

3-1-2014

Empirical Study on the Relationship between Ethical Leadership and Organizational Climate of Innovation

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Recommended Citation

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Empirical Study on the Relationship between Ethical Leadership and Organizational
Climate of Innovation

Submitted to the College of Business

George Fox University

In partial fulfillment of the requirements

for the degree of

Doctor of Business Administration

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March 2014

Empirical Study on the Relationship between Ethical Leadership and
Organizational Climate of Innovation

by

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has been approved as a

Dissertation for the Doctor of Business Administration Degree

at George Fox University College of Business

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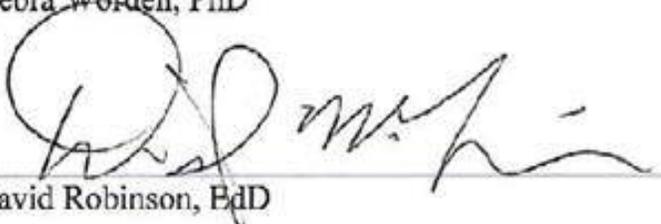
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Abstract

In today's world, it is imperative that organizations continuously innovate because their long-term survival is threatened when they do not. Research has shown that two elements are required for an organization to be innovative: an innovative climate and an effective leadership style. Recent studies have begun to explore the relationship between the ethical dimension of leadership and outcomes of an innovative climate, such as promotion of technological innovation and support for innovation.

While there is evidence that ethical leadership may improve innovative climate, the relationship between the two constructs has not been explored. The purpose of this study was to begin the exploration of the possible link between ethical leadership and innovation climate, along with its five dimensions.

Four hundred eighteen participants who work in a variety of industries and occupations participated in the study. Of this number, 359 participants were online panelists of an online research company, and 59 were students and instructors in Bachelor and Masters level courses at three Oregon universities. The former completed the questionnaire over the Internet, and the latter completed hard copy questionnaires in the classroom.

A 5-point Likert score questionnaire was used in the study; it encompassed the ten statements in the Ethical Leadership Scale (ELS) and the 61 statements in the Siegel Scale of Support for Innovation (SSSI). The results showed significant positive correlations between ethical leadership and innovation climate and ethical leadership and

each of the five dimensions: continuous development, ownership, normal for diversity, leadership, and consistency.

This study sets the stage for future empirical research regarding the relationship between two important constructs, both of which are required for long-term organizational success. They provide evidence that at least from the employee's perspective, a leader's ethical behaviors have a positive relationship with multiple dimensions of an innovation climate.

Acknowledgements

I would like to thank Craig Johnson whose ethics course initiated my interest in ethical leadership. His interest and knowledge in the subject of my dissertation continued to inspire me even when life's challenges presented themselves. I also want to thank Deb Worden and David Robinson, the other members of my committee, for their encouragement and compassionate caring, which included not only caring about the completion of my dissertation but for me as an individual. Deb's knowledge of statistics and David's knowledge and experience in organizational leadership and higher education were invaluable contributions to this project.

I would also like to thank the faculty in the Business Department at Linfield College where I have been fortunate to work as a Visiting Professor of Business. All of the professors have been supportive of me during this journey. I would, however, like to mention two by name. Professor Sharon Wagner, the chair of the Business Department, has consistently encouraged me; she has also been willing to listen regarding research complexities I have faced and has been there when I needed to bounce ideas around. Sometimes it helps to see issues or ideas more clearly when one is able to put thoughts into words and hear them said aloud. Professor Tyler Laird-Magee is not only is an individual I met in the doctoral program, but she is now a colleague of mine at Linfield. Through the sharing of many educational experiences and in the completion of her doctoral degree, she has inspired me to stay the course toward my own doctoral degree.

Last but not least, I would like to acknowledge and thank my entire family for their prayers and words of encouragement; these helped me see the light at the end of the tunnel. In particular, though, I would like to thank my husband, David, for his love and

willingness to support me in this education pursuit. He has shown enormous patience and understanding about the resources that it takes to complete a doctoral degree, including my time spent on coursework, research and writing the dissertation.

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Definition of Key Terms

Change

Change means to “make the form, nature, content, future course, etc., of (something) different from what it is or from what it would be if left alone” (“Change”, n.d. para.1).

Creativity

Creativity can be defined as the production of ideas that are seen to be unique and new and which are may be also be useful (Amabile, Conti, Lazenby, & Herron, 1996).

Innovation

Innovation is an extension of creativity because it requires that creative ideas are actually implemented in an organization and that the implementation is successful (Amabile et al., 1996).

Organizational climate

Organizational climate is a behaviorally-oriented construct that represents individuals’ perceptions of patterns of policies, procedures and exhibited interactions that are found in organizations and that support specific climates, such as climate of innovation (Patterson, West, Shackleton, Dawson, Lawthom, Maitlis...Wallace, 2005; Schneider, 2000; Syvantek & Bott, 2004).

Organizational culture

Organizational culture refers to the combination of values, attitudes, and beliefs that are common among individuals in the same organization and that they use to guide their interactions with others inside and outside the organization (Syvante & Bott, 2004).

Leadership

Although there are numerous types of leadership, Yukl's (2006) overall definition of leadership provides a backdrop for the different styles. It reads as follows: "the process of influencing others to understand agree about what needs to be done and how to do it, and the process of facilitating individual and collective efforts to accomplish shared objectives" (p. 8).

Transactional leadership

Transactional leadership tends to be the most common approach to leadership in organizations; it involves setting and monitoring goals and getting results through exchanges based on rewards and punishments (Bass, 1981; Bass & Riggio, 2006; Burns, 1978). Leaders and followers are motivated to do or provide things based on their own needs and self-interests (Packard, 2009).

Transformational leadership

Transformational leadership is a type of leadership that motivates followers through the articulation of a compelling vision and encourages followers to transcend their own self-interests to attain organizational goals beyond standard expectations (Bass, 1981; Bass & Riggio, 2006; Burns, 1978; Packard, 2009).

Ethical leadership

Ethical leadership has been described and measured in a different ways (Brown, Trevino, & Harrison, 2005; Kalshoven, Den Hartog, & De Hoogh, 2011; Kunungo, 2001; Yukl, Mahsud, Hassan, & Prussia, 2013). The description of ethical leadership used in this study is Brown and Trevino's (2002) definition, which emphasizes its role modeling and behavioral aspects. They define ethical leadership as "the demonstration of normatively appropriate conduct through personal actions and interpersonal relationships, and the promotion of such conduct to followers through two-way communication, reinforcement, and decision-making" (Brown & Trevino, 2002, p. D2).

Innovation climate

An innovative innovation climate refers to an organization that is oriented toward promoting and assisting its members to effectively use their creativity as part of their overall function in solving organizational problems and attaining organizational goals (Siegel & Kaemmerer, 1978).

Chapter 1

Introduction

Change is constantly occurring in today's world. Both innovation and leadership require deliberate actions that can help or hinder an organization's ability to effectively deal with change (Selman, n.d.). The word *action* may be seen as what a person does after deliberately choosing between different alternatives; but *behavior* is an empirically observable response to stimuli (Kirkman, 2010). Perceptions about patterns of behavior tend to represent much of the research on organizations, even though leadership, organizational culture and climate tend to be entwined (Kozlowski & Doherty, 1989, Rousseau, 2011).

To a large extent, a climate that encourages creativity and innovation can be seen as an outcome of individual leadership style (Amabile, 1998; Dess & Picken, 2000). Leaders within organizations have social power and can influence and motivate followers toward certain actions (Gini, 1998). Rather than focusing entirely on the motivational aspects or the intentions behind certain actions ethical leaders, Brown and Trevino (2002) emphasized the behavioral aspects of ethical leadership (Stouten, van Dijke & De Cremer, 2012). In organizations, effective leadership is not one sided; like ethics, leadership requires a symbiotic relationship with others (Gini, 1998). For example, the behaviors that ethical leaders exhibit have been shown to have positive relationships with

follower trust and perceived organizational effectiveness (Johnson, Shelton, & Yates, 2012).

Leadership and change have been popular topics for research, but there is a lack of research of the ethical aspects between the two (Burnes & By, 2012). All organizations must deal with change; effective leadership and a climate that is supportive of innovation are critical components in determining whether change efforts will be seen as appropriate (Sarros, Cooper & Santora, 2008). Research has shown that there is a relationship between transformational leadership, which includes an ethical component (Brown et al., 2005) and an organizational climate of innovation (Sarros, et al.) This study extends research on ethical leadership by determining whether there is also a relationship between it and a climate for innovation.

Statement of Problem

Due to today's rapidly changing environment, organizations must continually innovate or the likelihood is that their survival will be short-lived (France, Mott & Wagner, 2013). Among the myriad of challenges that organizations face, one of their greatest challenges is establishing a climate where innovation thrives. An innovative climate is important because it is part of creating and sustaining an organization's competitive advantage. There are many vital aspects that help organizations be more innovative, including their organizational structure and use of technology. However, organizational leadership is the most important element (Abgor, 2008).

Leaders are the catalyst for successful innovation because for innovation to "bring any real benefit, the leadership must support, sustain, encourage, and inspire followers to

make it work” (Abgor, 2008, p. 40). Effective leaders encourage followers to ask questions about why things are done certain ways and to look for new ways to streamline or eliminate unnecessary steps in a process. Employees’ willingness to suggest ideas for improvements or experiment with new processes requires a trusting relationship between leaders and followers because risks of failure exist when people try out new ideas. In order, therefore, for organizations to have innovation and creativity that produces positive and sustainable results, leaders must exhibit a style of leadership that encourages the means and ends to be consistent with these expectations (Abgor, 2008).

There have been studies that explored the relationship between the transformational style of leadership and organizational innovation. For example, Chen and Lin (2012) found a relationship between transformational leadership and the promotion of technological innovation. In another study, the causal relationship between leaders’ transformational leadership behaviors and their business units’ one year performance was moderated by the units’ level of support for innovation (Howell & Avolio, 1993). Organizational culture was also found to be a mediator between transformational leadership and an organization’s climate for innovation (Sarros & Cooper, 2008, p. 148).

Transformational leadership as a leadership style, though, is not totally representative of ethical leadership; it has a distinction of its own (Brown et al., 2005). Ethical leadership is based on behavior that promotes ethical behavior in followers by modeling ethical behavior through interpersonal relationships. Ethical leadership has been shown to have a positive correlation with the type of organizational climate that encourages ethical behavior (Mayer, Kuenzi, & Greenbaum, 2010). Although ethics in

business is not totally the responsibility of leaders, leadership is one of the most powerful influences in an organization (Stouten et al., 2012). When leaders create a fair and trusting environment, this tends to encourage pro-social behaviors (Mayer, Kuenzi, Greenbaum, Bardes, & Salvador, 2009; Walumbwa & Schaubroeck, 2009). To remain competitive, businesses must have a capacity for innovation, and business ethics is an important aspect of building this capacity (European Commission, 2009). According to Graen and Scandura (1987), the stronger the relationship, interdependence and interlocking behaviors there are between leaders and followers, the greater the organizational innovativeness.

Additionally, the behaviors that are evident in different leadership styles have a significant impact on employees' perceptions of their organization's climate (Holloway, 2012; Kozlowski & Doherty, 1989). Research shows that between 50 and 70 percent of the perceptions held by employees about their organization are attributable to a leader's leadership style behaviors (Goleman, 2000; HayGroup, 2012; Momeni, 2009). Leaders may exhibit more than one leadership style, but it is the reliability of a leader's style and behaviors that greatly affect how employees sum up their experiences and perceptions of what it like to work in an organization (Ayers, 2005; Momeni). This study is a reflection of participants' perceptions on the ethical behaviors of their leader and on whether they perceive their organizational climate as supportive of innovation.

Significance of the Study

The relationship between ethical leadership as a particular style of leadership and organizational innovation climate has not yet been explored. Since a climate of innovation and ethical leadership are key elements in the long term survival of

organizations, this study sought to address this research gap. The study surveyed participants who were working in variety of occupations and industries. The results of the study begin to shed light on the linkages between these two constructs.

Purpose of Study

Similar to leaders in organizations who display behaviors that are associated with different leadership styles (Johnson, 2014), organizations also have different climates that are associated with how they function in various arenas (Schneider, 1975). In addition for a need for empirical studies on different organizational climates (Ostroff, Kinicki, & Tamkins, 2003) and ethical leadership (Stouten et al. 2012), there is a need to test for linkages between types of leadership that could help organizations deal with the need to be innovative (Sarros et al., 2008). This study responds to these needs by answering the following research question: Is there a positive correlation between ethical leadership and organizational climate of innovation?

Based on prior research (Siegel & Kaemmerer, 1978), there are at least five different dimensions that are encompassed in the broader construct of an innovation climate. These dimensions include Leadership, Ownership, Norms for Diversity, Continuous Development, and Consistency. Ethical leadership has been shown to have relationships or have an impact on outcomes that are embodied in each of these dimensions. This study also investigated whether there was a correlation between ethical leadership and each of these dimensions. By doing so, it makes contributions to needed research on each of individual components that contribute to an organization's innovation climate.

Research Hypotheses

In order for creativity and innovation to thrive in an organization, there must be effective diffusion of leadership, empowerment, shared accountability, and the encouragement of diversity (Abgor, 2008). Just as there are different styles of leadership, there are different types of organizational climates (Schneider, 1975). As indicated earlier, organizational innovation climate is one type of organizational climate.

Research has shown that there is a positive relationship between ethical leadership and organizational trust and perceived organizational effectiveness (Johnson et al., 2012). In reviewing Siegel and Kaemmerer's (1978) five dimensions of a climate of innovation, there would appear to be a need for organizational trust to exist in order for each of the dimensions to be evident in an organization. When organizational trust exists, followers have certain expectations regarding reciprocal behavior (Kramer, 2010). Organizational effectiveness includes many indicators that would appear to run parallel to those involved in Siegel and Kaemmerer's climate for innovation, such as adaptation, creativity, and goal achievement, and job satisfaction (Morley, Shockley-Zalabak, & Cesaria, 1997). Additionally, when there is high trust in an organizations, employees are more willing to raise issues that have ethical ramifications (Brown et al., 2005), which may avert situations that occurred in Enron and in many banks engaged in subprime lending.

The emphasis of the majority of studies on organizational climates has been done at the aggregate level, which means that individual scores have been aggregated to represent the climate at the collective levels; for example, different work groups, departments, or organizational level (Patterson et al., 2005). People who work in the same work settings often have shared perceptions about the higher level climate in which

they are working. Given the positive relationship between ethical leadership and organizational trust and perceived organizational effectiveness, the following hypothesis was proposed.

Hypothesis H_{a1}: There is a positive relationship between ethical leadership and an organization's overall innovation climate.

Dimension hypotheses. The next five hypotheses stem from the five dimensions of an innovative climate (Siegel and Kaemmerer, 1978).

Leadership. The type of leadership that is typical in innovative organizations is one that supports and encourages individuals to develop new ideas and does not keep power centralized in one area or given to a selected few (Siegel & Kaemmerer, 1978, p. 554). Power is shared and distributed. Leaders also decentralize authority and support their employees' personal development, which make employees more effective in using their creativity in solving organizations issues and problems. Ethical leaders consider their employees' development needs a priority, place them in positions and situations where they can enhance their confidence and personal growth (Zhu, May & Avolio, 2004), listen to employees and encourage them to voice their opinions and suggestions about work processes and their work experiences (Avey, Wernsing, & Palanski, 2012), and share power with their employees so they have more control over their own work (De Hoogh & Hartog, 2008).

Hypothesis H_{a2}: There is a positive relationship between ethical leadership and the leadership dimension of innovation climate.

Ownership. In innovative organizations, individuals feel that they have ownership in what goes on in their jobs and in the organization. They are also given individual autonomy and feel free to develop new processes and procedures, which means they do not just rely on others to come up with solutions (Siegel & Kaemmerer, 1978). Ethical leaders encourage employees to have psychological ownership in their jobs, involve them in decision-making, and give them more autonomy in the workplace, all of which increases their employees' job satisfaction (Avey et al., 2012).

Hypothesis H_{a3}: There is a positive relationship between ethical leadership and the ownership dimension of innovation climate.

Diversity. Individuals in innovative organizations continually question existing systems and experiment with different ways to solve problems; diversity of opinions is also encouraged (Siegel & Kaemmerer, 1978). Ethical leaders have meaningful conversations with employees where they show interest in hearing ideas and suggestions not only about ethical issues but also about work processes and procedures (Walumbwa & Schaubroeck, 2009). Employees are empowered and encouraged to not accept the status quo, but rather to independently question how their creative ideas might improve the workplace (Resick, Hanges, Dickson, & Mitchelson, 2006). According to Agbar (2008), an organization's ability to innovate is determined by its ability to remove barriers that thwart diversity. People with different backgrounds, talents, and skills offer opportunities for generating new ideas that often results in the development of new products, better efficiencies, and higher productivity in organizations.

Hypothesis H_{a4}: There is a positive relationship between ethical leadership and the diversity dimension of innovation climate.

Consistency. In innovative organizations, employees are as much concerned about the way things are accomplished as they are with the accomplishment (Siegel & Kaemmerer, 1978). They realize that when risky short cuts or methods are undertaken to accomplish a goals, there may be consequences that were neither intended or that ultimately conflict with the overall object that was to be accomplished. Consistency also involves continuous learning and development. These elements are required of organizations today in order for them to effectively deal with economic uncertainties and innovate faster in a global economy (Buckler, 1996). In order to be effective in the long run, though, organizations and organizational leaders must be seen as ethical. It is ethics, which is concerned about the well-being of people (in organizations and in society at-large), that tends to be the lens through which society evaluates innovation. This includes not only the end goals of any innovation, but also the methods used to develop it. Consistency in the leader's ethical behavior provides an environment that is more predictable, which produces an environment that is less risky to those who raise issues of concern or want to experiment with different ways of accomplishing tasks.

Hypothesis H_{a5}: There is a positive relationship between ethical leadership and the consistency dimension of innovation climate.

Continuous development. Because change is ongoing, in innovative organizations there is a commitment to continuous development. Individuals are encouraged to continually question what is and to experiment with different ways of accomplishing the

strategic goals of the organization (Siegel & Kaemmerer, 1978). Unlike individuals in many organizations who may become frustrated by the continuous experimentation and the associated system changes when innovations are adopted, individuals in an innovative climate successfully cope with these occurrences. Chen, Sawyers, and Williams (1997) posit that many businesses employ organization-wide approaches, such as Total Quality (TQ), to encourage continuous improvements that could also be used to develop an organizational culture that inspires and supports ethical behavior at all levels in an organization. This type of culture also requires a trust relationship between leaders and followers, and continuous development efforts must be highly supported by ethical leaders. There is some evidence to support this notion because Steeples (1994), an examiner for the Malcolm Baldrige National Quality Award, discovered that there was a definite relationship between an organization's quality and the ethics in which it carried out its actions (p. 859).

Hypothesis H_{a6}: There is a positive relationship between ethical leadership and the continuous dimension of innovation climate.

Methodology Used

A cross-section survey design (Babbie, 1973) was used in this study. This included the use of a 5-point Likert scale questionnaire in order to complete quantitative analyses of the data. The questionnaire was formatted so that it could be completed online and in hard copy form.

Since the study's purpose was to determine whether there was a positive correlation among several variables, bivariate correlation statistical tests were used to

analyze the data. Although the sample size ($n = 416$ with listwise deletions) was large enough to use the parametric Pearson correlation test, there was a non-normal skew in the data. This was especially true for participant responses to the ethical leadership statements. The non-normal distribution required the use of a nonparametric correlation tests; therefore, the Spearman rho, was used to confirm the Pearson correlation results. Both correlation results are included in the Method chapter.

