tuckey et al., 2002; VandeWalle et al., 2000). In the current study, an approach goal can arguably be mapped onto the learning orientation. An approach regulatory focus directs individuals’ motivations to pursue ideal and desirable outcomes (Carver & Scheier, 1998). In this case, their
approach goal is to perform, to the best of their ability, the assigned tasks. This echoes the emphasis of learning orientation on individuals’ mastery of the domain. Thus, their self-identity levels as activated by the leader should determine their willingness to seek individual or group performance feedback, regardless of perceived individual or group performance.

On the other hand, when the leader engages followers’ avoid regulatory system, their perceived individual and group performance levels are expected to interact with their levels of self-identity in determining their willingness to seek individual or group feedback. As discussed earlier, individuals with a performance orientation may avoid feedback-seeking when they perceive the possibility of receiving negative feedback (VandeWalle & Cummings, 1997). This may occur when they perceive their performance level as below standards (Tuckey et al., 2002). In the current study, an avoid goal can arguably be linked with performance orientation. An avoid goal motivates individuals to enlarge the distance between their current state and undesirable or unpleasant outcomes (Carver & Scheier, 1998). Part of the performance orientation involves individuals’ tendency to avoid unfavorable or negative judgments about their ability (Dweck, 1986), which can be seen to be related to the avoid motivational orientation.

Thus, while followers’ self-identity level may still direct their attention to feedback regarding their individual or group performance, their willingness to seek feedback should be influenced by how well they perceive themselves, or their group, to perform on the assigned tasks. For those with an individual self-identity, there will be a positive relationship between perceived individual performance level, and willingness to
seek individual feedback. Similarly, those with a collective self-identity will be more willing to seek feedback concerning their groups’ performance when they perceive that their groups perform well on the tasks. This set of expected results is summarized in Figure 2. Notice that a similar pattern is expected for the two “willingness to seek feedback” dependent variables. In general, approach motivational orientation leads to greater willingness to seek feedback than avoid motivational orientation. However, when the individual self-identity level is salient, there is greater willingness to seek individual level feedback than group level feedback, and vice versa for the collective identity level. Thus, this set of hypotheses describes the matching effects concerning the target of the evaluation (perceived individual or group performance level) and the target of the feedback.

*Hypothesis 8a: There will be a three-way interaction between followers’ self-identity level, motivational orientation, and perceived individual performance level, on their willingness to seek feedback concerning their individual performance.*

*Hypothesis 8b: There will be a three-way interaction between followers’ self-identity level, motivational orientation, and perceived group performance level, on their willingness to seek feedback concerning their group’s performance.*
Figure 2. Proposed Interaction Effect of Identity Level, Motivational Orientation, and Perceived Individual Performance on Willingness to Seek Individual and Group Feedback.

Transformational Leadership Outcomes and Their Implications at Multiple Levels

The final issue that will be addressed by the current study relates to the multiple levels of leadership outcomes. Previous studies have focused on how transformational leaders affect outcomes either at the individual or group level. For example,
transformational leadership has been linked with various followers’ attitudes, such as job satisfaction and organizational commitment, and behaviors, including task performance and extra-role performance (DeGroot et al., 2000; Lowe et al., 1996; Shamir et al., 1998, 2000). Studies have also found that transformational leadership has implications for group or unit level outcomes such as performance (e.g., Bass et al., 2003) and team efficacy and culture (e.g., Shamir et al., 1998). However, seldom did they examine the issue of how outcomes at one level could have implications for those at the other level. It has been implicitly assumed that the facilitative effects of transformational leadership for outcomes at one level (e.g., individual performance) should contribute positively to outcomes at another level (e.g., unit level performance). Indeed, research has found that transformational leader behaviors had positive effects on both individual and group level performance (e.g., DeGroot, et al., 2000).

On the other hand, some research evidence suggests that the same cognitive process may influence outcomes at different levels differently (e.g., De Cremer & van Dijk, 2002). The current study proposes that transformational leaders may facilitate outcomes at one level at the risk of impairing outcomes at the other level. In order to study the differential effects of leadership processes, the current study manipulated the valence of feedback provided to followers. Specifically, half of the followers received feedback that indicates positive individual performance but negative group performance, whereas the other half received negative individual and positive group performance feedback. The following discussion will address how feedback valence, together with followers’ cognitive and conative processes as activated by their leaders, may have
different implications for two specific outcomes at different levels: followers’ affective responses to feedback and task motivation to improve or persist post to receiving feedback.

*Followers’ affective responses to feedback.* The literature concerning individuals’ emotional reactions to feedback has demonstrated repeatedly that such reactions are largely determined by self-enhancement processes (Stahlberg, Petersen, & Dauenheimer, 1999; Swann, Griffin, Predmore, & Gaines, 1987). In other words, individuals respond positively to positive feedback, and negatively to negative feedback (self-enhancement theory: Schrauger, 1975). Empirical studies in various fields of psychology (e.g., educational, industrial, and organizational) have found that when individuals receive favorable or positive feedback, they are more satisfied with the feedback, and react more positively towards the feedback, than when they receive unfavorable or negative feedback (Bloom & Hautaluoma, 1987; Brett & Atwater, 2001; Dauenheimer, Stahlberg, & Petersen, 1999; Lao & Bolen, 1984; Stahlberg et al., 1999; Woo & Mix, 1997). Following this line of logic, the current study proposes that followers’ affective responses will be determined by the feedback valence manipulation. In addition, their discrete emotional reactions to the feedback will be influenced by their level of self-identity, and motivational orientation. In other words, a three-way interaction between feedback valence, followers’ self-identity level, and motivational orientation on reactions to feedback is proposed.

As argued earlier, followers whose individual self-identity is more activated by their leaders should be more interested in feedback concerning their individual
performance (Hypothesis 5a), and perceive such feedback as more useful (Hypothesis 6a). On the other hand, those with activated collective self-identity should be more interested in group performance feedback (Hypothesis 5b), and perceive such feedback to be more useful (Hypothesis 6b). Following this line of logic, individuals’ self-identity levels should have an impact on the level of feedback to which they are most sensitive, and thus react strongly. In the current study, the valence of feedback at the two different levels (i.e., individual versus group) is designed to be opposite. Thus, it follows that for those followers who receive positive individual but negative group performance feedback, they will have more positive emotional reactions if their individual self-identity is more activated, but more negative affective reactions if their collective self-identity is more activated. On the other hand, followers who receive negative individual but positive group performance feedback will have more negative reactions if their individual self-identity is more activated but more positive reactions if their collective self-identity is activated.

The body of educational research which investigated the “big-fish-small-pond” effect has provided some support for the proposed differential emotional responses to the feedback valence manipulation in the current study. The big-fish-small-pond effect suggests that students in more prestigious schools have more negative academic self-conceptions than equally capable students who attend less prestigious or competitive schools (e.g., Marsh & Hau, 2003; for review, see Marsh, 1987). This effect was found to be moderated by individuals’ identity level. If students had higher collective identity, it could remove the negative “big-fish-little-pond” effect (e.g., Marsh & Hau, 2003;
McFarland & Buehler, 1995). On the other hand, strengthening students’ collective identity could lead them to respond less favorably to feedback when they performed well but their group did not (e.g., McFarland & Buehler, 1995). These studies suggest that reactions to feedback concerning performance at different levels may be different, and such differences are highlighted by the identity level as elicited by the leader.

While the feedback valence should determine the general valence (positive-negative) of followers’ affective reactions, their motivational orientation should determine the discrete emotions they experience as a result of the feedback. Carver and Scheier (1998) proposed that approach and avoid motivational systems are linked to two unique sets of positive and negative emotions. When individuals set an approach goal, their emotions should vary on the continuum between elation (as a result of achieving the goal) and dejection (as a result of failing the goal). On the other hand, those with an avoid goal should experience quiescence when they succeed, and anxiety when they fail their goal.

Empirical studies have found support for this distinction between emotional responses associated with different regulatory foci (Higgins, Shah, & Friedman, 1997; Shah & Higgins, 2001). In a series of four studies, Higgins et al. measured and manipulated individuals’ motivational orientation to either approach or avoid. They found that goal attainment led participants to experience cheerfulness (success) or dejection (failure) when participants set an approach goal. In contrast, goal attainment led to quiescence (success) and agitation (failure) when participants had an avoid goal. Shah and Higgins (2001) also found that individuals with an approach goal were more efficient
in appraising emotions along the elation-dejection continuum, while those with an avoid goal were better with quiescence-agitation emotional appraisal. It seems that such a distinction can be applied to the current study, such that the discrete emotions followers experience as a result of their self-identity level and feedback valence should vary along two separate continua as determined by their motivational orientation. This set of proposed results is presented in Figure 3. Similar to hypotheses 8a and 8b, this set of hypotheses proposes a matching effect of feedback valence and participants’ self-identity level. In addition, results also match between two types of positive emotions (elation and quiescence), and between two types of negative emotions (depression and agitation).

_Hypothesis 9a:_ There will be a three-way interaction between followers’ self-identity level, motivational orientation, and feedback valence manipulation, on their positive affective responses (elation and quiescence) to the feedback.  
_Hypothesis 9b:_ There will be a three-way interaction between followers’ self-identity level, motivational orientation, and feedback valence manipulation, on their negative affective responses (depression and agitation) to the feedback.
Manipulation Conditions:

- Individual – Approach
- Collective – Approach
- Individual – Avoid
- Collective – Avoid

*Figure 3. Proposed Interaction Effect of Feedback Valence, Identity Level, and Motivational Orientation on Affective Poles.*
Followers’ motivation to improve/persist after feedback. One of the major outcomes of feedback seeking is the instrumental value of the feedback in improving individuals’ task performance (Ashford et al., 2003). These positive effects of discrepancy feedback on performance have been demonstrated in various studies (e.g., Morrison & Weldon, 1990). Other studies have expanded the focus and elaborated on different mechanisms through which feedback-seeking may improve individuals’ task performance. For example, Brown, Ganesan, and Challagalla (2001) found that feedback-seeking improved employees’ role clarity, which had positive implications for their work performance. In addition, Renn and Fedor (2001) found that employees who sought feedback used the discrepancy information to set improvement goals, which led to subsequent improvement in performance. Interestingly, in both Brown et al., and Renn and Fedor’s studies, self-efficacy played an important role in the effect of feedback-seeking on task performance. Brown et al. found that the feedback only had positive effects on role clarity for those with high self-efficacy. Also, Renn and Fedor found that self-efficacy had unique effects on employees’ feedback-based goals, above and beyond feedback-seeking. These studies suggest that while feedback may have a positive effect on task motivation or performance, such an effect may have boundary conditions.

One of the boundary conditions that is the focus of the current study is individuals’ level of self-identity. As argued earlier, individuals’ level of self-identity should direct their cognitive and motivational resources to be consistent at the same level (Lord & Brown, 2004). Thus, those with activated individual self-identity should have higher motivations for individual-based tasks (Hypothesis 2a), while those with activated
collective self-identity should grant group-based tasks priority (Hypothesis 2b). Upon receipt of the feedback manipulation proposed by the current study, such differential emphasis should manifest itself in followers’ motivation to improve.

In addition to the activated self-identity levels, motivational orientations may also have some implications in followers’ motivational responses to feedback. As mentioned earlier, Van-Dijk and Kluger (2004) found that assignment of approach versus avoid goal influenced participants’ motivational levels after receiving positive or negative feedback. Particularly, those who were assigned an approach goal were more motivated after receiving positive feedback, whereas those who were assigned an avoid goal were more motivated after receiving negative feedback. In another study, Forster et al. (2001) found that participants’ with an approach focus were more motivated after receiving positive feedback, and showed higher intention to increase their task effort. On the other hand, positive feedback was found to reduce task motivation for those with an avoid goal. Taken together, these studies suggested that individuals’ motivational orientation may be another important boundary condition when examining the effect of feedback on individuals’ motivation.

Therefore, a three-way interaction between followers’ self-identity level, motivational orientation, and feedback valence manipulation is proposed to influence their post feedback motivation to improve/persist on the task. Those with an individual self-identity and approach goal should be more motivated to improve or persist on the individual-based tasks after receiving positive feedback, whereas those with an individual self-identity and avoid goal should be especially motivated for individual-based tasks.
after receiving negative individual feedback. On the other hand, those with a collective self-identity and an approach goal should be more motivated to improve or persist on the group-based tasks after receiving positive group feedback. However, a combination of collective self-identity, avoid goal, and negative group feedback should lead to highest motivation for group-based tasks. Figure 4 provides an illustration of the proposed three-way interaction effect.

**Hypothesis 10a:** There will be a three-way interaction between followers’ self-identity level, motivational orientation, and feedback valence manipulation, on their motivation to improve/persist on individual-based tasks post feedback.

**Hypothesis 10b:** There will be a three-way interaction between followers’ self-identity level, motivational orientation, and feedback valence manipulation, on their motivation to improve/persist on group-based tasks post feedback.

**Summary**

The current study takes a process-oriented approach to empirically examine the effects of a collection of leader behaviors on followers’ attitudes, task motivations, and feedback-related perceptions and responses. It is proposed that effective leaders can cognitively activate different levels of follower self-identity, and conatively engage them to set approach or avoid goals, depending on the content of their inspirational message. These two processes should influence followers’ task priority, preference for different types of feedback, willingness to seek feedback, and affective and motivational responses to feedback.
Figure 4. Proposed Interaction Effect of Feedback Valence, Identity Level, and Motivational Orientation on Motivation to Improve Individual and Group Tasks.
A summary of the proposed hypotheses are presented in Table 1. Linking the hypotheses to the schematic model as shown in Figure 1, it is noted that Hypotheses 1 and 3 relate to the connection between the leader behaviors and followers’ internal processes. Hypotheses 2, 5 and 6 relate to followers’ activated cognitive processes with their subsequent task attitudes and motivations. Hypotheses 7, on the other hand, links followers’ activated conative processes with their subsequent task motivations. Finally, Hypotheses 8 through 10 pertain to the joint effect of followers’ activated cognitive and conative processes on their attitudes and responses to feedback.

In sum, the current study raised four issues concerning the current transformational leadership literature: (a) the processes through which leadership takes its effects; (b) the variations within the broad transformational leadership style; (c) the active roles of followers; and (d) leadership outcomes and their implications at multiple levels. A laboratory study with ten sets of hypotheses has been proposed. Participants were randomly assigned to receive one of the four leader messages designed to activate followers’ different of self-identity levels and motivational orientations. Measures were chosen so that the activation of different levels of participants’ self-identity and motivational orientations can be directly assessed by reaction time measures. With the results from the current study, a more integrated, process-oriented approach to transformational leadership can help better understand the underlying mechanisms of such leader influence.
<table>
<thead>
<tr>
<th>Effects</th>
<th>Hypothesis Number</th>
<th>Hypothesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leader role manipulation →</td>
<td>1a</td>
<td>Transformational leader scripts activate followers’ individual self-identity when they emphasize individual values and goals, competition, and the rewards and punishments associated with individual goals.</td>
</tr>
<tr>
<td>Followers’ internal processes</td>
<td></td>
<td>1b Transformational leader scripts activate followers’ collective self-identity when they emphasize shared values, group goals, cooperation, and rewards and punishments associated with group goals.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3a Transformational leader scripts activate followers’ approach motivational orientation when they articulate goals such as achieving desirable and pleasant end states, and emphasize rewards associated with goal accomplishment.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3b Transformational leader scripts activate followers’ avoid motivational orientation when they articulate goals such as avoiding undesirable and unpleasant end states, and emphasize punishment associated with goal failure.</td>
</tr>
<tr>
<td>Follows’ internal processes → Outcomes</td>
<td></td>
<td>2a Followers with an activated individual self-identity will have higher task motivation for individual-based tasks than those with an activated collective self-identity.</td>
</tr>
<tr>
<td>Main effects of self-identity levels</td>
<td></td>
<td>2b Followers with an activated collective self-identity have higher task motivation for group-based tasks than those with an activated individual self-identity.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5a Followers with an activated individual self-identity have higher preference for individual performance feedback than those with an activated collective self-identity.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5b Followers with an activated collective self-identity have higher preference for group performance feedback than those with an activated individual self-identity.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6a Followers with an activated individual self-identity have higher expected feedback utility for individual feedback than those with an activated collective self-identity.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6b Followers with an activated collective self-identity have higher expected feedback utility for group feedback than those with an activated individual self-identity.</td>
</tr>
</tbody>
</table>

(continued)
Table 1 (cont.)

Summary of Proposed Hypotheses in the Current Study

<table>
<thead>
<tr>
<th>Main effects of motivational orientations</th>
<th>7a</th>
<th>Followers with an activated approach motivational orientation have higher preference for success-framed feedback content than those with an activated avoid motivational orientation.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7b</td>
<td>Followers with an activated avoid motivational orientation have higher preference for failure-framed feedback content than those with an activated approach motivational orientation.</td>
</tr>
<tr>
<td>Two-way interaction (Null effect)</td>
<td>4</td>
<td>Leader scripts that activate different follower internal processes (cognitive and conative) will be perceived as equally transformational.</td>
</tr>
<tr>
<td>Three-way interaction</td>
<td>8a</td>
<td>There will be a three-way interaction between followers’ self-identity level, motivational orientation, and perceived individual performance level, on their willingness to seek feedback concerning their individual performance.</td>
</tr>
<tr>
<td></td>
<td>8b</td>
<td>There will be a three-way interaction between followers’ self-identity level, motivational orientation, and perceived group performance level, on their willingness to seek feedback concerning their group’s performance.</td>
</tr>
<tr>
<td></td>
<td>9a</td>
<td>There will be a three-way interaction between followers’ self-identity level, motivational orientation, and feedback valence manipulation, on their positive affective responses (elation and quiescence) to the feedback.</td>
</tr>
<tr>
<td></td>
<td>9b</td>
<td>There will be a three-way interaction between followers’ self-identity level, motivational orientation, and feedback valence manipulation, on their negative affective responses (dejection and agitation) to the feedback.</td>
</tr>
<tr>
<td></td>
<td>10a</td>
<td>There will be a three-way interaction between followers’ self-identity level, motivational orientation, and feedback valence manipulation, on their motivation to improve/persist on individual-based tasks post feedback.</td>
</tr>
<tr>
<td></td>
<td>10b</td>
<td>There will be a three-way interaction between followers’ self-identity level, motivational orientation, and feedback valence manipulation, on their motivation to improve/persist on group-based tasks post feedback.</td>
</tr>
</tbody>
</table>
CHAPTER III

METHODS

Participants

Data were collected from 210 undergraduate psychology students from a mid-sized Mid-western university. Participants received course credits in exchange for their participation. About two-thirds of the sample (67%) was female and the average age of the participants was 21.03 years (SD = 6.11). Seventy-seven percent of the participants were currently employed at least part-time. For those who were currently employed, the average number of hours they worked per week was 22.12 (SD = 9.72). The majority of the sample was Caucasian (80.8%), followed by African American (8.1%) and Asian (6.1%).

Design and Procedure

The study is a 2 (follower self-identity level) x 2 (follower motivation orientation) x 2 (feedback valence) between-subject design. Four leader role prototypes were created to differentially elicit followers’ individual or collective self-identity level, and their approach or avoid motivation orientation. In addition, participants received one of two types of feedback manipulation after working on an in-basket task: Positive individual but negative group performance evaluation, or negative individual but positive group performance evaluation.
Figure 5 depicts the steps that occurred in the experimental procedure. Participants completed the experiment on computers, except for the base-line dispositional identity and motivational orientation measures. When they first came to the laboratory, they were told that they were in a study intended to evaluate an in-basket task, designed as a selection tool for a local bookstore. They were instructed that they would play the role of job applicant in the study. Participants then completed questionnaire measures of self-identity and motivational orientation as baselines. After they completed the paper-and-pencil questionnaires, each participant then sat in front of a personal computer and was told that he or she would first receive some information about the company from the company CEO and then complete the selection task. After random assignment, participants were exposed to one of the four leader role video presentations. These presentations were designed to share some similar characteristics but to elicit different follower internal processes (individual versus collective self-identity, approach versus avoid motivation orientation; see Appendix A). Measures were then administered to determine whether the proper follower processes were activated by the manipulation. Participants’ perceptions of leaders were also measured at this point.

Next, participants completed an in-basket task with subtasks that varied in terms of being group- or individual-based (see Appendix B). They were presented with a total of seven memoranda. The first memorandum was from the former job-holder, describing the nature and the responsibilities of the job. The second, fourth, and sixth memoranda were from the team leader, describing three group-based tasks respectively (i.e., proofreading marketing proposal, budget preparation, and brainstorming). The third, fifth,
Figure 5. Experimental Procedure Flow Chart.

