EASTERN UNIVERSITY

LINKING EMPOWERING LEADERSHIP AND EMPLOYEE CREATIVITY: THE MEDIATING ROLE OF AFFECTIVE-BASED TRUST IN LEADER

by

Connie D. Allison

A dissertation submitted to the

College of Business and Leadership

in partial fulfillment of the requirements

for the degree Doctor of Philosophy

St. Davids, Pennsylvania

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Abstract

Linking Empowering Leadership and Employee Creativity:

The Mediating Role of Affective-Based Trust in Leader

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Eastern University

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This quantitative, correlational study focused on the impact of empowering leadership on employee creativity within the workplace. Further, the study examined how affect-based trust in one's leader might mediate this association. There were four hypotheses tested to assess correlations between empowering leadership, creativity, and affect-based trust. The sample consisted of 244 full-time U.S. workers across various industries. Regression analyses were performed on the resulting data using resampling techniques. The findings from this study provide support for empowering leadership's impact on employee creativity. The results also demonstrated a positive association between empowering leadership and followers who experienced strong affect-based trust in their leader. However, this study did not find affect-based trust in the leader to be correlated with employee creativity, nor was there support for mediating effects of affect-based trust on the association between empowering leadership and creativity. Implications for both theory and practice are discussed.



DEDICATION

I wish to dedicate this dissertation to my Lord and Savior, Jesus Christ, "in whom we have redemption, the forgiveness of sins" (English Standard Bible, Colossians 1:14). As a believer, I continue to grow in my realization of God's presence in my life. He has shown himself to be faithful in numerous ways over the years. It is through him, and him alone, that I find my purpose. I am humbled and grateful for all he has done to lead me to this point in my studies.

"Now to him who is able to keep you from stumbling and to present you blameless before the presence of his glory with great joy, to the only God, our Savior, through

Jesus Christ our Lord, be glory, majesty, dominion, and authority,

before all time and now and forever. Amen"

(English Standard Bible, Jude 1: 24-25).



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Table of Contents

Abstract	ii
Dedication	111
Acknowledgements	iv
List of Tables	xi
List of Figures	xii
List of Appendices	xiii
Chapter	Page
1. Introduction and Background	14
Purpose Statement	17
Rationale for the Study	17
Conceptual Framework	20
Significance of the Study	22
Organization of the Dissertation	22
Summary	23
2. Review of the Literature	24
Importance of Creativity in the 21st Century	25
Creativity Theory	27
Importance of Leadership in the 21st Century	31
Comparison of Management and Leadership	32

Chapter		Page
	Historical Roots of Management and Leadership	34
	Organizational Needs for Managerial and Leadership Roles	35
	Impact of Leadership on Creativity	37
	Empowering Leadership	39
	Empowerment Theory	41
	Findings Related to Empowerment	43
	Related Leadership Theories	45
	Participative Leadership	45
	Servant Leadership	46
	Transformational Leadership	47
	Leader-Member Exchange	49
	Distinctiveness of Empowering Leadership Theory	49
	Trust	50
	Types of Trust	52
	Empowering Leadership and Trust	53
	Benefits of Trust	54
	Theoretical Framework	55
	Social Cognitive Theory	55
	Social Exchange Theory	58
	Summary	59
3	. Methodology	64
	Research Design	64



Chapter		Page
	Research Questions and Hypotheses	65
	Hypothesis 1	65
	Hypothesis 2	66
	Hypothesis 3	66
	Hypothesis 4	67
	Population and Sampling	67
	Survey Instruments	72
	Empowering Leadership Questionnaire	72
	Affect-Based Trust Measure	73
	Self-Rated Creativity Scale	74
	Data Collection	76
	Considerations for use of MTurk	79
	Considerations for use of Payments	81
	Survey Processes	85
	Data Screening Processes	86
	Data Analysis	88
2	4. Results and Analysis	90
	Descriptive Characteristics of the Sample	91
	Testing Assumptions	93
	Testing for Normality	93
	Testing for Linearity	95
	Testing for Multicollinearity	96



Chapter	Page
	Testing for Homoscedasticity96
	Change of Methodology
	Descriptive Statistics of the Study Variables
	Result of the Study
	Summary of Findings
5.	Discussion and Conclusion
	Discussion of Findings
	Hypothesis 1 (EL/Creativity)106
	Hypothesis 2 (EL/Affect-based Trust)108
	Hypothesis 3 (Affect-based Trust/Creativity)111
	Hypothesis 4 (Mediation Model)112
	Implications of Findings
	Implications for Theory114
	Implications for Practice116
	Limitations of the Study
	Recommendations for Future Research
	Summary
	References
	Appendices
	A. Empowering Leadership Questionnaire
	B. Affect-Based Trust Instrument177



Chapter		Page
	C. Self-Rated Creativity Scale	179
	D. Demographical Survey Questions	181
	F. Consent Form	183



List of Tables

Table 1 Demographic Profile of Survey Respondents	92
Table 2 Skewness and Kurtosis Statistics of Study Variables	92
Table 3 Kolmogorov-Smirnov	95
Table 4 Descriptive Statistics and Correlations for Study Variables	102
Table 5 Direct and Indirect Effects of EL on Employee Creativity	103



List of Figures

Figure 1 Bandura's Model of Triadic Reciprocal Causation	56
Figure 2 Theoretical Framework	68
Figure 3 Bootstrapping Results	105



List of Appendices

A. Empowering Leadership Questionnaire	175
B. Affect-Based Trust Instrument	177
C. Self-Rated Creativity Scale	179
D. Demographical Survey Questions	181
E. Consent Form	183

CHAPTER 1

INTRODUCTION AND BACKGROUND

Modern organizations are facing intense demands due to the increase of globalized markets, the growing complexity of work, and fast-paced technological changes (Amundsen & Martinsen, 2014; Bellanca, 2009; Humphrey et al., 2007; Müceldili et al., 2013; Sharma & Kirkman, 2015). These stresses have led many organizations to seek a workforce comprised of individuals who have a strong capacity for the development and use of creativity within their work environment (Javed et al., 2018; Lutz Allen et al., 2013). Some scholars have suggested that creativity can have a strong impact on an organization's competitive advantage and growth (Khalid & Zubair, 2014; Lutz Allen et al., 2013; Özaralli, 2015; Prasad & Junni, 2016; Zhou & Hoever, 2014). It has also been found that creativity fuels organizational innovation (Bellanca, 2009; Tu et al., 2019; Zhou & Hoever, 2014) which can heighten the organization's ability to adapt and remain relevant (Gerstein & Friedman, 2017; Raphan & Friedman, 2014; Zhou & Hoever, 2014). Research has likewise indicated that creativity may play a pivotal role in employee engagement, job satisfaction, and retention (Zhou & Hoever, 2014). Organizations can benefit from both recognizing and valuing creativity in the workplace (Zhou & Hoever, 2014).

Although there is much evidence to suggest both the need and desire for increased creativity, organizations report various challenges associated with promoting the



development and use of employee creativity (Özaralli, 2015). These include issues at the individual level such as a lack of creative thinking skills, low technical capabilities, low motivation, an aversion to risk-taking, and personality traits (Jiang et al., 2019; Özaralli, 2015). Organizational issues, including the culture of the organization, a lack of strategic emphasis on creativity, and limited resources focused on creativity development, have also been shown to hinder creativity (Özaralli, 2015; Shalley & Gilson, 2004). Both scholars and practitioners have turned their attention to leadership as a means of impacting employee creativity through efforts which boost motivation, building a culture which embraces risk-taking, rewarding creative efforts, and modeling desired behaviors (A. Lee et al., 2018; X. Zhang & Bartol, 2010).

In response to pressures placed on organizations in this postindustrial age, practitioners are seeking new and innovative ways to approach organizational leadership. Many organizations are seeking increased flexibility within the structure, flattened organizations, decentralization of decision-making, and a focus on increased quality and efficiency (Amundsen & Martinsen, 2014; Seibert et al., 2004; Sharma & Kirkman, 2015). To support these efforts, leadership scholars have demonstrated much interest in research related to empowerment theory (Amundsen & Martinsen, 2014; Arnold et al., 2000; Chaubey et al., 2019; Cheong et al., 2016; Hassan et al., 2019; Jaiswal & Dhar, 2017; Javed et al., 2018; Lorinkova & Perry, 2017; Lutz Allen et al., 2013; Özaralli, 2015; Seibert et al., 2004; Suifan et al., 2018). Empowering leadership (EL) has been defined as "a process of sharing power, and allocating autonomy and responsibilities to followers, teams, or collectives through a specific set of leader behaviors for employees to enhance internal motivation and achieve work success" (Cheong et al., 2019, p. 34).



EL has theoretical connections to theories such as Servant Leadership (Chung et al., 2010); Leader-Member Exchange (Chen et al., 2007; Sharma & Kirkman, 2015), Transformational Leadership (Kark et al., 2003), and Participative Leadership (Sharma & Kirkman, 2015). Despite the commonalities each of these leadership theories have with EL, there are sufficient differences leading scholars to consider EL a distinct leadership method worthy of independent study (Amundsen & Martinsen, 2014; Arnold et al., 2000; Fong & Snape, 2015; Kundu et al., 2019; Pearce et al., 2003; Sharma & Kirkman, 2015).

Leadership has been shown to have an effect on employees' creativity (Harris et al., 2014; L. Huang et al., 2016; Lutz Allen et al., 2013; Tierney et al., 1999). EL is one of the theories which has been studied within the context of creativity (Amabile et al., 2004; Özaralli, 2015; Tierney et al., 1999; X. Zhang & Bartol, 2010). However, studies linking EL and creativity have yielded inconsistent results and suggested there are many factors which might influence this association (Ahearne et al., 2005; Audenaert & Decramer, 2018; Zhou & Hoever, 2014). Some studies have indicated the impact EL has on creativity is affected by the trust a follower has in their leader (Chow, 2018; Dehbannejad, 2017; X. Zhang & Zhou, 2014). There is some evidence supporting the idea that affect-based trust within an empowering leadership model promotes employee creativity (Chow, 2018; X. Zhang & Zhou, 2014). Trust requires one's acceptance of being vulnerable and readiness to assume risk because they feel safe in the relationship (Mayer & Gavin, 2005; K. Ng & Chua, 2006; X. Zhang & Zhou, 2014). This willingness to become vulnerable is essential for creativity to thrive (Gong et al., 2012). In a trusting relationship, the employee is more likely to engage in creativity because they experience a sense of positive expectation in how the leader will respond regardless of the results of



their creative efforts (Chow, 2018; A. Lee et al., 2018). This expectancy supports the risk-taking needed in the creative processes.

One approach to creating competitive advantage within an organization is to create the type of climate which both encourages and supports creativity (Lutz Allen et al., 2013). It is thought that perhaps EL and trust in leader might contribute to this type of climate. Hence this study sought to explore associations between empowering leadership and employee creativity and how affect-based trust in the leader might mediate these associations.

Purpose Statement

The purpose of this quantitative, correlational study was to further the research surrounding the association between empowering leadership and employee creativity. Further, this study sought to fill research gaps in understanding the mediating role of affect-based trust in the leader between empowering leadership and employee creativity. The sample included full-time working adults, across various industries, from the United States.

Rationale for the Study

Several key influences have changed the landscape of postindustrial age organizations. First, the modern world markets have felt the impact of the rise of globalism (Ahearne et al., 2005; Jain, 2016; Müceldili et al., 2013; Sharma & Kirkman, 2015). As world economies have become more closely tied together, globalized markets have become increasingly more competitive which is driving many organizations to place a strong emphasis on innovation as they seek to reinvent both their products and their processes (Jain, 2016; Jia et al., 2018; Mallén et al., 2019).



Additionally, the nature of work has shifted over the past several decades due to the dramatic increase of technology (Amundsen & Martinsen, 2014; Humphrey et al., 2007; Parker et al., 2001). The impact of technological advances can be seen across occupations and professional groups. Technology has changed the essence of work as it has fueled what Barley and Orr (1997) describe as "the emergence of work which is comparatively complex, analytic and even abstract, because it makes use of tools that generate symbolic representations of physical phenomena" (p. 5). The complexities associated with technological change have added to the burden of modern organizations as they seek to remain competitive in their fields.

In turn, the increased complexities associated with the growth and codification of knowledge have brought about a need for higher cognitive capabilities among today's workforce (Amundsen & Martinsen, 2014; Bellanca, 2009; Humphrey et al., 2007; Jiang et al., 2019; Parker et al., 2001). Across industries, there has been a dramatic increase in the need for knowledge workers (Davenport, 2005; Viñas-Bardolet et al., 2020). Knowledge work is not an occupational group, but rather a description of the type of work which has been characterized as non-routine, unstructured, highly connected to information and communications technologies, and contingent upon the specific organization's changing needs (Drucker, 1959; Scarbrough, 1999; Viñas-Bardolet et al., 2020).

Globalization, the speed of technological change, and the rise of knowledge work have added numerous demands not only to the modern workforce but has also impacted those who manage these demands (Müceldili et al., 2013; Scarbrough, 1999).

Contemporary organizations are increasingly looking for employees who can adapt to



these many changes and help the organization find ways to not only survive, but to thrive amidst these conditions (Özaralli, 2015; Prasad & Junni, 2016). Leadership is key to the development of such a workforce by cultivating the growth of employee creativity (Gupta et al., 2012; Oke et al., 2009).

The desire for a better understanding of how to develop creativity within the workplace has been demonstrated across numerous industries. Researchers have explored workplace creativity in fields such as manufacturing, pharmaceuticals, advertising, technology, healthcare, education, and even churches (Allen, 2007; Carmeli et al., 2014; Castro et al., 2012; Hirst et al., 2009; Javed et al., 2018; Khalid & Zubair, 2014; Özaralli, 2015)

There has been much attention within the leadership literature on how to enable organizations to better cope with the rate of change and resulting sense of uncertainty (L. Huang et al., 2016; Jung, 2001; A. Lee et al., 2018). The pressures for fast-paced change have led toward the advancement of leadership theories which focus on more autonomous working conditions (Audenaert & Decramer, 2018; D. Liu et al., 2016). This is valuable to leaders as their jobs have become increasingly complex. Leaders are involved in multifarious activities where it is simply not feasible for there to be a single point of information or decision-making (Lovelace et al., 2007). EL theory embraces the concept of employees assuming many of the responsibilities traditionally associated with leadership (Arnold et al., 2000; Chow, 2018). This allows for distribution of the judgements made, as well as the knowledge needed to make them. EL changes the role of the leader from one who directs, to one who helps others learn to lead themselves (Arnold et al., 2000; Audenaert & Decramer, 2018).



An organization's success is highly dependent upon the creation of conditions which foster empowerment of employees (Özaralli, 2015). EL has a positive association with employee performance and organizational output (Ahearne et al., 2005; Chen et al., 2007; Fong & Snape, 2015; Meng & Sun, 2019). EL has also been found to positively impact employee satisfaction and retention (Meng & Sun, 2019; Shalley et al., 2000; Shalley et al., 2004). Additionally, EL has been associated with building affect-based trust in the leader (Chow, 2018). Trust helps to generate an environment of safety allowing persons to be more open to the vulnerability that is needed for creative efforts (X. Zhang & Zhou, 2014).

The effects of continued organizational change stemming from globalization, the rise of technological advances, and the growing complexity of knowledge work have led to an increased interest in empowerment both from the academe and practitioners (Amundsen & Martinsen, 2014; Arnold et al., 2000; Bellanca, 2009; Humphrey et al., 2007; Parker et al., 2001; Seibert et al., 2004). Scholars have sought to expand the literature by exploring leadership theory which more highly correlates with the needs of the modern organization (Chow, 2018; Müceldili et al., 2013). Beyond theoretical findings, having a deeper understanding of the impact EL and affect-based trust have on creativity offers the practical benefit of helping organizations determine methods for unleashing employee creativity and reaping the associated benefits.

Conceptual Framework

Two theories served as a framework for this research. First, Bandura's (1988)

Social Cognitive Theory (SCT) expanded on social learning processes by focusing on

both the cognitive and behavioral factors which influence the theory. SCT introduced two



concepts: human agency and triadic reciprocal determinism (Bandura, 1989). Human agency holds that people have the capacity to direct themselves via causal contributions to their thinking, motivations and actions (Bandura, 1989). Bandura (2001a) argued that "it is not just exposure to stimulation, but agentic action in exploring, manipulating, and influencing the environment that counts" (p. 4). Reciprocal determinism proposes that people's behaviors are not simply impacted by personal and environmental factors, but rather create a reciprocal model of interdependence between these three factors (Bandura, 1977). In addition to human agency and reciprocal determinism, Bandura (1977) also placed great emphasis on self-efficacy and the important role that self-efficacy plays in SCT. Self-efficacy is the interpretation a person makes about their own abilities.

Consistent with reciprocal determinism, this self-reflection is impacted by both behaviors and the environment (Bandura, 1977).

The second theory which framed this research was Blau's (1964) Social Exchange Theory (SET). SET postulates that social exchanges create obligations for reciprocated behaviors. One of the determinants for how people respond is how they are treated (Lorinkova & Perry, 2017). The relational aspects of empowerment are rooted in SET (Blau, 1964; Emerson, 1962). Empowering leadership can engender high-quality social exchanges, which in turn facilitate a relationship of high affect-based trust (Biemann et al., 2015; A. Lee et al., 2018; Lorinkova & Perry, 2017). Leaders who demonstrate concern for followers create the psychological state in which followers reciprocate with increased trust (X. Huang, 2010; Kelloway et al., 2012; X. Zhang & Zhou, 2014). Leaders who empower their followers demonstrate confidence in and respect for these



individuals, which also helps to foster a high level of trust in the leader (Dirks & Ferrin, 2002).

Significance of Study

This study sought to contribute to the theoretical understanding of empowering leadership and its influence on creativity. This study also attempted to add to the literature surrounding affect-based trust and how affect-based trust might mediate the association between empowering leadership and creativity. Further, the study pursued benefits which could assist practitioners by offering organizational leaders some additional insights into methods which may improve employee creative capabilities by means of leadership strategies. As an extension of this, practical benefits could be offered at a societal level as contemporary organizations continue to seek ways to flourish in the postindustrial age (Harris et al., 2014; Rubenstein et al., 2018). Creativity has been found to be a contributor to growth and success in today's fast-moving environment (Chaubey et al., 2019; Özaralli, 2015; Zhou & Hoever, 2014). Exploring practices which might assist organizations in promoting creativity may bring value to both individual organizations as well as society as a whole (Rubenstein et al., 2018).

Organization of the Dissertation

This study is organized into five chapters. Chapter one describes the background of the research project and offers an overview of key concepts including empowering leadership, creativity, and affect-based trust. In addition, chapter one presents the purpose statement, rationale for the study, conceptual framework, and significance of the research. Chapter two provides a review of the literature related to empowering leadership, creativity, and trust. Chapter two also examines concepts such as creativity in



the workplace, how empowering leadership differs from other leadership theories, and theoretical underpinnings of this study. This review of the literature revealed a gap in the literature related to how empowering leadership is related to creativity and any mediating effects affect-based trust might have on this association, specifically within the U.S. Chapter three describes the methodology which was used in this study. This includes the research design, research questions, hypotheses, procedures for the sampling processes, instrumentation used, data collection processes, and procedures used for the data analysis. Chapter four presents descriptive statistics, the data analysis, as well as the research findings of this study. Chapter five provides a discussion of the findings including implications for practitioners, limitations of the study, and recommendations for future research.

Summary

While the early 20th century was focused on building organizations within the industrialized economy, the current landscape is information-driven and heavily relies on creativity (Bellanca, 2009; Harris et al., 2014; Jain, 2016; Liden et al., 2014; Özaralli, 2015; Sweetman, 2010). Today's organizations are increasingly seeking ways to handle competition and augment organizational successes (Mallén et al., 2019). Believing creativity to be a most crucial human attribute (Chew et al., 2017), some scholars have sought insights into means of fostering creativity within organizations (Özaralli, 2015; S. Zhang et al., 2018; Zhou & Hoever, 2014). This research adds to the understanding of how empowering leadership might help achieve this goal.



CHAPTER 2

REVIEW OF THE LITERATURE

Over the past several decades, dramatic shifts have happened in the marketplace causing the need for a transformation in the type of employee, work environment, and leadership style used within many organizations (Ahearne et al., 2005; L. Huang et al., 2016). The rise of disruptive technologies and expanded globalism have created increasingly turbulent business environments (Ahearne et al., 2005; Özaralli, 2015; Prasad & Junni, 2016; Schneider, 2016; Sharma & Kirkman, 2015). This, in turn, has fueled fierce competition among organizations (Jaiswal & Dhar, 2017; A. Lee et al., 2018; Prasad & Junni, 2016). To stay viable in this era of increased competition and rapid change, organizations are seeking strategies which help bolster their market position by achieving a stronger competitive advantage (Javed et al., 2018; Prasad & Junni, 2016).

There has also been a growing complexity of work in many industries related to the technical and economic changes of the 21st century (Amundsen & Martinsen, 2014; Humphrey et al., 2007; Sharma & Kirkman, 2015). There has been a move away from the production economy of the early to mid-20th century to a postindustrial age economy powered by knowledge workers (Bellanca, 2009; Jiang et al., 2019; Kundu et al., 2019; Parker et al., 2001). This new era demands the ability for organizations to envision and implement fast-paced strategic change (Amabile, 1996; Crant, 2000; Grant & Ashford, 2008; Li et al., 2015; Shalley et al., 2004).



Importance of Creativity in the 21st Century

Over the past several decades many leadership theorists have conjectured that organizations' survival is growing more dependent upon their ability to adapt quickly to the ever-changing landscape (Drucker, 1993; Knowles, 1990; Prasad & Junni, 2016; Shalley et al., 2004). One of the outcomes from these pressures is a drive for greater innovation within organizations (Jia et al., 2018; Mallén et al., 2019). To avoid organizational obsolescence there must be a culture that focuses on innovation and adaptability (Gerstein & Friedman, 2017; Raphan & Friedman, 2014; Zhou & Hoever, 2014). Innovation has been defined as the application of creative ideas within an organization (Amabile, 1996; Oldham & Cummings, 1996). Organizational innovation is therefore dependent upon individual members of the organization being creative (Amabile, 1997; Bellanca, 2009; Woodman et al., 1993). Creativity has been defined as the generation of novel and useful ideas related to specific products, services, processes, and procedures (Amabile, 1988; Zhou & George, 2001). Csikszentmihalyi (1996) identified creativity as an act, idea, or product that changes an existing domain into a new one. Therefore, a creative person is someone whose thoughts or actions evoke change (Csikszentmihalyi, 1996).

