

A Laboratory Study of the Moderating Effect of Task Importance on the Relationship
between Transformational and Transactional Leadership Styles and Outcomes

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ABSTRACT

A Laboratory Study of the Moderating Effect of Task Importance on the Relationship between Transformational and Transactional Leadership Styles and Outcomes

Melanie Robinson

This study investigated task importance as a moderator of the relationship between four transformational and transactional leadership styles (charisma, intellectual stimulation, contingent reward, and no leadership) and six outcomes (performance quantity and quality, satisfaction with the leader, perceived leader effectiveness, task interest/enjoyment, and extra effort). The sample for this study was composed of 102 undergraduate students (45 males, 57 females). Each participant viewed one of four videos, created for this study, in which a leader (as portrayed by an actress) displayed the characteristics of one of the leadership styles noted above. Task importance was manipulated by providing participants with handouts designed to convey either high or low task importance. Participants completed an in-basket exercise adapted from Howell and Frost (1989). The findings showed a significant main effect of the leadership condition for three outcomes – performance quantity, task interest/enjoyment, and extra effort. The interaction effect was marginally significant for two outcomes – performance quality and satisfaction with the leader. Contrary to expectations, contingent reward leadership emerged as the best predictor of the outcomes – while the effect of contingent reward leadership was not significant for all outcomes in this study, a pattern emerged whereby participants in the contingent reward leadership condition reported highest scores for five of the six outcomes investigated in this study. The study's contributions and limitations, along with directions for future research, are discussed.

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DEDICATION

I dedicate this thesis to my father, Brian, in loving memory.

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A Laboratory Study of the Moderating Effect of Task Importance on the Relationship between Transformational and Transactional Leadership Styles and Outcomes

The effect of leadership on both individual and group-level outcomes is of great interest to both researchers and organizations. From the organizational perspective, effective leadership can result in such important outcomes as the motivation and development of followers, the optimization of individual and unit-level performance, and the realization of the organization's strategic goals.

Research on leadership has shown that some leadership styles positively affect outcomes, while others often have a very negative effect on outcomes. Therefore, the following questions are of great interest: "What is the most effective leadership style for different outcomes" and "What type of leadership is most effective in a given situation"? The current study aims to explore these questions by investigating the relationship between different transformational and transactional leadership styles and outcomes, as well as the moderating effect of the perceived importance of the task being performed on this relationship.

Several theories have been proposed to explain the impact of leadership. These theories include transformational leadership (Bass, 1995), charismatic leadership (e.g., Conger & Kanungo, 1987), and contingency theories of leadership (e.g., Fiedler, 1974; House, 1971). In the following section, the main findings from several studies on transformational and charismatic leadership shall be presented.

Research on transformational leadership (Bass, 1985) has found transformational leadership to be related to several important individual-level and organizational-level

outcomes, including unit-level performance (e.g., Barling, Weber, & Kelloway, 1996; Howell & Avolio, 1993), individual-level performance (e.g., Hochman, 1998; Jung & Avolio, 1999), intention to leave the organization (e.g., Bycio, Hackett, & Allen, 1995), follower's satisfaction with their leader (e.g., Bycio et al., 1995; Judge & Piccolo, 2004; Vandenberghe, Stordeur, & D'hoore, 2002), perceptions of leader effectiveness (e.g., Judge & Piccolo, 2004; Lowe, Kroeck, & Sivasubramaniam, 1996), job satisfaction (e.g., Judge & Piccolo, 2004), follower's extra effort (e.g., Bycio et al., 1995; Vandenberghe et al., 2002), trust (e.g., Gillespie & Mann, 2004), job stress (e.g., Gill, Flaschner, & Shachar, 2006; Sosik & Godshalk, 2000), as well as burnout and emotional exhaustion (e.g., Stordeur, D'hoore, & Vandenberghe, 2001). Research on charismatic leadership has also demonstrated the relationship between leadership and such salient outcomes as individual-level performance (e.g., Howell & Frost, 1989; Kirkpatrick & Locke, 1996), task satisfaction (e.g., Howell & Frost, 1989), and followers' collective identity (e.g., Conger, Kanungo, & Menon, 2000).

The current study contributes to the literature on transformational leadership by investigating the moderating effect of task importance on the relationship between four dimensions of transformational and transactional leadership and outcomes. The independent variable *leadership style* is based on dimensions of transformational/transactional leadership proposed by Bass (1985, 1998) and has four levels: i) charisma, ii) intellectual stimulation, iii) contingent reward, and iv) no leadership (a control condition).

Task importance is proposed to moderate the relationship between leadership style and outcomes. The moderator was chosen in order to investigate whether the type of

task being performed would influence the relationship between leadership style and outcomes. This research question was put forth in an article by Jung and Avolio (2000). Task importance is argued to be a highly salient type of task to investigate, as employees performing similar tasks in organizations may have different perceptions about the importance of their work. It is interesting to investigate how these differing perceptions will impact salient organizational outcomes – including performance and employees' willingness to exert extra effort.

The conceptualization of task importance in this study reflects the core job characteristic of task significance from the Job Characteristics Model (Hackman & Oldham, 1980). Thus, importance (task significance) is defined as “the degree to which the job has a substantial impact on the lives of other people, whether those people are in the immediate organization or in the world at large” (Hackman & Oldham, 1980, p. 79). The variable has two levels: i) high task importance and ii) low task importance.

The dependent variables in this study include six follower outcomes and perceptions. All of the relationships in this study are investigated at the individual-level of analysis. The dependent variables include: i) *performance quantity* – defined as the total number of pieces of information attempted by participants on the answer sheets for the memos, ii) *performance quality* – defined as the practicality and creativity of the pieces of information provided by participants in response to the memos, iii) *task interest/enjoyment* – a measure of a person's intrinsic motivation with respect to a task, iv) *satisfaction with the leader* – defined as the degree of satisfaction felt by participants with respect to their leader's behavior (Bass, 1985), v) *leader effectiveness* – defined as participant's perceptions of the effectiveness of their leader, and vi) *extra effort* – defined

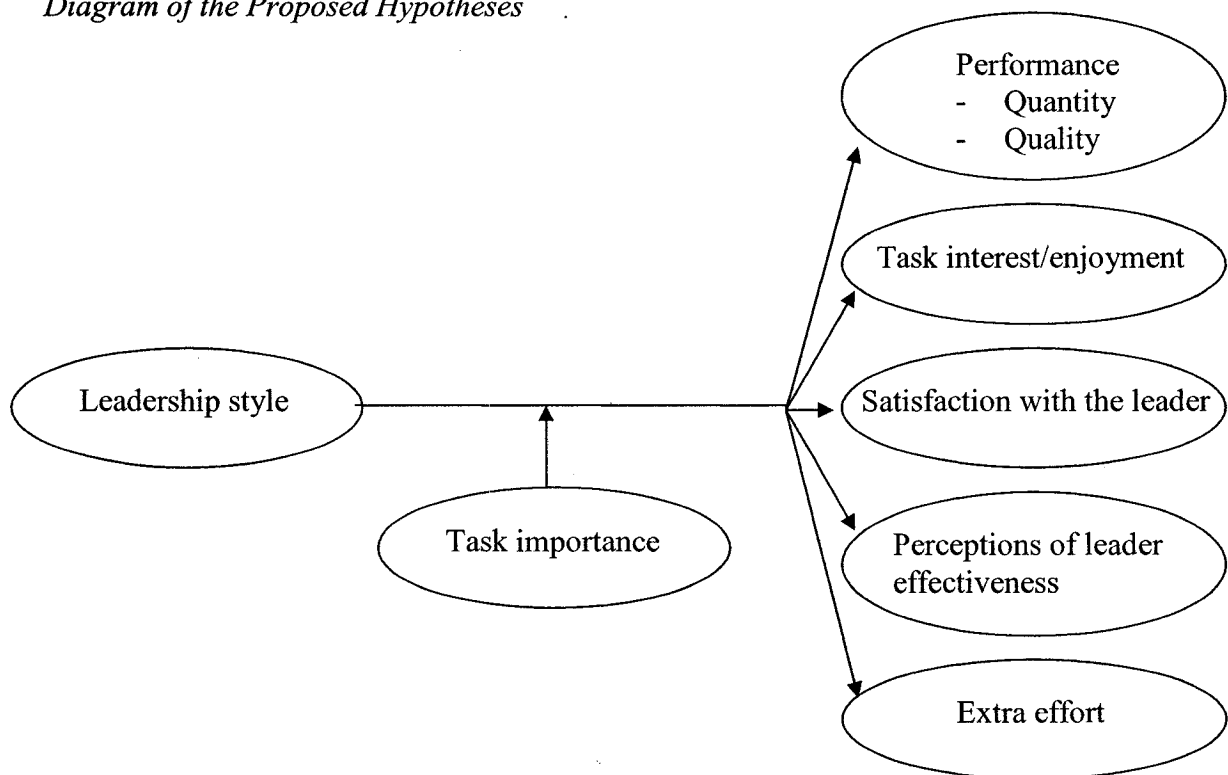
as “the exertion of extra effort by subordinates beyond ordinary expectations” (p. 213).

A diagram of the research study is presented in Figure 1 below.

The following section shall present a description of the theoretical foundations of the current study. These theoretical foundations include the Job Characteristics Model, Transformational Leadership theory, Charismatic Leadership theory, and the Contingency Theories of Leadership.

Figure 1

Diagram of the Proposed Hypotheses



Theoretical Foundations

Several theories served as a foundation upon which the design of the current study was based. The first theory presented is the Job Characteristics Model (Hackman & Oldham, 1980), which proposed five core characteristics of jobs that are intrinsically

motivating. The core job characteristic of task significance is explored as a moderator in the current study.

Subsequent sections present an overview of three leadership theories (transformational leadership, charismatic leadership, and contingency theories of leadership) that are very relevant to the current study. Transformational leadership theory (Bass, 1985) is the main theory upon which the current study is based. In it, leadership behaviors are identified as being transactional (representing the exchange relationship between leaders and followers) or transformational (helping followers to surpass what they thought was possible). The leadership styles investigated in this study are dimensions of transformational and transactional leadership. Charismatic leadership theory (Conger & Kanungo, 1987) proposes that charismatic leadership is a result of two factors – the charismatic behavior of the leader and the attribution by followers of charisma to the leader. Thus, this theory considers charismatic leadership to be an outcome of both the leader's personal qualities and follower perceptions. Although the charisma condition in the current study is based on transformational leadership, the results of several studies on charismatic leadership were used to develop this study's hypotheses with regard to the charisma condition. Finally, the contingency theories of leadership (e.g., Fiedler, 1974; House, 1996) view leadership as a product of both a leader's personal characteristics and situational factors. This theory is very relevant to the current study, as its investigation of the moderating effect of the type of task being performed (specifically, the effect of task importance) proposes that situational characteristics will moderate the relationship between leadership styles and outcomes. These theories are further described in the sections below.

Job Characteristics Model. The Job Characteristics Model (JCM) was proposed by Hackman and Oldham (1980). The model identifies five core characteristics of intrinsically motivating jobs: i) skill variety – the extent to which the job involves using a variety of skills, ii) task identity – the extent to which workers see the final product of their work, iii) task significance – the degree to which the work has an impact on others, iv) autonomy – the amount of responsibility felt by workers, and v) the extent to which employees receive feedback regarding the results of their work. The JCM proposes that the core job characteristics of task variety, task identity, and task significance contribute to the meaningfulness of work felt by workers. Together, the five core job characteristics were stated to contribute to several outcomes, including a high level of intrinsic motivation, high levels of performance in the job, and high levels of job satisfaction.

The core job characteristic of task significance – labeled task importance in the current study – is proposed to moderate the relationship between transformational and transactional leadership styles and outcomes.

Transformational leadership. Transformational Leadership theory has received a great deal of attention by scholars and support in the literature since it was proposed by Bass in 1985. The theory posits that leaders engage in behaviors that are transactional, characterized by exchanges, based on self-interest, between leaders and followers (Bass, 1999), and behaviors that are transformational, whereby the leader helps followers to attain a performance beyond what they thought was possible to achieve.

Transformational leadership is comprised of three distinct but interrelated dimensions. The first dimension is charisma (idealized influence and inspirational motivation), where the leader presents an ideal vision to followers and inspires them to

work toward that vision. The second dimension is intellectual stimulation, whereby the leader helps followers to view and solve problems in new ways. The third dimension is individualized consideration, where the leader provides support and guidance to followers. Transactional leadership is comprised of two leadership styles. The first style is contingent reward, where the leader specifies performance expectations and links rewards to the attainment of objectives. The second style is management-by-exception, which may take an active form (whereby the leader seeks out mistakes and takes corrective action), or a passive form (whereby the leader waits for mistakes to happen before taking corrective measures). In addition to the transformational and transactional factors, Bass (1985) proposed that the Full Range Model of Leadership also comprises *laissez-faire* leadership, which refers to the absence of leadership.

It has been noted in the literature that the transformational factors, as well as contingent reward leadership, are highly intercorrelated (e.g., Avolio, Bass, & Jung, 1999; Bass 1999; Bycio et al., 1995). To test the original factor structure of the Multifactor Leadership Questionnaire (MLQ, developed by Bass and Avolio (1995) and a main instrument to measure transformational and transactional leadership behaviors), Bycio et al. (1995) conducted a study whereby data were collected from 1376 registered nurses. Their results provided support for the five-factor model proposed by Bass (charisma, intellectual stimulation, individualized consideration, contingent reward, and management-by-exception), but the authors note that there was a high correlation between the transformational leadership dimensions.

A study conducted by Vandenberghe et al. (2002) also examined the structure of the factors of the MLQ. The authors tested several models, and found the six-factor

model (where charisma, intellectual stimulation, individualized consideration, contingent reward, management-by-exception active, and management-by-exception passive were all separate factors) to be the best fit. The authors further note that the transformational dimensions and contingent reward leadership were highly correlated.

In addition, Avolio et al. (1999) conducted a study in which multiple factor structures for the MLQ were examined to identify which structure was most appropriate. The results indicated that the “best fit” was the original six-factor model (this model includes *laissez-faire* leadership), but that the transformational dimensions and contingent reward leadership had “low discriminant validity” (p. 457). To investigate this low discriminant validity, the authors combined the items into two factors – the first factor was comprised of charisma, inspiration, and intellectual stimulation, and the second factor was comprised of individualized consideration and contingent reward. The authors note that the results indicated that the two aforementioned factors could be distinguished.

The findings presented above are relevant to the development of this study in two ways. Firstly, although the literature presented above suggests that there may be a conceptual overlap between some of the dimensions of the Full Range Model of Leadership, the dimensions nonetheless measure some different aspects of leadership. Secondly, the finding by Avolio et al. (1999) that the intercorrelated factors could be divided into two higher-order factors (charisma and intellectual stimulation, individualized consideration and contingent reward) is very interesting. This implies that there is something about the two groupings that makes them different enough to separate, despite their intercorrelation at the outset. This study examines leadership styles from both groupings of factors.

Four leadership styles are included in the current study – charisma (a combination of the transformational dimensions of inspirational motivation and idealized influence), intellectual stimulation, contingent reward, and a no leadership control condition.

The decision to combine inspirational motivation and idealized influence into one leadership style for this experiment can be supported in the literature. Referring to the development of the MLQ, Bass (1999; see also Bass, 1985) notes that several items that were very highly correlated with charisma (greater than .80) were used to create a scale for inspirational motivation, because it was felt that a leader could be inspirational without necessarily being charismatic. However, Bass also notes that the separation of inspirational motivation from charisma has not been supported in the factor analyses that have been conducted since the development of the MLQ. In addition, several past studies have included the dimension of charisma as a combination of the idealized influence and inspirational motivation dimensions (e.g., Vandenberghe et al., 2002).

Individualized consideration was not included because it is a leadership behavior that is specific to each follower (i.e., one-on-one) and this would have been difficult to portray given the study's design (i.e., a leader interacting with participants solely through video).

Contingent reward leadership was included in the study design because it represents the 'exchange' relationship between leaders and followers that is important for effective leadership. It was noted by Bass, Avolio, Jung, and Berson (2003) that contingent reward leadership provides the foundation for the relationship between a leader and his or her followers. Contingent reward leadership has often been found in the literature to have some positive effects on outcomes and perceptions (e.g., Judge &

Piccolo, 2004). Densten (2006) notes that the focus of many leadership scholars has been on the effects of charismatic and transformational behaviors, largely ignoring the potentially important role of contingent reward leadership. The current study seeks to explore the role of contingent reward leadership.

Charismatic leadership. Conger and Kanungo (1987) proposed a model of charismatic leadership, whereby charismatic leadership was a product of both a leader's charismatic behaviors and follower attributions of charisma to the leader. The authors identified ten behaviors considered to be essential to the development of charismatic leadership – these behaviors include i) the leader's desire to change the *status quo*, ii) the leader presents a vision that inspires and motivates change, iii) the degree to which the leader is likable to followers, iv) the degree to which the leader is perceived as being trustworthy, v) the leader's ability to use innovative means to exact change, vi) behavior that is “unconventional”, vii) the leader's careful assessment of the resources available in his or her environment, viii) the leader's ability to communicate his or her vision in an effective manner, ix) the leader's “personal power” –the leader's power is derived from the respect and admiration of followers versus power inherent in the leader's position in the organization, and x) the leader's relationship with followers is one where the leader is an example to followers. The authors discuss the role of context in charismatic leadership and note that charismatic leaders emerge in times of transition.

Contingency theories of leadership. In describing Contingency Theory, Fiedler (1974) posits that there are two factors that contribute to a leader's effectiveness in a group or organization, namely the leader's personality and situational favorability. The personality of the leader is described as either being ‘relationship-motivated’, whereby

the leader is motivated by his or her relationship with followers, or as task-oriented, whereby the leader is motivated by performing well on a task. Fiedler describes three factors that contribute to situational favorability – the relations between the leader and his or her subordinates (which can be favorable or unfavorable), the task structure, and the leader's position power (the degree to which the leader has the ability to provide rewards or consequences to subordinates).

Fiedler notes that leader effectiveness is a result of the interaction between the leader's personality and situational favorability. Fiedler notes two important interpretations that can therefore be made: The first is that the relationship- and task-oriented leaders are effective in some situations, but ineffective in others. The second is that the effectiveness of the leader (i.e., his or her performance) is affected by both the personality of the leader and the situation in which a leader is placed by an organization. Although the research question for this study does not look at the specific variables present in the Contingency Model, its basic premise – that the effectiveness of a leader depends on the leader's personal characteristics as well as the situation – is important for this study. In this study, the variable contributing to leader effectiveness is the leadership style of the leader, and the contextual factor is represented by task importance.

A second theory that may help to support the current study's design is the Path-Goal Theory of Leadership, developed by House in 1971 and reformulated in 1996 (House, 1996). The underlying proposition of the theory is that leader effectiveness is dependent upon the extent to which the leader's behaviors complement their followers' abilities and environments, therefore positively affecting group performance. Thus, Path-

Goal Theory posits that the leadership style of a leader needs to 'fit' with the work environment and the skills of his or her subordinates for that leader to be effective.

The focus of House's original theory was on the relationship between the supervisor and subordinates. Four leader behaviors were identified: i) directive leader behaviors (i.e., informing subordinates of work expectations, clarifying work), ii) supportive leader behaviors (i.e., ensuring that subordinates' needs are satisfied), iii) participative leader behaviors (i.e., encouraging the participation of subordinates in decision-making), and iv) achievement-oriented behaviors (i.e., setting high performance expectations).

The focus of the reformulated theory is on leadership in work units and the author identifies ten leader behaviors. One leader behavior, path-goal clarifying behavior, is very relevant to this study. In many ways, this leader behavior is similar to Bass' construct of contingent reward leadership. House notes that the type of task performed by subordinates can influence the effectiveness of this leader behavior. He specifies that certain characteristics of the task demands (i.e., whether they are ambiguous or unambiguous, and satisfying or dissatisfying) will affect the extent to which a leader's behavior will be acceptable and motivating to followers. Thus, the characteristics of the task being performed will impact the effectiveness of the leader behavior. Similarly, when describing supportive leader behaviors, House notes that the task and work environment can influence the effectiveness of supportive leader behaviors. For example, he posits that a supportive leader will increase subordinates' effort and satisfaction when there is a stressful, frustrating or dangerous task or work environment, while a supportive

leader will not have a large effect on subordinate satisfaction when tasks and work environments are not stressful and intrinsically satisfying¹.

In sum, Fiedler's Contingency Theory and House's Path-Goal Theory are important to incorporate into the theoretical foundation of this thesis because they provide support for the argument that there are situational factors (or contextual factors) that can affect whether a specific leadership style will be effective in a given situation.

The following section shall present the hypotheses of the study, along with their rationale.

Hypothesis Generation

In the following section, eight hypotheses are proposed. The first six hypotheses investigate the main effects of the leadership condition on each dependent variable in the study. One hypothesis is proposed to examine the main effect of the task importance condition on task interest/enjoyment. Finally, an interaction hypothesis is proposed to explore the effects of the leadership and task importance conditions on each dependent variable in the study. The hypotheses are proposed and analyzed at the individual level of analysis.

Effects of leadership styles on performance. A number of studies have investigated the relationship between charismatic and/or transformational leadership and both unit-level and individual-level performance.

First, the results from several studies examining the effects of charismatic and transformational leadership on unit or organization-level performance are described. Subsequently, the findings from several experimental and field studies on the relationship

¹ See House's (1996) propositions 14 and 15 (pp. 340-1).

between transformational and charismatic leadership and individual-level performance are presented.