Introduction Summary

Although there has been a growing number of studies and literature written about ethical leadership since the construct was introduced in 2002 (Brown and Mitchell, 2010), the link between this style of leadership and the organizational climate of innovation has not been explored. The results of this study add more weight to the importance of ethical leadership and furthers a discussion of its potential role as an effective leadership style (Ciulla, 2003) in organizations as they deal with innovation and change (Burnes & By, 2012). This is true whether one considers organizational climate for innovation an outcome of leadership or whether the two are simply entwined (Kozlowski & Doherty, 1989)

Chapter 2

Literature Review

The literature review in this chapter explores the foundation and research development of two primary constructs: innovation climate and ethical leadership. The literature review begins with a discussion that highlights the need for organizations to be innovative and to successfully deal with change. Innovations can come in many forms, including process improvements and new products.

The literature often uses the terms *creativity* and *innovation* interchangeably; however, the first deals only with the production of ideas and the latter implies that these ideas were actually put into use (Amabile et al., 1996). Amabile et al. contend that one cannot exist without the other.

In describing the development of organizational climate literature, two more terms require explanation because they, too, have been used interchangeably in the literature. Organizational culture is represented by the values and beliefs held by individuals in organizations, which guide their behavior (Syvanteck & Bott, 2004). Organizational climate is based on people's perceptions of patterns of policies and interactions that they observe in organization (Patterson et al., 2005; Schneider, 2000; Syvanteck & Bott, 2004). There are different types of organizational climate. To

successfully examine whether a particular type of organizational climate exists, the characteristics of that climate must be defined (Schneider (1975). For an innovation climate, five dimensions as defined by Siegel & Kaemmerer (1978) are discussed.

The next section of the literature review contains an overview of the development of literature on leadership. Because this project looks at a particular type of leadership that is based on ethics, two perspectives on ethics as described by Frankena (1963) are discussed: deontology and teleology. Two leadership styles that reflect these perspectives and that run parallel to ethical leadership are also discussed: transactional and transformational leadership. A major difference between ethical leadership and the two leadership styles is its intentional focus on ethics. This section includes a definition of ethical leadership and highlights studies that are pertinent to this project.

Lastly, the importance of having an ethical leadership infused in organizations as they deal with innovations is discussed. Because innovations often raise ethical issues, ethical leadership would seem conducive to having an organizational climate that not only encouraged innovation but would also be conducive to successfully dealing with its ethical issues. This section lays groundwork for the need for ethical leadership to be infused in an organization in deciding what is right and good for the organization and society in general.

Innovation Climate

In order for organizations to be successful in the long-run, there must be an organizational climate that encourages creativity and innovation (Martins & Terblanche, 2003). Both constructs must be evident in organizations because creativity and innovation

overlap and are often quite symbiotic in nature. Organizations risk their very survival when change is resisted or they are too slow in implementing innovations to improve organizational performance and firm value (Srinivasan, Lilien & Rangaswamy, 2004). The impetus for the change can come internally or externally, but it is the leader's role to promote organizational changes that allow the organization to not only adapt, but thrive, when changes do occur (Kalyani, 2011, p. 90).

Companies like Apple are known for their proactive innovations and continuous change strategies; however, even organizations that are seen as having fairly stable environments must deal with change. The innovation adoption and implementation processes in organizations involve a myriad of innovations and usually not one at a time (Damanpour, 1991). These processes are also influenced by individuals' belief that the innovations are needed or worthwhile, industry or board expectations, and organizational aspects, such as centralized or decentralized decision-making.

Not only are innovation and change efforts necessary in for-profit organizations, they are essential in public organizations as well. Pressing social problems, such as education and health, beg for attention because tackling these issues in creative and new ways is essential for emerging economies and currently successful countries that want to remain that way in the future (Kohli, 2012.). Thus, innovations do not have to be worthy of press coverage as often happens when new technology is released; innovations involving social issues can often take years to accomplish (Hage, 1980).

There are also numerous types of innovations: administrative and technical innovations (Damanpour, 1987; Kimberly and Evanisko, 1981) and radical and

incremental innovation (Dewar & Dutton, 1986; Ettlie, Bridges, & O'Keefe, 1984).

Innovations can come in many different forms, including new products, such as Apple's iPhone, structural and system changes when an organization reorganizes, and implementation of new technology that often requires new processes (Damanpour, 1991). In other words, innovations are seen as improvements due to change or to effect change. In order for any of these innovations to be successful, the organization must have incorporated the capacity to effectively deal with the changes that accompany it (Spanjol & Tam, 2010).

Innovations, though, are not self-generated or self-perpetuated; they have an inter-relationship with creativity. Creativity can be defined as "the production of novel and useful ideas" (Amabile et al., 1996, p. 1155). Therefore, innovation cannot exist without creativity, because creativity is the seed from which innovations grow. In order for a creative idea to become an innovation, however, it has to become useful. Therefore, Amabile et al.'s definition of innovation is "the successful implementation of creative ideas within an organization" (p. 1155). Mathisen and Einarsen (2004) argue, however, that creativity may also be motivated by successful innovation. For example, the successful implementation of a new technology can motivate streamlining steps in an organization's policies and procedures which can improve internal and external customer service. Innovation at all levels of the organization can also be affected by an organization's climate and culture. Although the terms *climate* and *culture* are often used interchangeably in the literature, there are researchers who draw distinctions. For example, Schneider (2000) states that organizational climate is behaviorally-oriented and it represents the perceptions that individuals hold relative to what they observe happening

to them and others in the workplace. When specific patterns of behavior are not only seen in an organization, but are also encouraged and supported, then a particular type of organizational climate is said to exist (Patterson et al., 2005; Syvante & Bott, 2004). For example, when organizational behaviors are consistent with a climate that promotes workplace safety, an organizational climate for safety is more likely to exist (Zohar, 1980).

On the other hand, organizational culture goes deeper than what can be seen on the surface (Patterson et al., 2005; Schneider, 1990; Schein, 1985). Patterson (n.d.) put it this way: organizational climate refers to “shared perceptions of the work environment; organizational culture refers to “shared meanings, values and attitudes and beliefs” (p. 24). Cultural aspects in an organization are reinforced by such things as organizational structures, rewards systems, and rituals and stories.

Literature references to organizational climate began around 1960, but these references were mainly inferred or discussed in unmeasured ways as part of research being done on other subjects (Schneider, Ehrhart, & Macey, 2011), such as hiring individuals with the right kind of leadership styles (Argyris, 1957) or the fairness with which managers treated subordinates (McGregor, 1960). Both objective approaches and perceptual approaches have been used to study and measure organizational climate (Siegel & Kaemmerer, 1978). Studies using the objective approach focused on factors that vary among organizations, such as organizational size and different levels of authority (Evan, 1963; Prien and Ronan, 1971). One of the first studies using the perceptual approach was facilitated by Litwin and Stringer’s (1968) design of a questionnaire that measured employees’ perceptions about different variables in the

workplace, including structure, responsibility, reward, risk, warmth, support, standards, conflict, and identity (Gray, 2007). The perceptual approach of studying organizational climate tends to be favored when studying organizational climate (Siegel & Kaemmerer; Yoo, Huang, & Lee, 2012).

Gaining an understanding of organizational climate became more focused by 1975. Based on research to that point, Schneider (1975) concluded that in order for research on organization climate to be measurable and meaningful, researchers must identify the type of organizational climate that is being study, and the climate's facets must also be specified. Examples of studies on different organizational climates include the following: climate for service (Schneider, Parkington, & Buxton, 1980), ethical climate (Victor & Cullen, 1987, 1988), and climate for innovation (Siegel and Kaemmerer, 1978), and climate for creativity (Amabile et al., 1996).

An article written by Amabile et al. (1996) discussed innovation in some detail but primarily focused on the aspects of a creative climate and its inter-relationship with innovation. Their research and the resulting survey instrument, nevertheless, have been used in other studies involving a climate of innovation. In the 1996 article, five factors were identified that encourage innovation: (1) risk-taking must be encouraged and valued by leadership; (2) ideas must be evaluated fairly; (3) the importance of innovations must be recognized and rewarded; (4) ideas must easily move across the structures in the organization; and (5) participatory management and decision-making must be a routine way of doing business.

An innovative organization is one that is oriented toward promoting and assisting its members to effectively use their creativity as part of their overall function in solving organizational problems and attaining organizational goals (Siegel & Kaemmerer, 1978). The organizational climate in innovative organizations (an innovative climate) has been found to mediate the relationship between transformational leadership and employees' innovative behavior (Naami & Asadi, 2011). Research has also shown that work climates tend to be supportive of innovation when there is a positive relationship between the organizational climate and a leader's expectations for employees' innovation (Scott and Bruce, 1994). Leaders can also affect an innovation climate through their behavior, such as reflecting on actions, i.e., self-monitoring (Kazama, Foster & Hebl, 2002) and developing high levels of trust (Scott & Bruce, 1994).

Dimensions of an Innovation Climate. To study innovative organizations, Siegel and Kaemmerer (1978) identified five dimensions of an organization's innovation climate: leadership, Ownership, Diversity, Continuous Development, and Consistency. These are discussed below.

Leadership. The type of leadership that is typical in innovative organizations is one that supports the development of new ideas throughout the system, diffuses power, supports personal development and decentralizes authority (Siegel & Kaemmerer, 1978, p. 554). Leaders support the development of new ideas by setting innovation goals creating processes (Drazin, 1999) and reward mechanisms (Mumford & Gustafson, 1988) that enhance employees' intrinsic motivation (Avolio, Bass, & Jung, 1999). In effect, leaders act as a facilitator of innovation (Denti & Hemlin, 2012).

Ownership. In innovative organizations, individuals feel that they have ownership in what goes on in their jobs and in the organization (Siegel & Kaemmerer, 1978). They are given individual autonomy so that they free to develop new processes and procedures. In other words, they do not just rely on others to come up with solutions (Siegel & Kaemmerer, 1978). This type of ownership is sometimes referred to psychological ownership. Individuals experience psychological ownership when they feel a sense of ownership to either a tangible or intangible object (Pierce, O'Driscoll & Coghlan, 2004). In organizations this type of ownership can also be a result of different experiences, such as participating in decision making (Pierce, O'Driscoll, & Dirks, 2001; Rousseau and Shperling 2003). When employees feel they have an ownership in the organization's systems, processes, and outcomes, their tacit sharing of knowledge, new ideas and creative ways of accomplishing simple and complex tasks is enhanced (Han, Chiang & Chang, 2010). This type of sharing can make the difference between a static organization and one that makes make innovative changes that keep pace with an ever-changing world economy.

Ethical leadership has also been shown to have a correlation with job autonomy (Kalshoven, Den Hartog, & de Hoogh, 2013). When leaders trust followers to experiment with different ways of completing tasks (Oldham & Cummings, 1996), they are more willing to reciprocate by showing initiative. Initiative is a broader concept than voice because it is proactive in nature. Follower initiative is exhibited when they look for creative ways to solve problems and also contribute ideas for improving organizational efficiency and effectiveness (Van Dyne & LePine, 1998).

Diversity. Individuals in innovative organizations continually question existing systems and experiment with different ways to solve problems; diversity of opinions is also encouraged (Siegel & Kaemmerer, 1978). Diversity, such as having individuals with different backgrounds, can create conflict in the organizations and communication difficulties. It can, though, also enhance creativity, create opportunities for finding new solutions to problems (Williams & O'Reilly, 1998), and increase the quality of innovations (Rogelberg & Rumery, 1996).

Continuous Development. Because change is ongoing, in innovative organizations there is a commitment to continuous development. Individuals are encouraged to continually question what is and to experiment with different ways of accomplishing the strategic goals of the organization (Siegel & Kaemmerer, 1978). Unlike individuals in many organizations who may become frustrated by the continuous experimentation and the associated system changes when innovations are adopted, individuals in an innovative climate successfully cope with these occurrences.

Job autonomy is also an important element of continuous development (Anand, Chhajad, & Delfin, 2012). Job autonomy means that employees feel that they have a say in how day-to-day activities are carried out (Hackman & Oldham, 1976). Although job autonomy should not be limitless, employees must feel that they are empowered to make proactive changes in their daily activities in order to be committed to an organization's continuous efforts (Anderson, Rungtusanathan & Schroeder, 1994; Thamizhmanii & Hasan, 2010).

Trust is another element of continuous development efforts. In order for continuous development to become part of the organizational fabric, trust must not flow in only one direction. Leaders must trust employees to make responsible decisions and employees must trust that leaders will listen to their ideas and provide an environment that is conducive to risk taking if they initiate changes (Anand et al., 2012; Anderson et al., 1994; Thamizhmanii & Hasan, 2010). Leaders must also give clear directions and ensure that employee goals are consistent with the goals of the organization (Thamizhmanii & Hasan, 2010).

Employee fulfillment is another aspect of continuous improvement. According to Anderson et al. (1994), this concept is compatible with McGregor's (1960) Theory Y Leadership. Theory Y is based on the precepts that employees like to work, are motivated by work they find enjoyable and are willing to take responsibilities for the outcomes of the work they contribute. Leadership that is conducive to making continuous improvement efforts successful in an organization is also effective in motivating employees to take part in change effort. This type of leadership tends to be more transformational than transactional because of its inspirational nature (Anderson et al.). Transformational leadership, along with its ethical component, also recognizes the importance of helping followers' meet their fulfillment needs, which better ensures in meeting organizational outcomes (Hetland, Hetland, Andreassen, Pallesen, & Notelaers, 2011).

Consistency. In innovative organizations, employees are as much concerned about the way things are accomplished as they are with the accomplishment (Siegel & Kaemmerer, 1978). This concern stems from a realization that when activities are carried

out in a haphazard or uncaring way, they may conflict with organizational objectives.

This can result in consequences that are unexpected, unintended and unwanted.

Consistency also involves the type of continuous learning and development described above. Continuous learning and improvement are essential elements if a) organizations want to successfully cope with economic uncertainties, and b) have the innovation capacity to stay ahead of the rate of change that is occurring in today's marketplace (Buckler, 1996, p. 38).

Ethical Leadership

Interest in defining and understanding the different aspects of leadership is not new. The study of leadership dates back to early civilization, but two of the themes have remained constant, whether the leader was an Egyptian ruler, biblical patriarch, or contemporary chief executive (Stone & Patterson, 2005). The first is that leaders attempt to influence others, and the second is that they have power sufficient to encourage follower obedience (Wren, 1985).

Over the past 100 years, studies on leadership have continued to evolve, yet the concept of leadership continues to be somewhat elusive and difficult to define (Carroll & Levy, 2008). Early studies focusing on the traits and characteristics of leaders provided valuable insight about leadership; however, newer research has emphasized a more encompassing view of the field of leadership and how it should be defined and examined (Avolio, Walumbwa, & Weber, 2009). Newer research on leadership includes correlational and causal studies on followers, for profit and non-for-profit organizations, and different types of leadership.

Two leadership constructs tend to run parallel and sometimes overlap with ethical leadership: transactional leadership and transformational leadership. In terms of ethics, there is often a relationship between the three constructs (Brown et al., 2005). Therefore, a brief overview of each follows.

In the late 1970s, transactional leadership and its incremental approach to improving organizational performance became the focus of research efforts (Behling & McFilin, 1996; Hunt, 1991). Transactional leadership is considered to be the most prevalent style of leadership practiced today (Avolio, Waldman & Yanimarina, 1991; Seltzer & Bass, 1990). It tends to be bureaucratic in nature and leaders motivate followers by rewarding their compliance through an exchange process (Tracey & Hinkin, 1994). The focus of this leadership style also tends to more on day-to-day activities, rather than on longer term goal setting and organizational improvements (Crosby, 1996).

As important as leadership is in follower's day-to-day activities, today's research also includes an emphasis on the more motivational aspect of leadership. It is this motivational aspect that has spurred the interest of research into other theories of leadership, including transformational leadership. Stone and Patterson (2005) assert that it was Douglas McGregor's (1960) Theory X and Theory Y that provided a foundation for transformational leadership theories. Under McGregor's Theory Y, people's creativity and self-management can be better motivated through their values and interests, such as taking on more responsibility, than by motivating them through control mechanism (Theory X). It was Burns (1978), however, who actually introduced the concept of a transforming style of leadership. The development of transformational leadership continues today, and because of its emphasis on "intrinsic motivation and the positive

development of followers” (Bass & Riggio, 2006, p. xi), it has become a favored approach in research involving different leadership theories and their applications in different organizational settings.

The influence of leaders, whether they are more transactional or transformational, can bring about positive follower behavior and organizational impacts. There are, though, boundaries that leaders must stay within to ensure that there are more positive than negative impacts (Tucker & Russell, 2004). This is where the ethical dimension of leadership becomes important. In terms of normative theory, ethics sets the parameters and general outline of what society will accept as right or wrong when dealing with or trying to solve simple to complex problems (Frankena, 1963)

Two theoretical perspectives on ethics are important in leadership research: deontology and teleology (Frankena, 1963). The first is a theory of obligation; the second focuses on the outcomes or consequences of people’s actions. Under the deontological perspective people are expected to exhibit good behavior to themselves and when dealing with others. In terms of teleological perspective, people’s actions are thought to be ethical if their actions produce more good than bad results. There are underpinnings of these perspectives in determining whether a leader’s actions are ethical and whether that person is a good or bad leader (Frankena, 1973; Ponnu & Tennakon, 2009).

Research shows that both transformational and transactional leadership styles have different, but still, ethical applications (Kunungo, 2001). Under both leadership styles, ethical leaders refrain from behaviors that are harmful to others and act in ways that encourage beneficial behavior in others. Transformational leadership tends to be more deontological in nature and as such, transformational leaders often reflect more of

an “organic worldview” (p. 257) than that of transactional leaders. In other words, there is more flexibility in how goals are to be accomplished. Motivations behind the behaviors of both styles tend to be altruistic in nature; however, the motives of each are different. The motives of transformational leaders have been shown to be more *morally altruistic*, whereas the motives of transactional leaders are more *mutually altruistic* and teleological in nature (2001).

Although the different leadership theories have brought greater awareness about different aspects of leadership, such as traits of leaders and behaviors that tend to motivate followers, they have often ignored or failed to highlight the importance of the ethical dimension of leadership (Burnes & By, 2012). According to Ciulla (1995), the emphasis on the ethical dimension needs to be intentional and not through happenstance. Leadership is more than a set of knowledge skills, and abilities; it involves deliberately making decisions based on doing the right thing (Kodish, 2006). Brown and Trevino (2002) state this intentional emphasis should include an intentional promotion of ethical behavior. They define ethical leadership as “the demonstration of normatively appropriate conduct through personal actions and interpersonal relationships, and the promotion of such conduct to followers through two-way communication, reinforcement and decision-making” (p. D1).

An emphasis on the behavioral aspects of ethical leadership can be ascertained by focusing on the different elements in Brown and Trevino’s (2002) definition. The first portion of the definition emphasizes the social learning aspect (Bandura, 1976, 1986) of ethical leadership because through their behavior, they directly and indirectly influence others (Yukl, 2002). The influence process of ethical leadership comes through modeling

standards of behavior, such as honesty and trustworthiness, which followers believe are appropriate to the organizational culture. In some cultures, followers might want overt leadership behavior when something occurs that followers believe is wrong. In other cultures, publicly speaking out on an issue would not be seen as necessary or appropriate.

The second portion of the ethical leadership definition suggests that ethical leadership encourages ethical conduct through communication where leaders not only talk, but they also listen and then consider these inputs in their decision-making process. Consequences of decisions are also taken into consideration. In the accountability arena, ethical leaders tend to use aspects of transactional leadership for holding others accountable for adhering to ethical standards as they carry out day-to-day activities (Brown et al., 2005).

