Subordinate Independence: A Boundary Condition on the Effectiveness of Transformational Leadership?

Terry Michael Dockery
Louisiana State University and Agricultural & Mechanical College

Follow this and additional works at: https://digitalcommons.lsu.edu/gradschool_disstheses

Recommended Citation
https://digitalcommons.lsu.edu/gradschool_disstheses/5566

This Dissertation is brought to you for free and open access by the Graduate School at LSU Digital Commons. It has been accepted for inclusion in LSU Historical Dissertations and Theses by an authorized administrator of LSU Digital Commons. For more information, please contact gradetd@lsu.edu.
INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps. Each original is also photographed in one exposure and is included in reduced form at the back of the book.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.
Subordinate independence: A boundary condition on the effectiveness of transformational leadership?

Dockery, Terry Michael, Ph.D.

The Louisiana State University and Agricultural and Mechanical Col., 1993
SUBORDINATE INDEPENDENCE:  
A BOUNDARY CONDITION ON THE EFFECTIVENESS  
OF TRANSFORMATIONAL LEADERSHIP?

A Dissertation

Submitted to the Graduate Faculty of the  
Louisiana State University and  
Agricultural and Mechanical College  
in partial fulfillment of the  
requirements for the degree of  
Doctor of Philosophy  
in  
The Department of Psychology

by

Terry Michael Dockery  
B.A., Armstrong State College, 1972  
M.A. in Psychology, Louisiana State University, 1987  
August 1993
ACKNOWLEDGMENTS

Many thanks to Professor Dirk Steiner, who truly is a gentleman and a scholar.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACKNOWLEDGMENTS</td>
<td>ii</td>
</tr>
<tr>
<td>ABSTRACT</td>
<td>iv</td>
</tr>
<tr>
<td>INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>REVIEW OF LITERATURE</td>
<td>5</td>
</tr>
<tr>
<td>Evolution of Transformational Leadership Theory</td>
<td>5</td>
</tr>
<tr>
<td>Transactional and Transformational Leadership</td>
<td>7</td>
</tr>
<tr>
<td>Transactional Leadership Factors</td>
<td>11</td>
</tr>
<tr>
<td>Transformational Leadership Factors</td>
<td>13</td>
</tr>
<tr>
<td>Previous Transformational Leadership Research</td>
<td>17</td>
</tr>
<tr>
<td>Level of Analysis</td>
<td>19</td>
</tr>
<tr>
<td>Subordinate Independence as a Boundary Condition</td>
<td>20</td>
</tr>
<tr>
<td>The Present Study</td>
<td>25</td>
</tr>
<tr>
<td>Hypotheses</td>
<td>29</td>
</tr>
<tr>
<td>METHOD</td>
<td>31</td>
</tr>
<tr>
<td>Sample</td>
<td>31</td>
</tr>
<tr>
<td>Procedure</td>
<td>31</td>
</tr>
<tr>
<td>Measures</td>
<td>32</td>
</tr>
<tr>
<td>RESULTS</td>
<td>41</td>
</tr>
<tr>
<td>Measures</td>
<td>41</td>
</tr>
<tr>
<td>Hypotheses</td>
<td>44</td>
</tr>
<tr>
<td>DISCUSSION</td>
<td>57</td>
</tr>
<tr>
<td>SUMMARY AND CONCLUSIONS</td>
<td>66</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>69</td>
</tr>
<tr>
<td>APPENDIX A INDEPENDENCE</td>
<td>77</td>
</tr>
<tr>
<td>APPENDIX B TRANSFORMATIONAL LEADERSHIP</td>
<td>83</td>
</tr>
<tr>
<td>APPENDIX C SATISFACTION WITH THE LEADER</td>
<td>86</td>
</tr>
<tr>
<td>APPENDIX D EFFECTIVENESS OF THE LEADER</td>
<td>87</td>
</tr>
<tr>
<td>APPENDIX E EXTRA EFFORT DUE TO THE LEADER</td>
<td>88</td>
</tr>
<tr>
<td>APPENDIX F ORGANIZATIONAL CITIZENSHIP BEHAVIOR</td>
<td>89</td>
</tr>
<tr>
<td>APPENDIX G SUBORDINATE PERFORMANCE</td>
<td>90</td>
</tr>
<tr>
<td>APPENDIX H PERMISSION TO REPRODUCE 16PF ITEMS</td>
<td>91</td>
</tr>
<tr>
<td>VITA</td>
<td>92</td>
</tr>
</tbody>
</table>
The present study hypothesized that subordinate independence would act as a boundary condition on the effectiveness of transformational leadership; that is, that independence would moderate the relationship between transformational leadership and several dependent variables. More specifically, subordinates who responded favorably to transformational leaders were expected to be low in independence. The dependent variables employed in the study included subordinate reactions to the leader (satisfaction with the leader, perceived effectiveness of the leader, and willingness to exert extra effort due to the leader), individual subordinate performance, and discretionary subordinate organizational citizenship behavior.

Study results did not support the hypotheses at the .05 level of significance. These results are interpreted as evidence suggesting that subordinate independence is not a boundary condition on the effectiveness of transformational leadership in most typical work settings; that subordinates' level of independence is not a significant factor in determining whether or not they respond favorably to a transformational leadership style.
Recently the theory of transformational leadership has generated great interest, both in academic circles and in the popular press (Graham, 1988). In attempting to improve the relatively small variance in leadership outcomes (i.e., unit satisfaction, effectiveness) accounted for heretofore, transformational leadership theory was advanced with the intent of bridging the gap in leadership theory and research between the approach of social and organizational psychology and the approach of political science and psychohistory (Bass, 1985a).

Specifically, social and organizational psychology focus on leaders in small groups or in complex organizations, while political science and psychohistory focus on world-class leaders. Transformational leadership theory attempts to understand what makes the performance of world-class leaders so remarkable (e.g., Mahatma Gandhi's leadership of India to a national identity, John F. Kennedy's leadership of the United States to a new national pride and awareness of its role as a world leader, Lee Iacoca's role in the resurrection of the Chrysler Corporation), and to apply this understanding to its primary focus on leaders in small groups and in complex organizations (Bass, 1985a).
Furthermore, sufficient data are available to demonstrate that transformational leadership is not limited to world class leaders, or even to CEO's and upper level management (Avolio, Waldman, & Einstein, 1988). Evidence also exists of frequently observed transformational leadership behaviors at widely varying levels in educational, military, industrial, and college settings (Avolio & Bass, 1988; Bass, Waldman, Avolio, & Bebb, 1987; Komives, 1991a; Waldman & Bass, 1987; Waldman, Bass, & Einstein, 1987), and women have been found to be equally as capable of transformational leadership as men (Avolio & Bass, 1988; Komives, 1991b). Originally inspired by the theses of Downton (1973) and Burns (1978) on charismatic political leaders, transformational leadership is conceptualized as an externally observable and trainable set of behaviors which allows leaders to charismatically transform followers and inspire extraordinary effort in the pursuit of organizational objectives (Bass, 1985a).

The main thrust of previous research in transformational leadership has generally attempted to establish (a) its usefulness in explaining variance in positive outcomes (e.g., subordinate satisfaction, superior and subordinate ratings of leader effectiveness) beyond that of "transactional" or contingent-reward leadership theories (Hater & Bass, 1988; Seltzer & Bass,
1990), or (b) its relationship to various positive outcomes, such as subordinate satisfaction/perceptions of leader effectiveness (Avolio, et al., 1988; Hater & Bass, 1988; Seltzer & Bass, 1990; Waldman et al., 1987; Yammarino & Bass, 1990), or subordinate effort/performance (Avolio et al., 1988; Clover, 1990; Yammarino & Bass, 1990). Though there have been repeated calls for research investigating the situations in which transformational leadership is most effective and the process by which it operates (e.g., Avolio & Bass, 1988; Bass, 1985a/b; Yammarino & Bass, 1990), little attention has been given to these areas of inquiry to date.

In answer to this need, the present research proposes a test of a hypothesis that has been advanced by several theorists (Demause, 1982; Galanter, 1982; Katz & Kahn, 1978) including Bernard Bass (1985b), the originator of transformational leadership theory. This hypothesis concerns the respective personalities of subordinates who either follow or resist charismatic or transformational leaders. The primary question addressed here is: do subordinates who respond positively to transformational leaders have personalities that predispose them to be dependent on others, therefore suggesting that subordinate personality is a boundary condition on the effectiveness of transformational leadership?
Following is an examination of the transformational leadership literature leading to the hypotheses of the present research. First, the evolution of transformational leadership theory is discussed. Next, the distinction between transformational and transactional leadership is explored, and the factors comprising each of these are detailed. Several relevant transformational leadership issues which bear directly on the present research are then examined. These include appropriate level of analysis, the importance of subordinate personality, and recent developments in personality trait theory. Finally, the hypotheses, method, and analyses are outlined.
The Evolution of Transformational Leadership Theory

Early leadership theorists searched for enduring traits that made for great leaders (see Landy, 1983; Yukl, 1981), but results were seen as inconsistent (Mann, 1959; Stogdill, 1974). Attention then shifted to a search for specific behaviors that effective leaders exhibited (Shartle, 1956), and behavior theorists found that most leadership behavior could be accounted for by the two constructs of consideration and initiating structure (Fleishman, 1953).

However, studies in this area still obtained mixed results (e.g., Fleishman & Harris, 1962), and the realization that other variables moderate the relationship between leader behavior and leader effectiveness (e.g., Kerr, Schriesheim, Murphy, & Stogdill, 1974; Schriesheim & Murphy, 1976) resulted in situational leadership theory. Situational leadership theorists focused on how environmental factors affect leader effectiveness. The primary situational theories include Fiedler's (1967) contingency model, path-goal theory (Evans, 1970; House, 1971), Vroom and Yetton's (1973) normative model, and Kerr and Jermier's (1978) substitutes for leadership theory. These theories generally identify contingencies in a particular
situation that determine which leader traits and behaviors make for effective leadership in that situation.

Next, out of a concern by theorists that the role of the follower in determining positive organizational outcomes had not been given enough weight, reciprocal theory emerged. More specifically, the Leader-Member Exchange model of leadership (Dansereau, Cashman, & Graen, 1973) maintains that leaders treat different subordinates differently. Therefore, instead of assuming that leaders have an average leadership style that they use with all subordinates, each leader-subordinate dyad is examined separately.