**Paper-and-pencil Baseline Measures**
- Dispositional self-identity
- Dispositional motivational orientation

**Leader Role Manipulation**
- Individual vs. collective self-identity
- Approach vs. avoid motivational orientation

**Leader Role Manipulation Check**
- Identity manipulation effects
- Motivational orientation manipulation effects

**In-Basket Task Session**
- Task motivations

**Feedback-Seeking Opportunity**
- Willingness to seek feedback
- Preferences for feedback

**Feedback Content Manipulation**
- Positive individual and negative group feedback vs. negative individual and positive group feedback

**Responses to Feedback**
- Affective responses
- Motivational responses
and last memoranda were from the department coordinator, describing three individual-based tasks (i.e., meeting notes preparation, donation calculation, and research at a competitor’s website). The three memoranda describing group-based tasks were printed on blue paper, whereas the three memoranda describing individual-based tasks were printed on yellow paper. This was done so that the distinction between the two types of tasks was highlighted. Participants were given as long as they wanted to go over the information, and prioritize the tasks described in the memoranda. The order in which the tasks were prioritized was then recorded.

After prioritizing the tasks, participants were given 20 minutes to complete all tasks described by the memoranda. Each task was represented as a dialog box on the computer screen, and participants could switch back and forth between tasks. Their progress on each task was recorded. At the end of this period, they were given the opportunity to seek feedback. Participants’ willingness to seek feedback, their preference for different types of feedback (i.e., individual level versus group level feedback, success/failure-framed information), and their perceptions of their individual and group performance were measured at this point.

After completing these measures, participants received the feedback manipulation. Half of the participants received a positive individual but negative group performance evaluation, and the other half received a negative individual but positive group performance evaluation (see Appendix C). The positive and negative feedback information was constructed on the basis of recommendations from previous studies (i.e., Blakely, 1993; Bannister, 1986; Levy, Cawley, & Foti, 1998). Participants’ affective
responses to the feedback, perceived feedback accuracy and utility, and motivation to improve/persist on the tasks of different levels were then measured. Participants were then briefed and thanked.

Pre-feedback Manipulation Measures

The measures given prior to the evaluative feedback manipulation delivery include a questionnaire to establish participants’ baseline self-identity levels and motivational orientation, measures assessing the activation of follower internal processes as a result of the leader role manipulation, prioritization of the memoranda, perceived performance, preference for feedback levels and contents, willingness to seek feedback, and expected utility of feedback (see Appendix D). Except for the baseline questionnaire, measures for manipulation effects, and the prioritization measure, all the other scales were administered at the feedback-seeking opportunity given to participants at the end of the in-basket task session.

Baseline questionnaires for self-identity and motivational orientation. Self-identity level was measured using the subscales of Levels of Self-Concept Scale (LSCS; Selenta & Lord, 2004). For individual self-identity, the comparative identity subscale was used. The subscale consists of five items that measure the extent to which one emphasizes his/her abilities, performance, and general standing above that of others (α = .83). An example item is: “I have a strong need to know how I stand in comparison to my coworkers.” On the other hand, the group achievement focus subscale was used to measure participants’ level of collective self-identity. This subscale also consists of five items that assess the extent to which one emphasizes his/her contribution to successful
group functioning ($\alpha = .70$). An example item is: “I feel great pride when my team or group does well, even if I’m not the main reason for its success.” Participants responded to the two subscales with a 5-point Likert type scale (1 = Strongly disagree, 5 = Strongly agree).

Participants’ baseline motivational orientation was measured by the regulatory focus questionnaire developed by Lockwood et al. (2002). The scale has 18 items and is divided into two subscales of 9 items. The promotion regulatory focus subscale was used to measure the chronic level of participants’ approach motivational orientation ($\alpha = .73$). An example item is: “I frequently imagine how I will achieve my hopes and aspirations.” The prevention regulatory focus subscale was used to measure the chronic level of participants’ avoid motivational orientation ($\alpha = .68$). An example item is: “In general, I am focused on preventing negative events in my life.” Participants responded to these questions using a five-point Likert type anchors (1: Strongly disagree, 5: Strongly agree).

*Measures assessing manipulation effects.* Various measures were used to determine the success of the leader role manipulations in influencing levels of self-identity and motivational orientations. Both of these measures were chosen because they directly assess the activation of participants’ key internal processes, which were hypothesized to translate transformational leader behaviors into outcomes. Particularly, it has been shown that implicit measures of self-identity levels and self-evaluation (such as priming) were more sensitive than explicit measures (such as questionnaires; Hetts, Sakuma, & Pelham, 1999). Therefore, the self-identity manipulation was assessed by using a letter identification task developed by Kuhnlen and Oyserman (2002).
The letter identification task can be used to measure field dependence. It has been shown that priming independent self-knowledge leads to greater field-independent processing style, whereas priming interdependent self-knowledge leads to a greater field-dependent processing style (e.g., Kuhnen, Hannover, & Schubert, 2001; Kuhnen & Oyserman, 2002). For this task, Kuhnen and Oyserman constructed sets of letters consisting of a bigger letter (e.g., H) made up of smaller letters (e.g., F). Participants were asked to identify either the bigger letter or the small letter. Kuhnen and Oyserman found that participants with primed independent self-knowledge responded faster when asked to identify the smaller letter. On the other hand, because identifying the big letter required field-interdependent processing, participants primed for interdependent self-knowledge responded faster. Therefore, in the current study, it was expected that participants who received the individual self-identity manipulation would demonstrate more context-independent processing style and therefore perform better (i.e., shorter response latencies) at identifying the smaller letter. On the contrary, those who received manipulations eliciting the collective self-identity level would show more context-dependent processing style and thus perform better at identifying the bigger letter.

The letter identification task consists of a total of 36 stimuli, with the first four stimuli being used for practice trials. For each trial, the stimulus and the options for letters were presented at the same time and remained on the screen until participants identified the letter. The presentation order of the stimuli was random, and the location of the accurate letter option (left versus right) was random. Participants were asked to click on the letter corresponding to their choice as fast and accurately as possible. Following
Kuhnen and Oyserman’s (2002) methodology, participants first identified big letters, and then small letters. The two reaction measures (one for big letter identification and one for small letter identification) were used as indicators of the identity manipulation effects.

The computerized version of the *self guides questionnaire* (Higgins, Klein, & Strauman, 1985) was used to assess the effects of the leader role manipulation on participants’ motivational orientation. Participants were first provided with the definition of an ideal self, which is the “type of person they would ideally like to be - the type of person they hope, wish, or aspire to be” (Frietas, Liberman, & Higgins, 2002, p.123). They were asked to list four attributes that describe their ideal self. These attributes should differ from each other, and should be provided as quickly and accurately as possible. After they typed in each attribute, participants were asked to rate the extent to which they would ideally like to possess the attribute, and the extent to which they actually possess the attribute on a five-point scale (1: Not at all, 5: Very much). Three response latencies were recorded for each attribute: (a) the response time for providing the attribute (with the timer starting when participants were provided with the box to enter the attribute, and stopping when they typed in the box), (b) the response time for making the ideal self attribute extent rating (with the timer starting when participants were provided with the box to enter the rating, and stopping when they entered the rating), and (c) the response time for making the actual self attribute extent rating (with the timer starting when participants were provided with the box to enter the rating, and stopping when they entered the rating). Following Higgins’ recommendation (see Freitas, Liberman, & Higgins, 2002), these response latencies were first log-transformed, then
summed for each attribute. The same procedure was repeated for the ought self guides, defined as “the type of person they believe they ought to be; the type of person they think it is their duty, obligation, and responsibility to be” (Freitas, Liberman, & Higgins, 2002, p.123). A faster response time for the ideal self attributes indicates the heightened accessibility of approach motivational orientation, while a faster response time for the ought self guides indicates the heightened accessibility of avoid motivational orientation.

*Leader perceptions.* The leader perceptions were measured by scales adopted from the General Leadership Impression scale (GLI) and the Multifactor Leadership Questionnaire (MLQ). The GLI scale (Cronshaw & Lord, 1987) consists of five 5-point Likert-type items (1: Strongly disagree, 5: Strongly agree). Participants were asked to indicate if the CEO in the leader role manipulations video exhibited leadership, demonstrated leader behavior, and fit their image of a leader ($\alpha = .90$). Ratings on these five items were averaged to form participants’ general leadership perception scores. In addition to the GLI, 10 items were adopted from the MLQ (Avolio et al., 1999) to measure participants’ transformational leadership perceptions. These items were selected from the inspirational/charismatic leadership (six items), individualized consideration (two items), and contingent reward (two items) subscales of the MLQ ($\alpha = .81$). These items were shown to have high loadings on their respective factors (e.g., Avolio et al., 1999; Den Hartog et al., 1997) and to correspond to the content of the leader role manipulation in the current study. Ratings on these items were averaged to form perception of transformational leadership scores.
Leader role content manipulation check. Five questions were constructed to assess the extent to which participants remembered the content of the leader role manipulation. The questions are in multiple choice format with three options. Participants who missed three or more questions were discarded from the sample, which resulted in six people being eliminated from further analyses.

Prioritization of the memo. Participants’ prioritization of the memoranda was measured by two sets of questions after participants indicated that they had familiarized themselves with the memoranda. The first set of questions asked participants to rate the importance of each of the memoranda (1: Very unimportant, 5: Very important) and indicate whether they should start working on the specific tasks first (1: Strongly disagree, 5: Strongly agree). The second set of questions asked them to rank the order they will proceed to perform the tasks specified by different memoranda (1: To be performed first, 6: To be performed last). The ratings of importance and urgency for individual-based (group-based) tasks were averaged and used as indicators of the absolute priority participants give to those two sets of tasks. The proceeding rank-orders for individual-based (group-based) tasks were averaged and used as indicators of the relative priority participants give to the individual-based (group-based) tasks.

Perceived performance. Six questions were used to measure participants’ perceptions of their individual and group performance at the feedback-seeking opportunity point. Participants were asked to assess the levels of their group performance and their individual performance on the relevant tasks using a five-point, Likert-type scale (1: Not well at all, 5: Very well).
Preference for feedback type. Two sets of questions were used to assess participants’ preference for different types of feedback. The first set of questions asked participants to indicate their level of preference for different types of feedback (i.e., success-framed and failure-framed) both on general individual and group performance and on specific tasks as detailed by the memoranda. Participants rated their preference on a five-point Likert-type scale (1: Strongly disagree, 5: Strongly agree). The average ratings for individual-based and group-based tasks, and for success-framed and failure-framed information, were used as indicators of absolute preference for different feedback types.

The second set of questions examined participants’ feedback preference type using forced-choice question format. These questions asked participants to choose three out of six tasks on which they prefer to seek feedback, and the type of feedback information (success- vs. failure-framed) they prefer to receive. A forced-choice question format was used so that participants’ scores reflected their relative preference for different types of feedback.

Willingness to seek feedback. Participants’ willingness to seek feedback was measured by the feedback seeking intention scale. The scale was adopted from Fedor, Rensvold, and Adams (1992) and Levy et al. (2002). The ten-item scale is a five-point, Likert type scale (1: Strongly disagree, 5: Strongly agree) that has 10 items. Five questions measured participants’ intention to seek feedback regarding their individual performance, while the other five measured their intention to seek feedback regarding
their group’s performance. The reliability coefficients of the subscales for willingness to seek individual and group feedback are .76 and .77, respectively.

*Expected utility of feedback.* The expected utility of feedback will be measured by an eight-item scale adopted from Greller’s (1978) four-item measure. The original scale was modified so that participants will rate their expected utility of feedback concerning both their individual and group level performance. The scale is a five-point, Likert-type scale (1: Strongly disagree, 5: Strongly agree). The reliability coefficients for expected individual feedback utility was .87, and the reliability coefficient for expected group feedback utility was .90.

*Post-feedback Manipulation Measures*

The measures after the evaluative feedback manipulation delivery included manipulation check for feedback valence manipulation, affective responses to feedback, motivational reactions to feedback, and control variables (see Appendix E). All these measures were administered after participants have received the feedback valence manipulation.

*Manipulation check.* Two questions were used to check for the feedback manipulation. Participants were asked to indicate whether the feedback has indicated that their individual (group) performance has been above or below the average. The manipulation checks showed that only three-quarters of the sample (N = 155) provided accurate answers to both questions. As a result, the subsequent analyses that examined the effects of feedback were conducted using participants’ responses to the manipulation
check questions as indicators of feedback manipulations, rather than the original feedback manipulation condition.

Affective responses to feedback. Participants’ affective responses to feedback manipulation were measured by the four subscales taken from PANAS-X (Watson & Clark, 1994) corresponding to the agitation – quiescence and the dejection – elation continua. Specifically, fear (five items), serenity (three items), joviality (seven items), and sadness (seven items) subscales from PANAS-X were used to assess participants’ positive and negative emotional reactions towards feedback. Participants responded to the scale using a five-point, Likert-type marker (1: Very slightly or not at all, 5: Extremely). In the current data, the reliability coefficients were .57 for the fear subscale, .76 for the serenity subscale, .92 for the joviality subscale, .86 for the sadness subscale, which was comparable with the validation data presented in Watson and Clark (1994).

Motivational reactions to feedback. Participants’ motivational reactions to feedback were assessed by twelve items. These items asked participants to indicate their intentions to continue working or improving the tasks specified by the memoranda if they have not completed them during the designated time period. Participants responded to the scale using a five-point, Likert-type marker (1: Strongly disagree, 5: Strongly agree).

Control variables. Participants’ perceptions of feedback accuracy, utility, and their general satisfaction with the feedback were measured for use as potential control variables. The perceived feedback accuracy scale was adopted from Stone, Gueutal, and Mcintosh (1984; see Keeping & Levy, 2000). The scale was modified so that the perceived accuracy of both the group and individual feedback could be measured. The
scale has a total of 10 items (five for perceived individual feedback accuracy, five for perceived team feedback accuracy), and is on a five-point Likert-type marker (1: Strongly disagree, 5: Strongly agree). The internal consistency for perceived individual feedback accuracy was .87, and the internal consistency for perceived group feedback accuracy was .91.

Two items were created to assess participants’ perceived feedback utility regarding the individual and team performance information respectively. The item was adopted from the first item of the feedback utility scale (Greller, 1978). Another two items were created to assess participants’ overall satisfaction with the feedback information concerning their individual and team performance. Taken together, participants’ perceived feedback accuracy, utility, and their satisfaction with the feedback information were used as control variables.

Analysis Strategy

Data were first screened for outliers and careless response patterns. Also, manipulation checks were used to determine if participants should be included in further analyses. Factor analyses were then conducted to ensure the factor structure of scales. Reliability coefficients were calculated for scale scores.

For response latency data, mixed linear model analyses were adopted to account for not only the manipulation effects, but also the individual differences in response times. Repeated analysis of variance (ANOVA) and multiple regression analyses were used for other rating and ranking data. Where appropriate, interaction terms were created following the recommendation of Cohen, Cohen, Aiken and West (2003) by first
centering the variables, then calculating the multiplicative term. Within each of the analyses, outliers were screened following the procedures recommended by Tabachnick and Fidell (2001). Cases with studentized deleted residual values greater than 2.5 were excluded from further analyses.
CHAPTER IV

RESULTS

In the present chapter, the empirical results are organized into sections based on the four issues the current study proposed to address. Results of the data screening are first presented to demonstrate that cell equivalence resulted from the random assignment procedure. Then, results pertaining to the proposed cognitive and motivational processes underlying transformational leadership are presented. These results address Hypotheses 1 and 3. They are followed by an examination of Hypothesis 4 regarding the variations within transformational leadership. Leaders’ effects on followers’ task motivation and feedback-related attitudes are then presented, addressing Hypotheses 2, 5, 6, 7, and 8. Finally, participants’ affective and motivational responses to feedback are examined, testing Hypotheses 9 and 10.

Initial Data Screening

In order to determine the pre-manipulation equivalence of participants assigned to the four different experimental conditions, their dispositional levels of identity, motivational orientation, and demographic characteristics were compared using ANOVA. Table 2 summarizes the results. Six participants in the individual identity-avoid motivational orientation condition did not provide demographic information (i.e., age, hours worked per week). Imputation based on sample means was employed to replace the
Table 2

Mean Dispositional Levels of Self-Identity, Motivational Orientation, and Demographic Characteristics across Conditions

<table>
<thead>
<tr>
<th></th>
<th>Identity manipulation</th>
<th>Motivation manipulation</th>
<th>Identity X Motivation cells</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Individual</td>
<td>Collective</td>
<td>Approach</td>
</tr>
<tr>
<td>N's</td>
<td>101</td>
<td>103</td>
<td>105</td>
</tr>
<tr>
<td>Self-Identity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual</td>
<td>3.28</td>
<td>3.30</td>
<td>3.23</td>
</tr>
<tr>
<td></td>
<td>(.09)</td>
<td>(.09)</td>
<td>(.09)</td>
</tr>
<tr>
<td>Collective</td>
<td>4.24</td>
<td>4.30</td>
<td>4.22</td>
</tr>
<tr>
<td></td>
<td>(.05)</td>
<td>(.05)</td>
<td>(.05)</td>
</tr>
<tr>
<td>Motivational Orientation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Promotion</td>
<td>4.23</td>
<td>4.28</td>
<td>4.24</td>
</tr>
<tr>
<td></td>
<td>(.04)</td>
<td>(.04)</td>
<td>(.04)</td>
</tr>
<tr>
<td>Prevention</td>
<td>3.18</td>
<td>3.14</td>
<td>3.11</td>
</tr>
<tr>
<td></td>
<td>(.06)</td>
<td>(.06)</td>
<td>(.06)</td>
</tr>
<tr>
<td>Demographics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.58)</td>
<td>(.54)</td>
<td>(.56)</td>
</tr>
<tr>
<td>Sex</td>
<td>.70</td>
<td>.65</td>
<td>.69</td>
</tr>
<tr>
<td>Hours Worked Week</td>
<td>17.69</td>
<td>15.72</td>
<td>16.80</td>
</tr>
<tr>
<td></td>
<td>(1.24)</td>
<td>(1.24)</td>
<td>(1.24)</td>
</tr>
</tbody>
</table>

Note: Standard errors are reported in parentheses. Sex was coded 0=male and 1=female.
missing data for those six individuals. Importantly, no differences in pre-existing dispositional levels of individual and collective self-identity were found between those who were assigned to the individual versus collective identity conditions (dispositional individual identity: $F_{(1,200)} = .02, p>.05$; dispositional collective identity: $F_{(1,200)} = .65, p>.05$). Similarly, those who were in the approach and avoid motivational orientation conditions showed no differences in their pre-existing dispositional motivational orientation levels (dispositional promotion: $F_{(1,200)} = .24, p>.05$; dispositional prevention: $F_{(1,200)} = 1.36, p>.05$). Finally, no significant differences in age, sex, and employment status were found between those who were assigned to different identity and motivational orientation conditions. This initial data screening supported the equivalence of participants in different cells on chronic levels of the focal variables, prior to receiving the leader role manipulation.

**Leader Role Manipulation Effects: Identity and Motivational Orientation Activation**

Hypotheses 1 and 3 proposed that the different leader scripts would differentially activate followers’ individual or collective identity levels (H1a and H1b), and approach or avoid motivational orientations (H3a and H3b), depending on the specific messages delivered by the leader. Mixed linear models were used to examine the effects of the leader role manipulation on participants’ identity and motivational orientation activation, as indicated by reaction times in the letter identification task and selves questionnaire respectively. The results for identity and motivational orientation activation are summarized in Table 3.
Table 3

*Leader Role Manipulation Effects on Identity and Motivational Orientation Activation*

<table>
<thead>
<tr>
<th>Manipulation Condition</th>
<th>Individual</th>
<th>Collective</th>
<th>Approach</th>
<th>Avoid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Letter ID RT&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small Letter</td>
<td>1337 (.01)</td>
<td>1345 (.01)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Big Letter</td>
<td>1606 (.01)</td>
<td>1578 (.01)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Selves Questionnaire RT&lt;sup&gt;b&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ideal Selves</td>
<td>1.13 (.03)</td>
<td>1.15 (.03)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ought Selves</td>
<td>.84 (.02)</td>
<td>.90 (.02)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup> Measurement unit is in millisecond.

<sup>b</sup> Numbers represent logarithmically-transformed response latency

*Note: N = 195; standard error in parentheses.*

*Identity manipulation effects.* Hypothesis 1a argued that when leaders emphasized individual values and goal, followers’ individual self-identity would be more activated. Participants whose individual self-identity was activated were expected to show faster response latencies for identifying the small letter in the letter identification task. On the other hand, Hypothesis 1b suggested that followers’ collective identity would be more activated when they received a leader message that emphasized group values and goals, thus resulting in faster response times to identify big letters in the letter identification task. Taken together, these two hypotheses imply an interactive effect of identity manipulation and letter size condition on reaction time.