Brown et al. (2005) state that ethical leaders use influence mechanisms that are both transformational and transactional in nature. In the transactional arena, ethical leaders set standards of conduct and performance through the use of performance appraisals and carrot and stick approaches for rewarding or punishing certain types of behavior. In the transformational arena, there are aspects that have ethical components, such as being role models for demonstrating ethical behavior that employees want to replicate and having a reputation for doing the right thing (Avolio, 1999).

Ethical leadership should be studied from a descriptive perspective, which will lead to a greater understanding about what ethical leadership is, rather than what it should be (Brown et al., 2005). Research has shown that although there is overlap between

ethical leadership and other leadership styles, including transformational and transactional leadership, there are also distinct characteristics of ethical leadership that makes it different in theory and application (Brown et al., 2005).

In ethical leadership, there is in effect both a transformational exchange and a transactional exchange process whereby employees often exceed performance expectations because of their relationship with the leader, which is based on trust and fair treatment. This transactional exchange process tends to be more of a social exchange (Blau, 1964) rather than an economic exchange (Brown et al., 2005). Blau explains it is the concept of social exchange that is in play when individuals consider and then act in ways that they believe will motivate others to voluntarily return a type of action. When leaders treat individuals in the workplace with trust and respect, they expect that they and others in the workplace will also be treated the same way.

Brown and Mitchell (2010) indicate that interest in and research about ethical leadership has grown substantially since the Brown and Trevino's (2002) definition of ethical leadership. One such article by Johnson et al. (2012) showed that ethical leadership was positively related to organizational trust. This is important because prior studies on trust indicate that when it exists in an organization, trust fosters openness in communication (Bruhn, 2001), increases employees' job satisfaction (Shockley-Zalabak, Ellis, & Winograd, 2000), and encourages innovative behaviors, including employee risk-taking that are essential for innovations to take root in an organizations (Tan & Tan, 2000).

Research has also shown that when ethical leaders encourage more job autonomy in the workplace, there is a more positive relationship with their followers' willingness to show initiative (Kalshoven et al., 2013). Brown and Trevino (2006) point to Bandura's (1976, 1986) social learning construct as an explanation for many of the outcomes of ethical leadership. Under this construct, followers are attracted to and motivated by the values and behaviors of the ethical leader who they perceive to be a credible role model. Research on ethical leadership continues to grow. Brown and Mitchell (2010) concede, however, there is still much to be learned about the antecedents and outcomes of ethical leadership.

Innovation and Ethical Leadership

The impact that leadership has on creativity is important in organizations because it goes hand-in-hand with change; and change is important for innovation. Pollard states, "Without change there is no innovation, creativity, or incentive for improvements" (1996, p. 116).

Leaders have the responsibility to handle change, create a positive work environment, and model behavior that encourages employees' creativity; these in turn help organizations compete more effectively (Kalyani, 2011). The ethical dimension of leadership would appear to be important in creating a climate that is supportive of innovation because it involves treating people in ways that are considered mutually beneficial. When individuals feel that their well-being is considered to be important, creativity tends to take root and flourish (Thiroux & Krasemann, 2007).

Not only is innovation critical to organizational success, but equally important is having leaders who demonstrate principled leadership (Seidman, 2007). Ethical leaders and the decisions that they act upon are seen as being principled and fair (Brown & Trevino, 2006). Innovations are also made easier when leaders work to develop an organizational climate that encourages employees to “to seek new opportunities, accept risk, collaborate, and commit themselves to the organization beyond self-interest” (Kalyani, 2011, p. 85). Today’s leaders and followers, however, are often encouraged and rewarded for putting their egos, self-interests, and short-term profits ahead of more sustainable outcomes and encompassing stakeholder strategies (By, Burnes, & Oswick, 2012). Enron, Arthur Andersen, and WorldCom are examples of companies that were headed by leaders who admired and encouraged creativity and innovation. The leadership in these organizations, however, failed ethically when ambition, greed and win-at-all cost mentality set in (Bello, 2012; Moncarz, Moncarz, Cabello, & Moncarz, 2006). This shows that encouraging creativity and innovation, if not done ethically, can result in the failure of individual careers and entire organizations.

Ethical leadership can be thought of in terms of applied ethics because leaders make decisions after considering and reflecting on their own values and the ethical aspects of a situation before and after making decisions (Enderle, 1987). They model this way of decision making to their followers. This reflection creates “double loop learning” (Gottlieb & Sanzgiri, 1996, p.1275). This type of learning means there is a better chance that the organizations will be more judicious and ethical in the future because it has taken time to not only consider present issues and potential ramifications, but it has also reflected on the consequences of past decisions. The pause and reflect process learning

process occurs at both the organizational level and the individual level, and each learning loop enhances the capacity of the other to think and act more ethical.

Organizations face ethical dilemmas on a daily basis, especially when they are trying to be innovative. This requires leaders whose followers perceive them as having integrity and a social conscience. Ethical leaders keep ethics at the forefront of their organizations' decision making. This is important because there are not always clear guidelines when making decisions due to the complexities and constant changes occurring in today's organizations. Organizations that can demonstrate that they have wrestled with ethical issues before making decisions generally fare better than others who haven't. This is true even when a decision is not seen as totally correct.

Gebler (2007) states respect and trust are the foundation upon which the creative process rests. In order to achieve objectives that benefit business and societal objectives, ethical behaviors are paramount. Ethical issues abound in innovation because it is so complex and encompassing; it can involve people, technology, science, marketing and finance. Ethics and innovation are at the crossroad in each of these business and educational discipline arenas (Fassin, 2000). For this reason, specific attention must be focused on ensuring that ethics are connected to decision making that involves innovation and productivity (Gebler).

When corporate leaders boost innovation through rule-breaking, it is no wonder that ethical boundaries in get blurred or ignored (Sims & Brinkman, 2003). People involved in change efforts may take a silent approach because they fear retribution or they don't want to be appear unsupportive or naïve. These negative methods emphasize

the importance of integrating ethical values into the equation. This integration is important because it is the ethical values that are held by people in organization that determine which outcomes, leadership actions, and change efforts are acceptable or unacceptable (By et al., 2012). The behaviors that are evident in different leadership styles have a significant impact on employees' perceptions of their organization's climate (Kozlowski & Doherty, 1989). This researcher found no research instrument designed to study ethical innovation. Ethical leadership, though, has been shown to have a positive relationship with an ethical climate (Mayer, Kuenzi, & Greenbaum, 2010). Additionally, an ethical climate's influence on innovation is higher when there is accompanying high levels of support for innovation within the organization (Choi, Moon, & Ko, 2013). Ethical leadership has also been shown to have a positive relationship with employees' innovative work behavior (Yidong & Xinxin, 2013). If the more negative side of creativity and innovation can be affected by a lack of ethical leadership, then it stands to reason that ethical leadership and its positive influence on individuals in an organization can have a positive relationship with an organization's innovation climate.

Literature Review Summary

Theories and research on leadership and organizational climate have been multifaceted and have been occurring over many decades. Out of this literature major requirements for the long term success of an organization have been identified. These include the ability to successfully dealing with change, the existence of both creativity and innovation, effective leadership and an organizational climate that is supportive of innovation. An innovative organization can better deal with change because it encourages individuals to use their creativity in helping to solve problems and to meet

organizational objectives. Siegel and Kaemmerer (1978) identified five dimensions of an organization with an innovation climate: leadership, ownership, diversity, continuous development and consistency.

Leaders can affect an innovative climate through their behavior (Kazama et al., 2002; Scott & Bruce, 1994). Ethical leaders model behavior that is normatively appropriate and help followers meet organizational goals through series of social exchanges (Brown et al., 2005).

Innovation by its very nature pushes boundaries and often requires decision-making that doesn't always have clear ethical guidelines. Leadership that puts ethics in the forefront of how people are treated and how decisions are made is important in these instances. Ethical leaders consider the present, past and future when making decisions (Gottlieb & Sanzgiri, 1996), and their decision making is perceived to be fair and objective (Kalshoven et al., 2013).

Innovation also requires risk-taking and a willingness on the part of followers to suggest new ways of doing things; these require trust in the leader. Research shows that ethical leadership is positively correlated with trust (Johnson et al., 2012).

A review of the literature on ethical leadership indicates that it has become a popular topic for researchers, although there are many areas that still need to be explored (Brown & Mitchell, 2010). For example, ethical leadership has been shown to have a relationship with one type of organizational climate, e.g. ethical climate. However, research appears to have been more focused on its antecedents or employee or organizational outcomes (Brown & Trevino, 2006; Mayer, Aquino, Greenbaum &

Kuenzi, 2012). There are also numerous studies involving creativity, but only a few studies on a climate for innovation (Mathisen & Einarsen, 2004). This study extends empirical research into areas that have previously not been studied together.

Chapter 3

Method

To determine whether there were positive correlations between ethical leadership and an innovative climate and each of its dimensions, a quantitative method using a cross-section survey design (Babbie, 1973) was used in this study. Ethical leadership was the used as the independent variable in all of the correlations tests. T-tests and one way analysis of variance (ANOVA) tests were used on demographic and organizational characteristics data to determine whether there were signification differences between groups. Nonparametric tests were also used to confirm the results.

The chapter is divided into three sections: sample and sampling procedures, survey instruments and data analysis. The data analysis section includes a list of statements that had to be reverse coded in each of the innovation climate dimensions. A reverse coding procedure is used when a questionnaire has both positively and negatively worded items. Some scales, such as the SSSI, use both types of statements to prevent survey response bias (Pallant, 2013). For example, a response of Significantly Agree to a statement that read “I really don’t care what happens in this organization” and “I really care what happens in this organization” are reflective of different perceptions. Therefore, the scores for the negatively worded items would be rescored. Using the scale of 1= Significantly Disagree and 5 = Significantly Agree for positively stated items, the scores

for the negatively worded items would be reversed scored, i.e. 5 = Significantly Disagree and 1 = Significantly Agree.

Sample Size

Several different sample size recommendations found in the literature were considered in determining a minimum sample size for the study. These recommendations included using the Interval Estimate of a Population Mean equation (Anderson, Sweeney & Williams, 2009), minimum size for nonexperimental design (typical) surveys (Kervin, 1992), central limit theorem (Anderson et al., 2009), and adequate size recommendations when examining relationships using the Pearson correlation efficient method (Giles, 2002; Green & Salkind, 2005). Since the Pearson Product-Moment Correlation data analysis technique was planned and later used for this study, a minimum survey size of 175 participants was deemed necessary. According to Giles (2002), this sample size ensured that the sample would be large enough to satisfy the large survey requirement for using the Pearson Correlation, (>150).

Procedure

The procedure of obtaining participants for the study consisted of two efforts: requesting permission from university staff and using an online research service. Participants were asked to complete the ELS based on their perceptions about their immediate supervisor or manager and the organization in which they worked for the SSSI. To get a sense of the participants' demographic profile, demographic variables were also included. These included gender, age ranges, ethnicity, and attained educational level, occupation, work classification, and organizational size.

The procedures for data collection are described below.

University participant procedure. Requests to administer the questionnaire in the classroom were made by using email exchanges or in-person meetings with professors or university representatives at three different types of higher education organizations: for-profit, public, and private. These requests were made after confirming that there were a significant number of students who worked while attending school.

Instructions for completing the questionnaire were given in person to participants. Participants were told that their responses were confidential and that they could request a summary of the study through the professor once it was completed. In two of the classes where written consent forms (see Appendix A) were required, these were distributed along with the questionnaire. Students were asked to complete the survey if they were employed. If they were not currently working, they were asked to put an asterisk on the front page of the questionnaire. No asterisks were shown on the questionnaires. One professor also distributed a Survey Monkey link to students who were not in the classroom at the time of the survey. Two individuals completed the survey using the link.

Online research service procedure. In order to have a sufficient number of surveys for this study, questionnaires were also sent to participants through the Toluna Survey Center (“What is,” n.d.) This company and its predecessor, Greenfield Online, have distributed surveys for organizations, such as *Time Magazine* and many universities, including Duke, University of Washington, Texas Tech, and North Western (Andrew Harvey, personal communication, July 3, 2013) and individuals in their doctorate dissertation process (Patrick Wong, personal communication, April 25, 2013).

Email exchanges and telephone calls with Toluna.com representatives were made to discuss the purpose of the study, participant criteria and the desired number of participants needed. A draft questionnaire was sent to help determine an estimate of the time it would take for participants to complete the form. The questionnaire was programmed into a format that Toluna uses for posting surveys on its website, and then panel members were either sent direct invites or were redirected from another sources (e.g. redirected from surveys for which they did not qualify) and asked to complete the questionnaire for this study. Toluna panel members earn points, which they can redeem for cash or prizes (<https://us.toluna.com>).

Toluna had procedures in place to ensure that questionnaire for a single study is not completed more than once. This is important because its panel community is over 4 million people in 39 countries (<http://www.toluna-group.com/>). Toluna ensured a demographically diverse pool that could be tapped for this study. As indicated, Toluna panelists are located in many countries, but participants for this study were limited to those in the United States.

A question regarding the number of hours worked each week was added to the questionnaire. In order to obtain online participants who worked a significant portion of the week, participant responses were terminated if they did not work at least 20 hours a week. In addition to the meeting the criteria of working at least 20 hours a week, a quality control statement was inserted between statements on the ELS and SSSI questionnaires. The control statement was added to improve the quality of the online responses by slowing down the responses and to catch contradictory answers, both which may imply that participants were not taking the questionnaire seriously (Sparrow, 2007). The

statement was as follows: For quality purposes, please select Disagree. Because the questionnaire was of considerable length, this control statement was shown four times, two times in the ELS, and two times in the SSSI. When participants marked these statements incorrectly, their questionnaire responses were terminated. They were thanked for their participation and were exited from the website (See breakdown of Toluna counts in Table 1 in Chapter 4).

Online participants' responses were also terminated if they straightlined their responses in the ELS. The ELS portion of the questionnaire was shown on one page. For example, if a participant's responses were marked "Significantly Agree" to all 10 ELS statements and the two quality control statements referred to above, the participant was thanked for participating in the survey and the survey completion was terminated.

Total number of participants/type of sample. The study sought to obtain information about how workers perceive their leaders and their organizational climate. Therefore, the population for the study could be defined as individuals who work in organizations. By the conclusion of the study, the sample included 418 participants. The participants came from two sources, undergraduate and graduate level classes at the three universities ($n = 59$) and an online research service (<https://us.toluna.com/About>) ($n = 359$). A nonrandom sampling process was used in getting the participants from the universities, and it could be argued that the survey participants from the universities constituted a convenience sample. The classes were chosen because the researcher knew that the majority of students worked while going to school, and there was willingness by the professors or university representative to allow distribution of the questionnaires in a single setting.

The majority of the survey participants, however, were a part of a larger population of online Toluna panel members. According to the American Association of Public Opinion Research (2011), online panel participants are considered to be from a nonprobability or even a self-selected sample. Although a nonprobability survey process was used, participant responses from the university students and the online panelists indicated that their perceptions represented work experiences with leaders and organizations in a variety of industry and occupations.

Survey Instruments

Two instruments, the Ethical Leadership Survey (ELS) and the Siegel Scale of Support for Innovation (SSSI) were used in their entirety. The questionnaire, which was distributed as one document, began first with demographic questions, followed by the 10 ELS statements, and then followed the 61 statements in the SSSI. The statements for each of the two instruments were kept in the same order as they were originally designed. Appendix B is the questionnaire used for participants from higher education institutions. It does not include the question related to hours worked or the data control statements that were added for quality purposes on the questionnaire used by the online panel members. Appendix C is the questionnaire used by the panel participants.

The ELS portion of the both questionnaires contained a permission statement which indicated that permission to reprint the instruments had been granted by the publisher through the Copyright Clearing Center. The SSSI portion also showed that the publisher had granted permission to reprint the instrument, and this statement also showed on both questionnaires.

Both of the original ELS and SSSI instruments have been used in other studies. In this study, the questionnaire used a Likert scale with five options. The five options were consistent with Lietz's (2010) recommendation that there should be between five to eight response options. According to Lissitz and Green (1975), the reliability of a scale, such as the Likert scale, is increased when five options (points) are used, and there is little utility gained by using more options.

The Ethical Leadership Scale (ELS) was developed by Brown and Trevino (2002) to "tap the broad content domain of ethical leadership" (para. 5). The ELS was designed using rigorous psychometric methods, and the instrument can, and has been, be used to study ethical leadership at all levels of an organization. The original instrument uses a five-point Likert scale on 10 items, i.e.: 1 = strongly disagree and 5 = strongly agree. A score of 5 on an item indicates a leader exhibits behavior that indicates a high level of ethical leadership (Brown & Trevino, 2002; Ponni & Tennakoon, 2009).

Brown and Trevino (2002) conducted in-depth interviews with executives, ethical officers, and MBA students to develop a definition of ethical leadership. Based on analyses of these interviews, a formal definition of ethical leadership was developed. This definition was used as a guide in developing a survey instrument of 148 items that was tested using a group of 154 MBA students in three large universities. Brown and Trevino then conducted an exploratory factor analysis, which allowed for correlations among factors (Fabrigar, Wegener, MacCallum & Strahan, 1999, as cited in Brown & Trevino, 2002).

Following recommendations of other researchers, a “culling process” (Brown & Trevino, 2002, p. D2) was used to reduce the 148 items to 10 items, which were included in their ELS instrument. A further exploratory factor analysis to assess the internal consistency of the questions yielded a coefficient alpha of .92, which indicated that the internal consistency of the ELS was excellent. Using additional types of analyses, including the confirmatory factor analysis and validity testing, the ELS was deemed to be both a valid and reliable instrument (p. D3).

The ELS survey instrument includes the following statements, such as “listens to what employees have to say” and “can be trusted” (Brown et al., 2005, p. 125). A review of literature and recent studies on ethical leadership has shown that it is the most used survey instrument to study the construct of ethical leadership. Unlike the other construct and instrument used in this study, ethical leadership does not contain individual dimensions. For this study, participant responses for all ten statements in the ELS survey instrument were summed; this sum total was considered the single independent variable. (The ELS portion of the Questionnaire is shown in both Appendix B and Appendix C.)

The second instrument used was the one Siegel Scale of Support for Innovation. This instrument is also shown in Appendix B and Appendix C. There are only a few research instruments that are available to examine an organization’s climate for innovation. Mathisen and Einarsen (2004) reviewed four of these: KEYS: Creative Climate Questionnaire (CCQ); Situational Outlook Questionnaire (SOQ), and Team Climate Inventory (TCI). The SOQ is the English version of the Swedish CCQ. Of the four, the SSSI most directly uses the term innovation rather than creativity; however, Amabile et al. (1996) states that the KEYS instrument is also appropriately used to

measure an organization's innovative climate because creativity produces and encourages innovation. Without creativity, innovation in organizations would cease to exist. The KEYS instrument has been used primarily in business environments.

The SSSI was designed for, and has primarily been used, to assess climates in school environments. The SSSI or subsets of its statements, however, have been used in other studies involving business environments, including Scott and Bruce's (1994) study on the relationship between innovation climate and individual innovation and Herron's (2003) study on creativity and perceived fraud risks. The SSSI was chosen for this study for three primary reasons. First, the scale items overlap those in the other instruments (Mathisen & Einarsen, 2004); however, they look to be more closely tied to innovation rather than creativity. Second, there was a high correlation among the subscales and high reliability for the overall instrument (Siegel & Kaemmerer, 1978). Third, like the ELS, it was immediately available for use without cost after permission was granted by the publishers.

The original SSSI that was piloted had 142 items. These items were correlated with the five subscales; those with the lowest correlation scores (less than .30) were dropped. Using factor analysis and a varimax-related matrix, the items were reduced to 61 items. Using exploratory factor analysis Siegel and Kaemmerer (1978) found that three factors accounted for the variance: support for creativity, tolerance of differences, and persona commitment. Support for creativity was determined to be the primary factor because it accounted for 66% of the variance. Using the Spearman-Brown prediction formula on these three factor indexes, the reliabilities were .94, .94, and .86 consecutively.