Transformational leadership theory incorporates and builds on previous leadership theory. Bass proposed that enduring behavior patterns (i.e., personality) are important in determining leader behavior and subordinate responses to this behavior. Focusing on specific leadership behaviors, Bass (1985a) developed the Multifactor Leadership Questionnaire as a measure of leadership, and concern for both relationships and task accomplishment is reflected in the theory. Appropriate decision making is addressed as an important aspect of leadership, and Bass' theory also emphasizes the importance of individualized interactions between leaders and followers.
Furthermore, transformational leadership theory extends previous leadership theory. Bass (1985a) maintains that previous leadership theory envisions leadership as a transactional process in which leaders exchange rewards valued by subordinates (e.g., pay, promotion) for subordinate performance behaviors valued by the leader. Bass (1985a) posits that previous theory, though useful in explaining average performance in work situations, fails to account for instances of exceptional performance by subordinates, particularly in the absence of exceptional external rewards.

**Transactional and Transformational Leadership**

Leadership or management? Some theorists have now made a distinction between true leadership behavior and the more general terms "management" (Mintzberg, 1973) or "supervision" (Graham, 1988; Hunt, 1984; Jacobs, 1971; Jago, 1982). Recently, Graham (1988) maintained that transformational leadership theory is the only leadership theory attempting to account for true leadership behavior; that is, behavior which results in an inspired subordinate who becomes self-motivated and self-rewarding in achieving organizational goals. Graham posited that other leadership theories are only accounting for external contingent-reward supervision/management behavior from superiors.
As discussed above, most of the previous theory and research in the leadership area tends to view leadership as a transactional process in which leaders reward or punish subordinates contingent upon their performance on goals valued by the leader (Bass, 1985a). However, numerous theorists and researchers have recognized that the complete study of leadership must include more than an equitable external exchange relationship between a supervisor and subordinate (e.g., Bennis, 1982; House, 1977; Katz & Kahn, 1966; Weber, 1922/1963; Zaleznik, 1977).

Bass and his colleagues consider the external transactional leader-subordinate exchange process to be essential and necessary for truly high-level leader performance, but not sufficient. That is, transactional leadership skills are viewed as necessary for the day-to-day supervision of employee goal attainment, but not sufficient to motivate highest-level employee performance (Bass, 1985a).

Furthermore, transformational leadership is viewed as a special case of transactional leadership in which a leader emotionally energizes subordinates and inspires them to extraordinary effort in achieving a vision or mission which serves as a goal or objective (Hater & Bass, 1988). This vision or sense of mission becomes both a motivator and a form of internal self-reward for
subordinates (Avolio & Bass, 1988). It is common, however, for effective transformational leaders to rate high in external transactional leadership as well (Bass, 1985a).

A subordinate who responds positively to a transformational leader should exhibit a noticeable step-up in level of effort expended in the pursuit of organizational goals (Bass, 1985a). Bandura's (1982) research in self-efficacy explains this change in terms of subordinates providing their own inducements to action through self-reinforcement and self-regulation. Specifically, the sense of purpose and mission imparted by the transformational leader becomes a source of self-reinforcement and self-regulation for the subordinate in achieving organizational goals.

Similarly, Opponent-Process Theory (e.g., Solomon, 1980), which posits the existence of an emotional homeostasis about which emotional highs and lows tend to balance each other, would account for a subordinate's heightened effort in terms of establishing a new homeostasis at a higher energy level. This higher emotional homeostatic level is energized by the influence of the transformational leader.

In this same vein, Maslow's Need Hierarchy Theory (Maslow, 1943, 1970) would explain this heightened effort from subordinates as a movement away from lower-level
needs and toward higher-level needs. Specifically, subordinates would be influenced by the transformational leader to place less emphasis on safety and security needs and more emphasis on self-actualization needs.

To show the desire for more transformational leadership in American business and industry, Bass (1985b) pointed to a survey of 845 nationally-representative working Americans which found that most workers like and respect their managers, but feel that management generally does not know how to motivate employees to do their best. Although 70% of the sample endorsed the work ethic, only 23% said they were working as hard as they could in their jobs. Furthermore, only 9% agreed that their performance was motivated by transactional processes. Most of the workers maintained that there was actually very little connection between how much they were paid and how hard they worked on their jobs.

Assessing transformational leadership. In addition to surveying the leadership literature (Bass, 1981), Bass (1985a) conducted an open-ended survey of 70 senior business executives to elicit descriptions of transactional and transformational leadership. This survey resulted in 73 descriptive behaviors and attitudes. A sample of 196 senior Army officers at the Army War College were then asked to rate how often their
superiors displayed these behaviors and attitudes. Factor analysis of these responses resulted in five primary factors which accounted for 90% of the common variance in leadership behavior. Two of the factors are transactional in nature, and the other three are transformational. These factors have been confirmed in separate factor analyses of 360 managers (Bass, 1985a) and 54 managers (Hater & Bass, 1988) in business settings. These factor analyses resulted in the construction of the Multifactor Leadership Questionnaire (MLQ; Bass, 1985a), a survey instrument which is completed by leaders' subordinates to obtain a rating of leadership style. Following are descriptions of the factors.

**Transactional Leadership Factors**

**Contingent reward.** This refers to leaders' rewarding subordinates with valued outcomes (e.g., pay, promotion) if their performance is satisfactory. Leaders generally engage in setting performance goals, clarifying the path to achieving these goals, and providing feedback on subordinates' progress. This type of leadership is perhaps best represented by path-goal theory (Evans, 1970; House, 1971). Contingent reward has been shown to positively affect subordinate job satisfaction and performance (Podsakoff, Todor, & Skov, 1982).
Management-by-exception. This refers to employing a "hands off" policy toward subordinates as long as performance goals are being met. If performance goals are not met, the leader may employ criticism and discipline (Bass, 1985a).

Further, Hater and Bass (1988) distinguished between active and passive management-by-exception. Passive management-by-exception was just described above, whereas a leader employing active management-by-exception is more vigilant concerning any deviations from performance and is more likely to look for areas which could be improved. Management-by-exception (contingent punishment) has been found to have either a neutral (Podsakoff et al., 1982) or negative (Bass, 1985a) effect on subordinate satisfaction and performance.

To summarize, traditional leadership theory is based primarily on external contingent reward and management by exception processes (Bass, 1985a). Essentially, a leader rewards satisfactory performance and corrects or punishes unsatisfactory performance. By contrast, the following transformational leadership factors attempt to account for instances of charismatically-inspired extraordinary subordinate effort and performance (Bass, 1985a; Burns, 1978).
Transformational Leadership Factors

Charisma. Charisma is conceptualized as the personal magnetism of a leader which moves followers to extreme loyalty and devotion. Charismatic leaders enjoy a measure of unqualified trust from subordinates, who often wish to identify with the leader and his/her goals and values (Bass, 1985a). Charismatic leaders instill pride, faith, and respect in subordinates, and impart a sense of mission to them (Hater & Bass, 1988). In particular, such leaders articulate an attractive vision and shared frame of reference in subordinates (Bass, 1985a).

Charismatic leaders serve as role models for subordinates by displaying self-confidence and a dedication to a set of beliefs. They set high performance expectations for subordinates, and express an unwavering confidence that these expectations can be fulfilled (Bass, 1985a).

Howell and Frost (1989) presented evidence of the effectiveness of charismatic leader behaviors. In a laboratory study employing business-simulation exercises, individuals exposed to charismatic leader behaviors evidenced significantly higher performance than those who were exposed to other types of leadership.

Charisma is preeminent in establishing a leader as transformational (Bass, 1985a). However, Bass (1985a)
cautioned that charisma alone is not sufficient to transform followers. Rather, this is accomplished by the combination of charisma with other transformational factors.

Closely related to charisma, Bass (1985a) presented inspirational leadership as a subfactor within charismatic leadership. Inspirational leadership is conceptualized as the non-intellectual, emotionally arousing and motivating component of transformational leadership. Inspirational leaders often appeal to faith rather than reason, and generally rely on various mechanisms of social reinforcement and confidence-building rather than logical discourse (Bass, 1985a).

Though not emerging as a freestanding factor because of its high correlation with charismatic leadership, inspirational leadership is often assessed and treated separately in the transformational leadership literature because of its practical usefulness in leadership training and development (Bass & Stogdill, 1990). Bass (1985a) also maintained that inspirational leadership deserves separate attention because it can be exhibited in the absence of charismatic leadership. Though devoid of charismatic magnetism or likeableness, leaders may still inspire followers through emotional appeals to achievement, affiliation, power, and altruism motives, or
through the use of persuasive symbols and images in communications (Bass, 1985a).

Further, leaders can inspire through an orientation toward action rather than toward constraints and precedents (Bass, 1985a). Other methods of inspiring include making followers believe they can accomplish difficult tasks, persuading them that their mission is important, giving pep talks, and setting an example of dedication (Yukl & Van Fleet, 1982).

**Individualized consideration.** This refers to a leader's concern about the personal development of each individual subordinate. A leader may provide teaching, coaching, or mentoring to subordinates in various ways. For example, a leader can offer congratulations for meeting performance goals, constructively point out problem areas, or assign special projects that make use of a subordinate's special talents or that allow an opportunity for personal growth. This process can instill subordinates with sharply increased confidence in their ability to achieve a newly acquired mission or vision (Bass, 1985a).

Ample evidence exists for the positive effects of leader consideration behavior on subordinates (e.g., Fleishman, 1973; Fleishman, Harris, & Burtt, 1955). Individualized consideration takes this phenomenon to its highest level by emphasizing the unique nature of each
leader-subordinate relationship. In this manner transformational leadership theory incorporates the processes of reciprocal theories of leadership, such as Leader-Member Exchange Theory (e.g., Dansereau, Graen, & Haga, 1975).

Intellectual stimulation. This refers to the leader's ability to convince followers to rethink their ideas and values, and to look at old problems in new ways. New norms are often imparted which form the foundation for action toward a new mission. The leader emphasizes problem-solving behavior and reasoning before action, and models these behaviors for subordinates (Bass, 1985a). Similarly, Katz and Kahn (1978) also maintained that a leader who imparts a sense of mission to subordinates can inspire them to internalize organizational goals and values by integrating them with their personal goals and values.

The complete transformational leader. Transformational leaders will evidence some combination of the primary transformational leadership factors of charisma (including inspirational leadership), individualized consideration, and intellectual stimulation. Again, charisma alone will not transform followers, and leaders who rate high on transformational factors may rate high on transactional factors as well. The transactional and transformational factors are
conceptually complementary, rather than contradictory (Bass, 1985a).

