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LEADING FOR CREATIVITY: COMPETING LEADER INFLUENCE
TACTICS ON CREATIVE ENGAGEMENT

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Dedication Page

This dissertation is dedicated to my mother, Melissa Louise McDaniel. I know I could not have made it through graduate school without her support. Her constant support gave me confidence and drive to work as hard as I could. I do not expect to ever be as smart as my mother, but she has taught me the value in education and continually learning. I have always admired her fearless questioning of others' assumptions or opinions in order to develop a thoughtful perspective. I believe in this approach and have sought to model her behavior. Thank you mom; I love you.

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Abstract

The success of creative endeavors is influenced by leadership. In this way, leaders play the critical role of creating the conditions that will engage the individual in the creative work. Researchers in leading for creativity have focused on different leadership styles, including transformational and charismatic leadership or expertise-based leadership. The purpose of the current study was to test the competing effects of different leader influence tactics creative engagement (e.g., intrinsic motivation, positive affect, self-efficacy). The influence tactics of charisma, mission, recognition, and intellectual stimulation were manipulated in an experimental study and participants worked on a creative task. The results indicated that influence tactics could be substituted for other to engage the individual in the creative work. The findings of the study provide insight as to what leadership influence tactics are effective in combination with other tactics.

Organizations have become increasingly interested in promoting and encouraging employees to be creative. This interest is for good reason—innovation is critical in order for organizations to maintain their competitiveness (Dess & Pickens, 2000). In this respect, the rate of innovation tends to be related to profitability and firm performance overall (Geroski, Machin, & Van Reenen, 1993). Central to having a high rate of innovation is encouraging creative behavior at the individual level. Creativity represents the generation of new ideas, while innovation involves the implementation of these ideas (Ghiselin, 1963; Mumford & Gustafson, 1988). However, getting employees to engage in creative behavior is challenging. The creative individual is difficult to manage, given their predispositions for self-confidence, drive, ambition, dominance, and hostility (Feist, 1998). With a natural curiosity and interest in complex problems, the challenge for organizational management is to create conditions that will ignite their extant interest and motivation and channel it into the appropriate work.

The critical role leaders play in facilitating creativity in employees and ensuring the success of innovative projects has recently become of interest to leadership scholars. A number of studies have sought to explain leadership of creativity and innovation. Mumford, Scott, Gaddis, and Strange reviewed these findings and concluded that the influence tactics leaders use have an effect on the willingness of the person to engage in creative work and ultimately the work itself. Indeed, the willingness to engage in creative work is critical. Once the leader has answered the question of, “*can* this employee be creative?”, the question then becomes, “*will* they be creative?”. Individuals must not only be capable of creative problem-solving, but perhaps just as importantly, willing to engage in the creative work. Those who are creatively engaged in terms of

intrinsic motivation (Amabile, 1997, 1998), self-efficacy (Tierney & Farmer, 2002), and affective engagement (Baas, De Dreu & Nijstand, 2008) tend to have higher performance in creative work.

A number of researchers have sought to explain how a leader can effectively exercise influence over those working on creative tasks. A popular theory, transformational and charismatic leadership, has received attention in this domain. A number of researchers have provided support for the idea that transformational and charismatic leaders encourage creativity and innovation (Jung, 2001; Jung, Chow, & Wu, 2003; Keller, 1992; Shin & Zhou, 2003, 2007; Sosik, Avolio, Kahai, & Jung, 1998; Sosik, Kahai, & Avolio, 1998; Waldman & Atwater, 1992). Specifically, by using their inspirational vision and support, these leaders are said to motivate creative workers (Shin & Zhou, 2003). However, others have focused on a more pragmatic leadership style, considering the day-to-day management of creative projects. In this respect, Mumford and colleagues (e.g., Mumford, Hunter, Eubanks, Bedell, & Murphy, 2007; Mumford et al., 2002) consider the technical leader capacities (e.g., expertise) and capabilities (e.g., defining problems) critical to managing creativity and innovation.

Although there are a number of studies examining the leader's influence on creative work, studies testing the competing effects of the key influence mechanisms are lacking in the current literature. It may be the case that an integrated and comprehensive theory should incorporate both leadership approaches to explain how to best manage creative work. However, it is more likely that the influence mechanisms do not possess additive value over each other and may in fact, be substituted for each other. The purpose of the current study was to explore these competing and substituting

effects of leader behaviors suggested by researchers in the leading for creativity domain. An experimental study can effectively shed light on the causal influence of various leadership influence tactics. Not all leader behaviors can be examined in one experimental study, but several key behaviors can be selected. This paper will describe a leader's influence on creativity by first considering the nature of creative work and people, reviewing the relevant literature, and proposing hypotheses about the competing effects of certain leader behaviors.

Nature of Creative Work and Creative People

In order to understand the influence a leader has over creative work, it is useful to first consider the nature of creative work and people. Certain individual characteristics are related to effective creative problem-solving. First, researchers have demonstrated the importance of knowledge (Ericsson & Charness, 1994; Weisberg, 1999), but perhaps more importantly, expertise and experience (Chi, Bassock, Lewis, Reitman, & Glaser, 1989; Hershey, Walsh, Read, & Chulef, 1990; Reeves & Weisburg, 1999). This sort of intellectual capacity is needed given the heavy cognitive demand associated with creativity. There are a number of process models suggesting specific cognitive activities in the creative problem-solving process (Lubart, 2001; Mumford, Mobley, Uhlman, Reiter-Palmon, & Doares, 1991; Parnes, 1967; Sternberg, 1988). Generally these models involve cognitive processing activities such as identifying a problem, gathering information, generating ideas, evaluating ideas, and implementing ideas. Creative problem-solving skills are critical to executing the creative processes (Amabile, 1983, 1988), but also a sustained focus and energy to continue working

through these time-intensive (Gruber & Davis, 1988) and cognitively demanding activities.

Apart from expertise and creative problem-solving abilities, creative individuals tend to have certain dispositional characteristics (Barron & Harrington, 1981; Feist, 1998; Mumford & Gustafson, 1988). Specifically, the creative individual tends to be characterized by openness and flexibility, high levels of achievement motivation, and moderate levels of competitiveness. Taking these personality characteristics together with the expertise and creative problem-solving abilities described above, a profile for the creative individual emerges. That is, someone who desires autonomy (Amabile, Conti, Coon, Lazenby, & Herron, 1996) and prefers a non-controlling supervisor (Oldham & Cummings, 1996; Scott & Bruce, 1994). This profile then begs a question; does the creative individual even need leadership? The literature in this area provides an answer to this question, an overwhelming yes. However, the leader role and influence tactics for the creative individual are unique and different from the traditional leadership styles and strategies.

Creative Engagement

The nature of creative work and the profile associated with the creative individual provides evidence for the importance of engagement. Leaders have relatively little influence over the creative individuals' *ability* to solve creative problems. Instead, the role of the leader is to structure the work such that employees can more easily tackle the creative problem-solving activities (Trevelyan, 2001) and foster a work environment that is conducive to creative work (Shalley & Gilson, 2004). In this respect the leader influences creativity by creating the conditions that will encourage the individual to

engage in the creative work. Recently Zhang and Bartol (2010) demonstrated how the extent to which an individual engages in the creative process mediates the relationship between motivation and creative performance, where motivation is defined as an individual's level of interest in a task and subsequent engagement in the task based off of this interest. If the individual does not care to engage in the creative process, then no amount of expertise or ability will ensure creative performance. The creative individual's inherent curiosity and achievement motivation tend to spark their interest in creative work (Mumford et al., 2002). Thus, leaders need not create motivation, per se, but create conditions that channel extant motivation into the creative work. There are several areas of engagement to consider, including intrinsic motivation, positive affective expectations, and self-efficacy.

Intrinsic motivation. Creative engagement involves intrinsic motivation. Intrinsic motivation is the extent to which an individual is attracted to and interested in a task, based on the task itself, as opposed to external consequences of performing the task (Deci & Ryan, 1985). Amabile and colleagues have provided insights into the importance of intrinsic motivation (Amabile, 1983, 1988; Amabile, Barsade, Mueller, & Staw, 2005; Ruscio, Whitney, & Amabile, 1998). Specifically, she has described how intrinsic motivation increases an individual's willingness to take risks, focuses attention, increases exploration, enhances cognitive flexibility, and encourages the persistence needed to work through the creative process. Other researchers have found similar effects of intrinsic motivation (McGraw & Fiala, 1982; McGraw & McCullers, 1979; Oldham & Cummings, 1996). There is evidence to support the idea that leadership and

other situational factors influence creativity through intrinsic motivation (Amabile, 1988; Olham & Cummings, 1996).

Positive affective expectations. The next area of creative engagement is labeled positive affective expectations. This aspect of engagement is related to intrinsic motivation given that people who are intrinsically motivated tend to experience positive affect (Silvia, 2008). Positive affective expectations, such as hope, optimism, and excitement give individuals the desire to engage in the creative process. The reason positive affective expectations plays a part in creative engagement is because of the cues and signals people use from their affect. Essentially, experienced feelings are used as information about the environment and this information influences responses to the environment (see Forgas, 2000). For example, Lerner and Keltner (2001) argued that experiencing fear, a negative emotion, causes an individual to interpret the environment as risky and respond by being cautious. Alternatively, positive emotions signal a safe environment and tend to elicit exploratory responses (Fredrickson, 2001). Researchers have begun to study the influence of positive and negative emotions on creativity. Although the results have been mixed, a recent meta-analysis by Baas, De Dreu and Nijstand (2008) provides some clarity. They found that creativity is enhanced the most by activating, positive emotions, those that prompt action. Positive emotions that are not activating (e.g., relaxed) do not seem to significantly enhance creativity. Further evidence for the value of such positive affective states has been provided by researchers demonstrating the value of hope as an influence on creativity (Rego, Machado, Leal, & Cunha, 2009; Zhou & George, 2003). Given that creative work is associated with challenges and obstacles, hope is suggested to be a sustaining force pushing individuals

to persevere (Shalley & Gilson, 2004). These findings suggest that positive affective expectations, such as hope, prompt creative engagement.

Self-efficacy. The last aspect of creative engagement is creative efficacy. Self-efficacy, like positive affective expectations, is also related to intrinsic motivation (Dewett, 2007). In this way, feelings of competence tend to increase intrinsic motivation (Deci, 1975; Deci & Ryan, 1985). Efficacy involves the belief that one is capable to perform a particular task, in this case a creative task. Creative self-efficacy or creative efficacy has been shown to have an important direct and indirect influence on creative performance (Gong, Huang, & Farh, 2009; Prabhu, Sutton, & Sauser, 2008; Tierney & Farmer, 2002). Those who feel capable and confident in their ability are more likely to engage in the creative work and persist despite challenges. In this way, increased confidence tends to help individuals continue working when faced with difficult, complex, and novel tasks (Gagne & Deci, 2005). Recently, Chong and Ma (2010) studied creative self-efficacy. They found that leadership style and behavior influenced the subordinate's creative self-efficacy, which ultimately increased creative performance. Indeed, leaders have an influence on self-efficacy and this influence is critical. Redmond, Mumford, and Teach (1993) suggested leader behaviors that induce self-efficacy were related to subordinate creativity. These findings provide support for the importance of self-efficacy as aspect of creative engagement that relates to creative performance.

Leading for Creativity

Now turning to the leader's influence on creative engagement, researchers have generally fallen into two streams. First, there are those who study transformational

leadership, proposing a positive influence of this leadership style on creative endeavors. A second group has focused on a more pragmatic leadership style, centered on leader expertise. Both camps have provided findings about how leaders might engage their employees in creative problem-solving.

Transformational leadership has received attention in the leading for creativity literature. A number of studies have found a positive relationship between this leadership style and creativity outcomes (Jung, 2001; Jung, Chow, & Wu, 2003; Keller, 1992; Sosik et al., & Jung, 1998a; Sosik, et al., 1998b; Waldman & Atwater, 1992). The nature of transformational leadership intuitively relates to creativity and innovation. In this regard, transformational leaders are agents of change (Tichy & Devanna, 1986), engage in unconventional strategies (Conger & Kanungo, 1987, 1998), and support experimenting to test solutions (Bennis & Nanus, 1985). Charismatic leadership is a similar theory and has largely been treated as interchangeable with transformational leadership (Howell & Sharmir, 2005). Recent research has provided convergent evidence of the two theories (Rowold &Heinitz, 2007). In this regard, both theories focus on articulation of a vision, leaders as agents of change, and emotional appeals to evoke motivation.