Data were first screened for accuracy for each letter identification trial and outliers. Nine participants showed a random response pattern (i.e., their accuracy rate was lower than 30%) and thus were eliminated from the response latency analyses. No reaction times were found to exceed the three standard deviation cutoff (Bush, Hess, &
Wolford, 1993). For the remaining participants, a mixed linear model analysis was used to compare response latencies for big versus small letters (for accurate trials only). After controlling for dispositional individual and collective identity levels, a significant interaction effect between letter size (within-person factor) and identity manipulation condition (between-person factor) was found ($F_{(1,11510.58)} = 4.10, p<.05$).

A closer examination of the estimated means showed that participants in the collective identity condition were faster at identifying big letters (RT = 1578ms) than those who were in the individual identity condition (RT = 1606ms), thus supporting Hypothesis 1b. On the other hand, participants in the individual (RT = 1337ms) and collective (RT = 1345ms) identity conditions showed very similar mean reaction times for identifying small letters. This suggests that the individual identity manipulation conferred no advantage in responding to small letters. In retrospect, greater familiarity with small letters plus a culture bias towards chronic activation of individual identities may have predisposed all participants to react quickly to the small letters. This issue is revisited in the discussion section.

However, if a more within-person perspective is taken, it can be argued that the activation of different identity levels will lead to specific patterns of within-person discrepancy between reaction times for identifying small versus big letters. Figure 6 provides a hypothesized illustration of what this effect should look like. In this figure, the dark line indicates the grand mean of letter identification reaction times going across all conditions. The bars in the figure thus represent positive or negative deviations from the grand mean. As mentioned earlier, an individual should show faster reaction times for
identifying small letters versus big letters due to familiarity and cultural bias (as seen in ‘chronic’). This can be seen as a negative deviation (i.e., faster reaction times) for small letter identification and a positive deviation (i.e., slower reaction times) for big letter identification.

Figure 6. Hypothetical Illustration of Within-Person Reaction Time Discrepancies between Identifying Small versus Big Letters with Chronic Tendency to Respond Quickly to Small Letters.

The next two sets of the bars in the figure are analogous to the conditions in the current study. They show the expected pattern of reaction time discrepancies once the chronic individual differences are superimposed on the manipulations. An activated individual identity in a participant should shorten her/his response latencies associated with small letters (and thus make them further away from the grand mean in the Figure 6) and lengthen those associated with big letters. On the other hand, an activated collective
identity in a participant may lengthen reactions times for small letters (and thus make them closer to the grand mean in the Figure 6) and shorten those for big letters. Taken together, those whose individual identity is more activated are expected to show greater discrepancy in reaction times between identifying big versus small letters than those whose collective identity is more activated.

This pattern of results was found in the current study (individual identity condition: $\Delta \text{RT} = 269\text{ms};$ collective identity condition: $\Delta \text{RT} = 245\text{ms}$). Thus, this result provided indirect support for Hypothesis 1a. Figure 7 shows the mean reaction times associated with identifying big and smaller letters for participants in different conditions after controlling for individual differences (i.e., dispositional identity levels).

**Motivational orientation manipulation effects.** Hypothesis 3a proposed that when leader scripts emphasized success and rewards, participants’ approach motivational orientation would be more activated, thus leading to faster response latencies associated with ideal selves. On the other hand, Hypothesis 3b proposed that participants’ avoid motivational orientation would be more activated if they received the leader message that emphasized prevention of failure and punishment associated with failure. Table 3 shows the results. A mixed linear model analysis found that there was a significant within-person main effect of self type on response latencies ($F_{(1,1349.32)} = 107.93, p<.001$). Longer reaction times were associated with the generation and the rating of ideal versus ought selves descriptors. However, there was no significant interaction between self type and motivational orientation manipulation ($F_{(1,1349.32)} = .54, p>.05$). Additional analyses were conducted to include participants’ dispositional motivational orientation levels as
covariates in the model. However, the results pattern did not change. Thus, Hypotheses 3a and 3b were not supported by the response latency data. These null results could reflect a possibility that the two manipulations, identity and motivational orientation, were not independent from each other as hypothesized. It is possible that the activation of motivational orientations subsumes under the activation of self-identity levels. Thus, what was intended to be orthogonal manipulations were in fact interdependent, and the activation of specific identity levels washed out the effects of motivational orientation manipulation. This point will be elaborated in more details in the next Chapter.

Figure 7. Adjusted Response Latencies to Big and Small Letters by Identity Manipulation Conditions: Observed Results in Deviation Form.

Note: Grand mean =1465ms
Leader Role Manipulation Effects: Leader Perceptions

Hypothesis 4 proposed that while different leader role scripts could emphasize different values, goals, and rewards or punishment and hence activate followers’ different internal processes, they would still lead to similar levels of leadership perceptions by the participants. Two multiple regression analyses were conducted to examine the effects of the identity and motivational orientation manipulations on participants’ transformational leadership perceptions (MLQ) and general leader impressions (GLI). For both models, control variables such as demographic information (step 1: sex, age, and hours worked per week) and dispositional levels of identity and motivational orientation (step 2) were first entered. Dummy-coded manipulation conditions (identity manipulation: 0 = collective, 1 = individual; motivational orientation manipulation: 0 = avoid, 1 = approach) were entered in step 3. Finally, a product term capturing the interaction between identity and motivational orientation was entered in step 4. Null results for steps 3 and 4 would be supportive of Hypothesis 4. Results for both models are summarized in Table 4.

As can be seen in Table 4, only participants’ demographic characteristics emerged as significant predictors of their leader perceptions. Not surprisingly, sex and age were important predictors of participants’ leader perceptions. The female participants tended to perceive the target as more leader-like (β = .20, p<.01), and younger participants perceived the target to be both more transformational (β = -.21, p<.01) and leader-like (β = -.32, p<.001). Demographic variables accounted for 5% and 15% of the variance in transformational leadership perceptions and general leader impressions respectively.

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As expected, none of the manipulation main or interaction effects were significant. In fact, estimates of these effects were all quite close to zero, as can be seen in the values for the regression coefficients in Table 4. Table 5 shows the adjusted means of transformational leadership perceptions and general leader impressions across different conditions after controlling for demographics and individual differences variables. These mean levels were all above mid-point (i.e., three) of the scale and thus indicated that the target was perceived to be at least moderately leader-like. These results suggested that leaders could present followers with different message content emphasizing individual or group-level success or failures, and still be perceived similarly.

In addition to the significant testing, further evidence was also examined to provide support for the proposed null results. The minimum difference required to reject the null hypothesis at the 95% confidence level (assuming the manipulation had small effect size of .2; Cohen, 1988) for leadership perceptions as measured by the MLQ is .24. The minimum difference required for the significant between-group differences for GLI is .33. In the current study, the largest between-group difference for MLQ is .11, whereas the largest between-group difference for GLI is .25. These differences provided further support for Hypothesis 4 and asserted the importance to focus on the processes underlying the leadership effects.
Table 4

Hierarchical Multiple Regression of Leader Perceptions Variables on Manipulations and Control Variables

<table>
<thead>
<tr>
<th>Leader Perceptions</th>
<th>MLQ</th>
<th>GLI</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1: Demographics</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td>.06</td>
<td>.20**</td>
</tr>
<tr>
<td>Age</td>
<td>-.21**</td>
<td>-.32***</td>
</tr>
<tr>
<td>Hour</td>
<td>-.03</td>
<td>-.04</td>
</tr>
<tr>
<td>ΔR²</td>
<td>.05*</td>
<td>.15***</td>
</tr>
<tr>
<td><strong>Step 2: Individual Differences</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual identity</td>
<td>.11</td>
<td>-.03</td>
</tr>
<tr>
<td>Collective identity</td>
<td>.12</td>
<td>-.03</td>
</tr>
<tr>
<td>Promotion</td>
<td>-.12</td>
<td>-.06</td>
</tr>
<tr>
<td>Prevention</td>
<td>-.02</td>
<td>.15*</td>
</tr>
<tr>
<td>ΔR²</td>
<td>.03</td>
<td>.03</td>
</tr>
<tr>
<td><strong>Step 3: Manipulation Main Effects</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identity</td>
<td>-.05</td>
<td>-.11</td>
</tr>
<tr>
<td>Motivational orientation</td>
<td>.04</td>
<td>-.00</td>
</tr>
<tr>
<td>ΔR²</td>
<td>.00</td>
<td>.01</td>
</tr>
<tr>
<td><strong>Step 4: Manipulation Interaction</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identity X Motivation</td>
<td>.07</td>
<td>.06</td>
</tr>
<tr>
<td>ΔR²</td>
<td>.00</td>
<td>.00</td>
</tr>
</tbody>
</table>

Note: N = 200-201; * p<.05, ** p<.01, *** p<.001; Regression coefficients correspond to the step in which they were entered; Sex was coded as 0=males and 1=females; Identity manipulation was coded as 0=collective and 1=individual; Motivational orientation manipulation was coded as 0=avoid and 1=approach
Table 5

*Adjusted Means and Standard Errors of Leader Perceptions across Identity and Motivational Orientation Conditions*

<table>
<thead>
<tr>
<th>Motivational Orientation Condition</th>
<th>Leader Perceptions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MLQ</td>
</tr>
<tr>
<td></td>
<td>Individual</td>
</tr>
<tr>
<td>Identity Manipulation</td>
<td></td>
</tr>
<tr>
<td>Approach</td>
<td>3.51 (.08)</td>
</tr>
<tr>
<td>Avoid</td>
<td>3.41 (.09)</td>
</tr>
</tbody>
</table>

*Note: Standard error in parentheses.*

*Leader Role Manipulation Effects: Task Motivation and Feedback-related Attitudes*

Hypotheses 2, 5, 6, 7 and 8 proposed that once followers’ specific levels of identity and/or motivational orientations are activated by the leader, these internal cognitive and conative processes would have implications for followers’ task motivation, feedback preference, perceived feedback utility and willingness to seek feedback. The following sections will first discuss results pertaining to the leader effect on followers’ task motivation, and then present results associated with leader effect on followers’ feedback-related attitudes.

*Task motivation.* Hypotheses 2a argued that when followers’ individual self-identity was activated by the leader, they would be more motivated to pursue individual-based tasks, and thus consider these tasks to be more important and urgent. On the other hand, when the leader activated followers’ collective self-identity, they would view group-based tasks to be more important and urgent (Hypothesis 2b). These hypotheses

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imply that there would be an interaction between the identity manipulation and the task level on participants’ task motivations.

Two types of analyses were employed to examine the proposed effect. First, repeated measures ANOVAs were used to compare task importance and urgency ratings across both identity manipulation conditions (between-person factor) and task levels (within-person factor). Secondly, multiple regression analyses were performed to examine the proposed effects of identity manipulation on the average rankings of proceeding order for individual- and group-based tasks. The initial analyses performed to test these hypotheses included various individual differences as control variables. These included demographics (sex, age, hours worked per week), dispositional identity, and motivational orientation levels. However, most of the potential covariates were nonsignificant and were therefore trimmed from subsequent analyses. The results presented in this section are the most parsimonious models that resulted after the trimming procedure was followed.

For the task importance ratings dependent variable, the final repeated measures ANOVA model included participants’ dispositional identity levels as covariates, the identity manipulation as a between-subjects factor, and the task level as a within-subject factor. A significant interaction between identity manipulation and task level was found ($F_{(1,193)} = 6.40, p<.05$). A closer examination of the adjusted means from this analysis (see Table 6) suggested that participants who received the individual identity manipulation rated the individual tasks to be more important than those who received the collective identity manipulation. On the other hand, group tasks were considered to be
more important by those in the collective identity condition than those in the individual identity condition. Figure 8 graphically displays this interaction, which provided support for Hypothesis 2a and 2b.

Table 6

*Adjusted Means and Standard Errors of Task Motivation Ratings across Identity Conditions*

<table>
<thead>
<tr>
<th>Identity Manipulation</th>
<th>Task Motivation Ratings</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Importance</td>
<td>Urgency</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Individual</td>
<td>Collective</td>
<td>Individual</td>
</tr>
<tr>
<td>Task</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual</td>
<td>3.44 (.06)</td>
<td>3.34 (.06)</td>
<td>3.17 (.13)</td>
</tr>
<tr>
<td>Group</td>
<td>3.76 (.06)</td>
<td>3.93 (.06)</td>
<td>3.06 (.12)</td>
</tr>
</tbody>
</table>

*Note: N=197 – 201; Standard error in parentheses*

For task urgency ratings, the final repeated measures ANOVA model included identity manipulation as a between-subjects factor and task level as a within-subject factor. A marginally significant interaction between identity manipulation and task level was found (F(1,199) = 2.82, p<.10). The adjusted means (see Table 6) suggested that participants who received the individual identity manipulation rated individual tasks to be more urgent than those who received collective identity manipulation. On the other hand, group tasks were considered to be more urgent by those in the collective identity condition than those in the individual identity condition. This interaction is illustrated in Figure 9. Although the differences were not as pronounced as task importance rating, this result also showed support for Hypothesis 2a and 2b.
Figure 8. Adjusted Mean Importance Ratings of Individual- and Group-based Tasks across Identity Conditions.

Figure 9. Adjusted Urgency Ratings of Individual- and Group-based Tasks across Identity Conditions.
The last indicator of task importance was participants’ rank order of the sequence in which they would like to pursue various individual- and group-based tasks. The ranks they provided for the three individual- and three group-based tasks were averaged to generate a rank score for each level of the tasks. Unlike importance and urgency ratings, lower rank scores indicate higher priority. Regression analyses results are presented in Table 7. After controlling for motivational orientation manipulation, the identity manipulation had a significant effect on the average rank order participants gave to individual-based tasks ($\beta = -.17, p<.05$). Particularly, those who received the individual identity manipulation were more likely to start with an individual-based task than those who received the collective identity manipulation. On the other hand, the results for the average group-based task proceeding order showed the opposite pattern ($\beta = .17, p<.05$). Those who received the collective identity manipulation showed higher intention to start with group-based tasks than those in the individual identity condition. Figure 10 shows the overall pattern of results. Taken together, these results also supported the proposed identity effect on participants’ task motivation.

Overall, Hypothesis 2a and 2b received full support when task motivation was measured by task importance rating and proceeding order. Task urgency ratings also showed effects in the expected direction, albeit marginally significant. Thus, it appeared that leaders could influence followers’ task motivation by activating different identity levels and thus changing their priorities for different types of tasks.
Table 7

Hierarchical Multiple Regression of Task Proceeding Order Rankings on Manipulations

<table>
<thead>
<tr>
<th>Step 1</th>
<th>Task Proceeding Order</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Individual-based task</td>
</tr>
<tr>
<td>Motivational orientation</td>
<td>.04</td>
</tr>
<tr>
<td>(\Delta R^2)</td>
<td>.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Step 2</th>
<th>Task Proceeding Order</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identity</td>
<td>-.17*</td>
</tr>
<tr>
<td>(\Delta R^2)</td>
<td>.03*</td>
</tr>
</tbody>
</table>

* p<.05  

Note: N = 202; Regression coefficients correspond to the step in which they were entered; Identity manipulation was coded 0=collective identity and 1=individual identity; Motivational orientation manipulation was coded as 0=avoid and 1=approach.

Figure 10. Adjusted Mean Task Proceeding Order Ranks of Individual- and Group-based Tasks across Identity Conditions.

Note: Lower scores indicate an earlier order.

Feedback-related attitudes: Feedback preference. Hypotheses 5 and 7 proposed that followers’ cognitive and conative processes as activated by the leader would
influence their preferences for different feedback types. Hypothesis 5a suggested that
when leaders activated followers’ individual self-identity, followers would have a higher
preference for performance feedback pertaining to individual-based tasks. Hypothesis 5b
suggested the mirror effect of activated collective identity on preference for feedback
concerning performance on group-based tasks. Hypotheses 7a and 7b argued that
followers’ activated approach (7a) or avoid (7b) motivational orientation would lead
them to have higher preference for success-framed (7a) or failure-framed (7b) feedback.
These two sets of hypotheses were examined in three ways. First, the effects of identity
and motivational orientation manipulations on global measures of feedback preference
ratings were examined using a repeated measures ANOVA framework. Second, the
effects of these manipulations on forced choice indicators of feedback preference were
examined. Finally, preference for feedback concerning specific memorandum tasks was
used as an outcome measure.

Table 8 summarizes the adjusted means of participants’ preference rating for
feedback for tasks at the individual or group level (Hypotheses 5a and 5b). After
controlling for dispositional identity levels and perceived individual and group
performance, an unexpected four-way interaction was found between sex, the identity
and motivational orientation manipulations (between-subjects factors), and task level
(within-subject factor). In light of this significant four-way interaction ($F_{(1,188)} = 9.67,$
p<.01), adjusted means for the hypothesized identity manipulation effect are interpreted
and compared across groups based on participants’ sex and the motivational orientation
manipulation conditions.
Table 8

*Adjusted Means Feedback Preference by Task Level, Sex, Identity and Motivational Orientation Conditions*

<table>
<thead>
<tr>
<th>Identity Manipulation</th>
<th>Motivational Orientation Manipulation</th>
<th>Approach</th>
<th>Avoid</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Individual</td>
<td>Collective</td>
<td>Individual</td>
</tr>
<tr>
<td>Males</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feedback Preference</td>
<td>Individual</td>
<td>2.81 (.19)</td>
<td>3.76 (.17)</td>
</tr>
<tr>
<td></td>
<td>Group</td>
<td>4.13 (.17)</td>
<td>3.79 (.15)</td>
</tr>
<tr>
<td>Females</td>
<td>Individual</td>
<td>3.66 (.11)</td>
<td>3.70 (.12)</td>
</tr>
<tr>
<td></td>
<td>Group</td>
<td>3.81 (.10)</td>
<td>3.74 (.11)</td>
</tr>
</tbody>
</table>

*Note: N=200; Standard error in parentheses*

Males in the approach motivational orientation condition did not show the expected effect of the identity manipulation on mean preferences for individual versus group feedback. While the identity manipulation showed minimum effect on preference for group task feedback, those who were in the collective identity condition showed higher preference for individual task feedback than those in the individual identity condition. This was opposite from the expected pattern. It appeared that the unique combination of males and approach condition washed out or reversed the expected identity manipulation effect on participants’ feedback preferences (See Figure 11 for illustration).
On the other hand, males in the avoid condition, and females in both approach and avoid motivational orientation conditions showed the hypothesized patterns of preference for different feedback levels. Namely, those who received the individual identity manipulation showed higher preference for individual task feedback than those who received the collective identity manipulation. On the other hand, those in the collective identity condition had higher preference than those in the individual identity condition for group task feedback.

Furthermore, this identity effect appeared to be differentially accentuated by the motivational orientation manipulation for females (see Figure 12). The approach motivational orientation manipulation seemed to heighten the effect of the identity manipulation on participants’ preference for individual feedback. In contrast, the avoid
motivational orientation manipulation seemed to enlarge the differences of preference for group task feedback across different identity conditions.

Figure 12. Females’ Adjusted Mean Preference for Individual and Group Performance Feedback across Identity and Motivational Orientation Conditions.

Overall, while the results provided some support for the hypothesized identity effect on participants’ preference for feedback at different levels (Hypotheses 5a and 5b), they showed a much more complicated picture. Males and females appeared to respond differently to the identity and motivational orientation manipulations and thus showed different patterns of feedback preference for tasks at different levels. In addition, the motivational orientation manipulation appeared to make feedback at different levels more salient, and thus accentuate the effect of the identity manipulation. The implications of these results will be discussed in more details in the next Chapter.
A similar repeated measures ANOVA was used to examine whether the motivational orientation manipulation influenced global preference ratings for success-versus failure-framed feedback (Hypotheses 7a and 7b). As mentioned earlier, this dependent variable refers to the framing, or the wording, of the feedback content (i.e., relative distance from success or failure), rather than the actual valence (i.e., positive or negative) of the feedback. After controlling for individual differences such as age, hours worked per week, promotion, dispositional self-identity levels, and perceived group performance, the interaction between the motivational orientation manipulation (between-subject factor) and the feedback type (within-subject factor) was not significant ($F(1,187) = 1.20$, $p > .05$). A closer examination of the adjusted means (see Table 9) showed that participants had slightly higher preference for success-framed feedback than failure-framed feedback irrespective of the motivational orientation manipulation condition they were in. Thus, Hypotheses 7a and 7b received minimal support based on the global measure of preference for different feedback framing.