Barling et al. (1996) conducted a field study investigating the effects of transformational leadership training on follower perceptions and unit-level performance. Their sample was composed of branch managers of a large Canadian bank. The authors note that the training program heavily emphasized intellectual stimulation, reasoning that intellectual stimulation had the lowest score of all of the transformational leadership components before the training for both groups, and also that it would be easier to modify intellectual stimulation than charisma for trainees. The results indicated that two measures of financial performance (number of personal loan sales and credit card sales) were increased as a result of the training. A field study conducted by Bass et al. (2003) investigated the effects of transactional and transformational leadership on unit performance in a military sample, where the units were characterized by their high levels of stress, uncertainty, and challenge. The authors found that transformational and contingent reward leadership were positively related to unit performance for platoon leaders but not for platoon sergeants. The authors note that their results differ from previous research (as their findings showed that both transformational and contingent reward behaviors predicted performance similarly), and suggest that one reason for this finding may be that the tasks completed by the platoon were very complex and required a large degree of clarity and coordination. Howell and Avolio (1993) also conducted a field study where the effect of transformational leadership on unit-level performance was assessed. The results indicated that the transformational leadership dimensions were significantly related to performance (highest for intellectual stimulation, followed by

charisma and individualized consideration, respectively). The relationship between contingent reward leadership and performance was also significant, but negative. Finally, a longitudinal study conducted by Baum, Locke, and Kirkpatrick (1998) explored the relationship between aspects of charismatic leadership (specifically vision attributes, content, and communication) and business performance, where business performance was measured by venture growth. The results indicated that vision positively affected business performance.

Thus, the literature reviewed on the effects of charismatic and transformational leadership on unit- or organizational-level performance indicates that transformational leadership is positively related to performance (e.g., Barling et al., 1996; Bass et al., 2003; Baum et al., 1998; Howell & Avolio, 1993). The literature also indicates that contingent reward leadership is related to performance. Bass et al. (2003) found contingent reward leadership to be positively related to performance, while Howell and Avolio (1993) found it to be negatively related to performance.

The effects of charismatic leadership on the quality of individual-level performance have also been examined in several laboratory studies. Kirkpatrick and Locke (1996) manipulated three aspects of charismatic leadership (vision, vision implementation, and charismatic communication style). In their study, vision implementation involved providing participants with a task cue (i.e., a type of information that was relevant to the task that they were performing), which the authors note can be viewed as part of supervisory, or transactional, behaviors. However, the authors also note that transformational theories regard task cues to be part of transformational leadership because providing task cues involves intellectually

stimulating followers. The authors found a significant positive relationship between vision and quality. Task cues resulted in higher quality of performance than did the non-task cues condition, while the charismatic communication style did not have an effect on quality. Howell and Frost (1989) also conducted a laboratory study in which they investigated the effects of three different charismatic leadership styles (charismatic, structuring, and considerate) and two levels of group productivity norms (high and low productivity) on the participants' task performance, task adjustment, and adjustment to the leader and the group. The results showed that participants who were paired with a charismatic leader had higher performance (in terms of the number of courses of action and the quality of their suggestions), compared to participants paired with a considerate leader.

Several laboratory studies also investigated the effects of transformational leadership. Jung and Avolio (1999) conducted a study in which the effects of transformational and transactional leadership on performance for individualists and collectivists (represented in this study by Caucasian and Asian students, respectively) for both group-based and individual brainstorming tasks were investigated. Both groups (individualists and collectivists) generated the highest quality of ideas under a transformational leader. Hochman (1998) conducted an experimental study in which the effects of specific leadership styles on follower performance and perceptions were investigated. The author examined four levels of the leadership condition – namely charisma alone, intellectual stimulation alone, a combination of charisma and intellectual stimulation, and no leadership. The dependent variables assessed in the study included satisfaction with the leader, extra effort, satisfaction with the task, meaningfulness and

responsibility toward the task, trust in the leader, and task clarity. The results of the study suggested that the transformational dimensions (charisma and intellectual stimulation) had an effect on followers' behavior when used alone, but not in the conditions where the leadership styles were combined. In fact, the author notes that, in the condition where the two behaviors were combined, the performance of the participants was akin to the no leadership control group. An experiment conducted by Kelloway, Barling, Kelley, Comtois, and Gatién (2002) investigated the effects of remote leadership on follower outcomes (including individual and group performance). Remote leadership study was manipulated via a series of emails that were created for the purpose of the study, where each participant read one email. Each email presented a message from a leader to the participant, displaying one of the following leadership styles: charisma, intellectual stimulation, a combination of both, or neither of the leadership styles. The findings showed that individual and group performance was greater for participants who read emails by the leaders portraying charisma (than the leader not portraying charisma) and displaying intellectual stimulation (than the leader not displaying this leadership style). Finally, Towler (2003) conducted an experimental study in which the effects of training for two aspects of charisma - vision content and charismatic communication style – were investigated. There were two parts to the study. In the first part, participants were given one of three types of training (charismatic influence, presentation skills, and a control group). Each participant was filmed presenting a speech that involved instructions for a task. In the second part, a second sample of participants watched the videos and performed a task. Participants who viewed a video of a charismatic trainee had better

performance quality (the letter that was composed) than participants viewing videos of trainees from the other conditions.

To summarize, several studies have found a positive relationship between charismatic leadership and quality, including Kirkpatrick and Locke (1996) and Howell and Frost (1989). Several studies were also presented that found a positive relationship between transformational leadership and quality, including Jung and Avolio (1999) and Towler (2003). In addition, Kelloway et al. (2002) found that performance was higher for participants who read an email from a charismatic leader (versus a non-charismatic leader), as well as participants who read an email from an intellectually stimulating leader (versus a non-intellectually stimulating leader). However, although Hochman (1998) found that leadership style (for the charisma and intellectual stimulation conditions) affected follower behavior, the author found that leadership style did not affect the quality of participants' output.

Based the literature reviewed on the effect of both charismatic and transformational leadership on performance (quality), it is anticipated that the transformational leadership dimensions (charisma and intellectual stimulation) will have the greatest effect on the performance quality in this study. It is further anticipated that contingent reward leadership will have a stronger effect on quality than will the no leadership condition. Therefore, the following hypothesis is proposed:

H1_a: Performance (quality) will be highest for participants in the transformational leadership conditions, followed by participants in the contingent reward leadership condition and the no leadership condition, respectively.

The literature reviewed also presents findings with respect to the effect of charismatic and transformational leadership on performance quantity. Hochman (1998)

found that quantity was highest when the leader displayed transformational behaviors alone (highest for charisma, followed by intellectual stimulation), compared to the control and combination conditions (quantity was lowest in the combination condition). Jung and Avolio (1999) found that individualists generated the highest quantity of ideas in the group condition and under the transactional leader, while collectivists generated the highest quantity of ideas in the group condition under a transformational leader.

Regarding charisma, Kirkpatrick and Locke (1996) found that vision did not affect quantity. Kirkpatrick and Locke (1996) found that quantity was higher for the task-cues condition than for the non-task cues condition, where the task cues condition was similar to the transformational dimension of intellectual stimulation. Howell and Frost (1989) found that participants paired with a charismatic leader had higher performance quantity when compared with participants paired with a structuring leader (where it may also be noted that the characteristics of the structuring leader are similar to those of leaders displaying contingent reward behaviors in transformational leadership theory).

Regarding contingent reward, although some authors have investigated similar leadership styles (e.g., Howell and Frost, 1989), there were no studies found in the literature review that specifically assessed quantity for this leadership style. However, in this study the leader displaying contingent reward repeatedly emphasizes the performance standards of the task to participants. The leader also stresses that good performance is what leads to rewards. As such, it is proposed that contingent reward leadership will have the strongest effect on performance quantity, followed by the transformational leadership conditions (charisma and intellectual stimulation). Based on the literature reviewed above, the following hypothesis is proposed:

H1_b: Performance (quantity) will be highest for participants in the contingent reward condition, followed by the transformational leadership conditions and the no leadership condition, respectively.

Effects of leadership styles on leader effectiveness. The effects of transformational and transactional leadership on leader effectiveness has been investigated in numerous studies. Lowe et al. (1996) conducted a meta-analysis of such studies. The authors note that research has generally found a significant relationship between the transformational leadership dimensions and leader effectiveness. In addition, the authors note that this relationship is also present for contingent reward, although to a lesser extent. The results showed that charisma was the dimension most strongly related to leader effectiveness. This relationship occurred for both types of organizations studied (private and public), both levels of the leader studied (whether the leader was at a high or low level in the organization), and the way in which effectiveness was measured (as subordinate perceptions or via organizational measures). In addition, intellectual stimulation related to leader effectiveness, with a stronger relationship to subordinate perceptions than to organizational measures.

Consistent with these results, Bycio et al. (1995) measured leader effectiveness using MLQ items, in a study where the MLQ was distributed to a large sample of nurses. Their results showed leader effectiveness to be positively related to charismatic leadership, intellectual stimulation, and contingent reward.

Judge and Picollo (2004) conducted a meta-analytic test of transformational and transactional leadership, in which one of the dependent variables measured was leader effectiveness. The results showed that there were four outcome variables where there was a significance difference in the correlation between transformational leadership and

contingent reward: for two outcomes (satisfaction with the leader and leader effectiveness), the correlation was significantly higher for the transformational leadership versus contingent reward, while for two other outcomes (follower job satisfaction and leader job performance) the correlation was significantly higher for contingent reward versus transformational leadership. The authors further note that *laissez-faire* leadership was negatively correlated with leader effectiveness. Although *laissez-faire* leadership is not equivalent to the No Leadership condition of the current study, this result suggests that a lack of leadership causes perceptions of leader effectiveness to be lower than in situations where leadership is present.

Based on the literature reviewed, it is anticipated that transformational leadership will have a stronger effect on perceptions of leader effectiveness than transactional leadership. As the literature has shown that charisma usually accounts for the greatest amount of variance in transformational leadership, it is proposed that participants viewing a video of a leader displaying charisma will have the strongest perceptions of leader effectiveness.

H1_c: Perceptions of leader effectiveness will be highest for participants in the charisma condition, followed by participants in the intellectual stimulation, contingent reward, and no leadership conditions, respectively.

Effects of leadership style on satisfaction with the leader. Several studies have found that the leadership behaviors displayed by the leader influence participants' degree of satisfaction with the leader.

Bycio et al. (1995) found satisfaction with the leader to be positively related to charismatic leadership (.83), intellectual stimulation (.66), and contingent reward leadership (.57). A meta-analysis by Judge and Piccolo (2004) also found a positive

relationship between transformational leadership and satisfaction with the leader, as well as contingent reward and satisfaction with the leader. The authors note that transformational leadership had higher validity with respect to this dependent variable than contingent reward leadership (where the correlation was .71 for transformational leadership and .55 for contingent reward). The authors also note that they found a strong and negative relationship between satisfaction with the leader and *laissez-faire* leadership. In addition, Vandenberghe et al. (2002) conducted a study in which the relationship between transformational leadership and several outcomes (including satisfaction with the leader, extra effort, intention to quit, altruism, and perceived unit effectiveness) was examined in a sample of 1059 nurses. The results of the study showed that both the transformational dimensions and contingent reward leadership were related to satisfaction with the leader and extra effort. However, the authors noted that the transformational dimensions were more strongly related to these outcomes than contingent reward leadership.

The following hypothesis is proposed based on the findings from Bycio et al. (1995). The finding by Judge and Piccolo (2004), that satisfaction with the leader was higher for transformational leadership than for contingent reward, as well as the findings by Vandenberghe et al. (2002) also support the proposed hypothesis.

H1_d: Satisfaction with the leader will be highest for participants in the charisma condition, followed by participants in the intellectual stimulation, contingent reward, and no leadership conditions, respectively.

Effects of leadership styles on task interest/enjoyment. A study by Amorose and Horn (2001) investigated how college athletes' intrinsic motivation was affected (pre-season to post-season) by their coach's leadership behaviors and whether they had a

scholarship. The sample for the study consisted of 72 first-year college athletes practicing four sports. Athletes' intrinsic motivation was measured with the Intrinsic Motivation Inventory (IMI), including the task interest/enjoyment subscale. The results indicated that the participants' intrinsic motivation increased (from the pre- to post-season) when the participants perceived their coaches to provide them with a lot of training and to display a minimal autocratic behavior and social support. Thus, this article provides support for the hypothesis presented in this study that leadership style will have an impact on participant's task interest/enjoyment.

As no studies were found that specifically examined the relationship between task importance and task interest/enjoyment, the hypothesis proposed is exploratory in nature. As noted above, the findings by Ambrose and Horn (2001) suggest that leadership style impacts intrinsic motivation (including task interest/enjoyment). It is therefore anticipated that participant's task interest/enjoyment will be greatest in the transformational leadership conditions, followed by the transactional contingent reward condition and no leadership.

H1_c: Task interest/enjoyment will be highest for participants in the transformational leadership conditions, followed by participants in the contingent reward and no leadership conditions, respectively.

Effects of leadership styles on extra effort. Finally, the leadership behaviors displayed by the leader in this study are expected to influence participants' extra effort. Bycio et al. (1995) conducted a study in which extra effort was measured using MLQ items. The results from their study showed extra effort to be positively related to charismatic leadership (.82), intellectual stimulation (.78) and contingent reward leadership (.68).

Bass (1998) described a study in which the effects of transformational and transactional leadership on employees' extra effort were examined. The percentage of employees who reported exerting extra effort was higher for employees under a transformational leader than a transactional leader². Specifically, 82% of respondents reported exerting extra effort under an intellectually stimulating leader, 78% under a charismatic leader, 75% under a leader displaying individualized consideration, 60% under a leader displaying contingent reward leadership, and 58% under a leader displaying management-by-exception.

A study conducted by Densten (2006) examined the relationship between contingent reward leadership and extra effort. Both contingent reward and extra effort were measured with items from the MLQ for a sample of 480 managers. In this study, the author identified 3 factors that comprise contingent reward leadership. The factors were i) framing ("defining the boundaries"), ii) rewarding ("acknowledging involvement") and iii) clarifying ("elucidating mutual outcomes") (p. 45). The author then examined the relationship between each of the three contingent reward factors and extra effort. The results showed that contingent reward (clarifying) was the only factor that had a direct effect on extra effort.

The findings from the study by Bycio et al. (1995) suggest that charisma has the strongest effect on extra effort, followed by intellectual stimulation and contingent reward. The findings described by Bass are slightly different, suggesting that intellectual stimulation has the strongest effect on extra effort, followed by charisma and contingent reward. Finally, the findings by Densten (2006) show that one of the three factors of

² Where the leaders were managers rated as "four-star" by employees (in the top 25%).

contingent reward leadership identified in the study (i.e., clarifying) had a direct effect on extra effort.

Based on the above-mentioned findings, it is anticipated that participants' extra effort will be greatest in the transformational leadership conditions, followed by contingent reward and no leadership.

H1f: Extra effort will be highest for participants in the transformational leadership conditions, followed by participants in the contingent reward and no leadership conditions, respectively.

Main effect of task importance. Studies in which task importance is manipulated are sparse. One study by Forsyth and Schlenker (1977) investigated the effects of performance, task importance, and the expectation of being tested again in the future on participants' attributions after completing a group task. A sample of 126 undergraduate students were assigned to small groups where they were presented with twelve problems (with three possible answers to each) and were asked to input the group answers into a machine. Task importance was manipulated in two ways. First, participants in the high importance condition were told that the test had high predictive validity, and in the low-importance condition, participants were told that the test was only somewhat valid. Second, participants in the high importance condition were told that they could receive a bonus credit if the group performed well, while the participants in the low-importance condition were not informed of this possibility. A study by Deci, Eghrari, Patrick and Leone (1994) used self-determination theory to investigate how people self-regulate to complete tasks that are not intrinsically motivating. The authors note two processes by which people internalize this self-regulation: introjection (which refers to an internal sense of control – such as a sense

of duty or guilt– that motivates a person to complete the task), and integration (where the desire to complete the task becomes self-determined – for example, the person views the task as being beneficial). One of the findings of the study was that the significance of the rationale proposed for performing a task (one of the contextual factors proposed by the authors to affect a person’s integration) significantly affected participants’ task interest and enjoyment. Thus, the results from the study suggest that the presence of a meaningful reason for performing a task that is not intrinsically motivating can affect a person’s interest and enjoyment in the task.

Some studies also investigated the effects of task significance (as one of the core job characteristics). Piccolo and Colquitt (2006) found that core job characteristics (i.e., task autonomy, task significance, and task identity) were related to intrinsic motivation. A meta-analysis by Loher, Noe, Moeller, and Fitzgerald (1985) investigated the relationship between job characteristics and job satisfaction. The results from the meta-analysis showed the correlation between task significance and job satisfaction to be .38.

The following hypothesis is based on the results by Piccolo and Coquitt (2006), who found a relationship between the core job characteristics and intrinsic motivation. It is anticipated that, in this study, participants in the high task importance condition will perceive the assigned task to have a greater significance than will participants in the low task importance condition. As a result, the task interest/enjoyment (intrinsic motivation) of the participants in the high task importance condition will be greater than the task interest/enjoyment of participants in the low task importance condition.

H2: Task interest/enjoyment will be greatest for participants in the high task importance condition.

Interaction effects. The findings from several studies suggest that both leadership style and task importance may interact to predict outcomes. The findings by Howell and Frost (1989) showed an interaction between leadership style and contextual factors (i.e., group norms), as the results indicated that group productivity norms impacted one leadership style (the structuring leader) but not the other (the charismatic leader). Also, a study by Jung and Avolio (1999) investigated the interaction of leadership style (transformational versus transactional) and the structure of the task performed (individual versus group) on several measures of performance (i.e., quantity, practicality, and long-term orientation) for two groups (individualists and collectivists). The authors reported that the results for the main and interaction effects were significant for both the individualist and collectivist samples. In addition, a study by Halverson, Murphy, and Riggio (2004) investigated the role of context in the emergence and attribution of charismatic leadership. A laboratory study was conducted with a sample of 168 students, assigned to groups, in which the experimenters manipulated both stress (one stress and one control condition) and crisis (via a “crisis intervention” given to all groups). The results showed that stress and crisis had an effect on the amount of charismatic behaviors displayed by the leaders in the study. Thus, the results from the study by Halverson et al. (2004) support the assertion by Conger and Kanungo (1987) that situational factors are important in the emergence of charismatic leadership.

It is anticipated that the mean difference in outcomes between the high and low importance conditions will be greatest in the no leadership condition. This is due to the fact that the high task importance condition will introduce significance (or meaningfulness) to the task that is otherwise completely absent in the no leadership

condition. Thus, it is anticipated that the difference in perception of task significance will be greatest in the no leadership condition, for all outcome variables.

It is anticipated that the mean difference in outcomes between the high and low importance conditions will be smallest in the charisma condition. This is due to the fact that there is an inherent importance or significance to the charisma manipulation and therefore the manipulation of task importance is anticipated to have the smallest effect. The following interaction hypothesis is therefore proposed:

H3: The mean difference between the high and low task importance conditions for each outcome will be greatest for the no leadership condition, followed by the contingent reward, intellectual stimulation, and charisma conditions, respectively.

Please note that hypothesis 3 specifies the gaps (i.e., mean differences) between the mean scores in the high and low importance conditions by leadership style. The absolute value of the mean score for each condition is not specifically predicted in the hypothesis.

METHOD

Sample

The sample for this study was composed of 102 undergraduate students (male, $N=45$ and female, $N=57$). Students enrolled in an undergraduate course were recruited over the period of one month and received a bonus of 1% toward their final grade in the course in exchange for their participation in the study. As such, the sample for this study was obtained through convenience sampling.

The average age of participants was 22.5 years ($SD = 3.39$). Participants reported their primary language as English (48.4%), French (15.8%) or other primary languages (35.8%) (based on 95 questionnaire responses). In this sample, 6.9% of participants reported having no work experience, 12.9% reported less than 1 year experience, 14.9% reported 1-2 years experience, 21.8% reported 3-4 years experience, 27.7% reported 5-6 years experience and 15.8% reported 7 years experience or more (based on 101 questionnaire responses). Twenty-seven and a half percent of participants reported having managerial experience (based on 96 questionnaire responses).

Procedure

Research design. This study was a laboratory experiment with a 4 x 2, between-subjects design. Two conditions – leadership style and task importance – were manipulated. The variable ‘leadership style’ had four levels: 1) Charisma, 2) Intellectual Stimulation, 3) Contingent Reward, and 4) No Leadership (the control condition). The variable ‘task importance’ had two levels: 1) high importance and 2) low importance. Thus, this study consisted of a total of 8 conditions. A diagram of the research design is presented in Figure 2.

Figure 2

Research Design

Leadership Style:	Charisma	Intellectual Stimulation	Contingent Reward	No leadership
Task Importance:	Condition #1 High Importance	Condition #3 High Importance	Condition #5 High Importance	Condition #7 High Importance
	Condition #2 Low Importance	Condition #4 Low Importance	Condition #6 Low Importance	Condition #8 Low Importance

Participants were invited to sign up for one of 19 study sessions that were held over the period of one month. Each session was assigned to one of the conditions as presented in the above diagram. The condition assigned to each study session was based on the number of participants who had signed up for that session, with the intention of creating equivalent samples in each of the eight study conditions. The sample size for each of the conditions of the study ranged from 11 to 15 participants.

Research sessions. Each research session began with a brief introduction by the researcher, where she thanked the participants for their attendance, presented an overview of the session, read the consent form for participation and collected the signed forms. Please see Appendix A for the script that was used by the researcher at the beginning of each session. Each session was less than one hour in length.

The session began with a video that was created for the purpose of this study. The video featured a leader, who represented a fictitious company that specialized in developing fundraising campaigns. The leader explained to participants that her company had designed the workshop in which they were about to participate and provided instructions for the assigned task for the workshop. Participants were given twenty minutes to work on the assigned task, after which a questionnaire booklet was distributed.

During the course of the study, it was discovered through an Internet search by the researcher that the name that was given to the fictitious company featured in this study was the name of an existing company. In an effort to correct this, debriefing sheets were immediately created and given to participants at the conclusion of each research session. These debriefing sheets stated that the video shown in the session was created for

the purpose of the study and featured a fictitious company. It was further noted that any resemblance or similarity to any actual company was a pure coincidence. Please see Appendix B for the debriefing sheet. As a few sessions had been held before the debriefing sheets were created, participants from those sessions were sent an email with the debriefing sheet attached. The company that was created for this study will henceforth be referred to in this thesis as Company XYZ.

The researcher informed participants at the beginning of each session that they would be provided with a written feedback report from the study during the following semester (in the end, the feedback report was sent to participants approximately 6 months after the research sessions were held, one month after the completion of the subsequent semester). This feedback report was intended to debrief participants on the purpose of the study, its hypotheses, and the main findings from the research. Participants were asked to provide an email or postal address where this feedback report could be sent, if they wished to receive the report. Please see Appendix C for the feedback report.