The innovation which can result from creativity plays an important role in organizations' competitive advantage during this fast-changing time, making the promotion of creativity essential (Jaiswal & Dhar, 2015; Özaralli, 2015; Prasad & Junni, 2016). Research has demonstrated that employee creativity can have a direct impact on many of these 21st century disruptors (Ahearne et al., 2005; Sharma & Kirkman, 2015). Creativity has been found to be pivotal to organizations staying competitive (George,



2007; George & Zhou, 2007; Khalid & Zubair, 2014; Puccio et al., 2011; Shalley & Gilson, 2004). Additionally, creativity supports a contemporary organization's competitive advantage because it supports making adjustments that allow one to react to emergent opportunities (Mallén et al., 2019; Sweetman, 2010). Creativity has been found to be crucial for organizational survival (Harris et al., 2014; Özaralli, 2015) and has been seen as a driving force for economic development, technical advances, and work-place leadership (Chew et al., 2017).

There are personal benefits to creativity, as well. Individuals who have strong creative skills are able to view matters from multiple perspectives and more easily find solutions as problems arise (Hensley, 2020). Additionally, creative persons are more comfortable with embracing the unknown (Hensley, 2020) and have demonstrated higher levels of resilience when seeking methods of handling uncertainty (Venckutė et al., 2020). Creativity has also been linked to cultural awareness and personal development (Venckutė et al., 2020). These are all critical attributes needed for the 21st century. Creativity has been described as a vital part of human cognition and an essential aspect of the creation of "globally competitive citizens" (Denson & Buelin-Biesecker, 2015, p. 2).

Modern organizations are in desperate need of employee creativity which can fuel the innovation needed to succeed in the 21st century (Bellanca, 2009; Liden et al., 2014; Tu et al., 2019). Creativity is an essential element needed for competing successfully in the global marketplace (Özaralli, 2015). Understanding the growing importance creativity plays within organizational success puts further pressure on leaders to fashion environments which support creativity (Jaiswal & Dhar, 2017; Lutz Allen et al., 2013; Özaralli, 2015).



Creativity Theory

Creativity and the role it plays in modern organizations has attracted the interest of scholars (Liden et al., 2014; Özaralli, 2015; Zhou & Hoever, 2014). Csikszentmihalyi (1996) saw creativity as the act of changing what is currently in place with something new. Other scholars have added to this definition arguing that creativity requires not only the production of novel ideas, but ones that are useful within a particular context (Amabile, 1996; Oldham & Cummings, 1996). Otherwise, the act of creativity could apply equally to the mundane and the brilliant (Clegg, 2008) or even include bizarre and impractical notions which serve no value to the organization (Shalley & Perry-Smith, 2001).

Creativity research has roots in the area of psychology, specifically focusing on personal characteristics and cognitive abilities which help persons work within a creative manner (Amabile, 1983; Guilford, 1950; Shalley et al., 2004; Simonton, 2000). Examples of these capabilities include independence, self-confidence, and motivation (Amabile, 1997; Jiang et al., 2019; Simonton, 2000). Self-efficacy has also been demonstrated to be highly related to creativity (T. W. H. Ng & Lucianetti, 2016). What employees believe about their own ability creates a sense of self-determination which often leads to a stronger persistence toward creative output (Tierney & Farmer, 2011; C. Wang et al., 2014).

Further, creativity is impacted by aspects of one's personality. Personality is seen as the traits that distinguish people from each other (Wood, 2012). Research has indicated that such traits are reflective of who a person is (McCrae & Costa, 1994) and has been shown to predict behaviors over time and across numerous situations (McCrae & Costa,



1994). The five-factor personality model, commonly referred to as the *Big 5*, describes the most prominent elements of personality (Giluk & Postlethwaite, 2015; Hirschfeld et al., 2008; Simha & Parboteeah, 2020). These five elements include conscientiousness, openness to experience, extraversion, agreeableness, and neuroticism. Personality traits help to explain various reactions to similar situations (Nga & Shamuganathan, 2010). Of these five areas, openness to experience has been found to be particularly relevant to creativity studies. People who are high in openness to experience are found to be creative, imaginative, nonconforming, unconventional, and curious (Grehan et al., 2011; Sur & Ng, 2014). Creativity is also indirectly affected by other personality aspects. In addition to openness to experience, creativity is affected by one's risk-taking propensity, which is a multi-dimensional construct positively influenced by extraversion and openness to experience (Shen & Yuan, 2020). At the same time, creativity is negatively influenced by neuroticism, agreeableness, and conscientiousness (Shen & Yuan, 2020).

There are two dominant models for examining creativity: componential and interactionist. The componential paradigm is attributed to Amabile (1983) who built upon the work of earlier eras (Campbell, 1960; Dunker, 1945; Newell & Simon, 1972; Rogers, 1954; Wallas, 1926). Per the componential model, creativity results from a combination of skills, motivation and creative processes (Amabile et al., 2004). Amabile (1988) argued the overlap of these three components would produce the highest levels of creativity. As such, organizations should seek ways to help individuals develop in all three areas (skills, processes, motivation). Much of her work focused attention on this last element, motivation, and how it might impact creativity at the individual level (Amabile, 1983, 1988, 1997). Motivation is premised on finding excitement in the work, having the



drive for accomplishing it, and believing in the importance of the efforts (Amabile, 1988).

A few years later, Woodman et al. (1993) proposed an interactionist creativity model. This model posited creativity as the interaction of individual and group dynamics mixed with organizational characteristics which either enhance or constrain the act (Woodman et al., 1993; X. Zhang & Zhou, 2014). Woodman et al. (1993) described organizational creativity as a group of individuals working together within the complexity of the organizational system to create something that is both new and offers value. It is this emphasis on the complex social system that is at the heart of the interactionist theory.

The two perspectives on creativity, motivational (Amabile, 1983, 1988) and interactionist (Woodman et al., 1993), are distinct; yet they have been seen to complement each other and are often used together as a basis for creativity research literature (Hon & Leung, 2008; X. Zhang & Zhou, 2014). Both perspectives offer insights on how creativity affects the work environment both positively and negatively. S. Zhang et al. (2018) conducted a study bringing together both "context specific and actor-related mechanisms simultaneously in the relationship between leadership and creativity" which offered a theoretical framework underlying other literature (p. 897).

Antecedents of creativity have also been examined (S. Zhang et al., 2018). Scholars have found predictors of creativity to include leader support, an innovative culture, empowerment, leader expectations, openness to creativity, and motivation (Batey et al., 2010; Choi, 2004; Qu et al., 2015; Unsworth et al., 2005). Other scholars have found support for creativity, training and development, as well as having a climate of



innovation to be key contributors to the development of a creative workplace (Cangemi & Miller, 2007; Diliello et al., 2011; Slatten et al., 2011; Wong & Pang, 2003). In addition to these environmental elements, attributes such as employee self-efficacy also impact the ability to be creative (Gong et al., 2009; Tierney & Farmer, 2011; C. Wang et al., 2014; W. A. Williams et al., 2017). The employee's learning orientation, intrinsic motivation, and psychological needs further add to their creative capacities (Amabile, 1988; Gong et al., 2009; Gumusluoglu & Ilsev, 2009; D. Liu et al., 2016; Tierney et al., 1999; Woodman et al., 1993). Additional attributes which have been linked to creativity include a person's sense of independence, self-confidence, openness to experience, and being achievement—oriented (Chow, 2018; Simonton, 2000). A person's age and level of education have also been found to be correlated to creativity (George & Zhou, 2001; Shalley & Gilson, 2004; X. Zhang & Bartol, 2010).

Creativity and innovation have sometimes been used synonymously within research; however, many researchers believe they are two distinct constructs (Anderson et al., 2014; Berg, 2016; Zhou & Hoever, 2014). Creativity focuses on the generation of ideas which are considered novel and useful within a particular domain (Amabile, 1988; Madjar et al., 2002; Shalley & Perry-Smith, 2001). Innovation is commonly associated with the implementation of such creative ideas (Amabile, 1996; Jia et al., 2018; Oldham & Cummings, 1996). From this perspective, creativity cannot be separated from the innovative output but rather should be interpreted as a subset of the domain of innovation (Woodman et al., 1993). Therefore, creativity becomes a precondition for innovation (Klijn & Tomic, 2010; Özaralli, 2015) or as Amabile (1996) described it, the seed of innovation.



Creativity does not assure innovation within an organization. There are many outside influences which may constrain the adoption of new ideas or processes. Examples of inhibitors include employees believing their ideas will not be well received (Baer, 2012), a lack of a supportive culture (Shalley et al., 2004), or an unstable environment (Javed et al., 2018). Therefore, creativity is a necessary part of innovation but not sufficient unto itself (Joo, 2007). For the purposes of this study, creativity was considered a separate construct, and defined as the generation of novel and useful ideas which then have the potential of being implemented within an organizational setting to bring value to the larger group (Amabile, 1988; Oldham & Cummings, 1996; Shalley & Perry-Smith, 2001).

Importance of Leadership in the 21st Century

Leadership has been identified as an important element for organizational success in the 21st century (Jaiswal & Dhar, 2015; Tu et al., 2019). Many institutions are seeking ways to both maximize efficiency and adapt quickly to change (A. Lee et al., 2018). As the work environment has become more complex and demanding, so has the role of the leader (A. Lee et al., 2018; Müceldili et al., 2013; Sharma & Kirkman, 2015). It has become impractical for the leader to be expected to handle all the intricacies involved in decision-making (Lovelace et al., 2007; Sharma & Kirkman, 2015). In response, many leaders are seeking to flatten hierarchical structures within their establishments and move towards a greater level of employee empowerment (Amundsen & Martinsen, 2014; Fong & Snape, 2015; Sharma & Kirkman, 2015). Empowering leadership involves the sharing of power, providing support for motivation, and supporting opportunities for



developmental efforts within employees (A. Lee et al., 2018). EL has been found to be relevant to the transformation of the modern workforce (Forrester, 2000).

Many traditional leadership theories assumed a hierarchical structure and top-down approach to control, and centralized decision-making (Arnold et al., 2000; Bass & Stogdill, 1990). These models emerged from management theory and were generally geared toward work that involved repetitive tasks which were characterized by uniformity and governed for control and efficiency (Sweetman, 2010). Today's organization, which is highly dependent upon creativity and innovation, demands a new approach to leadership (Lichtenstein et al., 2006; Lichtenstein & Plowman, 2009). Many modern organizations are seeking leadership which is focused less on control, and more on motivating and developing employees (Yukl, 2006). In today's era of complexities and uncertainty, leadership must enable an environment that supports and enables creativity (L. Huang et al., 2016; Jung, 2001; Lichtenstein et al., 2006). Empowerment leadership can be a significant driver of such an environment (A. Lee et al., 2018; X. Zhang & Bartol, 2010; X. Zhang & Zhou, 2014).

Comparison of Management Leadership

To better understand leadership, it is important to examine how leadership compares to the concept of management. Scholars have disagreed about how these two concepts contrast. Zaleznik (1977) authored one of the first publications which purported management and leadership to be separate and distinct roles. This was premised on differences in how each role handles work, sets goals, and approaches work relationships (Bergman, 2007). The roles of leader and manager were further differentiated by the focus each has. Management tends to remain focused on internal operations (Phipps,



2015), concentrating on efforts to bring about consistency and order (Kotter, 1990). In contrast, leadership focuses on external aspects such as building vision and the corresponding plans for achieving the vision (Phipps, 2015). Unlike managerial efforts to build stability, leadership focuses on movement (Bennis & Nanus, 1985; Kotter, 1990; Rost, 1991).

Some scholars have portrayed the relationship between leadership and management in more nuanced models. For example, management and leadership have been viewed as separate, yet highly related, functions (Bennis & Nanus, 1985; Bergman, 2007). From this perspective, management is seen as providing the means whereby the leadership's goals are achieved. Another model portrays leading and managing as two ends of a continuum scale and therefore not completely separate concepts (Azad et al., 2017). Those who accept the continuum scale model understand leadership and management to have overlapping attributes but to varying degrees. Another perspective considers leadership to be a subset of management (Bedeian & Hunt, 2006) with both being needed for organizational success (Kotter, 1990).

Further, it has been suggested that having one of these two concepts without the other is not feasible (Azad et al., 2017). Mintzberg and Mangelsdorf (2009) said leadership and management were "two sides of a single coin" (p. 10). For example, a department head cannot succeed by having vision if there is a lack of effective planning or insufficient allocation of resources needed to bring it to fruition. Conversely, success cannot be achieved by having good processes, planning, and allocations but no clear direction or vision (Azad et al., 2017). Therefore, even if management and leadership are



seen as separate constructs, they are only effective if used in tandem (Azad et al., 2017; Marquis & Huston, 2012).

Historical Roots of Management and Leadership

Management has been defined as exercising direction of a group of people through a managerial position (Katz, 1955). Management emerged during the 20th century as a means of regulating and controlling work in large, complex organizations. Managers were tasked with bringing order, predictability, and consistency to the workplace (Kotterman, 2006). Management focused on finishing the business of the day by instructing employee action (Liphadzi et al., 2017). Early portrayals of management included conducting tasks such as planning, organizing, coordinating, and directing structural systems to accomplish organizational goals (Tamkin, 2012; Wajdi, 2017). Over the decades, the duties and associated processes have been refined and improved (Kotter, 1990). In addition to having a focus on productivity and cost controls (Hill, 2017; Mullins, 2005), modern managers must now be reactive to situations and demonstrate the ability to handle crisis control (Hill, 2017). In current times, management involves finding ways to cope with the complexities within the organization (Kotter, 1988).

In comparison, leadership has been part of society for thousands of years (Bass & Stogdill, 1990). The study of leadership theory extends back to Aristotle's work (Northouse, 2018). Contrary to the goal of stability associated with management, leadership drives change, and this action can inherently create chaos and potentially even failure (Kotter, 1990). Rather than focusing on managerial control mechanisms, leadership emphasizes the release of control (Posner & Kouzes, 1988). Leadership skills focus on establishing direction and then aligning, motivating and inspiring others to



achieve long-term organizational goals (Bennis & Nanus, 1985; Wajdi, 2017).

Leadership is vision oriented. Management requires a position of authority whereas leadership can be accomplished regardless of title or position (Bolman & Deal, 2003). Further, the goals associated with each of these roles is distinctive. Zaleznik (1977) believed managers' goals arise from the necessities of the job whereas leaders' goals stem from a passion for creating meaning.

Organizational Needs for Managerial and Leadership Roles

Much literature has studied the roles, abilities, and functions associated with both management and leadership. These two concepts have been found to have overlapping purpose in that they both seek to influence people and to effectively accomplish organizational goals (Bass & Stogdill, 1990; Kotter, 1990; Maguire, 2016; Pretorius et al., 2018; Wajdi, 2017). Some scholars have glorified leadership as being visionary and inspiring (Bennis & Nanus, 1985; Kotterman, 2006; Liphadzi et al., 2017), while dismissing managerial skills as simply being task-oriented (Azad et al., 2017). Rather than seeking a tiered comparison of management and leadership, perhaps a more appropriate approach would be to seek to understand the value each of these roles brings to organizations.

Managers control and direct in an effort to help solve problems, whereas leaders inspire and empower others to problem solve. The goals may be the same but the approach to achieve the goals varies. Managers often use structure and systems to reach organizational goals; leaders tend to use style to motivate others (Phipps, 2015).

Managers and leaders are different types of people and tend to have varying skills and career goals (Zaleznik, 1977). Those who seek to manage and those who seek to lead also



form different types of relationships with their followers. Leaders pursue multidirectional influential relationships while managers focus on unidirectional authoritarian relationships (Katz, 1955).

Both management and leadership are needed for an organization to achieve its goals (Liphadzi et al., 2017). This is especially true during the 21st century as modern organizations need both change and order to survive the challenges associated with the complexity they are experiencing (Stanley, 2006). If an organization only has strong management, the likely outcome will be that of a rigid and bureaucratic culture (Pretorius et al., 2018). On the other hand, if there is strong leadership but weak management, the organization may find itself ineffective in its pursuit of any needed change efforts (Pretorius et al., 2018). Therefore, it is important that modern organizations seek to attract and retain both great leaders and strong managers. At the same time, it is imperative that organizations understand the function each of these roles plays and how the positions influence the work environment. This allows both managers and leaders to effectively advance the organization's position.

The distinction between management and leadership is important when examining how organizations build creative capacity within their employees. Management is focused on systems and controls, and tends to emphasize maintaining the status quo (Van Vactor, 2012). Creativity can be stifled by managers due to this deliberate focus on stabilization (Liphadzi et al., 2017; Zaleznik, 1977). Managers often seek to avoid risktaking (Zaleznik, 1977). Leadership, on the other hand, is associated with change and innovation (Lichtenstein & Plowman, 2009). Unlike management, leaders seek new processes which can help to propel the organization into the future (Manion, 2005). As a



result, leadership can have a dramatic impact on how organizations approach growing their creative capacity.

It is important for organizations to clearly understand the differences between management and leadership. Both are essential to an institution's success; however, they offer distinctive contributions. Leadership helps organizations actively promote and embrace change while management seeks to establish order (Kotter, 1990; Liphadzi et al., 2017; Stanley, 2006). The more disruption happening to an industry, the more there is a need for strong and effective leadership (Kotter, 1990; Stanley, 2006). Leadership plays a particularly pivotal role in organizations that are undergoing turbulent times and is consequently exceptionally important in this current era (Bobo, 2019; Hayat Bhatti et al., 2019; Kotter, 1990).

Impact of Leadership on Creativity

While there are many contributors to fostering creativity in the workplace, it has been noted that leadership is a key element (L. Huang et al., 2016; S. Zhang et al., 2018). There has been a variety of research performed across numerous industries on how employee creative behavior is influenced by leadership style (Gong et al., 2009; Gupta et al., 2012; Neubert et al., 2008; Oke et al., 2009; Tierney & Farmer, 2011; P. Wang et al., 2013; Yoshida et al., 2014; X. Zhang & Bartol, 2010). Examples include a study from manufacturing which positively correlated leadership to employee problem solving abilities (Carmeli et al., 2014). An additional study from the pharmaceutical industry related a leader's inspirational motivation with the followers' creativity (Hirst et al., 2009). A study from a hospital setting linked the leader's emotional intelligence and employee creativity (Castro et al., 2012). Another healthcare study demonstrated an



association between the leader's creative expectations and the group's innovative output (West et al., 2003). Various industries have signaled a need for increased levels of creativity and found leadership to play a pivotal role in the development of creativity within the workplace.

Leaders may impact numerous aspects of the organization which relate to employee creativity including the work environment, organizational culture, strategies which help to stimulate creativity, and internal processes (Gong et al., 2009; Gupta & Singh, 2013; Özaralli, 2015). Leaders are in a position to challenge employees to seek nontraditional answers to problems (Carmeli et al., 2014; Özaralli, 2015). Employee motivation can be stimulated by leaders as a result of both loosening controls over the methods of work and increasing information sharing (Özaralli, 2015). Leaders help to shape culture. This is important in areas such as job autonomy which has been found to increase a sense of control, flexibility, and intrinsic motivation, all of which contribute to employee creativity (Amabile, 1996; Jung & Sosik, 2002; D. Liu et al., 2016). Further, a leader can build a culture which appreciates divergent thinking and encourages risktaking (A. Lee et al., 2018; Özaralli, 2015). Those who hold leadership positions can also establish reward systems which support a creative environment (Özaralli, 2015). A leader influences the perception employees have of expectations related to creativity output (West et al., 2003; X. Zhang & Bartol, 2010). Each of these leadership behaviors contributes to the individual creativity, which in turn, impacts the organization.

To combat what has been described as "highly turbulent, volatile and uncertain environmental conditions" (Carmeli & Paulus, 2015, p. 116), organizations are under pressure to support the exploration and development of new products and services



(Carmeli & Paulus, 2015; Müceldili et al., 2013). Recognizing individual creativity as an antecedent to any large organizational innovative output, organizations need to develop a culture which embraces employee creativity (Amabile, 1988; Bobo, 2019). The development of creativity can lead to the production of innovative products and services, which can then add to an organization's competitive advantage (Damanpour & Schneider, 2006; Oke et al., 2009; Prasad & Junni, 2016; Tellis et al., 2009; Yuan & Woodman, 2010). The value of employee creativity goes beyond organizational benefits. Hulme et al. (2014) noted creative work makes people feel more "engaged, curious, absorbed, courageous, and focused. Time disappears and life is full of possibilities; in essence, participating in creative acts is a key element of what makes life worth living" (p. 15). Creativity offers benefits to both the organization as a whole, and the employee as an individual.

The challenge for contemporary organizations then becomes how to foster an environment which promotes the development of creative individuals. It is believed that leadership behavior is one of the strongest antecedents of creativity (Mumford et al., 2002; Shalley & Gilson, 2004). Leaders manage the work environment and processes, as well as influence the culture and strategies which have been found to stimulate a creative organization (Jia et al., 2018; Özaralli, 2015). Therefore, a study of the association between leadership and creativity is not only valuable from the perspective of scholarship, but also offers insights to practitioners.

Empowering Leadership

Effective leadership is crucial for the success of today's organizations (Giessner et al., 2009). Xu (2017) characterized leadership as having influence on others



concerning which objectives to pursue and then determining how to collectively accomplish them. Much scholarship has focused on the development of leadership theory. Early theories were based on traditional top-down models (Bass & Stogdill, 1990). This approach was well-matched for the early 20th century industrial era which valued uniformity of processes and products, as well as heavy control over work tasks (Gronn, 1999). However, this became less applicable as the 21st century knowledge era emerged. This new age requires uniformity be replaced with high degrees of creativity and innovation (Bellanca, 2009; Y. Li 2018; Osborn et al., 2002). The top-down approach to leadership has not proven to be conducive for inspiring creativity among employees (A. Lee et al., 2018; Lichtenstein et al., 2006). As a result, there has been a growing interest in leadership theories which have demonstrated potential for better supporting modern organizational needs (Chow, 2018; Müceldili et al., 2013). Empowering leadership is one such theory which has drawn attention from scholars (Chow, 2018; Özaralli, 2015).

