Leadership sagacity and its relationship with individual creative performance and innovation

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ABSTRACT

Creativity literature has largely overlooked an important construct associated with progressing beyond individual creative performance (i.e., the generation of an idea) to innovation (i.e., the implementation of an idea). That missing construct is leadership sagacity. Leadership sagacity is defined as the possession by an individual in an authority position of keen mental discernment, good judgment and wisdom necessary to recognize valuable work. Specific to creative performance, it is related to having the ability to identify creative ideas and to provide the leadership required for an organization to be both creative and innovative. It is vital for a leader who has approval authority for the allocation of resources and support to have a high level of sagacity so that they have the level of discernment necessary to decide which creative ideas should be championed toward innovation. In addition, we also discuss the importance of obtaining empirical organizational evidence that creative performance mediates the relationship between leadership supportive behavior and innovation as leadership sagacity plays an integral role among these vital relationships.
INTRODUCTION

Individual creative performance and innovation are thought to be vital to the survival of organizations (Amabile, 1996; Kanter, Kao, & Wiersema, 1997; Madjar & Ortiz-Walters, 2008). Organizations often value individuals and leaders who are inclined to produce creative work as well as innovative outputs. For example, IBM’s Institute for Business Value conducted an investigation that determined that creative work is the number one leadership proficiency or capability (Arnold, 2010). The assertion is that without creative performance and innovation, organizations would have a difficult time successfully competing within today’s rapidly evolving market place.

Because of the importance of creative work, researchers have conducted investigations to determine which internal and external factors function as facilitators and barriers to the generation of creative output (Kilbourne & Woodman, 1999). For example, conscientiousness (i.e., an internal factor) and low levels of team support (i.e., an external factor) have been found to result in lower levels of individual creative performance (Amabile, Conti, Coon, Lazenby, Herron, & 1996; George & Zhou, 2001; Shalley, Gilson, & Blum, 2009). Similarly, evidence suggests self-efficacy and openness to experience (i.e., internal factors) as well as supportive creative organizational policies, procedural and distributive justice (i.e., contextual factors) positively influence individual creativity (Amabile, 1988; George & Zhou, 2001; Robinson & Stern, 1997; Simmons, 2011; Tierney & Farmer, 2002; 2004).

Although many internal and contextual factors have been found to have a significant influence on creative work it appears that both researchers and organizations have an increasingly ardent interest in the behavior of leaders, a contextual factor, as it relates to
individual creative and innovative work (e.g., Shin & Zhou, 2003; Tierney, Farmer, & Graen, 1999; Yuan & Woodman, 2010; Zhou & George, 2003). For instance, researchers have discovered that transformational leadership as well as the display of interactional justice and developmental feedback by leaders have a positive relationship with individual creative work (George & Zhou, 2007; Shin & Zhou, 2003). Furthermore, organizational superiors have sought to retrieve the useful and novel ideas which are valuable enough to be implemented that their subordinates possess by leading employee groups in discussions entitled innovation communities. These communities are managed by leadership and have been developed to generate an assortment of perspectives and to provide approved organizational time for the exchange of thoughts in efforts to aid in the generation of creative ideas (Spencer & Strong, 2010). Other organizations, such as Google and 3M, specifically provide a resource vital to creativity, time (Mayer, 2006). 3M’s 15% rule provides employees the opportunity to spend 15% of their work time on projects of their own choosing (Kanter, et al., 1997). It takes courageous leadership to establish a policy that appears to go counter to the mainstream focus on efficiency and immediate returns.

Even though organizations have allocated resources to help in the development of creative outcomes and researchers have conducted studies to determine the impact of leaders on creative outcomes (e.g., George & Zhou, 2007; Shin & Zhou, 2003), the sagacity of a leader has been largely overlooked. The sagacity of leadership is vital as, “sagacity is necessary to identify any kind of discovery” (Diaz de Chumaceiro, 1999: 340). This applies to the identification of creative work. If an individual has a high level of task motivation, creativity-relevant skill and domain-relevant skill as deemed required for the generation of creative work according to Amabile (1988), it is likely that they will produce creative outcomes. Thus, the creative work
should be sufficient to contribute to the organization, but it would still have to be recognized as valuable and creative by a supervisor or manager before it can move forward toward the innovative process. Zhou (2003: 413-414) stated that, “employee’s creativity often provides a starting point for organizational innovation”, but leadership is often responsible for deciding what creative work is championed toward innovation. Furthermore, a critique of the stage gate process, a highly regarded product development process, suggests that creative ideas are often truncated before they can move toward innovation because of leadership’s lack of prudence or discernment (sagacity) (Becker, 2006).