Notes on the research sessions. During one of the research sessions, the audiovisual equipment that was used to play the video malfunctioned. For that session, the leadership video was shown to participants on a laptop belonging to one of the participants who very kindly allowed the laptop to be used for the session.

During the introduction of two research sessions, the researcher did not provide an example of a fundraising activity to participants (the researcher usually provided the example of a bake sale to participants). In one research session, the researcher did not read the handout provided to students aloud during the video, as the researcher was responding to a knock at the door at the time.

In the research sessions, each participant was provided with an in-basket containing 10 memos (presented in the same order for all participants). The first memo in the packet included a brief explanation of what a slogan entailed. The explanation was as follows: “A slogan is a catch-phrase, or a saying, that is used a lot in the fundraising campaign. To develop a slogan, think of a title for the fundraising campaign – such as last year’s slogan for ‘ABC’ Elementary School’s fundraising activity, ‘Protect our Oceans’.” There were approximately 20 memo packets used during the research study. It was realized, after the research sessions had ended, that approximately half of the memo packets did not include this explanation on the first memo of the packet due to an oversight by the researcher.

Task. The workshop required participants to engage in a task that involved the development of fundraising ideas. An in-basket exercise was designed for this study, adapted from Howell and Frost (1989). Each participant was provided with an in-basket that contained 10 memos. Each memo provided a brief description of a fictitious company or organization that wanted to develop a fundraising activity or campaign. Participants were asked to provide three pieces of information for each memo (for example, to suggest a fundraising activity, a way to advertise this fundraising activity, and to develop a slogan for the activity). An answer sheet booklet was created and placed next to each in-basket. Please see Appendix D for the memos and Appendix E for the content of the answer sheet booklet. In the memos presented in Appendix D, all of the names given to the companies in the memos have been changed in this thesis to Company “ABC”.

The leader in the video informed participants that the characteristics of high quality ideas were *practicality*, defined as the feasibility of ideas, and *creativity*, defined as the innovativeness of ideas. Participants were given twenty minutes to answer as many of the memos as they could. Halfway through the task, the leader re-appeared on screen for a ‘booster session’ that was designed to reinforce the leadership style that was being portrayed by the leader to the participants (e.g., Jung & Avolio, 1999). After twenty minutes, the leader re-appeared on screen for the final time to inform participants that the task was complete and to thank them for their participation in the workshop. Table 1 presents the agenda for each research session.

Table 1

Agenda for Research Sessions

Part of the session	Details
Introduction	<ul style="list-style-type: none"> - Presented by the researcher, using a script as a guide - Consent form was read aloud and signed by participants - Researcher distributed the handout for the session - Researcher began the video
Part 1 of the video	<ul style="list-style-type: none"> - Leader introduced herself and Company XYZ - Leader provided instructions about the task for the workshop
In-basket exercise begins	<ul style="list-style-type: none"> - Task began - Video screen faded to a picture of the leader’s slogan³ written on a flipchart for ten minutes (in the no-leadership condition, the company’s name appears written on the flipchart)
Part 2 of the video	<ul style="list-style-type: none"> - Leader reappeared on screen for a booster session (approximately 1.5-2 minutes)
In-basket exercise continues	<ul style="list-style-type: none"> - Task continued - Video screen faded to a picture of the leader’s slogan written on a flipchart for ten more minutes (in the no-leadership condition,

³ Please see the scripts for each video in Appendix F for each leader’s slogan.

Part of the session	Details
	the company's name appears written on the flipchart)
Part 3 of the video	- Leader reappeared on screen to thank participants and to inform them that the task for the workshop has been completed
Conclusion	- Researcher stopped the video and thanked participants - Questionnaire booklets were distributed to participants - Participants were asked to fill out the 'sign in' sheet after completing the questionnaire (participants were asked to provide an email or postal address where the feedback report could be sent, among other information) - Researcher gave each participant a receipt for their participation in the study and the debriefing sheet

Manipulations. In this study, the variable 'leadership style' had four levels: 1) Charisma, 2) Intellectual Stimulation, 3) Contingent Reward, and 4) No Leadership. To manipulate this variable, four videos were created for the purpose of this study that featured a leader who displayed verbal and non-verbal behaviors characteristic of each of the above mentioned leadership styles. An actress, who appeared in all four videos, portrayed the leader. Four scripts – one for each leadership condition – were written for this study. The scripts were reviewed to ensure that they were equivalent in length⁴. Please see Appendix F for the scripts.

In the videos for the charismatic, intellectual stimulation, and contingent reward conditions, the actress identified herself as the 'project leader' of the workshop and the questionnaire booklet distributed at the end of these sessions referred to the project leader. In the video created for the no leadership condition, the actress did not identify herself as the leader of the workshop and the questionnaire booklet distributed at the end of these sessions referred only to 'the person that you saw in the video'. This was done to

⁴ Length of scripts: Charisma (711 words), Intellectual stimulation (663 words), Contingent reward (677 words), and No leadership (663 words).

minimize the possibility that participants would attribute leadership qualities to the person featured in the no leadership condition. For example, it was suggested by Hochman (1998) that followers may perceive leaders to possess some degree of charisma as a result of the leader's position.

To identify the verbal and non-verbal behaviors that are characteristics of the specific leadership styles manipulated in this study, a literature review was conducted. Table 2 summarizes the main characteristics that were used to develop the leadership manipulations in this study. The table references the articles from the literature review in which these characteristics were found (but does not represent an exhaustive list of all articles in which these characteristics are identified).

Table 2

Summary of the Characteristics for the Leadership Conditions

Topic	Characteristics	Article
Charisma		
Vision	Emphasizes quality	1
	Ideal, involves shared values, with moral implication	1,3,6,8
	Has high expectations and standards of performance	1,2,4,6,8
	Instills in followers a confidence they can meet expectations	1,3,4
	Presents a future-oriented vision and how it can be achieved	2,3,4,10
	Emphasizes the importance of the work	3,4,6
	Emphasizes that there is a common goal	3,6
	Presents goals for the future	3
	Communication of vision: vision is short and is repeated	3
	When speaking, refers to group as "we" (versus saying "I")	3
	The leader is a role model to followers, who does what is right	5,10
Charismatic personality	Uses a tone of voice that will engage followers	1,3,4,8
	When speaking, pauses to emphasize points	1,11
	When speaking, varies loudness of voice	1,3,11
	Displays confidence	2,11
Non-verbal	Leader is enthusiastic, displays optimism	5,10
	Makes eye contact with followers	1,3,4,8,

Topic	Characteristics	Article
aspects		11
	Uses vibrant facial expressions	1,3,4,8
	Interacts with followers in a confident and energetic way	1,3,4
	Uses hand gestures	1,3,11
	Moves while speaking (standing, sitting, pacing)	1,3,4
	Leans forward	3,4,11
	Leader's posture is relaxed	4
Intellectual Stimulation		
Task cues	Provides pieces of information to followers on how to perform the task (clarifies the task)	1
	Suggests ways to improve the way tasks are accomplished	1
Intellectual stimulation	Focuses on innovation and creativity	2, 10
	Presents new ways for employees to tackle problems	6,5,10
	Emphasizes problem solving and intelligence	6
	Helps followers to find solutions to their questions and problems	5
Contingent Reward		
Clarifying	Emphasizes to followers the mutual outcomes of the work	7
Rewarding	Recognizes the involvement of followers in the work	7
Framing	Clarifies the parameters for doing the work (the "defining the boundaries", p. 45)	7
Contingent reward	Highlights the exchange relationship between effort and receiving rewards, acknowledges good performance	6,9
	Leader sets goals, discusses the expectations for their outcomes	9,10
	Acknowledges when the goals have been accomplished	10
Structuring leader	Presents details related to how the task should be completed	4
	Lets followers know the time period in which the work in expected to be done	4
	Discusses the standards related to work performance	4
	Sits at desk with little movement, maintains eye contact	4

* Legend

- | | |
|--|--|
| 1. Kirkpatrick and Locke (1996) | 8. Towler (2003) |
| 2. Bass (1999) | 9. Dvir, Eden, Avolio, and Shamir (2002) |
| 3. Frese, Beime, and Schoenborn (2003) | 10. Bass et al. (2003) |
| 4. Howell and Frost (1989) | 11. Hochman (1998) |
| 5. Kelloway, Barling, and Helleur (2000) | |
| 6. Bass (1998) | |
| 7. Densten (2006) | |

Leadership style was manipulated by creating a video in which the leader exemplified the characteristics of the leadership style in question and displayed the non-verbal cues associated with that leadership style. Thus, the charismatic leader emphasized the ideal that she envisioned and her confidence that participants could excel at the assigned task, while exhibiting animated movements and facial expressions. The intellectually stimulating leader emphasized the importance of innovative thinking and problem solving, while displaying a confident tone and some body movement (but significantly less than the charismatic leader). The contingent reward leader emphasized the relationship between good performance and rewards, while seated at the head of a conference table and displaying limited hand gestures. Finally, in the no leadership condition, the person in the video presented in a monotone voice with a neutral expression, while remaining seated in a center chair at the conference table and displaying no hand gestures or animated movements.

The second variable manipulated in this study was ‘task importance’. To manipulate task importance, two handouts were prepared that described the company’s purpose for holding the workshop. Handouts were used in order to keep the task importance as separate as possible from the leadership style manipulation, in order to avoid confounds between the two independent variables. One handout was designed to convey high task importance, and the other handout to convey low task importance. In addition, the manner in which the ideas generated by participants would be used was different in each handout. Please see Appendix G for the handouts. A summary of the manipulation for task importance is presented in Table 3 below.

In each research session, one handout (reflecting either high task importance or low task importance) was distributed to participants just before the video of the leader was played. During the video, the leader asked participants to take a moment to read the handout that was provided for them and the video faded to a black screen for a period of one minute. During this time, the researcher, who was present at each session, also read the handout aloud.

Table 3

Summary of the Manipulation of Task Importance

Level of task importance	Manipulation
High importance	<p><u>Purpose:</u> The company’s purpose for holding the workshops was that it believed in encouraging students to participate in fundraising for charitable causes – thus to highlight the importance of charitable work and to promote awareness of social issues.</p> <p><u>How ideas generated would be used:</u> The company stated that the ideas generated by participants were absolutely essential to the company, that all ideas would be carefully reviewed, and that participants’ ideas had a huge impact on the development of their fundraising activities.</p>
Low importance	<p><u>Purpose:</u> The company’s purpose for holding the workshop was to fulfill its ethical mandate that requires it to hold workshops for students.</p> <p><u>How ideas generated would be used:</u> The company stated that it would not use the ideas provided by participants in any way, that ideas would not be reviewed, and that the company would not keep the ideas for future use.</p>

Pilot Test

A pilot test was conducted with graduate students from the same university as the sample in this study ($N = 9$). Each participant in the pilot test experienced two of the eight

conditions of the research study. For each condition, participants were asked to view 2 of the 4 videos and read the 2 handouts, but were not asked to perform the task (i.e., in-basket exercise) designed for the study. A questionnaire was distributed to participants after each video. The questionnaire included two questions. The first question presented participants with four statements (each describing one of the leadership styles manipulated in this study) and asked participants to select the statement that best described the person who appeared in the video. This question is provided below.

*For the following question, please select one (1) statement that **BEST** applies to the video that you just watched. Thank you for your participation.*

Which of the following statement **BEST** describes the person presented in the video? (Please select only one statement).

- The person presented in the video attempts to help people look at problems in new ways and suggests ways in which performance can be improved. The person in the video also emphasizes creativity, intelligence, and problem solving.
- The person in the video clearly defines good performance and stresses the relationship between good performance and receiving rewards. The person in the video also clearly articulates the details of the task and sets goals to achieve desired outcomes.
- The person in the video presents an ideal (or vision) of the future and inspires people to work toward it. The person in the video expresses high expectations of others, along with a confidence that these high expectations can be achieved.
- None of the above statements apply to the person in the video.

The second question asked participants to rate the importance of the assigned task of the workshop on a scale from 1 to 7 (where 1= not very significant to 7= highly significant). This question was taken from the Job Diagnostic Survey (Hackman & Oldham, 1980) and slightly modified for this study. The question is provided below.

In general, how *significant* or *important* is the task that participants are asked to perform? That is, are the results of your work likely to significantly affect the lives or well being of other people?

The number of participants who experienced each condition of the study ranged from 2 to 3; the total number of questionnaires completed was 18. The results from the pilot test suggested that the manipulation of leadership style was successful, as the leadership style was correctly identified in 88.9% of the questionnaires. The results also suggested that the manipulation of task importance was successful. The mean score for the significance of the task in the high importance condition was 4.56, and the mean score in the low importance condition was 2.67.

In all four leadership conditions, the average score for task significance was higher in the high importance condition than in the low importance condition. For the charismatic leadership style, the average score for task significance was 4.5 in the high importance condition and 3.5 in the low importance condition. For the intellectual stimulation leadership style, the average score for task significance was 5 in the high importance condition and 1 in the low importance conditions. For the contingent reward leadership style, the average score for task significance was 5 in the high importance condition and 3 in the low importance condition. Finally, in the no leadership condition, the average score for significance was 3.5 in the high importance condition and 3 in the low importance condition.

After the pilot test, the handouts were edited to strengthen the difference between the high and low importance conditions.

Measures

Demographic characteristics. Demographic information collected included the age, gender, nationality, primary language and the university major(s) and minor(s) of participants. In addition, the questionnaire asked participants to state the extent of their work experience and whether they had held a managerial position. Please see Appendix H for the demographic questionnaire.

Manipulation check for the leadership style condition. A question was developed for this study as a manipulation check for the leadership style condition. Participants were asked to select one statement from four options that best described the person presented in the video. Each statement described one of the four leadership styles examined in this study. This question was also used during the pilot test for this study. Please see Appendix I for this question.

Manipulation check for the task importance condition. A question from the Job Diagnostic Survey (Hackman & Oldham, 1980) was slightly modified to measure participants' perception of the importance of the task. This question was also used in the pilot study. Participants were asked to respond to the following question based on a 7-point scale (where 1= not very significant and 7= highly significant). Please see Appendix J for this question.

Satisfaction with the leader, leader effectiveness, and extra effort. The variables satisfaction with the leader, leader effectiveness, and extra effort were measured with items from the Multifactor Leadership Questionnaire (MLQ, Form 5X). The MLQ was developed by Bass and Avolio (1995). Specifically, two items measured satisfaction with the leader, four items measured leader effectiveness, and three items measured extra

effort. The questions presented in the MLQ are based on a 5-point frequency scale, ranging from 0 to 4 (where 0 represents “not at all” and 4 represents “frequently, if not always”). As this questionnaire is copyrighted, sample items could not be provided. The Cronbach’s alphas of the scales for the data in this study were .80 (satisfaction with the leader), .76 (leader effectiveness) and .85 (extra effort).

It must be noted that an error was made in this study. The error occurred in the scale that was presented in the questionnaire booklet for the items pertaining to satisfaction with the leader, leader effectiveness, and extra effort. In the questionnaire, the scale (ranging from 0-4) was correctly noted above the items, along with the description for each point on the scale. However, the values available for participants to circle next to each of the items were incorrectly presented as 1-4. Some participants included the missing 0 on their questionnaires, while others responded to the items based on the values provided in the questionnaire (from 1-4).

As a result, the decision was made to combine the values of 0 and 1 for the three variables affected by this error (where 0 denoted “not at all” and 1 denoted “once in a while”). Thus, a score of 0 given for these three variables was recoded as 1. This decision was made because it would have been otherwise impossible to analyze these variables, as the responses of participants were based on two potentially different scales.

Task interest/enjoyment. Seven items that were slightly adapted from the task interest/enjoyment subscale of the Intrinsic Motivation Inventory (IMI, developed by Ryan, 1982) were used to measure participants’ interest and enjoyment with the assigned task. Participants were asked to respond based on a 7-point scale, with 1 being ‘not true at

all’ and 7 being ‘very true’. The Cronbach’s alpha of the scale for the data in this study was .93. Please see Appendix K for the questions measuring task interest/enjoyment.

Performance – quantity. Quantity is defined in this study as the total number of pieces of information attempted by participants on the answer sheets for the memos. Thus, the score for quantity was based on the number of points on the answer sheets where participants provided an answer. This operationalization is adapted from Howell and Frost (1989), where quantity was assessed based on the number of in-basket items attempted by participants.

Performance – quality. In the video presented at the beginning of each research session, the leader informs participants that a high quality idea is one that is both practical (e.g., Jung & Avolio, 1999) and creative. Shalley and Gilson (2004) note that “creativity involves producing novel products, processes or services” (p. 34). This definition of creativity was adopted for this study.

Quality therefore refers in this study to both the practicality and creativity of the pieces of information provided by participants in response to the memos. The following 5-point scales were developed for this study to rate the practicality and creativity of those pieces of information. Please see Appendix L for further information on the scoring of creativity and practicality using the following scales.

<i>Scale for Practicality</i>				
1	2	3	4	5
Not at all practical		Somewhat practical		Very practical

<i>Scale for Creativity</i>				
1	2	3	4	5
Not at all creative		Somewhat creative		Very practical

Sample item

The following is an example of an answer provided by one participant that was highly rated for both practicality and creativity.

Answer for Memo #2, question #1 “Suggest a fundraising activity”:

- “Set up a public campaign with all sorts of gaming activities that require and encourage literacy. The idea is basically to relate fun with literacy and intelligence with literacy”.

Mean score for practicality: 4.25

Mean score for creativity: 4.25

Two subject matter experts coded the practicality and creativity of the responses provided on the answer sheets for the memos. The expert raters were marketing graduate students from the same university as the students in the sample in this study and were blind to the hypotheses of the study. Raters were asked to provide a score for both practicality and creativity, based on the scales presented above, for each of three questions answered for each memo. An exception was the question presented in each memo that asked participants to develop a slogan – this question was coded on the creativity scale alone. In addition, raters provided an overall score for both practicality and creativity for each memo.

The raters participated in a training session (approximately 1 hour in length). Following this meeting, the expert raters coded 8 memo booklets. Interrater agreement was assessed based on the coding for these 8 memo booklets. Interrater agreement for creativity was good ($r = .44$, $p < .01$, 2-tailed), but agreement for practicality was not significant ($r = -0.04$). To calculate this correlation, all scores for practicality (including overall scores, as well as scores for each question) were combined to create one single

variable and all scores for creativity (including overall scores, as well as scores for each question) were combined to create one single variable for each rater.

A second training session was therefore conducted to discuss coding for practicality that was approximately 1 hour in length. The 8 memo booklets previously coded were then re-coded by the expert raters. During the two meetings, the following decision rules were developed: i) in the case where multiple slogans are presented for one memo, it was decided that the raters would provide a score for creativity based on the slogan that the rater considered to be best, ii) in the case where the wording of an answer might not reflect the intention of the answer (for example, if the wrong word was used to express the answer – such as ‘illiteracy’ instead of ‘literacy’), raters were asked to code the answer based on the intention of the answer, iii) when the answer provided was out of scope for the question (i.e., did not answer the question presented), raters were asked to still provide a score, but on the lower end of the scale, and iv) the coding for practicality would be based on the possibility of implementing the suggestion, in light of the context of the situation presented in the memo (rather than on the potential effectiveness of the suggestion).

Interrater agreement was calculated by correlating the overall scores only for both practicality and creativity between raters. The correlations for both practicality ($r = .30$) and creativity ($r = .28$) were significant at the 0.01 level (2-tailed). Interrater agreement was further assessed by correlating all the scores for practicality and creativity (including the overall scores and the individual scores for each question). The correlations for both practicality ($r = .32$) and creativity ($r = .25$) were significant at the 0.01 level (2-tailed).

To calculate the final score for quality for each participant, the overall scores for practicality and creativity were used. The average of the scores from both raters was taken. Firstly, the average scores for practicality and creativity were calculated for each memo. Secondly, the average score for practicality and creativity for each participant was calculated by averaging the overall practicality and creativity scores for all memos answered by participants. Finally, each participant's score for practicality and creativity were averaged to arrive at the final scores for quality.

Data Cleansing

Missing data. The following decision rules were adopted for the scales of the dependent variables in this study: i) scales with 1-5 items would be computed if 1 item or less was missing, and ii) scales with 6 or more items would be computed if 2 items or less were missing.

Scales with 1-5 items included Leader Effectiveness, Satisfaction with the Leader, and Extra Effort. In total, 18 scores were missing 2 or more items and were therefore excluded from the analyses. As a result, the sample size included in the analyses for the dependent variables were as follows: leader effectiveness ($N= 97$), satisfaction with the leader ($N= 98$) and extra effort ($N= 98$). The scale with 6 items or more was task interest/enjoyment. There were no scores for this scale missing more than 2 items, therefore all 102 scores were included in the analyses.

A manipulation check was conducted for the independent variables in this study. Each manipulation check consisted of one question. There were no missing data for the leadership condition manipulation check question ($N= 102$), however there were three missing data for the task importance manipulation check question ($N= 99$).

Outliers. A check for outliers was conducted by examining Cook’s distance (*d*) for each dependent variable. The following decision rule was applied: a score with a value for Cook’s distance greater than 1 denoted an outlier. No outliers were detected for any of the dependent variables in the study.

RESULTS

Manipulation Checks

Leadership conditions. The results for the leadership condition manipulation check indicate that overall 48% of participants correctly assessed the leadership condition in the manipulation check question. Please see Table 4 for a summary of the results.

Further analysis of the manipulation check by leadership style reveals that the percentage of correct assessment of the leadership condition was good for the intellectual stimulation, contingent reward, and no leadership conditions (ranging from 50 to 69.6%), but low for the charisma condition (12.5%).