The SSSI in its present form has the 61 items referred to above; each statement has been designated one of five dimensions. The statements are not grouped in order of dimension; they are sprinkled throughout the instrument (see the dimension designation for each question in Appendix D). The items measure the participants' perceptions about the support for innovation within their organization. The original SSSI used by Siegel and Kaemmerer (1978) used a six-point Likert-scale response format that ranged from strongly agree to strongly disagree. In an effort to be consistent with the ELS instrument portion of the questionnaire, a five-point scale was used for the SSSI portion. Herron (2012) also used the five-point scale for the SSSI in his research study.

The five dimensions of an organization's innovation climate identified by Siegel and Kaemmerer (1978) include the following: Leadership, Ownership, Diversity, Continuous Development, and Consistency. The responses to the statements for each of the dimensions were summed as separate totals, and each of the totals were considered separate dependent variables. The statements for each of the dimensions were used as the basis for five of the stated hypotheses.

Data Analysis

Since this study used a cross-section survey method to collect data, a Likert-type scale was used. Although there are other types of scales, such as the semantic differential scale, according to Cook, Hepworth, Wall and Warr (1981), Likert type scales are generally preferred for survey research. Likert responses are considered to be continuous (interval) data, from which researchers can compute the mean, standard deviation, and other statistical analyses using the data (Holton & Burnett, 2005). Also, since the study primarily looked at the association between quantitative variables, two correlation data

analysis methods were used to test the hypotheses: the Pearson Product-Moment Correlation Coefficient and Spearman Correlation Coefficient, often referred to as Spearman's rho (Field, 2013; Green & Salkind, 2005). Both tests evaluate the data to see whether there is a linear relationship between the independent and dependent variables and also tests the strength of that relationship (Green & Salkind, 2005). The correlation range is between -1 and +1. If the correlation sign is positive, there is a positive relationship between the variables. A negative sign indicates a negative relationship (Holton & Burnett, 2005).

Although Ponnu and Tennakoon's (2009) correlational research on ethical leadership did not encompass variables that included innovative climate, a similar data analysis process was used for this study. By summing the response totals for each of the surveys, they developed two variables that facilitated the process of analyzing the relationship between the two constructs (2009). In other words, they created a variable total for the Ethical Leadership Scale and a total variable for the Trust Survey. Pearson Product-Moment and Spearman's rho correlations were then run on these new variables to show whether there was a correlation between the two variables. In this study, a total for the Ethical Leadership Scale and a total for the Siegel Survey for Innovation Instrument (SSSI) were used to run the correlational analysis. A similar method was used for each of the five innovation climate dimensions.

The questionnaires that were completed by university participants were entered into SurveyMonkey. In order to have a complete data set for statistical analysis, the school data was merged with the Toluna participant data in the Statistical Package for the Social Sciences (SPSS), Statistics Base Grad Pack, Version 22.

Only panel members who did not fail the data quality tests and who completed all data values were considered “participants” in this study. Only two questionnaires from the schools had missing data values. Missing data was analyzed for system or input error or blank responses on the part of the participants. Due to the small number of blank responses, they were not recoded in SPSS. These questionnaires were deleted from the correlation analyses using the listwise function in SPSS. The data, including outliers, were reviewed for possible errors due to entering or merging the participant obtained in the classroom with those from the Toluna panel participants.

Statistics, including frequencies, dispersion, central tendency and distribution, and statistical tests were completed using the SPSS Version 22. This statistics were reviewed, along with a visual analysis, histograms, and normal tolerance tests were used to determine whether parametric or nonparametric tests should be used.

Demographic data and work characteristics were collected to see whether these had an impact on survey results. These included the ethnicity, age, and gender of participants and industry and occupational areas in which participants worked, the length of time they had worked for their organization and in their present position, the size of the organization for which they worked, and the gender of the participant’s leader.

Although this study used the perceptual approach to study the constructs of ethical leadership and innovative climate, studies using objective factors, such as organizational size and different levels of authority, have also shown that leadership affects organizational climate (Evan, 1963; Prien and Ronan; 1971). There have also been studies showing conflicting results involving the gender of leaders. For example,

Schminke, Ambrose, and Miles (2003) found that gender was a factor in how they perceived the ethics of other individuals. Prime, Carter, and Welbourne (2009) found that respondents perceived that women exhibited more effective caring taking behaviors and men exhibited more action oriented behaviors. The same study found that respondent males perceived that men outperformed women in problem solving. In Salome's (2009) study, however, the majority of participants did not perceive that their manager's gender affected their job satisfaction or that females were better communicators. The majority of the participants did not believe there was a difference in the leadership of males and females.

Other individual differences, such as one's social culture when one is working in another country (Kuntz, Kuntz, Elenkov, & Nabirukhina (2013) and age (e.g. Generation Y compared to other age groups (VanMeter, Grisaffe, Chonko, & Roberts, 2013) have also been found as factors that contribute to individuals' experiences with ethical leadership, ethical ideologies, judgments and actions in organizations. These studies and those discussed in the paragraph above were the primary impetus for including many of the survey questions involving individual and work characteristics.

Due to the skewness of the data, both the parametric Pearson Correlation and nonparametric Spearman rho were used in the correlational analysis (Field, 2013). In comparing the means of different groups, the parametric t-test and one-way ANOVA tests were used. According to Paulson (2003), the t-test is quite robust, but if there is considerable difference in the size of the groups being tested, the t-test is less reliable. Also, as indicated before, there was considerable skewness and kurtosis in the distributions for some of the variables, e.g. ethical leadership. Therefore, the Mann

Whitney U, a nonparametric test, was also used to confirm the results of the t-test. The Mann Whitney U looks at the medians rather than the means to make this determination (Field, 2013).

To avoid inflating a Type I error rate when there were large differences of sample sizes used in the comparisons, Brown-Forsythe F-ratio (1974) and Welch's F (1951) corrections in SPSS were used as recommended by Field (2013). Additionally, following the procedure Field (2013) recommended, a Bonferroni correction for the t-tests and ANOVA was used to ensure that a cumulative Type I error rate remained at $p < .05$ level of significance. To complete a Bonferroni correction, the .05 level of significance is divided by the number of comparisons being made, i.e. .05 was divided by 7, which included ethical leadership, innovative climate and the five dimensions. The Levene test was used to test whether groups had statistically significantly different variances; variances of $p < .05$ were considered significant. When there was a statistically significant difference between groups in the ANOVA tests, the Games-Howell post hoc test was used to determine where the differences were (Field, 2013).

The R-square for each of the correlations was determined by either squaring the correlation or running linear regression for the independent and dependent variables (Field, 2013). A cross-match analysis was used to show the gender of the participants in comparison to the gender of their leader, and then separate Spearman rho tests were used to analyze the variables to check for differences in the correlations.

Reverse coding. The five dimensions of Innovative Climate (Siegel & Kaemmerer, 1978) were also summed to create dimension totals, which were used as

dependent variables. To accomplish this, there were several responses within each dimension that needed to be reverse coded. The dimension statements (verbatim) from the SSSI that were reverse coded are listed below.

Leadership dimension.

- The people in charge around here usually get credit for others' ideas.
- There is one person or group here who assumes the role of telling others what to do.
- Persons at the top have much more power than persons lower in this organization.
- The leadership acts as if we are not very creative.
- Most people here find themselves at the bottom of the totem pole.
- One individual is usually the originator of ideas and policies in this organization.
- In this organization, the power of final decision can always be traced to the same few people.
- Others in our organization always seem to make the decisions.
- The leaders "pets" are in a better position to get their ideas adopted than most others.
- The main function of members in this organization is to follow orders that come down through channels.

Continuous development dimension.

- This place seems to be more concerned with the status quo than with change.
- Once this organization develops a solution to a particular problem, that solution becomes a permanent one.
- There is little room for change here.

Ownership Dimension.

- I really don't care what happens to this organization.
- In this organization we tend to stick to tried and true ways.
- Nobody asks me for suggestions about how to run this place.
- These aren't my ideas, I just work here.

Consistency dimension.

- People talk a lot around here, but they don't practice what they preach.
- Sometimes the way things are done around here makes matters worse, even though our goals aren't bad.
- The leaders in this organization talk one game but act another.
- Work in this organization is evaluated by results, not how they are accomplished.

Norms for Diversity Dimension.

- People around here are expected to deal with problems in the same way.
- A person can't do things that are too different around here without provoking anger.

- A motto of this organization is “The more we think alike, the better job we will get done.”
- The best way to get along in this organization is to think the way the rest of the group does.
- Creative efforts are usually ignored here.
- Around here, a person can get into a lot of trouble by being different.

Chapter 4

Results

This study was designed to explore possible relationships between ethical leadership and organizational climate for innovation and each of its five dimensions. The participants in the study came from two sources, instructors and Bachelor- and Masters-level students involved in courses at three Oregon universities and panel members from an online research company. To qualify for the study, participants were required to indicate that they worked for an organization. The following hypotheses were tested in this study:

Hypothesis H_{a1}: There is a positive relationship between ethical leadership and an organization's overall innovation climate.

Hypothesis H_{a2}: There is a positive relationship between ethical leadership and the leadership dimension of innovation climate.

Hypothesis H_{a3}: There is a positive relationship between ethical leadership and the ownership dimension of innovation climate.

Hypothesis H_{a4}: There is a positive relationship between ethical leadership and the diversity dimension of innovation climate.

Hypothesis H_{a5}: There is a positive relationship between ethical leadership and the consistency dimension of innovation climate.

Hypothesis H_{a6}: There is a positive relationship between ethical leadership and the continuous dimension of innovation climate.

Of the 418 participants in the study, 59 were from the schools and 359 were from the online research company. The number of online panel members who started the questionnaire was much higher than the 359 who completed it. Table 1 gives a breakdown of the reasons panel members who were not considered “completes” i.e. participants for the study.

Table 1.

Online Participant Breakdown Compared to Surveys Started

Online Participant Breakdown	Number Reported	% of Survey Started (Rounded)
Surveys started	1458	
Survey terminated:		
Incomplete surveys	235	16.12
Quota full	18	1.23
Duplicate-Email or ID already existed	1	.07
Age < 18	1	.07
Hours Worked < 20 hours per week	595	40.80
ELS straightlined	70	4.80
Quality Statements Incorrect on ELS	154	10.56
Quality Statements Incorrect on SSSI	<u>25</u>	<u>1.71</u>
Total “Completes”	359	24.62

Note: Direct invitations were sent to 14,771 panel members. Of the 359 “Completes”, 317 were from direct invites. Adapted from TolunaAnalytics and personal communication with Toluna representative, January 31, 2014.

The frequency count for participants' ethnicity showed five American Indian or Alaskan Native, 30 Asian or Pacific Islander, 27 Black or African American, 21 Hispanic or Latino, and 344 White/Caucasian. The total count was 427, rather than the number of participants ($n = 418$) because participants could choose more than one ethnicity.

Demographic data for the participants is displayed in Table 2.

Table 2
Profile of participants ($n = 418$)

Demographic characteristics	Frequency	Percentage
Industry type		
Advertising & Marketing	5	1.2
Agriculture	7	1.7
Airlines & Aerospace (including Defense)	4	1.0
Automotive	9	2.2
Business Support & Logistics	27	6.5
Construction, Machinery, and Homes	24	5.7
Education	45	10.8
Entertainment & Leisure	14	3.3
Finance & Financial Services	22	5.3
Food & Beverages	32	7.7
Government	21	5.0
Healthcare & Pharmaceuticals	39	9.3
Insurance	12	2.9
Manufacturing	47	11.2
Nonprofit	18	4.3
Retail & Consumer Durables	51	12.2
Real Estate	9	2.2

Telecommunications, Technology, Internet & Electronics	25	6.0
Utilities, Energy, and Extraction	6	1.4
Total	417	99.8
System	1	.2

Occupations

	Frequency	Percent
Management Occupations	43	10.3
Business and Financial Operations Occupations	30	7.2
Computer and Mathematical Occupations	22	5.3
Architecture and Engineering Occupations	7	1.7
Life, Physical, and Social Science Occupations	6	1.4
Community and Social Service Occupations	6	1.4
Legal Occupations	5	1.2
Education, Training, and Library Occupations	32	7.7
Arts, Design, Entertainment, Sports, and Media Occupations	9	2.2
Healthcare Practitioners and Technical Occupations	19	4.5
Healthcare Support Occupations	9	2.2
Protective Service Occupations	6	1.4
Food Preparation and Serving Related Occupations	23	5.5
Building and Grounds Cleaning and Maintenance	3	.7

Personal Care and Service Occupations	10	2.4
Sales and Related Occupations	64	15.3
Office and Administrative Support Occupations	69	16.5
Farming, Fishing, and Forestry Occupations	5	1.2
Construction and Extraction Occupations	13	3.1
Installation, Maintenance, and Repair Occupations	9	2.2
Production Occupations	16	3.8
Transportation and Materials Moving Occupations	12	2.9
Total		

Number of employees

	Frequency	Percent
01-19	79	18.9
20-99	85	20.3
100-499	90	21.5
500-plus	164	39.2
Total	418	100.0

Department type

	Frequency	Percent
Accounting	191	45.7
Administrative	55	13.2
Customer Service	51	12.2
Marketing	7	1.7
Operations	38	9.1
Human Resources	12	2.9
Sales	43	10.3
Finance	4	1.0
Legal	5	1.2
Engineering	1	.2
Manufacturing	1	.2
Public Relations	1	.2
Other	5	1.2
Total	414	99.0

System	4	1.0
Total	418	100.0

Length in Current Position

	Frequency	Percent
Less than 3 months	22	5.3
3 to 12 months	64	15.3
1 to 3 years	82	19.6
3 to 5 years	80	19.1
5 to 10 years	77	18.4
10 to 20 years	51	12.2
More than 20 years	42	10.0
Total	418	100.0

Length in Current Organization

	Frequency	Percent
Less than 3 months	29	6.9
3 to 12 months	79	18.9
1 to 3 years	107	25.6
3 to 5 years	70	16.7
5 to 10 years	67	16.0
10 to 20 years	38	9.1
More than 20 years	28	6.7
Total	418	100.0

Age

	Frequency	Percent
18-20	18	4.3
21-29	187	44.7
30-39	39	9.3
40-49	38	9.1
50-59	73	17.5
60 or older	63	15.1
Total	418	100.0

Education Level Completed

	Frequency	Percent
Did not graduate from high school	4	1.0
Graduated from high school	62	14.8

1 year of college	28	6.7
2 years of college	53	12.7
3 years of college	49	11.7
Graduated from college	143	34.2
Some graduate school	29	6.9
Completed graduate school	50	12.0
Total	418	100.0

One-way ANOVA tests were completed on organizational characteristics data.

The tests failed to show statistically significant differences for the following characteristics: occupation, department, and length of time in current job and in organization. There were also no statistically significant differences in groups using age and levels of education characteristics.

For the industry characteristics, Consistency was the only variable where there was a statistically significant difference in groups. Using a .007 significance level, the Games-Howell post hoc tests revealed that the 24 participants who worked in the Construction, Machinery, and Homes were significantly different at $p = .006$ than the 32 participants who worked in the Food and Beverage industry; this means that Consistency received higher ratings on the average from Construction, Machinery, and Homes ($M = 24.625$, $SD = 3.645$) than Food and Beverage ($M = 19.844$, $SD = 4.451$).

The one-way ANOVA test failed to show statistically significant differences for most of the groups using category for number of employees. These results were confirmed using the nonparametric Kruskal-Wallis (1952, Field, 2013) test. However, using the Bonferroni correction for $p = .05$, i.e. a .007 significance level, the Games-Howell post hoc test showed that there were significant differences between groups on

several different variables. The mean and standard deviation differences are shown below.

- For Ownership: The results for the 79 participants who worked in an organization where there were 1-19 employees ($M = 60.20$, $SD = 11.539$) at $p = .001$ were statistically significantly different than the 163 participants who worked in organization where there were 500 or more employees ($M = 54.03$, $SD = 10.746$) at $p = .001$. This means that Ownership received higher ratings on the average from participants who worked in smaller organizations.
- For Norms of Diversity, the results for the 79 participants who worked in an organization where there were 1-19 employees ($M = 31.42$, $SD = 5.830$) were significantly different than the following: the 85 participants who worked in organizations where there were 20-99 employees ($M = 28.17$, $SD = 6.071$) at $p = .003$, the 89 participants who worked in an organization where there were 100-499 employees ($M = 27.73$, $SD = 6.515$) at $p = .001$, and the 163 participants who worked in an organization where there were 500 or more employees ($M = 28.56$, $SD = 6.638$) at $p = .004$. This means that Norms of Diversity received higher ratings on the average from participants working in smaller organizations than those in larger organizations.
- For Leadership, the results for the 79 participants who worked in an organization where there were 1-19 employees ($M = 64.25$, $SD = 13.722$) were significantly different than the following: the 89 participants who worked in an organization where there were 100-499 employees ($M = 56.57$, $SD = 11.967$) at $p = .001$ and the 163 participants who worked in an organization where there were 500 or more

employees ($M = 57.42$, $SD = 13.170$) at $p = .002$. This means that Leadership received higher ratings on the average from participants who worked in smaller organizations.

- For Consistency, the results for the 79 participants who worked in an organization where there were 1-19 employees ($M = 24.57$, $SD = 5.158$) were significantly different than the results for the 89 participants who worked in an organization where there were 100-499 employees ($M = 21.76$, $SD = 5.036$) at $p = .003$. This means that Consistency received higher ratings on the average from participants who worked in smaller organizations.
- For Innovative Climate, the results for the 79 participants who worked in an organization where there were 1-19 employees ($M = 215.78$, $SD = 39.876$) were significantly different from the following: the 89 participants who worked in an organization where there were 100-499 employees ($M = 193.92$, $SD = 38.015$) at $p = .002$ and the 163 who worked for an organization where there were 500 or more employees ($M = 196.54$, $SD = 37.684$) at $p = .003$. This means that Innovative Climate received higher ratings on the average from participants who worked in smaller organizations.

Independent samples t-tests were completed to compare the means in the data for the male and female participants and Toluna online participants and participants from the universities. The group size for males ($n = 213$) and females ($n = 203$) were fairly equal, however, the group size for the university participants ($n = 57$) was considerably different than the Toluna online group ($n = 359$). The independent samples t-test failed to reveal a statistically reliable difference between the means of the participant group who came

from the two sources. This was also true for the results of the independent samples t-test for male and female participant groups. These results were confirmed using nonparametric Mann Whitney U tests.

Participants' data was also divided into the following two groups using the select cases feature in SPSS: 1) male and female participants who had a male leader and 2) male and female participants who had a female leader. The Spearman rho one-tailed test was performed on data showing male and female participants who had a male leader ($n = 264$), and then the same test was used again on data showing male and female participants who had a female leader ($n = 154$). The results showed significant positive correlations between the variables, however, the correlations were higher for participants who had a male leader.

Using the same variables as were used for the entire data, the comparative r_s correlation results were as follows: Ethical leader/Innovation climate ($n = 264, r_s 0.65$ versus $n = 154, r_s 0.62, p < .01$), ethical leadership/continuous development ($n = 264, r_s 0.66, p < .01$ versus $n = 154, r_s 0.49, p < .01$), ethical leadership/ownership ($n = 264, r_s 0.70, p < .01$ versus $n = 154, r_s 0.60, p < .01$), ethical leadership/norms for diversity ($n = 264, r_s 0.44, p < .01$ versus $n = 154, r_s 0.46, p < .01$), ethical leadership/leadership ($n = 264, r_s 0.57, n = 154, r_s 0.62, p < .01$), and ethical leadership/consistency ($n = 264, r_s 0.51, p < .01$ versus $n = 154, r_s 0.53, p < .01$).