Transformational and charismatic leaders are said to motivate others to work towards the leader's vision, rather than their own self-interests (Bass, 1985; Bass & Riggio, 2006; Conger, & Kanungo, 1987, 1998; House, 1977). A vision is the leader's idealized image of the future, containing affective appeals to elicit follower motivation and satisfaction (Bono & Illies, 2006; Dumdum, Lowe, & Avolio, 2002; Sosik et al., 1999). Shin and Zhou (2003, 2007) have suggested a number of explanations for why

transformational and charismatic leaders enhance creativity in followers. In this respect, transformational and charismatic leaders are said to enhance creativity through intrinsic motivation and positive affective reactions (e.g., energy, excitement). Jung, Chow, and Wu (2003) studied how transformational and charismatic leadership behaviors increase perceptions of support, which increase creative behavior. Similar findings have been evidenced in other studies (e.g., Eisenbeiss, van Knippenberg, & Boerner, 2008). This climate of support may encourage employees to engage in exploratory activities, unconventional approaches, and risk-taking. Support for innovation seems to be a critical component of the climate for creativity. In this respect, a recent meta-analysis by Hulsheger, Anderson, and Salgado (2009) found that support for innovation was one of the strongest predictors for innovation at work. Another strong predictor of innovation in this meta-analysis was vision, a key influence mechanism for transformational and charismatic leadership.

Several researchers have found mixed and negative effects of transformational and charismatic leadership on creativity. Eisenbeiss and Boerner (2010) found a curvilinear relationship between this leadership style and creativity, such that high or low levels of transformational leadership were more related to creativity than moderate levels of this leadership style. They suggested that low levels may be equally effective if the leader relies on high intrinsic motivation and the expert knowledge of their subordinates, rather than imposing structure through charismatic and visionary leadership behaviors. This may be a result of the creative individual's preference for autonomy. A separate study by Basu and Green (1997) found a negative relationship between transformational leadership and creativity, where transactional leaders tended

to encourage creativity in their followers more frequently. These researchers suggested that transformational leaders may induce stress in subordinates, by raising the stakes and focusing heavily on achievement. These mixed results of transformational leadership raise questions about the effectiveness of the style and specifically, what aspects of transformational leadership may be advantageous and what aspects may be less effective.

Other researchers in leading for creativity have not focused on the transformational and charismatic leadership style and have instead taken an expertise-based approach. Early studies of leadership in creative endeavors set the stage for this body of research, where the leader's technical expertise was found to be a strong predictor of team creativity and innovation (Barnowe, 1975) and team performance in R&D organizations (Andrews & Farris, 1967). Leaders with technical expertise can tangibly help the employees working through the difficult creative problem-solving process. For example, they can offer expert knowledge and information (Krause, 2004) and input after employees have started working on the problem (Farris, 1972). In fact, providing input and feedback to employees is a critical activity for leaders of creative efforts (Mumford, Connelly, Gaddis, & Strange, 2002). Without a technical understanding of the work being done providing detailed, accurate feedback to employees is difficult, if not possible. Providing feedback is not the only behavior that requires leader expertise. Reiter-Palmon and Illies (2004) suggest that the leaders must provide needed information and guidance on objectives according to the stage of the creative process. In order to engage in these activities leaders must have the expertise to understand the creative work.

Expertise helps a leader articulate a mission for employees in creative work. Missions describe a specific area of exploration that is concrete and focused on production tasks, yet is broad and challenging (Mumford et al., 2002). Hunter, Bedell, and Mumford (2007) describe “mission clarity” as critical element of the creative climate and define it as awareness and understanding of objectives and expectations with respect to creative performance. The DuPont research lab provides a useful illustration of what an effective mission statement entails. That is, consolidative work goals, with flexibility to encourage exploration and creativity, and also, provides structure that guides project work while not restricting the work (Hounshell, 1992). It is not uncommon to see loose definitions of missions and assumption that missions and visions are the same thing. However, distinctions between missions and visions can be made. Missions are framed in terms of work goals and, unlike visions, do not contain affective appeals. The value of a mission has been demonstrated in the literature (Pinto & Prescott, 1988; Shalley, 1991, 1995). There are several reasons missions are advantageous to creative endeavors. First, given the nature of creative work (e.g., novel, ill-defined, challenging), having clear, technical objectives provides guidance and structure. Second, missions serve as a motivational tool (Mumford et al., 2002), given that missions do not overly restrict, creative individuals have the autonomy to pursue their own interests, within the framework of objectives of interest. In order to offer a detailed mission, the leader must understand the technical nature of the creative work.

As mentioned earlier, leaders of creative work need the expertise to provide constructive, detailed feedback to employees. One way leaders provide feedback is through rewards. Without expertise to understand the creative work being done, the

leader cannot effectively identify who should be rewarded and why. Although researchers in intrinsic motivation have generally called extraneous rewards detrimental to creative performance (e.g., Collins & Amabile, 1999), others have suggested that rewards can be useful. In this respect, researchers have acknowledged that rewards are not always bad and can in fact, be helpful to creativity (De Jong & Den Hartog, 2007; Eisenberger & Armeli, 1997; Eisenberger & Cameron, 1996; Farr & Ford, 1990; Laursen & Foss, 2003). Innovative cultures have a reward orientation and offer recognition for creative work (Hunter et al., 2007; Judge, Fryxell, & Dooley, 1997; Tesluk, Farr, & Klein, 1997). In sum, effective rewards that do not distract or take away from the creative work can provide feedback to employees about their progress and tell the employee that their creative work is valued by the organization.

Another leadership influence mechanism for creative performance is intellectual stimulation. This leadership influence strategy is considered important by both researchers in transformational leadership and alternative leadership approaches. In fact, intellectual stimulation is an aspect of transformational leadership (Bass, 1985). The value of intellectual stimulation has to do with the nature of creative people and their need to be intrinsically motivated. By enhancing intrinsic motivation, intellectual stimulation has been found related to creativity (Andriopoulos & Lowe, 2000; Enson, Cottman, & Band, 2001; McGourty, Tarshis, & Dominick, 1996). Amabile and Khaire (2008) suggested that managers of creative work should not be afraid of failure and the challenges associated with creativity, and in fact, can motivate employees by intellectually challenging them to tackle the difficult, creative task. Additionally, Hunter et al. (2007) described how the climate for creativity involves both intellectual

stimulation (i.e., debate and discussion of ideas being encouraged and expected) and challenge (i.e., perception that jobs/tasks are challenging, interesting, stimulating, while not overly taxing or overwhelming). These two aspects go hand in hand, as stimulation can occur by challenging employees in terms of how their work is framed and also evaluated. Thus, employees can be intellectually stimulated by framing the work as a challenge, where they may not be able to solve the problem and there is a potential for failure and difficulty along the way.

There are a number of studies providing insight into leading for creativity from both the transformational leadership researchers, as well as the expertise-based models. The transformational researchers have focused on motivation and creating an environment supportive of creativity, while the expertise-based researchers have focused on day-to-day activities and facilitating the work itself with the assumption that this help will in turn motivate the creative worker. Certainly there is some overlap of the aspects of effective leadership and it may be the case, that an integrative model that combines both areas best describes effective management of creative individuals. However, we propose that the leader behaviors and influence tactics from both areas have competing effects on creative performance, such that they may be substitutes for each other or more effective than others when taken together in a controlled study. The next section proposes several hypotheses about the combined effects of specific leader behaviors drawn from the literature on leading for creativity.

Hypothesis Development

The vision articulated by the transformational and charismatic leader is said to increase follower motivation and commitment (Bass, 1985; Bass & Avolio, 1994;

Howell & Shamir, 2005). Likewise, similar effects are suggested by the leaders of creative workers. It may be that the value of a vision is to motivate and excite those involved in creative work, but this manner of inducing engagement may not be necessary. Given that creative workers tend to naturally have extant interest in creative work, creating this engagement is not the issue, but rather channeling extant motivation to the creative work. It may be that a vision serves to enhance creative work through another mechanism. Specifically, by articulating a vision, leaders of creative efforts may induce structure to the project. Bearing in mind that creative work is inherently ambiguous, ill-defined, and poorly structured (Mumford & Gustafson, 1988; Besemer & O'Quin, 1999; Ward, Smith, & Finke, 1999), the structure imposed by a vision of an idealized future state may provide employees with guidance.

If the benefit of the transformational and charismatic leader's vision is to induce structure, this objective might be achieved through other leader behaviors. In this regard, the leader with technical expertise can offer a mission statement to workers in creative efforts. Missions provide technical objectives of the project without imposing solution pathways or means of accomplishing the technical objectives (Hunter et al., 2007). Although a leader requires a certain amount of domain-specific technical understanding in order to create a viable mission statement, this structure is suggested to have a positive effect on motivation and the work itself (Mumford et al., 2002). Taking these points together, it is suggested that visions and missions are different leadership tactics to structure creative work and motivate the creative worker. This idea leads to the first hypothesis.

Hypothesis 1. Charismatic leader behaviors and specific mission statements will interact to influence the engagement of the creative worker. Specifically, these

influence tactics will substitute for each other given they both provide structure to the creative task and motivate the creative worker.

Another way the leader can influence engagement is through rewards. In this way, a reward orientation is an element of climates conducive to creativity (Hunter et al., 2007). However a reward may be detrimental to creative performance if it distracts from the creative work itself, particularly by decreasing intrinsic motivation (e.g., Collins & Amabile, 1999). Indeed, rewards that diminish intrinsic motivation have been described as detrimental to creative performance (Amabile 1997; Amabile et al., 1996; Deci & Ryan, 1985). Not only can rewards be problematic if they distract from the creative work, they can also be problematic if they create undue pressure or stress on the employee. In this way, extreme levels of arousal limit creative problem-solving, by reducing an individual's ability to interpret and evaluate information, and encouraging a norm-consistent responses rather than creative responses (Berlyne, 1967; Easterbrook, 1959).

Although recognizing those who excel in creative work may be detrimental, it can in some circumstances, be helpful (Eisenberger & Cameron, 1996; Abbey & Dickson, 1983; Cardinal, 2001). The effective reward may foster intrinsic motivation, rather than decrease it. In this way, recognition as a reward may be particularly valuable given the achievement motivation characteristic of creative workers (Feist, 1998).

Additionally, the leader may be able to offset the distraction and arousal overload that can accompany rewards. A specific mission statement may help the employee focus on the objectives of the project, providing enough structure and information to help the employee in creative problem-solving. In this regard, specific mission statements are considered beneficial to workers on creative projects (Mumford et al., 2002). The

direction provided by the mission may give the individual the structure needed to not buckle under the pressure of a valued reward. Engagement may decrease if the achievement motivated employee is offered a reward that he/she does not feel capable of achieving. This idea leads to the next hypothesis.

Hypothesis 2. Recognition and specific mission statements will interact to influence the creative worker. Specifically, recognition will only have a positive influence on engagement if it is paired with a specific mission statement.

A common element in leading for creativity seen in both the transformational and charismatic leadership researchers and the expertise-based leadership researchers is intellectual stimulation. Given the creative worker's achievement motivation and natural curiosity (Mumford et al., 2002), challenging them through intellectual stimulation can help engage them in the creative process. Framing the creative task as a challenge may likely peak the individual's interest and motivate him or her to tackle the problem.

The benefit of intellectual stimulation may be bounded by certain conditions. Given that the creative work is difficult, risky, and resource-intensive, emphasizing the challenge of the work through intellectual stimulation may not be helpful in some circumstances. Specifically, intellectual stimulation may be detrimental when the individual feels high levels of arousal and stress, or when the individual is distracted by other factors. In these situations, a more supportive, less challenging leader may be needed to alleviate the stress, rather than add to it. Given that stressors tend to hurt creative performance, a stressful environment surrounding the work is undesirable (Byron et al., 2010). On the other hand, if the conditions surrounding the creative work do not overwhelm or distract the individual, then leaders who intellectually stimulate

may fully engage the individual in the creative process. This idea led to the final hypothesis.

Hypothesis 3. Intellectual stimulation will engage individuals in the creative work if the leader has not created the conditions where the creative work is perceived as too challenging. In these conditions, intellectual stimulation will be detrimental to engagement.

Method

Sample

Participants in this study included 243 undergraduate students (81 males, 162 females) with an average age of 19.1 years. Students received credit in their introductory psychology course for participating in the study. In order to participate, students accessed a website that contained brief study descriptions.

General Procedure

Participants completed the study in a university classroom and took approximately 2 hours. The first hour and a half of the study consisted of an experimental task and the remaining time involved completing a battery of individual difference measures. All materials were completed using paper and pencil.