Thus, the purpose of this paper is to discuss the role that sagacity plays between individual creative and innovative work. We discuss how sagacity is central to those in leadership positions that seek individual creative and innovative outcomes. We then explain that extending the research base to include the sagacity of leadership is in alignment with a mounting body of work that seeks to discover how leadership influences individual creative and innovative work. We also discuss leadership supportive behavior as this relationship with creative work has been confirmed as critical to the generation of creative work (Ahmed, 1998; Amabile, Conti, Coon, Lazenby, & Herron, 1996; Oldham & Cummings, 1996; Shalley & Gilson, 2004; Shin & Zhou, 2003; Tierney, Farmer, & Graen, 1999). We further discuss the importance of obtaining empirical work on how individual creativity mediates the relationship between leadership supportive behavior and innovation within the same context. The empirical validation of these relationships within an organizational environment is key as leadership sagacity builds upon the interaction among these constructs.

In sum, we provide theoretical reasoning for why sagacity is an important construct with regard to the relationships among leadership supportive behavior, individual creativity, and
innovation. We then discuss how sagacity should be included in future research on creativity as well as suggest possible implications for business practitioners.

**SAGACITY**

The word sagacity was first used in the mid 16th century and is derived from the Latin word *sagācitās* (wisdom or keenness of perception). The Merriam Webster Dictionary (2011) defines sagacity as the quality of being sagacious and sagacious as having or showing keen mental discernment and good judgment. While the Oxford English Dictionary (1997) defines sagacity as “gifted with acuteness of mental discernment, having special aptitude for the discovery of truth, penetrating and judicious in the estimation of character and motives, and the devising of means for the accomplishment of ends.” Building on these definitions and following Scheibe (1979), we define sagacity as the possession of keen mental discernment and good judgment coupled with interpretive knowledge.

We believe that sagacity is necessary to effectively recognize valuable creative ideas and to provide the required leadership for innovative work. We suggest that leaders possess sagacity in various amounts that are likely to be correlated with their ability to recognize and facilitate creative work in their organizations and to turn that creative work into innovations. In addition, the literature suggests that sagacity can be developed within individuals and organizations (Dollinger, 1985). Thus, we discuss leadership sagacity in terms that reflect this ability in both individuals and organizations. Further, Robinson and Stern (1997) introduced sagacity as an aspect of organizations that produce creative work, and they provide some insight into how sagacity can be developed in an organization by encouraging employees to engage in diverse education and training activities—particularly ones which are unrelated to their current
assignments. According to Robinson and Stern, restricting employees to just current-job-related education and training opportunities does not increase sagacity but is simply "optimizing for an existing or predetermined situation" p. 73. Thus, it is vital that employees have the opportunity to engage in various types of work functions and training, particularly if they hold a leadership position and are expected to have high levels of keen mental discernment (i.e., sagacity).

There are several leadership theories that discuss traits that are keys to effective leadership. Moreover, trait theories of leadership list various characteristics that good leaders possess. For example Kouzes and Posner (2008) list 5 traits: honest, forward-looking, competent, inspiring, and intelligent, and Bass (1990) lists 5 traits correlated with leadership quality: intelligence, dominance, self-confidence, high-energy level, and task-relevant knowledge. The various lists of leadership traits, however, do not include the discernment and judgment traits that are germane to sagacity.