**Previous Transformational Leadership Research**

Accounting for incremental variance. In a study of a major U.S. express package delivery company, Hater and Bass (1988) employed hierarchical regression and found that transformational leadership added significantly to the prediction of subordinate satisfaction with leaders and ratings of leader effectiveness beyond that of transactional leadership behavior. In addition, leaders who were more transformational were rated as higher-performing by their superiors. Similarly, Seltzer and Bass (1990) studied managers and their subordinates from varied business settings, and hierarchical regression results supported the transformational leadership model as adding significantly to the traditional Ohio State leadership dimensions of consideration and initiating structure (Fleishman et al., 1955) in explaining the variance of subordinates' satisfaction with a leader and subordinates' ratings of leader effectiveness.

In a study of leadership among United States Navy officers, Waldman, Bass, and Yammarino (1990) found that transformational leadership added unique variance beyond that of transactional leadership in explaining superiors' performance appraisals of leader effectiveness as well as subordinate perceptions of leader effectiveness.
Further, Yammarino and Bass (1990) found transformational leadership to be more strongly associated with individual follower effort, satisfaction with a leader, and perceived effectiveness of a leader than either transactional or laissez-faire (hands off) leadership. Establishing the link with positive outcomes. Howell and Frost (1989) conducted a laboratory study of business students completing business-simulation exercises, and reported higher individual task performance, higher task satisfaction, and lower role conflict for participants who had charismatic leaders as compared to those who had either considerate or structuring leaders. These results were consistent regardless of the manipulated directionality of group-productivity norms.

An industrial study by Waldman et al. (1987) found that subordinates' satisfaction with performance appraisal was significantly positively correlated with how transformational they rated their leaders. Additionally, a significant positive correlation was found between transformational leadership and subordinate performance.

Avolio et al. (1988) conducted a semester-long business-simulation game among teams of MBA students, and reported results similar to those found in industrial settings. Specifically, transformational leadership
ratings of a leader were positively correlated with subordinate satisfaction with the leader and subordinate ratings of leader effectiveness. Furthermore, teams whose leaders were rated as more transformational outperformed those teams whose leaders were rated as less transformational. Finally, though not statistically significant, Clover (1990) found that higher-performing squadrons of the United States Air Force tended to rate their leaders as more transformational (p = .10).

Level of Analysis

Transformational leadership theory is ambitious insofar as it purports to account for performance beyond expectations at the individual, group, and organizational levels. Transformational leaders can inspire extraordinary effort in individual subordinates through dyadic interactions, or they can charismatically appeal to entire groups of subordinates. At the most macro level, transformational leadership within an organization can inspire extraordinary organizational performance (Bass, 1985a).

In attempting to identify the level of analysis at which the transformational process primarily occurs, recent empirical studies have supported a conceptualization of the transformational process as operating primarily at the individual level rather than at the group level (Avolio & Yammarino, 1990; Bass,
201985a; Seltzer & Bass, 1990; Yammarino & Bass, 1990; Yammarino & Dubinsky, 1992). Further, studies of individual-level outcomes have generally yielded positive results (e.g., Hater & Bass, 1988; Waldman et al., 1987). Accordingly, the present research will examine the transformational leadership process at the individual level of analysis.

Subordinate Independence as a Boundary Condition

The romance of leadership. As noted previously, there have been repeated calls for research investigating the situations in which transformational leadership is most effective and the process by which it operates (e.g., Avolio & Bass, 1988; Bass, 1985a,b; Seltzer & Bass, 1990; Yammarino & Bass, 1990). In this regard, Meindl, Erlich, and Dukerich (1987) recently addressed the tendency of leadership research to simultaneously romanticize leaders while underestimating the importance of followers in determining positive outcomes in organizations.

Similarly, Kerr and Jermier (1978) asserted that subordinate characteristics are at least as important as leadership in determining group outcomes. Further, implicit leadership theorists have long maintained that followers' perceptions of leadership are the force that empowers leaders (Calder, 1977) and have demonstrated that the effectiveness of leadership can sometimes be as
much a function of followers' perceptions as of
leaders' actions (e.g., Rush, Thomas, & Lord, 1977).

The role of subordinate personality. As discussed
previously, the research of Bass and his colleagues has
suggested that the transformational process between
leaders and subordinates is best investigated as a
phenomenon that occurs at the individual level of
analysis. Specifically, although there tends to be
agreement among subordinates on whether a leader is
transformational (e.g., Hater & Bass, 1988; Waldman et
al., 1990; Yammarino & Bass, 1990), each subordinate will
have a unique reaction to that leader that is normally
strongly positive or negative (Bass, 1985a).
Subordinates who respond positively to transformational
leadership will be "transformed" as described above,
whereas subordinates who respond negatively to
transformational leaders will tend to resist their
attempts at influence because these subordinates may see
this influence as superfluous or even bothersome (Bass,
1985a).

The present study investigates the potential
moderating effect of subordinate personality on the
relationship between transformational leadership and
several outcome variables. That is, though subordinates
normally agree on whether a leader is transformational,
an individual subordinate's response to that leader may be determined by his or her personality.

**Personality trait theory: New evidence.** Past personality trait (i.e., enduring behavior pattern) research has ostensibly focused primarily on the relationship between leader personality and positive outcomes. Although several leader personality traits were reported to be significant in this regard, reviews of the leadership literature by Stogdill (1948) and Mann (1959) led them to the conclusion that personality traits did not consistently differentiate leaders from non-leaders across situations.

Lord, DeVader, and Alliger (1986) have since pointed out that these earlier reviews by Stogdill (1948) and Mann (1959) were concerned with leader emergence (i.e., subordinates's perceptions of the leader), and that the reviews have since been grossly misinterpreted as pertaining to leader effectiveness (i.e., outcome measures of leader performance). Further, through the meta-analytic technique of validity generalization, Lord et al. (1986) identified several leader personality traits that are strongly related to leader emergence.

More recently, several personality dimensions have been found to be significantly related to important aspects of job performance (Day & Bedeian, 1991; Day & Silverman, 1989). This new evidence suggests that trait
theory may have been dismissed prematurely by leadership researchers, and that it may still contribute to our understanding of the leadership phenomenon, whether applied to leaders or to their subordinates.

**Testing a longstanding hypothesis.** Bass and his colleagues hypothesized that individual differences among subordinates are an important determinant of whether a subordinate will be emotionally energized (i.e., "transformed") by a transformational leader (Avolio & Bass, 1988; Bass, 1985a; Seltzer & Bass, 1990; Yammarino & Bass, 1990). More specific to the present research, Bass (1985b) predicted that subordinates who are most easily transformed would have "highly dependent personalities" (p. 39).

This prediction was previously advanced by Katz and Kahn (1978), who maintained that followers who respond positively to charismatic leaders do so as a way to avoid personal responsibility for the demanding task of evaluating a myriad of difficult choices in their environments. Instead, these followers prefer to be dependent upon their leaders to make important decisions that affect their lives. Bass' (1985b) prediction is also in keeping with previous work by theorists from other disciplines who have suggested that followers of charismatic leaders may tend toward some psychological distress which would make them dependent on others.
(Galanter, 1982) or may be from inadequate family backgrounds that leave them dependent on love or approval from substitute parent figures (Demause, 1982).

Previous research provides support for several facets of personality as affecting response to leadership. Further, all of these facets of personality are subsumed under the independence-dependence dimension (Institute for Personality and Ability Testing, Inc., 1991).

In a study of undergraduate men, Singer and Singer (1986) found that a strong need for affiliation (to form strong attachments to others) was significantly correlated with preference for leaders who were more transformational. In addition, participants who were less conforming showed a preference for leaders who displayed intellectual stimulation of subordinates (a transformational leadership behavior).

Social psychological research has also provided evidence that conformity is important in determining people's willingness to change their attitudes and opinions (e.g., Petty & Cacioppo, 1981). Further research has found that low self-esteem is an important determinant of willingness to obey authority figures unquestioningly (e.g., Milgram, 1963, 1974).
The above theory and research suggest the possibility that subordinates' personalities may indeed affect their responses to transformational leadership. In this way, then, subordinate independence may act as a boundary condition on the effectiveness of transformational leadership.

More recently, however, Bass et al. (1987) have reported that there is a "falling dominoes effect" in which leaders at higher hierarchical levels who are more transformational tend to have subordinate leaders who are more transformational. These results suggest that perhaps there is a more universal positive reaction of subordinates to transformational leadership and that a subordinate's personality may not be as important a variable in determining the response to a transformational leader as Bass and others have hypothesized. These contrasting views point to a need for further clarification of the potential effects of subordinates' personalities on their responses to transformational leadership. This will be the primary focus of the present study.

The Present Study

As discussed previously, Bass and his colleagues have suggested that each subordinate has a unique response to a transformational leader (Bass, 1985a, Seltzer & Bass, 1990; Yammarino & Bass, 1990). Thus,
depending upon how subordinates respond to transformational leaders, they will either be emotionally energized and transformed, or they will resist them.

To detect the transformed subordinate, Bass and his colleagues have attempted appropriately to operationalize and measure performance beyond expectations. In this regard, Avolio and Bass (1988) pointed out that finding appropriate criterion measures to detect transformational leadership effects has been a major challenge for previous research.

It is clear that there are multiple possible outcomes of leadership, and the present study employs several outcome variables which have been found to be of value in detecting performance beyond expectations. The first is bottom-line performance (Avolio et al., 1988). However, because overall employee performance is affected by a multitude of factors, subordinate reactions to transformational leaders have also been used. These include willingness to expend extraordinary effort at work due to the influence of a leader, satisfaction with a leader, and perceived effectiveness of a leader (Avolio & Bass, 1988; Seltzer & Bass, 1990; Seltzer et al., 1989; Yammarino & Bass, 1990).

In addition, recent study in the area of organizational citizenship behavior (OCB) suggests that it may be useful in measuring performance beyond
expectations. OCB is defined as work-related behaviors that are discretionary, are not directly recognized by the formal reward system, and which in general facilitate the efficient and effective functioning of the organization (Organ, 1988). Smith, Organ, and Near (1983) found that a leader's individualized support behavior, one of the leader behaviors identified as transformational by Bass (1985a), has a direct effect on some forms of employee citizenship behavior (i.e., conscientiousness). Similarly, Podsakoff, MacKenzie, Moorman, and Fetter (1990) reported that transformational leadership had an indirect effect on OCB through the mediator of subordinate trust in the leader. Therefore, organizational citizenship behavior is also included as a leadership outcome variable in the present study.