<table>
<thead>
<tr>
<th>Motivational Orientation Manipulation</th>
<th>Approach</th>
<th>Avoid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feedback Framing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Success</td>
<td>4.11 (.05)</td>
<td>4.16 (.05)</td>
</tr>
<tr>
<td>Failure</td>
<td>3.83 (.06)</td>
<td>3.96 (.06)</td>
</tr>
</tbody>
</table>

*Note: N=194; Standard error in parentheses*
In addition to ratings, participants also answered force-choice format questions to indicate their feedback preference pertaining to different levels and different framings. Since the average choice scores for individual- and group-based feedback, or for success- and failure-framed feedback would be perfectly negatively related, regression analyses were performed with only choice scores for individual performance feedback (Hypotheses 5a and 5b) and for success-framed feedback (Hypotheses 7a and 7b). For participants’ choice for individual-based feedback, the only control variables which emerged as significant predictors were promotion ($\beta = .16, p<.05$), perceived individual performance ($\beta = .33, p<.001$), and perceived group performance ($\beta = -.39, p<.001$). The identity manipulation had no significant effect on participants’ choice to receive individual feedback ($\beta = .03, p>.05$). Thus, Hypotheses 5a and 5b were not supported when feedback preference was measured by forced-choice questions.

For participants’ choice for different feedback framing, only perceived individual performance emerged as a significant control variable ($\beta = .15, p<.05$). The motivational orientation manipulation had no significant effect on participants’ choice ($\beta = -.09, p>.05$). Similar to the global ratings, Hypothesis 7a and 7b did not appear to receive support. These results are presented in Table 10.
Table 10

Hierarchical Multiple Regression of Feedback Preference Choices on Manipulations and Control Variables

<table>
<thead>
<tr>
<th>Feedback Choice Type</th>
<th>Individual</th>
<th>Success-framed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1: Individual Difference</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Promotion</td>
<td>.16*</td>
<td>-</td>
</tr>
<tr>
<td>Performance – ind</td>
<td>.33***</td>
<td>.15*</td>
</tr>
<tr>
<td>Performance – grp</td>
<td>-.39***</td>
<td>-</td>
</tr>
<tr>
<td>ΔR²</td>
<td>.24***</td>
<td>.02*</td>
</tr>
<tr>
<td><strong>Step 2: Manipulation Main Effects</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identity</td>
<td>.03</td>
<td>-</td>
</tr>
<tr>
<td>Motivation orientation</td>
<td>-</td>
<td>-.09</td>
</tr>
<tr>
<td>ΔR²</td>
<td>.01</td>
<td>.00</td>
</tr>
</tbody>
</table>

Note: N = 200 – 204; * p<.05, ** p<.01, *** p<.001; Regression coefficients correspond to the step in which they were entered; Identity manipulation was coded as 0=collective and 1=individual; Motivational orientation manipulation was coded as 0=avoid and 1=approach

Finally, participants rated their preference for feedback pertaining to each specific task described by the memorandum. The feedback was worded either using a success or a failure frame. Thus, four feedback preference average ratings were created: success-framed individual performance feedback, failure-framed individual performance feedback, success-framed group performance feedback, and failure-framed group performance feedback. These four indicators allowed further exploration of the joint effect of the identity and motivational orientation manipulations on participants’ feedback preference.

Four separate regression analyses were used to examine the effects of identity and motivational orientation manipulations on followers’ feedback preference. Since different
control variables emerged as significant predictors for various models, the final results reported here represented the most parsimonious model after trimming nonsignificant predictors. For each regression model, control variables such as demographic information, dispositional identity levels and motivational orientations, and perceived task performance were entered at step 1. Main effects and the identity-motivation interaction effect were included in steps 2 and 3 respectively. These results are presented in Table 11.

As shown in Table 11, control variables consistently accounted for significant amount of variance in participants’ preference for different types of feedback. Overall, it appeared that females showed higher preference for feedback across different types of feedback information. Also, chronically prevention-oriented participants showed higher preference for all types of feedback. Finally, perceived performance levels were important predictors for participants’ preference for various types of feedback, especially for group level feedback.
Table 11

Hierarchical Multiple Regression of Feedback Preference Ratings for Specific Memorandum Tasks on Manipulations and Control Variables

<table>
<thead>
<tr>
<th>Step 1: Individual Differences</th>
<th>Preference for Different Feedback Type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Individual – Success</td>
</tr>
<tr>
<td>Sex</td>
<td>-</td>
</tr>
<tr>
<td>Hour</td>
<td>-</td>
</tr>
<tr>
<td>Individual identity</td>
<td>-</td>
</tr>
<tr>
<td>Collective identity</td>
<td>-</td>
</tr>
<tr>
<td>Promotion</td>
<td>.31***</td>
</tr>
<tr>
<td>Prevention</td>
<td>.27***</td>
</tr>
<tr>
<td>Performance – individual</td>
<td>.21***</td>
</tr>
<tr>
<td>Performance – group</td>
<td>-</td>
</tr>
<tr>
<td>ΔR²</td>
<td>.21***</td>
</tr>
</tbody>
</table>

Step 2: Manipulation Main Effects

| Identity   | -.04 | -.10 | -.00 | -.08 |
| Motivation | .01  | -.10 | -.10 | .03  |
| ΔR²        | .00  | .02  | .01  | .01  |

Step 3: Manipulation Interaction

| Identity X Motivation | .14  | -.06 | -.18 | .12  |
| ΔR²                   | .01  | .00  | .01  | .00  |

Note: N = 196 – 200; * p<.10, ** p<.05, *** p<.01; Regression coefficients correspond to the step in which they were entered; Sex was coded as 0=males and 1=females; Identity manipulation was coded as 0=collective and 1=individual; Motivational orientation manipulation was coded as 0=avoid and 1=approach

In terms of the effects of the manipulations, only the interaction between identity and motivational manipulations reached marginal significance when predicting participants’ preference for success-framed group feedback (see Figure 13). However, contrary to expectation, participants who received individual identity and avoid motivational orientation manipulations appeared to have the highest preference for such feedback (Adjusted M = 3.91). Thus, these results provided no support for hypothesized
effects of followers’ activated identity and motivational orientations on their preference for specific types of feedback.

Taken together, these results showed mixed support for Hypotheses 5a, 5b, and virtually no support for Hypotheses 7a and 7b. Particularly, Hypotheses 5a and 5b specified the effects of follower identity activation as a result of the leader role manipulation on followers’ feedback preference for individual- versus group-based feedback. The results suggested that this hypothesized identity manipulation effect had some unexpected interactive effect with participants’ sex and the motivational orientation manipulation they received. However, the results did indicate some support for the hypothesized identity manipulation effect. On the other hand, Hypotheses 7a and 7b articulated the effects of follower motivational orientation activation as a result of the leader role manipulation on followers’ higher feedback preference for success- or failure-framed feedback. This set of hypotheses received minimum support. Overall, it appeared that more complicated mechanisms might be underlying followers’ feedback choice and preference.
**Figure 13.** Adjusted Mean Ratings of Preference for Success-Framed Group Feedback across Identity and Motivational Orientation Conditions.

*Feedback-related attitudes: Expected feedback utility.* Hypotheses 6a and 6b proposed that when followers’ specific levels of identity were activated by the leader, they would perceive feedback congruent with their identity level to be more useful. Thus, a significant interaction effect between the identity manipulation and the feedback level condition on expected feedback utility ratings is anticipated. The final repeated measures ANOVA model included participants’ prevention level, perceived individual and group task performance, and motivational orientation manipulation as covariates, identity manipulation as a between-subjects factor, and feedback level as a within-subject factor. A significant interaction between the identity manipulation and feedback level was found ($F_{(1,189)} = 4.26, p<.05$). Adjusted means (see Table 12) showed that participants who received the individual identity manipulation expected individual performance feedback
to be more useful than those who received collective identity manipulation. On the other hand, the group performance feedback was expected to be more useful by those in the collective identity condition than those in the individual identity condition. This result pattern provided support for Hypothesis 6a and 6b.

Table 12

*Adjusted Means of Expected Feedback Utility for Different Feedback Levels across Identity Conditions*

<table>
<thead>
<tr>
<th>Feedback Level</th>
<th>Individual</th>
<th>Collective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual</td>
<td>4.27 (.05)</td>
<td>4.23 (.05)</td>
</tr>
<tr>
<td>Group</td>
<td>4.25 (.05)</td>
<td>4.32 (.05)</td>
</tr>
</tbody>
</table>

*Note: N=195; Standard error in parentheses*

*Feedback-related attitudes: Willingness to seek feedback.* Hypotheses 8a and 8b proposed a three-way interaction between participants’ activated self-identity, motivational orientation, and perceived performance levels in determining their willingness to seek individual- (8a) or group-level (8b) feedback. Two separate regression analyses were performed. Control variables such as demographic information, dispositional identity levels, and willingness to seek feedback at the alternative level were included in step 1. Main effects of the identity and motivational orientation manipulations, and perceived performance, were entered in step 2. Step 3 included the
two-way interaction terms between the predictors, and the three-way interaction term was entered in the final step.

Table 13 summarizes the results of the regression analyses. Overall, dispositional identity levels and willingness to seek feedback at the alternative level consistently emerged as significant control variables. For participants’ willingness to seek individual performance feedback, the motivational orientation manipulation and perceived individual performance were found to have important contribution to participants’ feedback seeking willingness. Those who were in the avoid motivational orientation condition were more willing to seek individual feedback than those who were in the approach condition ($\beta = -.08, p<.10$). Also, participants’ higher perceived individual performance was related to higher willingness to seek individual performance feedback ($\beta = .20, p<.001$). Unfortunately, neither the two-way nor the three-way interactions reached significance. Thus, Hypothesis 8a did not receive much support from the current data.
Table 13

Hierarchical Multiple Regression of Willingness to Seek Feedback on Perceived Performance, Manipulations, and Control Variables

<table>
<thead>
<tr>
<th>Feedback Seeking Willingness</th>
<th>Individual</th>
<th>Group</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1: Individual Differences</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>-</td>
<td>-.10*</td>
</tr>
<tr>
<td>Hour</td>
<td>-</td>
<td>.11*</td>
</tr>
<tr>
<td>Individual identity</td>
<td>.14**</td>
<td></td>
</tr>
<tr>
<td>Collective identity</td>
<td>-</td>
<td>.12*</td>
</tr>
<tr>
<td>Willingness – individual</td>
<td>-</td>
<td>.68***</td>
</tr>
<tr>
<td>Willingness – group</td>
<td>.72***</td>
<td>-</td>
</tr>
<tr>
<td>ΔR²</td>
<td>.53***</td>
<td>.56***</td>
</tr>
</tbody>
</table>

**Step 2: Manipulation Main Effects**

| Identity | .00 | .05 |
| Motivation | -.08 | .07 |
| Performance – individual | .20*** | - |
| Performance – group | - | .18*** |
| ΔR² | .04*** | .04*** |

**Step 3: Two-way Interaction**

| Identity X Motivation | .04 | -.01 |
| Motivation X Ind perf | -.09 | - |
| Motivation X Grp perf | - | .08 |
| Identity X Ind perf | -.07 | - |
| Identity X Grp perf | - | -.19** |
| ΔR² | .01 | .02a |

**Step 4: Three-way Interaction**

| Identity X Motivation X Ind perf | -.03 | - |
| Identity X Motivation X Grp perf | - | -.06 |
| ΔR² | .00 | .00 |

*p<.10, *p<.05, **p<.01, ***p<.001 Note: N = 193 – 199; Regression coefficients correspond to the step in which they were entered; Identity manipulation was coded as 0=collective and 1=individual; Motivational orientation manipulation was coded as 0=avoid and 1=approach
For willingness to seek group performance feedback, only perceived group performance emerged as having a significant main effect ($\beta = .18, p<.001$) above and beyond the control variables. Such main effect was qualified by a significant two-way interaction effect between the identity manipulation and the perceived group performance ($\beta = -.19, p<.01$). Additional split-group analyses found that perceived group performance had a significant positive impact on willingness to seek group feedback ($\beta = .24, p<.01$) only for those whose collective identity was activated by the leader role manipulation. Although the three-way interaction was not significant, in light of the nonsignificant results for the motivational orientation manipulation, this pattern of results could be taken as provisional support for Hypothesis 8b.

*Multilevel Implications of Leadership Effects: Affective and Motivational Responses to Feedback*

Hypotheses 9 and 10 addressed the issue of multilevel implications of leadership effects by examining followers’ affective (H9a and H9b) and motivational (H10a and H10b) responses to feedback on performances at different levels. In order to examine such effects, feedback was manipulated so that half of the participants received positive individual and negative group feedback, while the other half received negative individual but positive group feedback. As mentioned earlier, due to the low accuracy rate for the manipulation check questions, participants’ responses to the manipulation check questions for feedback content, rather than the original manipulation condition assignment, were used as indicators for the types of feedback they received for further analyses.
Affective responses to feedback. Hypotheses 9a and 9b proposed a three-way interaction of identity, motivational orientation, and feedback content manipulations on participants’ positive (9a) and negative (9b) affective responses to the feedback they received. Table 14 presents the mean, standard error, and correlation coefficients between the four distinctive emotions. Given that the motivational orientation manipulation appeared to have limited effect (see Hypotheses 3a, 3b, 7a, and 7b) and high correlations between the two positive emotions (r = .46, p<.001) and between the two negative emotions (r = .77, p<.001), two new composite scores were created to represent participants’ positive (average of elation and quiescence) and negative (average of depression and agitation) affective responses to feedback. These two indicators were used for the following analyses. Taken into consideration of revised indicators for the feedback valence manipulation and the non-significant motivational orientation manipulation effects, a four-way interaction between the identity manipulation, two recalled feedback valence indicators, and the affective valence should be taken as provisional support for Hypotheses 9a and 9b.
Table 14

*Means, Standard Errors, and Correlation Coefficients between Positive and Negative Emotions*

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>SE</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Elation</td>
<td>2.49</td>
<td>.07</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Quiescence</td>
<td>2.88</td>
<td>.06</td>
<td>.46</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Depression</td>
<td>1.83</td>
<td>.05</td>
<td>-.34</td>
<td>-.34</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Agitation</td>
<td>1.83</td>
<td>.05</td>
<td>-.31</td>
<td>-.41</td>
<td>.77</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Positive Emotion</td>
<td>2.68</td>
<td>.05</td>
<td>.87</td>
<td>.83</td>
<td>-.40</td>
<td>-.42</td>
<td></td>
</tr>
<tr>
<td>6. Negative Emotion</td>
<td>1.83</td>
<td>.05</td>
<td>-.35</td>
<td>-.40</td>
<td>.94</td>
<td>.94</td>
<td>-.43</td>
</tr>
</tbody>
</table>

N=204; All correlations significant at p<.001

The final repeated measures ANOVA model included perceived individual feedback accuracy as a control variable, the identity and motivational orientation manipulations and the perceived feedback valence for individual and group performance as between-subject factors, and two affective responses as within-subject factor. The four-way interaction between the identity manipulation, perceived feedback valence for individual and group performance, and the affective valence was significant ($F_{(1,174)} = 5.36, p<.05$).

Of the particular interest for the current study are the subgroups who perceived themselves as receiving positive individual and negative group performance feedback, and negative individual and positive group performance feedback. Table 15 shows the adjusted means across different conditions. For participants who recalled themselves as receiving positive individual and negative group performance feedback, the positive emotion levels did not vary across different identity manipulation conditions. However, those who were in the collective identity condition did show more elevated levels of...
negative emotions than those who received the individual identity manipulation. On the other hand, for participants who recalled receiving negative individual and positive group feedback, those who were in the collective identity condition showed higher positive emotions than those in the individual identity condition. However, their negative emotion levels were comparable.

Table 15

Adjusted Means for Positive and Negative Emotions across Identity and Recalled Feedback Valence Conditions

<table>
<thead>
<tr>
<th>Recalled Feedback Valence</th>
<th>Positive-Individual-Negative-Group</th>
<th>Negative-Individual-Positive-Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identity Manipulation</td>
<td>Individual</td>
<td>Collective</td>
</tr>
<tr>
<td>Emotions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive</td>
<td>2.50 (.10)</td>
<td>2.56 (.12)</td>
</tr>
<tr>
<td>Negative</td>
<td>1.68 (.08)</td>
<td>1.77 (.10)</td>
</tr>
</tbody>
</table>

Note: N=190; Standard error in parentheses

Additional planned comparison analyses were conducted to compare participants’ positive and negative emotions across different manipulated identity conditions with particular focus on the two subgroups. Unfortunately, the abovementioned differences between identity manipulation conditions did not reach the conventional statistical significance: $F_{(1,174)} = .94$, $p>.05$ for negative emotions for positive individual-negative group feedback combination; $F_{(1,174)} = 1.73$, $p>.05$ for positive emotions for negative
individual-positive group feedback combination. Overall, Hypotheses 9a and 9b received minimal support in the current study.

Motivational responses to feedback. Hypotheses 10a and 10b proposed a three-way interaction effect of the activated identity level, motivational orientation, and feedback valence on participants’ motivational responses to the feedback they received. A repeated measures ANOVA model was used to compare participants’ willingness to improve individual- versus group-based tasks after receiving feedback. The final ANOVA model included participants’ chronic promotion level, and perceived individual- and group-based task completion as covariates. Between-subjects factors included the identity and motivational orientation manipulations, and participants’ recalled feedback valence for individual and group performance and task level was included as a within-subject factor. Similar to the affective responses, a four-way interaction between the identity manipulation, two recalled feedback valence, and the task level would be considered as supportive to the proposed Hypotheses 10a and 10b.

A marginally significant four-way interaction effect was found between the identity manipulation, recalled feedback valence for individual and group performance, and the task level \( (F_{(1,174)} = 1.73, p>.05) \). Similar to the affective responses, the unique combination of subgroups who perceived themselves as receiving opposite-signed feedback for individual and group performance was the focus of the study. Table 16 shows the adjusted means across different conditions. It was found that those who recalled receiving positive individual and negative group performance feedback had higher willingness to improve on group-based tasks when in the collective identity
condition than in the individual identity condition. On the other hand, for those who recalled receiving negative individual and positive group performance feedback, their willingness to improve individual-based tasks was higher for those who were in the individual identity condition than those who were in the collective identity condition.

Table 16

*Adjusted Means for Willingness to Improve Performance for Different Task Levels across Identity and Recalled Feedback Valence Conditions*

<table>
<thead>
<tr>
<th>Recalled Feedback Valence</th>
<th>Identity Manipulation</th>
<th>Individual</th>
<th>Collective</th>
<th>Individual</th>
<th>Collective</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Positive-Individual-Negative-Group</td>
<td>3.24 (.09)</td>
<td>3.36 (.11)</td>
<td>3.51 (.10)</td>
<td>3.29 (.10)</td>
</tr>
<tr>
<td></td>
<td>Negative-Individual-Positive-Group</td>
<td>3.57 (.10)</td>
<td>3.90 (.12)</td>
<td>3.89 (.12)</td>
<td>3.64 (.11)</td>
</tr>
</tbody>
</table>

*Note:* N=193; Standard error in parentheses

Additional planned comparison analyses were conducted to compare participants’ willingness to improve performance for individual- and group-based tasks across different manipulated identity conditions. Those in the collective identity condition showed significantly higher willingness to improve group tasks ($F_{(1,175)} = 3.46, p<.05$) than those who were in the individual identity condition after they recalled receiving positive individual but negative group performance feedback. However, the difference between identity conditions for willingness to improve individual tasks after recalling receiving negative individual and positive group performance feedback did not reach
significance ($F_{(1,175)} = .96, p>.05$). Overall, these results fit the general predicted results pattern of Hypothesis 10a and 10b, and can be seen as showing provisional support for these two hypotheses, especially Hypothesis 10b.

Table 17 presents a summary of the all the hypotheses and the major findings. Overall, results showed support that transformational leader scripts could activate participants’ individual or collective level of self-identity, depending on their emphases. In addition, it appeared that participants did not have different leadership perceptions depending on which level of their identity was activated. The activated self-identity level in turn influenced participants’ task motivation, feedback preference, and expected feedback utility. Furthermore, it interacted with the perceived performance in affecting participants’ willingness to seek feedback and resulted in participants to react more strongly to a specific level of feedback. Unfortunately, the motivational orientation manipulation did not have much of the hypothesized effect. These results, along with their theoretical and practical implications, will be discussed further in the next Chapter.
<table>
<thead>
<tr>
<th>Hypothesis Number</th>
<th>Hypothesis</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a</td>
<td>Transformational leader scripts activate followers' individual self-identity when they emphasize individual values and goals, competition, and the rewards and punishments associated with individual goals.</td>
<td>Supported</td>
</tr>
<tr>
<td>1b</td>
<td>Transformational leader scripts activate followers' collective self-identity when they emphasize shared values, group goals, cooperation, and rewards and punishments associated with group goals.</td>
<td>Supported</td>
</tr>
<tr>
<td>2a</td>
<td>Followers with an activated individual self-identity will have higher task motivation for individual-based tasks than those with an activated collective self-identity.</td>
<td>Supported</td>
</tr>
<tr>
<td>2b</td>
<td>Followers with an activated collective self-identity have higher task motivation for group-based tasks than those with an activated individual self-identity.</td>
<td>Supported</td>
</tr>
<tr>
<td>3a</td>
<td>Transformational leader scripts activate followers' approach motivational orientation when they articulate goals such as achieving desirable and pleasant end states, and emphasize rewards associated with goal accomplishment.</td>
<td>Not Supported</td>
</tr>
<tr>
<td>3b</td>
<td>Transformational leader scripts activate followers' avoid motivational orientation when they articulate goals such as avoiding undesirable and unpleasant end states, and emphasize punishments associated with goal failure.</td>
<td>Not Supported</td>
</tr>
<tr>
<td>4</td>
<td>Leader scripts that activate different follower internal processes (cognitive and conative) will be perceived as equally transformational.</td>
<td>Supported</td>
</tr>
<tr>
<td>5a</td>
<td>Followers with an activated individual self-identity have higher preference for individual performance feedback than those with an activated collective self-identity.</td>
<td>Supported</td>
</tr>
<tr>
<td>5b</td>
<td>Followers with an activated collective self-identity have higher preference for group performance feedback than those with an activated individual self-identity.</td>
<td>Supported</td>
</tr>
<tr>
<td>6a</td>
<td>Followers with an activated individual self-identity have higher expected feedback utility for individual feedback than those with an activated collective self-identity.</td>
<td>Supported</td>
</tr>
<tr>
<td>6b</td>
<td>Followers with an activated collective self-identity have higher expected feedback utility for group feedback than those with an activated individual self-identity.</td>
<td>Supported</td>
</tr>
</tbody>
</table>
Table 17 (cont.)