Table 4

Results of the Leadership Condition Manipulation Check

Leadership condition	Manipulation check	Other leadership styles selected (when incorrectly identified)
Charisma (<i>N</i> = 24)	Correct (12.5%)	
	Incorrect (87.5%)	Intellectual stimulation (50%) Contingent reward (8.33%)

Leadership condition	Manipulation check	Other leadership styles selected (when incorrectly identified)
Charisma (<i>N</i> = 24)	Correct (12.5%)	
	Incorrect (87.5%)	Intellectual stimulation (50%) Contingent reward (8.33%) No leadership (29.2%)
Intellectual stimulation (<i>N</i> = 23)	Correct (69.6%)	
	Incorrect (30.4%)	Charisma (17.4%) Contingent reward (0%) No leadership (13%)
Contingent reward (<i>N</i> = 25)	Correct (60%)	
	Incorrect (40%)	Charisma (4%) Intellectual stimulation (24%) No leadership (12%)
No leadership (<i>N</i> = 30)	Correct (50%)	
	Incorrect (50%)	Charisma (13.3%) Intellectual stimulation (16.7%) Contingent reward (20%)

It is therefore concluded that the charisma manipulation was unsuccessful. However, it is notable that 50% of participants in the charisma condition selected intellectual stimulation (also a transformational leadership dimension).

The success rate for the leadership manipulation is highest for intellectual stimulation (69.6%). The success rate is slightly more modest for contingent reward (60%) and no leadership (50%). These percentages indicate that at least half of the participants correctly assessed the leadership style displayed by the leader. Therefore, it is concluded that the leadership manipulations for intellectual stimulation, contingent reward and no leadership were moderately successful.

The overall mean was also calculated for the correct assessment of the leadership condition for intellectual stimulation, contingent reward and no leadership (i.e., calculating the overall success rate for the manipulation check question excluding the unsuccessful charisma manipulation). The results indicated that 59% of participants correctly assessed the leadership condition for these 3 leadership styles ($N=78$), which represents a difference of 11% in the success rate for the manipulation (when charisma is excluded).

Task conditions. The results for the task condition manipulation check indicate that participants perceived the task to have greater significance in the high task importance (overall mean = 4.66, $SD = 1.56$) than in the low task importance conditions (overall mean = 4.13, $SD = 1.57$). A summary of the manipulation check results is presented in Table 5. An independent samples t-test was conducted to test whether the difference between the overall means for high and low task importance was significant. The t-test results indicated that the difference between the overall means was significant ($t(97) = -1.67, p < .05, 1$ -tailed).

Table 5

Results of the Task Condition Manipulation Check

Task importance	Overall mean	SD	Results by leadership condition
High importance	4.66 (<i>N</i> = 50)	1.56	Charisma: 4.21 (<i>N</i> = 12) Intellectual stimulation: 4.21 (<i>N</i> = 12) Contingent reward: 5.0 (<i>N</i> = 12) No leadership: 5.14 (<i>N</i> = 14) ^a
Low importance	4.13 (<i>N</i> = 49)	1.57	Charisma: 4.75 (<i>N</i> = 12) Intellectual stimulation: 4.5 (<i>N</i> = 10) ^a Contingent reward: 3.54 (<i>N</i> = 13) No leadership: 3.89 (<i>N</i> = 14) ^a

Note. Based on 99 observations.

^a Condition includes 1 missing observation.

As the difference between the overall means was found to be significant, these results were further analyzed in order to assess whether there was a significant difference between the means for the high and low task importance conditions for each leadership style. Independent sample t-tests were conducted for each leadership style to test the null hypothesis that the difference between the high and low importance conditions was significant. The results of the t-tests are presented below in Table 6. Levene's statistic indicated that the assumption of homogeneity of variance was satisfied for all tests ($p > .05$).

Table 6

T-test Results for the Task Condition Manipulation Check by Leadership Style

Leadership style	<i>t</i>	<i>df</i>	Sig. (1-tailed)	Mean difference (High – Low)
Charisma	.83	22	.21	-.54
Intellectual stimulation	.45	20	.33	-.29
Contingent reward	-2.02	23	.03	1.46
No leadership	-2.64	26	.01	1.25

Note. Charisma ($N = 24$), Intellectual stimulation ($N = 22$), Contingent reward leadership ($N = 25$), No leadership ($N = 28$).

The t-test results indicated that the difference between the means for the high and low importance conditions was significant for two of the leadership styles (contingent reward and no leadership, where $p < .05$, 1-tailed). The difference was not significant for either transformational leadership dimensions.

Multivariate Analysis of Variance (MANOVA) was used to test the hypotheses presented in this study. The following sections will present an analysis of the model assumptions, a discussion of the data transformation conducted, and a test of the hypotheses.

Checking Model Assumptions

The MANOVA is based upon several assumptions: i) independence of observations, ii) random sampling, iii) normality, iv) homogeneity of variance, and v) homogeneity of covariance. The assumption of independence is satisfied in the study's research design. The assumption of random sampling is not met within the research

design, as the study's sample was obtained by convenience sampling. However, it is argued that the robustness of MANOVA makes it an appropriate test to use to analyze the current data. MANOVA was deemed an appropriate statistical test to use in the data analysis for this study because it allows for the testing of both main and interaction effects for the variables and greater control of family-wise error rate. The remaining assumptions of normality, homogeneity of variance and homogeneity of covariance were examined using statistical tests and are discussed below.

Assumption of normality. To determine whether the dependent variables followed a normal distribution, the skewness of each variable was examined. Skewness was calculated by dividing the skewness statistic by the standard error of skewness (to derive the Z-score). The decision rule was as follows: it was concluded that variables followed a normal distribution if their skew was less than - 1.96 or greater than 1.96. The value of +/- 1.96 was adopted as a conservative measure for determining whether the variable followed a normal distribution.

Two variables – quantity and quality – did not satisfy the normality assumption. It was found that quantity had a positive skew, while quality had a negative skew.

The kurtosis of each variable was also examined. Kurtosis was calculated by dividing the kurtosis statistic by the standard error of kurtosis (to derive the Z-score). The decision rule was as follows: it was concluded that the variables followed a normal distribution if their kurtosis was less than - 1.96 or greater than 1.96. The value of +/- 1.96 was adopted as a conservative measure for identifying kurtosis.

One variable, quantity, was found to have a large kurtosis (Z-score was greater than 4).

Assumption of homogeneity of variance. The assumption of equal variance was investigated by examining the Levene's test for each dependent variable. The test considered the null hypothesis of equal variance among the groups. The decision rule was as follows: if the p value for Levene's test was smaller than .05, the null hypothesis was rejected. If the p value was greater than .05, we fail to reject the null hypothesis and conclude that the variances are not statistically different.

One variable, quality, did not satisfy the assumption of homogeneity of variance ($p < .05$).

Assumption of homogeneity of covariance. The assumption of equal covariance was investigated by examining Box's Test of Equality of Covariance Matrices. This tests the null hypothesis of equal covariance. The decision rule is as follows: if the p value for Box's Test of Equality of Covariance Matrices is greater than .05, then we fail to reject the null hypothesis. As the p value was greater than .05 ($p = .70$), we fail to reject the null hypothesis that there is equal covariance. As such, the assumption of equal covariance is satisfied.

Data Transformation

To address the issues of non-normality for quantity and quality, as well as non-constant variance for quality, the two variables were transformed.

Quantity. An examination of the normality of the distribution for quantity found that the variable was positively skewed. To address this issue, the variable was transformed by taking the square root of the data. The variable (which had a minimum value of 0) was transformed as follows: $\text{SqRt}(1+\text{Quantity})$.

The skewness of the transformed variable was 0.33, therefore satisfying the normality assumption. However, the kurtosis was 5.54 (remaining above the cutoff value of +/-1.96). Homogeneity of variance was examined with Levene's test ($p > .05$), therefore satisfying the assumption. No outliers were detected (d was less than 1 for all observations).

Quality. An investigation of the normality of the distribution for quality found that the variable was negatively skewed. To address this issue, the variable was transformed by taking the inverse function. The variable was transformed as follows: $1/(K-\text{quality})$, where K = the largest score for quality +1.

The skewness and kurtosis of the transformed variable were 1.76 and 0.47 respectively, therefore satisfying the assumption of normality. The transformed variable also addressed the issue of non-constant variance, as the p value for Levene's statistic ($>.05$) satisfied the assumption of homogeneity of variance. No outliers were detected (d was less than 1 for all observations).

Test of the Hypotheses

A two-factor MANOVA was conducted to test for the main and interaction effects for the dependent variables. To investigate whether any of the factor effects (main or interaction) were significant, Wilk's Lambda was examined. Wilk's lambda considers the null hypothesis of no factor effects. The decision rule is as follows: if the p value for Wilk's Lambda is smaller than .05, the null hypothesis of no factor effects is rejected. Please see Table 7 for the Wilk's Lambda results. The results indicated that there was a main effect for the leadership condition ($F(18, 232.42) = 2.24, p < .01, \eta^2 = .36$, partial $\eta^2 = .14$) and that the interaction effect was marginally significant ($F(18, 232.42) = 1.62$,

$p = .06$, $\eta^2 = .28$, partial $\eta^2 = .11$). The task condition effect was not significant ($F(18, 232.42) = .42$, $p > .86$, $\eta^2 = .03$, partial $\eta^2 = .03$).

Table 7

Wilk's Lambda Statistic

Effect	Wilk's Lambda	<i>F</i>	<i>df</i>	Sig.	η^2	Partial η^2
Intercept	.01	1645.87	6	.00	.99	.99
Leadership condition	.64	2.24	18	<.01	.36	.14
Task condition	.97	.42	6	.86	.03	.03
Interaction	.72	1.62	18	.06	.28	.11

Note. The values for eta-square presented in this table were calculated as follows: $\eta^2 = 1 - \Lambda$. (see Kline, 2004)

Table 8 presents a summary of the ANOVA results. The *F* test was significant for the main effect of the leadership condition for the following 3 dependent variables: *Performance quantity* ($F(3,87) = 3.17$, $p < .05$, $\eta^2 = .00$, partial $\eta^2 = .10$), *task interest/enjoyment* ($F(3,87) = 4.06$, $p < .01$, $\eta^2 = .01$, partial $\eta^2 = .12$) and *extra effort* ($F(3,87) = 4.52$, $p < .01$, $\eta^2 = .00$, partial $\eta^2 = .14$). The *F* test was found to be moderately significant for the interaction effect for the following two variables: *Performance quality* ($F(3,87) = 2.61$, $p < .10$, $\eta^2 = .00$, partial $\eta^2 = .08$) and *satisfaction with the leader* ($F(3,87) = 2.22$, $p < .10$, $\eta^2 = .01$, partial $\eta^2 = .07$). The *F* test was not found to be significant for any main effects for the task condition.

Table 8

Summary of the ANOVA results

Variable and source	<i>MS</i>	<i>F</i>	Sig.	η^2	Partial η^2
Performance (Quantity)					
Leadership style ^b	.95	3.17	.03*	.00	.10
Task importance ^a	.04	.14	.71	.00	.00
Leadership style x Task importance ^b	.29	.98	.41	.00	.03
Performance (Quality)					
Leadership style ^b	.02	.67	.51	.00	.02
Task importance ^a	.04	1.62	.21	.00	.02
Leadership style x Task importance ^b	.06	2.61	.06 ^t	.00	.08
Task interest/enjoyment					
Leadership style ^b	6.73	4.06	.01*	.01	.12
Task importance ^a	.58	.35	.56	.00	.00
Leadership style x Task importance ^b	.89	.54	.66	.00	.02
Satisfaction with the leader					
Leadership style ^b	.97	1.38	.25	.00	.05
Task importance ^a	.03	.04	.85	.00	.00
Leadership style x Task importance ^b	1.57	2.22	.09 ^t	.01	.07
Leader effectiveness					
Leadership style ^b	.87	1.58	.20	.00	.05
Task importance ^a	.06	.12	.73	.00	.00
Leadership style x Task importance ^b	.28	.51	.68	.00	.02

Variable and source	<i>MS</i>	<i>F</i>	Sig.	η^2	Partial η^2
Extra effort					
Leadership style ^b	2.89	4.52	.01*	.00	.14
Task importance ^a	.13	.20	.66	.00	.00
Leadership style x Task importance ^b	.90	1.40	.25	.01	.05

Note. ^a*df* = 1. ^b*df* = 3. **p* < .05. [†]*p* < .10.

The values for eta-sqaure presented in this table were calculated as follows:

$\eta^2 = SS_{\text{between}} / SS_{\text{total}}$ (see Levine & Hullett, 2002).

As the main effect of the leadership condition was found to be significant for three dependent variables (i.e., performance quantity, extra effort, and task interest/enjoyment), the mean differences were examined for the leadership styles to determine which differences were significant. Table 9 presents the means, standard deviations and overall means for each condition of the study and Table 10 presents the mean differences between leadership styles for each of the three dependent variables.

Table 9

Means, Standard Deviations, and Overall Means for Each Study Condition

Variable	Leadership condition			Task condition			Overall row mean		
	High task importance			Low task importance					
	<i>M</i>	<i>SD</i>		<i>M</i>	<i>SD</i>		<i>M</i>	<i>SD</i>	
Performance (Quantity)	Charisma	3.34	.60	3.59	.71		3.47	.66	
	Intellectual stimulation	3.42	.32	3.11	.35		3.27	.36	
	Contingent reward	3.63	.60	3.62	.42		3.62	.51	
	No leadership	3.79	.48	3.69	.71		3.74	.59	
	Overall column mean	3.56	.53	3.52	.60		3.54	.56	
Performance (Quality)	Charisma	.51	.15	.66	.14		.59	.16	
	Intellectual stimulation	.60	.15	.64	.18		.62	.16	
	Contingent reward	.68	.14	.60	.11		.64	.13	
	No leadership	.61	.12	.66	.18		.63	.15	
	Overall column mean	.60	.15	.64	.15		.62	.15	

Variable	Leadership condition		<u>Task condition</u>				Overall row mean	
			High task importance		Low task importance			
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Task interest/enjoyment			3.71	1.57	3.73	1.27	3.72	1.38
	Charisma							
	Intellectual stimulation		4.11	1.22	4.73	1.24	4.42	1.24
	Contingent reward		4.83	1.17	5.13	1.32	4.99	1.24
	No leadership		4.31	1.33	4.01	1.14	4.17	1.23
	Overall column mean		4.26	1.35	4.39	1.33	4.33	1.34
Satisfaction with the leader			2.73	.91	2.29	.81	2.50	.87
	Charisma							
	Intellectual stimulation		2.75	.89	2.25	.79	2.50	.86
	Contingent reward		2.46	.78	2.73	.93	2.60	.85
	No leadership		1.89	.81	2.42	.79	2.15	.83
	Overall column mean		2.42	.89	2.44	.83	2.43	.86
Leader effectiveness			2.61	.66	2.38	.68	2.49	.67
	Charisma							
	Intellectual stimulation		2.63	.58	2.63	.84	2.63	.70

Variable	Leadership condition		Task condition				Overall row mean	
			High task importance		Low task importance			
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
	Contingent reward	2.61	.76	2.81	.81	2.71	.78	
	No leadership	2.17	.84	2.41	.71	2.28	.77	
	Overall column mean	2.48	.74	2.56	.75	2.52	.74	
Extra effort	Charisma	2.09	.82	2.14	.97	2.12	.88	
	Intellectual stimulation	2.73	.77	2.05	.57	2.39	.74	
	Contingent reward	2.40	.81	2.56	.84	2.49	.82	
	No leadership	1.64	.77	1.82	.77	1.73	.76	
	Overall column mean	2.17	.87	2.15	.83	2.16	.85	

Table 10

Mean Differences Among Leadership Styles Based on the Tukey HSD Post-Hoc test

Leadership condition (I)	Leadership condition (J)	<u>Mean Difference (I-J)</u>					
		(I-J)	Sig.	Performance (Quantity)	Extra Effort	Task interest/ enjoyment	Sig.
Charisma	Intellectual stimulation	.20	.63	-.28	.67	-.71	.29
	Contingent reward	-.15	.77	-.37	.38	-1.27**	.01
	No leadership	-.27	.30	.39	.33	-.45	.61
Intellectual stimulation	Contingent reward	-.35	.15	-.10	.98	-.57	.46
	No leadership	-.47*	.02	.66*	.03	.25	.91
Contingent reward	No leadership	-.12	.86	.76**	.01	.82	.11

Note. ** $p < .01$, * $p < .05$.

The Tukey HSD post-hoc test of multiple comparisons was conducted to derive the mean differences between leadership styles. For performance (quantity), intellectual stimulation was significantly lower than the no leadership condition. For task interest/enjoyment, charisma was significantly lower than contingent reward. Finally, for extra effort, a significant mean difference was found for two pairs of leadership styles: i) no leadership was significantly lower than intellectual stimulation, and ii) no leadership was significantly lower than contingent reward leadership.

The findings provided partial support for Hypothesis 1_f, which proposed that participant's extra effort would be highest in the transformational leadership conditions, followed by the contingent reward and no leadership conditions, respectively. The results showed that the overall mean was greatest in the contingent reward condition, followed by the intellectual stimulation, charisma and no leadership conditions, respectively. Hypothesis 1_f was partially supported as the order from the results matched the order proposed in the hypothesis for 2 of the 4 leadership styles.

Figures 3 to 5 below present graphs of the effect of the leadership condition (from the SPSS output) for the three outcome variables where a significant main effect was found for the leadership condition. Please see Appendix M to view graphs of the effect of the leadership condition for all six outcomes investigated in this study.

Figure 3

Profile Plot for Performance Quantity of the Effect for the Leadership Condition (from SPSS, of Estimated Marginal Means)

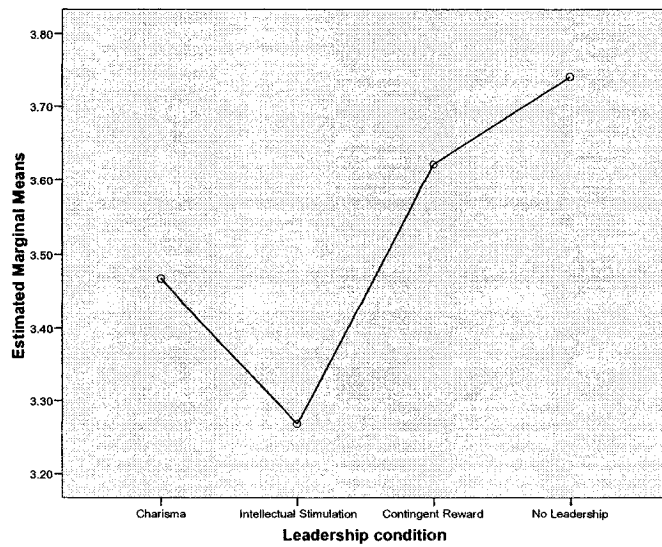


Figure 4

Profile Plot for Task Interest/Enjoyment of the Effect for the Leadership Condition (from SPSS, of Estimated Marginal Means)

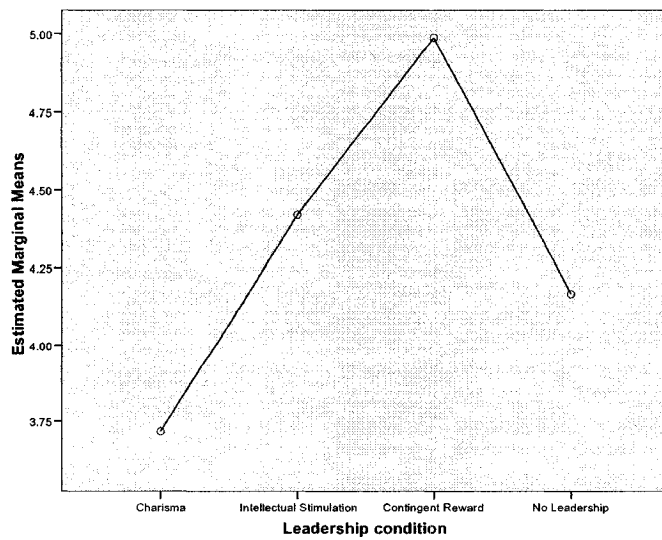
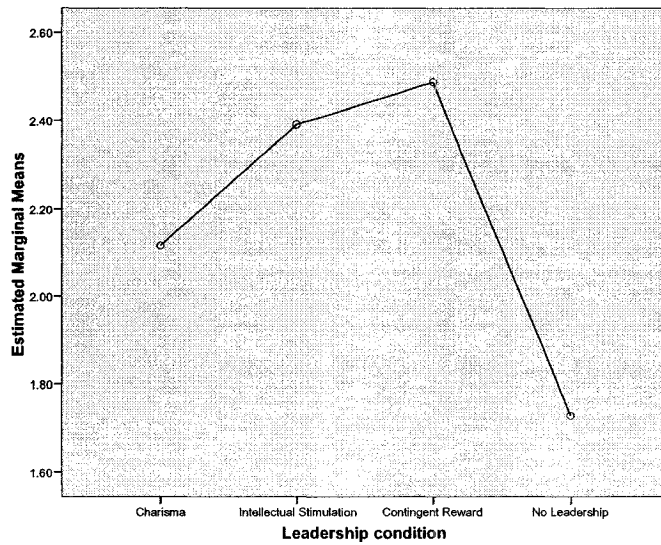


Figure 5

Profile Plot for Extra Effort of the Effect for the Leadership Condition (from SPSS, of Estimated Marginal Means)



Figures 6 and 7 below present graphs of the interaction of leadership style and task importance for the two outcomes – performance quality and satisfaction with the leader - where the interaction effect was found to be marginally significant. Please see Appendix N to view graphs of the effect of the leadership condition for all six outcomes investigated in this study.