It is also important to note a concept entitled the helicopter view approach to management which is related to sagacity. This concept was developed by the Royal Dutch Shell Company and derives from systems theory. The helicopter view refers to the ability to see beyond the specifics of a particular situation to see it in its overall context and environment. It is sometimes considered to be synonymous with the terms peripheral vision or breadth of vision (Muna, 2003). This concept is focused on how to facilitate strategic thinking and specifically refers to a management perspective taken when assessing tactical issues. The strategic thinking detailed by this concept could be considered to be a function or subset of acumen, but it does not include the aspects of judgment and discernment required to maximize effective action.
The ability to see the big picture that the helicopter view provides is a vital leadership trait. But sagacity also incorporates the wisdom to see what others do not and to effectively act upon that information by providing leadership that can identify transformational creativity and foster innovation within their organizations. Without sagacity, the helicopter view might enable an organization to adapt to changes in its environment through continuous incremental improvement but provides no guarantee that it will recognize potential paradigm-shifting events on the horizon (reactive) or develop those events itself (proactive). According to Christensen and Horn (2008), the ability to foster work that is creative as well as to identify what is suitable enough to be implemented (i.e., innovation) is relatively uncommon among leaders. They claim that the most common response of an organization to the pursuit of innovations is to try to exploit them within the existing paradigm in order to do the familiar incrementally better. True innovation must be implemented disruptively and few organizations possess the leadership sagacity to accomplish this. Christensen and Horn’s position is consistent with that of Sower and Fair (2005) who allude to the idea that sagacity is vital to the generation of innovation.

THEORETICAL DEVELOPMENT

Individual creative performance is defined as the generation of novel and useful ideas, processes and products (Amabile, 1988; Shalley, 1991). As previously stated, researchers have discovered many antecedents to individual creative performance. Although there are many variables that have a positive relationship with creativity, leadership creativity supportive behaviors seems to demonstrate one of the most consistent and influential effects on individual creative performance (see Amabile, Conti, Coon, Lazenby, & Herron, 1996; Carmeli & Schaubroeck, 2007; Madjar, Oldham, & Pratt, 2002; Oldham & Cummings, 1996; Shin & Zhou, 2003; Zhou & George, 2001).
The production of creative work often necessitates actions that are outside of normal work routines; thus, employees often experience apprehension and angst when seeking to produce creative work (Csikszentmihalyi, 1996; Zhou & George, 2003). This is particularly the case when organizations place a strong focus on immediate production and gains. Thus, leadership creativity supportive behavior is vital to the production of creative work because it helps to generate a risk tolerant atmosphere in which employees feel comfortable to go beyond the status quo and participate in the process of trial and error that is typical in the production of creative work. Thus, the importance of support for individual creative efforts cannot be overstated. There is evidence from past studies to support this idea. For instance, Madjar, Oldham, and Pratt (2002) researched three clothing organizations and discovered that support from both peers and superiors had a positive impact on individual creative performance.

Although creativity is vital in increasing the effectiveness and success of an organization, companies also look to move beyond individual creative performance to individual innovation. Innovation is defined as the successful implementation of creative outcomes (Amabile, 1988; George & Zhou, 2001; Zhou & Shalley, 2003). Several factors have been discovered to precede innovative work; for example, the climate of an organization as well as job characteristics have been found to influence the production of innovative outcomes (Oldham & Cumming, 1996; Scott & Bruce, 1994). Indeed, these factors are critical in the generation of individual innovative work; however, from a broad perspective innovative outcomes cannot be observed without the production of individual creative performance. In fact, researchers have explained how creativity is the typical initial step toward innovation (Amabile, 1988; Amabile, 1996; George & Zhou, 2001; Zhou, 2003).
These relationships (i.e., leadership supportive behavior is positively related to individual creative performance, and creative performance is positively related to individual innovation) have been individually researched, but we believe they should be jointly investigated within the same environmental context to empirically confirm these relationships. To our knowledge these relationships have not been investigated in this stated context; thus, to solidify our understanding with regard to leadership support, creativity, and individual innovation, researchers should work to provide empirical evidence that leadership supportive behavior influences individual innovation via individual creative performance. Because these relationships appear to be central to the generation of innovative work we assert that they should be collectively validated as other constructs build on these relationships, particularly leadership sagacity. Thus, we propose the following:

*Proposition 1: Individual creative performance mediates the relationship between leadership supportive creative behavior and individual innovation.*