As indicated above, the Spearman's rho correlations were different for the group who had a male leader compared to the group who had a female leader. Independent t-test showed no significant difference in the means of the two groups. However, the

Levene's statistic test was also completed for the data. The p values shown in the Levene's test for each of the variables were as follow: ethical leadership (0.027), continuous development (0.240), ownership (0.699), norms for diversity (0.016), leadership (0.553), consistency (.808), and innovative climate (.893). According to the Levene's statistic, equality of variances for the groups' responses was found to be significant at $p < .05$ for ethical leadership and norms for diversity. The null hypotheses would be that there would be an equality of variances between the two groups. Given the respective p values, the null hypotheses must, therefore, be rejected for ethical leadership and norms of diversity.

Table 3
Crosstabulation of gender of participant compared to the gender of their leader

Gender of Participants	Gender of Leader		Total Count
	Male	Female	
Male	178	35	213
Female	86	119	205
Total	264	154	418

Table 4
Descriptive Statistics for Groups by Leader's Gender

Variable	Leader's		Mean	Standard Deviation
	Gender	Sample Size		
Ethical Leadership Total	Male	264	38.4015	7.7938
	Female	154	37.9221	9.2401
Continuous Development Total	Male	264	33.7538	7.0065
	Female	152	34.3092	6.6783
Ownership Total	Male	264	55.8902	11.4702
	Female	152	54.7368	11.8079
Norms for	Male	264	28.7727	6.15588

Diversity	Female	152	28.9671	6.97053
Total				
Leadership	Male	264	58.9659	13.00142
Total	Female	152	58.3026	13.78118
Consistency	Male	264	22.6705	4.95928
Total	Female	153	22.7190	5.09316
Innovative	Male	264	200.0530	38.94118
Climate Total	Female	152	199.0789	39.99512

Participant responses for each of the following were summed and used in testing the hypotheses as follows: all 10 statements on the ELS for Ethical Leadership; 10 statements for the Continuous Development dimension; 16 statements for the Ownership dimension; 6 statements for the Norms of Diversity dimension; 19 statements for the Leadership Dimension; 7 statements for the Consistency dimension, and all 61 statements on the SSSI for Innovative Climate (see Appendix B).

Two bivariate correlation tests were used to test the hypotheses, the Pearson correlation and Spearman's rho correlation (See Tables 6 and 7). The sample size $n = 416$ (after SPSS listwise deletions) exceeded the minimum sample size to use the Pearson correlation test ($n = 150$). The data, however, showed a negative skew and both positive and negative kurtosis (See Table 5).

Table 5
Statistics for the data

		Ethical Leadership Total	Continuous Development Total	Ownership Total	Norms for Diversity Total	Leadership Total	Consistency Total	Innovative Climate Total
<i>n</i>	Valid	418	416	416	416	416	417	416
	Missing	0	2	2	2	2	1	2
Mean		38.22	33.96	55.47	28.8438	58.7236	22.6882	199.6971
Median		39.00	35.00	57.00	29.0000	60.0000	23.0000	201.0000
Mode		40	36	58 ^a	27.00	65.00	20.00	197.00 ^a
Std. Deviation		8.348	6.886	11.594	6.45780	13.27895	5.00276	39.28425
Variance		69.690	47.410	134.418	41.703	176.331	25.028	1543.253
Skewness		-.944	-.449	-.440	-.194	-.293	-.012	-.341
Std. Error of Skewness		.119	.120	.120	.120	.120	.120	.120
Kurtosis		.915	.114	-.083	-.194	.181	-.305	.106
Std. Error of Kurtosis		.238	.239	.239	.239	.239	.238	.239
Sum		15978	14126	23075	11999.00	24429.00	9461.00	83074.00

a. Multiple modes exist. The smallest value is shown

Although some of the variables showed skewness and kurtosis statistics that were close to zero (i.e. a normal distribution in SPSS) (Field, 2013), the Ethical Leadership Total in particular did not. A visual examination of the shape of the distributions (See Figures 1 through 7 below.) showed that the majority of participant scores on the Ethical Leadership Total were in the middle to upper end of the scale, resulting in a skewness of -0.944 and kurtosis of 0.915. Using a visual review and calculations of skew/2*standard error of skew or kurtosis/2*standard error of kurtosis (Brown, 1997; Field, 2013) and skew/3*standard error of skew (Onwuegbuzie & Daniel, 2002), it was determined that a non-parametric correlation test should also be used to test the hypotheses.

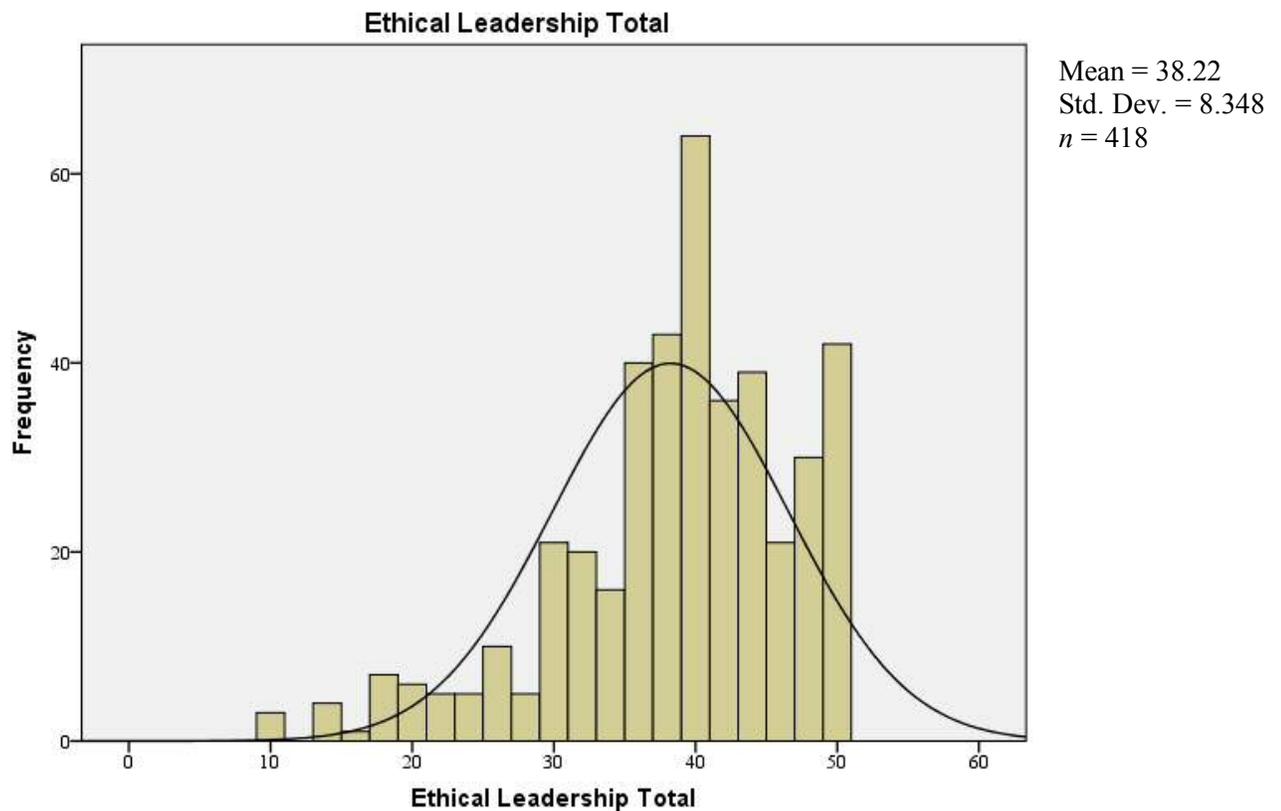


Figure 1. Histogram of ethical leadership showing a superimposed normal curve.

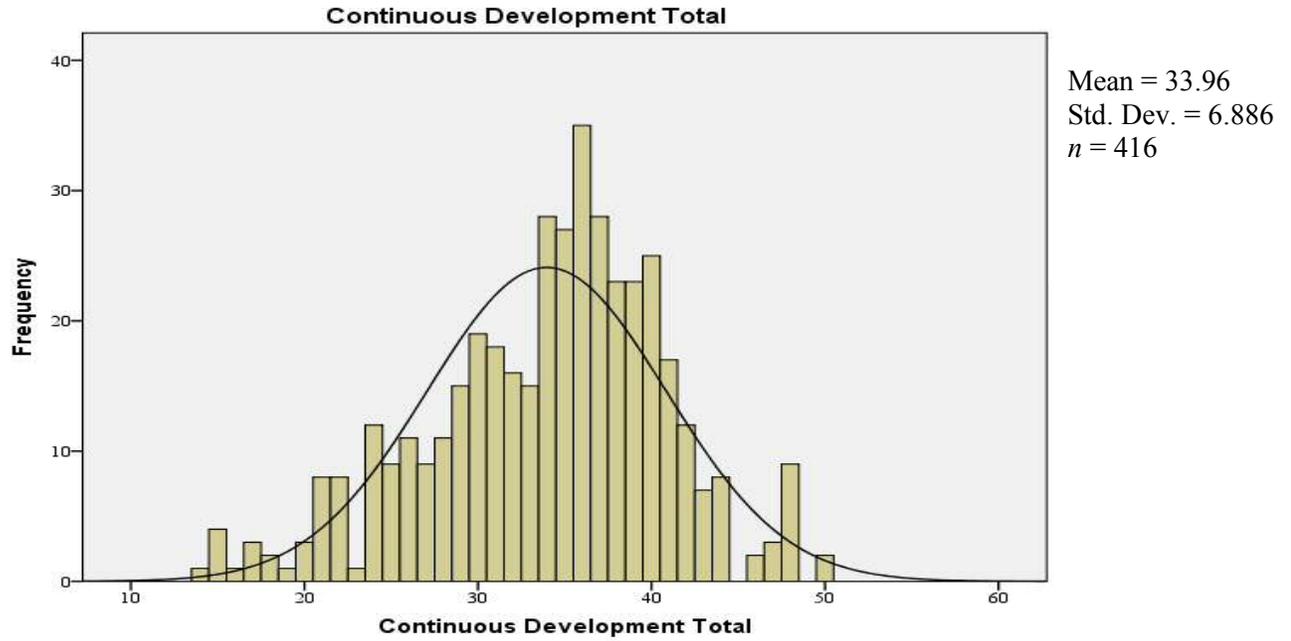


Figure 2. Histogram of continuous development dimension showing a superimposed normal curve.

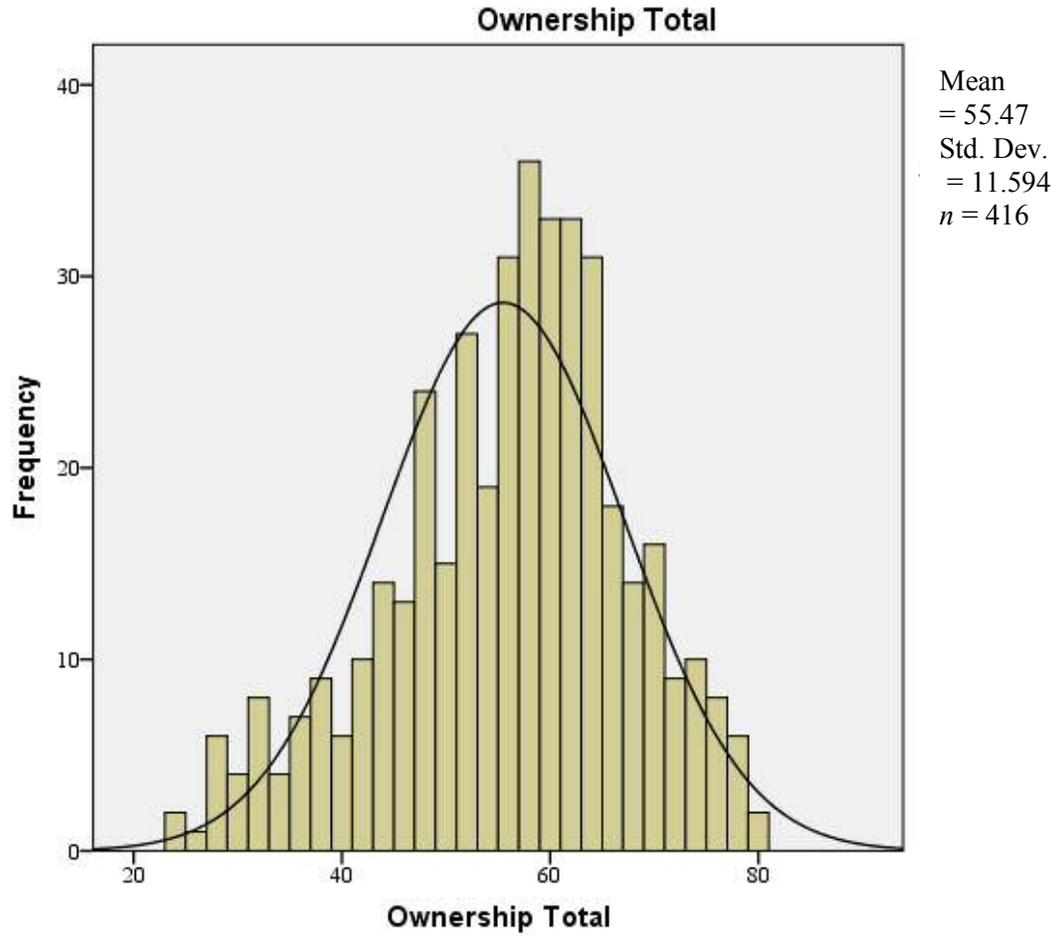


Figure 3. Histogram of ownership dimension showing a superimposed normal curve.

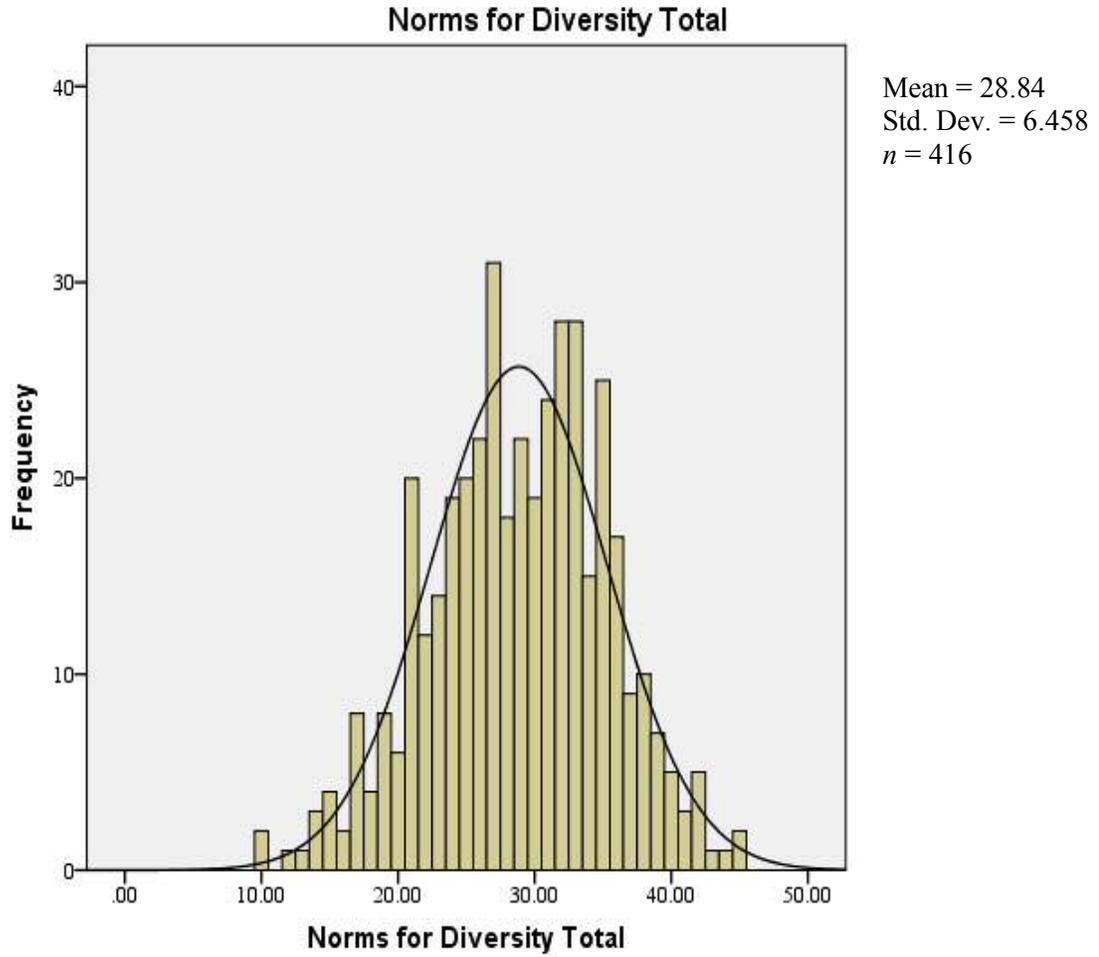


Figure 4. Histogram for diversity dimension showing a superimposed normal curve.

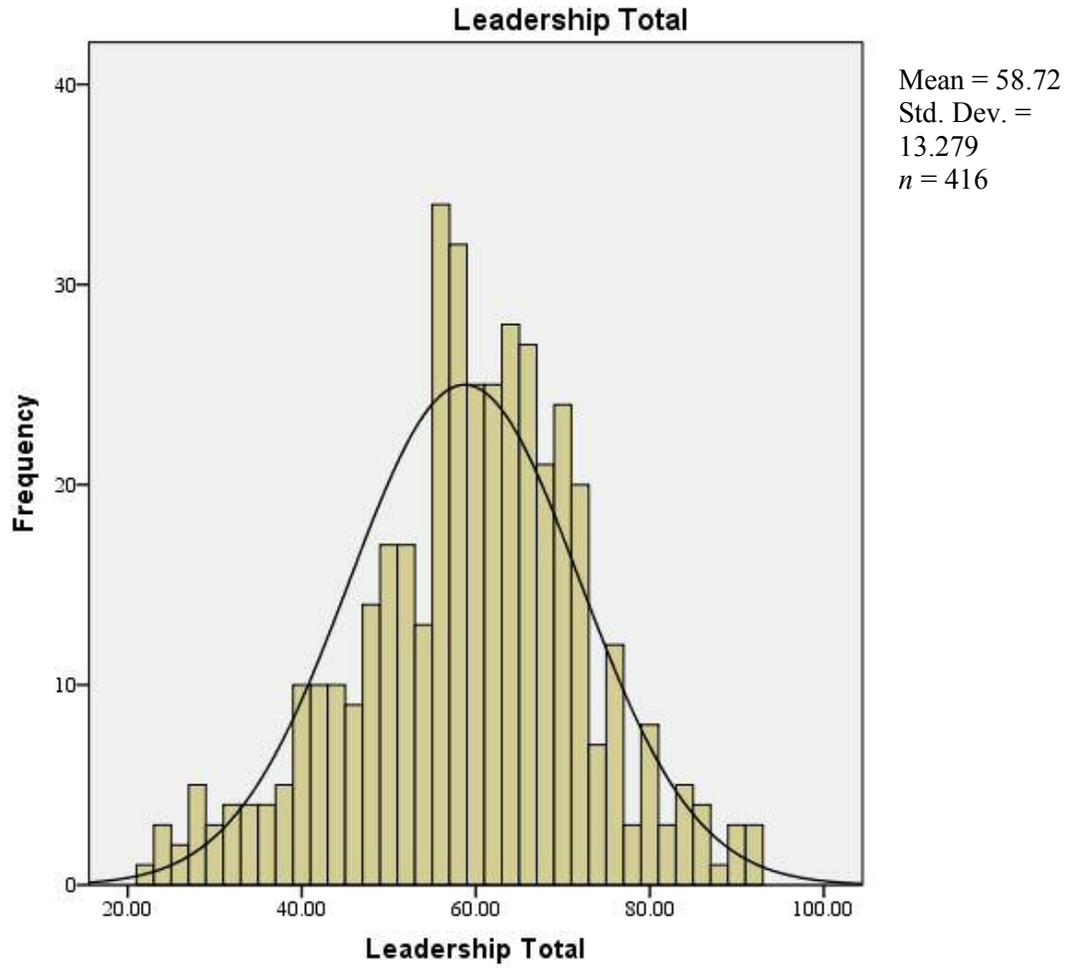


Figure 5. Histogram of leadership dimension showing a superimposed normal curve.