Figure 6

Interaction Plot for Performance Quality (from SPSS of Estimated Marginal Means)

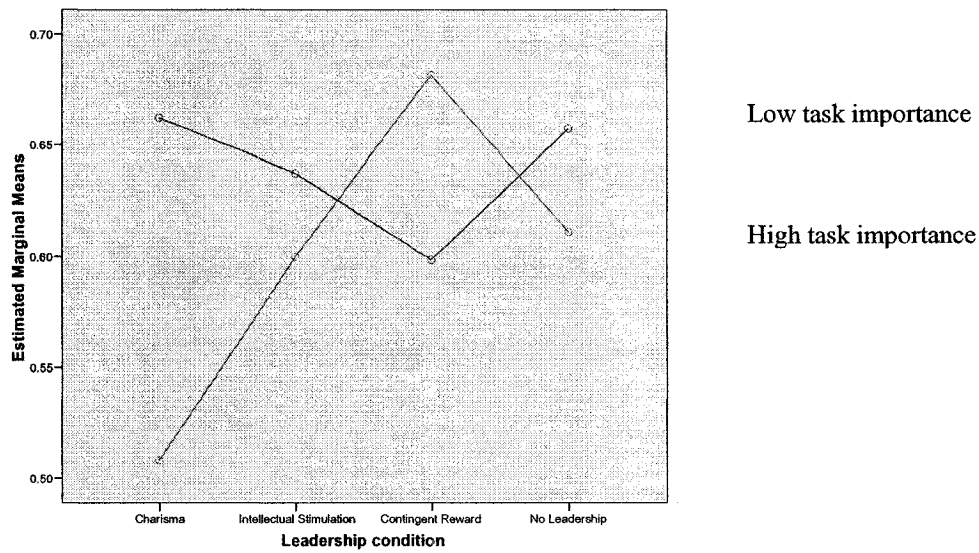
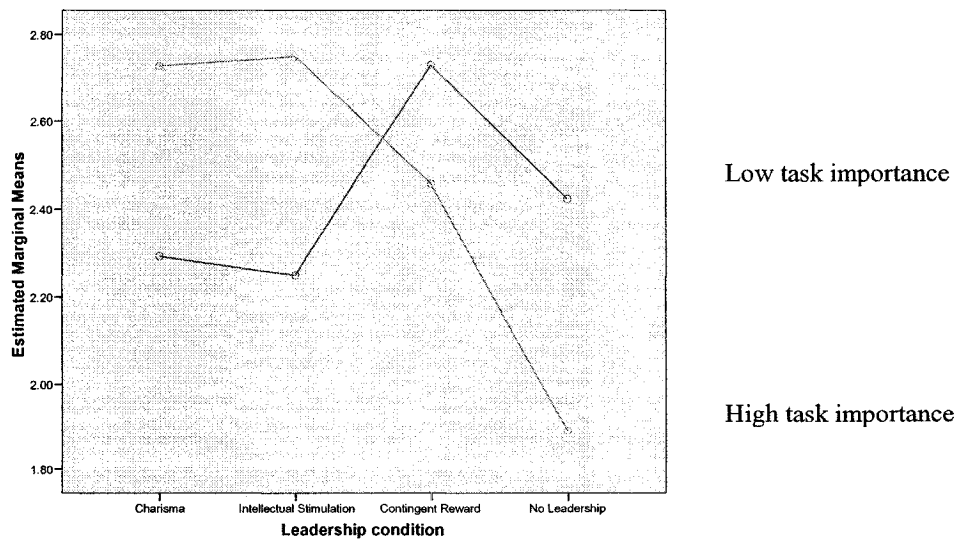


Figure 7

Interaction Plot for Satisfaction with the Leader (from SPSS of Estimated Marginal Means)



The remaining hypotheses proposed for the main effect of the leadership condition were not supported. Although the main effect for the leadership condition was

significant for both performance quantity and task interest/enjoyment, the hypotheses proposed in this study with respect to these outcomes (Hypotheses 1_b and 1_e) were not supported.

Hypothesis 3 proposed that the mean difference between the high and low importance conditions would be greatest in the no leadership condition, followed by the contingent reward, intellectual stimulation, and charisma conditions, respectively. The hypothesis was investigated by examining the absolute value of the mean differences for the two outcome variables (performance quality and satisfaction with the leader) for which the interaction effect was marginally significant ($p < .10$). Table 11 below presents the mean differences for these two outcomes.

Table 11

Mean difference for the Interaction between Leadership Style and Task Importance

Outcome	Leadership style			
	(High importance – Low importance)			
	Charisma	IS	CR	NL
Performance quality	-.15	-.04	.08	-.05
Satisfaction with the leader	.44	.50	-.27	-.53

Note. IS = Intellectual stimulation, CR = Contingent reward leadership, and NL = No leadership.

For performance (quality), the mean difference between the high and low importance conditions was greatest in the charisma condition, followed by the contingent reward, no leadership and intellectual stimulation conditions, respectively. For

satisfaction with the leader, the mean difference between the high and low importance conditions was greatest in the no leadership condition, followed by the intellectual stimulation, charisma and contingent reward conditions, respectively. In conclusion, the results did not provide support for Hypothesis 3.

A further analysis was conducted to investigate the simple main effects for the interaction between leadership style and task importance for the two outcomes where the interaction was found to be marginally significant. For each of the two outcomes, a test of simple main effects were conducted to investigate whether the task importance condition significantly affected any of the levels of the leadership condition. The ANOVA results for performance quality are presented below in Table 12, followed by the ANOVA results for satisfaction with the leader in Table 13.

Table 12

ANOVA Results for the Test of Simple Main Effects for Performance Quality

Variable and Source	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	Sig.
Task importance condition with Charisma	.11	3	.11	4.67	.03*
Task importance condition with IS	.00	1	.00	.18	.67
Task importance condition with CR	.04	1	.04	1.91	.17
Task importance condition with NL	.00	1	.00	.18	.67

Note. *=*p* .05. Based on 101 observations. IS = Intellectual stimulation, CR = Contingent reward leadership, and NL = No leadership

The ANOVA results for performance quality indicate that the task importance condition had a significant effect on one level of the leadership condition (i.e., charisma,

$F(3, 93) = 4.67, p < .03$). Thus, for the outcome performance quality, there was a significant interaction between the charisma condition and the task importance condition.

Table 13

ANOVA Results for the Test of Simple Main Effects for Satisfaction with the Leader

Variable and Source	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	Sig.
Task importance condition with Charisma	1.09	1	1.09	1.51	.22
Task importance condition with IS	.61	1	.61	.84	.36
Task importance condition with CR	.46	1	.46	.64	.43
Task importance condition with NL	2.88	1	2.88	3.99	.05*

Note. * = $p < .05$. Based on 98 observations. IS = Intellectual stimulation, CR = Contingent reward leadership, and NL = No leadership

The ANOVA results for satisfaction with the leader indicate that the task importance condition had a significant effect on the no leadership condition ($F(1, 90) = 3.99, p < .05$). Thus, for the outcome satisfaction with the leader, the interaction between task importance and leadership style was significant for one level of the leadership condition (i.e., no leadership).

In sum, the results of the two tests of simple main effects make it possible to interpret, for the two outcome variables where a marginally significant interaction effect was found, which levels of the leadership condition were significantly affected by the task importance condition. The ANOVA results indicate that, for performance quality, one level of the leadership condition (i.e., charisma) was significantly affected by the task importance condition. The ANOVA results for satisfaction with the leader indicate that

one level of the leadership condition (i.e., no leadership) was significantly affected by the task importance condition.

Supplementary Analyses

In addition to the tests of the hypotheses, two supplementary analyses were conducted. The hypotheses tested were developed post-hoc.

Analysis of the indicators of quality. In this study, the overall score for quality was derived as an average of each participant's scores on the two indicators of quality (i.e., practicality and creativity). This first supplementary analysis investigates the effects of the independent variables on each indicator separately (i.e., the overall score for practicality and the overall score for creativity) by conducting two one-way ANOVAs. The normality assumption was first tested for each indicator. Neither indicator satisfied this assumption, as both practicality and creativity were found to be negatively skewed (adopting the same criteria as described previously. Specifically, practicality was found to have a skewness of -3.31 (the kurtosis was 0.96) and creativity was found to have a skewness of -2.16 (the kurtosis was -0.11).

Due to the fact that neither indicator satisfied the assumption of normality, both indicators were transformed. Practicality was transformed by taking the inverse function ($1/(K\text{-practicality} + 1)$, where K = the largest score for practicality + 1). The transformed indicator satisfied the normality assumption (skewness = 1.89 , kurtosis = 0.35), as well as the assumption of homogeneity of variance (Levene's statistic $> .05$). Creativity was transformed by taking the log function ($\text{Log}_{10}(K\text{-creativity})$, where K = the largest score for creativity + 1). This transformed indicator satisfied the normality assumption (skewness = $-.34$, kurtosis = $-.55$), as well as the assumption of homogeneity of variance

(Levene's statistic > .05). No outliers were detected for either transformed variable (Cook's distance was less than 1 for all observations).

The first one-way ANOVA investigated the indicator of practicality. A summary of the ANOVA results is presented below in Table 14. The results indicate that neither the main effects for leadership style and task importance, nor the interaction effect were statistically significant for this indicator.

Table 14

ANOVA Results for the Indicator of Practicality

Variable and Source	<i>MS</i>	<i>F</i>	Sig.	η^2	Partial η^2
Leadership style ^a	.01	.38	.77	.00	.01
Task importance ^b	.01	.41	.52	.00	.00
Leadership style x Task importance ^a	.02	1.10	.36	.00	.03

Note. ^a = 3 *df*, ^b = 1 *df*.

The second one-way ANOVA investigated the indicator of creativity. A summary of the ANOVA results is presented below in Table 15. The results indicate that the interaction effect was significant ($F(3, 93) = 3.11, p = .03, \eta^2 = .01, \text{partial } \eta^2 = .09$), although the main effects for the leadership and task importance conditions was not significant.

Table 15

ANOVA Results for the Indicator of Creativity

Variable and Source	<i>MS</i>	<i>F</i>	Sig.	η^2	Partial η^2
Leadership style ^a	.02	1.42	.24	.01	.04
Task importance ^b	.01	.61	.44	.00	.01
Leadership style x Task importance ^a	.03	3.11	.03*	.01	.09

Note. * $p < .05$, ^a = 3 *df*, ^b = 1 *df*.

To further investigate this interaction, a test of simple main effects was conducted for the indicator of creativity. The test investigated which levels of the leadership condition were significantly affected by the task importance condition. The results are presented in Table 16 below.

Table 16

ANOVA Results for the Test of Simple Main Effects for the Indicator of Creativity

Variable and Source	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	Sig.
Task importance condition with Charisma	.08	1	.08	7.60	.01*
Task importance condition with IS	.00	1	.00	.03	.86
Task importance condition with CR	.02	1	.02	2.20	.14
Task importance condition with NL	.00	1	.00	.00	.96

Note. * $p < .05$. Based on 101 observations. IS = Intellectual stimulation, CR = Contingent reward leadership, and NL = No leadership

The results of the test of simple main effects make it possible to interpret the significant interaction found for the indicator of creativity, in order to determine which levels of the leadership condition are significantly affected by the task importance condition. The ANOVA results presented in Tables 18 show that one level of the leadership condition (i.e., charisma) was significantly affected by the task importance condition ($F(1, 93) = 7.60, p < .01$).

An analysis of the correlation between quantity and quality. The second analysis was conducted to investigate whether the scores for quantity and quality were significantly correlated. A significant negative correlation between the variables would suggest that a high score for quantity was associated with a low score for quality, and vice versa.

A correlation analysis was conducted between the non-transformed indicators of quantity and quality. The results showed a correlation of $-.17$ ($p = .09$, 2-tailed). Thus, the results indicate that there is a marginally significant correlation between the two variables.

In the following section, a discussion of the results of the study shall be presented. In addition, the limitations of the study and directions for future research shall be discussed.

An analysis of the correlation between the outcome variables. The correlations between the outcome variables – overall and by leadership style – are presented below in Table 17. The results show several of the dependent variables – measured by questions from the MLQ – to be significantly correlated. In addition, the results for the overall sample show a significant correlation between task interest/enjoyment and both

participants' perceptions of leader effectiveness and willingness to exert extra effort, as well as a significant correlation between the participants' performance quality and willingness to exert extra effort.

Table 17

Correlations between Outcomes by Leadership Style

Leadership style	Outcome	Outcome					
		Quantity	Quality	Sat. with leader	Task interest	Leader eff.	Extra effort
Overall	Quantity	1.0 ^a	-.17 ^b	.08 ^c	-.12 ^a	.08 ^d	.07 ^c
	Quality	-	1.0 ^b	-.15 ^d	-.01 ^b	-.14 ^d	-.23* ^d
	Sat. with the leader	-	-	1.0 ^c	.18 ^c	.75*** ^e	.65*** ^e
	Task interest/enjoyment	-	-	-	1.0 ^a	.28*** ^d	.36*** ^c
	Leader effectiveness	-	-	-	-	1.0 ^d	.61*** ^e
	Extra effort	-	-	-	-	-	1.0 ^c
Charisma	Quantity	1.0 ^f	-.07 ^f	-.21 ^g	-.21 ^f	-.08 ^g	.12 ^f
	Quality	-	1.0 ^f	-.24 ^g	-.05 ^f	-.33 ^g	-.24 ^f
	Sat. with the leader	-	-	1.0 ^g	.53*** ^g	.84*** ^g	.67*** ^g
	Task interest/enjoyment	-	-	-	1.0 ^f	.62*** ^g	.60*** ^f
	Leader effectiveness	-	-	-	-	1.0 ^g	.74*** ^g
	-	-	-	-	-	-	-

Leadership style	Outcome		Outcome				
	Quantity	Quality	Sat. with leader	Task interest	Leader eff.	Extra effort	
IS	Extra effort	-	-	-	-	1.0 ⁱ	
	Quantity	1.0 ^h	.36 ^j	-.05 ^h	.10 ^j	.24 ⁱ	
	Quality	-	1.0 ⁱ	.11 ⁱ	-.11 ^j	-.41 ^j	
	Sat. with the leader	-	1.0 ^j	-.03 ^j	.53* ^k	.45* ^j	
	Task interest/enjoyment	-	-	1.0 ^h	.07 ^j	.27 ⁱ	
	Leader effectiveness	-	-	-	1.0 ^j	.26 ^j	
CR	Extra effort	-	-	-	-	1.0 ⁱ	
	Quantity	1.0 ^l	.20 ^l	-.30 ^l	.15 ^l	.00 ^l	
	Quality	-	1.0 ^l	-.04 ^l	.12 ^l	-.03 ^l	
	Sat. with the leader	-	1.0 ^l	.11 ^l	.80** ^l	.71** ^l	
	Task interest/enjoyment	-	-	1.0 ^l	.03 ^l	.11 ^l	
	Leader effectiveness	-	-	-	1.0 ^l	.65** ^l	
Extra effort	-	-	-	-	1.0 ^l		

Leadership style	Outcome		Outcome				
	Quantity	Quality	Sat. with leader	Task interest	Leader eff.	Extra effort	
No leadership	Quantity	1.0 ^m	-.65** ^m	.26 ⁿ	-.09 ^m	.28 ^o	.26 ^p
	Quality	-	1.0 ^m	-.11 ⁿ	-.21 ^m	-.22 ^o	-.34 ^p
	Sat. with the leader	-	-	1.0 ⁿ	.08 ⁿ	.77** ^o	.70** ^p
	Task interest/enjoyment	-	-	-	1.0 ^m	.29 ^o	.30 ^p
	Leader effectiveness	-	-	-	-	1.0 ^o	.58** ^p
	Extra effort	-	-	-	-	-	1.0 ^p

Note. * $p < .05$. ** $p < .01$.

IS = Intellectual stimulation, and CR = Contingent reward leadership.

^a = ($N = 102$), ^b = ($N = 101$), ^c = ($N = 98$), ^d = ($N = 97$), ^e = ($N = 96$), ^f = ($N = 24$), ^g = ($N = 23$), ^h = ($N = 23$), ⁱ = ($N = 22$), ^j = ($N = 21$),

^k = ($N = 20$), ^l = ($N = 25$), ^m = ($N = 30$), ⁿ = ($N = 29$), ^o = ($N = 28$), ^p = ($N = 27$).

DISCUSSION

In the following section, the results from the manipulation check shall be discussed, followed by the main findings of the study and their interpretations. The contributions and limitations of the current study are subsequently presented, as well as practical implications and direction for future research.

This study investigated the moderating effect of task importance on the relationship between four transformational and transactional leadership styles (charisma, intellectual stimulation, contingent reward and no leadership) and six outcomes (performance quantity and quality, satisfaction with the leader, task interest/enjoyment, perceptions of leader effectiveness, and extra effort).

Two conditions were manipulated in the current study – leadership style and task importance. The manipulation check results for the leadership style condition showed that the manipulation was moderately successful for 3 of the 4 leadership styles. The majority of participants correctly identified the leadership condition in the intellectual stimulation condition, contingent reward, and the no leadership conditions. However, the manipulation check results indicated that the charisma condition was unsuccessful, as the percentage of participants who correctly identified that their leader was displaying charisma was low.

Three possible reasons are proposed to explain the lack of success for the charisma manipulation. Firstly, it is possible that the script for the charisma condition needed to be stronger. It is possible that the script tried to convey too many aspects of charisma (including the communication of a vision, sharing personal examples, displaying confidence that followers can achieve goals, etc.), and would instead have

been stronger if it had focused upon one or two key characteristics of charisma (for example, emphasizing the ideal and vision of the leader).

Secondly, it is possible that participants would have perceived the leader to be more charismatic had the leader presented instructions in person versus remotely via a video. In this sense, perhaps the distance between the leader and participants lessened their perceptions of the leader's charisma. However, it must be noted that a study by Towler (2003) investigated the effects of charismatic training, in which a group of participants were trained in various aspects of charismatic leadership. These participants then wrote and filmed a speech that was presented to a second group of participants. The author found that participants in the second sample had higher performance quality when they viewed a video (of a trainee in the first sample) displaying charisma versus the other study conditions. Thus, Towler's findings indicate that charisma can be successfully portrayed in videos.

Thirdly, it is possible that the charisma condition required a greater amount of training for the actress portraying the leader than the other leadership styles, especially to convey the non-verbal aspects of the condition. Thus, the researcher may have not allocated sufficient training time for the charisma condition. For example, the length of training time allocated by the researcher made the use of cue cards necessary, which resulted in breaks in eye contact from the leader to read the cue cards. As eye contact is an important non-verbal characteristic of charisma, this likely affected participants' perceptions of the leader's charisma.

The manipulation check results for the task importance condition showed that participants' mean score for perceptions of task significance was greatest in the high

importance condition. As such, it is concluded that the manipulation check was successful.

Further analysis of the task importance manipulation check revealed that the difference between the scores for task significance in the high and low task importance conditions was statistically significant for two leadership conditions – contingent reward and no leadership. The difference between the scores in the high and low task importance conditions was not significant for the transformational leadership dimensions. One potential reason for this result is that there may have been a conceptual overlap between the transformational leadership conditions (which could be argued to heighten perceptions of task significance, especially in the charisma condition). Thus, there may have been a confound between the task significance conveyed through the transformational leadership conditions and the task importance manipulation.

The possibility also exists that the task assigned to participants in the current study had an inherent sense of importance, due to the fact that the task involved generating fundraising ideas for charitable organizations and events. In other words, participants may have perceived the task to have some importance due to the nature of the task (even in the low task importance condition). Thus, although the results of the manipulation check reveal that the task importance manipulation was successful, the results of the study may have been strengthened had participants been assigned a task that did not have any potential of being perceived as having an inherent importance.

The main effect for the leadership condition was significant for three outcome variables - performance quantity, task interest/enjoyment, and extra effort. In addition, the results showed that the interaction effect was marginally significant for two outcome

variables- performance quality and satisfaction with the leader. The main effect of task importance was not significant for the outcome variables.

With respect to the main effect of leadership styles on outcomes, the findings provide partial support for Hypothesis 1_c, which proposed that participants' extra effort would be highest in the transformational leadership conditions, followed by the contingent reward and no leadership conditions, respectively.

A post hoc analysis was conducted to compare the mean differences between the leadership styles for this outcome. The results showed that the difference between the mean scores was significant for two pairs of leadership styles: i) participants reported a willingness to exert more extra effort in the intellectual stimulation condition versus the no leadership condition and ii) more extra effort in the contingent reward leadership condition versus the no leadership condition. Thus, participants' extra effort was significantly greater in the intellectual stimulation and contingent reward conditions than in the no leadership condition. The results may be interpreted to indicate that intellectual stimulation and contingent reward leadership stimulate a desire in followers to exert extra effort to achieve goals. Participants may have found the contingent reward leader's focus on the relationship between high performance and receiving rewards as a motivator to put forth extra effort on a task. Similarly, the intellectually stimulating leader's focus on innovation and creativity may have inspired participants to exert extra effort on the task, in order to generate ideas that were, as the leader emphasized, "outside the box".

Post hoc analyses were also conducted for the other two outcomes where a significant main effect for leadership style was found. For performance quantity, the results showed participants generated significantly greater quantity in the no leadership

condition versus the intellectual stimulation condition. For task interest/enjoyment, participants reported significantly higher task interest/enjoyment in the contingent reward leadership condition versus the charisma condition.

The results of these two analyses were somewhat surprising. Firstly, the results for performance quantity indicate that participants under a leader displaying no leadership generated a significantly greater quantity of ideas than did participants under an intellectually stimulating leader. It is admittedly difficult to propose a reason for these counterintuitive results. One suggestion would be that the intellectually stimulating leader's emphasis on innovation and creativity caused participants to focus more on the quality of their suggestions (where innovativeness was repeatedly noted to be one of the indicators of a high-quality answer) than on the quantity of suggestions generated. To explore this possibility, the correlation between the scores for quantity and quality (non-transformed) for participants who viewed the video of the intellectual stimulating leader was computed ($r = .13, p > .10$). However, this non-significant result suggests that there was not a significant trade-off between quality and quantity for participants in the intellectual stimulation condition.

Another possible explanation is that the leader's focus on the generation of creative ideas ("outside the box") may have acted as an unintentional constraint on participants' suggestions, thus causing participants to spend more time developing each suggestion. In contrast, the lack of similar constraints in the no leadership condition may have resulted in participants generating more ideas as the emphasis on creative "outside the box" responses by the leader was not present. This provides a possible explanation for

the findings that the no leadership condition resulted in significantly higher quantity than the intellectual stimulation condition.

Secondly, the results for task interest/enjoyment indicate that participants reported significantly greater task interest/enjoyment in the contingent reward condition than in the charisma condition. Although it was anticipated that participants in the transformational leadership conditions would report greater task interest/enjoyment than participants in the contingent reward condition, one explanation for this result may be the fact that the charisma condition was unsuccessful. As such, it is very possible that the charisma manipulation did not have the intended effect on participants and therefore the results for this leadership style are unreliable.