As discussed, researchers have sought to uncover the factors that lead to creativity and innovation. For instance, some researchers believe that intelligence plays an important role in the production of creative and innovative work (Barron & Harrington, 1991). Intelligence is defined as a person’s capability to produce and utilize abstract ideas and concepts (Humphreys, 1979; Mumford & Gustafson; 1988; Tyler, 1965). Moreover, intelligence has to do with the aptitude to learn, the ability to understand facts, as well as the ability to understand and produce abstract concepts (Humphreys, 1979; Mumford & Gustafson; 1988; Oxford English Dictionary, 1997). Organizations often seek to employ intelligent individuals who they believe can produce high levels of performance (Vasantha Kumara & Sahasranam, 2008).
Companies also consider other factors and tactics to ascertain indications that an individual is inclined to produce creative work (Amabile, 1988; George & Zhou, 2001). In fact, some organizations are so interested in employing creative individuals that they specifically measure an applicant’s inclination to generate creative outcomes (Vasantha Kumara & Sahasranam, 2008). Again, levels of intelligence often play a large role in these assessments as organizations often have motives to hire the most intelligent individuals as they believe that these individuals would also be more likely to be more creative as well as more innovative (Barron & Harrington, 1991; Mumford & Gustafson, 1988). Although intelligence may influence creativity and innovation, the relationships have been found to be inconsistent. Some researchers have discovered a strong significant positive relationship while others have uncovered a weak or insignificant relationship between intelligence and creative and innovative work (Frederiksen & Ward, 1978; Gough, 1976; Hocevar, 1980; Mumford & Gustafson, 1988). We believe that leadership sagacity may help explain these inconsistent findings as it may have an important role in the identification of individual creativity, as well as the potential for creative outcomes, which contributes to the implementation of creative work (i.e., innovation).

Although one may be intelligent this does not necessarily equate to having a high level of sagacity, which would be a higher level of thought that includes discernment. In fact, Sternberg stated that, “…it becomes clear merely by looking at the historical record that in many walks of life, intelligence without wisdom is not enough…” (1986: 177). For instance, Jong and Hartog discovered many leadership behaviors that lead to innovation such as consulting, stimulating knowledge diffusion, delegating and feedback (2007). They even include behaviors such as intellectual stimulation and other activities that are related to intelligence that are considered to have a positive relationship with innovation (Jong & Hartog, 2007). In spite of these helpful
findings, they failed to highlight the importance of wisdom or discernment (i.e., sagacity) or even identify sagacity as distinct from intelligence.

Thus, we agree that the intelligence of a leader is necessary, but it is not sufficient (Sternberg, 2003), and assert that this area of study is incomplete without the inclusion of sagacity. Few studies have investigated sagacity; however, one study asked participants to sort occupational tasks and categorize them as representing intelligence, creativity, or wisdom as related to work activities. With regard to observed occupational behaviors related to wisdom three distinct dimensions represented 87% of the observed variance in the data. Sagacity was discovered to be one of the three dimensions that captured wisdom. This work further supported the idea that sagacity is distinct from intelligence and is key to a wise individual (Sternberg, 1985). More specifically, researchers state that “…the wise person has a certain sagacity not necessarily found in the intelligent person” (Sternberg, 1985: 623). Thus, the level of sagacity that a leader possesses is key because, many potential products, services, processes, and opportunities may go unnoticed without a leader’s sagacity. Therefore, even though managers are likely to be intelligent, which explains their having achieved superior positions, they must also have a level of sagacity, a type of wisdom, to best discern the difference between creative ideas, processes, or products that are appropriate to be championed in efforts to move forward toward innovation and those that do not.