Empowering leadership has been described as "the extent to which supervisors express confidence in their employees' abilities, emphasize the significance of their employees' work, involve their employees in decision-making, and reduce or remove bureaucratic constraints on their employees" (X. Zhang & Zhou, 2014, p. 150). EL focuses on flattening the organization, investing in leader/follower relationship, removing barriers, and extending power to subordinates (Amundsen & Martinsen, 2014; Arnold et al., 2000; Özaralli, 2015; Seibert et al., 2004; Sharma & Kirkman, 2015). In response, EL has been shown to induce employee motivation, sense of ownership, and engagement (A. Lee et al., 2018; Meng & Sun, 2019).



The concept of empowerment is not new to leadership theory. Empowerment grew out of the field of management during the 1980s as a way to respond to the demands of technological and economic changes which were driving organizations to seek means for promoting productivity (Amundsen & Martinsen, 2014; Bartunek & Spreitzer, 2006; Fernandez & Moldogaziev, 2011). These demands led to a need for more flexibility within organizations to help improve quality and efficiency (Amundsen & Martinsen, 2014). Empowerment is created through the use of power sharing, increasing autonomy, removing constraints, and promoting involvement in decision-making (Ahearne et al., 2005; Chen et al., 2011; Cheong et al., 2016; X. Zhang & Bartol, 2010; X. Zhang & Zhou, 2014). This requires not only leadership behaviors which allocate responsibilities and encourage participation in decision-making, but also actions which express a high confidence in the employee's capabilities for high performance (Ahearne et al., 2005; Chen et al., 2011; Cheong et al., 2016; X. Zhang & Bartol, 2010; X. Zhang & Zhou, 2014). Specific managerial practices used in empowering leadership include delegation, shared decision-making, strong communication, development of employee capabilities, and a strong sense of mentoring (Ahearne et al., 2005; X. Zhang & Zhou, 2014). Additionally, empowering leaders must effectively reduce or remove obstacles which could prohibit employees from being truly empowered (X. Zhang & Zhou, 2014).

Empowerment Theory

Employee empowerment has been conceptualized from both structural empowerment and psychological empowerment viewpoints (A. Lee et al., 2018; Sun et al., 2012). These two approaches to empowerment are fundamentally different, however. Structural empowerment is contextual and focuses on managerial practices and behaviors



(Hao et al., 2018; A. Lee et al., 2018). Structural empowerment focuses on power that comes from an external source or is dependent on the actions of others (Hao et al., 2018; A. Lee et al., 2018; Pfeffer, 2010). Examining EL from the perspective of structural empowerment includes an analysis of the policies and procedures used within the setting (Bobo, 2019; Hassan et al., 2019). The leader uses the organizational structure to encourage the expression of opinions and ideas, support information sharing, and promote joint decision-making (Arnold et al., 2000; Burke et al., 2006; Chen et al., 2011; Pearce et al., 2003; Sharma & Kirkman, 2015; Yun et al., 2006). Structural empowerment also emphasizes the leader's behaviors which greatly impact the dyadic relationship between the leader and follower (Kirkman & Rosen, 1997, 1999; Strauss, 1963).

EL has also been approached from the perspective of psychological empowerment which is based on the employee's subjective perceptions (Spreitzer, 1995). Psychological empowerment has been defined as "individuals' experience of intrinsic motivation, based on cognitions about themselves in relation to their work role" (Fong & Snape, 2015, p. 127). This motivation stems from perceptions of their own meaningfulness, competence, self-determination, and impact (Spreitzer, 1995). Psychological empowerment is influenced by the person's reaction to being empowered (A. Lee et al., 2018; Raub & Robert, 2010). Employees' perceptions of their own empowerment increase the benefits of EL (Kirkman & Rosen, 1997).

Some scholars have integrated these two aspects of empowerment into their studies asserting the structural acts of empowerment affect the follower's psychological empowerment (Hao et al., 2018; Sharma & Kirkman, 2015; X. Zhang & Bartol, 2010).



From this standpoint, the two conceptual approaches are intrinsically linked. The current study followed this integrated pattern.

Findings Related to Empowerment

Empowerment has been associated with numerous positive outcomes for both the employee and the organization. Some employees experience increased levels of job satisfaction (Kim et al., 2018; Vecchio et al., 2010), meaningfulness of work (Hao et al., 2018), and lessened job strain (Raub & Robert, 2010). Studies have also found EL to be positively associated with engagement at work (Kim et al., 2018). Scholars have proposed that EL can enhance both motivation and the personal investment an employee makes in their work (Ahearne et al., 2005; Chen et al., 2011; Cheong et al., 2016; Meng & Sun, 2019; X. Zhang & Bartol, 2010; X. Zhang & Zhou, 2014). EL encourages selfleadership, participative goal setting, knowledge sharing, and improved teamwork (Eze et al., 2013; Manz & Sims, 1987). Productivity may also rise when employees have an increased sense of control over their work environments (Birdi et al., 2008; Kundu et al., 2019; Vecchio et al., 2010). Research has suggested empowering leadership is positively associated with both organizational commitment (Harris et al., 2014; Raub & Robert, 2010) and lowered turnover rates (Meng & Sun, 2019; Raub & Robert, 2010). Additionally, EL has been found to improve various forms of self-efficacy, including job self-efficacy, creative self-efficacy, career self-efficacy, and team self-efficacy (Cheong et al., 2016; Hao et al., 2018). This is important because there is empirical evidence that followers who feel more efficacious about their work produce higher results (Cheong et al., 2016). When an employee has a strong belief in their ability to perform work which they believe in, and do so in a setting they believe they have influence over, they perform



at levels which exceed their typical role and therefore produce greater work outcomes for the organization (Ahearne et al., 2005; Chen et al., 2011; Kim et al., 2018; Lorinkova et al., 2013).

However, not all research has demonstrated positive results from empowerment (Cheong et al., 2016; Mathieu et al., 2006). Empirical studies have examined what has been described as the "burdening effects" sometimes found within empowering environments. For example, one study found a decrease in work performance (Cheong et al., 2016). Some organizations have experienced increased administrative costs due to delays associated with the time involved in modeling behaviors and exchanging ideas (Lorinkova et al., 2013). Some employees have experienced an increase in job tension stemming from the expectations which accompany empowerment (Cheong et al., 2016; Kim et al., 2018). One study found highly individualized results with an inverted Ushaped effect on performance whereby those experiencing either very high or very low levels of empowerment demonstrated a drop in their work performance (Humborstad et al., 2014; S. Lee et al., 2017). Stress which stems from role ambiguity has also been associated with EL (Cheong et al., 2016; Humborstad & Kuvaas, 2013). Delegation of power can cause some employees to experience an increase in workload (Humborstad & Kuvaas, 2013). Additionally, EL may have a negative impact on upward communication with leadership (Sharma & Kirkman, 2015).

Realizing there is a potential for both positive and negative outcomes from EL, it is important to further the research surrounding empowerment. It has been found that benefits from empowerment might be contingent upon characteristics of the leader (A. Lee et al., 2018) or the leader – member relationship (Gao et al., 2011; A. Lee et al.,



2018; X. Zhang & Zhou, 2014). Characteristics of the employee have also been found to be correlated to the benefits of empowerment (Ahearne et al., 2005; Guo & Wang, 2017). For example, the gender of an employee has been found to be associated with perceptions of empowerment (Thani & Mokhtarian, 2012). This perception influences how the employee responds to EL. Additionally, Özaralli (2003) found both an employee's age and level of education were correlated to their sense of empowerment. An additional study found higher one's level of education tend to be associated with higher empowerment indicators (Thani & Mokhtarian, 2012).

Related Leadership Theories

Empowering leadership has its early roots in work done by Manz and Sims (1991) who emphasized that leaders should teach others to lead themselves. This led to the concept of SuperLeadership. This theory focused on unleashing leadership abilities within the follower and approaching challenges as opportunities. SuperLeadership placed a premium on autonomy, self-efficacy, and modeling of behaviors. As empowering theory continued to develop, it drew upon constructs from a variety of other forms of leadership.

Participative Leadership

Closely aligned with EL is the participative leadership (PL) model (Kim et al., 2018; Miao et al., 2013; Srivastava et al., 2006). PL is focused on the follower's participation in decision-making (Kim et al., 2018; Northouse, 2018). This contrasts with more traditional, hierarchical organizational theories (Kim et al., 2018). EL shares this element of participation in decision-making. Additionally, both PL and EL include the act of delegation (Albrecht & Andreetta, 2011; Sharma & Kirkman, 2015).



However, EL is a broader construct as it goes beyond delegation and adds employee goal setting (Chen et al., 2007; Kirkman & Rosen, 1999; Manz & Sims, 1987). EL also focuses on building the employee's confidence and personal control over their work which has been demonstrated to enhance the outcome of the delegation processes (Kirkman & Rosen, 1999; Manz & Sims, 1987). Further, while both participative and empowering models of leadership seek to bring subordinates into the decision-making processes, only empowering has employees make the final choices and then act upon them (Ahearne et al., 2005; Sharma & Kirkman, 2015). EL is broader than PL in that it places an emphasis on followers making decisions rather than simply influencing them (Sharma & Kirkman, 2015). EL extends beyond decision-making to include the development of self-determination, self-confidence, and means for self-advancement through training and learning opportunities (Kim et al., 2018).

Servant Leadership

Greenleaf (1977) emphasized the importance of empowerment as part of servant leadership (SL) theory, arguing it promoted the use of authority for the betterment of all and not simply for self-serving interests. This included the encouragement of followers to make decisions and solve problems (Spears, 2010). Scholars have argued that empowerment is at the core of servant leadership (Focht & Ponton, 2015; Greenleaf, 1977; Parris & Peachey, 2013; Van Winkle et al., 2014). SL offers access to information and resources which facilitate empowerment (Van Winkle et al., 2014). One of the methods by which servant leaders influence others is through empowering them to develop their competencies (Chung et al., 2010; Jaiswal & Dhar, 2017). In addition, SL emphasizes the importance of respecting and adopting the perspectives of followers as



part of the relationship between leader and follower (Van Dierendonck, 2011). Greenleaf (1977) argued that empowerment was philosophically aligned with SL in that it promoted the use of power for societal good (Parris & Peachey, 2013; Stone et al., 2004; Van Dierendonck, 2011). SL focuses on the creation of a serving culture, which has been demonstrated to be a result of empowerment (Liden et al., 2014). In each of these ways, SL shares some traits with EL.

Servant leadership also shares commonalities with EL as relates to employee creativity (Yoshida et al., 2014) and trust (Greenleaf, 1998). As stated by Greenleaf (1998), SL motivates followers to reciprocate behaviors and attitudes as a result of trust. SL can produce organizational success based on the development of both trust and loyalty that develops between the leader and the follower (Morgan, 2018).

Nevertheless, EL and SL also have some differentiating attributes. EL places much emphasis on coaching and leading by example as core leadership traits (Amundsen & Martinsen, 2014; van Assen, 2018). EL is likewise very focused on participative decision-making, enhancing meaningfulness of work, and removing bureaucratic constraints (Cheong et al., 2019; van Assen, 2018) while SL sees leadership primarily involved in the stewardship and facilitation of helping others achieve their potential (van Assen, 2018).

Transformational Leadership

Numerous traits are shared between Transformational Leadership (TL) and EL (Avolio, 1999; Sharma & Kirkman, 2015). Empowerment is one of the characteristics that distinguishes TL from transactional leadership (Kark et al., 2003). Both EL and TL are linked to psychological empowerment (Amundsen & Martinsen, 2014; De Klerk &



Stander, 2014; Fong & Snape, 2015). Psychological empowerment focuses on employee perceptions of their abilities to manage situations which arise (Fong & Snape, 2015). TL is built upon the concept of intrinsic motivation which stems from employees' feelings about their own empowerment (Spreitzer, 1995). Both transformational leadership and empowering leadership emphasize the importance of the development of followers (A. Lee et al., 2018). TL seeks to delegate responsibility to followers, encouraging them to further develop their own capabilities (Dvir et al., 2002). EL likewise focuses on delegation (Cheong et al., 2019). Both TL and EL share an emphasis on building relationships which form a basis for affect-based trust (Bobbio et al., 2012).

On the other hand, TL does not always require the transference of control to followers (Sharma & Kirkman, 2015). The transformational leader may decide to remain in charge of final decision-making. TL encourages follower development, provides vision, and seeks to build the follower using four types of behaviors: idealized influence, intellectual stimulation, inspirational motivation and individualized consideration (Bass & Riggio, 2005). But it is possible to demonstrate these behaviors without transferring power (Kim et al., 2018; S. L. Martin et al., 2013). There is not typically a sharing of roles in the vision casting itself, as well (Amundsen & Martinsen, 2014; Sharma & Kirkman, 2015). Further, while TL can lead to a strong reliance on the leader for both inspiration and guidance, EL explicitly emboldens a spirit of independence (Amundsen & Martinsen, 2014; Sharma & Kirkman, 2015). Due to these differences, EL and TL are seen as distinct leadership models (Amundsen & Martinsen, 2014; Pearce et al., 2003; Sharma & Kirkman, 2015).



Leader – Member Exchange

Leader – Member Exchange (LMX) theory is another leadership model which shares some similarities with EL (Chen et al., 2007; A. Lee et al., 2018). Both LMX and EL focus heavily on the dyadic relationship between leader and follower (Graen & Uhl-Bien, 1995; Kim et al., 2018; A. Lee et al., 2018). Both of these theories also share a strong relationship with psychological empowerment (Han et al., 2019; A. Lee et al., 2018). Trust is a core element in both LMX and EL theories (Yu & Liang, 2004). Additionally, effectual relation-oriented behaviors are fundamental in both LMX and EL theories (Derue et al., 2011; Kim et al., 2018; S. L. Martin et al., 2013).

However, while LMX is heavily focused on the relationship between leaders and followers, there is no assumption of that relationship being based on empowerment (A. Lee et al., 2018). For example, research indicates some followers report high levels of LMX stemming from highly directive leaders (Sharma & Kirkman, 2015). LMX is closely aligned with the concept of differentiated leadership where relationships are not all equal (S. Li et al., 2015). Because each relationship is found to be unique in nature, an LMX leader may have some relationships that are empowering while other relationships are very directive in their nature (Fong & Snape, 2015; Kim et al., 2018; A. Lee et al., 2018).

Distinctiveness of Empowering Leadership Theory

Much research has been conducted concerning empowering leadership (Amundsen & Martinsen, 2014; Arnold et al., 2000; Cheong et al., 2019; Chow, 2018; Özaralli, 2015; Sharma & Kirkman, 2015; X. Zhang & Bartol, 2010; X. Zhang & Zhou, 2014). While EL has similarities to several other forms of leadership, it has come to be



seen as a distinct leadership theory (Amundsen & Martinsen, 2014; Arnold et al., 2000; Kundu et al., 2019). Therefore, Kim et al. (2018) note:

Empowering leadership can be a distinct type of leadership, conceptually and empirically, through emphasis on different aspects of the leadership process, such as encouraging subordinates to take initiative, emphasizing subordinates' focus on goals, showing confidence in subordinates in order to increase their sense of self-efficacy and motivation, and providing developmental support in order to enhance subordinates' skills. (p. 2)

While there are some similarities between empowering leadership and other leadership models, there are also notable differences between them warranting further research on empowering leadership (Sharma & Kirkman, 2015).

Many of the classic leadership theories have been found inadequate to meet the needs of modern organizational settings (Özaralli, 2015). Changes within current organizational environments, fueled by expanding competition, rapid technological change, globalism, and other factors have demonstrated a need for more empowerment (Amundsen & Martinsen, 2014; Fernandez & Moldogaziev, 2011; Mumford et al., 2002; Özaralli, 2015). In today's world, empowering leadership has become an important influence within the workplace.

Trust

Increasing levels of uncertainty and interdependence within contemporary work environments have made trust indispensable in the workplace. Trust helps leaders influence followers while avoiding heavy monitoring or the use of coercion (Chowdhury, 2020). Additionally, organizations have found trust in a leader to be linked to personal



benefits and work outcomes. Trust has been seen to have a positive impact on organizational citizenship behaviors (Podsakoff et al., 1990), as well as job satisfaction, employee commitment, and reduced turnover (Dirks & Ferrin, 2002). Trust plays a pivotal role in establishing productive relationships (S. Li et al., 2017; Mayer & Gavin, 2005). Studies have also linked trust to employee job performance (Dirks & Ferrin, 2002) as well as organizational financial performance (Davis et al., 2000). Trust is key to helping facilitate the achievement of organizational goals especially when going through challenging situations (Hernandez et al., 2014).

Trust has been defined as the willingness of a person to become vulnerable to another person due to the anticipation of positive intentions and behaviors in return (Gong et al., 2012). This sense of vulnerability puts the employee in a position of risk-taking (Jiang et al., 2019; A. Lee et al., 2018). Per social exchange theory (Blau, 1964), this becomes part of a reciprocated model. The level of trust a party has for another will influence how much risk they will take (Colquitt et al., 2007; Mayer & Gavin, 2005). Organizations often expect a trust association between leader and follower which can thereby enable stable associations and encourage employee risk-taking (S. Li et al., 2017).

For a follower to be willing to expose themselves to risk, there must be an expectation of consistent and predictable reactions by the leader (Jiang et al., 2019). In addition, there must be an expectation of positive intentions (Dirks & Ferrin, 2002).

These expectations are premised on the trustor's perceptions of the trustee's abilities and attitudes, as well as an alignment with previous behaviors (Kuvshinikov, 2012). Leader actions such as fair procedures, organizational support, and meeting expectations serve as



antecedents of follower trust (Dirks & Ferrin, 2002). Additionally, subordinates who sense their leader has faith in them tend to be more trusting of their leaders (X. Huang et al., 2010).

Types of Trust

There are two distinct types of trust: cognitive and affective (McAllister, 1995). Research indicates both kinds of trust to be correlated, but they have unique antecedents and outcomes and therefore represent unique constructs (Carter & Mossholder, 2015; Chowdhury, 2020; Dowell et al., 2015). Cognition-based trust focuses on a rational assessment of the other person's abilities (Gong et al., 2012; Hayat Bhatti et al., 2019; K. Ng & Chua, 2006). This type of trust bases trustworthiness on competence and evaluates trustworthiness through a factually based lens (van Knippenberg, 2018). This perception can be founded on direct observations of behaviors or via indirect means such as the leader's credentials or reputation (Gong et al., 2012). Cognition-based trust is also reliant on personal characteristics such as integrity and reliability (Chowdhury, 2020; Dirks & Ferrin, 2002; Hayat Bhatti et al., 2019). A sense of perceived fairness is important in the cognitive model of trust (Dirks & Ferrin, 2002). Cognition-based trust has been found to promote a follower's confidence in their leader's actions which reduces uncertainty and risk-avoidance and can also increase a follower's belief that the leader has the expertise to lead in ways that both contribute to the employee's advancement and the organization's betterment (Hayat Bhatti et al., 2019).

In contrast, affect-based trust is grounded in emotional bonds which demonstrate genuine concern for the other party (Han et al., 2019; McAllister, 1995; X. Zhang & Zhou, 2014). Affect-based trust produces empathy, establishes affiliation, and creates



rapport within the relationship (Schaubroeck et al., 2011). Affect-based trust stems from social interactions and the confidence that arises from these relationships (K. Ng & Chua, 2006). Trustworthiness is based on the quality of the relationship between the trustor and the trustee (van Knippenberg, 2018). Dirks and Ferrin (2002) described affect-based trust as being built on the type of relationship which stimulates concern for the other person's welfare.

Empowering Leadership and Trust

While both cognition-based and affect-based trust bring value to organizations, affect-based trust has demonstrated a closer alignment with empowerment (Ergeneli et al., 2007). Literature has linked the effectiveness of empowering leadership to affect-based trust (Biemann et al., 2015; Bobbio et al., 2012; X. Zhang & Zhou, 2014). Affect-based trust increases the likelihood of employees feeling empowered by their leaders and thereby increases the efficacy of empowerment (Lorinkova & Perry, 2017; X. Zhang & Zhou, 2014). It has been suggested that, by nature, the type of high-quality relationships found in empowering leadership will facilitate high degrees of trust (Biemann et al., 2015). This includes acts such as granting control over some parts of organizational decision-making, or in allowing participation in the defining of the employee's role (A. Lee et al., 2018). Further, affect-based trust increases information sharing (Ha et al., 2011) and encourages the general sense of cooperation (K. Ng & Chua, 2006). Affect-based trust has been shown to be more impactful on outcomes that are relationship oriented (van Knippenberg, 2018).

Affect-based trust aligns with social exchange theory (Dirks & Ferrin, 2002; Hassan et al., 2019; McAllister, 1995). This type of trust is viewed as having intrinsic



virtue and is founded on the belief there will be a reciprocation of these trusting sentiments (Blau, 1964; X. Huang et al., 2010; McAllister, 1995). When followers sense their leader demonstrating consideration for them, they tend to reciprocate the behaviors (Hayat Bhatti et al., 2019; Kelloway et al., 2012; X. Zhang & Zhou, 2014). This includes developing an increased sense of trust, making it particularly relevant to this study (Kelloway et al., 2012; X. Zhang & Zhou, 2014).

Benefits of Trust

Trust is a vital aspect of productive workplace relationships (Mayer & Gavin, 2005; A. Newman et al., 2014). It is especially important during times of crisis or whenever there is a need to quickly assimilate and act (K. Ng & Chua, 2006). It is also important in times of uncertainty, complexity, or in situations which require intricate coordination (Mayer et al., 1995; McKnight & Chervany, 2006; Sharma & Kirkman, 2015). Trust helps to speed cooperation among team members (Kuvshinikov, 2012). Employees who have a high level of trust in their leader show an increase in task performance (Dirks & Ferrin, 2002; Kalshoven & den Hartog, 2009).

Trust has an impact on creativity, as well. Affect-based trust increases the willingness of individuals to be vulnerable in situations where there is risk (X. Zhang & Zhou, 2014). This openness to risk is further linked to employee creativity (Jiang et al., 2019; X. Zhang & Zhou, 2014). Trust establishes an environment of safety which encourages experimentation, the free exchange of ideas, and an increase in creative activities (Chow, 2018). Gong et al. (2012) observed an increase in employee motivation toward innovation when there was a safe atmosphere that embraced risky creative ventures. Affect-based trust increases employee feelings of being genuinely empowered



by their leaders (Han et al., 2019; X. Zhang & Zhou, 2014). This can lead to a decrease in employees' sense of uncertainty which can further increase levels of confidence in their creative abilities and, in turn, generate increased levels of creative output (X. Zhang & Zhou, 2014).