In conclusion, the results for the main effect of leadership style on outcomes provide some support for the argument that different leadership styles result in different follower effects.

Hypothesis 3 proposed that the mean difference between the high and low importance conditions would be greatest in the no leadership condition, followed by the contingent reward, intellectual stimulation, and charisma conditions, respectively. The hypothesis was assessed for each outcome. Hypothesis 3 was partially supported for the results of one of the outcomes, namely task interest/enjoyment. The results showed that the mean difference between the high and low importance conditions for task interest/enjoyment was greatest in the intellectual stimulation condition, followed by the no leadership and contingent reward conditions (with equal differences) and the charisma condition, respectively. The results for the interaction between the leadership style and task importance conditions for task interest/enjoyment therefore matched the order

proposed in the hypothesis for 2 of the 4 leadership styles and provided partial support for Hypothesis 3. The remaining hypotheses proposed in this study were not supported.

A marginally significant interaction between leadership style and task importance was found for two outcomes, namely performance quality and satisfaction with the leader. To further interpret this marginally significant interaction, a test of simple main effects was conducted for each of the two outcomes. The test of simple main effects investigated which levels of the leadership condition were significantly affected by the task importance condition. The results for performance quality showed that there was a significant interaction between the charisma and task importance conditions. The results for satisfaction with the leader showed that there was a significant interaction between the no leadership and task importance conditions. In the following section, a discussion of the most interesting findings of the study – that contingent reward leadership had the most positive effect on outcomes of all the leadership styles examined in this study – shall be presented.

The effect of contingent reward on outcomes. Perhaps the most interesting finding of the current study was the important effect of contingent reward leadership on outcomes. Contingent reward leadership had a greater positive effect, for all outcomes examined in this study, than the transformational leadership dimensions. In fact, contingent reward consistently produced the highest results for five of the six outcomes investigated in this study (performance quality, task interest/enjoyment, satisfaction with the leader, leader effectiveness, and extra effort). However, the mean difference between participants' scores in the contingent reward leadership condition and the other leadership conditions was not always significant. Thus, the mean difference between contingent

reward leadership and no leadership was significant for the outcome extra effort, and the mean difference between contingent reward leadership and charisma was significant for the task interest/enjoyment outcome. A summary of the findings with respect to the mean scores for each outcome is presented in Table 18 below.

These findings highlight the importance of contingent reward leadership as the foundation upon which the relationship between leaders and followers is built. They suggest that contingent reward leadership, in the context of the current study, was the single most effective leadership style on both follower performance and follower perceptions.

Table 18

Summary Table of the Mean Scores for Each Outcome

Outcome	Results for the Mean Scores
Performance quantity	NL > CR > Ch > IS
Performance quality	CR > NL > IS > Ch
Task interest/enjoyment	CR > IS > NL > Ch
Satisfaction with the leader	CR > Ch = IS > NL
Leader effectiveness	CR > IS > Ch > NL
Extra effort	CR > IS > Ch > NL

Note. Ch = Charisma, IS = Intellectual stimulation, CR = Contingent reward leadership, and NL = No leadership.

The positive effect of contingent reward leadership, as found in the current study, is consistent with the findings from numerous past studies, where the effects of

contingent reward leadership on outcomes have been shown to be positive (e.g., Bass et al., 2003; Bycio et al., 1995; Judge & Piccolo, 2004; Lowe et al., 1996). However, there have also been studies where the findings indicated a negative effect of contingent reward on outcomes (e.g., Howell & Avolio, 1993). The results of the current study are therefore in line with some of the past research on transformational and contingent reward leadership.

In sum, the importance of contingent reward leadership on follower outcomes and perceptions was very interesting and consistent with the findings of numerous studies on transformational leadership. Several reasons are proposed to explain this result. Firstly, it is argued that contingent reward leadership provides the foundation of the relationship between leaders and followers and therefore, when transformational and transactional dimensions are studied separately, has the greatest effect on outcomes. In other words, contingent reward makes the greatest contribution to the leader-follower relationship when leadership styles are isolated and presented to followers.

In addition, if contingent reward provides the basis of the foundation for the leader-follower relationship, it makes sense that the transformational leadership dimensions would not, in isolation, provide as strong an effect on follower outcomes and perceptions. The augmentation hypothesis, proposed by Bass (1985), would seem to support this rationale. The augmentation hypothesis proposes that transformational leadership provides a benefit (i.e., adds value) over and above the presence of transactional contingent reward leadership. In other words, when transactional leadership is present, the presence of transformational leadership will augment the effect of leadership on outcomes. Therefore, it would be possible to suggest that transformational

leadership will not – by itself – have as strong of an effect on outcomes as it would if the foundation of transactional leadership were present.

It is also possible that the remote nature of the leadership condition (i.e. the fact that participants viewed a video of the leader instead of interacting with the leader in person) may have had an effect on the results in the study. In the following section, this possibility shall be discussed in detail.

The effect of remote leadership. It is possible that the findings from the current study were influenced by the fact that the leadership condition was manipulated through video versus face-to-face. The absence of a personal interaction between the leader and participants may have therefore affected participants' outcomes and perceptions differently for different leadership styles.

The results of the current study are similar to the findings of Howell and Hall-Merenda (1999) in a study investigating the effects of transformational leadership, the quality of the relationship between the leader and followers (leader-member exchange) and the leader's physical distance from followers (close versus distant) on individual-level performance. Some of the findings showed that, in the condition where the leader displayed contingent reward leadership, follower performance was significantly greater when the leader was physically distant than physically close to followers. In contrast, in the transformational leadership condition, follower performance was significantly greater when the leader was physically close than when the leader was distant.

Howell and Hall-Merenda's (1999) findings are very relevant to the current study as they help to explain the effectiveness of contingent reward leadership on participants' performance when compared to the transformational leadership dimensions. For both

aspects of performance examined in the current study (i.e., quantity and quality), the mean score was greater in the contingent reward condition than in the transformational leadership conditions. Furthermore, the mean scores for performance in the no leadership conditions was greater than the transformational leadership conditions. This suggests that physical proximity may be an important element for the communication of transformational leadership.

A study by Kelloway et al. (2002) investigated the effects of remote leadership on follower motivation and performance (in individual and group tasks). The authors investigated the effect of remote leadership on charisma, intellectual stimulation, both transformational leadership styles combined, and a control condition.

The findings suggested that remote transformational leadership can have positive effects on follower motivation and performance. Among their results, the authors found that individual performance was greater when participants were presented with emails from a charismatic leader than a non-charismatic leader, and when presented with emails from intellectually stimulating leaders than non-intellectually stimulating leaders.

These results are relevant to the discussion at hand, as they suggest that transformational leadership can be communicated remotely (in the above mentioned study, leadership was depicted via emails). However, it is possible – based on the results of the current study, as well as two studies previously discussed – that contingent reward leadership can be communicated with greater success in a remote leadership context than transformational leadership.

Moderating effect of task importance. While the moderating effect of task importance was not strongly supported in this study, it is argued that these results do not

necessarily indicate that task importance does not have a moderating effect on the relationship between leadership styles and outcomes. Several reasons are proposed to support the author's continued belief that task importance has a significant effect on this relationship.

Firstly, the current study's research design may have been a factor that mitigated the moderating effect of task importance on outcomes. Due to the experimental design of the study, participants were asked to complete a task for a short duration (20 minutes) in a research setting. It is argued that individuals completing a task for a long duration in a natural setting (for example, in the workforce) would be affected, to a much greater extent, by the degree of their perceived importance of the task being performed.

Secondly, it must be noted that the manipulation for task importance in this study, which emphasized the purpose for holding the workshop and how the results from the workshop would be used, does not represent an exhaustive list of all the ways in which task importance may be perceived. In other words, it is possible that an individual's perception of task importance (i.e., the perception of how the task may significantly affect the well-being of others) may result from aspects of the task other than the organization's purpose or its use of the results. For example, compensation may also be perceived as an indicator of task importance.

Finally, as mentioned earlier in this discussion, the nature of the task assigned to participants in the study (i.e., to generate suggestions for fundraising activities for both charitable organizations and charitable events) may have resulted in a confound with the task importance manipulation in the study. As a result, it is possible that the results would have been stronger with regard to the task importance condition if the assigned task had

been designed with no possibility of being interpreted by participants as having an inherent importance.

Therefore, it is very possible that future studies (especially in a field setting) would find more support for the moderating effect of task importance on the relationship between leadership style and outcomes.

Contributions

This study contributes to the transformational leadership literature in two ways. Firstly, the study employs an experimental research design to examine specific components of transformational leadership. A number of recent laboratory studies have investigated isolated factors of transformational leadership, with the majority of such studies focusing solely on charisma (e.g., Howell & Frost, 1989; Kirkpartick & Locke, 1996). Intellectual stimulation has been a focus of investigation less often (see Hochman, 1998; Kelloway et al., 2002). Contingent reward leadership has, to this author's knowledge, not yet been investigated as a separate dimension in a laboratory experiment. This study therefore contributes to the literature on transformational leadership through its consideration of charisma, intellectual stimulation, and contingent reward leadership simultaneously, thus allowing the leadership styles to be compared.

Secondly, this study aimed to explore the effects of the type of task performed on the relationship between transformational leadership and outcomes. As such, this study contributes to the literature on transformational leadership through its investigation of the role of task importance as a moderator of the relationship between specific dimensions of transformational leadership styles and outcomes. While the role of the core job characteristics has been investigated in several studies on transformational leadership

(e.g., Piccolo & Colquitt, 2006), this study was unique in its consideration of one of the core job characteristics (i.e., task significance) as a moderator.

Limitations

Several limitations of the current study must be noted. Sampling issues include the study's small sample size ($N = 102$), use of a convenience (i.e., non-random) sampling technique, and student sample. In addition, the sample for the pilot test conducted for this study was small in size ($N = 9$) and was composed of students from a different population (i.e., graduate students) than that of the sample for the actual study (i.e., undergraduate students).

Issues pertaining to construct validity include the fact that the manipulation checks for each independent variable were measured with only one item. Therefore, it is difficult to concretely assess whether the moderate success of the manipulation check question – as indicated by the manipulation check result – was due to the manipulation itself, the fact that only one question assessed the success of the manipulation check, or a combination of both factors. Finally, several dependent variables (i.e. satisfaction with the leader, extra effort, and leader effectiveness) were measured with a small number (2-3) of items.

Issues pertaining to external validity include the fact that the study was a laboratory experiment and therefore did not represent a real-life interaction between the leader and followers. In addition, the task (i.e., in-basket exercise) completed by participants was created for the purpose of this study and was not based on an actual task completed in organizations.

Despite these limitations, it is argued that the results from this study provide some support for the assertion that different leadership styles affect outcomes differently, as well as limited support for the case that leadership style and task importance can have a significant and differential impact on outcome variables.

Practical Implications

The results from the study have some practical implications for leadership training programs conducted in organizations. The important role of training in the workforce is highlighted by Goldstein and Ford (2002, citing a study conducted by the National Center on Educational Quality of the Workforce in 1995), that an organization's profitability may increase by as much as 8.4% as a result of a 10% increase in education level of the organization's workforce.

The current study's design reflects the premise of both charismatic leadership theory and contingency theories of leadership that different leadership styles are effective in different situations. The findings suggest that different leadership styles may influence follower outcomes and perceptions differently. Thus, organizations may benefit from conducting leadership training that emphasize the specific leadership styles that produce the most positive outcomes based on the situation at hand (for example, type of task being performed) as well as the importance of contingent reward leadership.

Future Research Directions

The results of the current study suggest two directions for future research. Firstly, the results from the current study emphasize the importance of contingent reward leadership as a foundation for relationships between leaders and their followers. One suggestion for future research is to further investigate in experimental research the role of

contingent reward in Bass' (1985) augmentation hypothesis, which states that transformational leadership adds value over and above transactional leadership alone. As such, future research may explore how the transformational leadership dimensions (charisma, intellectual stimulation, and individualized consideration) augment contingent reward leadership. This could be investigated by conducting a laboratory experiment in which the leadership condition is manipulated, by considering the effects of contingent reward leadership alone on outcomes, as well as in combination with each transformational leadership dimension. This experiment would investigate the additive effects of the transformational leadership dimensions on contingent reward leadership.

Secondly, future research may consider different types of tasks as moderators of the relationship between transformational leadership and outcomes. For example, future studies may examine the moderating effect of participative versus non-participative tasks or creative versus non-creative tasks. Future studies may also investigate the moderating effects of the other core job characteristics, such as tasks with high levels of autonomy versus low levels of autonomy. For example, it would be interesting to investigate the moderating effects of task creativity (the degree to which a task allows workers to be creative) on the relationship between transformational leadership and outcomes, or the moderating effect of autonomy on the same relationship.

CONCLUSION

This experimental study examined the moderating effect of task importance on the relationship between four transformational and transactional leadership styles (charisma, intellectual stimulation, contingent reward, and a no leadership control condition) on

outcomes. The outcomes investigated in this study were performance (quantity and quality), satisfaction with the leader, task interest/enjoyment, perceptions of leader effectiveness, and extra effort.

The main findings of the study were a significant main effect for leadership style on three outcome variables – performance quantity, task interest/enjoyment, and extra effort – as well as a marginally significant interaction effect for two outcome variables – performance quality and satisfaction with the leader.

The results showed that contingent reward leadership had the most positive effect of all leadership styles on all outcomes explored in this study, with the exception of performance quantity (although this effect was not always significant). Thus, the findings of this study emphasize the importance of contingent reward leadership as the foundation upon which the relationship between leaders and followers is built.

The results of this study also provide strong support for the argument that different leadership styles predict outcomes in a differential manner. The results provide limited support for the moderating effect of task importance in the relationship between leadership styles and outcomes.

The findings from this study have practical implications for organizations, as they suggest that leadership styles impact outcomes in a different manner. This may affect the way in which organizations develop their leadership training programs.

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APPENDICES

Appendix A: Researcher's Script

Hello!

Thank you for coming today and participating in the Task Behavior Study. I would like to begin by giving you a brief overview of today's session: in a few minutes you will view a video. In this video, you will be presented with instructions for a task and given time to complete the task. After the task is complete, I will distribute a questionnaire booklet for you to fill out. In total, this session will take about one hour.

The company in the video is called Company XYZ, which is a company that designs fundraising activities. A fundraising activity, or campaign, is an event where the goal is to raise money. An example of a fundraising activity is a bake sale.

I would like to take a moment to read through the consent for participation in this research. [Pass out consent form, read form out loud]. If you would like to participate in this study, please sign your consent form and I will come by to pick it up in a moment. If you do not wish to participate in this study, do not sign your consent form and please feel at ease to leave the session. [Pick up forms].

Your participation in this study is greatly appreciated. We would like to provide you with a written feedback report of the main findings of the study next [semester], once the study is complete. The written feedback report can be sent to you in two ways, either by email or by the post. At the end of today's session, I will place a 'sign-in sheet' at the front of the class. [Hold up sign-in sheet to show participants]. On this sign-in sheet, please print your name, student ID number, you [course] instructor's name, indicate whether you would like to receive the report by email or by post, and the address (either your email or postal address) where the report should be sent. You will receive this report next winter.

Also, at the end of today's study, I will give each of you a receipt for your participation in this study. Please come and see me when you have finished answering the questionnaires so that I can give you your receipt. [Ask if anyone has any questions about the consent form before we begin].

The video will now begin, please turn your attention to the television screen.

----After video is complete----

Thank you. I will now distribute the questionnaire booklets. When you are finished, please place the questionnaires inside your in-basket. Please place your answer sheets for the memos in your in-basket as well.

Also, please remember to fill out the sign-in sheet before you leave and pick up a receipt for your participation in the study. Thank you.

Appendix B: Debriefing Sheet

Task Behavior Study

Dear Research Participant;

Thank you for participating in the Task Behavior Study.

The video that was presented in the Task Behavior Study was created for the purposes of this study and features a **fictitious company**. Any resemblance or similarity with other companies is pure coincidence.

You will be receiving a **written feedback report** once the study is completed [next semester]. This written feedback report will provide you with information about the purpose of the study, its hypotheses, and the main findings. This written feedback report will be sent to the email or postal address that you provided on the sign-in sheet for the session that you attended. If you would like to make a change to the email or postal address that you provided, please email the changes to [researcher's email address].

Thank you for participating in this study. Your cooperation was greatly appreciated.

[Contact information provided for researchers – Thesis Supervisor and Student].

If at any time you have questions about your rights as a research participant, please contact [information on how to contact the Ethics Committee].

Appendix C: Feedback Report

FEEDBACK REPORT Task Behavior Study

[Date]

Dear Research Participant:

Thank you for your participation in the Task Behavior Study during the Fall semester of 2007, for which you received 1 percent toward your grade in COMM 222 at the John Molson School of Business, Concordia University.

Please find enclosed a Feedback Report, which presents information on the purpose of the research study, the hypotheses, main findings, and suggestions for additional readings.

Your participation in the study is greatly appreciated. Thank you again,

Sincerely,

Melanie Robinson
Student in the M.Sc. in Administration program (Management option)
[Contact information]

Thesis Supervisor:
Dr. Kathleen Boies
[Contact information]

FEEDBACK REPORT

Task Behavior Study

THE STUDY

This research study investigated the effects of 4 different leadership styles on 6 outcomes (i.e. performance quantity and quality, task interest/enjoyment, satisfaction with the leader, perceptions of leader effectiveness, and extra effort). In addition, this study explored how participant's perceived importance of the task being performed would influence these effects.

This research study was conducted for a thesis in the Master of Science in Administration program (Management option). The thesis is entitled "A Laboratory Study on the Moderating Effect of Task Importance on the Relationship between Transformational and Transactional Leadership Styles and Outcomes".

Leadership Style

There were 4 leadership styles investigated in this study. The leadership styles included in this study were based on Transformational Leadership theory (Bass, 1985). The theory proposes that leader behaviors may be categorized as transactional or transformational. Transactional leadership is characterized by an exchange relationship between leaders and followers (Bass, 1999). Transformational leadership is characterized by behaviors that help followers to enhance their performance to a level 'beyond expectations' (Bass, 1985). In the following section, the four leadership styles are briefly described:

1. **Charisma:** The charisma condition was a combination of Inspirational Motivation (whereby the leader presents a vision/ideal, inspiring and motivating followers to work toward it) and Idealized Influence (the leader acts as a role model for followers).
2. **Intellectual Stimulation:** The leader helps followers to view and solve problems in innovative ways.
3. **Contingent Reward:** Where the leader emphasizes the link between performance (for example, accomplishing objectives) and receiving rewards.
4. **No Leadership:** This was a control condition where no leadership was displayed.

To display these leadership styles, four videos were created for the purpose of this study. Each video featured an actress displaying verbal and non-verbal characteristics of 1 of the 4 leadership styles. The videos featured a fictitious company - any resemblance or similarity with other companies is pure coincidence. In each research session, one video was shown.

Task Importance

In this study, there were two levels of the task importance condition. In order to convey the different levels of task importance in this study, handouts were created that described

the fictitious company's purpose for holding the workshop and how the results of the workshop (i.e., the ideas generated by participants in the study) would be used. One handout was created to convey high task importance and a second handout was created to convey low task importance. In each research session, one handout was distributed.

THE TASK

The task in this study was an in-basket exercise adapted from Howell and Frost (1989). Ten memos were created to include in the in-basket. Each memo featured a scenario in which an organization or charity was interested in developing a fundraising campaign for a charitable cause. Each memo featured a fictitious scenario. The memos featured scenarios for fictitious organizations, charities and companies. Any resemblance with other organizations, charities or companies is pure coincidence. Each memo asked participants to help the organization or charity to develop a fundraising campaign. Each memo asked participants to provide 3 pieces of information; this information was recorded in an answer sheet booklet that was created for this study.

HYPOTHESES AND MAIN FINDINGS

Eight hypotheses were proposed in this study: Six investigated the effects of the different leadership styles on the outcomes. One investigated the effect of task importance on task interest/ enjoyment. The final hypothesis investigated how both leadership styles and task importance together affect the outcomes (the interaction hypothesis).

The following section presents the main findings of the study. The effects of leadership styles on outcomes were statistically significant for three of the outcome variables: performance quantity, task interest/enjoyment, and extra effort. Thus, the leadership style condition significantly affected these three outcomes.

To further explore the significant effect of leadership style on these three outcomes, the average score for each of the leadership conditions in the study were compared (for each outcome). The results showed that:

- For performance quantity, participants who saw the video where the leader (portrayed by an actress in a video) displayed no leadership generated a greater quantity of ideas during the task than participants who saw the video of the leader displaying intellectual stimulation.
- For task interest/enjoyment, participants who saw the video where the leader displayed contingent reward leadership reported greater task interest/enjoyment than participants who saw the video of the leader displaying charisma.
- For extra effort, there were 2 significant differences: i) participants who saw the video where the leader displayed intellectual stimulation reported wanting to do more extra effort than participants who saw the video of the leader displaying no leadership, and ii) participants who saw the video where the leader displayed contingent reward leadership reported wanting to do more extra effort than participants who saw the video of the leader displaying no leadership.

These results partially support one of the hypotheses regarding the leadership styles.

Hypothesis 3 proposed that the difference between the average scores for the outcomes in the high and low importance conditions would be greatest in the no leadership condition, followed by the contingent reward, intellectual stimulation, and charisma conditions, respectively. The hypothesis was examined for each outcome. The hypothesis was partially supported for task interest/enjoyment, where the results show that the difference between the average scores in the high and low importance conditions was greatest in the intellectual stimulation condition, followed by the contingent reward and no leadership conditions (with equivalent mean differences) and the charisma conditions, respectively. Hypothesis 3 was not supported for the remaining outcomes.

For more information about the hypotheses and findings from the study, please refer to the thesis (which should be available at the Concordia Library by the end of the Fall 2007) or contact the researchers.

ADDITIONAL READINGS

The following are a few suggestions of additional readings on transformational leadership.

Bass, B. (1985). *Leadership and performance beyond expectations*. New York: Free Press.