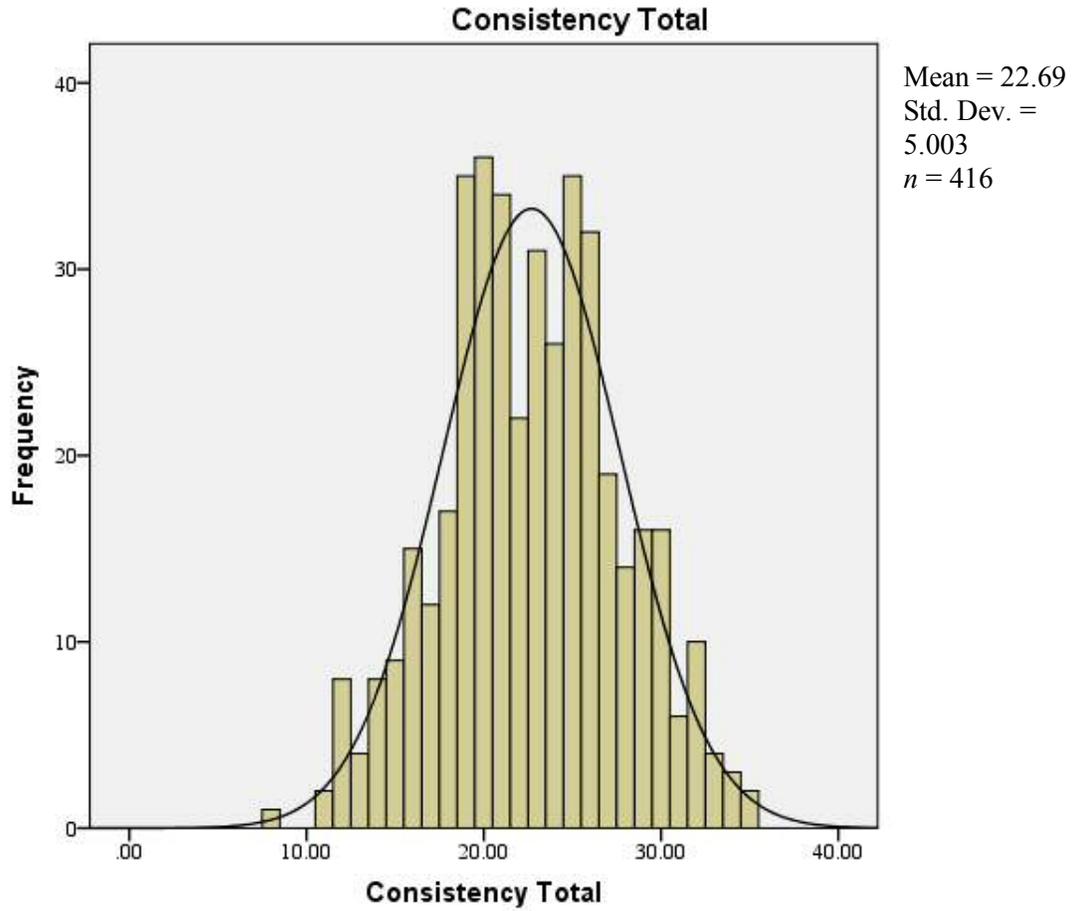


Figure 6. Histogram of consistency dimension showing a superimposed normal curve.

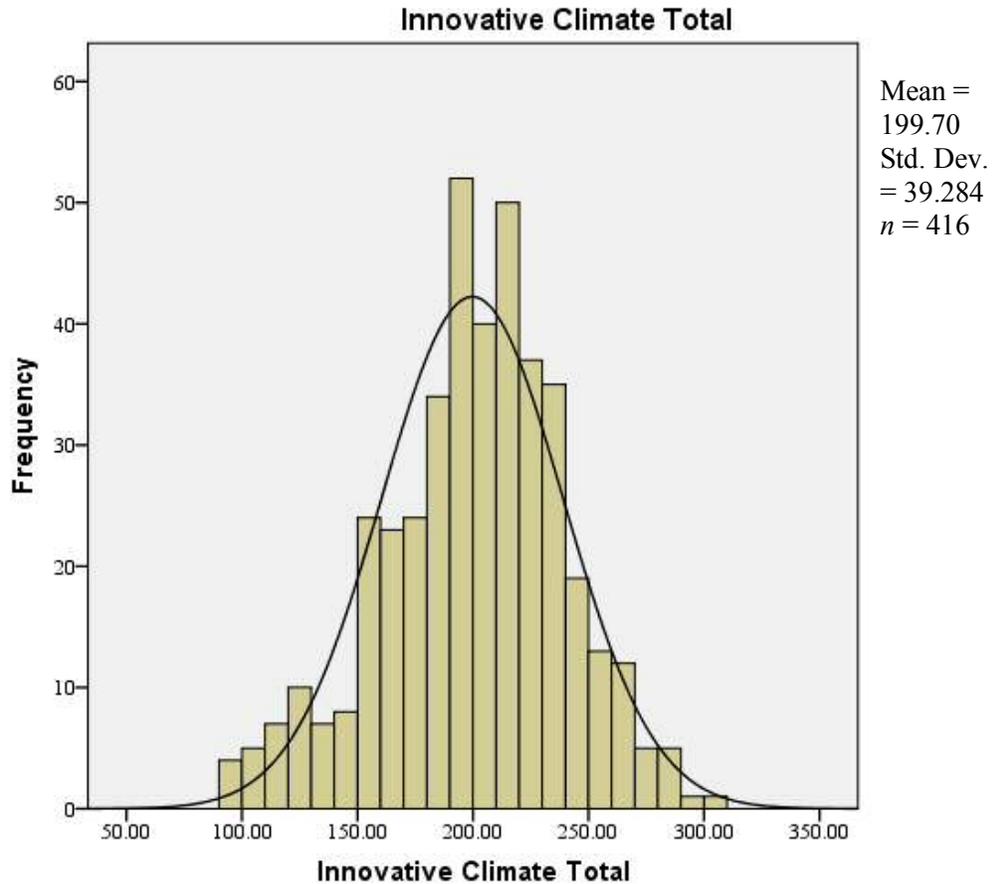


Figure 7. Histogram of Innovative Climate showing a superimposed normal curve.

Tables 4 and 5 show that both the Pearson and Spearman's rho correlation bivariate tests; they indicate that all of the hypotheses for this study were supported. As can be seen, however, the correlations are somewhat lower when using the nonparametric Spearman's rho test. Due to the skewness of the data, when correlations for the study are discussed, the Spearman's rho results are the ones that are reported.

Table 6
Pearson Correlations

	Ethical Leadership Total	Continuous Development Total	Ownership Total	Norms for Diversity Total	Leadership Total	Consistency Total	Innovative Climate Total
Ethical Leadership Total		.610**	.651**	.491**	.630**	.554**	.663**
Continuous Development Total			.800**	.729**	.799**	.671**	.887**
Ownership Total				.679**	.827**	.727**	.919**
Norms for Diversity Total					.832**	.705**	.864**
Leadership Total						.789**	.959**
Consistency Total							.842**
Innovative Climate Total							

** . Correlation is significant at the 0.01 level (1-tailed). Listwise n = 416

Table 7
Spearman's rho Correlations

Spearman's rho	Ethical Leadership Total	Continuous Development Total	Ownership Total	Norms for Diversity Total	Leadership Total	Consistency Total	Innovative Climate Total
Ethical Leadership Total		.596**	.658**	.451**	.584**	.513**	.638**
Continuous Development Total			.781**	.707**	.771**	.630**	.868**
Ownership Total				.663**	.810**	.684**	.908**
Norms for Diversity Total					.813**	.703**	.855**
Leadership Total						.768**	.951**
Consistency Total							.820**
Innovative Climate Total							

** . Correlation is significant at the 0.01 level (1-tailed). Listwise $n = 416$.

The correlational findings and R_s^2 for each of the hypotheses were as follows:

Hypothesis H_{a1}: Ethical leadership will have a positive relationship to an organization's overall innovation climate.

There was a statistically significant positive relationship between ethical leadership and innovative climate, $r_s = 0.64$, $n = 414$, $p < .01$, one tailed. The hypothesis is supported.

The R_s^2 of .407 indicates that 40.7% of the variance in the Innovative Climate Total can be explained by the Ethical Leadership Total variable.

Hypothesis H_{a2}: Ethical leadership will have a positive relationship to the leadership dimension of innovation climate.

There was a statistically significant positive relationship between ethical leadership and the leadership dimension of innovation climate, $r_s = 0.58$, $n = 414$, $p < .01$, one tailed. The hypothesis was reported. The R_s^2 of .341 indicates that 34.1% of the variance in the leadership dimension of innovation climate can be explained by ethical leadership.

Hypothesis H_{a3}: Ethical leadership will have a positive relationship with the ownership dimension of innovation climate.

There was a statistically significant positive relationship between ethical leadership and the ownership dimension of innovation climate, $r_s = 0.66$, $n = 416$, $p < .01$, one tailed. The hypothesis was reported. The R_s^2 of .433 indicates that 43.3 % of the variance in the ownership dimension of innovation climate can be explained by the Ethical Leadership Total variable.

Hypothesis H_{a4}: There will be a positive relationship between ethical leadership and the norms for diversity dimension of innovation climate.

There was a statistically significant positive relationship between ethical leadership and the diversity dimension of innovation climate, $r_s = 0.45$, $n = 414$, $p < .01$, one tailed. The hypothesis was supported. The R_s^2 of .203 indicates that 20.3% of the variance in the diversity dimension of innovation climate can be explained by the Ethical Leadership Total variable.

Hypothesis H_{a5}: There is a positive relationship between ethical leadership and the consistency dimension of innovation climate.

There was a statistically significant positive relationship between ethical leadership and the consistency dimension of innovation climate, $r_s = 0.51$, $n = 414$, $p < .01$, one tailed. The hypothesis was supported. The R_s^2 of .263 indicates that 26.3% of the variance in the consistency dimension of innovation climate can be explained by ethical leadership.

Hypothesis H_{a6}: There is a positive relationship between ethical leadership and the continuous dimension of innovation climate.

There was a statistically significant positive relationship between ethical leadership and the continuous development dimension of innovation climate, $r_s = .60$, $n = 414$, $p < .01$, one tailed. The hypothesis was supported. The R_s^2 of .355 indicates that 35.5% of the variance in the continuous dimension of innovation climate can be explained by ethical leadership.

Summary

The purpose of this study was to examine whether there was a positive relationship between the independent variable of ethical leadership and six dependent variables: innovative climate, continuous development dimension, ownership dimension, norms for diversity dimension, leadership dimension, and consistency dimension. Findings support each of these six hypotheses. T-tests and ANOVA tests were used to see whether there were statistically significant differences in the means for different groups. Results were confirmed by non-parametric tests. Most groups were found to not have significant differences, but there were a few that were significant. For example, participants in smaller organizations rated several of the dimensions of an innovative climate higher than participants in larger organizations. Also, the variance in participant responses regarding ethical leadership and norms for diversity were found to be statistically significant for groups having a male versus female leader.

Preliminary testing of the data indicated that there was significant skewness, which necessitated that several nonparametric tests to be run. Because the data for the ethical leadership variable was significantly skewed, tables are shown for both the Pearson and Spearman's rho correlation tests. However, in discussing the correlation results, only the nonparametric Spearman's rho correlations (r_s) were used.

Chapter 5

Discussion

This chapter begins with the purpose of the study and the primary reasoning behind the study's hypotheses. It also includes limitations for the study, implications, and recommendations for future research.

The purpose of this study was to examine whether there was a positive correlation between ethical leadership and an innovative climate and also a positive correlation between ethical leadership and each of the five dimensions of an innovative climate. The primary reasoning behind the hypotheses was twofold. First, there is the social exchange nature of ethical leadership (Blau, 1964; Brown, & Trevino, 2002). According to this theory, leaders employ mechanisms of social exchange to influence follower behavior and organizational outcomes; outcomes that were believed would help an innovative climate thrive. For example, research has shown that there is a positive relationship with follower initiative when an organization is led by an ethical leader who encourages open communication, is seen to be trustworthy, and whose decision making is perceived to be fair and objective (Kalshoven et al., 2013).

A company's ethics and trust and confidence in its leader are also important to enhance or maintain employee engagement (Ethics Resource Center, 2009). It is also the

leaders' behavior, rather than words alone, that set the tone for an organization's climate (Suleman, 2013). This study's premise was that the tone set by behaviors of an ethical leader and the influence of those behaviors would be discernable (Holloway, 2012) in an organizational climate that supports innovation. In other words, that there would be a positive relationships between ethical leadership and an innovative climate. This is important because both are essential for long term organizational success.

The second reasoning behind the study is that leadership is expressed in behavior that can be categorized into different styles, such as transactional, transformational, and ethical. Leadership styles can overlap, but they can also place different emphasis in organizations. Ethical leaders' behaviors and actions promote efficiency and effectiveness in organizations (Ethical Resource Center, 2009), but they also hold themselves and others accountable for making decisions after considering not only what is to be done but how it is accomplished (Brown & Trevino, 2002).

This study is important because it is a first step in understanding the relationship between ethical leadership and the dimensions of an innovative climate. While there are studies involving innovation that tie to other types of leadership (e.g. transformational leadership) that encompass ethics and ethical behavior, this study provides insight about a leadership style that is intentionally focused on ethics. According to Fassin (2000) and Gebler (2007), ethic issues abound in innovation, and ethics must be connected to decision making that involves innovation and productivity.

If one types in the words *innovation* and *transformational leadership* into the online EBSCOhost database, there are 252 articles that appear. When one uses the words

innovation and *ethical leadership*, there are 33 articles that appear. Few of the 33 are empirical studies and only the Yidong and Xinxin (2013) study on the how ethical leadership influences follower's innovative work behavior directly relates to innovation. Additionally, there are no articles that explored the ethical leadership in the realm of other organizational climates involving innovation, such as a climate of creativity (Amabile et al., 1996), or behaviors that encourage innovation, although these may be implied in articles about effective leadership. There are many opportunities for further research on the linkages and impact of ethical leadership on organizations and individuals within those organizations. Some of these are discussed after the summary of the study's findings.

Summary of Study's Findings

The climate of innovation as a specific and tested concept has been around since the early 1970s (Siegel & Kaemmerer, 1971). Brown and Trevino's (2002) concept of ethical leadership with its specified attributes is much newer, but it is also a tested concept. What is totally new is a study that looks at both these concepts at the same time.

Although this study did not examine whether there was a cause and effect among the variables, the findings of this research study did answer the research question: Is there a correlation between two existing constructs, ethical climate and innovation climate? Both of these elements are important to the long-term success of an organization? The answer to the research question is yes, there is a correlation. The findings also support the hypothesis that ethical leadership would have a positive relationship with an innovative climate. Additionally, ethical leadership was shown to be positively related to each of the

following dimensions: leadership, ownership, diversity, continuous learning and consistency.

The study also showed there were a few differences among groups using the participant and organizational characteristics. Nothing, though, in the study points directly to why there was a difference in the consistency variable between participants who worked for Construction, Machinery, and Homes and those who worked in the Food and Beverage industry. It should be noted, however, that participants who worked in smaller organizations tended to give higher ratings for the overall innovative climate and the following dimensions: ownership, diversity, leadership, and consistency. According to Fiates, Fiates, Serra & Ferreira (2010), small companies tend to have an environment that is often more encouraging of innovation. Perhaps this tendency is reflected in the participant responses. These participants would also tend to work organizations with few hierarchical levels, so they might be more observant of their leaders' ethical behaviors.

The comparison of male and female participants did not show that participants' responses were statistically different. This changed, however, when the participants were divided into two groups: those having a female leader and those whose leader was male. First, using the Spearman's rho test, the correlations between ethical leadership and innovation climate and its dimensions were higher for participants who had a male leader. Secondly, the Levene's test showed that there was a statistically significant difference at $p < .05$ for ethical leadership and norms for diversity. To some extent, the latter finding adds support for Schminke et al.'s (2003) study that found that gender was a factor in how individuals perceived the ethics of others.

Leadership style not only has been shown to have an effect on employees' perceptions of their work environment, but it also has an impact on an organization's capability of developing new products (Norrgrén, & Schaller, 1999). A key element behind an organization's overall performance and long term success are leaders who reflect a leadership style that shows they are supportive of learning and encourage follower trust. Leaders are in roles that to a large extent control resources (e.g. goal setting and resources, including giving time to employees to think creatively) that greatly influence employees' behavior and the outcomes of that behavior (Brown & Mitchell, 2010). Ethical leaders base their decisions on what is the right thing to do, and there is a known relationship between ethical leadership and trust (Johnson et al., 2012).

Participant responses to the Ethical Leadership Scale (ELS) demonstrated a positive view toward their leader's ethical conduct, enough so the distribution was significantly skewed to the right. This, coupled with the positive relationship between the overall climate of innovation and its leadership dimension and the coefficient of determination (R^2) results, demonstrates the importance of ethical leadership behaviors.

Ethical leadership had the highest correlation with the ownership dimension ($r = .658, p < .01$). According to Van Dyne and Pierce (2004) psychological ownership is context specific. In an organizational context, it is a reflection of people's perceptions about their current job and the organization in which they currently work (Mayhew, Ashkanasay, Bramble & Garner, 2007). Both ethical leadership and psychological ownership have been found to be positively related to job satisfaction and organizational commitment. Sabir and Kalyar (2013) found no correlation between job satisfaction and organizational innovativeness. On the other hand, job satisfaction was shown to have a

positive correlation with individual innovative job performance (Dizgah, Chegini, & Bisokhan, 2012). Ways to encourage ownership that leads to innovation include 1) helping all employees see their roles as important to the organization's mission, and 2) empowering employees to experiment accompanied by a positive feedback loop that provides learning from mistakes (Efron, 2013). In carrying out their responsibilities, ethical leaders also take into consideration their employees' interests. When people perceive that changes in an organization reflect a mutual purpose (Rost, 1991), they do not feel as just cogs in a wheel. Consequently, they perceive they have more ownership in the organizational goals and outcomes.

Since ethical leadership is based on the theory of social exchange, it encompasses aspects of expected reciprocity (Blau, 1964; Brown et al., 2005; Gouldner, 1960). This type of leadership increases employees' sense of obligation to act responsibly, which tends to increase productivity and organizational effectiveness. This study showed there is a positive correlation between ethical leadership and the type of leadership that followers perceive as being supportive of innovation. In examining different leadership styles and their effect on innovation, Bossink (2004) found that consistency of leadership style, along with having necessary levels of information, knowledge, competence, was important in process and product development.

Ciulla (1995) states that leaders use different types of processes and influence to get people to behave in certain ways or to accomplish what they need or want. Many organizations have instituted continuous improvement techniques, such as Total Quality Management, in order to provide quality products and services. There are two deciding factors of whether continuous improvement programs will be successful: 1) substantial

leadership support and commitment, and 2) trust in the leadership and organizational processes (Perles, 2002). Leadership influence on followers is an important component in the second factor. According to Perles, different aspects are required for successful influence. These include a leader's technical skills, psychological traits, including an ability to create a desirable organizational climate, and moral values exhibited through appropriate behaviors (i.e. the ethical aspect of leadership). This study showed a positive relationship between ethical leadership and continuous development.