In contrast, a lack of trust can inhibit creativity. When employees do not have trust in their leaders, it is unlikely they will feel genuinely empowered by them. People who have low affect-based trust may not interpret a leader's empowering behaviors as being genuine (X. Zhang & Zhou, 2014). This lack of belief in the attempts to empower can have a negative effect on the employee's creative activities (Gong et al., 2012; X. Zhang & Zhou, 2014). As a result, their levels of creativity may be reduced (X. Zhang & Zhou, 2014). In one study, trust in leadership demonstrated a mediating influence on the association between empowering leadership and creativity (Chow, 2018). For these reasons, leaders should work towards building affect-based trust with their followers to help generate creativity within the organization (Chow, 2018; X. Zhang & Zhou, 2014).

Theoretical Framework

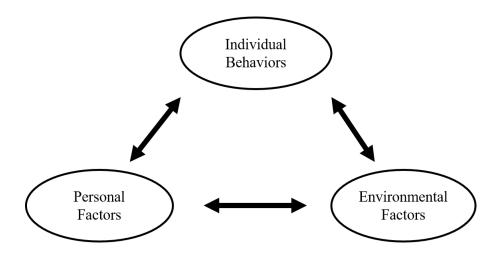
Social Cognitive Theory

This study was grounded in Bandura's (1988) Social Cognitive Theory (SCT) which asserts that a person's cognition is influenced by social interactions (other persons and settings). Effectively, this theory suggests people learn through the observation of others (Bandura, 1977). Further, the reproduction of observed behaviors is affected by three interacting determinants as outlined in Figure 1: personal factors, individual behaviors, and environmental factors (Bandura, 1978). This model of triadic reciprocal causation predicts multiple sources impact behaviors. The personal factors



Figure 1

Bandura's Model of Triadic Reciprocal Causation



Based on Bandura's (1978) schematic representation of causes for reciprocal interaction.

include conceptions, beliefs, and self-perceptions (Bandura, 1978). These competencies are built through modeling, strengthening one's self-efficacy, and enhancing self-motivation (Bandura, 1988) and each can be affected by leadership (Amundsen & Martinsen, 2014). For example, leaders can assist with modeling appropriate skills as a means of encouraging creativity (Javed et al., 2018; Sharma & Kirkman, 2015). By demonstrating desired approaches to work and problem solving, followers have the opportunity to benefit from vicarious experiences (Bandura, 1977). Leaders can also promote employees' motivation toward creativity by establishing a culture which rewards risk taking, encouraging developmental opportunities, and supporting information sharing among the employees (A. Lee et al., 2018; Özaralli, 2015). Perhaps most importantly, leaders can provide work environments which foster the growth of followers' self-efficacy (Carmeli et al., 2014; Javed et al., 2018). Bandura (1989) described self-efficacy as "people's beliefs about their capabilities to exercise control over events that affect



their lives" (p. 1175). Self-beliefs have a strong influence over choices people make, the effort put into a task, perseverance levels, resilience and the ability to bounce-back after setbacks, and the influence of thought patterns which self-aid or self-hinder (Bandura, 1989). Self-efficacy is also related to high personal goals, strong commitment, and motivation. Research has indicated that enhancing a person's belief in their own abilities strengthens their capabilities to perform. The development of this belief is cultivated in several ways. When persons witness the success of another's behaviors and processes, it can increase their own self-efficacy (Bandura, 2001b). While capabilities are important, it is equally important for there to be a strong self-belief in the ability to exercise control needed to succeed in the achievement of desired goals (Bandura, 1988). Environmental factors also influence behavior. The setting where learning happens plays an important role in facilitating desired behaviors (Bandura, 1978). However, this is a bidirectional relationship as people both activate and rebut environments (Bandura, 1978). Moreover, cognitive factors affect both how environmental elements are perceived and responded to.

A key element of SCT is the concept of human agency, meaning having the ability to effect change through one's own efforts (Bandura, 1989). Human agency has been conceptualized in several ways including autonomous agency, mechanical agency, and emergent interactive agency. Autonomous agency, which has few advocates, would indicate an individual serves as a completely independent agent. This view suggests people simply behave based on their abilities. Mechanical agency relies on external influences and omits any factors related to motivation, self-reflection, or being self-reactive. This form of agency relies entirely on environmental forces. In this model "people are not intentional cognizers with the capacity to influence their own motivation



and action; rather, they are neurophysiological computational machines" (Bandura, 1989, p. 1175). This view fails to explain any predictive powers related to self-referent factors. SCT aligns with emergent interactive agency (Bandura, 1986, 1989). Bandura argued persons are causal contributors to their own motivations and actions. In alignment with SCT, people have the capacity to influence their thoughts, motivations, and actions (Bandura, 1989). SCT proposes that human agency greatly informs behaviors (Bandura, 2001a). From this perspective, humans are not simply a result of either their innate capacities or shaped only by their environment (Bandura, 1989). Rather, they have capacities for being proactive, reflective, and self-regulating (Bandura, 2001b).

With SCT as a background, leaders have opportunities for positively influencing followers through numerous means. Leaders should strive to effectively model behaviors and strategies which show followers how to deal with diverse situations (Bandura, 1988). They can impact their followers' self-efficacy through vicarious experience (modeling), social persuasion (realistic encouragements; assigning tasks where they are prepared to succeed), and physiological state (reducing physical stresses; Bandura, 1988).

Social Exchange Theory

This study also had roots in Social Exchange Theory (SET; Blau, 1964). SET follows the analogy of economic relationships and the exchanges that happen within them. It is premised on social exchanges where a person is motivated by anticipated returns which they will receive from another person. This is important to leadership in that leader behaviors can create positive relationships and expect reciprocated behaviors. These behaviors include information exchange (McAllister, 1995) and high-quality relationships (Kalshoven & den Hartog, 2009), each of which has been linked to trust.



According to SET, when leaders demonstrate faith in a follower, the follower reciprocates with trust (A. Lee et al., 2018). Empowering leadership behaviors which allow for employee growth and development are also seen as positive social exchanges (A. Lee et al., 2018). SET also aligns with leader's behaviors which encourage reciprocity in the area of creativity (Afsar et al., 2014).

Summary

EL has drawn much attention from leadership scholars in recent decades with many studies reporting positive effects on work outcomes (Ahearne et al., 2005; Chen et al., 2011; Lorinkova et al., 2013). It has been found that EL increases some individuals' ability to take risks while becoming increasingly accountable for their actions and associated outcomes (Cheong et al., 2016). EL has been linked to a positive impact on employee satisfaction and retention (Kim et al., 2018; Özaralli, 2015; Vecchio et al., 2010). Each of these benefits are valuable to 21st century organizations as they seek to prosper amidst the challenges of this era.

Yet, an examination of existing research also yielded inconsistent results concerning the effectiveness of EL under certain circumstances (Ahearne et al., 2005; Cheong et al., 2016; Hui et al., 2004; Kundu et al., 2019; A. Lee et al., 2018; Sharma & Kirkman, 2015). EL in influenced by attributes surrounding the employee themselves. For example, while Hersey & Blanchard (1982) suggested employees at the higher developmental stages would be the most likely to favorably respond to EL, Ahearne et al. (2005) found those at lower development stages to be better suited for empowerment. Employee tenure may also be an important factor in the effectiveness of EL. In one metanalysis it was found that the acceptance of empowerment was more strongly felt among



employees who had lower organizational tenure (A. Lee et al., 2018). Closely related to this, Ahearne's (2005) work, which focused on the role of salespeople, theorized that perhaps the more experienced salesforce was set in their ways and therefore less receptive to EL. Further, it was suggested those with less experience were seeking a sense of feeling of being trusted by their leader and were therefore more inclined to receive empowerment.

The role of the employee has also been tied to inconsistent results from EL. According to role theory (Kahn, 1964), when a followers' role perception does not align with what the individual is experiencing, there can be an increase in job strain and dissatisfaction. High levels of role ambiguity, often associated with EL, can contribute to this lack of empowerment (Sharma & Kirkman, 2015).

Inconsistent results concerning the effects of EL may also stem from broader societal elements. Cultural norms vary and may influence how leaders and followers react to empowerment, trust, and creativity. For instance, various cultures have demonstrated the production of diverse levels of efficacy concerning empowerment. High power-distance societies may find empowerment to be at odds with their societal norms (Chow et al., 2006; Hui et al., 2004). In this situation, employees may refrain from receiving the full sense of empowerment. Conversely, cultures which demonstrate low power-distance may more readily embrace EL. Uncertainty avoidance and individualism are additional cultural aspects which may influence the results from these studies (Hofstede, 1986; Venckutė et al., 2020).

In addition to the varying research concerning the effects of EL, there were also inconsistent findings within the current literature concerning how EL is associated with



employee creativity. While some research has suggested a positive association between EL and creativity (A. Lee et al., 2018; Özaralli, 2015; X. Zhang & Bartol, 2010), other studies have failed to indicate any association (Ahearne et al., 2005; Cheong et al., 2016; Zhou & Hoever, 2014). Further, some studies have suggested EL might bring negative results within an organization which could hinder creativity (Hao et al., 2018; Kim et al., 2018; Sharma & Kirkman, 2015).

In alignment with interactionist creativity theory, contextual influences can inhibit creative performance (Woodman et al., 1993). Group dynamics and organizational culture impact an individual's creativity. From this perspective, the mixture of personality, job demands, and leadership models may offer explanation for some of the inconsistent results found in the creativity literature (Audenaert & Decramer, 2018).

Realizing the impact EL has on creativity may be impacted by various contextual factors (Audenaert & Decramer, 2018; Cheong et al., 2016; W. Liu et al., 2003), leadership studies can be strengthened by furthering the understanding of elements which increase the creative results. Previous research has demonstrated the association between EL and creativity may be strengthened in situations where the jobs have high problem solving demands (Audenaert & Decramer, 2018). Further, EL may offer greater influence on creativity in environments where leaders encourage the development of critical thinking skills (Audenaert & Decramer, 2018). Moreover, job design and routinization has been shown to influence the interaction of these two constructs (Ohly et al., 2006; Raja & Johns, 2010). Work characteristics such as job control, role complexity, job pressures, and the level of support offered by one's supervisor also influence how EL benefits the employee's creativity (Ohly et al., 2006). A leader's creativity expectations



have also been found to impact this relationship (Farmer et al., 2003). It has been suggested that an organization's ability to share knowledge, network, and support the introduction of new employees into these systems has a direct effect on how EL produces creativity as well (Rodan & Galunic, 2004). Further, the level to which an organization experiences team coordination is related to the creation of novel ideas (Lorinkova et al., 2013; Rodan & Galunic, 2004).

Other studies found limitations of EL's association to creativity was based on personal factors (Humborstad & Kuvaas, 2013; Kirkman & Shapiro, 2001; Lorinkova et al., 2013; S. L. Martin et al., 2013). These include Big 5 personality traits including conscientiousness, openness, and extraversion (Raja & Johns, 2010). Views of creative self-efficacy likewise affect this association (Farmer et al., 2003; Gong et al., 2009; Özaralli, 2015). The effects of EL on employee creativity have been affected by the employee's sense of psychological empowerment (Lorinkova et al., 2013). Additional characteristics that affect this relationship include intrinsic motivation, domain-relevant expertise, and creative thinking skills (Amabile, 1988). The employee's learning orientation is also relevant to this relationship (Gong et al., 2009).

The inconsistent results of past studies have suggested the possibility of mediating factors having an impact on the association of EL and creativity (Audenaert & Decramer, 2018). One such possible mediator is that of affect-based trust. Although trust in leader has been studied as a mediator in other types of leadership styles (Jung & Avolio, 2000; R. Martin et al., 2016), little research has focused on how trust in leader mediates EL and creativity (A. Lee et al., 2018).



Some scholars have found trust to play a role in assisting empowerment in promoting employee creativity (Fineman, 2006; Forrester, 2000; X. Zhang & Zhou, 2014). For example, one study suggested trust had a mediating effect on the association between EL and creativity (Chow, 2018). Other research has indicated a lack of trust in leader can actually cause EL to have negative effects (A. Lee et al., 2018). The association between how trust impacts creativity has been found to be important and relevant and therefore worthy of further study (Bidault & Castello, 2009).

Numerous scholars recommended further research on the association between EL and creativity (Chow, 2018; Hao et al., 2018; A. Lee et al., 2018; Vecchio et al., 2010). Literature has suggested EL could present either positive of negative effects (A. Lee et al., 2018) and seems to be related to various mediators. Trust in leader may be a positive mediator that helps EL engender positive responses which could bolster employee creativity. Therefore, EL should be considered by organizations that require creativity (Amabile, 1988; Amabile et al., 2004; A. Lee et al., 2018; X. Zhang & Bartol, 2010). However, a better understanding of how affect-based trust might mediate the association was considered an important component and worthy of further research. This study sought to add to previous work (Chow, 2018; Jo et al., 2015; Kundu et al., 2019) by testing the mediating influence of affect-based trust in leader on the association between empowering leadership and creativity.



CHAPTER 3

METHODOLOGY

This chapter describes the methodology that was used to examine the mediating role of affect-based trust in leader on the association between empowering leadership and employee creativity. In addition to the research method, this section discusses the study's research questions, hypotheses, population, sampling procedures, and instrumentation.

The chapter concludes with a description of the data collection processes and analysis.

Research Design

This was a quantitative, correlational study. This type of research measures relevant variables and looks for either positive or negative correlations (Pallant, 2016; Stangor, 2014). Correlational studies can be used in situations where it is not feasible to manipulate predictor variables for experimental research. For example, some studies cannot easily facilitate the random assignment of people to a particular manipulation. However, it should be noted that correlational studies cannot be used to infer causal relationships among variables (Stangor, 2014). Nonetheless, it is an important aspect of research as the absence of correlation can eliminate some types of causal hypotheses. In this sense, a correlational study offers preliminary findings which can then be further tested through experimental research (Campbell & Stanley, 2015).



Research Questions and Hypotheses

This study sought to examine the hypothesized association between empowering leadership and employee creativity as well as mediating effects employee affect-based trust in the leader might have on this association. The current study focused on two research questions:

- Does empowering leadership impact employees' work-related expression of their creativity?
- 2) Does an employee's affect-based trust in the leader mediate the effects of empowering leadership on employee creativity?

Hypothesis 1

Hypothesis 1 stated that empowering leadership would be positively related to employees' creativity. Research has indicated an association between EL and the creative processes (Ahearne et al., 2005; Harris et al., 2014; Lorinkova et al., 2013; X. Zhang & Bartol, 2010; X. Zhang & Zhou, 2014). Empowering leaders share power by giving more responsibility and encouraging autonomy from the followers (Kirkman & Rosen, 1999). Each of these behaviors has been linked to creativity (Amabile, 1996; Jung, 2001). It has been suggested this type of empowerment develops followers' self-efficacy which can then increase employees' motivation toward creative behaviors (Özaralli, 2015; Tierney et al., 1999). Empowerment theory also promotes an environment which has been demonstrated to support risk-taking which is important for fostering a culture where employees desire to pursue creative output (Amabile, 1996; Özaralli, 2015; Simonton, 2000). Therefore, it was reasonable to hypothesize there would be a positive association between EL and employee creativity.



Hypothesis 2

Hypothesis 2 stated that empowering leadership would be positively related to employees' affect-based trust in the leader. Leaders play a critical role in generating trust from employees (Kannan-Narasimhan & Lawrence, 2012; A. Newman et al., 2014). Affect-based trust is rooted in the emotional bonds that are built between interdependent persons (X. Zhang & Zhou, 2014). For employees to trust their leader they must become comfortable with the associated sense of vulnerability (Mayer et al., 1995). Empowering leaders help generate a sense of safety which helps produce a culture which can embrace vulnerability (Cheong et al., 2016; A. Lee et al., 2018). Additionally, EL includes aspects of trust, development support, self-confidence and other similar attributes (Ahearne et al., 2005; Amundsen & Martinsen, 2014; Konczak et al., 2000). For all these reasons, EL was hypothesized to be positively related to affect-based trust.

Hypothesis 3

Hypothesis 3 stated that an employee's affect-based trust in their leader would be positively related to employee creativity. Researchers have found that risk-taking is an essential part of creativity processes (George & Zhou, 2007; Gong et al., 2012; Jiang et al., 2019). Any new creative endeavor brings with it the possibility of failure and subsequent rejection (Gong et al., 2012). A fear of failure can limit a person's willingness to expose themselves to risks (Jiang et al., 2019; Mayer & Gavin, 2005; X. Zhang & Zhou, 2014). Consequently, rejecting the notion of being vulnerable inherently works against creativity (Bandura, 1977). Social Cognitive Theory suggests that a follower's fear or anxiety can limit the development of self-efficacy which further inhibits creativity (Bandura, 1977). Building trust can help to offset this type of fear by creating a



psychologically safe environment which promotes an employee's level of confidence and further boosts the employee's development of self-efficacy (T. W. H. Ng & Lucianetti, 2016). In alignment with SCT, it stood to reason an affect-based trust relationship which helps employees to feel safe would positively effect creativity (Gong et al., 2012).

Hypothesis 4

Hypothesis 4 stated that having affect-based trust in a leader would mediate the association between empowering leadership and employees' creativity. Both cognition-based and affect-based trust promote confidence in leaders and therefore may lower risk-avoidance and contribute to higher levels of employee creativity (Gong et al., 2012; Hayat Bhatti et al., 2019). Employees who demonstrate affect-based trust in their leader have shown an increase in their sense of being genuinely empowered (Han et al., 2019; Lorinkova & Perry, 2017; X. Zhang & Zhou, 2014). Further, affect-based trust aligns with Social Exchange Theory (Dirks & Ferrin, 2002; Hassan et al., 2019). Per SET's expected reciprocation of behaviors, there was a presumption that an enhanced level of trust would impact employees' willingness to be vulnerable (Blau, 1964; X. Huang et al., 2010). Since affect-based trust has been found to be associated with empowerment (Ergeneli et al., 2007) and to bolster a sense of risk-taking (X. Zhang & Zhou, 2014), this study focused on the mediating effects affect-based trust might have had on creativity. The model for each of these hypotheses are found in Figure 2.

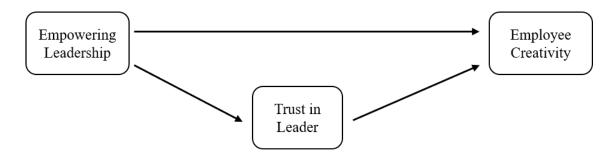
Population and Sampling

The population of interest for this study was full-time employees (working a minimum of 30 hours per week), representing various industries, aged 18 years or older,



Figure 2

Theoretical Framework



Note. Conceptual model: Hypothesized relationship of empowering leadership, affect-based trust in leader, and employee creativity.

and who were currently working within the United States. Participants were asked to self-report gender, age, and the highest level of education they have achieved as each of these were used as control variables. Because the study was focused on leadership's influence on affect-based trust and employee creativity, the sample did not include any person who identified as being self-employed. Demographic questions were used to identify those who met the sampling criteria. Since creativity has been demonstrated to be of both interest and value across numerous fields (Carmeli et al., 2014; Hirst et al., 2009; Javed et al., 2018; Özaralli, 2015; Tierney & Farmer, 2011), this study did not limit participation to any particular industry.

A previous study looked at the mediating effects of affect-based trust on the empowering leadership and creativity association using a sample from Southern China (Chow, 2018). The results from that study did not show EL to be directly related to employee creativity, however there were indications of trust mediating this association. Realizing cultural foundations may serve as covariates, some scholars have suggested expanding this research to other countries and cultures (Chow et al., 2006; Humborstad et



al., 2008). The differences between traditional Chinese management and that found in Western cultures have been widely recognized (Chow, 2018; Hofstede, 1991; Hui et al., 2004). Power-distance, meaning the acceptance of varying levels of power within an organization (Hofstede, 1991), was particularly informative to this current study as power-distance influences the willingness of employees to receive discretionary power (Chow et al., 2006). Workers in low power-distance cultures, such as in the U.S., may be more accepting of EL (Humborstad et al., 2008). Therefore, an examination of the mediation of affect-based trust on EL and creativity in Southern China might yield different results than similar research which focused on a Western culture. Seeking to extend the literature, the current study focused on U.S. workers.

To recruit the sample for this study, an online survey was created in Qualtrics® (https://www.qualtrics.com) and administered through Amazon's® Mechanical Turk (MTurk) crowdsourcing platform (https://www.mturk.com). MTurk was used to find qualified participants who were willing to offer their time in exchange for a small financial compensation. MTurk has been extensively used in numerous empirical studies (Howard, 2019; Keith et al., 2017; Kim et al., 2018; Kim & Beehr, 2020; McKersie et al., 2019; Paolacci & Chandler, 2014). A search of Google Scholar suggests over 43,000 papers containing the expression *Mechanical Turk* were published between 2016 and 2020. MTurk has been increasingly used for research in social and behavioral sciences (Marchiondo et al., 2015; Nichols, 2016; Re & Rule, 2016; Rupprecht et al., 2013; Walter et al., 2019). There are a variety of reasons for the adoption of this platform within the research community. The MTurk platform has been found to draw participants which demonstrate more diversity than traditional convenience samples (Behrend et al., 2011;



Bohannon, 2011; Buhrmester et al., 2011; Casler et al., 2013; Paolacci & Chandler, 2014; Sandell, 2012). For the researcher, MTurk offers a low-cost format for gathering data (Cheung, 2017; Mason & Suri, 2012; Rupprecht et al., 2013). In previous research, MTurk has been used to recruit nonprobability samples of the available pool of workers for a country (Chandler & Shapiro, 2016; Mason & Suri, 2012), making it applicable to studies about employee characteristics and behaviors.

For this study, respondents were recruited by posting information about the survey as a Human Intelligence Task (HIT) on the MTurk platform. When an Amazon® worker logged into the HIT for this study, they were presented with a brief description of the task, instructions, an explanation of the compensation rate, and a consent form. This allowed all participants to fully understand the request prior to determining their interest in proceeding. Those who agreed to the consent form were then presented with the survey questions. The study was divided into two sections. The initial portion of the survey was used to screen applicants. Basic demographic information was gathered and then used to determine eligibility for the population sample. Participants who met the basic requirements of the population were then able to access the second part of the Qualtrics® survey. Those who successfully completed the full survey, and all associated attention checks, were compensated by this researcher.