For the experimental task, an in-basket task was used to allow participants to engage in a low-fidelity simulation. The conditions that call for creativity, involve being faced with a novel, ill-defined problem that allows for multiple solution pathways (Mumford, Whetzel, & Reiter-Palmon, 1997). Thus, these criteria were kept in mind when creating the scenario that participants would be working within. This scenario involved telling participants they were the new employee in the marketing department of a mid-sized music retail store. A packet of resources gave participants information about the organization, such as company history, quarterly meeting minutes, company

newsletter, and emails from their boss (e.g., the leader). These materials illustrated how the company's current clientele was primarily an older demographic, with rare and eclectic music tastes. However, the organizational leaders were interested in expanding to a younger demographic. For this reason, they had decided to hire a new marketing employee to develop a creative solution to this problem, to be supervised by their marketing director. This marketing director served as the leader in the experimental task. The leader provided specific task instructions in an 'email', while demonstrating certain leader behaviors. These leader behaviors were manipulated and will be described in more detail in the next section.

After reading through the organizational material and being exposed to the manipulations, participants generated their ideas for a new marketing campaign and after generating their ideas, wrote their final plan (e.g., creative solution) in 1-2 pages. After generating their solutions, participants received a second packet. They were told this packet was for the Human Resources department of their company. The HR department was interested in collecting data from employees about the projects they are currently working on to learn about employee preferences and interests and different management styles. They were told that the HR department would not identify the data at the individual-level and encouraged to answer truthfully. Participants then completed 12 items on a 5-point scale to assess their creative engagement in terms of intrinsic motivation, positive affective expectations, and task self-efficacy. After completing these items, participants completed 5 items as manipulation checks to ensure they had perceived the leader behaviors of interest.

Experimental Manipulations

Charisma. The first aspect of the charismatic manipulation was a company newsletter. This newsletter presented an ‘employee spotlight’ with an interview of the marketing director of the company (e.g., the participant’s leader). See Figure 1 for the company newsletters for both charismatic and non-charismatic leaders. This interview asked some basic questions about how the company had changed since the leader had been there, where the leader thought the company was heading, and how the leader thought the company would get there. This interview provided the opportunity for the leader to be charismatic or not. The charismatic leader used positive affective language, expressing excitement, optimism, and pride in the company. They also described how they identified strongly with the company, how it mattered to them and how they believed in the company. Lastly, they articulated a vision of the company, a willingness to take risks to achieve that vision, and a confidence that the vision was attainable. Alternatively, the non-charismatic leader was decidedly more pragmatic in their answers. They lacked any affective communication, focused on the present, and talked about the importance of expanding the customer base generally.

Insert Figure 1 About Here

The second aspect of the charismatic manipulation was in an email from the leader to the participant. See Figure 3 for the text from the email. In this email the charismatic leader again used positive affective language, spoke about their belief in the company, and talked about their positive vision of the future of the company. The non-

charismatic leader simply said they would be providing some more information on the participant's task and they hoped the participant was ready to get to work.

Insert Figure 3 About Here

Mission. Within the leader's email to the participant, the leader either offered a specific or a vague mission statement to help the participant in beginning their work. The vague mission said "Increase sales". The specific mission was a short paragraph that included details of the demographic of interest, encouraged original and non-traditional ideas, and articulated how the marketing solution should involve changes to the company that will result in a long-term advantage over competitors.

Recognition. The third manipulation was also in the leader's email to the participant. In the recognition condition the leader said explicitly that the participant would be recognized for their work on this project because the company highly values this work. The leader also said that this recognition would include an all-expense paid trip to the annual management retreat, where they would be publicly recognized and given the opportunity to present their marketing strategy to the organizational leaders. In the no recognition condition, the leader simply said that the if the leaders at the company liked the participant's marketing plan then they will move forward with the plan and use the participant's ideas.

Intellectual stimulation. The last manipulation was at the end of the leader's email. In this paragraph they either stimulated the participant by challenging them or they did not challenge the participant. More specifically, in the intellectual stimulation

condition the leader challenged the participant's working on the project, expressed doubts about their ability, and was not sure the participant was up to challenge. In the alternative condition, the leader did not challenge the participant's working on the project, expressed belief in the participant's ability, and encouraged the participant to just 'go for it'.

Measures

Creativity. The creative solutions (e.g., marketing plans) were rated on a scale of 1-5 in terms of quality, originality, and elegance. These variables are typical measures of performance in creative problem-solving tasks (Besemer & O'Quin, 1999; Ford & Gioia, 2000; Mumford & Gustafson, 1988; Ward, Smith, & Finke, 1999). Four psychology graduate students served as raters for the study. They received a 20-hour rater training program that began with familiarization of the rating process. Next, raters were given operational definitions of the three variables of interest, along with benchmark examples of a low, medium, and high score. See Figures 2, 3, and 4 for definitions and benchmark examples of quality, originality, and elegance. Raters completed a set of practice ratings independently, then met to discuss discrepancies, and were provided feedback as to what the appropriate score would be. To determine inter-rater agreement, the r_{wg} was calculated for each variable (James, Demaree, & Wolf, 1984, 1993). All three variables had r_{wg} 's demonstrating acceptable levels of rater agreement: quality ($r_{wg} = .85$), originality ($r_{wg} = .81$), and elegance ($r_{wg} = .80$).

Insert Figure 2, 3, and 4 About Here

Creative Engagement. To measure creative engagement, participants completed 12 items on 5-point Likert scales. This self-report measure of creative engagement was included in packet described as information for the Human Resources department of the fictional organization they were working for. Five items assessed intrinsic motivation by asking first how motivated, committed, and determined they were to work on the creative task. Additionally, items asked participants to describe the extent to which they valued and the company valued their work. These five items had an internal consistency of .89. Next, four items assessed the extent to which they felt positive affective expectations about the task. Specifically, items asked participants to indicate how excited, hopeful, proud, and optimistic they felt about the task. The internal consistency of these items was .85. Last, participants completed three items that gauged their self-efficacy, asking about their certainty in their ability, perceived capability, and confidence in being able to perform the task. These items had an internal consistency of .83. Items were averaged to create one score for each aspect of creative engagement: intrinsic motivation, positive affective expectations, and self-efficacy.

Manipulation checks. Several questions were included to ensure that manipulations had been perceived accurately. For each manipulation, participants indicated on a scale of 1-5 how much they agreed with statements about the leader's behavior. Each manipulation had an associated manipulation check question (e.g., I was told I would be recognized for my work on this project), with the exception of charismatic manipulation having two questions (e.g., My manager expressed that he believed in a positive future for the company, My manager expressed positive feelings about the company in general). T-tests indicated the effectiveness of each condition as

evidenced by significant differences in responses to the manipulation check questions by condition.

The t-test on both charismatic manipulation check questions indicated significant differences between the charismatic and non-charismatic conditions ($t(243) = -7.59, p < .01$; $t(243) = -8.00, p < .01$). Participants in the charismatic condition indicated that the leader expressed a positive future ($M = 4.83, SD = .49$) and positive feelings ($M = 4.80, SD = .46$) more than did those in the non-charismatic condition ($M = 4.11, SD = .93$ and $M = 4.10, SD = .87$). The t-test for the mission manipulation check question was also significant ($t(243) = -8.11, p < .01$). Those in the specific mission condition indicated that the leader offered a more specific mission ($M = 4.50, SD = .79$) than those in the vague mission condition ($M = 3.33, SD = 1.38$). Next, the t-test for recognition was significant ($t(243) = -11.19, p < .01$), where those in the recognition condition indicated the leader offered recognition for their work ($M = 4.59, SD = .84$) and those in the other conditions responded significantly lower to the same question ($M = 2.95, SD = 1.38$). Last, the item to check intellectual stimulation was reverse-scored. This item asked participants to indicate how much the leader believed in the participants role on the project versus challenged the participants role on the project. Again, the t-test was significant ($t(241) = -11.29, p < .01$), such that those in the intellectual stimulation thought their leaders believed in them less (i.e., were more challenged; $M = 3.11, SD = 1.03$) than did those in the low intellectual stimulation condition ($M = 4.41, SD = .74$).

Individual differences. During the last part of the study, participants completed a separate packet of individual difference measures. These measures were selected based

on their relevance to creative problem-solving and creative engagement. Specifically, participants completed measures of divergent thinking, intelligence, personality, domain knowledge, and a demographics sheet. This section will describe each measure in more detail and provide existing validation evidence.

Ability is critical to creative problem-solving performance. Measures of ability in this study included intelligence and divergent thinking. To measure intelligence, the Wonderlic Personnel Test (Wonderlic, 1992) was used. Typically more intelligent individuals perform at higher levels than less intelligent individuals in problem-solving activities (Ackerman & Humphreys, 1990). This test includes 50 analogical reasoning items, with a split-half reliability above .70 and has a number of studies providing validation evidence (Bell, Lassiter, Leverett, & Matthews, 2002; Dodrill & Warner, 1988; McKelvie, 1989; Wonderlic, 1992). The next measure assessed divergent thinking using Guilford's Consequences Test (Guilford & Hoepfner, 1971). Divergent thinking has been shown to be a predictor of creative performance (Vincent, Decker, & Mumford, 2002). This test asks participants to generate the consequences of five different scenarios and when it is scored for fluency (i.e., number of responses generated), the internal consistency coefficients are greater than .70. Evidence bearing on the validity of this measure has been provided (Merrifield, Guilford, Christensen, & Frick, 1962; Vincent, Decker, & Mumford, 2002).

Knowledge in the marketing domain was assessed using a 6-item measure of 1-5 Likert responses. These items were adapted from items on a measure of domain knowledge in educational systems. Items ask about frequency with which advertising and marketing issues are thought about, talked about, and generally understood. Those

with more domain knowledge tend to have better creative performance (Mumford & Gustafson, 1988). The internal consistency of this measure was .81. Studies by Osburn and Mumford (2006) and Scott, Lonergan, and Mumford (2005) have used the measure of educational knowledge and contain evidence bearing on the validity of this measure.

The next covariate was a measure of personality. Specifically, participants completed a measure of the Big 5 personality traits (e.g., openness, conscientiousness, extraversion, agreeableness, and neuroticism). Personality traits, such as openness tend to be positively related to creativity, while conscientiousness tends to be negatively related (George & Zhou, 2001). To measure the Big 5 personality traits, the Goldberg Adjective Checklist (Goldberg, 1992) was completed by participants. This measure requires participants to rate on a scale of 1-9 how accurately 100 different adjectives describe them. Typically the internal consistency for each subscale of this measure is around .80 and further evidence related to its validity has been collected (see Becker, Billings, Eveleth, & Gilbert, 1997; Conway & Peneno, 1999; Goldberg 1992; Reysen, 2005; Saucier, 2002). Participants also completed a demographics sheet. This sheet asked them to provide information about their sex, age, ethnicity, ACT/SAT scores, and work experiences.

Analyses

To demonstrate the importance of creative engagement to creative performance a multivariate analysis of covariance was conducted, where creative engagement was the fixed factor and creative performance was the criteria. To create the creative engagement variable, participants were labeled as high, moderate, or low engagement based on their scores for intrinsic motivation, positive affective expectations, and self-

efficacy. This analysis provided evidence for the importance of creative engagement to creative performance. To test the predicted hypotheses, three analyses of covariance were conducted to test the influence of the manipulated leader behaviors on each aspect of creative engagement. Correlations, means, and standard deviations of study variables are reported in Table 1.

Insert Table 1 About Here

Results

Creative Performance

To analyze the effects of creative engagement on creative performance a multivariate analysis of covariance was performed. Creative engagement was treated as a fixed factor by assigning labels of high, moderate, or low creative engagement based on scores of intrinsic motivation, positive affective expectations, and self-efficacy. High creative engagement represented those who scored greater than the median on all three aspects of engagement ($n = 89$) and low represented those who scored below the median on all three aspects ($n = 68$). Moderate engagement represented those who scored above the median on at least one aspect of engagement ($n = 88$). Treating each aspect of engagement as a fixed factor resulted in an unequal distribution and low n 's for some conditions (e.g., n 's ranging from 8 to 79). This unequal distribution of n 's is expected, given that these variables are all measuring the same construct so even though they represent different aspects of engagement, they are also related. Further, identifying specific interactions between different aspects of engagement was not of interest for the

current study. Thus, a general score of creative engagement was considered to be useful and appropriate.