Considered in toto, previous work suggests the conceptualization of the transformational process as presented in Figure 1. Subordinates' independence should moderate the relationship between their exposure to transformational leadership and their satisfaction with the leader, their perception of the effectiveness of the leader, their willingness to expend extraordinary effort at work due to the leader, their organizational citizenship behavior, and their overall appraised work performance. That is, subordinates' independence will influence how they respond to transformational leadership
Transformational leadership

Subordinate independence

Satisfaction with leader

Effectiveness of leader

Extra effort due to leader

OCB

Appraised performance

FIGURE 1

Conceptual Model of Hypotheses
as assessed by several potential measures of performance beyond expectations. According to Bass and others, a subordinate who is low in independence (i.e., dependent) should respond more positively to a transformational leader, whereas a subordinate who is high in independence should be more likely to resist the influence of a transformational leader (a weaker link between transformational leadership and outcomes).

**Hypotheses**

**Hypothesis 1.** Degree of subordinate independence will moderate the relationship between transformational leadership and subordinate satisfaction with the leader. The relationship between transformational leadership and subordinate satisfaction with the leader will be stronger under conditions of low subordinate independence.

**Hypothesis 2.** Degree of subordinate independence will moderate the relationship between transformational leadership and subordinate perceptions of effectiveness of the leader. The relationship between transformational leadership and subordinate perceptions of effectiveness of the leader will be stronger under conditions of low subordinate independence.

**Hypothesis 3.** Degree of subordinate independence will moderate the relationship between transformational leadership and subordinate willingness to exert extra effort at work due to the leader. The
relationship between transformational leadership and subordinate willingness to exert extra effort at work due to the leader will be stronger under conditions of low subordinate independence.

**Hypothesis 4.** Degree of subordinate independence will moderate the relationship between transformational leadership and subordinate organizational citizenship behaviors. The relationship between transformational leadership and subordinate organizational citizenship behaviors will be stronger under conditions of low subordinate independence.

**Hypothesis 5.** Degree of subordinate independence will moderate the relationship between transformational leadership and subordinate work performance appraisals. The relationship between transformational leadership and subordinate work performance appraisals will be stronger under conditions of low subordinate independence.
METHOD

Sample

Participants in the study were 31 supervisors and 122 subordinates from 24 independent medical offices in a medium-sized city in the southeastern United States. The continuing education department of a local university provided the names of these offices; each of the offices had made use of the continuing education services of the university in the past.

Medical office work groups included in the study were required to have a minimum of three full-time subordinates and a supervisor. Five subordinates were chosen at random if work groups had more than five full-time subordinates. Subordinates were required to have been working under their current supervisor a minimum of 3 months to allow for socialization stability (Katz, 1978; Van Maanen, 1975) and to give supervisors an adequate work sample on which to base performance ratings. Supervisors had a mean age of 40 years, and included 6 males and 25 females. Subordinates had a mean age of 36 years, and included 10 males and 112 females.

Procedure

Subordinates (n = 122) completed a questionnaire assessing their independence, the degree of transformational leadership exhibited by their immediate
supervisors, their satisfaction with the supervisor, and
the effectiveness of the supervisor. The immediate
supervisor of each work group concurrently completed a
questionnaire assessing each subordinate's organizational
citizenship behaviors and work performance.
Approximately 2 months later, the same subordinates (n =
96) completed a second questionnaire assessing their
willingness to exert extraordinary effort at work due to
the supervisor.

Measures

Subordinate personality. Subordinate personality
was measured with appropriate scales from the Sixteen
Personality Factor Questionnaire (16PF, 1949-86; see
Appendix A), first published by Raymond B. Cattell in
1949 (reproduced by permission, see Appendix H). Cattell
used factor analysis to arrive at sixteen primary
personality factors. Independence is conceptualized as a
second-order personality dimension which is a composite
of several of the primary factors (Institute for

The 16PF was chosen for this study for several
reasons. It is designed to be used with normal-
functioning adult populations, it has extensive and well-
established norms, and it is one of the most widely-used
tests of its kind, with thousands of research references
to its credit (Wholeben, 1986). Its reliability and
established criterion relationships are generally good, and it compares favorably with similar instruments used to measure variations in normal personality (Bolton, 1978). The 16PF is the only widely-used normal-functioning personality inventory which provides a specific score on the independence-dependence dimension about which Bass and others have hypothesized. Additionally, it includes a "motivational distortion" correction to scale scores when respondents are deemed to be answering in a socially desirable manner.

Form C of the 16PF was used, for which the independence factor has an average short-term (up to two weeks) test-retest reliability of .82 (Institute for Personality and Ability Testing, Inc., 1991). Each item of the 16PF has three alternative response choices which contribute either 2, 1, or 0 points to the scale score. These raw scores are then converted to stens (range = 1 to 10) to allow comparison with norms.

Following are brief descriptions of: 1) the nine first-order personality factors used to calculate independence, 2) the motivational distortion correction which can be applied to the primary factor scores to compensate for socially desirable responses, and 3) the second-order independence dimension.

Factor E (Submissive vs. Dominant); 6 items. Low scores indicate being humble, easily led, and
accommodating; high scores indicate being assertive, aggressive, and independent-minded.

Factor C (Expedient vs. Conscientious); 6 items. Low scores indicate disregarding rules, cultural demands, and group influence; high scores indicate conforming, moralistic, and rule-bound.

Factor H (Shy vs. Bold); 6 items. Low scores indicate timid, hesitant, and threat-sensitive; high scores indicate venturesome, uninhibited, and "thick-skinned."

Factor L (Trusting vs. Suspicious); 6 items. Low scores indicate accepting of existing conditions and easy to get along with; high scores indicate hard to fool, distrustful, and skeptical.

Factor M (Practical vs. Imaginative); 6 items. Low scores indicate concerned with "down to earth" issues and concerned over detail; high scores indicate creative, absent-minded, and impractical.

Factor N (Forthright vs. Shrewd); 6 items. Low scores indicate open, genuine, and unpretentious; high scores indicate polished, diplomatic, and calculating.

Factor O (Self-assured vs. Apprehensive); 6 items. Low scores indicate secure, free from guilt, and self-satisfied; high scores indicate insecure, guilt-prone, and worrisome.
Factor Q1 (Conservative vs. Experimenting); 6 items. Low scores indicate respecting traditional ideas and opposed to change; high scores indicate critically evaluative, open to change, and liberal.

Factor Q2 (Group-oriented vs. Self-sufficient); 6 items. Low scores indicate a liking for and dependence on social approval; high scores indicate a preference for individual decisions and action without regard for social approval.

Motivational distortion correction ("Faking good" vs. truthful); 7 items. Low scores indicate truthful responses; high scores indicate socially desirable responses. With high scores, adjustments are made to primary factor scores to correct for motivational distortion.

Independence (Subduedness vs. Independence); second-order factor which includes 8 primary factors (55 items, including motivational distortion scale below) for men and 6 primary factors (43 items) for women. Low scores indicate group dependent, passive personalities who are likely to need support from others and to orient behavior toward persons who give such support (greater dependence); high scores indicate likely to be aggressive, daring, decisive, and to take the initiative (greater independence). To arrive at the second-order factor of Independence, the above primary factors are
combined according to the following equations, which are supported by a large-scale \((n = 17,381)\) factor analytic cross-validation study (Krug & Johns, 1986).

Males: 
\[
0.53E - 0.14C + 0.34H + 0.23L - 0.14N - 0.17O + \\
0.24Q1 + 0.11Q2
\]

Females: 
\[
0.48E - 0.13G + 0.34H + 0.19M + 0.37Q1 + 0.13Q2 - \\
2.09
\]

**Leadership style.** The Multifactor Leadership Questionnaire (MLQ), Form 8Y (Bass & Avolio, 1990) was used to assess transformational leadership (see Appendix B). This questionnaire is a refinement of the original MLQ, which is supported by factor analysis and based on research by Bass and his associates at the Center for Leadership Studies and at the School of Management at the State University of New York at Binghamton. Coefficient alpha reliabilities for the individual factors normally range from the .70s to the .80s (e.g., Gorham, 1991). Scale anchors have been shown to demonstrate appropriate intervals in measurement (Bass, Cascio, & O'Connor, 1974).

Transformational leadership is composed of charisma, inspirational leadership, intellectual stimulation, and individualized consideration. Mean response scores were calculated for each factor, and factors were further combined to form an overall score for transformational leadership style (e.g., Clover, 1990; Howell & Higgins, 1990).
1990). The response format for this variable is a 5-point Likert scale anchored by Frequently, if not always, Fairly often, Sometimes, Once in a while, and Not at all. Scores may range from 1 to 5. This Likert scale and range are identical for the variables of satisfaction with the leader, effectiveness of the leader, and extraordinary effort at work due to the leader. Higher scores indicate a greater degree of transformational leadership.

**Satisfaction with the leader.** This variable was measured with a two-item scale originally developed by Bass, Valenzi, Farrow, and Solomon (1975, see Appendix C). Coefficient alpha reliabilities are usually in the low .90s (e.g., Bass, 1985a; Seltzer et al., 1989). Higher scores indicate more satisfaction with a leader.

**Effectiveness of the leader.** This variable was measured with a four-item scale also originally developed by Bass et al. (1975, see Appendix D). Coefficient alpha reliabilities are normally in the range of .81-.89 (e.g., Bass et al. 1975; Yammarino & Bass, 1990). Higher scores indicate greater effectiveness of a leader.

**Extraordinary effort at work due to the leader.** This variable was measured by a three-item scale (see Appendix E) developed by Bass (1985a). Coefficient alpha reliabilities usually are in the low .80s (e.g., Bass,
1985a; Yammarino & Bass, 1990). Higher scores indicate more extraordinary effort due to the leader.

OCB. OCB was measured by an eight-item scale (see Appendix F) completed by a subordinate's immediate supervisor. I created this scale by shortening a 24-item scale originally developed by Podsakoff, MacKenzie, Moorman, and Fetter (1990). The time-saving value of a shortened form was deemed desirable in procuring the cooperation of supervisors in rating multiple subordinates in the study. Because the five factors of the original scale are significantly intercorrelated (e.g., MacKenzie, Podsakoff, & Fetter, 1991; Podsakoff et al. 1990), I chose two of the items with the highest factor loadings from each factor to form a 10-item global measure of OCB. The 10-item scale was further reduced to eight items when several participating supervisors suggested that the two items from the civic virtue factor (described below) were not applicable to medical office employees (e.g., "Attends functions that are not required, but help the company image").

Following are brief descriptions of the five OCB factors. Altruism is helping another other person with an organizationally relevant task or problem. Conscientiousness is going well beyond the minimum role requirements of the organization in the areas of attendance, obeying rules and regulations, taking breaks,
and so forth. **Sportsmanship** is tolerating less than ideal circumstances without complaining, and **courtesy** is preventing work-related problems with co-workers from occurring. Finally, **civic virtue** is being involved in and concerned about the life of the organization.