Summary of Results for the Proposed Hypotheses in the Current Study

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Description</th>
<th>Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>7a</td>
<td>Followers with an activated approach motivational orientation have higher preference for success-framed feedback content than those with an activated avoid motivational orientation.</td>
<td>Not Supported</td>
</tr>
<tr>
<td>7b</td>
<td>Followers with an activated avoid motivational orientation have higher preference for failure-framed feedback content than those with an activated approach motivational orientation.</td>
<td>Not Supported</td>
</tr>
<tr>
<td>8a</td>
<td>There will be a three-way interaction between followers' self-identity level, motivational orientation, and perceived individual performance level, on their willingness to seek feedback concerning their individual performance.</td>
<td>Not Supported</td>
</tr>
<tr>
<td>8b</td>
<td>There will be a three-way interaction between followers' self-identity level, motivational orientation, and perceived group performance level, on their willingness to seek feedback concerning their group's performance.</td>
<td>Partially Supported</td>
</tr>
<tr>
<td>9a</td>
<td>There will be a three-way interaction between followers' self-identity level, motivational orientation, and feedback valence manipulation, on their positive affective responses (elation and quiescence) to the feedback.</td>
<td>Not Supported</td>
</tr>
<tr>
<td>9b</td>
<td>There will be a three-way interaction between followers' self-identity level, motivational orientation, and feedback valence manipulation, on their negative affective responses (dejection and agitation) to the feedback.</td>
<td>Not Supported</td>
</tr>
<tr>
<td>10a</td>
<td>There will be a three-way interaction between followers' self-identity level, motivational orientation, and feedback valence manipulation, on their motivation to improve/persist on individual-based tasks post feedback.</td>
<td>Not Supported</td>
</tr>
<tr>
<td>10b</td>
<td>There will be a three-way interaction between followers' self-identity level, motivational orientation, and feedback valence manipulation, on their motivation to improve/persist on group-based tasks post feedback.</td>
<td>Partially Supported</td>
</tr>
</tbody>
</table>
CHAPTER V

DISCUSSION

The current study adopted a process-based approach to examine the psychological mediators of the transformational leadership effects on follower motivational components, and the potential for finding variations within the broad transformational leadership style. Two psychological processes internal to followers, one cognitive and one conative, were hypothesized to be the focal mechanisms underlying the transformational leadership effects. Specifically, I examined whether experimental manipulations consisting of different leader scripts constructed based on the transformational leader behaviors could differentially activate participants’ self-identity levels and motivational orientations. These processes in turn were expected to influence the proposed task motivations, feedback seeking, feedback preference, and reactions to feedback outcomes. To the extent that these hypotheses were supported, the key idea that there can be meaningful variation within the more global category of transformational leadership is also supported.

Indeed, results showed that when the transformational leader script emphasized individual values and goals, competition, and rewards and punishment associated with individual achievement and failure, the participants’ individual level of self-identity was more activated, as indicated by faster reaction times to identify small letters. Furthermore, participants in the individual identity condition had higher task motivation
for individual-based tasks, and higher preference and expected utility for individual performance feedback. On the other hand, when the transformational leader script emphasized collective values and goals, cooperation, and rewards and punishment associated with group-level achievement and failure, the participants’ collective level of self-identity was more activated, as shown in their faster response latencies for identifying big letters. Consequently, they showed higher motivation for group-based tasks, higher preference and expected utility for group performance feedback, higher willingness to seek group performance feedback (especially when they perceived their group performance was high), and stronger motivational responses to group performance feedback.

More importantly, while different leader scripts showed efficacy in activating different self-identity levels, they were perceived to be equally leader-like and transformational. These results are quite important because they tie micro-level leader behaviors to specific cognitive processes in the followers, with implications for the followers’ subsequent task motivational and feedback preferences. In contrast with the proposed self-identity effects, there was much weaker support for the proposed motivational orientation effects. These overall results are discussed in more detail in the following sections.

*Process-Oriented Perspective Underlying Effects of Transformational Leadership*

*Cognitive processes: Activation of self-identity levels.* With respect to the cognitive processes, the leader role manipulation of self-identity showed many of the intended effects. First, the manipulation check results were supportive. Leader role
Manipulation scripts were created to include various transformational leadership characteristics, such as idealized influence, inspirational motivation, individual consideration, and reward contingency as specified by Bass (1985) and Bass et al. (2003). By using singular pronouns, highlighting individual-based goals, the means to achieve these goals, and consequences associated with these goals, transformational leader scripts activated participants’ individual level of self-identity as demonstrated by the lower reaction times to small letters in the letter identification task. Contrarily, using plural pronouns, stressing group-based goals and related information made participants’ collective level of self-identity more salient. This effect was evident as the reaction times for identifying big letters were shorter for these participants.

Second, the leader role manipulation of self-identity showed strong effects on followers’ task motivation, as measured by three different versions of the dependent variable. Participants whose individual self-identity level was activated considered individual-based tasks to be more important and urgent, and indicated that they would start with these tasks. On the other hand, participants whose collective self-identity was activated by the leader role manipulation rated group-based tasks to be more important and urgent, and expressed high priorities for these tasks.

Third, self-identity manipulation had strong implications for participants’ expected feedback utility, and some complex effects on their feedback preference. It was found that when the participants’ individual self-identity was more activated, they expected individual feedback to be more useful, whereas group performance feedback was expected to be more useful for those whose collective self-identity was activated.
Partial support was found that activated self-identity level also determined participants’ preference for receiving feedback about their individual or group performance. However, the result pattern showed complex interaction effect between self-identity manipulation, motivational orientation manipulation, and participants’ gender.

Finally, tentative support was found for the self-identity manipulation effect on participants’ willingness to seek feedback at different levels, and their strength of motivational responses to feedback. Particularly, it appeared that for participants whose collective identity level was more activated, they had stronger willingness to seek group feedback when they also perceived that their group performance was high. Also, they showed higher motivation to improve group-based tasks after receiving negative group performance feedback.

These self-identity results are important for several reasons. First, they can be seen as an extension of the current literature linking transformational leadership with self-identity levels. Several studies have demonstrated that transformational leaders can influence followers and generate positive effects largely by evoking followers’ collective self-identity (e.g., Kark et al., 2003; Shamir et al., 1998; Shamir et al., 2000). The current study extended this line of reasoning and showed that leaders could activate not only followers’ collective, but also their individual level of self-identity, yet be viewed as equally transformational. This suggests that it is not the switch to a collective identity per se that creates transformational leadership, but suggests that the important mechanism might have more to do with greater integration of leader objectives into followers’ self-systems, regardless of whether that system is at the individual or collective level. In other
words, it is possible that transformational leaders’ emphases on higher-order purposes (idealized influence) and values (inspirational motivation), genuine concerns for their followers (individual consideration), and encouragement for followers’ fullest potentials (intellectual stimulation) allow them to create unique connections with their followers’ self-systems. Followers’ self-systems, in turn, function as the core for regulating their motivations and emotional responses to the work environment. In the current study, these effects were demonstrated by different levels of perceived importance and urgency of different tasks. Thus, this study supports the idea that connecting to followers’ self-systems serves as an interface between the leaders and the leadership outcomes (Lord & Brown, 2004; Lord et al., 1998), and such connections may be especially easy to establish for transformational leaders since their behaviors facilitate the linking with followers’ self-systems.

Second, while the current results suggest that transformational leader scripts can activate participants’ individual level of self-identity, the effects were more pronounced when examining the within-person differences in activation strengths of the two identity levels, than when examining the between-persons differences across different experimental conditions. This difference is understandable in light of the distinction between chronic versus working self-concept (Markus & Kunda, 1986; Markus & Wurf, 1987). Since the majority of the sample came from an individualistic cultural background (Hofstede, 1980), participants may have a high level of chronic activation of the individual self-identity level. According to Markus and her colleagues, such chronic or trait-like activation represents an anchor around which one’s state or working self-
identity level fluctuates. Thus, the small between-person differences in the state activation of the individual identity level as a result of the leader role manipulation may be a result of a ceiling effect. On the other hand, within-person differences in the state activation of the individual versus collective identity level may be a better gauge of the leader manipulation effectiveness.

Additionally, there was also a general within-person decline over trials in reaction latencies associated with identifying small letters (as an assessment of individual level identity activation) versus big letters (as an assessment of collective level identity activation). This could reflect not only participants’ general familiarity with identifying the small letters, but also a possible practice effect since all participants were asked to identify big letters first. Although the current study followed the methodology adopted by Kuhnen and Oyserman (2002), mixing the order of presentation of big and small letters may be a better option to avoid confounding order with the manipulation condition effects.

Finally, results from the current study imply that at any given time, only one level of self-identity can be activated. While this is consistent with previous conceptualization of the working self-concept (e.g., Markus & Kunda, 1986; Markus & Wurf, 1987), the more current perspective suggests that there are shared processes underlying different levels of self-identity and as a result, activation of one level may facilitate the activation of the other (e.g., Kampmeier & Simon, 2001; Simon & Kampmeier, 2001). For example, Kampmeier and Simon (2001) suggested and empirically demonstrated that using differentiation to establish individual self-identity may also facilitate the establishment of
one’s collective self-identity if the person considers his or her group membership as a way to distinguish him/herself from others. It is possible that more than one level of self-identity can be activated at a time by the leader, thus making both individual and group concerns salient. If so, the prioritization strategy used in the current study may not be sensitive to participants who are trying to simultaneously satisfy goals at different levels. These followers may use other strategies to strive for goals at different levels, such as integrating the goals by identifying similar components (e.g., Emmons, King, & Sheldon, 1993; Ramakrishnan, Grefe, & Lord, 2005).

Conative processes: Activation of motivational orientations. The transformational leader scripts did not show the anticipated effects of activating participants’ different motivational orientations as measured in the manipulation check by the accessibility of ideal versus ought selves (Higgins et al., 1985). This null finding may possibly be attributed to the practice effect on the selves questionnaire. The pattern of response latencies to the selves questionnaire hinted at the potential for an order effect, and thus may have masked the accessibility of approach versus avoid motivational orientation. In order to minimize confusion, instructions asked participants to generate and rate four attributes reflecting their ideal selves first, followed by the generation and rating of four ought self attributes. Across the two motivational orientation manipulation conditions, participants showed faster reaction times associated with ought selves attributes than those of ideal selves. It is possible that the ideal selves trials provided participants with practice opportunities and consequently, reduced response latencies for ought selves trials across the board. Therefore, the differences in reaction times associated with ideal versus
ought selves attributes are more indicative of the familiarity with the task, rather than the
differential activation of approach versus avoid motivational orientations.

Another possible explanation is that the motivational manipulation may not have
really been incorporated because the goals in the script were not really going to be used
and pursued by the participants. In other words, in order for goals to have an effect, they
may need to be accepted and acted upon. Here the artificialness of the experimental
setting and the nonspecific nature of the goals mentioned in the leader scripts may have
meant that there was no real commitment to the general goals and thus the participants
were actually operating under the influence of other unknown, idiosyncratic goals.

While this pattern of results is discouraging, it is important to recognize that it
may reflect an experimental procedure issue rather than theoretical flaws. It is possible
that in real-life settings, transformational leaders may indeed activate followers’ different
motivational orientations by setting either appetitive or aversive goals and emphasizing
rewards or punishment as proposed in the current study. This potential is suggested by
results which showed a few significant weak interaction effects associated with the
motivational orientation manipulation, even though, as just described, the manipulation
check measures did not show significant differences. Moreover, it is possible that
transformational leaders may influence followers’ motivational orientation via more
subtle means than directly through goal setting and framing. For example, previous
research indicates different motivational orientations are associated with unique
emotional responses (e.g., Higgins et al., 1997). Leaders may activate followers’
motivational orientations through emotional contagion by displaying different emotions,
which followers may mimic. This imitation may heighten the accessibility of the corresponding motivational orientation.

For example, leaders’ expression of happiness, which is an emotion associated with approach motivational orientations (Higgins et al., 1997), may activate followers’ approach motivational orientation through emotional contagion. On the other hand, leaders’ display of anger, which is associated with avoid orientations (Higgins et al., 1997), may activate followers’ avoid motivational orientation. In fact, field and laboratory studies have shown that both the leader (e.g., Cherulnik, Donley, Wiewel, & Miller, 2001) and the members (e.g., Totterdell, 2000) can influence followers or teammates through the emotional contagion process. Thus, while this subtle effect is speculative, future studies with better designs and more sensitive measures are needed to evaluate transformational leadership effects through influencing followers’ motivational orientations.

Process-based variations within transformational leadership. The current study proposed a process-oriented perspective to assess the differences within the broad transformational leadership style. In other words, instead of using the different combinations of traditionally-defined transformational leader behaviors, the different processes activated by the transformational leader serve as a better way to delineate variations within the general transformational leadership style. Results from the current study showed that while transformational leader scripts activated different follower self-identity levels, the target was perceived to be equally transformational and leader-like across different conditions. In addition, participants’
general leader impressions and transformational leadership perceptions were above the response scale mid-point, suggesting that the manipulation was successful in creating an image of a transformational leader. This pattern of results is encouraging for two reasons. First, it supports the necessity and fruitfulness of exploring the variations within the broad transformational leadership style. As mentioned earlier, differential activation of followers’ self-identity levels has important implications for their subsequent motivation and affective responses. Thus, similar transformational leader behaviors with different emphases may result in a wide range of outcomes.

More importantly, results from the current study support that a process-oriented definition is beneficial when exploring the variations within the broad transformational leadership style. As argued earlier, the traditional behavior-based definition may not adequately reflect subtle differences, and may result in unfair comparisons between qualitatively and quantitatively different constructs. Also, as shown in the current study, a behavior-based measure may not be sensitive enough to detect the variations. On the other hand, using a process-oriented definition ensures fair and direct comparison. As observed in the current study, it is the particular follower internal process activated by the leader role manipulation, rather than the specific transformational behaviors, that drove the subsequent outcomes. Thus, the current study demonstrates the advantage of taking a process-based perspective when exploring the variations within the broad style of transformational leadership.

As an extension of the current findings, it can be argued that process-based distinctions may potentially be applied to comparisons between different leadership
styles. As discussed earlier, transformational leaders may be uniquely equipped to influence followers’ self-systems, and their self-based motivations and affect. It may be found that other leadership styles, such as transactional leadership, may influence followers at a more peripheral level rather than affecting followers’ self-systems and self-related processes. In other words, effects of transformational leaders on the followers may observe a more top-down principle, such that leaders influence followers’ higher-level processing (i.e., self-systems) and their effects then trickle down to followers’ lower-level processing (e.g., task motivation and goal striving). On the other hand, transactional leaders may change followers’ task-related behaviors and thus be limited to influencing their lower-level processing. Thus, taking a process-oriented perspective may not only help distinguish variations within the broad transformational leadership style, but also better identify the differences between transformational and other leadership styles.

Followers as Feedback Seekers

The current study linked transformational leadership with the feedback literature by investigating followers as active feedback seekers and suggesting that leaders could influence their feedback preference, perceptions of feedback utility, and willingness to seek feedback. Interestingly, while these three feedback variables are all considered to relate to individuals’ actual feedback-seeking behaviors (Ashford et al., 2003), participants showed different patterns of responses to the leader role manipulation for each of the three variables in the current study. These results will be discussed in the broader context of self-related feedback-seeking mechanisms (Kitayama, Markus,
Matsumoto, & Norasakkunkit, 1997; Kunda, 1990) and feedback intervention theory (Kluger & DeNisi, 1996).

Self-identity levels and preference for feedback: Different self-related motives. As stated in the last Chapter, there was an unexpected four-way interaction between the self-identity and motivational orientation manipulations, participant gender, and task levels, on participants’ preference for different feedback. Of particular interest for the current discussion is that the approach motivational orientation manipulation appeared to enhance the identity manipulation effect on participants’ preference for individual feedback. On the other hand, the avoid motivational orientation manipulation appeared to enhance the identity manipulation effect on participants’ preference for group feedback. In other words, when participants’ individual (collective) self-identity level was more activated by the leader role manipulation, their preference for individual (group) task feedback was particularly high if they also received the approach (avoid) motivation orientation manipulation. This pattern of results is interesting in light of the work on self-criticism (Kitayama et al., 1997) and self-enhancement (Kunda, 1990) feedback-seeking in the cross-cultural research.

According to Kitayama and his colleagues (Kitayama et al., 1997), people from a collectivist culture are more concerned with fulfilling their obligations and responsibilities as group members or relationship partners. They engage in self-criticism in order to identify where they fall short in meeting these group standards, so that they can better improve themselves to fit into their social groups. Borrowing this line of logic, it is possible that when participants’ collective level of self-identity is activated by the
leader, their intent to fill their group commitments and fear of being outcasts may lead them to favor an avoid motivational orientation. This would help explain how being in the avoid motivational orientation condition accentuated the collective self-identity manipulation effects on group performance feedback preference.

On the other hand, people from an individualist culture tend to be more interested in advancing their own well-being by viewing themselves in more positive light (Kunda, 1990). Thus, they seek self-enhancement and look for positive feedback. This mechanism is more aligned with having an approach motivational orientation, which would explain the enhanced effect of identity level activation on preference for individual feedback found in the current study.

Taken together, it is possible that activation of different identity levels might have inadvertently also influenced participants’ motivational orientation. This would mean that what was intended to be an orthogonal research design actually resulted in correlated factors. In other words, persons who received an individual identity manipulation may have been inadvertently disposed to also have an approach orientation, even if they were assigned to receive an avoid orientation manipulation. Previous research (e.g., Lee et al., 2000) has similarly observed the possible links between individual self-construal and approach orientation, and between collective self-construal and avoid orientation.

While this confound may have occurred in the current study, these results remain speculative and there may be other explanations for the unexpected four-way interaction. For now we must maintain that levels of self-identity and motivational orientations are separate constructs. Activation of the collective self-identity may highlight the
importance of not shirking the responsibility of being a group member, it may also increase the chance for individuals to pursue group-level achievement and to take pride of such achievement. For example, cross-cultural research has shown that group-level feedback had stronger impact on participants’ self-efficacy level for those from a collectivist culture (Earley, Gibson, & Chen, 1999). Thus, while different identity levels may be differentially related to different motivational orientations, such a link remains tentative in the current study and more research is needed to better address the issue.

Willingness to seek feedback: Feedback intervention theory and implications.
Kluger and DeNisi (1996) proposed the feedback intervention theory to explain the link between feedback and performance. They suggested that feedback can be categorized into three hierarchically-organized levels: task learning, task motivation, and self-related feedback. Task learning feedback provides individuals with ‘how-to’ information when they are unfamiliar with a new task. Task motivation feedback aims at giving individuals information about their current task performance. Finally, self-related feedback links individuals’ task performance to their self-esteem or self-worth, and attributes the task success or failure to stable individual characteristics.

According to feedback intervention theory (Kluger & DeNisi, 1996), negative feedback targeted to lower levels (e.g., task learning and task motivation) may increase performance by clarifying the expected behaviors and indicating progress. On the other hand, negative feedback at the self level may generate strong negative affective reactions and thus take the focus away from the task. Thus, Kluger and DeNisi (1996) suggested that when providing negative feedback, it is important to maintain the focus at the lower,
task-related level so that the negative impact could be minimized. Similarly, Carver and Scheier (1998) also suggested that when the task is important and closely tied to one’s self, individuals may withdraw effort more quickly after receiving negative feedback. On the other hand, if focus is kept on the task level, rather than on the link between the task and the self-systems, they may be more resilient to the damaging effects of receiving negative feedback. Instead, they may maintain their task commitment and goal-striving effort for a longer period of time.