The results for the MANCOVA are reported in Table 2. All control measures described earlier were tested, but only significant measures were retained. The only significant covariate for this analysis was divergent thinking ($F(3, 237) = 3.01, p < .05, \eta^2 = .04$). The MANCOVA for creative engagement on creative performance was significant ($F(3, 238) = 4.55, p < .01, \eta^2 = .05$) using Roys Largest Root. The univariate analysis revealed that this effect was significant for quality ($F(2, 239) = 6.20, p < .01, \eta^2 = .05$), elegance ($F(2, 239) = 5.45, p < .01, \eta^2 = .04$), and marginally significant for originality ($F(1,) = 2.93, p < .10, \eta^2 = .01$). Cell means indicated a consistent pattern across all three criteria that the best performance was for those who had high levels of creative engagement for quality ($M = 3.12, SE = .08$), elegance ($M = 3.09, SE = .08$) and originality ($M = 2.91, SE = .06$). Poorest performance was observed for low creative engagement with regard to quality ($M = 2.72, SE = .09$), elegance ($M = 2.85, SE = .09$), and originality ($M = 2.59, SE = .07$). These results are consistent with extant literature and provided evidence for the importance of creative engagement.

Insert Table 2 About Here

A second MANCOVA was conducted to examine the effects of the manipulated leader behaviors on creative performance. Table 3 has the results of this analysis. Again the significant covariate for this analysis was divergent thinking ($F(3, 224) = 3.34, p <$

.05, $\eta^2 = .04$). The main effect for recognition was marginally significant ($F(3, 224) = 2.33, p < .10, \eta^2 = .03$). Inspection of the univariate analyses revealed that this effect was significant for quality ($F(1, 224) = 6.36, p < .05, \eta^2 = .03$), originality ($F(1, 224) = 4.85, p < .05, \eta^2 = .02$), and marginally significant for elegance ($F(1, 224) = 2.93, p < .10, \eta^2 = .01$). The cell means indicated that those in the low recognition condition had higher levels of quality ($M = 3.05, SE = .06$), originality ($M = 3.05, SE = .07$) and elegance ($M = 2.85, SE = .06$) than those in the high recognition condition for quality ($M = 2.82, SE = .06$), originality ($M = 2.85, SE = .07$), and elegance ($M = 2.72, SE = .06$). Thus, it appears that recognition tended to inhibit creative performance. This finding suggests extraneous rewards can be detrimental to creative performance.

Insert Table 3 About Here

Creative Engagement

An analysis of covariance was conducted for each aspect of creative engagement. Tables 3, 4, and 5 presents the ANCOVA results. Domain knowledge in marketing was a significant covariate for all three aspects: intrinsic motivation ($F(1, 227) = 18.05, p < .01, \eta^2 = .07$), positive affective expectations ($F(1, 228) = 18.86, p < .01, \eta^2 = .08$), and self-efficacy ($F(1, 228) = 15.57, p < .01, \eta^2 = .06$). The pattern was consistent for all three analyses, such that marketing knowledge was positively related to creative engagement. For intrinsic motivation, another significant covariate was included in the analysis. This covariate was age ($F(1, 227) = 10.31, p < .01, \eta^2 = .04$), where age was positively related to intrinsic motivation.

Insert Tables 4, 5, and 6 About Here

The interaction between the charisma and mission manipulations was significant for self-efficacy ($F(1, 228) = 4.11, p < .05, \eta^2 = .02$) and marginally significant for positive affective expectations ($F(1, 228) = 2.71, p < .10, \eta^2 = .01$). This interaction was predicted in hypothesis 1. Inspection of the cell means revealed a consistent pattern for both effects. Highest levels of engagement were those who had a charismatic leader with a vague mission ($M = 3.94, SE = .09$ and $M = 4.01, SE = .10$) or a non-charismatic leader with a specific mission ($M = 3.90, SE = .09$ and $M = 3.92, SE = .10$) for self-efficacy and positive affective expectations respectively. Charismatic leaders with a specific mission were also effective in terms of self-efficacy and positive affective expectations ($M = 3.91, SE = .10$ and $M = 3.84, SE = .09$). Lowest levels of self-efficacy and positive affective expectations were those who had a non-charismatic leader with a vague mission ($M = 3.62, SE = .09$ and $M = 3.70, SE = .10$). These results indicate that charisma or specific missions substitute for each other to increase engagement.

The next significant effect was an interaction between mission and recognition. This effect was predicted in hypothesis 2 and significant for positive affective expectations ($F(1, 228) = 6.88, p < .01, \eta^2 = .03$) and self-efficacy ($F(1, 228) = 6.86, p < .01, \eta^2 = .03$). The interaction was marginally significant for intrinsic motivation ($F(1, 227) = 3.09, p < .10, \eta^2 = .01$). The cell means had the same pattern across all three aspects of engagement. Highest levels of engagement were reported when leaders

offered a specific mission with recognition for positive affective expectations ($M = 4.00$, $SE = .10$), self-efficacy ($M = 4.03$, $SE = .09$), and intrinsic motivation ($M = 3.99$, $SE = .10$). If the leader did not provide a specific mission it was better to not offer recognition either for positive affective expectations ($M = 4.02$, $SE = .10$), self-efficacy ($M = 3.86$, $SE = .09$) and intrinsic motivation ($M = 3.93$, $SE = .10$). Combinations of specific mission without recognition for positive affective expectations ($M = 3.83$, $SE = .10$), self-efficacy ($M = 3.71$, $SE = .09$), and intrinsic motivation ($M = 3.73$, $SE = .10$) or vague missions with recognition for positive affective expectations ($M = 3.69$, $SE = .10$), self-efficacy ($M = 3.69$, $SE = .09$), and intrinsic motivation ($M = 3.84$, $SE = .10$) were detrimental. The general trend observed in the means provides support for hypothesis 2, specifically, creative engagement is highest when leaders provide specific missions with recognition and if the leader does not provide a specific mission then they should not offer recognition.

The next interaction was between mission, recognition, and intellectual stimulation. An effect of this nature was predicted in hypothesis 3. This effect was approaching significance and seen in self-efficacy only ($F(1, 228) = 3.64$, $p = .06$, $\eta^2 = .02$). Given the marginal significance of this effect in only one aspect of engagement, differences between means should be interpreted with caution. Generally the means indicated a consistent pattern seen in the mission by recognition interaction, where self-efficacy was highest in conditions where the leader offered a specific mission with recognition or a vague mission with no recognition. However, it appears intellectual stimulation can offset the negative effects of bad pairings (e.g., specific mission/no recognition or vague mission/recognition). Specifically, self-efficacy was higher in

these instances when the leader intellectually stimulated for specific mission with no recognition ($M = 3.85, SE = .13$) and vague mission with recognition ($M = .384, SE = .13$) than when the leader did not intellectually stimulate for both pairings respectively ($M = 3.57, SE = .13$ and $M = 3.54, SE = .13$). When the leader effectively paired mission with recognition, intellectual stimulation did not make a difference. These results appear to support hypothesis 3, where intellectual stimulation can offset the negative effects of less effective leadership behaviors. However, given the effect was approaching significant, the support for hypothesis 3 is weak.

A significant 4-way interaction was found for both intrinsic motivation ($F(1, 227) = 4.13, p < .05, \eta^2 = .02$) and positive affective expectations ($F(1, 228) = 4.01, p < .05, \eta^2 = .02$). This type of interaction was also predicted in hypothesis 3. Interpretation of a 4-way interaction is somewhat cumbersome, but it appeared there were some general trends consistent across both aspects of engagement. Figure 5 depicts this interaction averaged across intrinsic motivation and positive affective expectations. First, for non-charismatic leaders staying consistent with the mission and recognition effect and offering a specific mission with recognition had a positive influence on both intrinsic motivation and positive affective expectations, particularly when the leader also intellectually stimulated ($M = 4.19, SE = .19$ and $M = 4.18, SE = .19$) compared to other non-charismatic combinations ($M = 3.79, SE = .20$ and $M = 3.76, SE = .19$). However, intellectual stimulation did not offset the bad pairing of a vague mission with recognition for non-charismatic leaders, these creative workers had the lowest levels of engagement ($M = 3.68, SE = .19$ and $M = 3.30, SE = .19$) compared to other non-charismatic combinations ($M = 3.86, SE = .20$ and $M = 3.89, SE = .19$). In sum, for

non-charismatic leaders pairing a specific mission with recognition and offering intellectual stimulation appears to be most effective for enhancing creative engagement.

Insert Figure 5 About Here

Turning to the means for charismatic leaders, there was a somewhat different pattern of means. These leaders had the more positive effect on engagement when they intellectually stimulated compared to when they did not intellectually stimulate for intrinsic motivation ($M = 3.97, SE = .20$ vs. $M = 3.83, SE = .20$) and positive affective expectations ($M = 4.07, SE = .19$ vs. $M = 3.85, SE = .19$). When charismatic leaders did not intellectually stimulate, failed to offer recognition, and provided a specific mission intrinsic motivation ($M = 3.55, SE = .19$) and positive affective expectations were particularly low ($M = 3.42, SE = .19$). However, the same combination with intellectual stimulation was higher for both intrinsic motivation ($M = 3.86, SE = .20$) and especially for positive affective expectations ($M = 4.19, SE = .19$). Thus, intellectual stimulation was beneficial in this typically detrimental combination of specific mission with no recognition. The best combinations for charismatic leaders were markedly different combinations of behaviors. First combining intellectual stimulation, no recognition, and a vague mission produced engaged creative workers for intrinsic motivation ($M = 4.00, SE = .20$) and positive affective expectations ($M = 4.22, SE = .19$). Second, charismatic leaders were also effective in terms of engagement if they did not intellectually stimulate, offered recognition, and offered a specific mission

($M = 4.04$, $SE = .20$ and $M = 4.13$, $SE = .19$). These findings suggest charismatic leaders can substitute intellectual stimulation with a specific mission and recognition.

Discussion

Limitations

Before turning to the conclusions of the current study, there are several limitations that should be noted. First, the sample for the study was psychology undergraduate students. One could argue this sample lacks the expertise and knowledge to engage in creative problem-solving for a marketing scenario. Although they tend to lack formal work experience or training in this domain, they do have exposure to and general knowledge on the topic and have been effective at creative problem-solving in this domain in other studies (e.g., Byrne, Shipman, & Mumford, 2010; Friedrich & Mumford, 2009). Nonetheless, the extent to which a working sample would demonstrate similar effects could be called into question. A second limitation of this study is that the leader was in paper form only and not a person interacting with the participants. By using this approach we were able to ensure standardization of the leader manipulations across conditions. However, it may be that a leader in person would have a stronger or potentially different effect on creative workers. The manipulation checks provide some evidence that differences in the leader were perceived by participants. Given the current climate in organizations to interact with each other through email, a situation where an employee would receive direction from their leader via email is not unlikely. Yet the generalizability of the findings to real world settings could be limited by this method used in our study. The use of a “paper leader” may be one reason there were limited direct effects of leader behavior on creative performance. It may be the

case that a stronger leader presence would have influenced creative performance more directly. Even though the leader's presence was in paper form only, it is clear that the leader influences creative engagement.

A last limitation to note is the direction of causality between engagement and performance. Albeit, the relationship between engagement and performance is not a primary focus in the present study, it is still of interest. Participants worked through the creative task and then retrospectively reported their engagement. Even though participants were asked to reflect back on the project they were just working on, they may have been reporting their current engagement. If this is the case, their perceived performance on the task might have influence how they were currently feeling and thinking. The extant literature on creativity provides support for the directional relationship between engagement and performance. Yet the limitation of the ordering of the measurement in the study is worth noting.

Conclusions

Bearing in mind the limitations described above, there are several findings flowing from the current study. Consistent with the existing literature, leaders have an influence on those involved in creative tasks (Jung, 2001; Mumford et al., 2002; Tierney, Farmer, & Graen, 1999). Although leaders may have less influence on creative performance directly, the current study found that the leader's influence is primarily on creative engagement. Engagement is critical as it is related directly to creative performance (Zhang & Bartol, 2010). Specifically, the leader influences the engagement of the worker in terms of intrinsic motivation, positive affective expectations, and self-efficacy. Thus, organizations must be concerned with creating

conditions that facilitate creative engagement and how the leader responsible for the creative work shapes those conditions.