Podsakoff and others (1990) conducted a confirmatory factor analysis of the original 24-item instrument which showed good correspondence with Organ's (1988) theoretical framework for OCB, and reported coefficient alphas above .80 for the four factors included in the present study.

In contrast to the 7-point Likert scale used previously, the present study used a 5-point Likert scale. Most researchers suggest that neither the reliability nor the predictive and concurrent validities of a scale are likely to be affected by this change (Bendig, 1954; Komorita, 1963; Matell & Jacoby, 1971, 1972). The specific anchors used are those recommended by Lemon (1973), which have been demonstrated to be of approximately equal interval. They are **Strongly agree**, **Agree**, **Neither agree nor disagree**, **Disagree**, and **Strongly disagree**. Scores may range from 1 to 5. Higher scores indicate more OCB.

**Subordinate work performance.** This variable was measured with a 3-item scale completed by a subordinate's immediate supervisor. This scale was constructed for the
present study, and consists of supervisor ratings of quantity of performance, quality of performance, and overall performance (see Appendix G). The response format was a 5-item Likert scale anchored by Much better than average, Better than average, Average, Worse than average, and Much worse than average. Scores may range from 1 to 5, with higher scores indicating higher levels of performance.
RESULTS

Measures

Table 1 presents means, standard deviations, ranges, and alpha coefficients of variables. Independence sten scores range from 1 to 10, whereas all other variables range from 1 to 5. Note that coefficient alpha is not deemed an appropriate reliability measure for independence (or any 16PF factors) because a high alpha is dependent upon a high intercorrelation of scale items. Items included in the 16PF factors are intended to have relatively low intercorrelations so as to sample the entire breadth of the personality factor being measured. The most appropriate reliability indexes for Form C of the 16PF are considered to be the published test-retest reliabilities (Cattell, Eber, & Tatsuoka, 1992).

Table 2 presents variable intercorrelations. Positive intercorrelations were obtained among the transformational leadership factors, thus supporting their relationships as parts of the transformational leadership construct. In addition, transformational leadership correlated positively with all dependent variables. Positive intercorrelations were obtained among subordinate-rated dependent variables (satisfaction with the leader, effectiveness of the leader, and
## TABLE 1

Means, Standard Deviations, Ranges, and Alpha Coefficients of Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>Male</th>
<th>Female</th>
<th>Overall</th>
<th>SD</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independence</td>
<td>121</td>
<td>5.85</td>
<td>5.00</td>
<td>5.07</td>
<td>1.82</td>
<td></td>
</tr>
<tr>
<td>Range = 0.52-9.13</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transformational leadership</td>
<td>118</td>
<td>3.39</td>
<td>3.63</td>
<td>3.61</td>
<td>.82</td>
<td>.92</td>
</tr>
<tr>
<td>Range = 1.31-5.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Charisma</td>
<td>119</td>
<td>3.08</td>
<td>3.29</td>
<td>3.27</td>
<td>.95</td>
<td>.70</td>
</tr>
<tr>
<td>Range = 1.0-5.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inspiration</td>
<td>121</td>
<td>3.40</td>
<td>3.68</td>
<td>3.66</td>
<td>.99</td>
<td>.79</td>
</tr>
<tr>
<td>Range = 1.0-5.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intellectual stimulation</td>
<td>121</td>
<td>3.35</td>
<td>3.52</td>
<td>3.51</td>
<td>.90</td>
<td>.74</td>
</tr>
<tr>
<td>Range = 1.0-5.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual consideration</td>
<td>120</td>
<td>3.75</td>
<td>4.06</td>
<td>4.03</td>
<td>.85</td>
<td>.76</td>
</tr>
<tr>
<td>Range = 1.75-5.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfaction</td>
<td>121</td>
<td>4.10</td>
<td>3.91</td>
<td>3.92</td>
<td>1.14</td>
<td>.90</td>
</tr>
<tr>
<td>Range = 1.0-5.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Effectiveness</td>
<td>121</td>
<td>3.73</td>
<td>3.77</td>
<td>3.77</td>
<td>.92</td>
<td>.89</td>
</tr>
<tr>
<td>Range = 1.75-5.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extra effort</td>
<td>96</td>
<td>2.67</td>
<td>2.94</td>
<td>2.92</td>
<td>1.13</td>
<td>.75</td>
</tr>
<tr>
<td>Range = 1.0-5.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OCB</td>
<td>122</td>
<td>3.98</td>
<td>3.76</td>
<td>3.78</td>
<td>.74</td>
<td>.86</td>
</tr>
<tr>
<td>Range = 2.0-5.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance</td>
<td>122</td>
<td>4.27</td>
<td>4.01</td>
<td>4.04</td>
<td>.69</td>
<td>.89</td>
</tr>
<tr>
<td>Range = 2.33-5.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
TABLE 2

Intercorrelations of Study Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>2a</th>
<th>2b</th>
<th>2c</th>
<th>2d</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Independent variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Independence</td>
<td>--</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Transformational leadership</td>
<td>-06</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2a. Charisma</td>
<td>-03</td>
<td>91**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2b. Inspiration</td>
<td>-04</td>
<td>88**</td>
<td>74**</td>
<td></td>
<td></td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2c. Intellectual stimulation</td>
<td>-03</td>
<td>90**</td>
<td>73**</td>
<td>74**</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2d. Individual consideration</td>
<td>-15</td>
<td>86**</td>
<td>74**</td>
<td>63**</td>
<td>72**</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Dependent variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Satisfaction</td>
<td>-10</td>
<td>73**</td>
<td>66**</td>
<td>63**</td>
<td>60**</td>
<td>69**</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Effectiveness</td>
<td>-11</td>
<td>76**</td>
<td>67**</td>
<td>69**</td>
<td>63**</td>
<td>69**</td>
<td>87**</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Extra effort</td>
<td>-05</td>
<td>64**</td>
<td>60**</td>
<td>60**</td>
<td>58**</td>
<td>49**</td>
<td>62**</td>
<td>58**</td>
<td>--</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. OCB's</td>
<td>-26**</td>
<td>26**</td>
<td>21*</td>
<td>20*</td>
<td>20*</td>
<td>34**</td>
<td>23**</td>
<td>22*</td>
<td>02*</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>7. Performance</td>
<td>-00</td>
<td>21*</td>
<td>14</td>
<td>16</td>
<td>20*</td>
<td>25**</td>
<td>14</td>
<td>05</td>
<td>16</td>
<td>47**</td>
<td>--</td>
</tr>
</tbody>
</table>

*p < .05; **p < .01. Note: Decimals omitted.
willingness to exert extra effort due to the leader) and between supervisor-rated dependent variables (OCB and performance). Further, subordinate performance correlated positively with intellectual stimulation, individual consideration, and OCB. Finally, OCB correlated negatively with independence.

Hypotheses

Hypotheses were tested by means of regression analysis. A separate regression was conducted for each of the five dependent variables of 1) satisfaction with the leader, 2) perceived effectiveness of the leader, 3) extra effort due to the leader, 4) OCB, and 5) subordinate performance. The independent variables entered for each of these five regressions were transformational leadership, subordinate independence, and the interaction of transformational leadership and subordinate independence. A significant moderator effect of independence would be indicated if the interaction term achieved significance in the regression analysis.

Table 3 presents the regression results. Despite adequate power (.80) to detect a moderate effect size (.30; Gatsonis & Sampson, 1989), subordinate independence failed to moderate the relationships between transformational leadership and the hypothesized dependent variables at the .05 level of significance; refuting all five hypotheses. As in previous research,
TABLE 3

Regression Results: Hypotheses

<table>
<thead>
<tr>
<th></th>
<th>b</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction with leader (n = 115, R-square = .53)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Independence</td>
<td>-0.02</td>
<td>-0.11</td>
</tr>
<tr>
<td>Transformational leadership</td>
<td>1.02</td>
<td>3.41**</td>
</tr>
<tr>
<td>Independence*Transformational leadership</td>
<td>-0.00</td>
<td>-0.05</td>
</tr>
<tr>
<td>Effectiveness of leader (n = 115, R-square = .58)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Independence</td>
<td>0.21</td>
<td>1.41</td>
</tr>
<tr>
<td>Transformational leadership</td>
<td>1.20</td>
<td>5.28**</td>
</tr>
<tr>
<td>Independence*Transformational leadership</td>
<td>-0.07</td>
<td>-1.63</td>
</tr>
<tr>
<td>Extra effort due to leader (n = 91, R-square = .41)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Independence</td>
<td>0.00</td>
<td>0.02</td>
</tr>
<tr>
<td>Transformational leadership</td>
<td>0.86</td>
<td>2.43*</td>
</tr>
<tr>
<td>Independence*Transformational leadership</td>
<td>-0.00</td>
<td>-0.05</td>
</tr>
<tr>
<td>Organizational Citizenship (n = 116, R-square = .14)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Independence</td>
<td>0.12</td>
<td>0.69</td>
</tr>
<tr>
<td>Transformational leadership</td>
<td>0.54</td>
<td>2.08*</td>
</tr>
<tr>
<td>Independence*Transformational leadership</td>
<td>-0.06</td>
<td>-1.26</td>
</tr>
<tr>
<td>Performance (n = 116, R-square = .06)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Independence</td>
<td>0.22</td>
<td>1.31</td>
</tr>
<tr>
<td>Transformational leadership</td>
<td>0.47</td>
<td>1.92</td>
</tr>
<tr>
<td>Independence*Transformational leadership</td>
<td>-0.06</td>
<td>-1.28</td>
</tr>
</tbody>
</table>

*p < .05; **p < .01.
transformational leadership was a significant predictor of satisfaction with the leader, perceived effectiveness of the leader, willingness to exert extra effort due to the leader, and OCB.