The desired sample size was originally determined by *a priori* power analysis using G-Power 3 (Faul et al., 2007). Statistical power indicates the probability the test correctly rejects a false null hypothesis. In other words, power shows the probability that a test will avoid a Type II error and correctly detect a difference in the sample if that same difference is present in the population (Meyers et al., 2016). The norms for



evaluating power values range from 0.8 to 0.9 (Cohen, 1988). For this study, the value for power was set at 0.9 to indicate a 90% chance of detecting any differences which might be present. With an alpha (error probability) of .05 and a medium effect size ($f^2 = .15$) as outlined by Cohen (1977), it was determined the final sample should include a minimum of 88 participants. To achieve this number of usable surveys, several possible factors needed to be considered. First, it was unknown how many participants who signed into the MTurk HIT would qualify for the population sample. Participation in the full study was determined by how participants responded to the initial qualifying demographic questions. Additionally, it was assumed some respondents might not provide complete or usable results. This could result in the removal of some of the submissions from the final analysis. Finally, there was an unknown factor surrounding participants who might demonstrate inattentiveness and would consequently need to be removed from the dataset.

The study sought to oversample to assure a minimum sample size of 150 for the final analysis. Fowler (2009) suggested "a sample of 150 people will describe a population of 15,000 or 15 million with virtually the same degree of accuracy, assuming that all other aspects of the sample design and sampling procedures are the same" (p. 22). This target number far exceeded the base number of 88 participants suggested by the power analysis. Recognizing the effects of unmet sample qualifications, incomplete data, and potential inattentiveness, the goal was to gather at least 450 responses as this represented three times the desired number of participants. It was anticipated that this ratio would assure a final result of at least 150 valid responses.



Survey Instruments

In quantitative research it is important to evaluate the reliability of the instruments used in the study. This evaluation includes assessing past studies where an instrument has demonstrated internal consistency (Creswell, 2014). Each instrument used in this study had demonstrated reliability in previous research (Bixby, 2016; Chow, 2018; Schaubroeck et al., 2011; Tan & Ong, 2019; Zhu et al., 2013).

Additionally, instruments used in quantitative studies need to be evaluated for validity, meaning they are statistically shown to be able to offer meaningful inferences (Creswell, 2014). This study used three previously validated instruments to measure empowering leadership, affect-based trust, and creativity. A description of each instrument follows.

Empowering Leadership Questionnaire

The Empowering Leadership Questionnaire (ELQ), developed by Arnold et al. (2000) was used to measure perceived leader behaviors which align with empowering leadership. This tool was developed to enhance the capabilities of measuring EL. Historically, many leadership tools focused on traditional aspects of leadership and therefore demonstrated limited applicability to empowered environments (Arnold et al., 2000). In response to this need for more focused attention on empowerment, Manz and Sims (1987) developed the Self-Management Leadership Questionnaire (SMLQ). While this was a good initial step, there were some limitations to the validation of this tool. To build upon this area, Arnold et al. (2000) created the ELQ. It was created out of extensive interviews with leaders and followers in three empowering organizations. That qualitative study resulted in eight categories which were considered at least tentatively to be



associated with empowerment. These included, leading by example, coaching, encouraging, participative decision-making, informing, showing concern, interacting with the team, and group management. In a second study, the authors wrote multiple questions to measure each of these categories. The results yielded five factors (leading by example, participative decision-making, coaching, informing, showing concern/interacting with the team) with multiple sub-scales associated with each. A 15-item adapted version of the ELQ (Arnold et al., 2000), has previously been used and validated in numerous studies (Bixby, 2016; Chow, 2018; Hon & Chan, 2013; S. Lee et al., 2017; Raub & Robert, 2010; Srivastava et al., 2006; Xue et al., 2011) with alpha coefficients being reported between .90 - .98. The ELQ instrument used a 7-point Likert scale, ranging from 1 (strongly disagree) to 7 (strongly agree). Sample questions concerning the participant's supervisor include "Sets high standards for performance by his/her own behavior" (leading by example), "Encourages work group members to express ideas/suggestions" (participative decision-making), "Suggests ways to improve my work group's performance" (coaching), "Explains his/her decisions and actions to my work group" (informing), and "Takes the time to discuss work group members' concerns patiently" (showing concern/interacting with the team; Arnold et al., 2000).

Affect-Based Trust Measure

To measure affect-based trust, this study used McAllister's (1995) 5-item tool with a Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). This instrument has been used in numerous studies and been validated in a wide array of contexts (Dirks & Ferrin, 2002; K. Ng & Chua, 2006; J. Yang et al., 2009; J. Yang & Mossholder, 2010). It has specifically been used in various leadership studies (A.



Newman et al., 2014; Schaubroeck et al., 2011; Zhu et al., 2013) making it particularly applicable to this study. Alpha coefficients in these studies ranged from .81 - .94. Sample items include "If I shared my problems with this person, I know he/she would respond constructively and caringly" and "We have a sharing relationship. We can both freely share our ideas, feelings, and hopes" (McAllister, 1995).

Within the literature, trust has been examined with different leadership referents (Dirks & Ferrin, 2002). Leadership can be viewed as the immediate supervisor or the senior leadership. This is an important distinction when conducting research as differing outcomes have been shown to be related to each of these (Dirks & Ferrin, 2002). The participants in this study were asked to reflect on their immediate supervisor as this is the level of the organization where the relationships associated with affect-based trust most commonly exist.

Self-Rated Creativity Scale

Finally, Zhou and George's (2001) 13-item self-rated creativity scale (SRCS) was used to measure employee creative performance. This instrument has been shown to be valid and reliable in numerous studies (George & Zhou, 2001, 2007; Harris et al., 2014; Özaralli, 2015; Qu et al., 2015; P. Wang et al., 2013; S. Zhang et al., 2018; X. Zhang & Bartol, 2010). Although this instrument was not originally created for self-assessments, it has been empirically examined and found to offer sound results even with a self-reflection modification (Tan et al., 2016; Tan & Ong, 2019). A recent study using this modified self-rated version of the creativity scale reported a coefficient alpha of > .90 (Tan & Ong, 2019). Sample items include "I come up with new and practical ideas to improve performance," "I search out new technologies, processes, techniques, and/or



product ideas," and "I come up with creative solutions to problems" (Zhou & George, 2001). This tool used a Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*).

Each of these instruments assumes that the various constructs they measure are not dichotomous, but rather continuous by nature. As a result, each used a Likert scale to measure the degree to which empowering leadership, creativity, and trust in leader were experienced by the employee.

To test the reliability of each instrument used in this study, Cronbach's alpha values were examined. All three scales demonstrated good internal consistency indicating the items in the various scales measured the same underlying attributes. In this study the Cronbach alpha coefficient for the ELQ (Arnold et al., 2000) was .96, the affect-based trust instrument (McAllister, 1995) reported an α of .89, and the self-rated creativity scales (Zhou & George, 2001) demonstrated an α of .93. With a level > .7, instruments have generally been interpreted as being reliable (Pallant, 2016). With each of these ranging from .89 to .96, the three instruments were accepted as having indicated satisfactory reliability.

The literature was reviewed to explore possible covariates that might impact this study. In several studies gender, age, and highest level of education were found to be significantly related to creativity (Chow, 2018; X. Zhang & Bartol, 2010). These three covariates have also been linked to empowering leadership. However, when examining EL, employee gender has yielded inconsistent findings on its confounding effects. Some studies have found employee gender to influence the effects of empowering leadership (Thani & Mokhtarian, 2012), as well as the value placed on empowerment (Knezovic &



Musrati, 2018). Yet, other studies have found no significant difference in the perceptions of empowerment related to the employee's gender (Knezovic & Musrati, 2018; Massey-Winds, 2014). Both age and level of education have previously been correlated with empowerment, as well (Özaralli, 2003). Since each of these demographic variables have demonstrated confounding effects on both the IV and DV, gender, age, and highest educational level achieved were used as control variables for this study.

Participants were asked to respond to demographic questions at the beginning of the survey process. These data were collected and coded for use in the analysis. The request for gender was presented as an open-ended survey question. Gender responses were coded twice. The first effort used the following codes: 0 = male/masculine, 1 = female/feminine, 2 = other, 3 = prefer not to answer. After the data were collected, it was found that no one responded with "other." Therefore, to allow for applicable statistical analysis, which was contingent upon a dichotomous variable, a second gender field was coded using -1 = male/masculine, 0 = prefer not to answer, +1 = female/feminine. The participant's age was also requested using an open-ended question format. Ages were organized in ranges and coded 0 = 18 - 30 years, 1 = 31 - 50 years, 2 = over 50 years, 3 = prefer not to answer. Participants' highest level of education was gathered through a multiple-choice format and was coded 1 = some high school, 2 = high school/equivalent, 3 = vocational training/some college, 4 = undergraduate degree, 5 = master's degree, 6 = doctorate /other professional degree, 7 = prefer not to answer.

Data Collection

This research project used a web-based survey as a means of reaching a sample of adult, full-time, U.S. workers. Since the 1990s, web-based surveys have been a popular



method for collecting survey data (Gosling et al., 2004; Schonlau et al., 2002).

Participants for the current study were recruited using Amazon's® MTurk crowdsourcing platform. Online surveys using platforms such as MTurk allow for access to a large sample (Mason & Suri, 2012; Meyers et al., 2016). This format also offers access to samples that are challenging to reach under normal methods (Gosling et al., 2004). In addition, MTurk samples have tended to be more culturally heterogeneous than traditional convenience samples (Buhrmester et al., 2011; Casler et al., 2013; Paolacci & Chandler, 2014; Sandell, 2012; Sansone et al., 2004). MTurk has been demonstrated to offer more credible data and to be more representative of the U.S. population than typical convenience samples (Barger et al., 2011; Casler et al., 2013; Keith et al., 2017; Landers & Behrend, 2015; Paolacci & Chandler, 2014). MTurk samples also have been shown to cover a broad range of jobs and industries (Landers & Behrend, 2015; Paolacci & Chandler, 2014) thereby bringing benefit to those seeking a variety of population samples.

When compared to paper surveys, telephone surveys, and face-to-face interviews, online surveys have been found to be cost effective in terms of time, facilities, and labor (Meyers et al., 2016; Sansone et al., 2004; Shropshire et al., 2009). This methodology allows for a rapid turnaround within the data collection processes (Creswell, 2014). Unlike traditional methods where researchers often suffer from "cold-start" problems associated with the time it takes to recruit reliable participants, MTurk offers access to persons who are qualified, available, and interested (Mason & Suri, 2012). Additional challenges associated with traditional survey methods relate to poor response rates (Fowler, 2014). MTurk workers ("Turkers") are highly motivated by both intrinsic



motivation and the incentive structure, and this motivation has demonstrated an increase in outcomes (Paolacci & Chandler, 2014). MTurk offers value to researchers in that qualified participants self-select to participate in studies in exchange for monetary compensation.

From a data perspective, MTurk offers several additional benefits. For instance, online surveys are thought to help reduce possible effects associated with having the researcher in the room at the time of the data collection (Fowler, 2014; Meyers et al., 2016; Shropshire et al., 2009). As a result, this form of data collection helps to reduce some of the bias found in traditional samples. Furthermore, it has been found that participants stay more focused throughout the data collection processes (Hauser et al., 2016). This, too, is speculated to be tied to the financial component of the methodology (Bohannon, 2011; Buhrmester et al., 2011). Past studies have indicated MTurk participants show more attention to instructions than traditional convenience samples (Hauser et al., 2016; Keith et al., 2017). Each of these patterns suggest MTurk might offer positive effects on the quality of the data achieved through the surveying processes.

When comparing MTurk to convenience samples, it has been found that MTurk offers data that is as reliable as that found in traditional methods (Berinsky et al., 2012; Buhrmester et al., 2011; Casler et al., 2013; Gosling et al., 2004; Mason & Suri, 2012; Paolacci & Chandler, 2014). Scholars have performed MTurk studies which replicate ones previously performed using nationally representative samples and found very similar findings (Berinsky et al., 2012; Casler et al., 2013). One study found MTurk data to outperform that gathered by professional marketing firms (Kees et al., 2017).



Considerations for use of MTurk

Despite these many positive aspects of using MTurk, some have called into question other aspects that might lessen the value of the data received. Caution must be demonstrated when employing any online survey technique (Fleischer et al., 2014; Fleischer & Mead, 2015). As part of preparing for the use of MTurk, I considered two broad categories of potential issues and implemented methods which have previously been used to mitigate some of the concerns.

The first category involved issues surrounding the use of an online format itself. While online surveys offer benefits such as drawing large, diverse convenience samples (Buhrmester et al., 2011; Paolacci & Chandler, 2014), the online format may also change the data gathering dynamics when compared to conventional, face-to-face formats. Online surveys are not performed in controlled settings where they can be monitored. This has led to concerns that web participants might not demonstrate conscientiousness or attentiveness (Paolacci & Chandler, 2014). If a participant is inattentive while offering survey responses, reliability issues may arise because the participants' observed scores might not represent their true scores (Fleischer et al., 2014). However, research indicates this to be of little concern based on the results of attention-sensitive tasks (Paolacci & Chandler, 2014). There is also some empirical evidence that MTurk participants may be more attentive than traditional convenience samples (Hauser et al., 2016; Keith et al., 2017). Still, it was thought to be important to address this concern within the research plan for this current study. Therefore, to assure participants were actively engaged and demonstrating full attention during the surveying processes, two attention checks were inserted into the questions. Each question appeared to be another Likert scale item on the



survey instruments. However, in both cases, the question ended with specific directions on which answer to select as a means of demonstrating full attention. Successfully answering both of these questions was a prerequisite for the acceptance of the results into the final dataset.

A second category of possible issues associated with online surveying methods relates to the payment-based recruitment processes used in platforms such as MTurk. Offering payment might cause participants in the study to engage in what has been called character misrepresentation, referring to the possibility that participants might make false representations of themselves simply to qualify for the pay associated with the study (Wessling, 2017). There is empirical data indicating MTurk workers offer about the same level of honesty as participants from other convenience samples (Chandler & Shapiro, 2016; Keith et al., 2017). Specifically, misrepresentation has not been found to be major issue in previous studies (Chandler & Shapiro, 2016; Keith et al., 2017). However, further steps were taken in this current study to corroborate the integrity of the surveying processes. MTurk tracks respondents via identification numbers and uses these to publish ratings based on their previous performance within the platform. Upon completion of a task, participants are given scores by the requester reflecting the worker's performance. This is presented to future requesters in aggregate as an approval rating. To help secure a higher level of valid responses, researchers may then stipulate a minimal approval rating within the MTurk settings as a means of demonstrating past dependability. This process supports prescreening and blocking of any undesirable participation (Chandler & Shapiro, 2016). In line with previous studies, a stipulation was enforced allowing only



those who had a prior approval rate of at least 95% to participate in the current study (Hauser et al., 2016; Marchiondo et al., 2015; Peer et al., 2013; Robinson et al., 2019).

The financial gains associated with MTurk might also cause some to seek to register for a study numerous times to increase the payment they receive. Some researchers have expressed concern over external validity issues that could arise should participants register for a study more than once (Berinsky et al., 2012). The issue of registering for the survey twice did become relevant in this study. However, the participants have unique identification numbers assigned by MTurk. During the data screening phase of the study a comparison was made of all participant numbers and applicable cases were removed from the dataset. Details of steps taken are presented in the portion of this chapter related to data screening processes.

Considerations for use of Payments

Since this study involved payment in exchange for participation, it was crucial that the amount paid to participants be carefully considered from several perspectives.

This examination included any impact the payment might have on participation rates and any associated influence on the soundness of the data gathered. How the payments were approached from an ethical perspective was also part of the planning for this study.

Ethics remains a vital part of any research planning and seems particularly relevant when money is exchanged within the design.

Payment can impact participation in research in several ways. First, previous research has identified that the rate of compensation can influence who chooses to participate (Narusis, 2013). One study found that offering less than \$0.60 attracted an increased number of participants who did not meet the requirements of the study. On the



other hand, compensation rates that are considerably higher than normal appear to reduce the number of interested participants perhaps by implying the task will take too long (Narusis, 2013). Another report indicated abnormally high compensation rates may attract heavy MTurk users instead of the more casual user and therefore affect the representativeness of the sample (Schmidt, 2015). On the positive side, it is also thought that a larger payment increases the speed of the data gathering (Mason & Watts, 2009). It is therefore important that payment rates be set within the norms of other studies, and that they offer enough money to incentivize participation from qualified persons.

Beyond having an influence on the solicitation of participation, it has been found that the pay rate may have an influence on the quality of data a survey receives. One study found an increase in the pay rate was correlated with an increase of thoughtful responses (Narusis, 2013). It is supposed that participants who felt their time was valued might have chosen to respond in a more meaningful way. But there are inconsistent findings related to how compensation rates affect the quality of the data. Other scholars have reported payment rates to have little to no effects on how participants respond to surveys (Buhrmester et al., 2011; Mason & Watts, 2009; Necka et al., 2016).

During the planning for this study, ethical consideration was given to the payment discussion. While there are currently no U.S. regulations governing payment for participation in research, there is an expectation of each Institutional Review Board (IRB) to guard against coercion or undue influence (Gelinas et al., 2018). Coercion involves some type of threat to harm. Conversely, undue influence involves something desirable which might overly sway decision making (Gelinas et al., 2018). With these definitions in mind, there could be no coercion in this study as there was no act during the recruitment



processes which could be assumed to be threatening. Therefore, only undue influence could be associated with the payment used in this study. Undue influence would only be problematic if the payment was high enough to cause the participant to undertake extreme risks in exchange for the payment (Gelinas et al., 2018). However, the payments made in typical crowdsourcing exchanges are typically small enough that they do not warrant such concerns. There was no indication that payments made in this study would inherently result in undue influence.

Beyond coercion and undue influence, ethical payments also need to be considered from a sense of fairness. However, there is much ambiguity surrounding how to approach this analysis. Some have argued that while the compensation levels for MTurk participation is typically smaller than traditional paid subject pools, it is also higher than incentives normally offered to volunteer participants (Chandler & Shapiro, 2016). The average amount paid based on one researcher's reviews was \$.99 for 30 minutes of work (Keith et al., 2017). Due to the nature of crowdsourcing, it is sometimes contended the amount paid to workers in these types of crowdsourcing platforms does not need to align with standards such as minimum wage laws. Workers are able to choose both the tasks and the timing of any participation (Mason & Suri, 2012). Milland (2016), who is himself a "Turker," presented complexities that have arisen surrounding the idea of ethical payment. For example, does the rate paid need to be in alignment with U.S. standards, or that of another country? Should it be paid based on time spent on task or the number of tasks completed? If the surveys are written in English and paid for number of tasks completed, does that lead to possible negative outcomes for those that might not be native English speakers?



MTurk requesters should wrestle with what they believe to be ethical concerning the payment and treatment of their workers before they post their requests (Milland, 2016). Since this study focused on U.S. workers, payment was determined by both minimum wage standards and guidance from Amazon[®]. From an ethical perspective, the payment should be informed by the difficulty and estimated duration of the task (Amazon Mechanical Turk, 2017). The difficulty of this survey was minimal as it required only a Likert scale response to a series of questions concerning one's perception of their supervisor and their own creative efforts. The time involved was estimated to be 3-4 minutes. In the U.S., the federal minimum wage is currently set at \$7.25/hour, but many states have enacted higher rates (Smith & Garcia, 2019). The average minimum wage across all states currently stands at \$11.80 (Smith & Garcia, 2019). Accepting these figures as a baseline, the minimum wage ranges from \$ 0.12 - \$ 0.20/minute. I sought to assure adequate time for participants to complete the survey and therefore I adjusted for an assumed 5-minute completion rate. Using this as a guide, the payment for this survey was set at \$1.00. This was implemented on MTurk as \$0.01 for completion of the screening portion of the survey and a bonus of \$ 0.99 for those who qualified for, and completed, the full survey and attention check questions. This payment structure not only met ethical standards, it exceeded ethical considerations typically associated with convenience samples (Chandler & Shapiro, 2016). Further, it aligned with MTurk norms and hence supported the expected outcomes both in participation rates and data quality (Schmidt, 2015).



Survey Processes

Those who met the 95% approval rating qualification were able to view the HIT for this study on MTurk along with a short description of the survey. The description informed the potential participant that the HIT involved an academic survey on work relationships and creativity. It also described the payment model stating it would pay up to \$1.00 (including the \$0.99 bonus) and would take approximately 5 minutes to complete. Those who self-selected to participate were then presented with a link to a Qualtrics® survey.

At the beginning of the survey, participants were presented with a consent form which included information about the survey including background information, procedures, confidentiality, risks, benefits, compensation, and contact information for both the researcher and the institution. They were asked to electronically give their consent if they agreed to the terms and conditions of the study. Participants were also informed they could print a copy of the consent form for their personal records. A copy of the consent form is available in Appendix E.

The next section of the survey presented demographic questions concerning how they currently described their gender, age, and highest level of education. This was in response to previous research (Chow, 2018; Knezovic & Musrati, 2018; Özaralli, 2003) which demonstrated each of these demographic variables to be significantly related to both the predictor variable (empowerment leadership) and the outcome variable (creativity). The participants' responses to gender, age, and education level were used as control variables in the study.



An additional set of demographic questions were asked as a basis for determining eligibility for the population sample. Beyond the age requirement (over 18 years of age), the population being studied involved working adults who were currently employed fulltime for an employer within the U.S. therefore demographic questions were presented to capture this information. Participants were asked to identify which best described their current, primary employment (unemployed/between jobs; working for employer more than 30 hours per week; working for employer less than 30 hours per week; selfemployed). They were likewise asked which country was their primary location of employment (Canada; France; U.S.; Mexico; Other). Those who self-identified as over 18 years of age, working for an employer more than 30 hours per week, and having the U.S. as their primary location of employment were then presented with the full survey. The survey ended for those who gave a different answer to any of these questions. Participants who successfully finished the survey were presented with an electronically generated random identification number on Qualtrics[®]. They were instructed to submit this number on MTurk to demonstrate completion of the survey. This number was then used by the researcher to approve the MTurk HIT and generate a payment of \$.01 plus a \$.99 bonus.