This study set out to examine key leadership behaviors or influence tactics associated with the leading for creativity literatures. Specifically, researchers in leading for creativity have either given more emphasis to models based on being transformational and charismatic or expertise. Studies comparing the effects of these different leadership approaches to creativity are lacking in the current literature. We expected that aspects of charisma may be substituted for if the leader has the requisite expertise. In this respect, an interaction between mission statements and charismatic behaviors was predicted; such that a specific mission statement would substitute for charisma given they both induce needed structure and motivate the creative worker (Mumford et al., 2002). The results provided evidence to support this hypothesis. It appears that creative workers may be more confident and experience higher levels of positive affect when they have a leader who offers a specific mission or is charismatic. These leader influence tactics can be substituted for each other.

The most consistent finding in the current study was the effects of mission and recognition that was predicted in hypothesis 2. This finding provides evidence that extraneous rewards will limit creative engagement unless they are paired with specific, technical guidance via a mission statement. Mission statements are suggested as an effective influence tactic for leaders of creative endeavors (Mumford et al., 2002; Pinto & Prescott, 1988; Shalley, 1991, 1995). Leaders who have enough expertise to articulate a strong mission statement can offset detrimental effects of rewards. Detrimental effects of rewards may be that they diminish intrinsic motivation, distract

from the creative work itself, or act as a stressor to the creative worker. In this respect, stressors and high levels of arousal are negatively related to creativity (Byron, Khazanchi, & Nazarian, 2010) since they take away from the already cognitively-intense creative work. In fact, recognition was marginally related to creative performance, where no recognition was better than recognition. Effective mission statements motivate the creative worker to tackle the task at hand and feel capable of developing a solution. If the leader is unable to offer an effective mission statement it is critical to find alternative ways to focus the creative individual on the work and alleviate the situational stressors. It may be the case that factors other than rewards that distract or overwhelm the creative worker can also be offset with missions. The specific relationship between missions and other competing factors should be tested in future research.

Significant effects demonstrated different combinations of behaviors had unique influences on engagement. Intellectual stimulation was a key difference between these two types of leaders. Both types tended to more effective at engaging creative workers when using intellectual stimulation. This is not surprising given both charismatic and transformational and expertise-based leadership researchers have suggested intellectual stimulation to be critical to creativity (Shin & Zhou, 2003, 2007; Mumford et al., 2002; West, 2002). Thus, it seems that challenging the creative worker may often be more effective than being a cheerleader or unconditionally supporting. That is not to say that leader support that involves tangibly helping the creative worker by providing needed time, allocating resources and access to information will not help. There are a number of studies demonstrating this positive effect of this type of support (e.g., Amabile,

Schatzel, Moneta, & Kramer, 2004). However, offering verbal support and not challenging the creative worker seems to be less effective in terms of engagement. Leaders who challenge the creative worker may communicate that there is a potential for failure and mistakes are likely. Since creativity requires some level of risk-taking (Tesluk et al., 1997) in order to develop new solutions that may or may not succeed. Making workers more comfortable with potential for failure and mistakes should encourage them to explore and be more willing to take risks.

As evidenced by cell means for the intrinsic motivation and positive affective expectations, charismatic and non-charismatic leaders were more or less effective using different influence tactics. Charismatics used intellectual stimulation to offset the less effective pairings of mission and recognition and non-charismatic leaders' use of intellectual stimulation with these pairings augmented the negative effect. The finding with non-charismatic leaders was consistent with predictions in hypothesis 3. Yet the findings with the charismatic leader were not consistent with these predictions. Thus, this hypothesis received mixed support. This hypothesis predicted that negative situations where the individual feels distracted or stressed is not the right time for leaders to further challenge the individual through intellectual stimulation. Given the cognitively taxing activity of creative problem-solving, dividing up cognitive resources to focus on either extraneous rewards or stressors are detrimental to creativity (Byron et al., 2010). In this situation, the non-charismatic leader who intellectually stimulates presents even more pressure by challenging the individual. On the other hand the charismatic leader can offset the distraction and stressors by using intellectual stimulation. The reason for this mixed finding may be because charismatic behaviors

involve communicating confidence in the leader's objectives and vision (Bass, 1985). This general confidence in the viability of the larger project and the organization may give the individual confidence in their ability even when the leader challenges him or her. Although a specific explanation as to why this is the case should be a question for future research.

The negative effect for applying intellectual stimulation was reversed for charismatic leaders. In this regard, failing to offer intellectual stimulation was more detrimental than offering when paired with less effective combinations of leader behaviors. Thus, intellectual stimulation can substitute for these less effective combinations. Charismatic leaders were ineffective when they provided a specific mission with no recognition and low intellectual stimulation. Given that creative workers prefer autonomy and freedom when working (Amabile, 1988; Feist, 1999), these leaders may have overly structured the creative work and not given the individual enough autonomy or freedom. It appears that the charismatic leader must reward or intellectually stimulate the creative worker if they are going to structure the creative task with a specific mission statement.

In sum, there are several practical implications of the current study. Given the complex effects, it is clear that leading creative individuals is difficult. Effectively managing these individuals and the creative process is likely an art that requires the leader to understand the needs of the project and also the needs of the creative individual. Selection and development of these leaders should center on identifying and developing those to be capable of managing the work and people. The leader must focus on how to engage the creative worker. Certainly creative workers must have

requisite ability and domain expertise in order to engage in creative work, but their engagement is where the leader has notable influences. One effective way to engage the creative workers is through intellectual stimulation. If the leader frames the creative work as a challenge with the potential for failure the creative worker tends to engage more. However, the leader must also be concerned with creating a climate that is not overly distracting or unduly stressful for the creative worker. For example, if the leader offers recognition and thus, creates higher performance expectations, but does not offer a specific mission to focus attention and provide guidance to the creative worker, engagement tends to suffer. There is not a significant difference between the effectiveness of leaders who demonstrate charismatic behaviors and those who do not. Instead, it appears to be more critical to engage the worker, without overly structuring, or distracting from the creative work. It may be the case that studies of leading for creativity should focus more on the specific leadership behaviors or influence attempts that enhance creativity rather than a specific model or theory. This approach may identify more accurately how and why leaders influence creative workers and ultimately their performance.

References

- Abbey, A., & Dickson, J. (1983). R&D work climate and innovation in semiconductors. *Academy of Management Journal*, *26*, 362-368.
- Ackerman, P. L., & Humphreys, L. G. (1990). Individual differences theory in industrial and organizational psychology. In M. D. Dunnette & L. M. Hough (Eds.), *Handbook of industrial and organizational psychology* (Vol. 1, pp. 223-282). Palo Alto, CA: Consulting Psychological Press.
- Amabile, T. M. (1983). *The social psychology of creativity*. New York: Springer-Verlag.
- Amabile, T. M. (1988). A model of creativity and innovation in organizations. In B. M. Staw & L. L. Cummings (Eds.), *Research in organizational behavior* (pp. 123-167). Greenwich, CT: JAI Press.
- Amabile, T. M. (1997). Motivating creativity in organizations: On doing what you love and loving what you do. *California Management Review*, *40*, 39-58.
- Amabile, T. M., & Khaire, M. (2008). Creativity and the role of the leader. *Harvard Business Review*, *10*, 101-109.
- Amabile, T. M., Barsade, S. G., Mueller, J. S., & Staw, B. M. (2005). Affect and creativity at work. *Administrative Science Quarterly*, *50*, 367-403.
- Amabile, T. M., Conti, R., Coon, A., Lazenby, J., & Herron, M. (1996). Assessing the work environment for creativity. *Academy of Management Journal*, *39*, 1154-1184.
- Amabile, T. M., Schnatzel, E. A., Moneta, G. B., & Kramer, S. J. (2004). Leader behaviors and the work environment for creativity: Perceived leader support. *The Leadership Quarterly*, *15*, 5-32.
- Andrews, F. M., & Farris, G. F. (1967). Supervisory practices and innovation in scientific teams. *Personnel Psychology*, *20*, 497-515.
- Andriopoulos, C., & Lowe, A. (2000). Enhancing organizational creativity: The process of perpetual challenging. *Management Decision*, *38*, 734-742.
- Baas, M., De Dreu, C. K. W., & Nijstad, B. A. (2008). A meta-analysis of 25 years of mood-creativity research: Hedonic tone, activation, or regulatory focus? *Psychological Bulletin*, *134*, 779-806.
- Barnowe, J. T. (1975). Leadership and performance outcomes in research organization: The supervisor of scientists as a source of assistance. *Organizational Behavior and Human Performance*, *14*, 264-280.

- Barron, F., & Harrington, D. M. (1981). Creativity, intelligence, and personality. *The Annual Review of Psychology*, 32, 439-476.
- Bass, B. M. (1985). *Leadership and performance beyond expectations*. New York: Free Press.
- Bass, B. M., & Avolio, B. J. (1994). *Improving organizational effectiveness through transformational leadership*. Thousand Oaks, CA: Sage.
- Bass, B. M., & Riggio, R. E. (2006). *Transformational Leadership*. Mahwah, NJ: Lawrence Erlbaum.
- Basu, R., & Green, R. (1997). Leader-member exchange and transformational leadership: An empirical examination of innovative behaviors in leader-member dyads. *Journal of Applied Social Psychology*, 27, 477-499.
- Becker, T. E., Billings, R. S., Eveleth, D. M., & Gilbert, N. W. (1997). Validity of scores on three attachment style scales: Exploratory and confirmatory evidence. *Educational and Psychological Measurement*, 57, 477-493.
- Bell, N. J., Lassiter, K. S., Leverett, K. S., & Matthews, T. D. (2002). Validity of the Wonderlic personnel test as a measure of fluid or crystallized intelligence: Implications for career assessment. *North American Journal of Psychology*, 4, 113-120.
- Bennis, W. G., & Nanus, B. (1985). *Leaders: The strategies for taking charge*. New York: Harper & Row.
- Berlyne, D. E. (1967). Arousal and reinforcement. In D. Levine (Ed.), *Nebraska Symposium on Motivation* (pp. 1-110). Lincoln, NE: University of Nebraska Press.
- Besemer, S. P., & O'Quin, K. (1999). Confirming the three-factor creative product analysis matrix model in an American sample. *Creativity Research Journal*, 12, 287-296.
- Bono, J. E., & Ilies, R. (2006). Charisma, positive emotions and mood contagion. *The Leadership Quarterly*, 17, 317-334.
- Byrne, C. L., Shipman, A. S., & Mumford, M. D. (2010). The effects of forecasting on creative problem-solving: An experimental study. *Creativity Research Journal*, 22, 119-138.
- Byron, K., Khazanchi, S., & Nazarian, D. (2010). The relationship between stressors and creativity: A meta-analysis examining competing theoretical models.

- Cardinal, L. B. (2001). Technological innovation in the pharmaceutical industry: The use of organizational control in managing research and development. *Organizational Science*, *12*, 19-36.
- Chi, M. T., Bassock, M., Lewis, M. W., Reitman, P., & Galser, R. (1989). Self-explanations: How students study and use examples in learning to solve problems. *Cognitive Science*, *13*, 145-182.
- Chong, E., & Ma, X. (2010). The influence of individual factors supervision and work environment on creative self-efficacy. *Creativity and Innovation Management*, *19*, 233-247.
- Collins, M. A., & Amabile, T. M. (1999). Motivation and creativity. In R. J. Sternberg, *Handbook of creativity* (pp. 297-312). Cambridge, UK: Cambridge University Press.
- Conger, J. A., & Kanungo, R. A. (1987). Towards a behavioral theory of charismatic leadership in organizational settings. *Academy of Management Review*, *12*, 637-647.
- Conger, J. A., & Kanungo, R. N. (1998). *Charismatic leadership in organizations*. Thousand Oaks, CA: Sage.
- Conway, J. M., & Peneno, G. M. (1999). Comparing structured interview question types: Construct validity and applicant reactions. *Journal of Business and Psychology*, *13*, 485-506.
- De Jong, J. P. J., Den Hartog, D. N. (2007). How leaders influence employees' innovative behaviour. *European Journal of Innovation Management*, *10*, 41-64.
- Deci, E. L. (1975). *Intrinsic motivation*. New York: Plenum Press
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum Press.
- Dess, G. G., & Pickens, J. C. (2000). Changing roles: Leadership in the 21st century. *Organizational Dynamics*, *28*, 18-34.
- Dewett, T. (2007). Linking intrinsic motivation, risk taking, and employee creativity in an R&D environment. *R&D Management*, *37*, 197-208.
- Dodrill, C. B., & Warner, M. H. (1988). Further studies of the Wonderlic Personnel Test as a brief measure of intelligence. *Journal of Consulting and Clinical Psychology*, *56*, 145-147.
- Dumdum, U. R., Lowe, K. B., & Avolio, B. J. (2002). A meta-analysis of transformational and transactional leadership correlates of effectiveness and satisfaction: An update and extension. In B. J. Avolio, & F. J. Yammarino