The lack of support for the hypotheses from the moderated regression analyses prompted additional analyses to further investigate the relationships between the study variables. As previously discussed, other theorists have focused on the relationship between charismatic leadership and subordinate independence (e.g., Demause, 1982; Galanter, 1982; Katz & Kahn, 1978). This suggested the possibility that the charisma factor of transformational leadership when considered alone would interact with subordinate independence to produce a significant moderating effect on the dependent variables. A significant moderator effect would suggest that perhaps it is leader charisma rather than the entire transformational leadership construct which interacts with subordinate independence. A separate regression equation was constructed for each of the five dependent variables. The independent variables included were charisma, independence, and the interaction of charisma and independence. Results are presented in Table 4. Once again, the interaction terms did not achieve significance, failing to provide support for this
### TABLE 4

Regression Results: Independence*Charismatic Leadership Interaction

<table>
<thead>
<tr>
<th>Satisfactory with leader (n = 116, R-square = .44)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Independence</strong></td>
<td>(-0.07)</td>
<td>(-0.41)</td>
</tr>
<tr>
<td><strong>Charismatic leadership</strong></td>
<td>(0.75)</td>
<td>(2.88^{**})</td>
</tr>
<tr>
<td><strong>Independence*Charismatic leadership</strong></td>
<td>(0.01)</td>
<td>(0.14)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Effectiveness of leader (n = 116, R-square = .46)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Independence</strong></td>
<td>(0.10)</td>
<td>(0.79)</td>
</tr>
<tr>
<td><strong>Charismatic leadership</strong></td>
<td>(0.88)</td>
<td>(4.17^{**})</td>
</tr>
<tr>
<td><strong>Independence*Charismatic leadership</strong></td>
<td>(-0.05)</td>
<td>(-1.13)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Extra effort due to leader (n = 91, R-square = .36)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Independence</strong></td>
<td>(-0.04)</td>
<td>(-0.21)</td>
</tr>
<tr>
<td><strong>Charismatic leadership</strong></td>
<td>(0.68)</td>
<td>(2.22^{*})</td>
</tr>
<tr>
<td><strong>Independence*Charismatic leadership</strong></td>
<td>(0.01)</td>
<td>(0.09)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Organizational Citizenship (n = 117, R-square = .11)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Independence</strong></td>
<td>(-0.00)</td>
<td>(-0.01)</td>
</tr>
<tr>
<td><strong>Charismatic leadership</strong></td>
<td>(0.32)</td>
<td>(1.48)</td>
</tr>
<tr>
<td><strong>Independence*Charismatic leadership</strong></td>
<td>(-0.03)</td>
<td>(-0.78)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Performance (n = 117, R-square = .03)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Independence</strong></td>
<td>(0.16)</td>
<td>(1.27)</td>
</tr>
<tr>
<td><strong>Charismatic leadership</strong></td>
<td>(0.34)</td>
<td>(1.69)</td>
</tr>
<tr>
<td><strong>Independence*Charismatic leadership</strong></td>
<td>(-0.05)</td>
<td>(-1.28)</td>
</tr>
</tbody>
</table>

*\(p < .05\); **\(p < .01\).*
alternative conceptualization of subordinate independence as a moderator.

Bass (1985b) predicted that subordinates who are most easily transformed would have "highly dependent personalities" (p. 39). In order to construct a more sensitive test of the potential differences in responses to transformational leadership between low independence and high independence subordinates, the possibility that independence might have a non-linear relationship with transformational leadership that was undetected by the original moderated regression analyses was investigated. For example, perhaps independence scores must be extreme (rather than average) before a significant influence on the relationship between transformational leadership and the dependent variables can be detected.

To test this conceptualization of the moderation effect, a separate regression equation was constructed for each of the dependent variables. The independent variables in these equations were transformational leadership, independence, independence squared, and the interaction of transformational leadership and independence squared. A significant interaction term would suggest that independence was moderating the relationship between transformational leadership and a dependent variable in a non-linear fashion. Results, presented in Table 5, did not produce a significant
Table 5
Regression Results: Transformational Leadership*Non-linear Independence Interaction

<table>
<thead>
<tr>
<th>Satisfaction with leader (n = 115, R-square = .53)</th>
<th>b</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independence</td>
<td>-0.20</td>
<td>-1.08</td>
</tr>
<tr>
<td>Transformational leadership</td>
<td>0.98</td>
<td>5.49**</td>
</tr>
<tr>
<td>Independence Squared</td>
<td>0.01</td>
<td>0.59</td>
</tr>
<tr>
<td>Independence Squared*Transformational leadership</td>
<td>0.00</td>
<td>0.17</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Effectiveness of leader (n = 115, R-square = .59)</th>
<th>b</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independence</td>
<td>-0.20</td>
<td>-1.41</td>
</tr>
<tr>
<td>Transformational leadership</td>
<td>1.02</td>
<td>7.51**</td>
</tr>
<tr>
<td>Independence Squared</td>
<td>0.04</td>
<td>2.15*</td>
</tr>
<tr>
<td>Independence Squared*Transformational leadership</td>
<td>-0.01</td>
<td>-1.40</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Extra effort due to leader (n = 91, R-square = .41)</th>
<th>b</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independence</td>
<td>-0.06</td>
<td>0.24</td>
</tr>
<tr>
<td>Transformational leadership</td>
<td>0.81</td>
<td>3.76**</td>
</tr>
<tr>
<td>Independence Squared</td>
<td>0.00</td>
<td>0.02</td>
</tr>
<tr>
<td>Independence Squared*Transformational leadership</td>
<td>0.00</td>
<td>0.19</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Organizational Citizenship (n = 116, R-square = .14)</th>
<th>b</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independence</td>
<td>-0.19</td>
<td>-1.19</td>
</tr>
<tr>
<td>Transformational leadership</td>
<td>0.36</td>
<td>2.33*</td>
</tr>
<tr>
<td>Independence Squared</td>
<td>0.03</td>
<td>1.31</td>
</tr>
<tr>
<td>Independence Squared*Transformational leadership</td>
<td>-0.00</td>
<td>-0.99</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Performance (n = 116, R-square = .09)</th>
<th>b</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independence</td>
<td>-0.30</td>
<td>2.00*</td>
</tr>
<tr>
<td>Transformational leadership</td>
<td>0.23</td>
<td>1.57</td>
</tr>
<tr>
<td>Independence Squared</td>
<td>0.04</td>
<td>1.99*</td>
</tr>
<tr>
<td>Independence Squared*Transformational leadership</td>
<td>-0.00</td>
<td>-0.40</td>
</tr>
</tbody>
</table>

* p < .05; ** p < .01.
interaction term. The quadratic independence term, however, achieved significance in the regression equation for the dependent variable effectiveness of the leader; suggesting a quadratic relationship between these two variables. In addition, the linear and quadratic independence terms achieved significance in the regression equation for the dependent variable performance; suggesting a relationship between these two variables that contains both linear and quadratic components.

This same non-linear relationship between charismatic leadership and independence was investigated in a similar manner. Results are presented in Table 6, and again were non-significant for the moderator effect. The quadratic independence term achieved significance in the regression equation for the dependent variable of performance, suggesting that independence again evidenced a quadratic non-linear relationship with performance. Scatterplots of the quadratic independence term and the residuals of the relevant dependent variables were generated in an attempt to discern the shape of these relationships, but no clear pattern emerged.

In another attempt to conduct a test of the potential differences between low independence and high independence subordinates, the correlations between transformational leadership and the dependent variables
TABLE 6
Regression Results: Charismatic Leadership*Non-linear Independence Interaction

<table>
<thead>
<tr>
<th></th>
<th>Satisfaction with leader (n = 116, R-square = .45)</th>
<th>Effectiveness of leader (n = 116, R-square = .47)</th>
<th>Extra effort due to leader (n = 91, R-square = .36)</th>
<th>Organizational Citizenship (n = 117, R-square = .12)</th>
<th>Performance (n = 117, R-square = .07)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>b</td>
<td>t</td>
<td>b</td>
<td>t</td>
<td>b</td>
</tr>
<tr>
<td>Independence</td>
<td>-0.23</td>
<td>-1.15</td>
<td>-0.24</td>
<td>-1.50</td>
<td>-0.07</td>
</tr>
<tr>
<td>Charismatic leadership</td>
<td>0.77</td>
<td>4.73**</td>
<td>0.77</td>
<td>6.00**</td>
<td>0.65</td>
</tr>
<tr>
<td>Independence Squared</td>
<td>0.02</td>
<td>0.67</td>
<td>0.03</td>
<td>1.82</td>
<td>-0.00</td>
</tr>
<tr>
<td>Independence Squared*Charismatic leadership</td>
<td>0.00</td>
<td>0.18</td>
<td>-0.00</td>
<td>-1.06</td>
<td>0.00</td>
</tr>
</tbody>
</table>

*p < .05; **p < .01.
were compared for low independence and high independence subordinates. The low independence group was composed of all subordinates who received a sten score of 3.5 or less for independence. These scores are considered less than average, or extreme (Institute for Personality and Ability Testing, Inc., 1991). The low independence group (i.e., highly dependent) included 26 subordinates, and accounted for 22.3% of the sample. The high independence group was composed of the 27 subordinates who received the highest 22.3% of the scores for independence.

If highly dependent subordinates are more influenced by a transformational leader, then the correlations between transformational leadership and the dependent variables should be significantly higher for the low independence group than for the high independence group. Correlations were transformed to z scores by means of Fisher's r to z transformation and then compared for significant differences (p < .05). As seen in Table 7, the results showed no significant differences, although for four of the five dependent variables the r was greater for low independence, as predicted. Similarly, these comparisons were made for the correlations between charismatic leadership and the dependent variables for the low and high independence groups. Results were non-significant, and are also presented in Table 7.
TABLE 7
High and Low Independence Subordinates: Correlational Differences Between Transformational/Charismatic Leadership and Dependent Variables

Satisfaction with the leader (Low, n = 26; High, n = 27)

<table>
<thead>
<tr>
<th></th>
<th>Low Independence</th>
<th>High Independence</th>
<th>Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transformational</td>
<td>0.55</td>
<td>0.66</td>
<td>-0.57</td>
</tr>
<tr>
<td>leadership</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Charismatic leadership</td>
<td>0.52</td>
<td>0.64</td>
<td>-0.62</td>
</tr>
</tbody>
</table>

Effectiveness of the leader (Low, n = 26; High, n = 27)

<table>
<thead>
<tr>
<th></th>
<th>Low Independence</th>
<th>High Independence</th>
<th>Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transformational</td>
<td>0.65</td>
<td>0.56</td>
<td>0.4</td>
</tr>
<tr>
<td>leadership</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Charismatic leadership</td>
<td>0.59</td>
<td>0.58</td>
<td>0.05</td>
</tr>
</tbody>
</table>

Extra Effort due to leader (Low, n = 22; High, n = 20)

<table>
<thead>
<tr>
<th></th>
<th>Low Independence</th>
<th>High Independence</th>
<th>Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transformational</td>
<td>0.66</td>
<td>0.54</td>
<td>0.57</td>
</tr>
<tr>
<td>leadership</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Charismatic leadership</td>
<td>0.63</td>
<td>0.63</td>
<td>0.00</td>
</tr>
</tbody>
</table>

Organizational Citizenship (Low, n = 26; High, n = 27)

<table>
<thead>
<tr>
<th></th>
<th>Low Independence</th>
<th>High Independence</th>
<th>Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transformational</td>
<td>0.37</td>
<td>0.20</td>
<td>0.63</td>
</tr>
<tr>
<td>leadership</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Charismatic leadership</td>
<td>0.21</td>
<td>0.19</td>
<td>0.07</td>
</tr>
</tbody>
</table>

Performance (Low, n = 26; High, n = 27)

<table>
<thead>
<tr>
<th></th>
<th>Low Independence</th>
<th>High Independence</th>
<th>Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transformational</td>
<td>0.50</td>
<td>0.22</td>
<td>1.11</td>
</tr>
<tr>
<td>leadership</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Charismatic leadership</td>
<td>0.32</td>
<td>0.10</td>
<td>0.79</td>
</tr>
</tbody>
</table>

Note: All Z scores are non-significant.
To see if the current data are consistent with past findings on transformational leadership, hierarchical regression analysis was used to determine whether transformational leadership added significant incremental variance to transactional leadership in predicting the dependent variables. Transformational leadership was entered last in each regression equation, after the transactional leadership factors. As can be seen in Table 8, transformational leadership contributed significant incremental variance for all dependent variables; a pattern of results similar to past research findings.