Extending this line of logic, it may explain the pattern of results in the current study. Particularly, it was found that when participants’ collective level of self-identity was activated by the leader role manipulation, they perceived that group feedback would be more useful. At the same time, their willingness to seek group performance feedback was still largely determined by their perceived group performance even though they expected such feedback to be beneficial. It appears that while the activated self-identity level directed participants’ interests to seek feedback at the corresponding level, this activation also increased the involvement of self during the feedback-seeking process. In other words, the attention was moving upwards from the task level to the self level (Kluger & DeNisi, 1996). As a result, participants showed higher willingness to seek feedback only when they perceived themselves as doing well on the task so that they would avoid the potential of negative and threatening information about themselves.

These findings imply that transformational leaders may not always have positive effects on followers’ performance. Arguably, receiving negative feedback during goal-striving can help individuals redirect their resources, identify ways to correct mistakes,
and thus improve performance (Lord & Levy, 1994). Previous research has also shown that one way feedback can help improve performance is through its positive effects on role clarity (Brown et al., 2001). However, results from the current study suggested that while transformational leaders may influence followers by engaging their self-systems, this effect could have an unexpected drawback. Specifically, involvement of self-systems may make individuals more sensitive to the potential of receiving negative feedback, and thus be less willing to seek feedback unless the risk of getting negative feedback is low (i.e., perceived performance level is high). This effect may hold even when people know that feedback, regardless of its nature, will be helpful. In this case, the motivation to avoid threats to one’s self-systems is so strong that it may impair performance by blocking possible ways to improve performance. Thus, extending the mechanisms underlying responses to feedback as proposed by the feedback intervention theory (Kluger & DeNisi, 1996), the current study seek to explain effects of transformational leadership on followers’ willingness to seek feedback.

Followers’ Responses to Feedback: Extended Effects of Transformational Leadership

Finally, in order to explore the implications of transformational leadership effects at different levels, feedback content was manipulated in the current study to examine if participants would respond more strongly to individual- versus group-level feedback. It was hypothesized that when transformational leader role manipulation activated participants’ individual level of self-identity, participants would respond more strongly to the content of individual-level feedback. On the other hand, they would respond more strongly to the group-level feedback when their collective level of self-identity was more
activated by the manipulation. Two types of responses, affective and motivational, were examined in the current study.

_Affective responses to feedback._ The hypothesized interaction effects of the leader role and the feedback manipulations on affective responses were not supported in the current study. While the results indicated that participants whose collective self-identity level was activated by the leader role manipulation responded more strongly to group-level feedback (i.e., higher levels of positive emotions after receiving positive group performance feedback, higher levels of negative emotions after receiving negative group performance feedback), this effect was not statistically significant. In addition, a similar pattern was not observed for those whose individual self-identity level was activated. These null results may be attributed to the following two reasons.

First, judging from the manipulation checks for the feedback content manipulation, one quarter of the participants (55) did not accurately remember at least one level of the feedback they received. Instead of removing these participants, a measure of participants’ recalled feedback (i.e., answers to the feedback manipulation check questions) was used as an indicator of the feedback condition for the purpose of maintaining adequate power for the analyses. The high error rates suggest that participants might not have clearly understood the feedback content manipulation. This misinterpretation could be due to lack of attention, fatigue, or unclear instructions. It might also be that the contradictory nature of the feedback (individual and group levels had opposing evaluations) made it seem unlikely or artificial. Thus, while the majority of the participants accurately recalled the feedback they received pertaining to their
individual and group performance, the efficacy of the feedback manipulation might not
be as strong as intended. As a result, participants did not show the expected emotional
responses.

Second, the measure adopted by the current study to assess participants’ affective
responses after receiving feedback may not have been sensitive enough to capture the
changes. Particularly, emotional responses to events have been theorized as ‘hot
cognition’ and may occur well-under individuals’ conscious awareness (Kunda, 1999;
Lord & Harvey, 2002; Weiss & Cropanzano, 1996). The current study used the self-
report method to measure participants’ affective responses to the feedback content. This
methodology depends on participants’ conscious assessment of their emotional states and
may not be able to detect subconscious changes in their affect. Due to this measurement
issue, the understated differences in affect might not have been correctly assessed and
reflected in the scores, which contributed to the null finding.

Motivational responses to feedback. In terms of participants’ motivational
responses to feedback, results showed support for the proposed effects. Participants
whose individual level of identity was activated by the leader role manipulation showed
higher willingness to improve individual tasks after receiving negative individual
feedback. On the other hand, those with activated collective level of self-identity reported
higher willingness to improve group tasks after receiving negative group feedback. These
results will be discussed within the framework of Kluger and DeNisi’s (1996) feedback
intervention theory.
As mentioned earlier, the mechanisms proposed by the feedback intervention theory (Kluger & DeNisi, 1996) may explain the observed effect of perceived performance on willingness to seek feedback that is corresponding to the activated self-identity level. Specifically, the activation of a particular self-identity level may heighten the connection between the tasks and the self, and thus orient participants to the self-related level of processing and increase their motivation to avoid self-threats. As a result, perceived performance had a significant effect on participants’ willingness to seek feedback as this perception was used as an assessment of the potential level of threat associated with feedback-seeking.

In light of this explanation, the finding that negative feedback on the specific task level was more motivating for those whose corresponding self-identity level was activated seems incompatible at the first glance. However, upon a closer examination of the feedback content manipulation, it can be argued that the feedback provided in the current study was evaluative in nature, but very task- and performance-based. It is possible that the content and the focus of the feedback reoriented participants to processing information at a lower, task-based level. As a result, the negative feedback did not debilitate participants’ focus by generating strong negative emotional responses. Instead, it directed participants’ attention to specific task level and was actually motivating, especially when the task level corresponded with the activated self-identity level.

This pattern of results is encouraging for two reasons. First, it supports the argument that negative feedback can be motivating as long as it is directed at the task
level (Kluger & DeNisi, 1996). Second, it suggests that even when the task is closely connected to one’s self-system, receiving negative task-oriented feedback may not be as detrimental as previously thought. It appears that individuals have the flexibility to shift their attention downwards to the task level, especially when the environment promotes this shift by presenting relevant cues (i.e., feedback content). Thus, the results support that it is possible for transformational leaders to engage followers’ self-systems without sacrificing other potential benefits associated with task-oriented processing.

**Implications and Future Directions**

The implications of the current study are threefold. First, it demonstrated the benefits of taking a process-oriented perspective when examining the effects of transformational leadership. A cognitive process, activation of followers’ different self-identity levels, was shown to be one way that transformational leaders may influence followers. The results suggested that it is the underlying processes influenced by the transformational leader, rather than the specific leader behaviors, that explain the changes in proposed leadership outcomes. Taking a process-oriented approach provides the opportunity to directly assess the effects of transformational leadership. More importantly, it also provides a new way to explore variations within the broad transformational leadership style. Thus, more theoretical effort should be devoted to identifying and testing other processes through which transformational leaders may take effect.

From a more practical standpoint, these results open additional possibilities for leadership development. Results from the current study showed that transformational
leadership behaviors can be flexibly adopted to establish either an individualistic or a collective sense within followers. Thus, it is important for leaders to not only demonstrate the transformational leader behaviors, but also be aware of the underlying processes they are trying to influence. This implies that leaders need to accurately assess the situational characteristics to adjust their emphases in order to produce follower processes that are optimal for a given situation. For example, during a crisis situation, leaders may want to especially stress the importance of establishing a collective identity in order to counter balance employees’ heightened sense of individual job insecurity.

To extend the current study, it would be necessary to examine whether the processes as proposed and tested in the current study actually occur in the real-life organizational context. It would also be interesting to explore whether this process-oriented perspective can be applied to other leadership styles, such as transactional leadership. In addition, more effort should be devoted in identifying and examining other potential processes through which transformational leaders may influence followers. For example, Lord and Brown (2004) suggested that leaders may influence followers through activating different value structures. Research on emotional contagion (e.g., Cherulnik et al., 2001) suggests another possible route through which leaders may influence followers. Finally, it would be interesting to examine the long-term effects of these different processes on followers. For example, an employee whose collective level of self-identity is constantly activated by his/her leader within the work context may develop a work-based chronic self-identity level that is different from his/her general chronic self-identity
level. The development and the implications of such work-based self-identity remain to be explored.

Second, the current study highlighted the important roles that followers play in the processes through which transformational leadership takes effect. As mentioned earlier, the current study proposed that the processes through which transformational leaders influence followers actually reside within the followers. Additionally, it was demonstrated that one way followers may respond to leaders’ influence is through changing their feedback-related attitudes. These results suggest that more attention needs to be paid to the followers of transformational leaders. Particularly, there may be other ways through which followers can actively participate during the leadership process. For example, as discussed earlier, followers’ chronic level of self-identity may lead them to respond to leaders’ effort to influence this cognitive process differently. These different responses may require the leaders to adjust their behaviors and messages in order to achieve the intended outcomes.

There are several ways to expand the emphasis on followers’ roles in the transformational leadership process. In terms of theoretical development, better integration is needed to conceptualize followers as active feedback seekers and the effects of their feedback-seeking behaviors within the leadership framework. Also, additional work is necessary to theorize other possible forms followers may actively participate in the leadership process. For example, Meindl’s social constructionist approach (1993; 1995) may provide a possible way to conceptualize followers’ participation in the leadership processes. In terms of empirical research, studies are required to test whether
transformational leaders have the proposed effects on followers’ actual feedback-seeking behaviors in an organizational context. It would also be interesting to explore the implications of the fit between followers’ feedback preference and the type of feedback provided by the leader.

Finally, results from the current study suggest that the multilevel implications of transformational leadership effects may be conceptualized not only as roles that followers occupy in the organization, but also as followers’ different cognitive processing levels. In terms of the former, leaders may make certain roles that followers have (i.e., individual employee versus group member) more salient by activating followers’ different levels of identity. These implications are important considering that there may be tradeoffs between fulfilling task requirements at one level versus the other. Additionally, focusing on different roles as an organizational member may also lead followers to respond more strongly to different levels of feedback. Previous studies have explored how feedback at the individual versus team levels may have different effects on goal-striving at the individual and the team levels (e.g., DeShon, Kozlowski, Schmidt, Milner, & Wiechmann, 2004). Thus, future studies need to consider these effects within the leadership context. Additionally, more conceptual and empirical work is necessary to explore the possibility of adopting different strategies to cope with multilevel demands. As discussed earlier, integrating multiple goals by finding their similar elements (e.g., Emmons et al., 1993; Ramakrishnan et al., 2005) may be a more effective way to achieve multiple goals than prioritization. The applicability of the integration strategy and its
impact on performance and other outcomes (e.g., task satisfaction, stress) need to be better examined within the transformational leadership context.

In terms of the implications for different processing levels within the follower, transformational leaders may influence followers through engaging their highest processing level—the self-systems—and expecting the trickle-down effects on their lower, task-oriented processing level. There are benefits and drawbacks associated with different levels of processing. For example, focusing on followers’ self-systems may enhance the leadership effects, but it may also reduce followers’ ability to effectively process negative feedback. Fortunately, individuals are able to flexibly shift their focus between different processing levels either by conscious choice or by environmental cues (Lord & Levy, 1994). Thus, it would be interesting to explore if and how transformational leadership effects translate from higher level processing (i.e., self-related systems), to lower level processing (i.e., tasks). Also, the implications of this trickle-down effect should be better theorized and tested.

*Limitations*

There are three major limitations of the current study. First, it adopted a laboratory experiment methodology. The transformational leadership effects observed here may be contrived and not representative of the real life situation. However, this design provided the necessary control to better observe the hypothesized processes underlying the transformational leadership effects. Additionally, these processes should be similar whether they are studied under a highly-controlled experimental setting, or in a natural setting. This is consistent with the arguments for establishing experimental
realism (Berkowitz & Donnerstein, 1982). As discussed earlier, it is important to extend the findings from the current study to leaders in organizational settings to support external validity. At the same time, the laboratory research provided a first initial step to better understand the processes underlying and the implications of transformational leadership effects.

The second limitation is the measures adopted by the current study. Particularly, some of the measures may lack the necessary sensitivity to adequately capture the effects (e.g., self-report of affect). Others may suffer from order or practice effects (e.g., the computerized selves questionnaire). These measurement issues may help explain some of the null findings in the current study. Future studies aiming at assessing the same variables should use more appropriate measures in order to more accurately gauge the effects.

Lastly, the efficacy of the feedback content manipulation may be threatened by the fatigue factor. As mentioned earlier, only three-quarters of the participants accurately recalled the feedback they received. This could be due to the inattention or misinterpretation as a result of long experimental procedure participants had to go through prior to receiving feedback. Future studies may need better ways to ensure participants’ attention and highlight the feedback message so that the intended feedback effect can be better examined.
CHAPTER VI

SUMMARY

Studies of transformational leadership have consistently shown that transformational leaders have positive impact on employees’ work-related attitudes and behaviors, and organizational performance (DeGroot et al., 2000; Judge & Piccolo, 2004; Zhu et al., 2005). However, critiques of transformational leadership theory suggest that it lacks theoretically-sound and empirically-tested explanations of the processes through which transformational leader behaviors are linked to followers’ attitudes and behaviors (House & Aditya, 1997). In addition, similarities exist between transformational leadership theory and other neocharismatic theories, which call for better efforts to refine and distinguish between the different constructs (House & Aditya, 1997). Finally, House and Aditya (1997) proposed that transformational leadership effects may have different implications for various organizational levels: individual, group, or organization as a whole, and these multilevel effects have not been closely examined.

In order to address these transformational leadership issues, the current research took a process-oriented perspective and argued that transformational leaders may have their effects by influencing different processes internal to followers (see Figure 1 in Chapter I). Two follower processes, one cognitive and one conative, were the focal process variables of the current study. In terms of the cognitive process, transformational
leaders were proposed to activate followers’ levels of self-identity (Lord & Brown, 2004; Lord et al., 1999). Self-identity, as part of the overarching structure of the self-concept, refers to how individuals define themselves (Markus & Wurf, 1987; Oyserman, 2001), with the primacy distinction being between individual and collective levels of identity. Lord and Brown (2004; Lord et al., 1999) argued that specific leader traits and behaviors can differentially activate followers’ specific levels of self-identity, which in turn direct their cognitive and motivational resources to activities consistent with that level.

Transformational leaders were also proposed to influence followers by differentially engaging one of the two different motivational subsystems. Carver and Scheier (1998) proposed that approach motivational subsystems guide individuals towards pursuing positive and desirable end states, whereas avoid motivational subsystems guide individuals from preventing negative and undesirable end states. In the current study, transformational leaders were hypothesized to activate different follower motivational orientations by emphasizing either the rewards associated with achieving a desirable outcome, or the punishments associated with failing to prevent an undesirable outcome.

In addition to being the hypothesized processes through which transformational leaders may influence followers, the abovementioned processes were also proposed to serve as a new approach to define subtle differences within a more general transformational leadership style. Previously, different researchers have defined and measured transformational leadership differently (e.g., Kark et al., 2003; Paul et al., 2001; Shamir et al., 1998), contributing to general construct confusion as critiqued by
House and Aditya (1997). Using a process-based approach to investigate the differences within the general transformational leadership style would allow a closer examination of transformational leadership effects, and the better conceptualization of transformational leadership.

In line with the emphasis on followers’ roles in transformational leadership processes, the current research treated followers as active feedback seekers within the context of transformational leadership. It was argued that followers could respond to transformational leader influences by showing different preferences and expected utility for feedback concerning their individual- versus group-level performance. Additionally, self-protection mechanisms (Ashford & Cummings, 1983; Wood, 1989) were proposed to interact with the two abovementioned processes activated by the transformational leader, and thus make followers more willing to seek either individual or group feedback, depending on their perceived performance.

Finally, to address the issue of multilevel implications of transformational leadership effects (House & Aditya, 1997), the current research explored how followers would respond to feedback when they had the dual roles of an individual employee and a group member. The feedback content that participants received was manipulated such that their individual- and group-level performance feedback was of opposite valence. It was argued that by activating different follower internal processes, transformational leaders could make concerns at one level (e.g., work group) more salient, and thus make followers respond more strongly to feedback at that level.
Ten sets of hypotheses were proposed and examined with data collected through a laboratory experiment. Two-hundred and ten participants were randomly assigned to receive one of the four transformational leader role manipulations (individual or collective identity crossed with approach or avoid motivational orientation) designed to activate different cognitive and motivational processes. Manipulation effects were assessed using implicit measures, as these measures were more sensitive. Also, participants’ leadership perceptions were measured. Following these measures, participants performed an in-basket task which included individual- and group-based subtasks. Their prioritizations of different tasks, task importance and urgency ratings were taken as measures of task motivation. After the task session, participants were given a feedback seeking opportunity, during which their feedback preference, expected feedback utility, willingness to seek feedback, and perceived performance were assessed. Following these measures, the feedback manipulation was delivered and participants’ affective and motivational reactions to feedback were then measured.

Results from the repeated-measures ANOVA and multiple regression analyses showed support for the proposed effects associated with the self-identity activation. After receiving the transformational leader role manipulation that emphasized individual values, goals, and competition, the participants’ individual level of self-identity was more activated. They also showed higher task motivation for individual-based tasks, higher expected utility of and preference for individual performance feedback. On the other hand, participants’ collective level of self-identity was activated after they received a transformational leader role message that stressed shared values, group-level goals, and
cooperation. Participants with an activated collective self-identity had higher task motivation for group-based tasks, higher expected utility of and preference for group feedback, higher willingness to seek group performance feedback when they perceived their group performance was higher, and stronger motivational reactions to the group-level feedback manipulation.

While the different transformational leader role manipulations appeared to successfully influence followers’ internal cognitive processes and their subsequent attitudes, all the participants perceived the ‘leader’ in the manipulations to be equally leader-like and transformational. These results supported a process-oriented approach not only for examining the transformational leadership effects, but also for better understanding the fine variations within the general transformational leadership style. Based on these findings, theoretical implications were discussed and directions for future studies to explore other processes underlying the transformational leadership effects were suggested.
REFERENCES


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APPENDIX A

LEADER ROLE MANIPULATION SCRIPTS

Individual – Approach Leader Script

My name is Michael Grant, and I’m the CEO of OPEN BOOKS bookstore. I’m proud to announce that I recently won the Award for Management Excellence for my work at OPEN BOOKS. OPEN BOOKS is the largest chain bookstore in the United States. There are 352 bookstores nationwide and OPEN BOOKS continues to successfully launch new stores. In 1997, OPEN BOOKS expanded its operation to include on-line business and has since become the leading internet-based retailer.

My management at OPEN BOOKS is driven by my mission, values and beliefs. I want to remind you of the purpose of the company, and to keep you focused on what is the most important. To continue providing the best customer service, I ask each of you to perform at the best of your ability. Your predecessor’s past performance has set high standards for you. You should strive for meeting and even moving beyond these standards. Only through continuous improvement can you prosper in this highly competitive market. You should always look for ways to reduce the gap between yourself and the desired perfection. As a result, the company can distinguish itself from its rivals with your high quality performance.

My values and beliefs guide how I make business decisions and set the policies for the company. I value competition and believe that only through competition can you achieve your individual goal. Importantly, competition comes from both outside of the company, and within the company. Each of you will always be competing with yourself and your coworkers for better performance, and for demonstrating the qualities that differentiate you as an outstanding employee. The company retains the best performers. Only the best performers can grow with the company, and help me achieve my visions for OPEN BOOKS of higher market shares and better customer service.

I have set the company policies to reward individual performers – it is the high level of individual performance that makes the company successful! Your personal high achievement and commitment to the company values will be generously compensated. I look forward to working with every one of you, to help you pursue and accomplish your personal performance goal, and as a result, the championship of the company.
Individual – Avoid Leader Script

My name is Michael Grant, and I’m the CEO of OPEN BOOKS bookstore. I’m proud to announce that I recently won the Award for Management Excellence for my work at OPEN BOOKS. OPEN BOOKS is the largest chain bookstore in the United States. There are 352 bookstores nationwide and OPEN BOOKS continues to successfully launch new stores. In 1997, OPEN BOOKS expanded its operation to include on-line business and has since become the leading internet-based retailer.

My management at OPEN BOOKS is driven by my mission, values and beliefs. I want to remind you of the purpose of the company, and to keep you focused on what is the most important. To not fall behind other competitors in providing quality customer service, each of you needs to avoid making any mistakes. Your predecessor’s past performance has not been very satisfactory. You should be cautioned to not repeat the same errors, or to make new mistakes. If you do not continuously identify and reduce your deficiencies, you cannot survive in this highly competitive market. You should always look for ways to enlarge the gap between yourself and the undesired failure. As a result, the company can prevent falling short in comparison with its rivals by way of your error-free performance.