Data Screening Processes

After the data collection was complete, the data were exported from Qualtrics[®] into IBM[®] SPSS[®] Statistics 26 for analysis. A duplicate of the dataset was made to maintain a full copy of the original data. A total of 488 survey responses were submitted. Data screening processes were performed prior to analysis. This included identifying surveys which were submitted by participants who were not eligible for the population



sample so they could be removed from the dataset. Of those original 488 submissions, 191 respondents (39%) did not meet all of the sample requirements and were therefore not permitted to finish answering the questions.

Further screening processes involved assuring no participant submitted more than one survey. It was found that although MTurk settings allowed each unique person to perform the HIT only once, since the surveys were released in several batches, a few participants had come back into subsequent HITs to retake the survey. The participant numbers were compared across all batches to identify these duplicates. In each case, the initial submission was kept in the dataset and any duplicate attempt was removed from the study. This accounted for a removal of 9 records.

Because attentiveness is important to the reliability of the study, two attention check questions were included in the survey. This type of attention detection technique has been demonstrated to be among the most effective (Fleischer et al., 2014). In this study, these attention check questions were embedded within similar questions however the respondent was asked to choose a particular answer (e.g. "My supervisor is dependable. Select 'strongly disagree' for this question to demonstrate your attention." And "At work, I am a leader in innovation. Select 'strongly disagree' for this question to demonstrate your attention."). Of the 288 initial cases in the sample, there were 44 participants (15%) who missed at least one of the two attention checks and were therefore withdrawn from the study. This percentage was in line with previous research that had suggested a typical return of 15%-20% of participants demonstrate inattention (Fleischer et al., 2015). This left a final dataset comprised of 244 valid responses to be used in the analysis.



Data Analysis

Once the surveys were collected, they were coded into SPSS® software for analysis. This included taking steps to screen for incomplete submissions. Surveys with missing data were evaluated and a decision was made on how to handle these responses based on the types of omissions. In line with previous research, responses which left no more than one unanswered question per instrument would remain within the dataset (Ugurlucan et al., 2020; Karsli et al., 2009; Kinman et al., 2017). Any surveys which omitted a larger number of questions were removed from the final results.

Additionally, descriptive statistics were generated. Applicants were asked to report their gender, age, and highest levels of education achieved. These were coded as follows: gender (male/masculine, female/feminine, other, prefer not to answer) age range (18-30, 31-50, over 50, prefer not to answer), and highest level of education (some high school, high school/equivalent, vocational training/some college, undergraduate degree, master's degree, doctorate, other professional degree, prefer not to answer).

The data were examined for normality, linearity, multicollinearity, and homoscedasticity to determine if assumptions had been met for the use of hierarchical multiple regression. The results indicated assumptions of both normality and homoscedasticity were unmet. Attempts to transform the data yielded insufficient improvements to the data. As a result, Hayes (2020) PROCESS macro was used to measure the strength and direction of the various associations (empowering leadership, affect-based trust, creativity). This resampling technique does not require the same assumptions as hierarchical multiple regression (HMR) yet offers a sound approach to regression testing. Since previous research found demographic variables of gender, age,



and level of education to be significantly related to both empowerment and creativity (Chow, 2018; Knezovic & Musrati, 2018; Mroz et al., 2018; Özaralli, 2003; X. Zhang & Bartol, 2010), each of these were used as control variables.



CHAPTER 4

RESULTS AND ANALYSIS

Chapter four presents the results of the study and an analysis of the collected data. Further, this chapter demonstrates how the study addresses the research questions presented in Chapter 3:

- 3) Does empowering leadership impact employees' work-related expression of their creativity?
- 4) Does an employee's affect-based trust in the leader mediate the effects of empowering leadership on employee creativity?

This study sought to contribute to the literature on empowering leadership and its association with employee creativity. Further, it sought to test for any mediating effects affect-based trust might have on this association. To do so, quantitative data were collected using the Empowerment Leadership Questionnaire (see Appendix A), affect-based trust instrument (see Appendix B), and Self-Rated Creativity Scale (see Appendix C). Demographic information was also collected from participants both to determine eligibility for the sample and to allow for controlling for previously identified confounding variables.

The study's original design had focused on the use of hierarchical multiple regression to analyze the data which were collected. HMR allows researchers to assess the amount of predictability gained by each set of variables (Meyers et al., 2016). However, to determine the fitness of the HMR model, several assumptions had to be met.



These included assumptions of normal distribution, linearity, multicollinearity, and homoscedasticity (Cohen & Cohen, 1983). In the initial stages of data analysis, it was found that the hypothesized model failed to meet two of the assumptions needed for the use of hierarchical multiple regression (normality and homoscedasticity). As a result of these two unmet assumptions, a change was made in methodology. Rather than HMR, this study used Haye's (2020) PROCESS (model 4) macro for performing resampling analysis. Resampling, often referred to as "bootstrapping," is a computationally intense method for creating probability-based inferences from the study of a sample. This technique resamples the data numerous times to produce an empirical estimate of a statistic's distribution across the entire population (Mooney & Duval, 1993). This non-parametric methodology does not have an assumption of normal distribution within the collected data (Hayes et al., 2017).

Details of the unmet testing assumptions and an explanation of the changes in methods are presented within this chapter. Additionally, the results and analysis of the data are presented, as well as descriptive statistics of both the sample and study variables, a review of the changes made to methodologies, study results, and a summary of the findings.

Descriptive Characteristics of the Sample

Analyses were performed to generate descriptive statistics related to the control variables of the study: gender, age, highest level of education. Participants were asked "How do you currently describe your gender identity?" and their responses were then coded for analysis. A full summary of the demographical profiles of survey respondents is presented in Table 1. Of the 244 responses, 63% identified as male/masculine, 35%



Table 1Demographic Profile of Survey Respondents (n=244)

Variable		Frequency	Percentage
Gender	Male/Masculine	154	63.1%
	Female/Feminine	85	34.8%
	Other	0	0%
	Prefer not to answer	5	2.0%
Age			
Bracket	18-30	92	37.7%
	31-50	119	48.8%
	Over 50	27	11.1%
	Prefer not to answer	6	2.5%
Highest			
level of			
Education	Some high school	1	0.4%
	High school diploma or equivalent	11	4.5%
	Vocational training/some college	11	4.5%
	Undergraduate degree	142	58.2%
	Master's degree	70	28.7%
	Doctorate or other professional		
	degree	8	3.3%
	Prefer not to answer	1	0.4%
•		·	

identified as female/feminine, 0 respondents identified as "other", and 2% selected "prefer not to answer" or left the question blank. The participants were then asked to give their age in years. Responses ranged from 18 years old to 66 years old (M = 36.9, SD = 10.39). These data were then coded into SPSS® as age brackets. The demographics represented in the final dataset were as follows: 38% were in the 18-30 age range, 49% were in the 31-50 age range, 11% were over 50, and 2% chose "Prefer not to answer" or left the question blank. Applicants identified their highest level of education, with < .5% responding "some high school," 4.5% indicating "high school diploma or equivalent," 4.5% answering "vocational training/some college," 58% indicating an undergraduate



degree, 29% reporting a master's degree, 3% responding "doctorate or other professional degree," and < .5% answering "prefer not to answer."

Testing Assumptions

Prior to performing further analysis on the study variables, preliminary tests for normality, linearity, multicollinearity, and homoscedasticity were run to confirm the assumptions for multiple regression had been met (Meyers et al., 2016; Osborne & Waters, 2002; Tabachnick & Fidell, 2011). In regression analysis, the suitability of the model is influenced by the pattern of the residuals (errors) making these assumptions an important aspect of the analysis. The data in this study met the assumptions of linearity and multicollinearity. However, the data failed to meet the assumptions of both normality and homoscedasticity.

Testing for Normality

To test for a normal distribution of each variable, histograms were generated in SPSS®. Visual inspection of the histograms indicated both empowering leadership and employee creativity to be negatively skewed. This was confirmed by examining tests for skewness and kurtosis. These tests revealed supplementary evidence of a lack of normal distribution for the outcome variable (see Table 2). While there are various opinions concerning what represents unacceptable levels of skewness and kurtosis, acceptable levels range from a conservative threshold of \pm 0.5 to a more liberal interpretation of \pm 1.00 (Meyers et al., 2016). Even with the more liberal interpretation level as a guideline, the results of this study further demonstrated a lack of normality. Both the predictor variable and outcome variable demonstrated skewness > \pm 1.00 with empowering



Table 2Skewness and Kurtosis Statistics of Study Variables

	Ske	wness	Kurtosis			
	Statistic	Std. Error	Statistic	Std. Error		
Empowering Leadership	-1.643	0.156	4.058	0.311		
Trust in Leader	0.156	0.156	2.290	0.310		
Employee Creativity	-1.271	0.157	2.400	0.312		

leadership negatively skewed at -1.64 and employee creativity negatively skewed at -1.27. Affect-based trust in leader was below this threshold with a statistic of 0.15. All three of the study variables were kurtotic with scores $> \pm 1.00$. The kurtosis statistic for each of the variables was as follows: empowering leadership (4.05), employee creativity (2.4), and trust in leader (2.29). The Kolmogorov-Smirnov statistic has been suggested for use in cases where the sample is > 50 (Rovai et al., 2013). Therefore, this test was also used to evaluate both skewness and kurtosis. The results of the Kolmogorov-Smirnov test indicated all three variables to be skewed (p-value < .001), further indicating a lack of a normal distribution for the DV (see Table 3).

An attempt was made to transform the data, with the goal of making it usable within a hierarchical multiple regression model. Data transformation has been viewed as a way to improve multivariate analysis but has also been acknowledged as complex and potentially adding confusion to the interpretation of the variable relationships (Meyers et al., 2016; Rovai et al., 2013). The output of transformed data is quite different than the raw data and may create challenges with the interpretation of the relationships between the transformed variable and other variables (Meyers et al., 2016). As a result, Meyers et al. (2016) caution that data transformations should be done judiciously. Nonetheless, a reflection and logarithmic transformation were performed in this study. Since the

 Table 3

 Kolmogorov-Smirnov Statistic

	n	Statistic	Sig.
Empowering leadership	243	0.112	.000
Trust in leader	244	0.155	.000
Employee creativity	241	0.121	.000

outcome variable (creativity) was negatively skewed, data reflection was required prior to applying the logarithmic transformation. After the transformation steps were taken, histograms and the Kolmogorov-Smirnov test were rerun. Both the visual inspection and the statistical analysis indicated the data remained non-normally distributed. The Kolmogorov-Smirnov statistic was .066 (p = .013). Since there was a statistically significant p-value (p < 0.05), the null hypothesis (normal distribution) was rejected, meaning the transformed variable was not normally distributed. Therefore, the assumption of normality remained an issue despite the attempt at data transformation.

Testing for Linearity

The second assumption of hierarchical multiple regression is that of linearity. HMR requires a linear relationship between each IV and the DV (Pallant, 2016). Additionally, it requires a linear relationship between the collective IVs and the DV. To test for linearity, a scatterplot was generated in SPSS®. The mean of the residuals formed a line indicating a correlation between the independent variables of EL and affect-based trust, and the dependent variable of creativity. Consequently, the assumption of linearity had been met.



Testing for Multicollinearity

The third assumption was that the data must not indicate multicollinearity. This occurs when there is a high correlation between two or more of the independent variables, making it difficult to understand the role each plays in the variance of the DV (Pallant, 2016). To test for multicollinearity, the correlations were manually checked to assure none were > 0.7, a commonly used threshold (Tabachnick & Fidell, 2011). There was only one set of variables that exceeded this level. EL and trust in leader demonstrated slight multicollinearity with a correlation of .82. To further explore this assumption, analysis was performed using Variance Inflation Factors (VIF). Values greater than 10 may suggest multicollinearity (Pituch & Stevens, 2016); however, in this study, the highest value on any of the predictors was 3.09. The control variables indicated low VIF results (gender = 1.1; age bracket = 1.1; highest level of education = 1.0). Low VIF scores were also reported in the study variables (empowering leadership = 3.09; affect-based trust = 3.07). These combined results suggested no violations of this assumption.

Testing for Homoscedasticity

The final assumption for HMR was that of homogeneity of variance. This test examines the residuals to determine if the variances remain consistent along the linear model (Pallant, 2016). For this assumption to be met, there should be a rectangular-shaped distribution with somewhat equal distance between the residuals. Regression analysis assumes the residuals which come from a sample have a constant variance as regression is sensitive to irregularities in the variance (Cohen & Cohen, 1983). As a result, heteroscedasticity creates less confidence in the resulting findings of a study (Montoya & Hayes, 2017; Osborne & Waters, 2002). The assumption of homogeneity of



variance may have an even greater effect on the validity of linear regression studies than normality. Further, bias increases as the sample size increases (K. Yang et al., 2019). Heteroscedasticity may lead to an increase in Type I errors, meaning there is an increase in the likelihood of incorrectly rejecting the null hypothesis, thereby creating a larger number of false positives (Osborne & Waters, 2002).

In the current study, homoscedasticity was evaluated through a visual review of a scatterplot. The scatterplot revealed the standardized residuals formed a funnel-shaped pattern indicating this assumption had not been met. To remedy this unmet assumption, outliers were evaluated with the use of Mahalanobis distances (1936). This test measures the distance between each case, and also the distance between each case and the multivariate mean (Meyers et al., 2016). Mahalanobis distances revealed 17 cases to be outliers based on 13.82 as the critical value (Tabachnick & Fidell, 2013). Cohen and Cohen (1983) recommend a tolerance of up to 2% outliers within a study. However, in this study, approximately 7% of the cases were found to be outliers. The removal of these outlying cases was therefore considered excessive. This lack of homoscedasticity, in combination with the lack of normal distribution, led to an exploration of a new methodology for the study.

Change of Methodology

Prior to performing a study, it is important to carefully consider the research design and statistical technique that will be used to analyze the data (Osborne & Waters, 2002). For this study, multiple hierarchical regression was planned because it allowed for each independent variable to be assessed for its impact on the outcome variable after controlling for previous variables (Pallant, 2016). However, prior to performing



hierarchical multiple regression analyses, the researcher must examine the collected dataset to assure it has met the set of assumptions outlined above. In this study, it was determined the dataset failed to meet two of the assumptions needed for the use of HMR. The output variable (creativity) lacked normal distribution and homogeneity of variance. As a result, data transformation was explored.

Reflection and logarithmic transformation processes were attempted as a means of resolving the non-normal distribution assumption, but this did not offer a solution.

Additionally, a large number of outliers were identified. Removal of outliers was evaluated as a potential method for resolving the second unmet assumption, homoscedasticity. However, the number of cases which were classified as outliers was substantially higher than research norms (Cohen & Cohen, 1983). Due to the unmet assumptions of normality and homoscedasticity, a change was made to instead perform multiple regression analysis using Process (model 4) macro (Hayes, 2020). This resampling approach does not require the same assumptions as HMR and has been found to be an effective method of regression testing (MacKinnon et al., 2004; J. Williams & MacKinnon, 2008).

The use of bias-corrected bootstrapping has increased in use over recent years as a method for testing mediation models (Preacher et al., 2007). While the concept of resampling goes back decades (Jones, 1956; McCarthy, 1969), the capabilities of modern computing power have made it a more viable option for researchers in recent years (Mooney & Duval, 1993).

Bootstrapping techniques have the ability to account for irregularities in the distribution of the sample (Hayes & Scharkow, 2013). Similar to parametric inference,



bootstrap methods seek to use data gathered from a sample to infer parameters about a population (Mooney & Duval, 1993). However, parametric inference relies on assumptions about the shape of the sampling distribution, whereas in bootstrapping, the sampling distribution is estimated through the use of a large number of computations (Mooney & Duval, 1993). The resampling processes create an estimate of the shape of the sampling distribution thereby alleviating concerns over a lack of normality. The distribution is then used to generate upper level and lower level confidence intervals. As a result, bootstrapping may increase the power of the analysis and therefore yield more accurate inferences (Hayes & Scharkow, 2013; MacKinnon et al., 2004; J. Williams & MacKinnon, 2008).

Assuming the sample sufficiently represents the population, the resampling processes offer a good estimate of the sampling distribution (Efron & Stein, 1981). Bootstrapping does not require the original sample be random in nature, however it is necessary that the sampling distribution mimic what is found in the population (Hayes et al., 2017). With the diversity found within MTurk samples, there was no reason to believe the sample used in this study would fall outside this constraint.

Bootstrapping can be effective with smaller sample sizes (Hayes & Scharkow, 2013; Hayes & Preacher, 2014). Hayes (2018) has suggested a sample of 20 might suffice. However, to avoid an increased risk of Type I errors, Koopman et al. (2015) have suggested a minimum of 100 participants is needed. In the current study, the sample was 244 which is more than sufficient for the use of bias-corrected bootstrapping resampling.

Resampling has been recommended because of its high performance and ease of use (Hayes & Preacher, 2014). Additionally, resampling accounts for a non-normal



distribution (Hayes et al., 2017). Finally, resampling does not require random sampling nor a large sample size. Due to each of these reasons, bootstrapping was determined to be suitable for testing the hypotheses of this study (MacKinnon et al., 2004; Preacher et al., 2007; Shrout & Bolger, 2002).

Descriptive Statistics of the Study Variables

Analyses were performed via SPSS® to generate descriptive statistics of the study variables. For each of the three test instruments the mean was calculated across each participant's answers to the various questions. This composite score was then used to represent the independent variable, dependent variable, and mediating variable when performing the statistical investigation. The results revealed the means, standard deviations, and zero-order correlations for empowering leadership, affect-based trust, and employee creativity.

Data were examined for responses that were incomplete (D. A. Newman, 2014). Occasionally respondents omitted a single question. This was in keeping with the consent form which stated, "If you decide to participate, you are free to not answer any question or withdraw at any time without penalty." Some scholars have proposed that in research a participant's responses not be discarded simply because they failed to complete a portion of a multi-item scale (D. A. Newman, 2014; Peugh & Enders, 2016). The threshold for missing answers was set at no more than one missing question per instrument as this aligns with standards set in previous research (Ugurlucan et al., 2020; Karsli et al., 2009; Kinman et al., 2017). In other words, a respondent could leave one question blank on empowering leadership and their submission still be considered a valid EL response. The same participant might also leave one question unanswered on creativity or affect-based



trust. In each scenario, the data were included in the final dataset for each measurement assuming there was no more than one missing question within that instrument. If more than one item was left unanswered, the response was determined to be incomplete and therefore not included in the analysis for that variable.

To measure empowering leadership this study used the ELQ (Arnold et al., 2000) with a 7-point Likert scale (M = 5.45; SD = 1.03). The affect-based trust instrument (McAllister, 1995) used a 5-point Likert scale (M = 3.86; SD = 0.86). Creativity was assessed via Zhou and George's (2001) self-reported creativity scale (M = 3.97; SD = 0.68).

Each of the main effects demonstrated statistically significant correlations. The association between empowering leadership and employee creativity was positively correlated (r = .61; p < 0.01). EL and affect-based trust indicated a large positive correlation (r = .82; p < 0.01). A moderate positive correlation was found between affect-based trust and employee creativity (r = .53; p < 0.01). However, there was no significant correlation between any of the three control variables (age, gender, education level) and the study variables (EL, affect-based trust, creativity). Descriptive statistics, as well as the results of all correlations, are presented in Table 4.

Results of the Study

To examine the hypothesized indirect effect that affect-based trust had on the association between empowering leadership and employee creativity, regression analysis was performed through the use of Hayes (2020) PROCESS. Resampling strategies have been used in numerous studies for hypothesis testing (Gong et al., 2009; Hayat Bhatti et al., 2019; Kim & Beehr, 2018). Resampling treats the sample as a pseudo-population that



Table 4Descriptive Statistics and Correlations for Study Variables

Variable Name	M	SD	n	1	2	3	4	5	6
1. Age	36.93	10.39	244	_					
2. Gender			244	027	_				
Education level Empower	4.22	0.820	244	.025	.000	_			
leadership	5.4471	1.03491	243	.022	.034	025	_		
 Trust in leader Employee 	3.8637	0.86467	244	.006	.028	048	.820**	_	
Creativity	3.9739	0.67687	241	.041	.045	.107	.612**	.525**	_

*p < 0.05, **p < 0.01, ***p < 0.001

Pearson Correlation (2-tailed)

represents the larger population (Preacher et al., 2007). A statistic can then be generated by calculating it in the various resamples (Preacher et al., 2007). This study used a biascorrected bootstrapped model based on 10,000 resamples to examine the mediating effects of affect-based trust. A 95% bias-corrected confidence interval was used. The effect was tested for statistical significance. The bootstrapped analysis produced regression coefficients, *p* values, and confidence intervals (CI) for each of the regressions included in this mediation model (see Table 5). Age, gender, and highest level of education were entered as covariates in all analyses to account for any change in outcome variables not associated with the main predictor variables.

As predicted in hypothesis 1, EL was found to have a significant positive direct effect on employee creativity (b = .35, SE = .059, 95% CI = [.234 to .465]). Statistical significance was indicated by the confidence intervals not crossing the zero mark. EL does appear to significantly relate to creativity (p < .001).

The analyses also supported hypothesis 2 as EL demonstrated a significant positive effect on affect-based trust in leader (b = .684, SE = .032, 95% CI = [.621



 Table 5

 Direct and Indirect Effects of Empowering Leadership on Employee Creativity

b	SE	р	LLCI	ULCI
0.35	0.059	***0.000	0.234	0.465
0.694	0.022	***0 000	0.621	0.746
0.084	0.032	****0.000	0.021	0.746
0.074	0.07	0.2899	-0.064	0.212
0.051	0.078		-0.084	0.223
	0.35 0.684 0.074	0.35 0.059 0.684 0.032 0.074 0.07	0.35	0.35

LLCI: lower level confidence interval. ULCI: Upper level confidence interval.

to.746]). This association was considered statistically significant because the CI range did not include zero and the p value was <.001. Consequently, employees who experienced empowering leadership in the workplace demonstrated an increase in affect-based trust toward their leader.

It was predicted that affect-based trust would increase levels of employee creativity. However, contrary to hypothesis 3, the bootstrapping results indicated affect-based trust in leader did not have a significant effect on employee creativity (b = .074, SE = .070, 95% CI = [-.064 to .212]) due to the CI ranging from a negative number to a positive number and therefore crossing zero (p = .2899). Results of this research indicated that when employees experienced affect-based trust in leader, there was no significant increase in the employee's creativity levels.