Bass, B. (1999). Two decades of research and development in transformational leadership. *European Journal of Work and Organizational Psychology*; 8, 1, pgs. 9-32.

Howell, J., & Frost, P. (1989). A laboratory study of charismatic leadership. *Organizational Behavior and Human Decision Processes*; 43, pgs. 243-269.

Judge, T., & Piccolo, R. (2004). Transformational and transactional leadership: A meta-analytic test of their relative validity. *Journal of Applied Psychology*; 89, 5., pgs. 755-768.

Kirkpatrick, S., & Locke, E. (1996). Direct and indirect effects of three core charismatic leadership components on performance and attitudes. *Journal of Applied Psychology*; 81, 1, pgs. 36-51.

Appendix D: Memos

Note:

- In the study, each memo was presented on a separate page and placed in order in the in-basket.
- In the memos used in the study, each organization, company or school mentioned in a memo was fictitious and given a name for the purpose of this study. In this thesis, all the names that had been given to each organization, company or school mentioned in the following memos have been changed to 'ABC'.

Company XYZ **MEMO #1**

'ABC' Elementary School recognizes that it is important to encourage children at a young age to be respectful of the environment. Each year, 'ABC' Elementary engages its students in a fundraising campaign with the goal of promoting charitable work to students, as well as increasing their awareness of the environment.

Each year, the school chooses a theme around which they build a fundraising campaign. Last year, 'ABC' Elementary School chose 'Water conservation' as the environmental theme (issue) that would be stressed throughout the year to students. It adopted the slogan 'Protect our Oceans!', and raised funds for a conservation charity by selling tickets to parents and the community to a production held at the school. For this production, each class researched the issue and then wrote and performed a skit to the audience.

'ABC' Elementary would like your help to develop this year's fundraising campaign. You are asked to choose a theme (issue), develop a slogan, and develop a fundraising activity or campaign for the school.

Company XYZ **MEMO #2**

The 'ABC' is a non-profit organization that has as its mission the goal to end illiteracy in the world. The money raised by the organization is used both domestically and internationally to fund programs that teach basic reading and writing skills.

The company would like your help to develop a fundraising campaign that will serve not only to increase funds for the organization, but also to increase social awareness of the need to end illiteracy around the world.

You are asked to suggest a fundraising activity or campaign for this charity. In addition, you are asked to provide a slogan for the campaign that will help raise funds, as well as social awareness of illiteracy. Finally, you are asked to suggest a way to promote or advertise this fundraising campaign so that it is as effective and successful as possible.

Company XYZ
MEMO # 3

'ABC' is a non-profit organization that is part of the fight to eradicate poverty worldwide. The funds raised by the organization are used to build facilities, in areas of extreme poverty that will allow residents to become self-sufficient by producing goods.

The organization would like your help to develop a fundraising campaign that bring the issue of global poverty into the spotlight and that successfully raises funds the organization needs to continue its mission, In addition, the organization would like this fundraising activity to specifically involve students (from elementary schools to universities), as well as the general population.

You are asked to develop an appropriate fundraising activity for the organization. You are also asked to develop a slogan for the fundraising activity that you suggest. In addition, you are asked to suggest one way in which students can be involved in the fundraising activity.

Company XYZ
MEMO #4

'ABC' is a large company that specializes in Real Estate. Every year the company sponsors an event, where proceeds are distributed to a charity, The event sponsored by the company is always tailored to reflect the type of charitable organization that will benefit from it. For example, last year, 'ABC' auctioned off a house, and the money raised from the auction was donated to a local charity that builds homes for the less fortunate.

The company would like your help to develop its fundraising campaign this year. You are asked to choose a type if charitable organization for which 'ABC' can sponsor a fundraising event (you do not need to select a specific charity, but only the general type of charity). In addition, you are asked to develop an appropriate fundraising event that the company can hold. Finally, you are asked to develop a slogan for the charity event.

Company XYZ
MEMO #5

'ABC' University would like to engage in fundraising activities, where the processed will be sent to an organization that builds schools is developing countries. The university would like to encourage its students, as well as the community, to be involved in these fundraising activities.

You are asked to suggest a fundraising activity for the university that will specifically engage its student body. In addition, you are asked to develop another fundraising activity that will engage and involve the local community. Finally, you are asked to suggest a slogan that the university can use for both fundraising activities – where the slogan conveys the purpose for the fundraising activities and motivates its audience to participate in them.

Company XYZ
MEMO #6

‘ABC’ Inc. is a book publishing company that specializes in academic books and books for children. The company would like to sponsor a fundraising activity or event that would promote reading for children. The money raised would be used to buy books and ship them to schools in developing countries.

You are asked to suggest a fundraising campaign or event that ‘ABC’ Inc. can sponsor. In addition, you are asked to briefly describe how this fundraising campaign would promote reading in children. Finally, you are asked to suggest a slogan for the fundraising campaign.

Company XYZ
MEMO #7

Students from ‘ABC’ High School would like to engage in a fundraising campaign, where the money raised will be used to furnish a playroom for children at a local children’s hospital. The students would like to develop a nation-wide fundraising campaign in order to raise the most money possible for the cause.

You are asked to develop a national fundraising activity or campaign for the students from ‘ABC’ High School. You are also asked to develop a slogan for the activity that you suggest. In addition, you are asked to suggest one way in which the fundraising campaign can be publicized nationally to maximize the attention brought to the cause.

Company XYZ
MEMO #8

‘ABC’ is a charity that provides fun activities to children who are in the hospital. The charity will bring toys to children and organize fun activities (such as having a clown come to the hospital to entertain the children, or arts and crafts).

Each year, 'ABC' holds a fundraising event to raise the money that is needed to continue to provide these fun activities to children. This year, the charity would like your help to design its fundraising event.

You are asked to suggest a fundraising event that will benefit 'ABC'. In addition, you are asked to suggest a slogan for the event and to suggest one (1) way in which the fundraising event can be advertised to the community.

Company XYZ
MEMO #9

The 'ABC' is a charity that provides meals to the homeless in a small community. Each year, the charity must design a fundraising campaign to raise the funds that it needs to operate the kitchen. In addition to raising funds, the fundraising event is also designed to promote social awareness of the need to help the homeless in the community.

The 'ABC' would like your help to design this year's fundraising campaign. You are asked to suggest a fundraising activity or event for the charity. You are also asked to develop a slogan for the fundraising event. In addition, please describe briefly how this fundraising event will promote social awareness of the need to help the homeless in the community.

Company XYZ
MEMO # 10

The 'ABC' organization would like to develop a fundraising campaign (or event) where the proceeds would benefit protected animal habitats in the wild. The organization wants the fundraising campaign to be 'tied' to wildlife and the conservation of their natural habitat (for example, a dance marathon would not be related to wildlife conservation). In addition, the organization would like the fundraising campaign to build social awareness about the importance of wildlife and protecting their natural habitats.

You are asked to develop a fundraising campaign for 'ABC' organization. In addition, you are asked to briefly describe how this proposed fundraising campaign is tied to wildlife and the conservation of their natural habitat. Finally, you are asked to develop a slogan for the activity that you suggest.

Appendix E: Content of the Answer Sheet Booklet for the In-basket Exercise

Note: In the answer sheet booklets provided to participants in this study, each answer sheet was one page in length and there was space provided for each of the three pieces of information that participants were asked to provide.

The following was printed at the top of each answer sheet:

Please write your answers in bullet-point form

Answer Sheet:

Memo # 1: 'ABC' Elementary School

- Choose a theme (with a brief explanation):
- Develop a slogan:
- Suggest a fundraising activity:

Answer Sheet:

Memo #2: 'ABC'

- Suggest a fundraising activity:
- Develop a slogan:
- Choose a way to promote the fundraising activity:

Answer Sheet:

Memo #3: 'ABC'

- Suggest a fundraising activity:
- Develop a slogan:
- Suggest a way that students can be involved in the fundraising activity:

Answer Sheet:

Memo #4: 'ABC'

- Choose the type of charitable organization that the company can sponsor the event for:
- Suggest a fundraising activity:
- Develop a slogan:

Answer Sheet:

Memo #5: 'ABC' University

- Suggest a fundraising activity to engage the student body:
- Suggest a fundraising activity that will engage the local community:
- Develop a slogan:

Answer Sheet:
Memo #6: 'ABC'

- Suggest a fundraising activity:
- Briefly describe how this activity will promote reading in children:
- Develop a slogan:

Answer Sheet:
Memo #7: 'ABC' High School Students

- Suggest a fundraising activity/campaign:
- Develop a slogan:
- Suggest a way that the fundraising activity can be publicized nationally:

Answer Sheet:
Memos #8: 'ABC'

- Suggest a fundraising event:
- Develop a slogan:
- Suggest one (1) way in which this fundraising event can be advertised to the local community:

Answer Sheet:
Memo #9: 'ABC'

- Suggest a fundraising activity:
- Develop a slogan:
- Briefly describe how this fundraising event will promote social awareness of the need to help the homeless in the community:

Answer Sheet:
Memo #10: 'ABC' Organization

- Suggest a fundraising activity:
- Develop a slogan:
- Briefly describe how the suggested fundraising activity is tied to wildlife conservation:

Appendix F: Scripts

Script 1: Charisma

Script 1 a)

Hello everyone. My name is Marie. I work for *Company XYZ*, which is a company that specializes in developing fundraising campaigns. We provide suggestions to organizations regarding fundraising activities and also suggest ways in which those fundraising activities can be implemented. Our company, *Company XYZ*, regularly holds workshops with students from leading business schools, such as yourselves. I am your project leader for this workshop and I would like to thank you for participating. On your desk, you will notice a handout that has been prepared by *Company XYZ* to explain our company's purpose for holding these workshops. Please take a moment to read this handout.

- Video fades to a screen that reads "Please read your handout" for 60 seconds

Fundraising for a charitable cause is not only about raising money or promoting the awareness of social issues. It's about giving back to our communities. We can all find just a little bit of time to give something back. This is the ideal that I envision – where every person who can finds the time to make a difference. Our contributions don't have to be big to have a big impact.

In this workshop, you are asked to apply your ideas and knowledge about fundraising to a series of real-world scenarios. These scenarios are presented on a series of memos. On your desk, you will see an in-basket. Inside the in-basket are a series of memos. Each memo asks you to provide three pieces of information based on the scenario that it presents. You may ask – what is a good or high-quality idea? A good idea has two characteristics. Firstly, it is practical – meaning that it would be possible to implement the idea. Secondly, it is creative – meaning that it is fresh and innovative idea. Please write down your ideas on the answer sheet provided for each memo. You may use both sides of the paper if you desire. For this part of the workshop, you have twenty minutes to answer as many of the memos as you can. Please complete this task individually.

Remember, you can make a difference. By thinking of great ideas for how fundraising can be conducted, you are developing very important skills. You are promoting charitable work and you are raising awareness of social issues – both for yourselves and for the others around you who would be viewing or participating in the fundraising ideas that you are thinking of now. I have no doubt that you will come up with great ideas during this workshop. Together we can make a difference! Good luck.

- Screen fades to a picture of the slogan used by the leader in this video: Make a difference.

Script 1 b) Booster session

Hello everyone. You are halfway through your task in this workshop. Remember that you are not only trying to come up with as many ideas as possible during this part of the workshop, but also ideas that are of high quality. I know that you are doing a great job at coming up with ideas for how fundraising can be conducted.

I would like to share with you for a moment a personal experience, where I was able to use the skills that I developed in business school to help a charitable cause. A local charity was having difficulty raising the funds that it needed. I helped them to design and market a fundraising event in their community. The event was a huge success – not only did the charity raise funds, but it also had the effect of making some of the people in the community more aware of both the charity itself and of the social cause that the charity was for. In other words, not only did the charity benefit from the event, but the community benefited as well. This example illustrates how we can all make a difference, and I hope that it inspires you to use the skills that you have developed to benefit others.

Use the knowledge that you have learned in your studies, as well as your personal experiences to help you build your ideas when reading the memos. I know that you can do a great job answering these memos!

- Screen fades to a picture of the slogan used by the leader in this video: Make a difference.

Script 1 c)

Hello again everyone. You have now completed the task for this workshop. On behalf of *Company XYZ*, I would like to thank you for your participation in this workshop. My advice to you is to always strive to make a difference. I wish you the best of luck in your studies.

Script 2: Intellectual Stimulation

Script 2 a)

Hello everyone. My name is Marie. I work for *Company XYZ*, which is a company that specializes in developing fundraising campaigns. We provide suggestions to organizations regarding fundraising activities and also suggest ways in which those fundraising activities can be implemented. Our company, *Company XYZ*, regularly holds workshops with students from leading business schools, such as yourselves. I am your project leader for this workshop and I would like to thank you for participating. On your desk, you will notice a handout that has been prepared by *Company XYZ* to explain our company's purpose for holding these workshops. Please take a moment to read this handout.

- Video fades to a screen that reads “Please read your handout” for 60 seconds

Designing successful fundraising campaigns for clients requires highly developed problem solving skills. In essence, the client comes to *Company X* because it has a problem that our organization is tasked with solving in an intelligent manner that will result in successful fundraising for the client. The fundraising activities that we develop are tailored to the specific needs of each of our clients. To be successful, these activities have to be different in some way from what is already in the market – in other words, it is important to think outside the box.

In this workshop, you are asked to apply your ideas and knowledge about fundraising to a series of real-world scenarios. These scenarios are presented on a series of memos. On your desk, you will see an in-basket. Inside the in-basket are a series of memos. Each memo asks you to provide three pieces of information based on the scenario that it presents. You may ask – what is a good or high-quality idea? A good idea has two characteristics. Firstly, it is practical – meaning that it would be possible to implement the idea. Secondly, it is creative – meaning that it is fresh and innovative idea. Please write down your ideas on the answer sheet provided for each memo. You may use both sides of the paper if you desire. For this part of the workshop, you have twenty minutes to answer as many of the memos as you can. Please complete this task individually.

When coming up with your ideas, consider all of the resources that you have at your disposal.... You have personal resources, such as your experiences and your skills – but you also have other resources that could be available to you as well. Remember to think outside the box. For example, perhaps there are local businesses that would be willing to help students promote a fundraising campaign or to donate merchandise for a charity auction. Good luck.

- Screen fades to a picture of the slogan used by the leader in this video: Think outside the box (e.g., Kelloway et al., 2002).

Script 2 b) Booster session

Hello everyone. You are halfway through your task in this workshop. Remember that you are not only trying to come with as many ideas as possible during this part of the workshop, but also ideas that are innovative and creative. Try to think of resources that you can use in developing your fundraising ideas.

I hope that your experience so far in this workshop has helped you to look at problems in new and creative ways. The ability to take an old or common problem, and approach it in a new and different way is a skill that will prove useful to you in many aspects of your lives. It is also a skill that can be improved with practice. When solving a problem, I always stress that it is important to first make sure that you take the time to identify what the core of the problem is before jumping to solutions. Then, try to think outside the box for solutions that present a new and different approach to tackling the problem.

- Screen fades to a picture of the slogan used by the leader in this video: Think outside the box.

Script 2 c)

Hello again everyone. You have now completed the task for this workshop. On behalf of *Company XYZ*, I would like to thank you for your participation in this workshop. My advice to you is to develop your problem solving skills, and always try to think creatively for ideas that are outside the box. I wish you the best of luck in your studies.

Script 3: Contingent Reward

Script 3 a)

Hello everyone. My name is Marie. I work for *Company XYZ*, which is a company that specializes in developing fundraising campaigns. We provide suggestions to organizations regarding fundraising activities and also suggest ways in which those fundraising activities can be implemented. Our company, *Company XYZ*, regularly holds workshops with students from leading business schools, such as yourselves. I am your project leader for this workshop and I would like to thank you for participating. On your desk, you will notice a handout that has been prepared by *Company XYZ* to explain our company's purpose for holding these workshops. Please take a moment to read this handout.

- Video fades to a screen that reads "Please read your handout" for 60 seconds

In business, I have noticed that high performance is often directly linked with rewards. In other words, when performance goals and standards are met, rewards – such as recognition – will follow. The same principle applies to your performance in the assigned task for this workshop – if you perform at a high level, you will benefit from your experience and practice skills, such as idea generation, that will be very useful to you – both in your studies and in your future careers.

In this workshop, you are asked to apply your ideas and knowledge about fundraising to a series of real-world scenarios. These scenarios are presented on a series of memos. On your desk, you will see an in-basket. Inside the in-basket are a series of memos. Each memo asks you to provide three pieces of information based on the scenario that it presents. You may ask – what is a good or high-quality idea? A good idea has two characteristics. Firstly, it is practical – meaning that it would be possible to implement the idea. Secondly, it is creative – meaning that it is fresh and innovative idea. Please write down your ideas on the answer sheet provided for each memo. You may use both sides of the paper if you desire. For this part of the workshop, you have twenty minutes to answer as many of the memos as you can. Please complete this task individually.

Your goal for this part of the workshop is to come up with as many ideas as you can, while keeping in mind that the characteristics of high quality ideas are that they are both practical and creative. If you work hard at generating ideas, you can accomplish this goal. I always say that good work gets noticed – especially in business. Keep in mind that if you do a good job in today’s task, you will get credit toward your grade in [course number].

- Screen fades to a picture of the slogan used by the leader in this video: Good work gets noticed.

Script 3 b) Booster session

Hello everyone. You are halfway through your task in this workshop. Remember that your goal is to come up with as many ideas as you can for ways in which fundraising can be conducted, while keeping in mind the characteristics of high-quality ideas.

I would like to take a moment to briefly describe how your participation in this workshop benefits both yourselves and our company. When you work hard to perform well on the tasks presented in this workshop, you benefit from an experience in which you get to practice developing ideas and applying them to real-life scenarios. At the same time, your effort motivates our company to continue to design workshops to be presented to students in local business schools. Thus, we, as a company, also benefit from the effort that you put forth in the workshops. Furthermore, when you perform well on the tasks assigned in this workshop you will receive credit toward your grade for your course [course number]. As I noted before, in business good performance is what leads to rewards.

Remember that each memo asks you to provide three pieces of information. You have ten minutes left to complete the task for this workshop.

- Screen fades to a picture of the slogan used by the leader in this video: Good work gets noticed.

Script 3 c)

Hello again everyone. You have now completed the task for this workshop. On behalf of *Company XYZ*, I would like to thank you for your participation in this workshop. My advice to you is to always keep in mind that good performance leads to rewards. I wish you the best of luck in your studies.

Script 4: No Leadership

Script 4 a)

Hello everyone. My name is Marie. I work for *Company XYZ*, which is a company that specializes in developing fundraising campaigns. We provide suggestions to

organizations regarding fundraising activities and also suggest ways in which those fundraising activities can be implemented. Our company, *Company XYZ*, regularly holds workshops with students from leading business schools, such as yourselves. I would like to thank you for participating in this workshop. On your desk, you will notice a handout that has been prepared by *Company XYZ* to explain our company's purpose for holding these workshops. Please take a moment to read this handout.

- Video fades to a screen that reads "Please read your handout" for 60 seconds

Company XYZ was founded here in Canada in 1992. Our company has developed fundraising campaigns for numerous clients in past years. Our clientele is very diverse – we have worked with companies in both the public and private sectors, ranging from small enterprises to large corporations. We have also worked with not-for-profit clients. We provide our clients with suggestions for fundraising activities, as well as with suggestions for how these activities may be implemented.

There are two main ways in which we present our suggestions to our clients. Firstly, we always prepare a written report that we submit to the company. Secondly, whenever possible, we prepare a formal presentation of our suggestions for the company's executives. In this way, we ensure that we have provided a complete service to our client.

In this workshop, you are asked to apply your ideas and knowledge about fundraising to a series of real-world scenarios. These scenarios are presented on a series of memos. On your desk, you will see an in-basket. Inside the in-basket are a series of memos. Each memo asks you to provide three pieces of information based on the scenario that it presents. You may ask – what is a good or high-quality idea? A good idea has two characteristics. Firstly, it is practical – meaning that it would be possible to implement the idea. Secondly, it is creative – meaning that it is fresh and innovative idea. Please write down your ideas on the answer sheet provided for each memo. You may use both sides of the paper if you desire. For this part of the workshop, you have twenty minutes to answer as many of the memos as you can. Please complete this task individually.

- Screen fades to a picture of the name of the company: *Company XYZ*.

Script 4 b) Booster session

Hello everyone. You are halfway through your task in this workshop. *Company XYZ* has designed this workshop and we hope that you are finding your experience to be enjoyable. Thank you for your participation.

I would like to provide you with some added information about our company. Each year we provide suggestions for fundraising activities to approximately thirty clients. Our clientele represents a very diverse group of industries. For example, we have provided suggestions for fundraising campaigns to small enterprises, large corporations, school boards, and hospitals. We also have numerous clients that we work with on a regular basis. In fact, each year we provide fundraising suggestions to approximately ten clients

that we have worked with in the past – thus, one third of our yearly clientele is made up of ‘repeat customers’. Many of our new customers learn of the services that we provide by word of mouth. Often our clients will mention our company to others, who will then contact us when they have a need to develop a fundraising campaign. We have found this to be a very successful and cost effective way of increasing our clientele.

This workshop was designed by *Company XYZ* as an applied exercise to use the knowledge and skills that you have developed over the course of your studies to address a series of real-life scenarios presented in memos. We hope that you are enjoying your experience. Thank you again for your participation.

- Screen fades to a picture of the name of the company: *Company XYZ*.

Script 4 c)

Hello again everyone. You have now completed the task for this workshop. On behalf of *Company XYZ*, I would like to thank you for your participation in this workshop and to wish you the best of luck in your studies.

Appendix G: Handouts

Handout for Low-Importance condition

Company XYZ

Our company's purpose for holding the workshop:

Our company has an ethical mandate that requires us to hold workshops for students. The workshops are designed to provide you with a forum to practice some of the skills that you have learned during your studies, however, the task that you will be performing has not been tailored to any specific course that you would have taken in your curriculum.

Your task in the workshop:

In this workshop, you are asked to develop fundraising ideas based on information presented on a series of memos. These memos present real-world scenarios for non-profit organizations.