- (Eds.), *Transformational and charismatic leadership: The road ahead* (Vol. 2, pp. 35-66). Oxford, UK: Elsevier Science.
- Easterbrook, J. A. (1959). The effect of emotion on cue utilization and the organization behavior. *Psychological Review*, *66*, 183-201.
- Eisenbeiss, S. A., & Boerner, S. (2010). Transformational leadership and R&D innovation: Taking a curvilinear approach. *Creativity and Innovation Management*, *19*, 364-372.
- Eisenbeiss, S. A., Van Knippenberg, D., & Boerner, S. (2008). Transformational leadership and team innovation: Integrating team climate principles. *Journal of Applied Psychology*, *93*, 1438-1446.
- Eisenberger, R., & Armeli, S. (1997). Can silent reward increase creative performance without reducing intrinsic creative interest? *Journal of Personality and Social Psychology*, *72*, 652-663.
- Eisenberger, R., & Cameron, J. (1996). Detrimental effects of reward: Reality or Myth? *American Psychological Association*, *51*, 1153-1166.
- Enson, J., Cottman, A., & Band, C. (2001). Fostering knowledge management through the creative work environment: A portable model from the advertising industry. *Journal of Information Science*, *27*, 147-155.
- Ericsson, K. A., & Charness, N. (1994). Expert performance: Its structure and acquisition. *American Psychological Association Inc.*, *49*, 725-747.
- Farr, J. L. and Ford, C. M. (1990). Individual innovation. In M. A. West, and J. L. Farr (Eds.), *Innovation and Creativity at Work* (pp. 63-80). New York: John Wiley & Sons.
- Farris, G. F. (1972). The effect of individual roles on performance in innovative groups. *R & D Management*, *3*, 23-28.
- Feist, G. J. (1998). A meta-analysis of personality in scientific and artistic creativity. *Personality and Social Psychology Review*, *2*, 290-309.
- Ford, C. M., & Gioia, D. A. (2000). Factors influencing creativity in the domain of managerial decision-making. *Journal of Management*, *26*, 705-732.
- Forgas, J. P. (2000). Affect and information processing strategies: An interactive relationship. In J. P. Forgas (Ed.), *Feeling and thinking: The role of affect in social cognition*. Cambridge, U.K.: Cambridge University Press.
- Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist*, *56*, 218-226.

- Friedrich, T. L., & Mumford, M. D. (2009). The effects of conflicting information on creative thought: A source of performance improvements or decrements? *Creativity Research Journal*, *21*, 265-281.
- Gagne, M., & Deci, E. L. (2005). Self-determination theory and work motivation. *Journal of Organizational Behavior*, *26*, 331-362.
- George, J. M., & Zhou, J. (2001). When openness to experience and conscientiousness are related to creative behavior: An interactional approach. *Journal of Applied Psychology*, *86*, 513-524.
- Geroski, P., Machin, S., Van Reenen, J. (1993). The profitability of innovating firms. *The RAND Journal of Economics*, *24*, 198-211.
- Ghiselin, B. (1963). Ultimate criteria for two levels of creativity, In C. W. Taylor, & F. Barron (Eds.), *Scientific creativity: It's recognition and development* (pp. 30-43). New York: Wiley.
- Goldberg, L. R. (1992). The development of markers for the Big-Five factor structure. *Psychological Assessment*, *4*, 26-42.
- Gong, Y., Huang, J., & Farh, J. (2009). Employee learning orientation, transformational leadership, and employee creativity: The mediating role of employee creative self-efficacy. *Academy of Management Journal*, *52*, 765-778.
- Gruber, H., & Davis, S. (1988). Inching our way up mount olympus: The evolving systems approach to creative thinking. In R. J. Sternberg (Ed.), *The nature of creativity*, pages 243–269. New York: Cambridge University Press.
- Guilford, J. P. & Hoepfner, R. (1971). *The Analysis of Intelligence*. New York: McGraw-Hill.
- Hershey, D. A., Walsh, D. A., Read, S. J., & Chulef, A. S. (1990). The effects of expertise on financial problem-solving: Evidence for goal-directed problem-solving scripts. *Organizational Behavior and Human Decision Processes*, *46*, 77-101.
- Hounshell, E. A. (1992). Invention in the industrial research laboratory: Individual or collective process. In R. J. Weber, & D. N. Perkins (Eds.), *Inventive minds: Creativity in technology* (pp. 273-291). New York: Oxford University Press.
- House, R. J. (1977). A 1976 theory of charismatic leadership. In J. G. Hunt & L. L. Larson (Eds.), *Leadership: The cutting edge* (pp. 189-207). Carbondale, IL: Southern Illinois University Press.
- Howell, J. M., & Shamir, B. (2005). The role of followers in the charismatic leadership process: Relationships and their consequences. *Academy of Management Review*, *30*, 96-112.

- Hulsheger, U. R., Anderson, N., & Salgado, J. F. (2009). Team-level predictors of innovation at work: A comprehensive meta-analysis spanning three decades of research. *Journal of Applied Psychology, 94*, 1128-1145.
- Hunter, S. T, Bedell, K. E., & Mumford, M. D. (2007). Climate for creativity: A quantitative review. *Creativity Research Journal, 19*, 69-90.
- James, L. R., Demaree, R. G., & Wolf, G. (1984). Estimating within-group interrater reliability with and without response bias. *Journal of Applied Psychology, 69*, 85-98.
- James, L. R., Demaree, R. G., & Wolf, G. (1993). r_{wg} : An assessment of within-group interrater agreement. *Journal of Applied Psychology, 78*, 306-309.
- Judge, W. Q., Fryxell, G. E., & Dooley, R. S. (1997). The new task of R&D management: Creating goal-directed communities for innovation. *California Management Review, 39*, 72-85.
- Jung, D. (2001). Transformational and transactional leadership and their effects on creativity in groups. *Creativity Research Journal, 13*, 185-195.
- Jung, D. I., Chow, C., & Wu, A. (2003). The role of transformational leadership in enhancing organizational innovation: Hypotheses and some preliminary findings. *The Leadership Quarterly, 14*, 525-544.
- Keller, R. T. (1992). Transformational leadership and the performance of research and development groups. *Journal of Management, 18*, 489-501.
- Krause, D. E. (2004). Influence-based leadership as a determinant of the inclination to innovate and of innovation-related behaviors: An empirical investigation. *The Leadership Quarterly, 15*, 79-102.
- Laursen, K., & Foss, N. J. (2003). New human resource management practices, complementarities, and the impact on innovation performance. *Cambridge Journal of Economics, 27*, 243-263.
- Lerner, J. S., & Keltner, D. (2001). Fear, anger, and risk. *Journal of Personality and Social Psychology, 81*, 146-159.
- Lubart, T. I. (2001). Models of the creative process: Past, present, and future. *The Creative Research Journal, 13*, 295-308.
- McGourty, J., Tarshis, L. A., & Dominick, P. (1996). Managing innovation: Lessons from world class organizations. *International Journal of Technology Management, 11*, 254-268.
- McGraw, K. O., & Fiala, J. (1982). Undermining the Zeigarnik effect: Another hidden cost of reward. *Journal of Personality, 50*, 58-66.

- McGraw, K. O., & McCullers, J. C. (1979). Evidence of a detrimental effect of extrinsic incentives on breaking a mental set. *Journal of Experimental Social Psychology*, *15*, 285- 294.
- McKelvie, S. J. (1989). The Wonderlic Personnel Test: Reliability and validity in an academic setting. *Psychological Reports*, *65*, 161- 162.
- Merrifield, P. R., Guilford, J. P., Christensen, P. R., & Frick, J. W. (1962). The role of intellectual factors in problem solving. *Psychological Monographs*, *76*, 1-21.
- Mumford, M. D. Wetzel, D. L. & Reiter- Palmon, R. (1997). Thinking creatively at work: Organizational influence on creative problem solving. *Journal of Creative Behavior*, *31*, 7-17.
- Mumford, M. D., & Gustafson, S. B. (1988). Creativity syndrome: Integration, application, and innovation. *Psychological Bulletin*, *103*, 27-43.
- Mumford, M. D., Connelly, S., & Gaddis, B. (2003). How creative leaders think: Experimental findings and cases. *The Leadership Quarterly*, *14*, 411-432.
- Mumford, M. D., Hunter, S. T., Eubanks, D. L., Bedell, K. E., & Murphy, S. T. (2007). Developing leaders for creative efforts: A domain-based approach to leadership development. *Human Resource Management Review*, *17*, 402-417.
- Mumford, M. D., Mobley, M. I., Uhlman, C. E., Reiter-Palmon, R., & Doares, L. (1991). Process analytic models of creative thought. *Creativity Research Journal*, *4*, 91-122.
- Mumford, M. D., Scott, G. M., Gaddis, B., & Strange, J. M. (2002). Leading creative people: Orchestrating expertise and relationships. *The Leadership Quarterly*, *13*, 705-750.
- Oldham, G. R., & Cummings, A. (1996). Employee creativity: Personal and contextual factors at work. *Academy of Management Journal*, *39*, 607-634.
- Osburn, H. K., & Mumford, M. D. (2006). Creativity and planning: Training interventions to develop creative problem-solving skills. *Creativity Research Journal*, *18*, 173-190.
- Parnes, S. J. (1967). *Creative behavior guidebook*. New York: Scribner.
- Pinto, J. K., & Prescott, J. E. (1988). Variations in critical success factors over the stages in the project life cycle. *Journal of Management*, *14*, 5-18.
- Prabhu, V., Sutton, C. & Sauser, W. (2008). Creativity and Certain Personality Traits: Understanding the Mediating Effect of Intrinsic Motivation. *Creativity Research Journal*, *20*, 53-66.

- Redmond, M. R., Mumford, M. D., & Teach, R. J. (1993). Putting creativity to work: Leader influences on subordinate creativity. *Organizational Behavior and Human Decision Processes*, 55, 120-151.
- Reeves, L. M., & Weisburg, R. W. (1999). The role of content and abstract information in analogical transfer. *Psychological Bulletin*, 115, 120-151.
- Rego, A., Machado, F., Leal, S. & Cunha, M. P. E. (2009). Are hopeful employees more creative? An empirical study. *Creativity Research Journal*, 12, 223-231.
- Reiter-Palmon, R., Illies, J. J. (2004). Leadership and creativity: Understanding leadership from a creative problem-solving perspective. *The Leadership Quarterly*, 15, 55-77.
- Reysen, S. (2005). Construction of a new scale: The Reysen likability scale. *Social Behavior and Personality*, 33, 201-208.
- Rowold, J., & Heinitz, K. (2007). Transformational and charismatic leadership: Assessing the convergent, divergent and criterion validity of the MLQ and the CKS. *The Leadership Quarterly*, 18, 121-133.
- Ruscio, J., Whitney, D. M., & Amabile, T. M. (1998). The fishbowl of creativity. *Creativity Research Journal*, 11, 243-263.
- Saucier, G. (2002). Orthogonal markers for orthogonal factors: The case of the Big Five. *Journal of Research in Personality*, 36, 1-31.
- Scott, G. M., Lonergan, D. C., & Mumford, M. D. (2005). Conceptual combination: Alternative knowledge structures, alternative heuristics. *Creativity Research Journal*, 17, 79-98.
- Scott, R. K., & Bruce, R. A. (1994). Determinants of innovative behavior: A path model of individual innovation in the workplace. *Academy of Management Journal*, 37, 580-607.
- Shalley, C. E. (1991). Effects of productivity goals, creativity goals, and personal discretion on individual creativity. *Journal of Applied Psychology*, 76, 179-185.
- Shalley, C. E. (1995). Effects of coaction, expected evaluation, and goal setting on creativity and productivity. *The Academy of Management Journal*, 38, 483-503.
- Shalley, C. E., & Gilson, L. L. (2004). What leaders need to know: A review of social and contextual factors that can foster or hinder creativity. *The Leadership Quarterly*, 15, 33-53
- Shin, S. J. & Zhou, J. (2007). When is educational specialization heterogeneity related to creativity in research and development teams? Transformational leadership as a moderator. *Journal of Applied Psychology*, 92, 1709-1721.