A mediating variable helps explain the relationship between a predictor variable and an outcome variable. It was hypothesized that affect-based trust in a leader would mediate the association between empowering leadership and employee creativity. There was no support for an indirect effect on employee creativity through affect-based trust in



^{*}*p* < .05; ***p* < .01; ****p* < 0.001

leader (hypothesis 4) as the coefficient for this association was non-significant due to the confidence intervals straddling zero (b = .051, SE = .078, 95% CI = [-.084 to .223]). The paths for the mediation model, along with the corresponding coefficients are provided in Figure 3. These results suggest that contrary to hypothesis 4, affect-based trust in leader did not appear to significantly mediate the relationship between empowering leadership and employee creativity in the current study.

Summary of Findings

The objective of this study was to contribute to the literature on empowering leadership and its impact on employee creativity and exploring any mediating effects of affect-based trust. This chapter presented the results of data analyses followed by the study's findings.

Hypothesis 1 was supported. The results of this study suggested a positive association between empowering leadership and employee creativity. This was in alignment with previous research which also found evidence of this relationship (Ahearne et al., 2005; Harris et al., 2014; X. Zhang & Zhou, 2014).

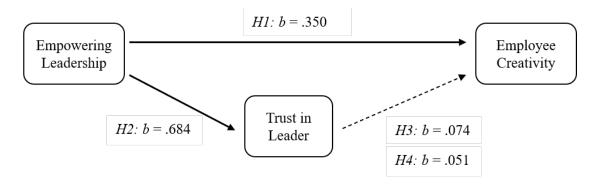
Hypothesis 2 was also supported. This study indicated that EL produced a positive direct effect on affect-based trust in the leader. Previous research has found leadership to play a critical role in trust building and this study found similar effects (Kannan-Narasimhan & Lawrence, 2012; A. Newman et al., 2014).

The final direct effect (hypothesis 3) however, was not supported by the data in this study. An employee's affect-based trust in their leader did not show a significant correlation with the employee's creative expression in the workplace.



Figure 3

Bootstrapping Results



Note. Dotted lines indicate non-statistically significant effect; full lines represent statistically significant effect.

Hypothesis 4 was also not supported as affect-based trust did not demonstrate mediating effects on the association between EL and employee creativity. The hypothesized indirect effect of affect-based trust in leader did not have a significant effect on creativity. Further, there was no evidence of age, gender, or level of education acting as confounding variables in this relationship.

CHAPTER 5

DISCUSSION AND CONCLUSION

The purpose of this quantitative study was to add to the research on empowering leadership and its association with creativity in the workplace. Specifically, the study explored mediating effects which affect-based trust in leader may have had on the EL-creativity correlation. Empowering leadership has been studied in recent decades with some findings indicating EL to have a positive effect on employee creativity (L. Huang et al., 2016; A. Lee et al., 2018). However, little research has focused on how affect-based trust might mediate this association.

The current study collected quantitative survey data from 244 full-time employees who worked for an employer within the U.S. There were four hypotheses developed with a goal of adding to the literature surrounding two research questions: Does empowering leadership impact employees' work-related expression of their creativity? Does an employee's affect-based trust in the leader mediate the effects of empowering leadership on employee creativity? This chapter presents a discussion of the findings, as well as implications for both theory and practice. The chapter concludes with limitations of the study and recommendations for future research.

Discussion of Findings

Hypothesis 1 (EL/Creativity)

This study hypothesized that empowering leadership would be positively related to employee creativity within the workplace (hypothesis 1). The results of this study



indicated a statistically significant positive association between the main predictor variable (EL) and the outcome variable (employee creativity). Previous studies have yielded inconsistent results when examining the correlation between EL and creativity. Some earlier studies have found support for the association between EL and creativity (Özaralli, 2015; X. Zhang & Bartol, 2010; X. Zhang & Zhou, 2014). However, Chow's (2018) work did not support empowerment leadership's correlation with creativity. Realizing that differences exist between Eastern and Western cultures, it is possible that location could impact the results. Several scholars have suggested further research on these constructs should be performed in various countries (Chow, 2018; Humborstad et al., 2008). Building on previous research, this study focused on U.S. employees as part of an effort to develop the scholarship on this topic.

Hofstede's (1991) work has been foundational for scholarly examination of how cultural differences effect numerous aspects within organizations. The concept of power-distance is particularly relevant to the construct of empowerment as it is common in high power cultures for there to be a deep appreciation of hierarchy when considering leadership models (Daller & Yildiz, 2006). In contrast, low power cultures, as typically found in the West, tend to place great value on equality (Daller & Yildiz, 2006). Therefore, power-distance may indicate organizations in the West to be more likely to embrace empowering leadership theory. The countries involved in some related studies (Chow, 2018; X. Zhang & Bartol, 2010; X. Zhang & Zhou, 2014) focused on Chinese populations where high power distance is predominant. An additional study focused on participants from Istanbul (Özaralli, 2015). The power distance of Turkey has been found to be lower than that of China, but still higher than what is found in most Western



countries (Daller & Yildiz, 2006). It is unknown whether power distance is relevant to the EL-creativity correlation. Therefore, it is important to continue to evaluate the association between EL and employee creativity in a variety of countries and cultures. The current study contributes to the empirical literature in that this research focused on a U.S. population and found a significant correlation. Additional studies which focus on U.S. samples will be needed to further test this correlation.

Hypothesis 2 (EL/Affect-based Trust)

This study found a statistically significant positive association between EL and affect-based trust in leader, thereby supporting hypothesis 2. This is in alignment with previous research which has also offered empirical evidence supporting the correlation between empowering leadership and affect-based trust (Biemann et al., 2015; Bobbio et al., 2012; Ergeneli et al., 2007). Specifically, the high-quality relationships that often stem out of empowerment have been found to nurture strong trust within followers (Biemann et al., 2015). Trust is built upon emotional bonds that exist between the leader and follower (X. Zhang & Zhou, 2014). The findings in the current study offered further evidence that the types of relationships which result from empowering leadership lead to followers feeling safe and being comfortable with making themselves vulnerable (Cheong et al., 2016; A. Lee et al., 2018). This results in affect-based trust in the leader.

To further add to the literature, it is important to examine how trust works under various circumstances, including the organizational shifts which have occurred as a result of recent world events. The effects of the COVID-19 pandemic have placed new burdens on both organizations and leaders who are seeking ways to direct their followers. Across the globe, there has been an increase in the adoption of the work from home model.



Gallup reported the number of U.S. employees who are working from home to have doubled within 30 days of March 13, 2020 (Hickman & Robison, 2020). While the effects of the pandemic on organizations is beyond the scope of this project, it is important to note that research conducted during this timeframe may be affected by the current state of affairs. As a result, the findings may offer new insights as the sample used was likely experiencing organizational change. For example, communication patterns may have been altered. Empowering leadership involves the encouragement of followers to express their point of view during discussions (Arnold et al., 2000). Further, EL is highly dependent upon organizations having a strong culture of information sharing among team members (Sharma & Kirkman, 2015). The growing reliance on the use of technology for the majority of business communication presents potential issues as well. Some scholars have pointed out the benefits of face to face communication (Farmer et al., 2003; Zhou & Hoever, 2014). This is especially important for new hires or newly formed teams as these relationships are not building upon preexisting bonds (Stuart, 2014). With so many employees working in remote settings, it is unknown if the communication within teams has substantively changed and is thereby hindering the efforts of leaders who are seeking to build affect-based trust with their teams.

It has also been found that affect-based trust grows out of social interactions which lay the foundation for relationships which demonstrate concern for the other party (Dirks & Ferrin, 2002; K. Ng & Chua, 2006). Trust requires leaders and followers to have a strong relationship which fosters a sense of security. Confidence in the leader's intentions and behaviors enhances the trust relationship (Gong et al., 2012). The distributed office setting may be limiting normal social interactions. These working



environments which have emerged as a result of the pandemic have the potential of negatively effecting leader-follower relationships (Kaushik et al., 2020). Without these strong relationships, followers may not have enough confidence in the leader to allow themselves to be vulnerable. Without this willingness to be vulnerable, trust may be shallow (Mayer et al., 1995).

There is another potential issue the current societal disruptions may bring to organizations. Leaders themselves may not feel safe in today's business world.

Organizational adjustments such as downsizing, restructuring, and even threats of bankruptcy may impact the sense of value that leaders feel they offer. When threatened by instability, leaders may exhibit tendencies to behave in a manner which seeks to protect their own power (Feenstra et al., 2020). This could directly impact structural empowerment which encourages leaders to use the organizational structure, policies, and procedures to promote joint decision-making (Bobo, 2019; Chow, 2018; Hassan et al., 2019). Structural empowerment emphasizes managerial behaviors (Hao et al., 2018; A. Lee et al., 2018). When leaders find themselves in instable situations, their behaviors may be changed to reflect a more centralistic point of view. This focus on self-protection works against empowerment theory as it is not focused on extending decision-making, flattening organizations, or increasing employee ownership.

The current study examined the correlation between EL and affect-based trust during a time of great uncertainty and change. The data supported the association between EL and affect-based trust even though workplaces are experiencing new communication patterns. There was also no apparent change in the relationships which are so vital to the building of trust. This may imply that empowering leadership can be



successfully used in various work settings. The data also suggest that despite the economic uncertainties of recent months, many leaders continue to find value in empowerment. In these ways, the current study contributes to the literature on both EL and affect-based trust.

Hypothesis 3 (Affect-based Trust/Creativity)

In contrast to the findings of previous research (Chow, 2018; Gong et al., 2012; Jiang et al., 2019; X. Zhang & Zhou, 2014), the results of this study did not support the hypothesized association between affect-based trust and employee creativity (hypothesis 3). In Chow's (2018) study the mediated effects of trust in leadership were found to be highly related to the person having a high sense of openness to experience. This was in keeping with other findings that associated openness to experience with creativity (Grehan et al., 2011; Sur & Ng, 2014). When evaluating the current findings in the light of these previous studies, it is possible that personality traits such as openness to experience are key to affect-based trust impacting employee creativity. Therefore, this study would suggest that affect-based trust alone does not necessarily increase creativity.

It is also possible there may have been effects caused by the pandemic and ensuing financial effects which have contributed to these findings differing from previous studies (Chow, 2018; Gong et al., 2012; Jiang et al., 2019; X. Zhang & Zhou, 2014). When considering creativity from an interactionist model, the combination of individual, group, and organizational characteristics creates a complex social system that greatly impacts the creative results (Woodman et al., 1993; X. Zhang & Zhou, 2014). Organizations have felt dramatic shifts during recent months which creates the possibility of having created significant modifications within the social systems many employees are



experiencing. Essentially, remote work environments may be changing communication patterns and hence altering how individuals and groups interact. For example, remote work environments may be disrupting the types of normal settings where the giving of praise might occur. This lack of verbal connection might negatively affect creative self-efficacy, and in turn, hinder employee creativity. An employee's self-efficacy is deeply connected to their expression of creativity (T. W. H. Ng & Lucianetti, 2016). Creative self-efficacy is highly dependent upon an employee hearing verbal statements which indicate praise and trust, and which express the leader's confidence in the follower's abilities (Jiang et al., 2019). Social Cognitive Theory (Bandura, 1977) proposes that fear can hinder self-efficacy. Trust may help to reduce fear and anxiety (T. W. H. Ng & Lucianetti, 2016), however if the work environment is not conducive to the development of strong, trusting relationships, self-efficacy may diminish and subsequently, creativity may diminish.

The findings of this study suggest there may be moderators such as personality traits that impact the effect affect-based trust has on creativity. Further, these findings prompt questions about how different working conditions might influence verbal connections that stimulate self-efficacy. In these ways this study serves as a starting point for further research into the correlation between affect-based trust and creativity.

Hypothesis 4 (Mediation Model)

The study did not support hypothesis 4 which proposed that affect-based trust would have a mediating effect on the association between EL and employee creativity. This contrasts with a previous study which found some evidence of affect-based trust acting as a mediator to this association (Chow, 2018). It is possible that organizations



have inadvertently hindered employee creativity through actions they have taken in response to the challenges of the pandemic era.

The financial disruptions that have occurred because of the pandemic have radically altered organizational climates. One relevant social indicator that could be shifting is that of uncertainty avoidance. Hofstede (1980) describes uncertainty avoidance as "the extent to which a society feels threatened by uncertain and ambiguous situations and tries to avoid these situations" (p. 45). Societal threats, fueled by uncertainty and ambiguous situations, have been felt across the globe as a result of recent events. In response to the current sense of uncertainty, organizations may be seeking to regain stability through the increase of formalized rules and the decrease in tolerance of deviant ideas. These stabilizing efforts may work against creativity. As a result, organizations who are seeking to amplify creativity may unintentionally be hindering their employees' creative expression as they formalize expected behaviors.

Finally, organizations that are experiencing declines tend to have strong tendencies to resist change (Amabile & Conti, 1999). When facing instability, employees may not feel safe. Having climates which are psychologically safe is a vital component in the correlation between trust and creativity (Jiang et al., 2019).

This study's findings suggest other factors might have a strong impact on any mediating effects affect-based trust might have on creativity. The disruptions of this era may have impacted organizational stability, and subsequently changed organizational culture, thus affecting the mediation model studied. Further research within stable organizations will be needed to help explore whether the instability organizations are



experiencing as a result of the pandemic and subsequent financial impact might have affected the results of this study.

Implications of Findings

Implications for Theory

The findings of this study support previous research regarding the positive correlation between empowering leadership and employee creativity (A. Lee et al., 2018; X. Zhang & Bartol, 2010). Further, these findings add a plausible explanation for some inconsistencies in previous research. Chow's (2018) work did not support this association; however, it was conducted in a high power-distance culture which may have had an impact on the employees' receptivity of empowerment. Focusing this current study on U.S. workers offers additional insights into the impact empowering leadership has on creativity when applied in a low power-distance culture.

This study also lends support for the association between EL and affect-based trust. As was found in earlier studies (Lorinkova & Perry, 2017; X. Zhang & Zhou, 2014), participants in this study who felt affect-based trust toward their leaders also demonstrated higher feelings of being empowered. This finding is in alignment with SET in that there is a reciprocation of trust when a follower feels empowered, and conversely, a stronger acceptance of empowerment when an employee has trust in their leader (Dirks & Ferrin, 2002).

However, this study yielded no support for a correlation between affect-based trust in leader and employee creativity. This finding differed from previous research which found some evidence of an association between trust and creativity (Chow, 2018; Gong et al., 2012). In alignment with Social Cognitive Theory (Bandura, 1978),



employee behaviors such as creativity are influenced by both personal and environmental factors. It is plausible the inconsistencies between this study and some previous research is a result of environmental factors found in contemporary organizations as a result of the pandemic and subsequent financial fallout. For followers to be open to risk-taking and vulnerability there must be evidence of there being a safe environment (Mayer & Gavin, 2005; K. Ng & Chua, 2006; X. Zhang & Zhou, 2014). The turmoil found in many industries as a result of the pandemic may be negatively effecting employees' perception of safety (Feenstra et al., 2020). Additionally, organizational changes that have resulted from this social distancing era may be negatively impacting the development of follower self-efficacy. Remote working environments are commonly being used to help stop the spread of contagion (Hickman & Robison, 2020). The expanse of this remote office model may be hindering vicarious learning that would more naturally happen within a traditional work setting. Additionally, the current remote working model might be limiting social persuasion which develops out of experiencing encouraging words and actions. These elements, coupled with physiological stressors, have been found to reduce self-efficacy (Bandura, 1988). While the data from this study did not lend evidence of a correlation between affect-based trust and creativity, it may have raised a valid question about how changes in the environment might affect this association. Further studies will be needed to explore how these new working environments are impacting affect-based trust.

This study also offered no support for the hypothesized mediation model. Since there is some evidence in prior research for affect-based trust mediating the EL-creativity association (Chow, 2018), it is possible there are other factors to consider. Affect-based



Bhatti et al., 2019). This confidence may reduce risk-avoidance and therefore cultivate a culture that embraces the risk-taking that is needed for creativity (Hayat Bhatti et al., 2019). However, if environmental factors associated with the changes organizations are making in the current era are negatively impacting the building of affect-based trust, that might offer an explanation for the results this study yielded. Future studies should examine how various environmental changes related to the remote work model impact affect-based trust and as a result, how this might impact the mediation affect-based trust might have on the correlation between empowering leadership and employee creativity.

Implications for Practice

One of the goals of this study was to offer practitioners a better understanding of empowering leadership and the role it plays in the contemporary workplace. The demands placed on modern organizations are complex. In recent decades the impact of globalization, technological growth, and an increased need for skilled knowledge workers has heightened the interest in leadership and its possible influence on creativity as a means of overcoming these challenges (Javed et al., 2018; Lutz Allen et al., 2013). The findings of this study provide insights into how empowering leadership is associated with employee creativity within a U.S. setting. While some previous studies have yielded support for the association between EL and creativity (Audenaert & Decramer, 2018; Zhou & Hoever, 2014), it has been speculated that cultural differences might impact this association (Chow, 2018; Humborstad et al., 2008). This current study contributes to the literature by examining the correlation between EL and creativity using a sample of U.S



workers. This study's findings suggest EL might be of value to Western organizations who are seeking to enhance creativity within their units.

From a practical perspective, this finding has the potential to contribute to the understanding of empowerment and add to the foundation of how both individual leaders and organizations might expand upon the use of EL. At the individual leader level, these results emphasize the importance of leaders paying close attention to their behaviors as they impact the empowerment of employees (Ahearne et al., 2005; Chen et al., 2011; Cheong et al., 2016; X. Zhang & Bartol, 2010; X. Zhang & Zhou, 2014). This is in alignment with Social Exchange Theory (Blau, 1964) that suggests leadership behaviors can encourage reciprocity of the types of behaviors which encourage creativity (Afsar et al., 2014). These findings also suggest leaders should embrace an organizational culture that supports divergent thinking and risk-taking to help promote employee creativity. Organizations interested in increasing their employee creativity might also find this study's results valuable and therefore be encouraged to develop leaders with the capacity to empower the workforce effectively. To do so, Human Resource departments could explore possibilities for incorporating empowering leadership skill development into their training and mentoring programs.

Although there was no support for the proposed mediation model, there was support for an association between EL and affect-based trust. Consistent with previous literature (Lorinkova & Perry, 2017; X. Zhang & Zhou, 2014), this study found that employees who demonstrated affect-based trust in their leader felt a higher level of empowerment. Therefore, practitioners may find value in seeking ways to enhance affect-based trust within their organizations. Leadership behaviors such as extending decision-



making to others and emphasizing the significance of their followers' work are critical components of generating affect-based trust (Kannan-Narasimhan & Lawrence, 2012; A. Newman et al., 2014; X. Zhang & Zhou, 2014). Leaders may also consider investing more heavily in leader/follower relationships as a means of supporting the formation of affect-based trust (Amundsen & Martinsen, 2014). Realizing that trust brings organizational benefits such as increased task performance, employee motivation, and team cooperation, organizations might consider cultivating educational opportunities for developing leadership strategies which can help to build affect-based trust within the leader-follower relationship (Dirks & Ferrin, 2002; Gong et al., 2012; Kalshoven & den Hartog, 2009; Kuvshinikov, 2012).

Limitations of the Study

While the results of this study offer insights for both scholars and practitioners, as with any research, it is not free from limitations. In this study, the data are drawn from a single source making it potentially subject to common method bias. When the respondent is providing the measure for both the predictor and outcome variables it may create additional covariance (Podsakoff et al., 2003).

The demographics of the sample may also limit the insights that can be drawn from this study. Nearly two-thirds of the sample identified as male/masculine. Realizing there is some research suggesting employee gender might have an impact on empowerment, it is valid to continue to research gender and its effects on EL (Thani & Mokhtarian, 2012). Further, over 90% of the applicants identified their highest level of education to be an undergraduate degree, master's degree, doctoral degree, or other professional degree. Higher levels of education have previously been associated with



higher levels of empowerment (Özaralli, 2003; Thani & Mokhtarian, 2012). It is worth noting the very high level of education found across nearly all of this sample may have influenced the results of the study and thereby created an additional limitation.

Additionally, the data were collected via self-reported means. Specifically related to the creativity variable, it should be acknowledged the data represented the employees' self-perceptions. Crowne and Marlow (1964) highlighted the effects of social desirability in behavioral research. Individuals tend to present themselves in a favorable way which can mask true relationships between variables. It is possible participants reported how they desired to be seen instead of how they actually perform. This is often a point of concern with self-reported measures (Kim & Beehr, 2020; Podsakoff et al., 2003).

Another limitation is that this study did not delineate job sector. Occupation was not evaluated as part of the study. Previous research across many industries has found creativity to be influenced by various forms of leadership (Gong et al., 2009; P. Wang et al., 2013; Yoshida et al., 2014). This study was focused on how empowering leadership and affect-based trust fit this premise. However, it is plausible that EL offers different amounts of influence within various industries. It is also possible that employee creativity is more desirable in various types of occupations. It is unknown from this current study if the type of profession had any impact on the overall results.

There is also a potential limitation related to the timing of the study. The data were collected during the first year of the COVID-19 pandemic. The health concerns and financial impact that resulted from this deadly virus led to many shifts in society. The effects of the pandemic will no doubt be studied for many years to come. It is currently unknown if changes to the work environments caused by social distancing might have



influenced the results of this study. Each of these potential limitations highlight the need for future research.

Recommendations for Future Research

This study extends the literature surrounding empowering leadership and its association with employee creativity. This is valuable as leadership studies continue to build in this area. The importance of EL has been demonstrated, particularly for organizations that are seeking to enhance creativity as a means of meeting the challenges faced in the 21st century. The impact EL and creativity might have on contemporary organizations justifies continued research. Based on this study and a review of the literature, the following recommendations are offered for future research.

More research is needed to compare studies which use self-rated scales with those that use other sources for assessing employee creativity. While the self-rated version of the creativity instrument used in this study demonstrated reliability in previous research (Tan et al., 2016; Tan & Ong, 2019), its use resulted in having a single source of data for both the IV and DV. To extend this research, future studies should consider two alternative approaches. First, future research could extend the analysis by obtaining measures of these variables from different sources. A manager's perspective on employee creativity might offer additional insights and help mitigate the concerns associated with common method bias. Second, researchers in this area of study could alter the response format of each measure. For example, researchers could vary the measures to include open-ended questions, interviews, and various locations as opposed to having all measures administered via a computer format and using a Likert scale model. Method



variance can lessen biases related to social desirability and halo effects (Podsakoff et al., 2003).