How your ideas will be used:

- Our company **will not** use the answers and suggestions that you provide during the task in any way.
- Our company **will not** review your answers and suggestions.
- Our company **will not** keep the answers and suggestions that you provide during the task for future use or review.

Although the ideas generated in this workshop are not important to our company's work, you can still benefit from your experience in this workshop, Thank you for your participation.

Handout for the High-Importance condition:

Company XYZ

Our company's purpose for holding the workshop:

Our company holds workshops to encourage students to participate in fundraising for charitable causes. As the business leaders of tomorrow, we believe that you will have a significant impact on the world. We hold these workshops to highlight the importance of charitable work and to promote awareness of social issues. Our company hopes that this workshop provides you with an opportunity to practice very important skills.

Your task in the workshop:

In this workshop, you are asked to develop fundraising ideas based on information presented on a series of memos. These memos present real-world scenarios for non-profit organizations.

How your ideas will be used:

- Your ideas are **absolutely essential** to our company.
- Our company will review all of your ideas and suggestions very carefully.
- Our company relies on the ideas developed by students in these workshops to help develop fundraising campaigns for charitable organizations. Your ideas have a **huge impact** on the development of these fundraising activities.

The ideas and suggestions that you develop during this workshop are *very important* to our company. Thank you for your participation.

Appendix H: Demographic Questionnaire

The following questions aim to gather the demographic information of the participants in this research study. Please note that all responses will be strictly anonymous.

Thank you for your participation.

1. What is your age? _____
2. What is your gender? Male Female
3. What is your nationality? Canadian Other, please specify _____
4. What is your primary language? English French
 Other, please specify _____
5. Please list your major and minor in your program (*if you have more than one major or minor, please list all that apply*)
Major(s): _____
Minor(s): _____
Other (please specify): _____
6. How many years of work experience do you have? (*Please choose the interval that best describes your total work experience of all jobs that you have held*)
 I do not have any work experience
 Less than one year
 1-2 years
 3-4 years
 5-6 years
 7 years or more
7. If you have previous work experience, please indicate whether you have held a managerial position:
 Yes – I have held a managerial position
 No – I have not held a managerial position

Appendix I: Manipulation Check Question for the Leadership Condition

*For the following question, please select one (1) statement that **BEST** applies to the video that you just watched. Thank you for your participation.*

Which of the following statement **BEST** describes the person presented in the video?
(Please select only one statement).

- The person presented in the video attempts to help people look at problems in new ways and suggests ways in which performance can be improved. The person in the video also emphasizes creativity, intelligence, and problem solving.
- The person in the video clearly defines good performance and stresses the relationship between good performance and receiving rewards. The person in the video also clearly articulates the details of the task and sets goals to achieve desired outcomes.
- The person in the video presents an ideal (or vision) of the future and inspires people to work toward it. The person in the video expresses high expectations of others, along with a confidence that these high expectations can be achieved.
- None of the above statements apply to the person in the video.

Appendix J: Manipulation Check Question for Task Importance

In general, how *significant* or *important* is the task that participants are asked to perform? That is, are the results of your work likely to significantly affect the lives or well being of other people?

Appendix K: Questions Measuring Task Interest/Enjoyment

The questions below are from the Intrinsic Motivation Inventory. The wording of the questions below was slightly modified from the original questions for the current study.

1. I enjoyed doing this task very much.
2. I would describe this task as very interesting.
3. This task was fun to do.
4. I thought this was a boring task. (reverse)
5. This task did not hold my attention at all. (reverse)
6. When I was doing this task, I was thinking about how much I enjoyed it.

Appendix L: Scoring Guide for Creativity and Practicality

CODING SCHEME

Practicality

1	2	3	4	5
Not at all practical		Somewhat practical		Very practical

1 → Not at all practical. It would not be possible to implement the fundraising idea that was suggested. For example, a suggestion to have a charity concert featuring the biggest rock bands in the world would not be practical for an elementary school fundraiser.

3 → Somewhat practical.

5 → Very practical. It would be very possible to implement this idea. For example, a bake sale would be a very practical fundraising idea to raise money at a school.

Creativity

1	2	3	4	5
Not at all creative		Somewhat creative		Very creative

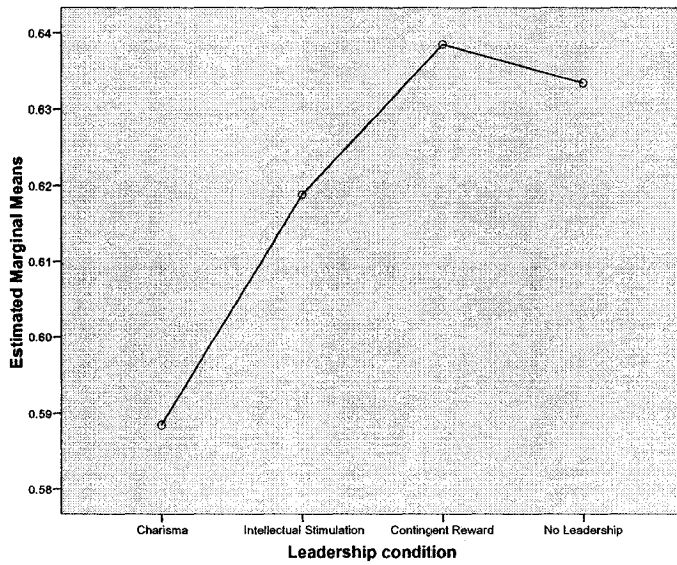
1 → Not at all creative (where creative refers to innovative and fresh).

3 → Somewhat creative. The idea is more developed than a standard fundraising idea. For example, one may suggest a bake sale at an elementary school where each child is asked to help bake a dessert and to prepare a poster advertising the dessert that he/she made would fall in the 'somewhat creative' category.

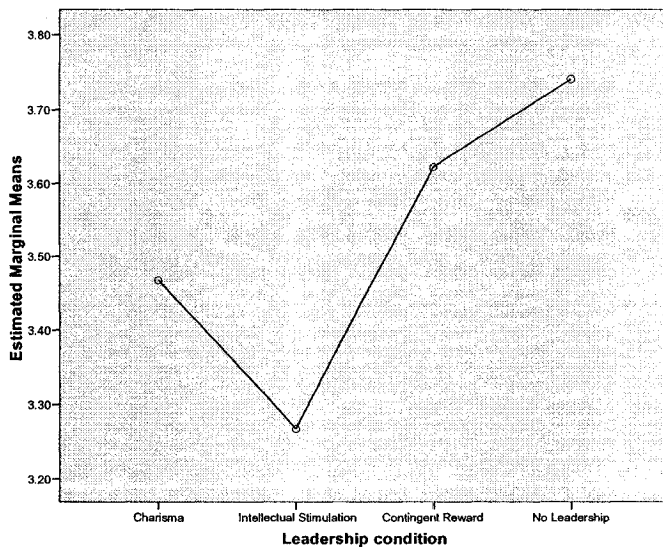
5 → Very creative. This is a new, fresh, and innovative idea that is presented.

Appendix M: Profile Plots for the Main Effect of the Leadership Condition for each Outcome (from the SPSS output)

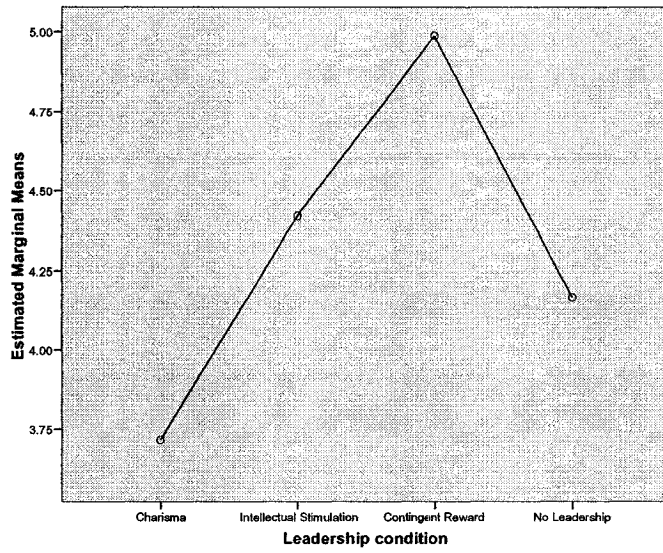
Profile Plot for Performance Quality of the Main Effect for the Leadership Condition (from SPSS, of Estimated Marginal Means)



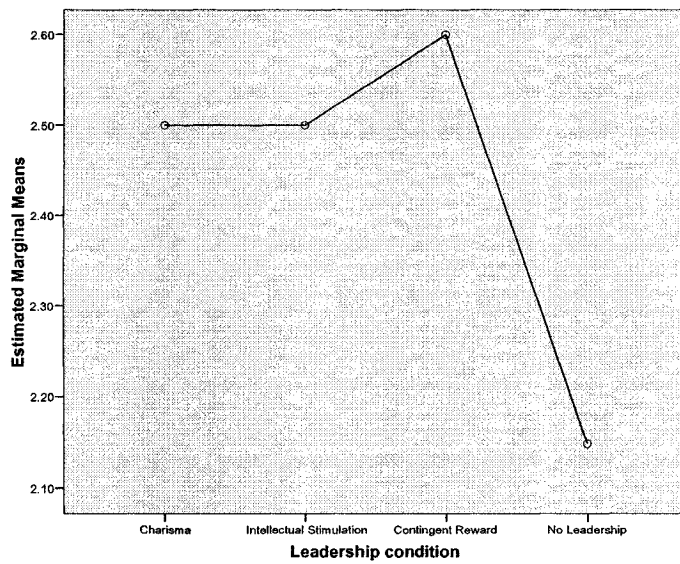
Profile Plot for Performance Quantity of the Main Effect for the Leadership Condition (from SPSS, of Estimated Marginal Means)



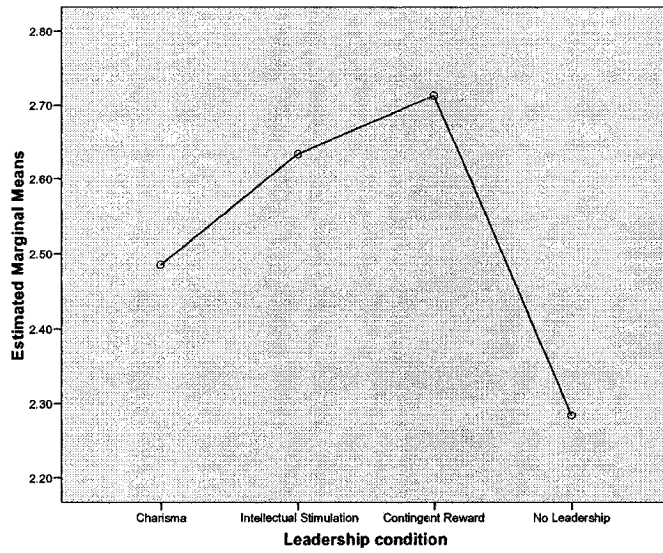
Profile Plot for Task Interest/Enjoyment of the Main Effect for the Leadership Condition (from SPSS, of Estimated Marginal Means)



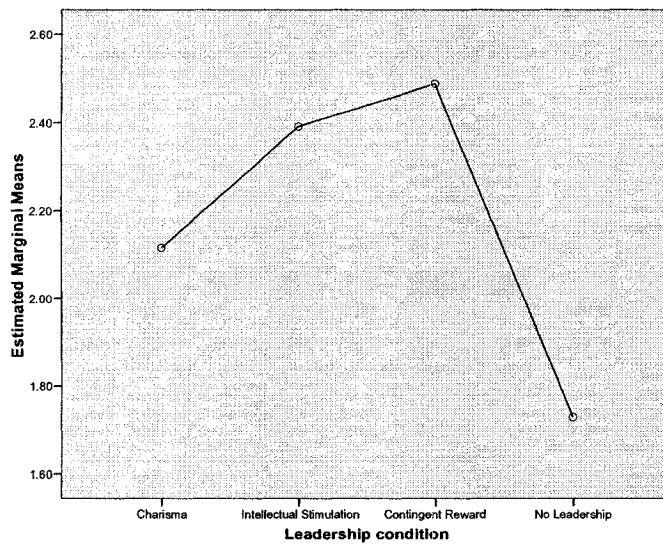
Profile Plot for Satisfaction with the Leader of the Main Effect for the Leadership Condition (from SPSS, of Estimated Marginal Means)



Profile Plot for Leader Effectiveness of the Main Effect for the Leadership Condition (from SPSS, of Estimated Marginal Means)

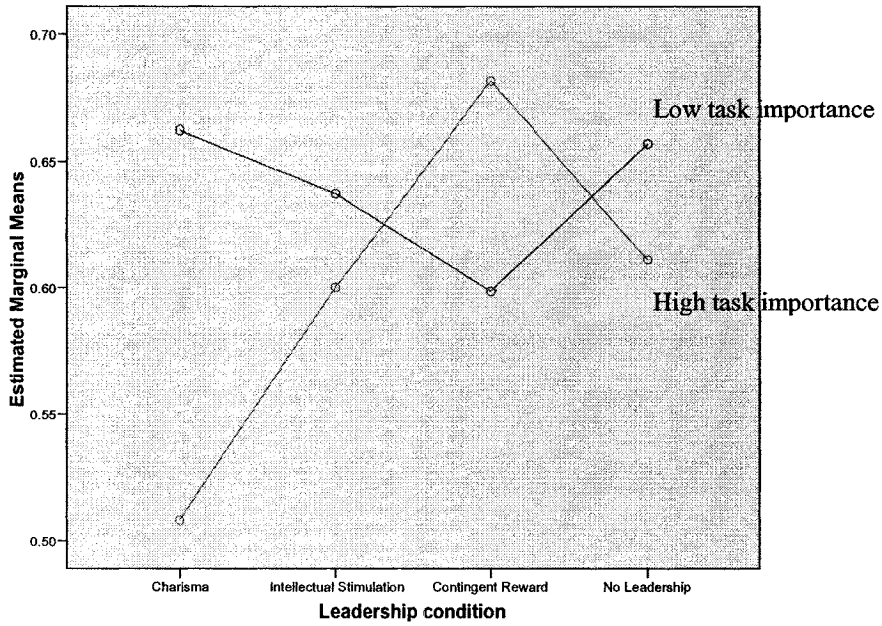


Profile Plot for Extra Effort of the Main Effect for the Leadership Condition (from SPSS, of Estimated Marginal Means)

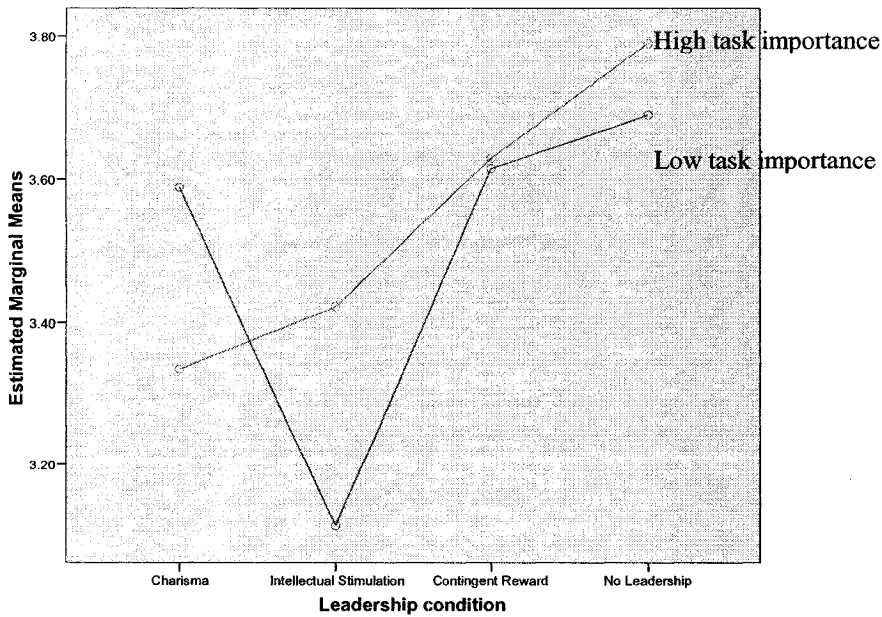


Appendix N: Interaction Plots for Each Outcome (from the SPSS output)

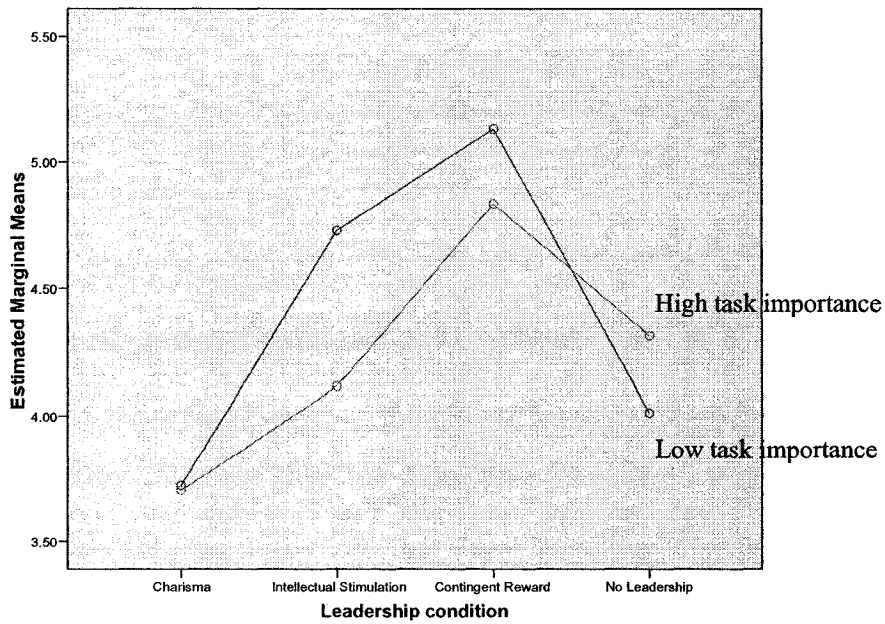
Interaction Plot for Performance Quality (from SPSS of Estimated Marginal Means)



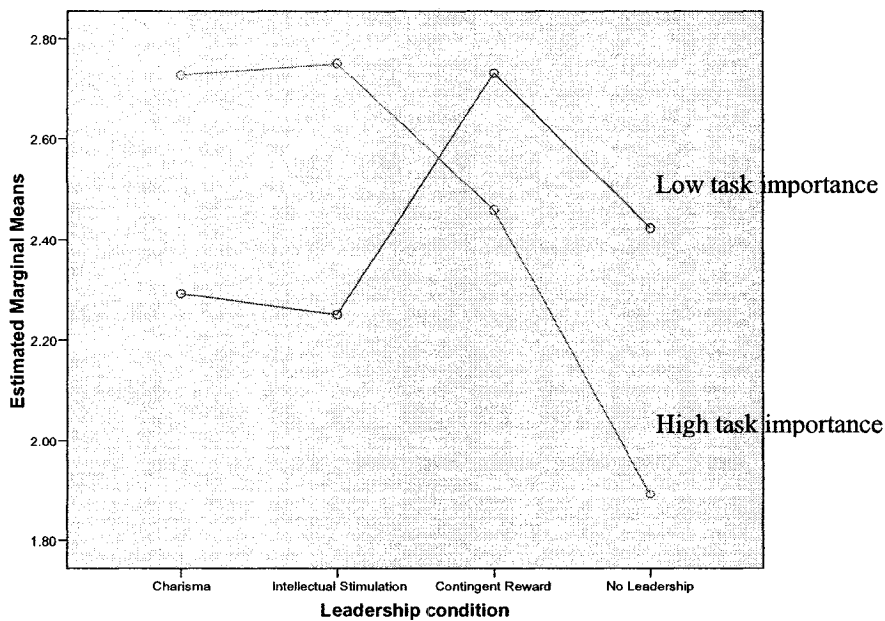
Interaction Plot for Performance Quantity (from SPSS of Estimated Marginal Means)



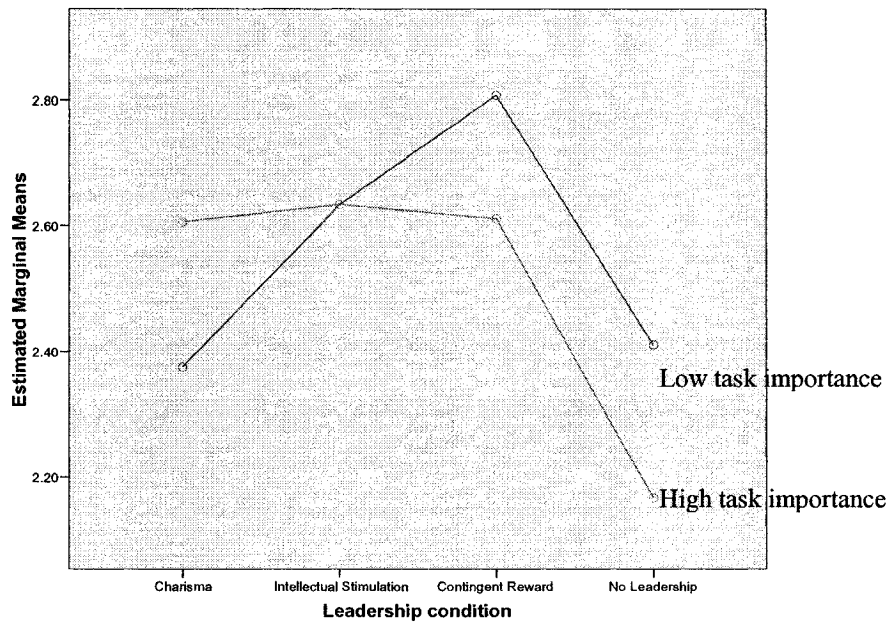
Interaction Plot for Task Interest/Enjoyment (from SPSS of Estimated Marginal Means)



Interaction Plot for Satisfaction with the Leader (from SPSS of Estimated Marginal Means)



Interaction Plot for Leader Effectiveness (from SPSS of Estimated Marginal Means)



Interaction Plot for Extra Effort (from SPSS of Estimated Marginal Means)