- Shin, S. J., & Zhou, J. (2003). Transformational leadership, conservation, and creativity: Evidence from Korea. *The Academy of Management Journal*, *46*, 703-714.
- Silvia, P. J. (2008). Appraisal components and emotion traits: Examining the appraisal basis of trait curiosity. *Cognition and Emotion*, *22*, 94-113.
- Sosik, J. J., Avolio, B. J., Kahai, S. S., & Jung, D. I. (1998a). Computer-supported work group potency and effectiveness: The role of transformational leadership, anonymity, and task interdependence. *Computers in Human Behavior*, *14*, 491-511.
- Sosik, J. J., Kahai, S. S., & Avolio, B. J. (1998b). Transformational leadership and dimensions of creativity: Motivating idea generation in computer-mediated groups. *Creativity Research Journal*, *11*, 111-121.
- Sternberg, R. J. (1988). A three facet model of creativity. In R. J. Sternberg (Ed.). *The Nature of Creativity* (pp 125-148). Cambridge, UK: Cambridge University Press.
- Tesluk, P. E., Farr, J. L., & Klein, S. R. (1997). Influences of organizational culture and climate on individual creativity. *The Journal of Creative Behavior*, *31*, 27-41.
- Tichy, N. M., & Devanna, M. A. (1986). The transformation leader. *Training and Development Journal*, *40*, 27-32.
- Tierney, P., Farmer, S. M., & Graen, G. B. (1999). An examination of leadership and employee creativity: The relevance of traits and relationships. *Personnel Psychology*, *52*, 591-620.
- Tierney, P., & Farmer, S. M. (2002). Creative self-efficacy: It's potential antecedents and relationship to creative performance. *Academy of Management Journal*, *45*, 1138-1148.
- Trevelyan, R. (2001). The paradox of autonomy: A case of academic research scientists. *Human Relations*, *54*, 495-525.
- Vincent, P. H., Decker B. P., & Mumford, M. D. (2002) Divergent thinking, intelligence, and expertise: A test of alternative models. *Creativity Research Journal*, *14*, 163-178.
- Waldman, D., & Atwater, L. (1992). The nature of effective leadership and championing process at different levels in an R&D hierarchy. *Journal of High Technology Management Research*, *5*, 233-245.
- Ward, T. B., Smith, S. M., & Finke, R. A. (1999). Creative cognition. In R. J. Sternberg (Ed.), *Handbook of creativity* (pp. 189-212). New York: Cambridge University Press.

- Weisberg, R. W. (1999). Creativity and knowledge: A challenge to theories. In R. J. Sternberg (Ed.), *Handbook of creativity* (pp. 226-259). Cambridge, U. K.: Cambridge University Press.
- West, M. A. (2002). Sparkling fountains or stagnant ponds: An integrative model of creativity and innovation implementation in work groups. *Applied Psychology: An International Review*, *51*, 355-387.
- Wonderlic, E. (1992). *Wonderlic Personnel Test*. IL: Libertyville.
- Zhang, X., & Bartol, K. M. (2010). The influence of creative process engagement on employee creative performance and overall job performance: A curvilinear assessment. *Journal of Applied Psychology*, *53*, 107-128.
- Zhou, J., & George, J. M. (2003). Awakening employees creativity: The role of leader emotional intelligence. *The Leadership Quarterly*, *14*, 461-478.

Appendix A: Tables

Table 1

Correlations, Means, and Standard Deviations for Study Variables

		M	SD	1	2	3	4	5	6	7	8	9	10	11
1	Divergent Thinking	5.84	1.52	1.00										
2	Intelligence	22.80	4.16	0.05	1.00									
3	Interest in Marketing	2.66	0.89	-0.02	-0.07	1.00								
4	Age	19.07	1.64	<i>0.11</i>	0.10	0.02	1.00							
5	Creative Engagement: Intrinsic Motivation	3.87	0.80	0.01	0.03	0.25	0.19	1.00						
6	Creative Engagement: Positive Affective Expectations	3.88	0.80	0.02	-0.07	0.27	0.10	0.75	1.00					
7	Creative Engagement: Self-Efficacy	3.82	0.76	0.04	-0.08	0.24	0.22	0.57	0.67	1.00				
8	Overall Creative Engagement	2.09	0.80	0.08	-0.05	0.22	0.15	0.77	0.79	0.73	1.00			
9	Creative Solution: Quality	2.94	0.72	0.16	0.10	0.02	0.15	0.23	0.21	0.15	0.23	1.00		
10	Creative Solution: Originality	2.95	0.73	0.19	0.09	0.01	0.18	0.16	0.08	0.03	0.15	0.76	1.00	
11	Creative Solution: Elegance	2.79	0.62	0.18	0.14	-0.01	0.09	0.23	0.19	0.14	0.21	0.82	0.69	1.00

Note. N = 243. **Bolded** correlations are significant at $p < .05$ and *italicized* correlations are approaching significance at $p < .10$

Table 2

Multivariate Analysis of Covariance Examining Effects of Creative Engagement on Creative Performance

	<i>F</i>	<i>df</i>	<i>p</i>	η^2
<u>Covariate</u>				
Divergent Thinking	3.01	3, 237	0.03	0.04
<u>Main Effect</u>				
Creative Engagement	4.55	3, 238	0.00	0.05

Note: *F* = F Ratio; *df* = Degrees of Freedom; *p* = Significance Level using Roy's Largest Root; η^2 = Effect Size (eta squared).

Table 3

Multivariate Analysis of Covariance Examining Effects of Leader Behaviors on Creative Performance

	<i>F</i>	<i>df</i>	<i>p</i>	η^2
<u>Covariates</u>				
Divergent Thinking	3.24	3, 224	0.02	0.04
<u>Main Effects</u>				
Charisma	0.05	3, 224	0.98	0.00
Mission	1.82	3, 224	0.14	0.02
Recognition	2.33	3, 224	0.08	0.03
Intellectual Stimulation	0.69	3, 224	0.56	0.01
<u>Interactions</u>				
Charisma * Mission	0.19	3, 224	0.90	0.00
Charisma * Recognition	0.05	3, 224	0.99	0.00
Charisma * Intellectual Stimulation	0.14	3, 224	0.94	0.00
Mission * Recognition	0.75	3, 224	0.52	0.01
Mission * Intellectual Stimulation	1.21	3, 224	0.31	0.02
Recognition * Intellectual Stimulation	1.07	3, 224	0.36	0.01
Charisma * Mission * Recognition	0.36	3, 224	0.78	0.01
Charisma * Mission * Intellectual Stimulation	0.51	3, 224	0.68	0.01
Charisma * Recognition * Intellectual Stimulation	0.85	3, 224	0.47	0.01
Mission * Recognition * Intellectual Stimulation	1.01	3, 224	0.39	0.01
Charisma * Mission * Recognition * Intellectual Stimulation	0.89	3, 224	0.45	0.01

Note: *F* = F Ratio; *df* = Degrees of Freedom; *p* = Significance Level using Roy's Largest Root; η^2 = Effect Size (eta squared).

Table 4

Analysis of Covariance Examining the Effects of Leader Behavior on Intrinsic Motivation

	<i>F</i>	<i>df</i>	<i>p</i>	η^2
<u>Covariates</u>				
Domain Knowledge	18.05	1, 227	0.00	0.07
Age	10.31	1, 227	0.00	0.04
<u>Main Effects</u>				
Charisma	0.41	1, 227	0.52	0.00
Mission	0.05	1, 227	0.82	0.00
Recognition	0.74	1, 227	0.39	0.00
Intellectual Stimulation	2.04	1, 227	0.15	0.01
<u>Interactions</u>				
Charisma * Mission	0.56	1, 227	0.45	0.00
Charisma * Recognition	0.09	1, 227	0.76	0.00
Charisma * Intellectual Stimulation	0.00	1, 227	0.96	0.00
Mission * Recognition	3.09	1, 227	0.08	0.01
Mission * Intellectual Stimulation	0.02	1, 227	0.89	0.00
Recognition * Intellectual Stimulation	0.06	1, 227	0.80	0.00
Charisma * Mission * Recognition	0.01	1, 227	0.93	0.00
Charisma * Mission * Intellectual Stimulation	0.11	1, 227	0.74	0.00
Charisma * Recognition * Intellectual Stimulation	0.03	1, 227	0.86	0.00
Mission * Recognition * Intellectual Stimulation	0.19	1, 227	0.67	0.00
Charisma * Mission * Recognition * Intellectual Stimulation	4.13	1, 227	0.04	0.02

Note: *F* = *F* Ratio; *df* = Degrees of Freedom; *p* = Significance Level using Roy's Largest Root; η^2 = Effect Size (eta squared).

Table 5

Analysis of Covariance Examining the Effects of Leader Behavior on Positive Affective Expectations

	<i>F</i>	<i>df</i>	<i>p</i>	η^2
<u>Covariates</u>				
Domain Knowledge	18.86	1, 228	0.00	0.08
<u>Main Effects</u>				
Charisma	2.22	1, 228	0.14	0.01
Mission	0.38	1, 228	0.54	0.00
Recognition	0.78	1, 228	0.38	0.00
Intellectual Stimulation	2.14	1, 228	0.15	0.01
<u>Interactions</u>				
Charisma * Mission	2.71	1, 228	0.10	0.01
Charisma * Recognition	0.41	1, 228	0.52	0.00
Charisma * Intellectual Stimulation	0.72	1, 228	0.40	0.00
Mission * Recognition	6.88	1, 228	0.01	0.03
Mission * Intellectual Stimulation	2.54	1, 228	0.11	0.01
Recognition * Intellectual Stimulation	2.61	1, 228	0.11	0.01
Charisma * Mission * Recognition	0.06	1, 228	0.80	0.00
Charisma * Mission * Intellectual Stimulation	1.33	1, 228	0.25	0.01
Charisma * Recognition * Intellectual Stimulation	1.09	1, 228	0.30	0.00
Mission * Recognition * Intellectual Stimulation	0.42	1, 228	0.52	0.00
Charisma * Mission * Recognition * Intellectual Stimulation	4.01	1, 228	0.05	0.02

Note: *F* = *F* Ratio; *df* = Degrees of Freedom; *p* = Significance Level using Roy's Largest Root; η^2 = Effect Size (eta squared).

Table 6

Analysis of Covariance Examining the Effects of Leader Behavior on Self-Efficacy

	<i>F</i>	<i>df</i>	<i>p</i>	η^2
<u>Covariates</u>				
Domain Knowledge	15.57	1, 228	0.00	0.06
<u>Main Effects</u>				
Charisma	1.88	1, 228	0.17	0.01
Mission	0.95	1, 228	0.33	0.00
Recognition	0.63	1, 228	0.43	0.00
Intellectual Stimulation	1.46	1, 228	0.23	0.01
<u>Interactions</u>				
Charisma * Mission	4.11	1, 228	0.04	0.02
Charisma * Recognition	1.03	1, 228	0.31	0.00
Charisma * Intellectual Stimulation	0.02	1, 228	0.90	0.00
Mission * Recognition	6.86	1, 228	0.01	0.03
Mission * Intellectual Stimulation	0.20	1, 228	0.66	0.00
Recognition * Intellectual Stimulation	0.11	1, 228	0.75	0.00
Charisma * Mission * Recognition	0.81	1, 228	0.37	0.00
Charisma * Mission * Intellectual Stimulation	0.98	1, 228	0.32	0.00
Charisma * Recognition * Intellectual Stimulation	0.26	1, 228	0.61	0.00
Mission * Recognition * Intellectual Stimulation	3.64	1, 228	0.06	0.02
Charisma * Mission * Recognition * Intellectual Stimulation	0.68	1, 228	0.41	0.00

Note: *F* = *F* Ratio; *df* = Degrees of Freedom; *p* = Significance Level using Roy's Largest Root; η^2 = Effect Size (eta squared).