My values and beliefs guide how I make business decisions and set the policies for the company. I value competition and believe that only through competition can you stop individual failure. Importantly, competition does not come from only outside of the company, but also from within the company. Each of you will never stop competing with yourself and your coworkers for making fewer mistakes, and for demonstrating the qualities that differentiate you as an employee that can avoid losses and damages to the company. You will not be retained by the company if you are not one of the most careful performers. My visions for OPEN BOOKS of not losing market share nor customers cannot be achieved if you are a reckless employee.

I have set the company policies to punish individual performers for making mistakes – a low level of individual performance makes the company unsuccessful. The company will not compensate you generously if you do not show high achievement and commitment to the company values personally. I look forward to working with every one of you, to help you avoid making costly personal performance errors, and as a result, the failing of the company.
Collective – Approach Leader Script

My name is Michael Grant, and I’m the CEO of OPEN BOOKS bookstore. Our management team recently won the Award for Management Excellence in 2003. OPEN BOOKS is the largest chain bookstore in the United States. There are 352 bookstores nationwide and OPEN BOOKS continues to successfully launch new stores. In 1997, OPEN BOOKS expanded its operation to include on-line business and has since become the leading internet-based retailer.

Our management team at OPEN BOOKS is driven by our shared mission, values and beliefs. We want to remind you of the purpose of the company, and to keep you focused on what is the most important. To continue providing the best customer service, all of us need to contribute to our team so that it can perform the best of its ability. Your team’s past performance has set high standards. As new members, you and your teammates should strive together for meeting, and even moving beyond these standards. Only through continuous improvement can your team prosper in this highly competitive market. Your team should always look for ways to reduce the gap between itself and the desired perfection. As a result, we can distinguish ourselves from other rival companies with the team’s high quality performance.

Our management team’s values and beliefs guide how we make business decisions and set the policies for the company. We value cooperation and believe that only through cooperation can we achieve our shared goals. Importantly, as a team member, contribution to the team performance is appreciated and working together is essential for the success of the team. We expect team members to always share information and devote effort to help each other perform assigned tasks, and maintain harmonious working relationship. We must develop and share the team spirits, and teamwork will help us achieve our visions for OPEN BOOKS of higher market shares and better customer service.

We the management team have set the company policies to reward team performance – it is the high level of collective effort that makes the company successful. Your team’s collective high achievement and commitment to the company values will be generously compensated. We look forward to working with your team, to help your team pursue and accomplish its performance goal, and as a result, the championship of the company.
Collective – Avoid Leader Script

My name is Michael Grant, and I’m the CEO of OPEN BOOKS bookstore. Our management team recently won the Award for Management Excellence in 2003. OPEN BOOKS is the largest chain bookstore in the United States. There are 352 bookstores nationwide and OPEN BOOKS continues to successfully launch new stores. In 1997, OPEN BOOKS expanded its operation to include on-line business and has since become the leading internet-based retailer.

Our management team at OPEN BOOKS is driven by our shared mission, values and beliefs. We want to remind us of the purpose of the company, and to keep you focused on what is the most important. To not fall behind other competitors in providing quality customer service, all of us need to contribute to our team so that the team can avoid making any mistakes. Your team’s past performance has not been very satisfactory. As new members, you and your teammates should be cautioned to not repeat the same errors, or to make new mistakes. If we do not continuously identify and reduce our deficiencies, we cannot survive in this highly competitive market. Your team should always look for ways to enlarge the gap between itself and the undesired failure. As a result, we can prevent falling short in comparison with our rival companies by way of your error-free team performance.

Our management team’s values and beliefs guide how we make business decisions and set the policies for the company. We value cooperation and believe that only through cooperation can we stop our business failure. Importantly, as a team member, your team will not be successful if you do not contribute to the team performance and work together. We do not expect team members to withhold information nor effort to help each other perform assigned tasks, and maintain harmonious working relationship. Our visions for OPEN BOOKS of not losing market share nor customers cannot be achieved if we do not develop and share the team spirits, and utilize teamwork.

We the management team have set the company policies to punish teams for making mistakes – a low level of collective effort makes the company unsuccessful. We will not compensate your team generously if the team does not show high achievement and commitment to the company values collectively. We look forward to working with your team, to help your team avoid making costly team errors, and as a result, the failing of the company.
APPENDIX B

IN-BASKET TASK MATERIAL

MEMO – Team marketing proposal task (blue paper)

From: Chris – Marketing research team 1 leader

Re: Proofreading the team marketing proposal

Hey there!

We want to welcome you as a new member of our marketing team. My name is Chris. I am your team leader at the marketing department. You will be working as a member of our team for conducting marketing research and preparing proposals. The Marketing/Sales Coordinator, Sam, will be your supervisor for other research and client contact.

Our team has been working on this proposal for quite a while and it is at its final stage. We think that we’ve put together a really great proposal, see the portion that is attached. Pat and Lanny, the other two members of our team, are working on the rest of the proposal. We can surely use a fresh pair of eyes from our newest team member to proofread this rough draft of the proposal summary. This will not only help the team to generate the final copy of the proposal, but also bring you up to date in terms of what we’ve been working on. If you can read through the section, and correct any spelling mistakes, that will be great contribution to the team.

When you are done with your section, please bring it to the team meeting so that we can put the proposal together. Thanks and if you need any help finding your way around, our doors are always open. Feel free to stop by any time – we are a friendly group and want you to feel like you belong!

Chris
Executive Summary

The proposed date of event is on July 20, 2004, and the time of the event is between 4 – 6 p.m.. This proposal will describe how we will approach the author, Alex Robertson, and a proposed schedule for the visit. It will also specify how we plan to promote the event to our customers. In addition, it describes how we may take this opportunity to increase the sales volume of the visiting author’s products, and other associated products. Finally, a detailed financial plan will be presented for the event.

In order to ensure that all potentially interested individuals have information regarding the signing event and its location, we plan to execute a marketing strategy that will entail traditional advertisements and website information. The advertisement will include information about the event and how to obtain information via our website. Specifically, the advertisement will involve:

a) Posting in various local magazines and newspapers;

b) Announcements on various local TV channels and radio stations;

c) Electronic and conventional distribution to the current preferred customer list;

d) Information packets with event specifics, flyers, and posters to local schools and colleges;

e) Postings on internet bulletin boards, and discussion boards designated for the author;

f) Creating new web page link from the company’s home page regarding the information of the event.

Overall, we believe that the event will be successful, and will generate significant revenue for the company. It also provides an opportunity for us to establish long-term fruitful relationship with the author.

For more information, please contact Chris, Marketing Team 1 leader.
MEMO – Team budget preparation task (blue paper)

From: Chris – Marketing research team 1 leader

Re: Budget statement

Hey all!

The accounting department is asking for the budget from all the marketing research teams for next month. Aside from the routine operating costs, which is in the database already, we will have additional costs for next month for the following social events: a farewell party for our coworker, Jen, and an afternoon tea session for the launch of a new book. Pat is in charge of organizing the farewell party and Lanny is planning the afternoon tea. They will pass you the information concerning the amount they require for each event. You will need to add these costs to the operating cost from the database, and get the budget ready for the upcoming team meeting. We are counting on you, our newest team member, to help get the budget ready quickly. We can then give the accounting department a figure so that the money we request will be available in time for all the charges. Thanks!

Chris
## Routine Operating Budget

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</tr>
</tbody>
</table>
MEMO – Brainstorming task (blue paper)

From: Chris – Marketing research team 1 leader

Re: Brainstorming meeting

Hey everybody!

It’s the first Monday of the month again and we are having our traditional brainstorming meeting at 3pm in conference room A. The fun activity for this meeting will be “the use of brick.” So, take some time and think about how many ways we can use brick. In addition to being creative on your own, it is your turn to record the answers so Pat and Lanny will send you their uses of brick before the meeting. As our newest team member, you will need to put together a list of all the answers and bring it to the meeting to share with us and the other teams. Remember, the more different, and creative uses of brick you can come up with the better. We are competing with other marketing research teams to defend our Creativity Cup at this meeting. Good luck and see you at the meeting.

Chris
Uses of Bricks

Building houses  
Creating firewall  
Attack people  
Paper weight  
Step stone to reach higher  
Weights for training  
Painting for color red  
Exfoliate dead skin
MEMO – Meeting notes preparation task (yellow paper)

From: Sam – Marketing/Sales Coordinator

Re: Meeting notes

Hi,

My name is Sam. I’m the Marketing/Sales Coordinator. I would like to welcome you to the company. I trust you understand that you will be working for me for client service. The first thing I need you to do is tidy up some notes from a meeting with one of the company’s biggest supplier. I know that the meeting occurred before you joined the company, but your predecessor, Robyn, should leave you with some hand-written records before she goes. Please find these records, and type them up and pass them to me. If you can’t find them, let me know as well. Thanks and I look forward to working with you.

Sam
Notes from Meeting (to be hand-written)

Date: 2/18/04

Present: Sam, Robyn (from Open Book), Bill, Sandy (from Random House)

Topics:
Distribution of books
- Possibility to obtain 45% of distribution right
- Need to check out
  - Our capacity for the materials
  - Marketing proposal for distribution
  - Other relevant issues: Contract (contacting respective lawyers), also our market share value (attitude survey for shareholders)

Forming relationships with authors
- More signing events organized
- Discuss with other departments
- Summer opportunities
  - Combine music and books (potential for local musicians; contact local radio stations and record company)
  - Children events (story telling, organized outings related to books)
- Issues with availability of authors
  - Should we contact directly or leave to the Random House? Need further discussion
  - Promotion versus public service, concerns with our own community reputation

New opportunity for food/beverage service
- Joint promotion with new recipe books
- Potential for new suppliers recommended by Random House
  - Need to check their products
  - Contact Martin at 986-468-8521
  - Pass information to store design for the blueprint of the store and potential location for such service
MEMO – Donation calculation task (yellow paper)

From: Sam – Marketing/Sales Coordinator  
To: Robyn

Re: Collecting donation for flowers

Hi Robyn,

The department’s secretary, Casey, is having an operation at the General Hospital. I have sent out a memo to collect donations to send some flowers on behalf of the department. Here is a list of the money I’ve got and from whom. Can you sum them up and tell me how much money we have in total? I can then go ahead and order the flowers. Thanks!

Pat: $10  
Robyn: $10  
Chris: $15  
Sam: $20  
Jen: $20 (needs five back, she only can afford to give $15)  
Lanny: $5  
Karen: $6 (will give another $4 to make it up to $10)  
Paul: $15  
Ross: $20  
Debbie: $10  
Ryan: $32 (will give another $3 to make it up to $35)  
Sandy: $15  
Linda: $30 (needs five back, she only wants to give $25)  
Jim: $25  
Richard: $15  
Leslie: $20

Sam
MEMO – Research on Barns and Noble website task (yellow paper)

From: Sam – Marketing/Sales Coordinator
To: Robyn

Re: Research the BN website

Hi Robyn,

One of our major competitors, Barns and Noble, just recently updated their website for internet retail. I need you to go on to their website (www.bn.com) and see what’s been changed. Specifically, the IT department has the following questions they need answers for:

1. Did they change their tabs for webpage options? They used to have tabs for home, books, business and technology, social sciences, new and used textbooks, children, DVD/video, music, calendars, and bookstore locations. Let me know if they added/removed any tabs.

2. What kind of special offer are they advertising on their homepage? (e.g., free-shipping, discount)

3. In terms of their pull-down search options at their homepage, what are the options in their new manual? They used to have bookstore, business and technology, social sciences, textbooks, children, DVD/video, and music. Let me know if they added/removed any options.

Just write a memo to me with answers to these questions ASAP. Thanks!

Sam
MEMO

From: Robyn
To: The new Marketing/Sales associate
Re: Handing over

Hi,

Sorry that I will not be there to welcome you and hand over my job to you in person. Let me give you a quick overview of this job in case you haven’t gotten the information somewhere else. There are two primary responsibilities of your job. First, you will be working as a member of a marketing research team. Your team leader’s name is Chris. Second, you will work under Sam as an individual sales associate. In order to make the two roles distinctive, all team-related tasks will normally come in blue memo paper. On the other hand, all individually-based tasks will be printed on yellow memo paper.

You will find some memos that are addressed to me, and these are things that I won’t be able to finish before I leave. So, you’ll have to take over the tasks listed on the memos. However, I’m sure by the time you show up for the job, there will be other things that you need to pay attention to. Feel free to reprioritize the tasks. Best of luck and I’m sure you will fit in quickly!

Robyn
APPENDIX C

FEEDBACK CONTENT MANIPULATION

High Individual – Low Team Performance (for collective identity)

Thank you for helping us evaluate the in-basket test designed to measure the performance of a sales/marketing associate in our bookstore. After carefully comparing your personal performance on the test, we found that your performance on the individually-based tasks (i.e., meeting notes preparation, donation calculation, research on the website) was at the 84 percentile. In other words, in comparison with others who have taken this test, you performed better than 84 percent of them. This is a well above average performance.

On the other hand, your team’s performance on team-based tasks (i.e., proposal preparation, budget preparation and brainstorming) was only at the 60 percentile. In other words, in comparison with other teams who have taken this test, your team only performed better than 60 percent of them. This performance is much lower than the average level. We appreciate you and your teammates’ time and effort.

High Individual – Low team Performance (for individual identity)

Thank you for helping me evaluate the in-basket test designed to measure the performance of a sales/marketing associate in my bookstore. After carefully comparing your performance on the test, I found that your personal performance on the individually-based tasks (i.e., meeting notes preparation, donation calculation, research on the website) was at the 84 percentile. In other words, in comparison with others who have taken this test, you performed better than 84 percent of them. This is a well above average performance.

On the other hand, your team’s performance on team-based tasks (i.e., proposal preparation, budget preparation and brainstorming) was only at the 60 percentile. In other words, in comparison with other teams who have taken this test, your team only performed better than 60 percent of them. This performance is much lower than the average level. I appreciate you and your teammates’ time and effort.

---

1 The positive and negative feedback information was constructed on the basis of recommendations from previous studies (i.e., Blakely, 1993; Bannister, 1986; Levy, Cawley, & Foti, 1998).
Low Individual – High Team Performance (for collective identity)

Thank you for helping us evaluate the in-basket test designed to measure the performance of a sales/marketing associate in our bookstore. After carefully comparing your personal performance on the test, we found that your performance on the individually-based tasks (i.e., meeting notes preparation, donation calculation, research on the website) was only at the 60 percentile. In other words, in comparison with others who have taken this test, you performed better than 60 percent of them. This performance is much lower than the average level.

On the other hand, your team’s performance on team-based tasks (i.e., proposal preparation, budget preparation and brainstorming) was at the 84 percentile. In other words, in comparison with other teams who have taken this test, your team performed better than 84 percent of them. This is a well above average performance. We appreciate you and your teammates’ time and effort.

Low Individual – High Team Performance (for individual identity)

Thank you for helping me evaluate the in-basket test designed to measure the performance of a sales/marketing associate in my bookstore. After carefully comparing your personal performance on the test, I found that your performance on the individually-based tasks (i.e., meeting notes preparation, donation calculation, research on the website) was only at the 60 percentile. In other words, in comparison with others who have taken this test, you performed better than 60 percent of them. This performance is much lower than the average level.

On the other hand, your team’s performance on team-based tasks (i.e., proposal preparation, budget preparation and brainstorming) was at the 84 percentile. In other words, in comparison with other teams who have taken this test, your team performed better than 84 percent of them. This is a well above average performance. I appreciate you and your teammates’ time and effort.
APPENDIX D

PRE-FEEDBACK MANIPULATION MEASURES

Self-identity Level Measure²

Using the scale provided, please decide to what degree each of the following statements are characteristic of you and indicate the appropriate response.

<table>
<thead>
<tr>
<th>5</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Agree</td>
</tr>
<tr>
<td>3</td>
<td>Neither Agree nor Disagree</td>
</tr>
<tr>
<td>2</td>
<td>Disagree</td>
</tr>
<tr>
<td>1</td>
<td>Strongly Disagree</td>
</tr>
</tbody>
</table>

1. I thrive on opportunities to demonstrate that my abilities or talents are better than those of other people. ______
2. I have a strong need to know how I stand in comparison to my classmates or coworkers. ______
3. I often compete with my friends. ______
4. I feel best about myself when I perform better than others. ______
5. I often find myself pondering over the ways that I am better or worse off than other people around me. ______
6. Making a lasting contribution to groups that I belong to, such as my school or work organization, is very important to me. ______
7. When I become involved in a group project, I do my best to ensure its success. ______
8. I feel great pride when my team or work group does well, even if I’m not the main reason for success. ______
9. I would be honored if I were chosen by an organization or club that I belong to, to represent them at a conference or meeting. ______
10. When I’m part of a team, I am concerned about the group as a whole instead of whether individual team members like me, or whether I like them. ______

² From Selenta and Lord (2004). Dispositional individual self-identity score is the average of the 5 individual identity items (1 – 5, with a possible high score of 5 and low score of 1); dispositional collective self-identity score is the average of the 5 collective identity items (6 – 10, with a possible high score of 5 and low score of 1).
Promotion/Prevention Orientation Scale

The following sets of questions relate to how you think about yourself, and your perceptions regarding various general life events. Please respond to these sets of questions with the scales provided.

<table>
<thead>
<tr>
<th>Scale</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Very True</td>
</tr>
<tr>
<td>4</td>
<td>Moderately True</td>
</tr>
<tr>
<td>3</td>
<td>Neither True nor Untrue</td>
</tr>
<tr>
<td>2</td>
<td>Not Quite True</td>
</tr>
<tr>
<td>1</td>
<td>Not at all True</td>
</tr>
</tbody>
</table>

1. In general, I am focused on preventing negative events in my life. ______
2. I am anxious that I will fall short of my responsibilities and obligations. ______
3. I frequently imagine how I will achieve my hopes and aspirations. ______
4. I often think about the person I am afraid I might become in the future. ______
5. I often think about the person I would ideally like to be in the future. ______
6. I typically focus on the success I hope to achieve in the future. ______
7. I often worry that I will fail to accomplish my academic goals. ______
8. I often think about how I will achieve my academic success. ______
9. I often imagine myself experiencing bad things that I fear might happen to me. ______
10. I frequently think about how I can prevent failures in my life. ______
11. I am more oriented toward preventing losses than I am toward achieving gains. ______
12. My major goal in school right now is to achieve my academic ambitions. ______
13. My major goal in school right now is to avoid becoming an academic failure. ______
14. I see myself as someone who is primarily striving to reach my “ideal self” – to fulfill my hopes, wishes, and aspirations. ______
15. I see myself as someone who is primarily striving to become the self I “ought” to be – to fulfill my duties, responsibilities, and obligations. ______
16. In general, I am focused on achieving positive outcomes in my life. ______
17. I often imagine myself experiencing good things that I hope will happen to me. ______
18. Overall, I am more oriented toward achieving success than preventing failure. ______

\[3\] From Lockwood et al. (2002). Dispositional promotion score is the average of the 9 promotion items (3, 5, 6, 8, 12, 14, 16, 17, 18, with a possible high score of 5 and low score of 1); dispositional prevention score is the average of 9 prevention items (1, 2, 4, 7, 9, 10, 13, 15, , with a possible high score of 5 and low score of 1)
Letter Identification Task

In the following screens, you will see some big letters made up of smaller letters. Please identify the big/smaller letters as fast and accurately as possible and press the key corresponding with your answers.