These ideas about the importance of sagacity are not new. Almost 2400 years ago, Plato in the Republic presented the image of a divided line characterizing four forms of awareness. The lowest level in Plato’s forms of awareness hierarchy is images. This may be characterized by a person who has read a text book but has no other experience in the field or knowledge. A person at the second level, perceptual belief, has experience in the subject matter gained for
example through work experience, experiential learning or laboratory exercises. At the third level, understanding, the individual will have spent time mastering the laws and theories, which underpin the area of study. The highest form of awareness is insight, which is characterized by what we might refer to as sagacity today. Leaders who have approached Plato’s insight level of awareness can be said to be more sagacious than those at the lower levels of awareness. They have sufficient awareness to be able to develop and understand creative ideas and innovations that go beyond existing knowledge and point the way to new discoveries. These insightful, sagacious leaders are able to identify and conceive valuable new hypotheses and ideas that are worth being pursued (Sower & Fair, 2005). Plato’s hierarchy of awareness provides a framework for understanding what constitutes sagaciousness and helps explain how sagacious leaders affect the creativity and innovation of their subordinates.

A further explanation of Plato’s Insight is offered by Grube (1980). According to Grube, Insight enables one to go beyond the premises of particular sciences to the grasping of the absolute values behind the present reality. It is precisely this which enables insightful leaders to envision a new reality—an original paradigm—and lead their organizations in the creative quest to make that new reality the latest paradigm.

While there have been criticisms of Plato’s divided line image, most focus on fine points in the image rather than on its substance. For example Foley’s (2008) criticism revolves around the fact that in Plato’s image all segments of the line are of equal length which Foley argues against. Despite this critique, no credible arguments have been located which argue against the substance of Plato’s image. Thus, in spite of the minor criticisms, we believe that Plato’s hierarchy of awareness is still an appropriate framework for explaining levels of awareness that
exist among organizational leaders and how leadership sagacity increasingly develops at the highest level of the hierarchy.

In efforts to further explain the relation among leadership sagacity, creativity and leadership, in conjunction with Plato’s hierarchy of awareness, we draw upon Amabile’s model (1988). This model, which is a seminal piece in the creativity literature, explains that an individual must possess intrinsic motivation, have creativity-relevant skills, as well as domain-relevant skills to generate creative work. Divergent thinking, which is defined as the capability to produce many possible solutions to a problem as well as the ability to identify vital relationships between two seemingly different products or processes, is an aspect of an individual inclined to produce creative work (i.e., it is an element of creativity-relevant skills) and is believed to be a form of intelligence (Amabile, 1988; Mumford & Gustafson, 1988). Thus, individuals who are inclined to produce creative work tend to be inherently intelligent. To be clear, we believe that sagacity is not necessarily required, even though it would likely be helpful, for the production of creativity. However, we assert that it is a necessity for the identification of creative work that should be championed toward innovation. Thus, although sagacity would be important in determining which ideas are likely to result in creative outcomes, and are worth the effort to develop the idea, leadership sagacity will have a greater influence on innovation as a leader would need sagacity to recognize creative work before it can move toward innovation.

Because employees are often limited to the resources allotted them as well as bound by the support afforded to them by leadership, it is difficult to move from individual creative performance to individual innovation without assistance from management. Innovation generally requires additional resources and buy-in before implementation occurs; therefore, a leader’s (i.e., superior of the individual who produced the creative idea) approval or disapproval (e.g.,
willingness to allocate additional support and funds) would play a large role in the creative idea moving forward toward innovation. In fact, we believe that leadership sagacity would moderate the relationship between individual creative performance and individual innovation. In sum, we assert that a leader’s high level of sagacity would strengthen the relationship between individual creative performance and individual innovation. Thus, we propose the following:

Proposition 2: Leadership sagacity moderates the relationship between individual creative performance and individual innovation.

DISCUSSION

In this paper, we propose relationships between leadership constructs and individual creativity and innovation. Specifically, we propose the testing of leadership supportive behavior and its influences on individual innovation via individual creative performance within the same organizational context. We also propose the notion that leadership sagacity moderates the relationship between individual creativity and individual innovation. Organizations that value both individual creativity and innovation as vital to their survival in an increasingly competitive and technologically advanced business environment will be more effective if they better understand these relationships.

As stated, individual creative performance will not achieve its full potential without leadership supportive behavior, the lack of which will negatively influence innovative work. This is consistent with the idea that bad leadership will always overcome a good employee (Yones, 2010). Without leadership supportive behavior, the most creative employees will either elect to leave the organization or will “hunker down” and get by the best they can. In either case, the organization loses the potential creative ideas these employees might have developed. For
the organization, which provides leadership supportive behavior, the creative ideas are more likely to develop into innovations that will provide value to the organization. Since these relationships are central to innovative work, it would be useful to have them empirically investigated within the same environmental context.