In summary, no analysis to address the hypothesized moderating effect of independence was significant. However, some of the study variables correlated significantly. Positive correlations were obtained among the transformational leadership factors, between transformational leadership and all dependent variables, among the subordinate-rated dependent variables, between the supervisor-rated dependent variables, and between performance and intellectual stimulation, individual consideration, and OCB. In addition, a negative correlation was obtained between OCB and independence. In the non-linear regression analyses, the quadratic independence term predicted effectiveness of the leader.
### TABLE 8

**Hierarchical Regression Results**

**Satisfaction with leader (n = 114, R-square = .55)**

<table>
<thead>
<tr>
<th></th>
<th>b</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contingent reward</td>
<td>0.05</td>
<td>0.68</td>
</tr>
<tr>
<td>Active management-by-exception</td>
<td>-0.08</td>
<td>-0.85</td>
</tr>
<tr>
<td>Passive management-by-exception</td>
<td>-0.19</td>
<td>-2.27*</td>
</tr>
<tr>
<td>Transformational leadership</td>
<td>0.91</td>
<td>7.83**</td>
</tr>
</tbody>
</table>

**Effectiveness of leader (n = 114, R-square = .59)**

<table>
<thead>
<tr>
<th></th>
<th>b</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contingent reward</td>
<td>0.04</td>
<td>0.82</td>
</tr>
<tr>
<td>Active management-by-exception</td>
<td>-0.01</td>
<td>-0.12</td>
</tr>
<tr>
<td>Passive management-by-exception</td>
<td>-0.16</td>
<td>-2.57**</td>
</tr>
<tr>
<td>Transformational leadership</td>
<td>0.74</td>
<td>8.29**</td>
</tr>
</tbody>
</table>

**Extra effort due to leader (n = 89, R-square = .42)**

<table>
<thead>
<tr>
<th></th>
<th>b</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contingent reward</td>
<td>0.08</td>
<td>0.92</td>
</tr>
<tr>
<td>Active management-by-exception</td>
<td>0.01</td>
<td>0.08</td>
</tr>
<tr>
<td>Passive management-by-exception</td>
<td>-0.00</td>
<td>-0.01</td>
</tr>
<tr>
<td>Transformational leadership</td>
<td>0.79</td>
<td>5.62**</td>
</tr>
</tbody>
</table>

**Organizational Citizenship (n = 114, R-square = .11)**

<table>
<thead>
<tr>
<th></th>
<th>b</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contingent reward</td>
<td>-0.06</td>
<td>-0.92</td>
</tr>
<tr>
<td>Active management-by-exception</td>
<td>-0.12</td>
<td>-1.53</td>
</tr>
<tr>
<td>Passive management-by-exception</td>
<td>-0.04</td>
<td>-0.59</td>
</tr>
<tr>
<td>Transformational leadership</td>
<td>0.31</td>
<td>2.98**</td>
</tr>
</tbody>
</table>

**Performance (n = 114, R-square = .09)**

<table>
<thead>
<tr>
<th></th>
<th>b</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contingent reward</td>
<td>0.03</td>
<td>0.63</td>
</tr>
<tr>
<td>Active management-by-exception</td>
<td>-0.15</td>
<td>-2.05*</td>
</tr>
<tr>
<td>Passive management-by-exception</td>
<td>-0.01</td>
<td>-0.22</td>
</tr>
<tr>
<td>Transformational leadership</td>
<td>0.21</td>
<td>2.27*</td>
</tr>
</tbody>
</table>

*p < .05; **p < .01.
and the linear and quadratic independence terms predicted subordinate performance.
DISCUSSION

The results of the present study are consistent with prior research in two important ways. First, transformational leadership predicted a variety of subordinate behaviors, including satisfaction with the leader, perceived effectiveness of the leader, willingness to exert extra effort due to the leader, OCB, and individual subordinate performance. Second, transformational leadership added significant incremental variance to transactional leadership factors in predicting all these outcomes. This is the same pattern of results which has been reported in previously cited transformational leadership research.

In addition, the present results make a unique contribution to the transformational leadership literature. In the past, positive correlations have been reported between transformational leadership and the dependent variables of satisfaction with the leader, perceived effectiveness of the leader, willingness to exert extra effort due to the leader, and OCB. This is the first time, however, that transformational leadership has been shown to predict individual subordinate performance, an important bottom-line outcome. This finding is significant in that it suggests that transformational leadership may have an even greater
relationship with individual subordinate behavior than has been previously documented.

The hypothesized independence moderating effect was not supported for any of the dependent variables included in the present study. Except for minimal evidence that the correlational results comparing low and high independence were in the predicted direction, subordinates who responded well to charismatic or transformational leaders did not tend to have more dependent personalities. This relationship was not found for subordinate reactions to the leader (satisfaction with the leader, perceived effectiveness of the leader, willingness to exert extra effort due to the leader), individual subordinate performance, or discretionary OCB.

There are several possible explanations for the lack of support for this study's hypotheses. First, the specific methodology employed here may account for the findings. For example, even though transformational leadership correlated with the dependent variables used in the present study, perhaps a different operationalization of "performance beyond expectations" would have produced significant results. For instance, one possible alternative that future researchers may wish to consider is a measure that taps subordinates' willingness to work extra hours or on holidays.
Similarly, although the 16PF was chosen to measure independence because it was considered to be a very broad and conservative operationalization of this construct, perhaps a different operationalization of this variable may have produced different results. Independence as measured by the 16PF is conceptualized as a second-order personality factor which subsumes several primary personality dimensions. Perhaps this operationalization of independence is so broad that it includes personality aspects that are irrelevant for the purposes of this study. Alternatively, a narrower operationalization of independence versus dependence may be desirable. For example, the sixteen-item autonomy scale of the Personality Research Form (Jackson, 1987), which is focused primarily upon the need to act independently versus the need for social approval may have produced the hypothesized results.

Another methodological consideration is that perhaps a different sample in which subordinates have more job autonomy (e.g., a research and development department) could have produced different results. Perhaps this alternative type of sample would allow the hypothesized relationship to materialize, whereas the jobs of the subordinates used in the present study may have been too constrained to do so. It must be noted, however, that other results obtained with this sample followed the
pattern of results found in previous research on transformational leadership. Transformational leadership predicted all the dependent variables and accounted for incremental variance beyond transactional leadership in predicting these outcomes. This suggests that the same processes that have been observed in previous studies were also in operation in the present study.

Another potential explanation for the non-significant results reported here is that perhaps the hypothesized independence moderating effect does in fact occur, but not normally in work settings. Perhaps extreme response to a charismatic leader, like the Jim Jones poisoning incident or the fanatical behavior of the followers of David Koresh in Waco, Texas, requires highly dependent followers who have the perception that the leader can offer extraordinary rewards like a surrogate family environment that provides unconditional love and security, or spiritual immortality. These rewards may be highly valued and motivating to these dependent followers. Leaders in most work settings, such as the medical offices used in the present study, can not legitimately offer these types of rewards; and thus may not be able to elicit the same behavioral effects from highly dependent subordinates. Perhaps a work setting in which a leader has more absolute power over both rewards
and sanctions, such as the military, would more likely produce the results hypothesized here.

Finally, another possibility which may explain the results obtained in the present study deserves to be explored here. Perhaps it is the case that, in typical work settings, subordinates who respond well to transformational leadership do not tend to have dependent personalities. At the theoretical level, this would mean that subordinate independence is not a boundary condition of transformational leadership, and that the effectiveness of transformational leadership is not constrained by the dependent or independent nature of subordinates' personalities. This interpretation would tend to disconfirm the thinking that strong leaders require weak followers to be truly effective. Perhaps it is not the social approval that leaders can offer that distinguishes between those subordinates who respond well to transformational or charismatic leaders and those who do not, but rather individual differences in subordinates' intrinsic work motivations and goals.

That is, some subordinates may be challenged to do their best work by a dynamic, stimulating leader, whereas others may not wish to invest any additional time or energy into their work life. Further, high-independence subordinates may be just as likely as low-independence subordinates to respond positively to transformational
leadership behaviors such as individualized consideration, intellectual stimulation, inspiration, and personal charisma. The potential for these transformational leadership behaviors to affect subordinates positively may have little connection to the subordinates' level of independence. Perhaps a different moderator worth future research consideration is the "transformability" of subordinates. For example, this concept might take the form of subordinates' openness to new ideas, so that a transformational leader could potentially have an effect on them. Whereas subordinates' independence may not be relevant to their response to a transformational leader in typical work situations, their willingness to reevaluate their values and goals and embrace the vision promoted by a leader may produce a significant moderating effect.

The variable correlation matrix revealed several interesting correlations and patterns of correlations that deserve attention. The correlations of transformational leadership with the subordinate-rated dependent variables of satisfaction, effectiveness, and extra effort were very high, thus making it difficult to account for additional variance with other variables; for example, the independence moderator. It should be noted, however, that this is not true of the supervisor-rated dependent variables of OCB and performance, which had
relatively smaller positive correlations with transformational leadership. Nonetheless, the independence moderating effect was not significant for these dependent variables either.