Example screen:

```
F  F
F  F
FFFFFFF
F  F
F  F
```

The big letter is H, and the smaller letter is F

1.        4.
P        YYYYYYY
P        Y
P        Y
P        Y
PPPPPPP    Y

* Big letter: L; small letter: P

2.        5.
W     W
W     W
WWW
W   W
W

* Big letter: Y; small letter: W

3.        6.
EEEEEE
E   EE
E    E
E    EE
EEEEEE

* Big letter: D; small letter: E

Adopted from Kuhnen and Oyserman (2002). Asterisks mark the correct responses for identifying big and small letters.
7. 
V  V 
V  V 
V  V 
V  V 
VVVVV

* Big letter: U; small letter: V

8. 
K 
K K 
KKKKK 
K  K 
K  K

* Big letter: A; small letter: K

9. 
CCCC 
C  C 
C  C 
C  C 
CCCC

* Big letter: O; small letter: C

10. 
DDDDDDDD 
D 
DDDDD 
D 
DDDDDDDD

* Big letter: E; small letter: D

11. 
SSSSS 
S 
S 
S 
SSSSSS

* Big letter: C; small letter: S

12. 
GGGG 
G  G 
G  G 
G  G 
GGGG

* Big letter: O; small letter: G

13. 
X  X 
X  X 
XXX 
X 
X

* Big letter: Y; small letter: X

14. 
UUUU 
U  U 
U  UU  U 
UU  UU 
UUUU  U

* Big letter: Q; small letter: U

15. 
HHHHH 
H 
H 
H 
HHHHH

* Big letter: C; small letter: H

16. 
BBBBBB 
BB 
BBB 
BB 
BBBBBB

* Big letter: S; small letter: B
17.  
IIIIII  
   II  
   III  
   II  
   IIIIII  

* Big letter: I; small letter: Z  

18.  
OOOOOO  
O   O  
OOOOOO  
O   OO  
O   OO  

* Big letter: R; small letter: O  

19.  
A   A  
A   A  
AAAAAAA  
A   A  
A   A  

* Big letter: H; small letter: A  

20.  
MMMMMM  
M   M  
MMMMMM  
M   M  
MMMMMM  

* Big letter: B; small letter: M  

21.  
TT   T  
T   T   T  
T   T   T  
T   T   T  
T   TT  

* Big letter: N; small letter: T  

22.  
   OOOO  
O   O  
O   OOOO  
O   OO  
O   OO  

* Big letter: G; small letter: O  

23.  
    Q   Q  
    Q   Q  
    Q   Q  
    Q   Q  
    QQQQ  

* Big letter: U; small letter: Q  

24.  
WW   WW  
W   W   W  
W   WW   W  
W   W  
W   W  

* Big letter: M; small letter: W  

25.  
PPP  
P   P  
PPP   PPP  

* Big letter: I; small letter: P  

26.  
N    N  
N    N  
N    NN   N  
N   N   N   N  
NN   NN  

* Big letter: W; small letter: N  

176
27. 
DDDDDD
D     D
DDDDDD
D
D

* Big letter: P; small letter: D

28. 
X     X
X     X
XXXXXX
X     X
X     X

* Big letter: K; small letter: X

29. 
LLLLLLL
  L
  L
  L
  L

* Big letter: T; small letter: L

30. 
CCCCCCC
C     CC
C     C
C     CC
CCCCCCC

* Big letter: D; small letter: C

31. 
WW    WW
  W    W
    WWW
  W    W
 WW   WW

* Big letter: X; small letter: W

32. 
Z
 Z  Z
 ZZZZZ
 Z    Z
 Z    Z

* Big letter: A; small letter: Z

33. 
FFFFFFFFFF
 F     F
 F     F
 F

* Big letter: P; small letter: F

34. 
UU    UU
  U    U
  U    U
  U

* Big letter: V; small letter: U

35. 
JJJJJJ
  J
 JJJJJJ
  J    JJ
 JJJJJJ
  J    JJ

* Big letter: R; small letter: J

36. 
ZZ    Z
 Z    Z
 Z    Z
 Z    Z
 Z    ZZ

* Big letter: N; small letter: Z
Selves Questionnaire

Please answer the following questions in the space provided, keeping in mind these two definitions.

**Ideal self** is defined as “the type of person I ideally would like to be; the type of person I hoped, wished or aspired to be.”

Please list four attributes that characterize your ideal self. Also, please provide ratings of the extent to which you feel you *ideally* would like to possess the attribute and the extent to which you actually possess that attribute, using the following scale:

<table>
<thead>
<tr>
<th></th>
<th>5 Very Much</th>
<th>4 A Good Deal</th>
<th>3 Neutral</th>
<th>2 Moderately</th>
<th>1 Not at All</th>
</tr>
</thead>
</table>

Attribute 1: ___________________ Ideal rating: _____ Actual rating: _____

Attribute 2: ___________________ Ideal rating: _____ Actual rating: _____

Attribute 3: ___________________ Ideal rating: _____ Actual rating: _____

Attribute 4: ___________________ Ideal rating: _____ Actual rating: _____

---

5 Adapted from Higgins et al. (1985). Computerized version was used in the current study.
Please answer the following questions in the space provided, keeping in mind these two definitions.

**Ought self** is defined as “the type of person I believed I ought to be; the type of person I believed it was my duty, obligation, or responsibility to be.”

Please list four attributes that characterize your ought self. Also, please provide ratings of the extent to which you feel you *ought* to possess the attribute and the extent to which you actually possess that attribute, using the following scale:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
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<td>3</td>
<td>Neutral</td>
</tr>
<tr>
<td>2</td>
<td>Moderately</td>
</tr>
<tr>
<td>1</td>
<td>Not at All</td>
</tr>
</tbody>
</table>

Attribute 1: ________________  Ought rating: _____ Actual rating: ______
Attribute 2: ________________  Ought rating: _____ Actual rating: ______
Attribute 3: ________________  Ought rating: _____ Actual rating: ______
Attribute 4: ________________  Ought rating: _____ Actual rating: ______
Leader Message Content Measure\(^6\)

1. The name of the company is:
   a. Open Chapters.*
   b. Open Books.
   c. Open Minds.

2. The name of the company’s CEO is:
   a. Michael Grant.*
   b. Adam Kane.
   c. Roger Graham.

3. The company policy rewards:
   a. Team performance.*
   b. Financial performance.
   c. Individual performance.*

4. According to the __________ magazine, the company’s website is the ninth-most-trafficked shopping site.
   b. Mars Media Metrix Magazine.
   c. Neptune Media Metrix Magazine.

5. In which of the following state is the company NOT opening new stores?
   a. Ohio
   b. Indiana
   c. South Florida*
Leader Perceptions Measure

Please think back to the impression you formed about the CEO of the Open Book company, and indicate whether you agree or disagree with the following statements using the scale:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>4</td>
<td>Agree</td>
</tr>
<tr>
<td>3</td>
<td>Neither Agree nor Disagree</td>
</tr>
<tr>
<td>2</td>
<td>Disagree</td>
</tr>
<tr>
<td>1</td>
<td>Strongly Disagree</td>
</tr>
</tbody>
</table>

1. The CEO inspires me to go beyond my self-interest. ______
2. The CEO focuses attention on my strengths and weaknesses. ______
3. The CEO clarifies the rewards and punishment in the message. ______
4. The CEO has my respect. ______
5. The CEO arouses my awareness about important issues related to the company. ______
6. The CEO intends to teach and couch the employees in the company. ______
7. The CEO talks about values in the message. ______
8. The CEO recognizes my achievement and failures. ______
9. The CEO emphasizes the mission of the company. ______
10. The CEO expresses enthusiasm in the message. ______
11. The CEO exhibited leadership. ______
12. I am willing to choose the CEO as a formal leader. ______
13. The CEO is a typical leader. ______
14. The CEO engages the leader behavior to a good extent. ______
15. The CEO fits my image of a leader. ______

Adopted from MLQ (items 1-10; Avolio et al., 1999) and GLI (items 11-15; Cronshaw & Lord, 1987). The transformational leadership perception is the average of the 10 transformational leadership scale (with a possible high score of 5 and low score of 1); the general leadership impression is the average of 5 general leadership impression scale (with a possible high score of 5 and low score of 1).
Prioritization of Memos Measure

1. Please rate your perceptions of how important it is for you to complete the tasks listed on the memo using the following scale:

   5  Very Important  
   4  Important     
   3  Neutral       
   2  Unimportant   
   1  Very Unimportant

A. Team marketing proposal task. ______
B. Meeting notes preparation task. ______
C. Team budget preparation task. ______
D. Donation calculation task. ______
E. Team brainstorming task. ______
F. Research on Barnes and Noble website task. ______

2. Please rate the following statements using the scale provided:

   5  Strongly Agree  
   4  Agree          
   3  Neither Agree Nor Disagree  
   2  Disagree       
   1  Strongly Disagree

A. I would like to start working on the team marketing proposal task first. ______
B. I would like to start working on the meeting notes preparation task first. ______
C. I would like to start working on the team budget preparation task first. ______
D. I would like to start working on the donation calculation task first. ______
E. I would like to start working on the team brainstorming task first. ______
F. I would like to start working on the research on Barnes and Noble website task first. ______
3. Please rank the memos based on the importance of completing the tasks from the most important (1) to the least important (6):

   Team marketing proposal task: ______
   Meeting notes preparation task: ______
   Team budget preparation task: ______
   Donation calculation task: ______
   Team brainstorming task: ______
   Research on Barnes and Noble website task: ______

4. Please indicate the best order you prefer to follow when performing the tasks (1: memo that will be performed the first; 6: memo that will be performed the last):

   Team marketing proposal task: ______
   Meeting notes preparation task: ______
   Team budget preparation task: ______
   Donation calculation task: ______
   Team brainstorming task: ______
   Research on Barnes and Noble website task: ______
Perceived Performance Scale

1. Judging from your team members’ contribution and your own effort, how do you think your team is doing in terms of preparing the proposal at this point?

   1     2          3        4   5
Not well at all                        Very well

2. Judging from your team members’ contribution and your own effort, how do you think your team is doing in terms of preparing the budget at this point?

   1     2          3        4   5
Not well at all                        Very well

3. Judging from your team members’ contribution and your own effort, how do you think your team is doing in terms of preparing for the brainstorming meeting at this point?

   1     2          3        4   5
Not well at all                        Very well

4. How do you think you are doing in terms of preparing the meeting notes at this point?

   1     2          3        4   5
Not well at all                        Very well

5. How do you think you are doing in terms of summing up the total amount of donation for flowers at this point?

   1     2          3        4   5
Not well at all                        Very well

6. How do you think you are doing in terms of conducting the research on the BN website at this point?

   1     2          3        4   5
Not well at all                        Very well
Preference for Feedback Type Scale

1. Please rate the following statements using the scale provided.

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
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<td></td>
<td></td>
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</tbody>
</table>

A. I would like to receive feedback concerning my own performance. ______
B. Information concerning our group’s performance would be important to me. ______
C. Feedback about our group’s performance would be more desirable to me than feedback about my own performance. ______
D. I would rather know how well I personally am doing than how well our group is doing. ______
E. I would like to know how far away I am from not finishing the tasks assigned to me an individual marketing/sales associate. ______
F. I would like to learn how close I am completing the tasks assigned to me as an individual marketing/sales associate. ______
G. I would prefer to learn how far away we are from not finishing the tasks assigned to us as a marketing research team. ______
H. I would prefer to know how close we are to completing the tasks assigned to us as a marketing research team. ______

2. Please circle the answer that best describes you for the following two questions:

A. At this point, the type of feedback that is more important to me is:
   a. Feedback regarding our group’s performance
   b. Feedback regarding my own performance

B. At this point, the type of feedback that is more important to me is:
   a. Feedback regarding how close I am/We are to the successful completion of all tasks
   b. Feedback regarding how far away I am/We are from the failure of not completing all tasks
3. Please rate the following statements using the scale provided.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree Nor Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
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<tr>
<td>4</td>
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</tr>
</tbody>
</table>

A. I would like to receive information about how many spelling corrections we have made accurately in the marketing proposal task. ______
B. I would like to know how many errors I have avoided in the meeting notes preparation task. ______
C. Learning that we have included all the costs associated with the special events in the budget for the budget preparation task would be desirable. ______
D. I would like to know that I have counted money from everyone correctly in the donation counting task. ______
E. Acquiring information about how many different uses of bricks that we have not missed for the brainstorming task would be desirable. ______
F. Learning how many incorrect responses I have avoided while answering the questions regarding the research on BN website would be preferable. ______
G. I would like to know how many correct responses I have made while answering the questions regarding the research on BN website. ______
H. Knowing how many different uses of brick we have generated for the brainstorming task would be desirable. ______
I. I would like to know that I have not miscounted money from anyone in the donation counting task. ______
J. I would like to learn that we have not omitted any of the costs associated with the special events in the budget for the budget preparation task. ______
K. Receiving information about how many accurate points I have made for the meeting notes preparation task would be desirable. ______
L. I would like to know how many spelling mistakes we have missed in the marketing proposal task. ______
4. Please choose THREE out of six tasks on which you would most like to receive feedback by circling three of A – F. Then, for the three tasks you chose, please select the specific information you would like to receive by circling a or b.

A. Marketing proposal task
   a. How many spelling corrections we have made
   b. How many spelling mistakes we have missed

B. Meeting notes preparation task
   a. How many errors I have avoided
   b. How many accurate points I have made

C. Budget preparation task
   a. That we have included all the costs associated with the special events in the budget
   b. That we have not omitted any of the costs associated with the special events in the budget

D. Counting donation task
   a. I have counted money from everyone correctly
   b. I have not miscounted money from anyone

E. Brainstorming task
   a. How many different uses of brick we have generated
   b. How many different uses of brick we have not omitted

F. Research on BN website task
   a. How many incorrect responses I have avoided while answering the questions
   b. How many correct responses I have made while answering the questions
**Feedback Seeking Intention Scale**

Please indicate whether you agree or disagree with the following statements using the scale:

<table>
<thead>
<tr>
<th>5</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Agree</td>
</tr>
<tr>
<td>3</td>
<td>Neither Agree nor Disagree</td>
</tr>
<tr>
<td>2</td>
<td>Disagree</td>
</tr>
<tr>
<td>1</td>
<td>Strongly Disagree</td>
</tr>
</tbody>
</table>

1. I probably would ask Michael Grant for feedback about my individual performance at this point. ______
2. I probably would initiate conversations with Michael Grant about my own performance at this point. ______
3. I probably would not ask Michael Grant how well he thinks I am performing as a sales/marketing associate at this point because he might think I am incompetent. ______
4. I probably would feel embarrassed to ask Michael Grant about my work performance at this point. ______
5. I probably would try and figure out how I’m doing on my own rather than to ask Michael Grant how he thinks I’m doing at this point. ______
6. We probably would ask Michael Grant for feedback about our team’s performance at this point. ______
7. We probably would initiate conversations with Michael Grant about our team’s performance at this point. ______
8. We probably would not ask Michael Grant how well he thinks we are performing as a marketing research team at this point because he might think we are incompetent. ______
9. We probably would feel embarrassed to ask Michael Grant about our team’s work performance at this point. ______
10. We probably would try and figure out how we’re doing on our own rather than to ask Michael Grant how he thinks we are doing as a team at this point. ______

Adapted from Fedor et al, (1992) and Levy et al., (2002). Feedback seeking willingness for individual feedback is the average of items 1-5 (with a possible high score of 5 and low score of 1); feedback seeking willingness for group feedback is the average of items 6-10 (with a possible high score of 5 and low score of 1).
Expected Feedback Utility Scale

Please indicate whether you agree or disagree with the following statements using the scale:

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>4</td>
<td>Agree</td>
</tr>
<tr>
<td>3</td>
<td>Neither Agree nor Disagree</td>
</tr>
<tr>
<td>2</td>
<td>Disagree</td>
</tr>
<tr>
<td>1</td>
<td>Strongly Disagree</td>
</tr>
</tbody>
</table>

1. At this point, to receive feedback on my performance would help me learn how I could do my job better. ______
2. At this point, I would learn a lot from the feedback concerning my own performance. ______
3. At this point, the feedback on my performance would help me understand my mistakes. ______
4. I would have a clearer idea of what is expected from me because of the feedback on my performance. ______
5. At this point, to receive feedback on our team’s performance would help us learn how we could do our jobs better. ______
6. At this point, we would learn a lot from the feedback concerning our team’s performance. ______
7. At this point, the feedback on our team’s performance would help us understand our mistakes. ______
8. We would have a clearer idea of what is expected from our team because of the feedback on our performance. ______

Adapted from Greller (1978). Expected feedback utility for individual feedback is the average of items 1-4 (with a possible high score of 5 and low score of 1); Expected feedback utility for group feedback is the average of items 5-8 (with a possible high score of 5 and low score of 1).
APPENDIX E

POST-FEEDBACK MANIPULATION MEASURES

Feedback Valence Manipulation Check

Please circle the answer that you think is accurate description of the feedback you received from Michael Grant:

1. In comparison with other teams, our team performed:
   a. Above the average team performance
   b. Below the average team performance

2. In comparison with other individuals, I performed:
   a. Above the average individual performance
   b. Below the average individual performance
Affective Responses to Feedback Scale\textsuperscript{10}

The following scale consists of a number of words and phrases that describe different feelings and emotions. Please read each item and indicate to what extent you feel this way after hearing the feedback about your own and your team’s performance with the following scale:

\begin{tabular}{|c|c|}
\hline
5 & Extremely \\
4 & Quite a Bit \\
3 & Moderately \\
2 & A Little \\
1 & Very Slightly or Not At All \\
\hline
\end{tabular}

13. Lively ______ 24. Sad ______

\textsuperscript{10} Adapted from Watson and Clark (1994). Elation score is the average of items 1, 6, 8, 11, 13, 14, and 17; quiescence score is the average of items 3, 15, and 19; depression score is the average of items 2, 5, 9, 10, 12, 20, and 24, agitation score is the average of items 4, 7, 16, 18, 21, and 22; all scores are with a possible high score of 5 and low score of 1.
Motivational Reactions Scale

Please indicate how you feel about the statements listed using the following scale.

5 Strongly Agree
4 Agree
3 Neither Agree nor Disagree
2 Disagree
1 Strongly Disagree

1. I have completed the team marketing proposal task to a satisfactory level. ______
2. If given the opportunity, I would like to work on the team marketing proposal task some more. ______
3. I have not completed the meeting notes preparation task to a satisfactory level. ______
4. If I have more time, I would like to work on the meeting notes preparation task. ______
5. I have finished preparing the team budget for the budget preparation task. ______
6. I would not want to continue working on the budget preparation task even if it is unfinished and I have extra time. ______
7. I have calculated the donations from everyone for the donation calculation task. ______
8. Given the opportunity, I would like to work on the donation calculation task some more to complete it. ______
9. I have completed the brainstorming task to the best of my ability. ______
10. If I have more time, I would like to keep working on the brainstorming task. ______
11. I have finished answering all the questions for the research task. ______
12. I would not want to continue working on the research task even if it is unfinished and I have extra time. ______
Perceptions of Feedback Scale\textsuperscript{11}

Please indicate whether you agree or disagree with the following statements using the scale:

\begin{center}
\begin{tabular}{ll}
5 & Strongly Agree \\
4 & Agree \\
3 & Neither Agree nor Disagree \\
2 & Disagree \\
1 & Strongly Disagree \\
\end{tabular}
\end{center}

1. The feedback was an accurate evaluation of my performance. ______
2. I do not feel the feedback reflected my actual performance. ______
3. I believe the feedback concerning my performance was correct. ______
4. The feedback was consistent with how I felt I performed. ______
5. The feedback was not a true assessment of my own work. ______
6. I am satisfied with the feedback concerning my own work. ______
7. The feedback I received about my own performance helped me learn how I could perform my own work better. ______
8. The feedback was an accurate evaluation of our team’s performance. ______
9. I do not feel the feedback reflected our team’s actual performance. ______
10. I believe the feedback concerning our team’s performance was correct. ______
11. The feedback was consistent with how I felt our team performed. ______
12. The feedback was not a true assessment of our team’s work. ______
13. I am satisfied with the feedback concerning our team’s work. ______
14. The feedback I received about our team’s performance helped me learn how we could perform our work better. ______

\textsuperscript{11} Used as control variables. Perceived feedback accuracy adopted from Stone et al., (1984) and Keeping and Levy (2000). Perceived individual feedback accuracy is the average of items 1-5, perceived group feedback accuracy is the average of items 8-12. Individual feedback satisfaction is item 6, group feedback satisfaction is item 13. Individual feedback utility is item 7, group feedback utility is item 14.
APPENDIX F

HUMAN SUBJECTS APPROVAL

September 8, 2004

Chu Hisiang Chang
Psychology Department
The University of Akron
Akron, Ohio 44325-3301

Chu Hisiang Chang:
The University of Akron's Institutional Review Board for the Protection of Human Subjects (IRB) completed a review of the protocol entitled "Cognitive and Motivational Processes of Transformational Leadership". The IRB application number assigned to this project is 20040902.

The protocol was reviewed on September 8, 2004 and qualified for exemption from continuing IRB review. The protocol represents minimal risk to subjects and matches the following federal category for exemption:

(2) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless: (i) information is recorded in such a manner that subjects can be identified, directly or through identifiers linked to subjects; AND (ii) any disclosure of responses outside the research could reasonably place the subjects at risk of civil or criminal liability or be damaging to subjects' financial standing, employability or reputation.

Enclosed is a copy of the informed consent document, which the IRB has approved for your use in this research.

Annual continuation applications are not required for exempt projects. However, you must immediately notify the IRB if any changes or modifications are made in the study's design or procedures that do not fall within one of the categories exempted from the regulations. Any such changes or modifications must be reviewed and approved by the IRB prior to their implementation.

Please retain this letter for your files. If the research is being conducted for a master's thesis or doctoral dissertation, the student must file a copy of this letter with the thesis or dissertation.

Sincerely,

Sharon McWhorter, Associate Director

Cc:
Linda Stubich, Department Chair
Rosalie Hall, Advisor
Phil Allen, IRB Chair