Appendix B: Figures

Figure 1

Charismatic Manipulation

Charismatic Leader	Non-Charismatic Leader
<p>Roots Music Newsletter: You have been with <i>Roots</i> for more than a decade. How has the company changed?</p>	<p>Roots Music Newsletter: You have been with <i>Roots</i> for more than a decade. How has the company changed?</p>
<p>SM: You know, I think the history of <i>Roots</i> is outstanding! We have seen so much growth since Mr. <i>Roots</i> started this company. But you know what? I want to talk about the future of <i>Roots</i>.</p>	<p>SM: You know, I think the history of <i>Roots</i> is promising, what with the many store locations opened.</p>
<p>RMN: Where do you think <i>Roots</i> is going?</p>	<p>RMN: Where do you think <i>Roots</i> is going?</p>
<p>SM: That is what is so exciting to me! <i>Roots</i> has a fantastic customer base, we pull in those with great music knowledge and strong interest in music. I am energized by our customers! These are the people that purchase music and music products frequently. That being said, I'm not content with where we stand with young adults. We have got to reach out to this demographic. There is a huge opportunity for growth once we target young adults.</p>	<p>SM: <i>Roots</i> has a strong customer base, those with music knowledge and interest. These are the people that purchase music and music products frequently. That being said, expanding the customer base to appeal more to young adults can't hurt the bottom line.</p>
<p>Our love of music is so exceptional, but we have got to spread that love and the enjoyment we get from music to those youngsters! That's what it is really all about, the music. I know they love music! We have got to capitalize on that!~Thinking about the future of <i>Roots</i> makes me so happy and dedicated to this company.</p>	<p>RMN: What do you recommend we do to appeal to this demographic?</p> <p>SM: The marketing department has a tall order! Figuring out a way to pull in the new customers will be a challenge, but again, I'm confident it can be done! I don't want to discuss any specifics at this point, because we really haven't even started brainstorming yet. Let me just say that the exciting new changes will be announced in upcoming weeks. So, get ready!</p>
	<p>RMN: Are you worried we could lose current customers if we change things up too much?</p>
	<p>SM: Well, there is certainly risk involved with any big change to our strategy. Carefully weighing the pro's and con's of any decision is important. We'll have to work out the details, but the benefit of expanding our customer base could be substantial.</p>
	<p>RMN: What do you recommend we do to appeal to this young adult demographic?</p>
	<p>SM: Marketing is key. I don't want to discuss any specifics at this point, because we really haven't even started brainstorming yet. The new changes will be announced in upcoming weeks.</p>

Figure 2

Leader Manipulations

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<p>Charisma First, I am really excited and hopeful about the future of <i>Roots Music</i>. I see a future where there are Roots stores across the whole country! Sure, it may take some time and hard work, but I know this company can go there. I think the younger audience can really get into what we have to offer! We just have to figure out ways to pull them in. We don't want to lose what is great about <i>Roots Music</i>: our unique selection and knowledge of different kinds of music. But that is what makes this company so SPECIAL! I have so much pride in this company, and I think it is important that you understand that. I want you to believe in this company and where it is going!</p> <p>Specific Mission Increase sales at Roots by generating interest with the 17-29 year old age group through a new marketing campaign. This strategic marketing direction should be new and original, not just limited to traditional marketing techniques, but may also include ideas for updating any aspects of the store, such as layout, staff, and products. Changes should be recommended that will draw in the target age group. Focusing on what would appeal to this age group and how to turn them into regular customers is critical. Bringing in a new demographic will increase Roots competitiveness among other music retailers and also create a long-term advantage with the potential for greater expansion. Without this expansion the company is likely to remain stable and eventually be less competitive among music retailers.</p> <p>Recognition I want you to know that in this company you will get recognized for your work on this project. The leaders of this company highly value this work. If they green light your marketing plan you will be recognized publicly at the annual management retreat which is in Charleston, SC. If this happens they have already agreed to pay for all of your travel accommodations and give you the opportunity to describe the marketing strategy at the retreat. That means you could really stand out at <i>Roots Music</i>.</p> <p>Intellectual Stimulation On a personal note, I am skeptical of you working on this project. I'm not sure that you have the ability to figure out a way to reach the younger audience. You need to know that the responsibilities of this project fall primarily on you—I'm just here to oversee your work and I don't expect to like everything you come up with. Also, please know that I'm very busy and have low availability so try to figure things out on your own before coming to me.</p>	<p>No Charisma I hope you were able to get a good feel for the company based on the information I gave you. This project is going to be a lot of work, so I hope you are ready. I wanted to mention a few of my own thoughts before you get started.</p> <p>Vague Mission Increase sales at Roots.</p> <p>No Recognition I want you to know that if the leaders of this company green light your marketing plan they will move forward with the plan. That means your ideas would be used.</p> <p>No Intellectual Stimulation On a personal note, I really support you in working on this project. I think you have the ability to figure out a way to reach the younger audience. You need to know that I have your back with this project and I encourage you take risks and not be afraid to go for it. I'm receptive and willing to listen to anything you throw at me! Also, please know that I'm available if you need anything, don't hesitate to ask.</p>
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Figure 3

Creative Performance Measurement: Quality

Quality - The overall quality of the plan				
<u>Completeness</u> – were the critical issues understood? Was the most relevant issue at hand addressed?				
<u>Coherence</u> – was the response coherent? Was it well thought out and logical?				
<u>Usefulness</u> – is the response actually feasible and appropriate for addressing the problem?				
1	2	3	4	5
Poor quality. The plan is haphazard and fragmented and does not address any of the key issues; it does not provide key information in a logical manner	Poor to average quality. A few key issues may be addressed; however, a clear plan is still not presented; key parts of the plan are unclear	Average quality. The plan is presented in a logical form; a number of key issues may still be missing or vague, but overall the plan addresses some of the major issues of the problem and is presented clearly and coherently	Average to excellent quality. Many of the key issues are addressed in the plan and plan is feasible; however, some information may seem unimportant to the plan or is not completely thought out	Excellent quality. The plan is presented so that is exceptionally coherent and clear and addresses the key issues in a manner that is feasible
<p>1 – For the first part of my plan I would like to see younger employees hired and also become a place for local bands and new talent to get their name out. Younger employees can be a source themselves and should be utilized. Second, I believe the new face of the company (newer direction) should be advertised strongly from tv ads, to a section in the paper to a website.</p> <p>3 – In order to reach the 17-29 year old age group, you must have music that they like. My first proposition is that you have each store survey the 17-29 years olds in the community and figure out what music they would most like to hear. Once you find that out, I suggest you come together as a company discuss results, then decide what new music needs to be offered. After that, find new employees that know a lot about the new music offered, as well as the old music and have them suggest the older music that matches the newer music style to the new customer. For your commercials make them a kind of new meets old feel so it will attract the attention of both age groups. Do the same for your billboards. This should help draw in the 17-29 year olds and also make them regular customers.</p> <p>5 – I feel like the one way to bring more people in is to have a band play in the store, so that way it brings people in to listen but they also look around and see the many things offered. Next, instead of just one band you could do a battle of the bands and give out prizes to the top three. This will also attract a younger crowd because the members of the band will hand out flyers telling their friends to come watch them play, and once again they will also look around. T-shirts are a good way to advertise because these days that’s all young adults wear and if it is a cool enough design then they will ask where they got it bringing customers to buy them and buy other things that are offered. Also, I liked the idea of hiring younger workers in their teens (17, 18) because kids talk about where they work and if it is cool or not and they will their friends to come visit them which would bring in potential customers. Another thing is to make sure to stay on top of the newest things coming out. Maybe even free things of good deals because in this economy people eat that stuff up. Just remember you only have to get them in once to get them hooked.</p>				

Figure 4

Creative Performance Measurement: Originality

Originality - The extent to which the plan is original and creative				
<u>Unexpected</u> – was the problem approached in a novel, imaginative, unpredictable, or innovative manner? <u>Elaborative/descriptive</u> – was a rich answer provided—one that helps the reader to visualize the solution for addressing the problem?				
1	2	3	4	5
Poor originality. The plan is very predictable and is given in basic terms with no elaboration. The plan only uses bare ideas and is commonplace and ordinary	Poor to average originality. The plan presents ideas in a slightly unique manner. The plan mostly provides common ideas that do not reflect much elaboration or description	Average originality. The plan contains something that makes it different from the typical plan. The approach is original and contains some descriptive information. Description and elaboration are present but not entirely complete	Average to excellent originality. The plan contains something that makes it different from the typical solution. The approach is original and contains some descriptive information. Description and elaboration are present but not entirely complete	Excellent originality. The plan is exceptionally unique. The participant includes characteristics or details that make the plan unique to him/her. The plan clearly reflects an unexpected understanding approach to the problem and goes beyond the norm and presents new ideas that are highly descriptive
<p>1 – The first thing I would do is collect all the music that that age group likes. I would then begin to place it in all the stores. I would then run ads on shows that generation watches. The ads will say that they changed up the store a little bit. I would add these commercials and take a few of the olds ones out. A the same time I would place ads into newspapers and magazines that age group reads. Next, I would change the appearance of the store to appeal to the new customers. This will all be done gradually so it is less competitive with other stores.</p> <p>3 – To increase our sales we need to appeal to more than just the middle age generation. I feel that our music should reach out to the younger age groups as well. We need to do several things to reach our goal of increasing sales at Roots. First, we should have some sort of charity events for the younger generation. For instance, we could have an event at Dominoes, it would cost the children \$5 each to eat at the buffet and the money would go to the cancer patients. Next I think we should try and get more of our music on stations that kids would listen to. This would increase our chances of them buying our music. Presenting our music at schools would be a good idea, we could do short concert for kids on what type of music they like. We could try and meet these needs by hiring new artists. Lastly we could put on concerts for kids, this would increase our fan base and get our name out there.</p> <p>5 – To make the image of unified music come to life commercials and print ads should be centered around this idea: The young crowd listening to their music while parading and partying down the street. The older crowd listening to their music coming from the opposite direction. The visual looks like a battle but when they come closer they realize that both sides have a “root” love for music and they all begin partying together. Slogan: it’s all the same if we go back to our roots. The stores will be expanded and organized into genres so that though they exist in the same establishments people can maintain their preference. Usual customers can be used as actors for commercials along with hired ones.</p>				

Figure 5

Creative Performance Measurement: Elegance

Elegance - The degree to which the leader's plan is articulately arranged in a succinct way				
<u>Flow</u> – was the plan well-articulated in a way that was easy to follow? Does it flow seamlessly?				
<u>Refinement</u> – is the plan designed so that it uses the minimal number of elements to be effective?				
<u>Clever</u> – was the plan well-designed and cleverly put together?				
1	2	3	4	5
Poor elegance. The plan lacks flow and focus. There are a number of ideas gathered together without order. Plan is very difficult to follow	Poor to average elegance. The plan reflects some organization of ideas, but at times is difficult to follow due to lack of focus	Average elegance. The plan shows good organization of ideas and they mostly fit together and are orderly. There may be too many unnecessary details regarding some ideas while other critical things are neglected	Average to excellent elegance. The plan is easy to read and follow. The flow and focus of the plan make it easy to comprehend and it seems to fit well together. However it is not flawless, there are unnecessary ideas or missed points	Excellent elegance. The plan is easy to read and follow. The ideas flow together smoothly, are directly related to the problem and cover the critical elements of the plan. The adequate amount of detail is provided without being over the top. The plan is well thought out and organized
<p>1 – I think that to increase sales at Roots the new music selection would need to be broad so that people could get the music that they enjoy. Also by having a more people in the stores buying different music, we would need to incorporate strategic locations in the stores for items that go with accessories, music type or different artists. An easy way to make an increase in sales would be to make catchy shirts, everyone loves a good shirt. But if we just wanted to get more people in the store to see the merchandise and possibly by invite an artist or band to a store for signing and pictures. This is my plan to increase sales.</p> <p>3 – I think the first step in our marketing campaign we should take would be to get our company name out there. In order to draw people in, they need to understand what we are about and what we have to offer them. We should have an open store day; open to the public. We can mark some of our store items down for that specific day, and also invite a local band to play. we also need to go to the spots/schools where (17-29) year olds spend a lot of their time in order to recruit for our store. We can set up a survey asking what products they would wish to see displayed, and also try to get some of them to apply for a job helping out in our stores. I think if they have more of an input in what comes out then they are more likely to visit the store.</p> <p>5 – Before we can market to the youth and advertise, we need to be 100% sure that our products are what they want. Every store sells mainstream music. This mainstream can be popular, but the up and coming artists are the ones who are an untapped resource. By focusing on this independent of small label artist we can have products that really appeal to younger people. By attending concerts and shows we can show them that we really are modern and we have products that they want to buy. Other stores are not willing to reach out to the youth in this way. They will only sell very mainstream products that are outwardly appealing. In reality there is a huge movement with underground artists that just does not get the media attention. The second focus is making sure our layout is fresh. Young people will not walk into a store that looks like it is for old people. By having a modern outward appearance we can further encourage young people to come in and see what we have. This idea of independent and small label artist is further enhanced by the buildings that house our name. The house conversion is excellent. It shows that we are not really guys in suits trying to sell all the cookie cutter music that other stores are. Further by coordinating with the artist they will be walking billboards to their fans.</p>				

Figure 6

Competing Effects of Leader Influence Tactics