Without sagacious leadership, many creative ideas proposed by individuals within the organization will not see the light of day and thus will be of no benefit to the organization. Leadership supportive behavior without sagacity might lead to increased numbers of creative ideas but without leadership sagacity, they may not result in innovations that create value and improved competitive position for the organization. Leaders lacking sagacity will more often fail to recognize the potential value of a creative idea and thus fail to provide the resources necessary to turn that idea into an innovation.

Further, sagacity is hardly a new concept. Plato’s divided line illustration of the forms of awareness is related to the concept of sagacity. Leaders at the insight level of awareness are more sagacious than those at the understanding level or lower (Sower & Fair, 2005). In this paper we relate the classic concept of insight or sagacity to a leader’s ability to recognize new and creative ideas that are worthy of development and adoption. Organizations seeking to be more innovative would do well to seek the most creative individuals available, but must recognize that this is just the first step. They must also select and train leaders to provide support for individual creativity and innovation and provide those leaders with the opportunities to gain the experience, training, and education necessary to achieve a sufficient level of sagacity to be able to recognize good ideas for which to provide resources to develop into innovations. This is a reasonable approach as research indicates that levels of sagacity can be improved (Dollinger, 1985).
Practical Implications

The organizational implications of the conceptual work detailed in this paper are extensive. As previously mentioned, organizations spend large sums of money on research and development, and seek to obtain cutting edge technologies to ensure that their employees have the resources required to be both creative and innovative. They also fund talent recruitment efforts directed at hiring individuals who are inclined to produce creative work. However, even if the employees have the required resources and the internal attributes, as detailed by Amabile (1988), to be creative, coupled with support from their leadership, the critical move toward innovative work will be stalled if their leaders lack leadership sagacity.

Several organizations have demonstrated that having the components required and support needed to be creative is not enough. For example, Apple continued to focus on innovative efforts after the first departure of Steve Jobs. The organization soared when he was in leadership, but it appears that the organization became stagnant when he was absent (Nerney, 2010). It seems that when Jobs left Apple innovative work continued to be pursued, but the championing of the best ideas faltered in his absence. Obviously, there are many factors that may have played a role in the stagnation of Apple in his absence, but it is also apparent that Steve Job’s sagacity was central to his ability to know what ideas should be championed, adopted, and implemented (i.e., innovation). In fact, Time placed Steve Jobs on the list of individuals considered to be the person of the year in 2010, they specifically named sagacity as central to his superior leadership abilities (Gentilviso, 2010). Other organizations may also suffer if they don’t have leadership with a sufficient level of sagacity required to identify the creative work that should be championed to innovate efforts.
Practical implications also extend to organizational employee selection. Because leaders have such an important role in initiating the innovative process their level of sagacity should be assessed. Thus, organizations may consider including evaluations that include the assessment of sagacity for employees/leaders or at least their potential to improve their current level of sagacity. Perhaps individuals that do well on these evaluations could be given training to help develop and enhance these abilities.

Future Direction

What is needed next is the opportunity to test the two propositions discussed in this paper. Empirical support for the propositions will provide insight into the process of increasing individual creativity and innovation within an organization. Organizations that have a research and development department, which often indicates an awareness of the value of creative and innovative work, may be an appropriate context to investigate these proposed relationships. Perhaps, investigators could develop a methodology in which they obtain a matched dyad sample that would include leaders and subordinates. The leadership could be examined for levels of both support for creative work and sagacity. In addition, the employee could be assessed for levels of creative work, while the creative work could be tracked to determine how or when it is recognized and championed toward innovation. It would be useful to conduct this type of investigation in the United States, but one could argue that it would also be important to investigate these relationships in other countries as a globalized economy is a reality for organizations. Perhaps diverse cultural differences like uncertainty avoidance and power distance may influence the level of leader sagacity that is required for the identification of creative outcomes.
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