Additionally, although subordinate-rated dependent variables were highly positively intercorrelated (satisfaction, effectiveness, and extra effort) and supervisor-rated dependent variables were highly positively intercorrelated (OCB and performance), these two categories of dependent variables were not as highly correlated with each other. This pattern of intercorrelations suggests the possibility that common method variance may account for some of the intercorrelation within the two categories of dependent variables. Specifically, the subordinate-rated dependent variables may owe some of their intercorrelation to the fact that the same subordinate rated each of them using a similar rating schema. Similarly, this process may account for the high intercorrelations among the supervisor-rated dependent variables.

Further, OCB was negatively correlated with subordinate independence ($r = -0.26$), and positively correlated with performance ($r = 0.47$). The OCB negative correlation with independence is in keeping with the conceptualization of OCB as discretionary helpful and cooperative behavior exhibited by employees of an
organization. An employee exhibiting high levels of OCB could be seen as a "team player" who is more group dependent, whereas a highly independent employee may be a "loner" who would not be motivated to engage in such activities. The OCB positive correlation with performance suggests that subordinates who are team-oriented may be seen by supervisors as higher-performing in the work environment sampled in the present study.

The transformational leadership factors of intellectual stimulation ($r = .20$) and individual consideration ($r = .25$) were significantly positively correlated with subordinate performance, whereas the factors of charisma and inspiration were not. The fact that individual consideration had the largest correlation with performance suggests the possibility that perhaps it is not the charismatic, inspirational, or intellectual stimulation aspects of transformational leadership which most influence subordinates' individual performance. Rather, perhaps it is a leader's willingness to be considerate of subordinates' needs that may have a greater influence on individual performance. This interpretation would be in keeping with the extensive work of Fleishman and his colleagues, which has identified leader consideration as one of the most important leadership dimensions in affecting subordinates (e.g., Fleishman, 1973; Fleishman et al., 1955).
In this same vein it should be pointed out that the results obtained in the present study are also consistent with those obtained in the leader-member exchange literature (e.g., Dansereau, Cashman, & Graen, 1973; Dansereau, Graen, & Haga, 1975), which emphasizes the individual nature of each supervisor-subordinate relationship. Results are reported here which further support the idea that leader behavior may influence subordinate responses at the individual level of analysis. Perhaps the most interesting and important of these results is the reported relationship between transformational leadership and the important bottom-line outcome of individual subordinate performance.
SUMMARY AND CONCLUSIONS

The hypotheses of the present study were not supported by the data. Subordinate independence did not moderate the relationship between transformational leadership and the dependent variables at the .05 level of significance. This relationship was not supported for dependent variables that included subordinate reactions to the leader (satisfaction with the leader, perceived effectiveness of the leader, and willingness to exert extra effort due to the leader), individual subordinate performance, and discretionary OCB.

Though several potential explanations for this outcome were proposed, the one favored by this researcher is that these results are preliminary evidence suggesting that subordinate independence is not a boundary condition on the effectiveness of transformational leadership. Specifically, this suggests that transformational leaders do not require dependent subordinates to be effective; and further, independent subordinates may be as likely as dependent subordinates to respond positively to transformational leaders. Future research efforts may wish to address this question with different samples and settings to provide more generalizability of results.

At the applied level, this interpretation would suggest that transformational leaders do not need to
adjust their leadership style to effectively influence subordinates who vary significantly in their levels of independence. In general, this provides additional evidence to suggest that a transformational leadership style may be effective across a wide variety of situations.

The present study provides additional information for identifying the individual characteristics that discriminate between subordinates who respond positively or negatively to transformational leaders. The results presented here suggest investigating characteristics other than subordinate independence. A potentially fruitful area for future research may be to examine the work values, goals, and motivations of subordinates as the discriminating factors.

Another intriguing possibility for future research efforts is to investigate the situational differences which may lead to different responses from followers of transformational or charismatic leaders in business versus religious or political settings. For example, perhaps subordinates' perceptions that the leader has greater power over rewards and sanctions in a religious cult setting would motivate them to respond differently than in a typical business setting. In this environment, perhaps dependent subordinates would be more likely to
respond favorably to a transformational or charismatic leader.

The major limitations of the present study are twofold. First, the research is correlational in nature, and this fact precludes the possibility of causal statements concerning the findings. Some experimental control has been lost in measuring a "real life" situation through field research; but this type of research provides for greater generalizability of results. Second, a sizeable portion of the data in the study was gathered through self-report questionnaires. Though the validity of this method has been debated in the literature, it remains one of the most practical and effective means of gathering certain types of data.
REFERENCES


PLEASE NOTE

Copyrighted materials in this document have not been filmed at the request of the author. They are available for consultation, however, in the author's university library.

Apx A
Independence
pgs. 77 - 82

University Microfilms International
APPENDIX B

Transformational Leadership

Key: A = frequently, if not always  
B = Fairly often  
C = Sometimes  
D = Once in a while  
E = Not at all

1. Is content to let me continue to do my job in the same way
2. Talks optimistically about the future
3. Treats me as an individual rather than just a member of the group
4. Things have to go wrong for him/her to take action
5. Persuades me to go beyond my own self-interest
6. Works out agreements with me on what I will receive if I do what needs to be done
7. Is alert for failure to meet standards
8. Shows the value of questioning assumptions
9. Articulates a vision of future opportunities
10. Listens to my concerns
11. Provides reasons to change my way of thinking about problems
12. Talks about special rewards for good work
13. Shows he/she is a firm believer in "If it ain't broken, don't fix it."
14. Focuses attention on irregularities, mistakes, exceptions and deviations from what is expected of me
15. If I don't bother him/her, he/she doesn't bother me
16. Provides advice when it is needed
17. Serves as a role model for me
18. Makes me back up my opinions with good reasoning
19. Introduces new projects and new challenges
20. Monitors performance for errors needing correction
21. As long as work meets minimal standards, he/she avoids trying to make improvements
22. Avoids getting involved when important issues arise
23. Shows how to look at problems from new angles
24. Sets high standards for himself/herself and others
25. Tells me what to do to be rewarded for my efforts
26. Avoids making decisions
27. Problems have to be chronic before he/she will take action
28. Mobilizes a collective sense of mission
29. Points out what I will receive if I do what is required
30. Keeps careful track of mistakes
31. Serves as teacher or coach as necessary
32. Instills pride in being associated with him/her
33. Engages in words and deeds which enhances his/her image of competence
34. Makes me aware of strongly held values, ideals, and aspirations which are shared in common
35. Demonstrates a strong conviction in his/her beliefs and values
36. Projects a powerful, dynamic, and magnetic presence
37. I am ready to trust him/her to overcome any obstacle
38. I have complete confidence in him/her
39. In my mind, he/she is a symbol of success and accomplishment
40. Displays extraordinary talent and competence in whatever he/she decides to undertake
Satisfaction with the Leader

Key: A = Very satisfied
    B = Somewhat satisfied
    C = Neither satisfied nor dissatisfied
    D = Somewhat dissatisfied
    E = Very dissatisfied

45. In all, how satisfied are you with the person you are rating as a leader?

46. In all, how satisfied are you with the methods of leadership used by the person you are rating to get your work group's job done?
APPENDIX D

Effectiveness of the Leader

Key: A = Extremely effective
     B = Very effective
     C = Effective
     D = Only slightly effective
     E = Not effective

41. The overall work effectiveness of the work group made up of yourself and your co-workers can be classified as _____.

42. How effective is the person you are rating in representing your work group to higher authority?

43. How effective is the person you are rating in meeting the job-related needs of supervisees and/or co-workers?

44. How effective is the person you are rating in meeting the requirements of the organization?
APPENDIX E

Extra Effort Due to the Leader

Key: A = Frequently, if not always
B = Fairly often
C = Sometimes
D = Once in a while
E = Not at all

1. Makes me do more than I expected I could do

2. Motivates me to do more than I originally expected I would do

3. Heightens my motivation to succeed
APPENDIX F

Organizational Citizenship Behavior

Key:  
A = Strongly agree  
B = Agree  
C = Neither agree nor disagree  
D = Disagree  
E = Strongly disagree

1. Does not take extra breaks.

2. Consumes a lot of time complaining about trivial matters.

3. Takes steps to try to prevent problems with other workers.

4. Willingly helps others who have work related problems.

5. Is one of my most conscientious employees.

6. Tends to make "mountains out of molehills."

7. Is mindful of how his/her behavior affects other people's jobs.

8. Is always ready to lend a helping hand to those around him/her.
APPENDIX G

Subordinate Performance

Key: A = Much better than average
    B = Better than average
    C = Average
    D = Worse than average
    E = Much worse than average

1. Quantity of work performed
2. Quality of work performed
3. Overall rating of work performed
APPENDIX H

Permission to Reproduce 16PF Items

INSTITUTE FOR PERSONALITY AND ABILITY TESTING, INC.

March 29, 1993
Mr. Terry Dockery
Department of Management
Louisiana State University
Baton Rouge, LA 70803-6312

Dear Mr. Dockery:

We are willing to grant permission for you to reproduce extracts from the 16PF Form C. The extract will contain the items necessary for the measurement of the Independence second order factor. In order to get the permission, you must agree to the following:

1. pay a permission fee of $35.00 plus $.90/copy for 42 copies; a grand total of $72.80;

2. print "From the 16PF Form C. Copyright 1954, 1956, 1969, 1978 by the Institute for Personality and Ability Testing, Inc. All rights reserved. Reproduced by permission." on each copy of each test;

3. send to IPAT a copy of the booklet of extracted items and a copy of the abstract of your dissertation when available.

If this is agreeable, please sign two copies of this agreement where indicated below and return to me with your check for $72.80. I will countersign and return a copy of the agreement to you so that you may print the extracts.

Thank you for your cooperation in this matter.

Sincerely,

[Signature]
James C. Slaughter
President

Agreed: Terry Dockery 4-25-93

Date

Agreed: [Signature] 5-3-93

Date
VITA

Terry Dockery is a native of Georgia. He received his bachelor's degree in psychology from Armstrong State College in Savannah, Georgia in 1972 and his master's degree in psychology from Louisiana State University in Baton Rouge, Louisiana in 1987.
DOCTORAL EXAMINATION AND DISSERTATION REPORT

Candidate: Terry Michael Dockery

Major Field: Psychology

Title of Dissertation: Subordinate Independence: A Boundary Condition on the Effectiveness of Transformational Leadership?

Approved:

[Signature]
Major Professor and Chairman

[Signature]
Dean of the Graduate School

EXAMINING COMMITTEE:

[Signature]

[Signature]

[Signature]

[Signature]

[Signature]

Date of Examination:

May 11, 1993