Leaders usually have the power of their position to initiate organizational structures, procedural changes and training programs, but continuous improvement demands consistent effort and personal commitment from people at all levels of an organization (Perles, 2002). The level of effort and commitment often comes down to how much followers feel they can trust their leader and also trust that the benefits gained from improvement will be fairly distributed. Continuous improvement also requires worker creativity that helps an organization develop capacity and flexibility to meet its organizational goals.

The positive relationship with the consistency and diversity dimensions adds weight to the concept of ethical leadership and the findings of other studies. For example, Walumbwa and Schaubroeck (2009) found that ethical leaders not only show interest in hearing ideas and suggestions about ethical issues, but they encourage and listen to ideas about processes and procedures. In the SSSI, there are statements, such as "around here people are allowed to try to solve the same problem in different ways" (Siegel & Kaemmerer, 1971, p. 558). This study showed there was a positive relationship between ethical leadership and the diversity dimension, which includes this statement. In the

consistency dimension, employees in an organization are concerned about the means and the end result of decision making (Siegel & Kaemmerer). This dimension's positive relationship with ethical leadership, which is also concerned about successes that are obtained ethically (Brown, Trevino, & Harrison, 2005), is a good sign that there is compatibility between the two constructs.

Implications

The study emphasizes the importance of leadership behaviors in the workplace. Leaders should be aware that ethical behavior has been shown not only have a positive relationship with an ethical climate (Shin, 2012), but it also has a positive relationship with an innovative climate. When followers see ethical leadership behaviors (Brown, Trevino, & Harrison, 2005), leaders should know that these behaviors have a relationship with all of the dimensions of an innovative climate. These dimensions include aspects that could affect their organization's ability to innovate, such as encouraging different opinions and ideas for improvements and getting employees to have ownership in meeting organizational goals.

The ownership dimension showed the strongest positive relationship ($r_s = .66$, $R_s^2 = .433$, $p = .01$, one-tailed) with ethical leadership and an even stronger positive relationship with the overall innovative climate variable ($r_s = .908$, $R_s^2 = .825$, $p = .01$, one-tailed). These results imply that fostering employees' psychological ownership is an important aspect of innovation. According to Shinn (2012) there is also a positive relationship between ethical leadership and an ethical climate. However, it would behoove ethical leaders who want to have both an ethical climate and one that leads to innovation to take steps to encourage their employees' psychological ownership. These

steps include helping them see the importance of their roles to the organization's mission, providing constructive feedback so that they learn from their mistakes (Efron, 2013) and demonstrating to the extent possible the mutual purpose of organizational changes so that they know their interests have been considered (Rost, 1991).

According to Savolainen (2008), literature involving trust shows that it links to and crosses over into various areas of study, including organizational climate, leadership, and change efforts, and creativity. Recent studies have shown a positive relationship between trust and workplace innovation (McMurray, Islam, Sarros, & Pirola-Merlo, 2013) and trust and ethical leadership (Johnson et al., 2012). Trust is a critical element in innovation because it involves risk taking.

Trust is also important in establishing and maintaining collaborative working relationships; these are important because in order to have innovation in a workplace, workers must be willing to share their knowledge and communicate new ideas (Savolainen, 2008). Individuals must also perceive that there will be a consistency of fairness and willingness to involve them in problem-solving efforts (2008). Ethical leaders are seen to be principled and fair, and they model and expect that type of behavior in the organizations in which they work (Brown & Trevino, 2006). While no study has delved into the linkages between trust, ethical leadership, and an innovative climate, this study implies that such a linkage based on a consistency of fairness and involvement, would be found. Leaders must keep this in mind when modeling and setting expectations for behavior in their organization.

This study also found positive correlations between all five of the innovative climate dimensions and the overall climate of innovation. This implies that all may be needed in some context in order for an innovation climate to exist. Leadership was one of those dimensions. Some, though, have argued that leadership is separate and distinct from an organization's climate (James & Jones, 1974). Whether leadership should be considered one of the dimensions of an innovative climate may be debatable; however, Ekvall and Ryhammar's (1998) study showed that a leader's style of leadership does have influence on an organization's climate. Additionally, their 1998 study found a causal effect that occurs from a leader's style of leadership, i.e.; leadership style has an effect on organizational climate and organizational climate effects outcomes, such as productivity and creativity. While this current study did not encompass causality between ethical leadership and an innovative climate, leaders should take note that ethical leadership did account for about 41 percent of the variance in the innovative climate variable.

Lastly, organizations must deal with change because it is inevitable. Effective organizational leadership and innovations are essential elements in dealing with change if organizations want to have long term success in today's economy. As indicated in the Introduction chapter, leaders have the responsibility to handle change, create a positive work environment, and model behavior that encourages employees' creativity; these in turn help organizations compete more effectively (Kalyani, 2011). Yet knowing this, there is still the question of why individuals and organizations decide to innovate in the first place. According to Millar, Udalov and Millar (2012), it is often the desire to gain a competitive business, social or personal advantage.

In dealing with change and the desire to stay ahead of the competition sometimes leaders and others in the organization put their egos ahead of ethics. Because of this reality, By et al. (2012) state that there needs to be an overt understanding throughout the organization that ethics are important and that everyone—leaders and followers—must take an active role in keeping unethical practices at bay. Ethical leadership by its nature is explicit that ethics is important not only in areas of policy, but in daily decisions and interactions. By modeling ethical behavior, leaders can be assured that this type of behavior has a positive relationship with an organizational climate that is conducive to encouraging creativity and innovations. This is important because innovations are important for an organization's survival. Also, setting clear expectations for such things as transparency in decisions involving change will go a long way toward keeping actions and innovations compatible with the wider interests within the organization and society in general (By et al., 2012).

Limitations

This study used two questionnaires, the ELS and SSSI, which have been used in other studies. Participants were selected in two different ways, students and faculty whose instructors had agreed to participate and panel members of an online research company. The data collection method was also two-fold. Questionnaires from the students and faculty questionnaires were completed on-site; the panel members completed the questionnaires using the Internet. While the participants worked in a variety of industries and occupations, the use of non-probability sampling techniques means that caution should be used in generalizing the results of the study (Anderson et al., 2009).

Other factors that need to be considered are 1) the majority of participants used the internet to complete the questionnaire, 2) the use of opt-in panel participants, and 3) not all groups were of equal size. The study may not, therefore, include individuals who may have limited access to the Internet or did not see the invitation to participate during the data collection period (Market Strategies International and Task Force, 2013). The number of male and female participants who completed the study was fairly equal, and the study included participants in different age groups who worked in many different industries and organizations of different sizes. It should be noted, however, that the participants were predominately White/Caucasian; therefore, the responses may not be representative of workers of different ethnicities.

Additionally, leadership involves a dyadic relationship, and this study's results are from the perspective of individuals who worked in different organizations. Perception of leader behaviors, which are related to outcomes, such as trust, may be affected by geographic dispersion of employees in organizations (Yakovleva, Reilly & Werko, 2010). Also, the perceptions of leaders may be the same or different than the perceptions of employees. Although studies on organizational climates tend to involve assessing the perceptions of individuals, it must be said that this study only collected information from one side of the leader-follower relationship.

Recommendations for Future Research

There are companies, such as Ethical Integrity Standards, SA (<http://www.ethics-certification.com/>), that provide ethics certifications to companies worldwide if they meet certain requirements for management processes and ethical practices. However, continuous improvement processes cannot in and of themselves create a climate that

would be both innovative and ethical. Nayebpour & Koehn, 2003, however, argue that continuous improvement programs have blind spots, such as quality standards that can be manipulated, and internal processes that have been continuously improved but do not consider whether the product or service is in itself ethical. Future research could determine whether ethical leadership has an impact on reducing these blind spots.

The importance of the ethical aspect of leadership influence cannot be overlooked if leaders want to encourage the production of new ideas that will help continuous improvement efforts be successful in their organizations (Perles, 2002). Perles argues that future research is needed to explore the leader-follower aspects of continuous improvement efforts. Ethical leadership should be a part of this exploration. A further step in research involving leadership and innovation climate would be to see whether the presence of ethical leadership and innovative leadership resulted in greater levels of productivity and innovation in products or service.

Innovations in and of themselves, or behaviors used when implementing innovations, can be seen as ethical or not. This was the case in Enron's implementation of its creative accounting methods. Brown and Trevino (2006) asserted that there is a need for studies involving unethical leadership and counterproductive behavior. Since a positive correlation was found with ethical leadership and the dimensions of an innovative climate, it begs the question of what relationship or impact unethical ethical leadership would have on employees' creativity and their perceptions and behavior involving radical and incremental innovations (Bridge & O'Keefe, 1984).

Another aspect of leadership influence that can influence continuous improvement is the leader's ability to motivate followers. Lee (2001) asserts that when people work in an environment where they understand what is right and wrong, they tend to manage themselves. Leaders who can model behavior and set expectations that are understood and followed without close supervision have a better chance of having continuous development programs work in their organizations (Meirovich & Romar, 2004). Research between ethical leadership, ethical climate and continuous improvement efforts could provide valuable information for organizations that have or are planning to implement such programs.

Lastly, this study showed significantly significant differences in responses from employees who worked for organizations of different numbers of employees and employees who had male or female leader. A leader's ability to influence followers can be significantly affected by the size and hierarchical levels within organizations (Schaubroeck et al., 2012). Additionally, females represent over 50 percent of the U.S. workforce and a large proportion (51 percent in 2011) of management, professional and related types of occupations (U.S. Department of Labor, 2013). According to Schminke et al. (2003), there is no clear pattern in the results of studies involving gender and ethics. Given the results of this study, further exploration of variables involving ethical leadership in organizations of different numbers of employees and leaders of different gender is warranted.

Summary

The participants in this study came from two sources, three institutions of higher education and panel members of an online research company. The purpose of the study

was to study the relationship between ethical leadership and innovative climate. Although there have been studies on other leadership styles that overlap with ethical leadership, such as transformational leadership, that looked at this relationship, there have been no such studies on ethical leadership.

The study's findings of positive relationships between ethical leadership and innovative climate, and with all of its dimensions, have implications for leaders in organizations. They emphasize the importance of ethical behaviors in relation to climate elements other than those involved in an ethical climate. Since organizations threaten their very existence if they don't innovate, this study sheds light on the importance of ethical leadership in having a climate that is supportive of innovation. It also opens the door for future research involving ethical leadership and innovation.

There are two primary jobs that leaders have within an organization (Goyder & Desmond, 2001). First, they need to lead in a way that drives the organization toward long term, rather than short-term success. Second, they need to not only recognize the importance of creating a climate that is conducive to successful performance; they need to create that climate. This study showed that there was a positive relationship between participants' perceptions about their leader's ethical leadership behaviors and the innovative climate dimensions (leadership, ownership, norms for diversity, continuous development, and consistency) within their respective organizations. While it is not known whether there is a causal relationship between these elements, one could argue that the existence of positive relationships between these elements would be helpful to leaders' endeavoring to carry out their primary jobs within an organization.

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Appendices

Appendix A

Consent to participate in a research study regarding the possible relationship between
Ethical Leadership and Organizational Climate of Innovation

You have been invited to volunteer to participate in a research study conducted by Virlena Crosley who is completing her Doctorate of Business Administration (DBA) at George Fox University. The researcher is also a Visiting Professor in the Business Department at Linfield College in McMinnville, Oregon.

PURPOSE OF THE STUDY:

Results from this study may add to our knowledge about the possible link between the ethical dimension of leadership and the organizational climate for innovation.

PROCEDURES:

Participation in this study will require the completion of a questionnaire that includes questions regarding the participants, age, gender, education, etc. and questions regarding the participant's manager or supervisor (i.e. leader) and organization for which the participant works.

TIME INVOLVEMENT:

Participation in this study will involve about 15 to 20 minutes to complete the questionnaire.

POTENTIAL RISKS AND DISCOMFORTS:

There is some foreseeable risk of participation. It is possible that filling out the questionnaire will make you feel anxious or cause you to worry about aspects of your life that are related to the questionnaires you are filling out. You may decline to answer any questions or sections of the questionnaires that cause you discomfort at any time. This risk and discomfort should be minimal because the participants' name and organization in which he or she works will not be requested or identified. Numerical codes will be used instead of the name of the participant and college or university that the participant is attending. The name of the college or university in which the participant is attending will also not be identified in the results of the study. Any information that is inadvertently obtained in connection with this study that can be linked to a specific person will remain confidential.

BENEFITS OF PARTICIPATING:

A summary of the study's results will be provided to participants upon request. This request should be sent to the following email address: crosleyvc@aol.com.

CONFIDENTIALITY

Participation will be anonymous. Confidentiality will be maintained by means of numerical codes, which will be used on questionnaires instead of full names. Numerical codes will also be used instead of the college or university that the participant is attending. The name of the college or university in which the participant is attending will also not be identified in the results of the study.

All paper documents will be kept in a locked filing cabinet at the researcher's home office. Data collected online will be collected through a secure and restricted website and

will be stored in a secured database. Data stored (e.g. in Excel or SPSS) on the researcher's computer will be password protected. The name of the organization at which a participant works and the "leader's name", i.e. immediate manager or supervisor, will not be asked for in the survey.

PARTICIPATION AND WITHDRAWAL

Participation in this study is voluntary. You may refuse to participate, skip any question, or withdrawn at any time without penalty.

CONTACTS:

If you have questions about this research study, please contact Virlena Crosley at crosleyvc@aol.com or telephone 503-910-0738.

Appendix B

Ethical Leadership and Support of Climate for Innovation

1. Industry, Occupation, and Demographic Information

The purpose of this section is to obtain information about the participant and the organization in which he or she works.

For questions involving a "leader", complete your responses based on your immediate manager or supervisor.* To make this determination, participants should consider from whom they get most of their work assignments and/or performance reviews.

1. Which of the following best describes the principal industry of your organization?

<input type="radio"/> Advertising & Marketing	<input type="radio"/> Government
<input type="radio"/> Agriculture	<input type="radio"/> Healthcare & Pharmaceuticals
<input type="radio"/> Airlines & Aerospace (including Defense)	<input type="radio"/> Insurance
<input type="radio"/> Automotive	<input type="radio"/> Manufacturing
<input type="radio"/> Business Support & Logistics	<input type="radio"/> Nonprofit
<input type="radio"/> Construction, Machinery, and Homes	<input type="radio"/> Retail & Consumer Durables
<input type="radio"/> Education	<input type="radio"/> Real Estate
<input type="radio"/> Entertainment & Leisure	<input type="radio"/> Telecommunications, Technology, Internet & Electronics
<input type="radio"/> Finance & Financial Services	<input type="radio"/> Utilities, Energy, and Extraction
<input type="radio"/> Food & Beverages	

2. Which of the following best describes your current occupation?

<input type="radio"/> Management Occupations	<input type="radio"/> Arts, Design, Entertainment, Sports, and Media Occupations	<input type="radio"/> Office and Administrative Support Occupations
<input type="radio"/> Business and Financial Operations Occupations	<input type="radio"/> Healthcare Practitioners and Technical Occupations	<input type="radio"/> Farming, Fishing, and Forestry Occupations
<input type="radio"/> Computer and Mathematical Occupations	<input type="radio"/> Healthcare Support Occupations	<input type="radio"/> Construction and Extraction Occupations
<input type="radio"/> Architecture and Engineering Occupations	<input type="radio"/> Protective Service Occupations	<input type="radio"/> Installation, Maintenance, and Repair Occupations
<input type="radio"/> Life, Physical, and Social Science Occupations	<input type="radio"/> Food Preparation and Serving Related Occupations	<input type="radio"/> Production Occupations
<input type="radio"/> Community and Social Service Occupations	<input type="radio"/> Building and Grounds Cleaning and Maintenance Occupations	<input type="radio"/> Transportation and Materials Moving Occupations
<input type="radio"/> Legal Occupations	<input type="radio"/> Personal Care and Service Occupations	
<input type="radio"/> Education, Training, and Library Occupations	<input type="radio"/> Sales and Related Occupations	

Ethical Leadership and Support of Climate for Innovation

3. What is the size of your organization?

1-19 employees
 20-99 employees
 100-499 employees
 500 or more employees.

4. In which department do you work? Choose the department that is closest to the department in which you work.

<input type="radio"/> Accounting	<input type="radio"/> IT
<input type="radio"/> Administrative	<input type="radio"/> Engineering
<input type="radio"/> Customer Service	<input type="radio"/> Product
<input type="radio"/> Marketing	<input type="radio"/> Research & Development
<input type="radio"/> Operations	<input type="radio"/> International
<input type="radio"/> Human Resources	<input type="radio"/> Business Intelligence
<input type="radio"/> Sales	<input type="radio"/> Manufacturing
<input type="radio"/> Finance	<input type="radio"/> Public Relations
<input type="radio"/> Legal	<input type="radio"/> Other

5. How long have you worked for this organization?

<input type="radio"/> Less than 3 months	<input type="radio"/> 5 to 10 years
<input type="radio"/> 3 to 12 months	<input type="radio"/> 10 to 20 years
<input type="radio"/> 1 to 3 years	<input type="radio"/> More than 20 years
<input type="radio"/> 3 to 5 years	

6. About how long have you been in your current position?

<input type="radio"/> Less than 3 months	<input type="radio"/> 5 to 10 years
<input type="radio"/> 3 to 12 months	<input type="radio"/> 10 to 20 years
<input type="radio"/> 1 to 3 years	<input type="radio"/> More than 20 years
<input type="radio"/> 3 to 5 years	

7. What is your sex?

Male
 Female

Ethical Leadership and Support of Climate for Innovation

8. What is the sex of your supervisor or manager?

- Male
- Female

9. What is your ethnicity? (Please select all that apply.)

- American Indian or Alaskan Native
- Asian or Pacific Islander
- Black or African American
- Hispanic or Latino
- White / Caucasian
- Prefer not to answer

10. Which category below includes your age?

- 17 or younger
- 18-20
- 21-29
- 30-39
- 40-49
- 50-59
- 60 or older

11. What is the highest level of education you have completed?

- Did not graduate from high school
- Graduated from high school
- 1 year of college
- 2 years of college
- 3 years of college
- Graduated from college
- Some graduate school
- Completed graduate school

Ethical Leadership and Support of Climate for Innovation

2. Ethical Leadership Survey (ELS)

The purpose of this page is for you to answer questions about your immediate manager's or supervisor's leadership. All ten (10) questions should be answered with the same manager or supervisor (i.e. leader) in mind.

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1. Listens to what employees have to say.

Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2. Disciplines employees who violate ethical standards.

Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3. Conducts his/her personal life in an ethical manner.

Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. Has the best interest of employees in mind.

Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5. Makes fair and balanced decisions

Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6. Can be trusted

Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

7. Discusses business ethics or values with employees.

Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

8. Sets an example of how to do things the right way in terms of ethics.

Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

9. Defines success not just by results but also by the way they are obtained?

Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

10. When making decisions, asks "what is the right thing to do".

Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Ethical Leadership and Support of Climate for Innovation

3. Siegel Scale of Support for Innovation

The purpose of the next few pages is to obtain information about your organization's support for innovation. All of the questions should be answered with the same organization in mind.

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1. This organization is always moving toward the development of new answers

Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2. This organization can be described as flexible and continually adapting to change

Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3. I can personally identify with the ideas in which I work.

Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. Our ability to function creatively is respected by leadership.

Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5. Around here people are allowed to try to solve the same problem in different ways.

Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6. I help make decisions here.

Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

7. Creativity is encouraged here.

Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

8. People talk a lot around here, but they don't practice what they preach.

Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

9. People around here are expected to deal with problems in the same way.

Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

10. The people in charge around here usually get the credit for others' ideas.

Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Ethical Leadership and Support of Climate for Innovation					
11. There is one person or group here who assumes the role of telling others what to do.					
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
12. Sometimes the way things are done around here makes matters worse, even though our goals aren't bad.					
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
13. The role of the leader in this organization can best be described as supportive.					
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
14. The leaders in this organization talk one game but act another.					
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
15. In this organization, we sometimes reexamine our most basic assumptions.					
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
16. The members of our organization are encouraged to be different.					
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
17. People in this organization are always searching for fresh, new ways of looking at problems.					
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
18. The way we do things seems to fit with what we're trying to do.					
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
19. Persons at the top have much more power than persons lower in this organization.					
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
20. Work in this organization is evaluated by results, not how they are accomplished.					
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
21. A person can't do things that are too different around here without provoking anger.					
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

Ethical Leadership and Support of Climate for Innovation				
22. The leadership acts as if we are not very creative.				
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23. I really don't care what happens in this organization.				
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24. I am committed to the goals of this organization.				
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25. The methods used by our organization seem well suited to its stated goals.				
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
26. Most people here find themselves at the bottom of the totem pole.				
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
27. My goals and the goals of this organization are quite similar.				
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
28. Members of this organization would rather be working here than anywhere else.				
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
29. In this organization, we tend to stick to tried and true ways.				
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
30. Assistance in developing new ideas is readily available.				
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
31. New ideas can come from anywhere in this organization and be equally well received.				
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
32. On the whole, I feel a sense of commitment to this organization.				
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
33. We're always trying out new ideas.				
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Ethical Leadership and Support of Climate for Innovation					
34. People in this organization are encouraged to develop their own interests, even when they deviate from those in the organization.					
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
35. Members of this organization feel encouraged by their superiors to express their opinions and ideas.					
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
36. The people here are very loyal to this place.					
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
37. Members of this organization realize that in dealing with new problems and tasks, frustration is inevitable; there it is handled constructively.					
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
38. I have the opportunity to test out my own ideas here.					
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
39. I feel a real sense of responsibility for my work.					
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
40. In this organization, the way things are taught is as important as what is taught.					
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
41. This organization is open and responsive to change.					
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
42. A motto in this organization is "The more we think alike, the better job we will get done."					
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
43. My ability to come up with original ideas and ways of doing things is respected by those at the top.					
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

Ethical Leadership and Support of Climate for Innovation					
44. This place seems more concerned with the status quo than with change.					
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
45. The role of the leader here is to encourage and support individual members' development.					
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
46. The best way to get along in this organization is to think the way the rest of the group does.					
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
47. Individual independence is encouraged in this organization.					
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
48. Nobody asks me for suggestions about how to run this place.					
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
49. One individual is usually the originator of ideas and policies in this organization.					
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
50. In this organization, the power of final decision can always be traced to the same few people.					
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
51. Creative efforts are usually ignored here.					
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
52. Once this organization develops a solution to a particular problem, that solution becomes a permanent one.					
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
53. Around here, a person can get into a lot of trouble by being different.					
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
54. I have a voice in what goes on in this organization.					
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

Ethical Leadership and Support of Climate for Innovation				
55. People here try new approaches to tasks, as well as tried and true ones.				
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
56. Others in our organization always seem to make the decisions.				
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
57. The leader's "pets" are in a better position to get their ideas adopted than most others.				
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
58. The main function of members in this organization is to follow orders that come down through channels.				
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
59. I mostly agree with how we do things here.				
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
60. There is little room for change here.				
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
61. These aren't my ideas, I just work here.				
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Appendix C

Ethical Leadership and Support of Climate for Innovation³

1. Industry, Occupation, and Demographic Information

The purpose of this section is to obtain information about the participant and the organization in which he or she works.

For questions involving a "leader", complete your responses based on your immediate manager or supervisor. To make this determination, participants should consider from whom they get most of their work assignments and/or performance reviews.

1. How many hours do you normally work each week?

1 to 20 hours

20 to 30 hours

30 to 40 hours

40+

2. Which of the following best describes the principal industry of your organization?

<input type="radio"/> Advertising & Marketing	<input type="radio"/> Government
<input type="radio"/> Agriculture	<input type="radio"/> Healthcare & Pharmaceuticals
<input type="radio"/> Airlines & Aerospace (including Defense)	<input type="radio"/> Insurance
<input type="radio"/> Automotive	<input type="radio"/> Manufacturing
<input type="radio"/> Business Support & Logistics	<input type="radio"/> Nonprofit
<input type="radio"/> Construction, Machinery, and Homes	<input type="radio"/> Retail & Consumer Durables
<input type="radio"/> Education	<input type="radio"/> Real Estate
<input type="radio"/> Entertainment & Leisure	<input type="radio"/> Telecommunications, Technology, Internet & Electronics
<input type="radio"/> Finance & Financial Services	<input type="radio"/> Utilities, Energy, and Extraction
<input type="radio"/> Food & Beverages	

Ethical Leadership and Support of Climate for Innovation³

3. Which of the following best describes your current occupation?

<input type="radio"/> Management Occupations	<input type="radio"/> Arts, Design, Entertainment, Sports, and Media Occupations	<input type="radio"/> Office and Administrative Support Occupations
<input type="radio"/> Business and Financial Operations Occupations	<input type="radio"/> Healthcare Practitioners and Technical Occupations	<input type="radio"/> Farming, Fishing, and Forestry Occupations
<input type="radio"/> Computer and Mathematical Occupations	<input type="radio"/> Healthcare Support Occupations	<input type="radio"/> Construction and Extraction Occupations
<input type="radio"/> Architecture and Engineering Occupations	<input type="radio"/> Protective Service Occupations	<input type="radio"/> Installation, Maintenance, and Repair Occupations
<input type="radio"/> Life, Physical, and Social Science Occupations	<input type="radio"/> Food Preparation and Serving Related Occupations	<input type="radio"/> Production Occupations
<input type="radio"/> Community and Social Service Occupations	<input type="radio"/> Building and Grounds Cleaning and Maintenance Occupations	<input type="radio"/> Transportation and Materials Moving Occupations
<input type="radio"/> Legal Occupations	<input type="radio"/> Personal Care and Service Occupations	
<input type="radio"/> Education, Training, and Library Occupations	<input type="radio"/> Sales and Related Occupations	

4. What is the size of your organization?

1-19 employees

20-99 employees

100-499 employees

500 or more employees.

5. In which department to you work? Choose the department that is closest to the department in which your work.

<input type="radio"/> Accounting	<input type="radio"/> IT
<input type="radio"/> Administrative	<input type="radio"/> Engineering
<input type="radio"/> Customer Service	<input type="radio"/> Product
<input type="radio"/> Marketing	<input type="radio"/> Research & Development
<input type="radio"/> Operations	<input type="radio"/> International
<input type="radio"/> Human Resources	<input type="radio"/> Business Intelligence
<input type="radio"/> Sales	<input type="radio"/> Manufacturing
<input type="radio"/> Finance	<input type="radio"/> Public Relations
<input type="radio"/> Legal	<input type="radio"/> Other

Ethical Leadership and Support of Climate for Innovation³

6. How long have you worked for this organization?

- Less than 3 months
- 3 to 12 months
- 1 to 3 years
- 3 to 5 years
- 5 to 10 years
- 10 to 20 years
- More than 20 years

7. About how long have you been in your current position?

- Less than 3 months
- 3 to 12 months
- 1 to 3 years
- 3 to 5 years
- 5 to 10 years
- 10 to 20 years
- More than 20 years

8. What is your sex?

- Male
- Female

9. What is the sex of your supervisor or manager?

- Male
- Female

10. What is your ethnicity? (Please select all that apply.)

- American Indian or Alaskan Native
- Asian or Pacific Islander
- Black or African American
- Hispanic or Latino
- White / Caucasian
- Prefer not to answer

Ethical Leadership and Support of Climate for Innovation³

11. Which category below includes your age?

- 17 or younger
- 18-20
- 21-29
- 30-39
- 40-49
- 50-59
- 60 or older

12. What is the highest level of education you have completed?

- Did not graduate from high school
- Graduated from high school
- 1 year of college
- 2 years of college
- 3 years of college
- Graduated from college
- Some graduate school
- Completed graduate school

Ethical Leadership and Support of Climate for Innovation ³				
2. Ethical Leadership Survey (ELS)				
<p>The purpose of this page is for you to answer questions about your immediate manager's or supervisor's leadership. All ten (10) questions should be answered with the same manager or supervisor (i.e. leader) in mind.</p> <p>Reprinted from Organizational Behavior and Human Decision Processes, 97(2). Brown, M. E., Trevino, L. K. & Harrison, D. A., p. 125, 1978, with permission from Elsevier provided by Copyright Clearing Center.</p>				
1. Listens to what employees have to say.				
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Disciplines employees who violate ethical standards.				
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Conducts his/her personal life in an ethical manner.				
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. For quality purposes, please select Disagree.				
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Has the best interest of employees in mind.				
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Makes fair and balanced decisions				
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. For quality purposes, please select Disagree.				
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Can be trusted				
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Discusses business ethics or values with employees.				
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Sets an example of how to do things the right way in terms of ethics.				
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Ethical Leadership and Support of Climate for Innovation ³				
11. Defines success not just by results but also by the way they are obtained?				
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. When making decisions, asks "what is the right thing to do".				
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Ethical Leadership and Support of Climate for Innovation³

3. Siegel Scale of Support for Innovation

The purpose of the next few pages is to obtain information about your organization's support for innovation. All of the questions should be answered with the same organization in mind.

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1. This organization is always moving toward the development of new answers

Significantly Disagree Disagree Neutral Agree Significantly Agree

2. This organization can be described as flexible and continually adapting to change

Significantly Disagree Disagree Neutral Agree Significantly Agree

3. I can personally identify with the ideas with which I work.

Significantly Disagree Disagree Neutral Agree Significantly Agree

4. Our ability to function creatively is respected by leadership.

Significantly Disagree Disagree Neutral Agree Significantly Agree

5. Around here people are allowed to try to solve the same problem in different ways.

Significantly Disagree Disagree Neutral Agree Significantly Agree

6. I help make decisions here.

Significantly Disagree Disagree Neutral Agree Significantly Agree

7. Creativity is encouraged here.

Significantly Disagree Disagree Neutral Agree Significantly Agree

8. People talk a lot around here, but they don't practice what they preach.

Significantly Disagree Disagree Neutral Agree Significantly Agree

9. People around here are expected to deal with problems in the same way.

Significantly Disagree Disagree Neutral Agree Significantly Agree

10. The people in charge around here usually get the credit for others' ideas.

Significantly Disagree Disagree Neutral Agree Significantly Agree

Ethical Leadership and Support of Climate for Innovation³

11. There is one person or group here who assumes the role of telling others what to do.

Significantly Disagree Disagree Neutral Agree Significantly Agree

12. Sometimes the way things are done around here makes matters worse, even though our goals aren't bad.

Significantly Disagree Disagree Neutral Agree Significantly Agree

13. The role of the leader in this organization can best be described as supportive.

Significantly Disagree Disagree Neutral Agree Significantly Agree

14. For quality purposes, please select Disagree.

Significantly Disagree Disagree Neutral Agree Significantly Agree

15. The leaders in this organization talk one game but act another.

Significantly Disagree Disagree Neutral Agree Significantly Agree

16. In this organization, we sometimes reexamine our most basic assumptions.

Significantly Disagree Disagree Neutral Agree Significantly Agree

17. The members of our organization are encouraged to be different.

Significantly Disagree Disagree Neutral Agree Significantly Agree

18. People in this organization are always searching for fresh, new ways of looking at problems.

Significantly Disagree Disagree Neutral Agree Significantly Agree

19. The way we do things seems to fit with what we're trying to do.

Significantly Disagree Disagree Neutral Agree Significantly Agree

20. Persons at the top have much more power than persons lower in this organization.

Significantly Disagree Disagree Neutral Agree Significantly Agree

21. Work in this organization is evaluated by results, not how they are accomplished.

Significantly Disagree Disagree Neutral Agree Significantly Agree

Ethical Leadership and Support of Climate for Innovation ³				
22. A person can't do things that are too different around here without provoking anger.				
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23. The leadership acts as if we are not very creative.				
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24. I really don't care what happens in this organization.				
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25. I am committed to the goals of this organization.				
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
26. The methods used by our organization seem well suited to its stated goals.				
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
27. Most people here find themselves at the bottom of the totem pole.				
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
28. My goals and the goals of this organization are quite similar.				
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
29. Members of this organization would rather be working here than anywhere else.				
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
30. In this organization, we tend to stick to tried and true ways.				
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
31. Assistance in developing new ideas is readily available.				
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
32. New ideas can come from anywhere in this organization and be equally well received.				
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
33. On the whole, I feel a sense of commitment to this organization.				
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Ethical Leadership and Support of Climate for Innovation ³					
34. We're always trying out new ideas.					
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
35. People in this organization are encouraged to develop their own interests, even when they deviate from those in the organization.					
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
36. Members of this organization feel encouraged by their superiors to express their opinions and ideas.					
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
37. For quality purposes, please select Disagree.					
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
38. The people here are very loyal to this place.					
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
39. Members of this organization realize that in dealing with new problems and tasks, frustration is inevitable; therefore it is handled constructively.					
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
40. I have the opportunity to test out my own ideas here.					
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
41. I feel a real sense of responsibility for my work.					
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
42. In this organization, the way things are taught is as important as what is taught.					
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
43. This organization is open and responsive to change.					
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
44. A motto in this organization is "The more we think alike, the better job we will get done."					
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

Ethical Leadership and Support of Climate for Innovation³

45. My ability to come up with original ideas and ways of doing things is respected by those at the top.

Significantly Disagree Disagree Neutral Agree Significantly Agree

46. This place seems more concerned with the status quo than with change.

Significantly Disagree Disagree Neutral Agree Significantly Agree

47. The role of the leader here is to encourage and support individual members' development.

Significantly Disagree Disagree Neutral Agree Significantly Agree

48. The best way to get along in this organization is to think the way the rest of the group does.

Significantly Disagree Disagree Neutral Agree Significantly Agree

49. Individual independence is encouraged in this organization.

Significantly Disagree Disagree Neutral Agree Significantly Agree

50. Nobody asks me for suggestions about how to run this place.

Significantly Disagree Disagree Neutral Agree Significantly Agree

51. One individual is usually the originator of ideas and policies in this organization.

Significantly Disagree Disagree Neutral Agree Significantly Agree

52. In this organization, the power of final decision can always be traced to the same few people.

Significantly Disagree Disagree Neutral Agree Significantly Agree

53. Creative efforts are usually ignored here.

Significantly Disagree Disagree Neutral Agree Significantly Agree

54. Once this organization develops a solution to a particular problem, that solution becomes a permanent one.

Significantly Disagree Disagree Neutral Agree Significantly Agree

Ethical Leadership and Support of Climate for Innovation ³				
55. Around here, a person can get into a lot of trouble by being different.				
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
56. I have a voice in what goes on in this organization.				
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
57. People here try new approaches to tasks, as well as tried and true ones.				
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
58. Others in our organization always seem to make the decisions.				
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
59. The leader's "pets" are in a better position to get their ideas adopted than most others.				
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
60. The main function of members in this organization is to follow orders that come down through channels.				
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
61. I mostly agree with how we do things here.				
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
62. There is little room for change here.				
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
63. These aren't my ideas, I just work here.				
Significantly Disagree	Disagree	Neutral	Agree	Significantly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Ethical Leadership and Support of Climate for Innovation³

4.

Thank you for your participation in this research study.

Appendix D

Table 1

Items of the Siegel Scale of Support for Innovation with their indicated dimension

Item no. and original dimension
1. (D) This organization is always moving toward the development of new answers
2. (D) This organization can be described as flexible and continually adapting to change
3. (O) I can personally identify with the ideas with which I work.
4. (L) Our ability to function creatively is respected by the leadership.
5. (N) Around here people are allowed to try to solve the same problem in different ways
6. (O) I help make decisions here.
7. (N) Creativity is encouraged here.
8. (C) People talk a lot around here, but they don't practice what they preach.
9. (N) People around here are expected to deal with problems in the same way.
10. (L) The people in charge around here usually get the credit for others' ideas.
11. (L) There is one person or group here who assumes the role of telling others what to do.
12. (C) Sometimes the way things are done around here makes matters worse, even though our goals aren't bad.
13. (L) The role of the leader in this organization can best be described as supportive.
14. (C) The leaders in this organization talk one game but act another.
15. (D) In this organization, we sometimes reexamine our most basic assumptions.
16. (N) The members of our organization are encouraged to be different.
17. (D) People in this organization are always searching for fresh, new ways of looking at problems.
18. (C) The way we do things seems to fit with what we're trying to do.
19. (L) Persons at the top have much more power than persons lower in this organization
20. (C) Work in this organization is evaluated by results, not how they are accomplished.
21. (N) A person can't do things that are too different around here without provoking anger.
22. (L) The leadership acts as if we are not very creative.
23. (O) I really don't care what happens to this organization.
24. (O) I am committed to the goals of this organization.

Items of the Siegel Scale of Support for Innovation with their indicated dimension

Item no. and original dimension

25. (C) The methods used by our organization seem well suited to its stated goals.
26. (L) Most people here find themselves at the bottom of the totem pole.
27. (O) My goals and the goals of this organization are quite similar.
28. (O) Members of this organization would rather be working here than anywhere else.
29. (O) In this organization we tend to stick to tried and true ways.
30. (L) Assistance in developing new ideas is readily available.
31. (L) New ideas can come from anywhere in this organization and be equally well received.
32. (O) On the whole, I feel a sense of commitment to this organization.
33. (D) We're always trying out new ideas.
34. (L) People in this organization are encouraged to develop their own interests, even when they deviate from those in the organization.
35. (L) Members of this organization feel encouraged by their supervisors to express their opinions and ideas.
36. (O) The people here are very loyal to this place.
37. (D) Members of this organization realize that in dealing with new problems and tasks, frustration is inevitable; therefore it is handled constructively.
38. (O) I have the opportunity to test out my own ideas here.
39. (O) I feel a real sense of responsibility for my work.
40. (C) In this organization, the way things are taught is as important as what is taught.
41. (D) This organization is open and responsive to change.
42. (N) A motto of this organization is "The more we think alike, the better job we will get done."
43. (L) My ability to come up with original ideas and ways of doing things is respected by those at the top.
44. (D) This place seems to be more concerned with the status quo than with change.
45. (L) The role of the leader here is to encourage and support individual members' development.
46. (N) The best way to get along in this organization is to think the way the rest of the group does.
47. (L) Individual independence is encouraged in this organization.
48. (O) Nobody asks me for suggestions about how to run this place.

Items of the Siegel Scale of Support for Innovation with their indicated dimension

Item no. and original dimension
49. (L) One individual is usually the originator of ideas and policies in this organization.
50. (L) In this organization, the power of final decision can always be traced to the same few people.
51. (N) Creative efforts are usually ignored here.
52. (D) Once this organization develops a solution to a particular problem, that solution becomes a permanent one.
53. (N) Around here, a person can get into a lot of trouble by being different.
54. (O) I have a voice in what goes on in this organization.
55. (O) People here try new approaches to tasks, as well as tried and true ones.
56. (L) Others in our organization always seem to make the decisions.
57. (L) The leader's "pets" are in a better position to get their ideas adopted than most others.
58. (L) The main function of members in this organization is to follow orders that come down through channels.
59. (O) I mostly agree with how we do things here.
60. (D) There is little room for change here.
61. (O) These aren't my ideas, I just work here.

Note. L = Leadership; O = Ownership; N = Norms for Diversity;
 D = Continuous Development; C = Consistency
 (Siegel, & Kaemmerer, 1978).

Appendix E

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End Page	134
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Portion	excerpt
Number of excerpts	1
Format	both print and electronic
Are you the author of this	No

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