Additionally, future research should build on this study by considering how EL might apply to various industries. It has been suggested that although there are benefits of EL across all industries, its effects are influenced by the organizational setting and may thereby be found to be more or less pronounced in some industries (A. Lee et al., 2018).

Finally, the role of trust in leader needs to be further explored. The findings of this current study did not offer evidence of affect-based trust mediating the effects EL has on creativity. Yet there is some empirical evidence which supports this mediating model (Chow, 2018). More research is needed to examine how cultural differences may influence the association between empowering leadership and creativity. Further studies are also needed to evaluate how culture might impact affect-based trust as well. As discussed earlier, there is also a possibility that organizational changes associated with both the pandemic and the subsequential financial impact may have influenced the mediating effects affect-based trust had on creativity in this study.

Summary

Organizations within the 21st century are facing tremendous amounts of change.

Understanding that creativity plays an important role in helping institutions cope with modern disruptors, it is important for leaders to find ways to promote the development of employee creativity. Empowering leadership may offer a strong model for achieving this goal, and as such, EL may offer benefits to contemporary organizations.

This study sought to contribute to the literature concerning any correlation between empowering leadership and employee creativity. The findings of the current



study support the association between EL and creativity. By focusing on a U.S. sample, the findings of this study offer a possible explanation for some differing results that focused on high power-distance cultures. This study also contributed to the scholarship by offering additional support for the association between EL and affect-based trust. Additionally, the present study lends empirical support that leaders find value in empowerment despite uncertain circumstances. The positive association between EL and affect-based trust also suggests that despite changes to communication patterns that many are experiencing in work from home settings, the benefits of EL are still possible. Contrary to previous findings, this study did not offer support for an association between affect-based trust and creativity. While the mediation model was not supported, this study contributes to the scholarship by suggesting the affect-based trust is only a mediator under certain circumstances. A possible reason for this finding could be the impact of personality traits, different working conditions, or a lack of self-efficacy. This study's findings suggest there may be other mediating factors which influence how affect-based trust effects creativity, laying the groundwork for further investigation.



References

- Afsar, B., Badir, Y. F., & Bin Saeed, B. (2014). Transformational leadership and innovative work behavior. *Industrial Management & Data Systems*, 114(8), 1270-1300. https://doi.org/10.1108/IMDS-05-2014-0152
- Ahearne, M., Mathieu, J., & Rapp, A. (2005). To empower or not to empower your sales force? An empirical examination of the influence of leadership empowerment behavior on customer satisfaction and performance. *Journal of Applied Psychology*, 90(5), 945-955. https://doi.org/10.1037/0021-9010.90.5.945
- Albrecht, S. L., & Andreetta, M. (2011). The influence of empowering leadership, empowerment and engagement on affective commitment and turnover intentions in community health service workers. *Leadership in Health Services*, *24*(3), 228-237. https://doi.org/10.1108/17511871111151126
- Allen, S. L. (2007). *Transformational leadership, change readiness, and* creativity (UMI No. 1445219) [Master's Thesis, San Jose State University]. ProQuest Dissertations & Theses Global. https://doi.org/10.1002/nml.21078
- Amabile, T. M. (1983). The social psychology of creativity (1st ed.). Springer.
- Amabile, T. M. (1988). A model of creativity and innovation in organizations. *Research* in Organizational Behavior, 10(1), 123-167.
- Amabile, T. M. (1996). Creativity in context. Westview Press.



- Amabile, T. M. (1997). Motivating creativity in organizations: On doing what you love and loving what you do. *California Management Review*, 40(1), 39-58. https://doi.org/10.2307/41165921
- Amabile, T. M. & Conti, R. (1999). Changes in the work environment for creativity during downsizing. *Academy of Management Journal*, 42(6), 630-640. https://doi.org/10.2307/256984
- Amabile, T. M., Schatzel, E. A., Moneta, G. B., & Kramer, S. J. (2004). Leader behaviors and the work environment for creativity: Perceived leader support. *The Leadership Quarterly*, 15(1), 5-32. https://doi.org/10.1016/j.leaqua.2003.12.003
- Amazon Mechanical Turk. (2017). *How to be a great MTurk requester*. https://blog.mturk.com/how-to-be-a-great-mturk-requester-3a714d7d7436
- Amundsen, S., & Martinsen, Ø L. (2014). Empowering leadership: Construct clarification, conceptualization, and validation of a new scale. *The Leadership Quarterly*, 25(3), 487-511. https://doi.org/10.1016/j.leaqua.2013.11.009
- Anderson, N., Potočnik, K., & Zhou, J. (2014). Innovation and creativity in organizations. *Journal of Management*, 40(5), 1297-1333. https://doi.org/10.1177/0149206314527128
- Arnold, J. A., Arad, S., Rhoades, J. A., & Drasgow, F. (2000). The empowering leadership questionnaire: The construction and validation of a new scale for measuring leader behaviors. *Journal of Organizational Behavior*, *21*(3), 249-269. https://doi.org/10.1002/(SICI)1099-1379(200005)21:33.0.CO;2-#



- Audenaert, M., & Decramer, A. (2018). When empowering leadership fosters creative performance: The role of problem-solving demands and creative personality. *Journal of Management & Organization*, 24(1), 4-18. https://doi.org/10.1017/jmo.2016.20
- Avolio, B. J. (1999). Full leadership development: Building the vital forces in organizations. Sage.
- Azad, N., Anderson, H. G., Jr, Brooks, A., Garza, O., O'Neil, C., Stutz, M. M., & Sobotka, J. L. (2017). Leadership and management are one and the same. *American Journal of Pharmaceutical Education*, 81(6), 1.
- Baer, M. (2012). Putting creativity to work: The implementation of creative ideas in organizations. *The Academy of Management Journal*, *55*(5), 1102-1119. https://doi.org/10.5465/amj.2009.0470
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change.

 *Psychological Review, 84(2), 191-215. https://doi.org/10.1037//0033-295X.84.2.191
- Bandura, A. (1978). The self system in reciprocal determinism. *American Psychologist*, 33(4), 344-358. https://doi.org/10.1037//0003-066X.33.4.344
- Bandura, A. (1986). Social foundations of thought and action: A social cognitive theory.

 Prentice-Hall.
- Bandura, A. (1988). Organisational applications of social cognitive theory. *Australian Journal of Management*, 13(2), 275-302.

https://doi.org/10.1177/031289628801300210

Bandura, A. (1989). Human agency in social cognitive theory. *American Psychologist*, 44(9), 1175-1184. https://doi.org/10.1037/0003-066X.44.9.1175



- Bandura, A. (2001a). Social cognitive theory: An agentic perspective. *Annual Review of Psychology*, *52*(1), 1-26. https://doi.org/10.1146/annurev.psych.52.1.1
- Bandura, A. (2001b). Social cognitive theory of mass communication. *Media*Psychology, 3(3), 265-299. https://doi.org/10.1207/S1532785XMEP0303_03
- Barger, P., Behrend, T. S., Sharek, D. J., & Sinar, E. F. (2011). IO and the crowd: Frequently asked questions about using Mechanical Turk for research. *The Industrial-Organizational Psychologist*, 49(2), 11-17.
- Barley, S. R., & Orr, J. E. (1997). Between craft and science: Technical work in US settings. Cornell University Press.
- Bartunek, J. M., & Spreitzer, G. M. (2006). The interdisciplinary career of a popular construct used in management. *Journal of Management Inquiry*, 15(3), 255-273. https://doi.org/10.1177/1056492606291201
- Bass, B. M., Riggio, R. E. (2005). *Transformational leadership* (Second ed.). Lawrence Erlbaum Associates.
- Bass, B. M., & Stogdill, R. M. (1990). *Bass & Stogdill's handbook of leadership* (3rd ed.). Free Press U.A.
- Batey, M., Furnham, A., & Safiullina, X. (2010). Intelligence, general knowledge and personality as predictors of creativity. *Learning and Individual Differences*, 20(5), 532-535. https://doi.org/10.1016/j.lindif.2010.04.008
- Bedeian, A. G., & Hunt, J. G. (2006). Academic amnesia and vestigial assumptions of our forefathers. *The Leadership Quarterly*, 17(2), 190-205. https://doi.org/10.1016/j.leaqua.2005.12.006



- Behrend, T., Sharek, D., Meade, A., & Wiebe, E. (2011). The viability of crowdsourcing for survey research. *Behavior Research Methods*, 43(3), 800-813. https://doi.org/10.3758/s13428-011-0081-0
- Bellanca, J. A. (Ed.). (2009). 21st century skills: Rethinking how students learn. Solution Tree.
- Bennis, W. G., & Nanus, B. (1985). *Leaders: The strategies for taking charge*. Harper & Row.
- Berg, J. M. (2016). Balancing on the creative highwire: Forecasting the success of novel ideas in organizations. *Administrative Science Quarterly*, 61(3), 433-468. https://doi.org/10.1177/0001839216642211
- Bergman, D. A. (2007). A phenomenological case study of Tohono O'odham women's perceptions of leadership (Publication No. 304894877) [Doctoral dissertation, University of Arizona]. ProQuest Dissertations & Theses Global.
- Berinsky, A. J., Huber, G. A., & Lenz, G. S. (2012). Evaluating online labor markets for experimental research: Amazon.com's Mechanical Turk. *Political Analysis*, 20(3), 351-368. https://doi.org/10.1093/pan/mpr057
- Bidault, F., & Castello, A. (2009). Trust and creativity: Understanding the role of trust in creativity-oriented joint development. *R&D Management*, *39*(3), 259-270. https://doi.org/10.1111/j.1467-9310.2009.00557.x
- Biemann, T., Kearney, E., & Marggraf, K. (2015). Empowering leadership and managers' career perceptions. *The Leadership Quarterly*, 26(5), 775-789. https://doi.org/10.1016/j.leaqua.2015.03.003



- Birdi, K., Clegg, C., Patterson, M., Robinson, A., Stride, C. B., Wall, T. D., & Wood, S. J. (2008). The impact of human resource and operational management practices of company productivity: A longitudinal study. *Personnel Psychology*, *61*(3), 467-501. https://doi.org/10.1111/j.1744-6570.2008.00136.x
- Bixby, K. M. (2016). The mediation of empowering leadership on psychological empowerment with organizational commitment and job satisfaction (UMI No. 10172548) [Doctoral dissertation, Anderson University]. ProQuest Dissertations & Theses Full Text: The Humanities and Social Sciences Collection.
- Blau, P. M. (1964). Exchange and power in social life. Wiley.
- Bobbio, A., Bellan, M., & Manganelli, A. M. (2012). Empowering leadership, perceived organizational support, trust, and job burnout for nurses. Aspen Publishers.
- Bobo, E. (2019). Authentic leaders, employee innovation, and employee creativity in telecommunication cooperatives (UMI No. 13865315) [Doctoral dissertation, Regent University]. ProQuest Dissertations & Theses Full Text: The Humanities and Social Sciences Collection.
- Bohannon, J. (2011). Social science for pennies. *Science*, 334, 307. https://doi.org/10.1126/science.334.6054.307
- Bolman, L. G., & Deal, T. E. (2003). Reframing leadership. Jossey-Bass San Francisco.
- Buhrmester, M., Kwang, T., & Gosling, S. D. (2011). Amazon's Mechanical Turk: A new source of inexpensive, yet high-quality, data? *Perspectives on Psychological Science*, 6(1), 3-5. https://doi.org/10.1177/1745691610393980



- Burke, C. S., Stagl, K. C., Klein, C., Goodwin, G. F., Salas, E., & Halpin, S. M. (2006). What type of leadership behaviors are functional in teams? A meta-analysis. *The Leadership Quarterly*, 17(3), 288-307. https://doi.org/10.1016/j.leaqua.2007.09.006
- Campbell, D. T. (1960). Blind variation and selective retention in creative thought as in other knowledge processes. *Psychological Review*, 67(6), 380-400.
- Campbell, D. T., & Stanley, J. C. (2015). Experimental and quasi-experimental designs for research. Ravenio Books.
- Cangemi, J., & Miller, R. (2007). Breaking-out-of-the-box in organizations: Structuring a positive climate for the development of creativity in the workplace. *Journal of Management Development*, 26(5), 401-410.

 https://doi.org/10.1108/02621710710748239
- Carmeli, A., & Paulus, P. B. (2015). CEO ideational facilitation leadership and team creativity: The mediating role of knowledge sharing. *The Journal of Creative Behavior*, 49(1), 53-75. https://doi.org/10.1002/jocb.59
- Carmeli, A., Sheaffer, Z., Binyamin, G., Reiter-Palmon, R., & Shimoni, T. (2014).

 Transformational leadership and creative problem-solving: The mediating role of psychological safety and reflexivity. *The Journal of Creative Behavior*, 48(2), 115-135. https://doi.org/10.1002/jocb.43
- Carter, M. Z., & Mossholder, K. W. (2015). Are we on the same page? The performance effects of congruence between supervisor and group trust. *Journal of Applied Psychology*, 100(5), 1349-1363. https://doi.org/10.1037/a0038798



- Casler, K., Bickel, L., & Hackett, E. (2013). Separate but equal? A comparison of participants and data gathered via Amazon's MTurk, social media, and face-to-face behavioral testing. *Computers in Human Behavior*, 29(6), 2156-2160. https://doi.org/10.1016/j.chb.2013.05.009
- Castro, F., Gomes, J., & de Sousa, F. (2012). Do intelligent leaders make a difference? The effect of a leader's emotional intelligence on followers' creativity.

 Creativity and Innovation Management, 21(2), 171-183.

 https://doi.org/10.1111/j.1467-8691.2012.00636.x
- Chandler, J., & Shapiro, D. (2016). Conducting clinical research using crowdsourced convenience samples. *Annual Review of Clinical Psychology*, *12*(1), 53-81. https://doi.org/10.1146/annurev-clinpsy-021815-093623
- Chaubey, A., Sahoo, C. K., & Khatri, N. (2019). Relationship of transformational leadership with employee creativity and organizational innovation. *Journal of Strategy and Management*, 12(1), 61-82. https://doi.org/10.1108/JSMA-07-2018-0075
- Chen, G., Kirkman, B. L., Kanfer, R., Allen, D., & Rosen, B. (2007). A multilevel study of leadership, empowerment, and performance in teams. *Journal of Applied Psychology*, 92(2), 331-346. https://doi.org/10.1037/0021-9010.92.2.331
- Chen, G., Sharma, P. N., Edinger, S. K., Shapiro, D. L., & Farh, J. L. (2011). Motivating and demotivating forces in teams: Cross-level influences of empowering leadership and relationship conflict. *Journal of Applied Psychology*, 96(3), 541–557. https://doi.org/x.doi.org/10.1037/a0021886



- Cheong, M., Spain, S. M., Yammarino, F. J., & Yun, S. (2016). Two faces of empowering leadership: Enabling and burdening. *The Leadership Quarterly*, 27(4), 602-616. https://doi.org/10.1016/j.leaqua.2016.01.006
- Cheong, M., Yammarino, F. J., Dionne, S. D., Spain, S. M., & Tsai, C. (2019). A review of the effectiveness of empowering leadership. *The Leadership Quarterly*, 30(1), 34-58. https://doi.org/10.1016/j.leaqua.2018.08.005
- Cheung, J. H. (2017). Amazon Mechanical Turk in organizational psychology. *Journal of Business and Psychology*, 32(4), 347-361. https://doi.org/10.1007/s10869-016-9458-5
- Chew, E. S., Hamid, M. A., & Madar, A. R. (2017). Conceptual framework for designing and developing a creativity enhancement module in education incorporating indigenous perspectives. *Social Sciences & Humanities*, *25*(S), 67-82.
- Choi, J. N. (2004). Individual and contextual predictors of creative performance: The mediating role of psychological processes. *Creativity Research Journal*, *16*(2), 187-199. https://doi.org/10.1207/s15326934crj1602&3_4
- Chow, I. H. (2018). The mechanism underlying the empowering leadership-creativity relationship. *Leadership & Organization Development Journal*, 39(2), 202-217. https://doi.org/10.1108/LODJ-03-2016-0060
- Chow, I. H., Lo, T. W., Sha, Z., & Hong, J. (2006). The impact of developmental experience, empowerment, and organizational support on catering service staff performance. *International Journal of Hospitality Management*, 25(3), 478-495. https://doi.org/10.1016/j.ijhm.2005.03.002



- Chowdhury, S. (2020). The role of affect- and cognition-based trust in complex knowledge sharing. *Journal of Managerial Issues*, 32(1), 43. https://www.jstor.org/stable/40604504
- Chung, J. Y., Jung, C. S., Kyle, G. T., & Petrick, J. F. (2010). Servant leadership and procedural justice in the U.S. National Park Service: The antecedents of job satisfaction. *Journal of Park & Recreation Administration*, 28(3), 1-15.
- Clegg, P. (2008). Creativity and critical thinking in the globalised university. *Innovations* in Education and Teaching International, 45(3), 219-226.

 https://doi.org/10.1080/14703290802175982
- Cohen, J. (1977). In Cohen J. (Ed.), Chapter 9 F tests of variance proportions in multiple regression/correlation analysis. Academic Press.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (Second edition ed.). Psychology Press.
- Cohen, J., & Cohen, P. (1983). Applied multiple regression/correlation analysis for the behavioral sciences. L. Erlbaum Associates.
- Colquitt, J. A., Scott, B. A., & LePine, J. A. (2007). Trust, trustworthiness, and trust propensity. *Journal of Applied Psychology*, 92(4), 909-927.

 https://doi.org/10.1037/0021-9010.92.4.909
- Crant, J. M. (2000). Proactive behavior in organizations. *Journal of Management*, 26(3), 435–462. https://doi.org/10.1177/014920630002600304
- Creswell, J. W. (2014). Research design: Qualitative, quantitative, and mixed methods approaches. SAGE Publications.
- Crowne, D. P., & Marlowe, D. (1964). The approval motive. Wiley.



- Csikszentmihalyi, M. (1996). Creativity: Flow and the psychology of discovery and invention. Harper Perennial.
- Daller, H., & Yildiz, C. (2006). Power distance at work: The cases of Turkey, successor states of the former Soviet Union and Western Europe. *Journal of Politeness Research: Language, Behaviour, Culture, 2*(1), 35.

 https://doi.org/10.1515/PR.2006.003
- Damanpour, F., & Schneider, M. (2006). Phases of the adoption of innovation in organizations: Effects of environment, organization and top managers. *British Journal of Management*, 17(3), 215-236. https://doi.org/10.1111/j.1467-8551.2006.00498.x
- Davenport, T. H. (2005). *Thinking for a living*. Harvard Business School Press.
- Davis, J. H., Schoorman, F. D., Mayer, R. C., & Tan, H. H. (2000). The trusted general manager and business unit performance: Empirical evidence of a competitive advantage. *Strategic Management Journal*, *21*(5), 563-576.

 https://doi.org/10.1002/(SICI)1097-0266(200005)21:53.0.CO;2-0
- De Klerk, S., & Stander, M. W. (2014). Leadership empowerment behaviour, work engagement and turnover intention: The role of psychological empowerment.

 **Journal of Positive Management, 5(3), 28. https://doi.org/10.12775/JPM.2014.018
- Dehbannejad, M. (2017). The impact of leadership style on employee creativity. International Journal of Economic Perspectives, 11(1), 1393-1402.



- Denson, C., & Buelin-Biesecker, J. (2015, June 14-17). *Investigating the relationship*between students' creative self-efficacy and their creative outcomes [Paper presentation]. 122nd ASEE Annual Conference and Exposition, Seattle, WA, United States. https://doi.org/10.18260/p.24379
- Derue, D. S., Nahrgang, J. D., Wellman, N., & Humphrey, S. E. (2011). Trait and behavioral theories of leadership: An integration and meta-analytic test of their relative validity. *Personnel Psychology*, 64(1), 7-52. https://doi.org/10.1111/j.1744-6570.2010.01201.x
- Diliello, T. C., Houghton, J. D., & Dawley, D. (2011). Narrowing the creativity gap: The moderating effects of perceived support for creativity. *The Journal of Psychology*, 145(3), 151-172. https://doi.org/10.1080/00223980.2010.548412
- Dirks, K. T., & Ferrin, D. L. (2002). Trust in leadership: Meta-analytic findings and implications for research and practice. *Journal of Applied Psychology*, 87(4), 611-628. https://doi.org/10.1037/0021-9010.87.4.611
- Dowell, D., Morrison, M., & Heffernan, T. (2015). The changing importance of affective trust and cognitive trust across the relationship lifecycle: A study of business-to-business relationships. *Industrial Marketing Management*, 44, 119-130.

 https://doi.org/10.1016/j.indmarman.2014.10.016
- Drucker, P. F. (1959). Landmarks of tomorrow: A report on the new "post-modern" world. Harper Colophon Books.
- Drucker, P. F. (1993). *Post-capitalist society*. HarperCollins Publishers.
- Dunker, K. (1945). On problem solving. Psychological Monographs, 58, 270.



- Dvir, T., Eden, D., Avolio, B. J., & Shamir, B. (2002). Impact of transformational leadership on follower development and performance: A field experiment. *Academy of Management Journal*, 45(4), 735-744. https://doi.org/10.5465/3069307
- Efron, B., & Stein, C. (1981). The jackknife estimate of variance. *The Annals of Statistics*, 9(3), 586-596. https://doi.org/10.1214/aos/1176345462
- Emerson, R. M. (1962). Power-dependence relations. *American Sociological Review*, 27(1), 31–41.
- Ergeneli, A., Arı, G. S., & Metin, S. (2007). Psychological empowerment and its relationship to trust in immediate managers. *Journal of Business Research*, 60(1), 41-49. https://doi.org/10.1016/j.jbusres.2006.09.012
- Eze, U. C., Goh, G., Goh, C. Y., & Tan, T. L. (2013). Perspectives of SMEs on knowledge sharing. *Vine*, 43(2), 210-236.
 https://doi.org/10.1108/03055721311329963
- Farmer, S. M., Tierney, P., & Kung-McIntyre, K. (2003). Employee creativity in Taiwan:

 An application of role identity theory. *Academy of Management Journal*, 46(5), 618-630. https://doi.org/10.2307/30040653
- Faul, F., Erdfelder, E., Lang, A., & Buchner, A. (2007). GPower 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences.
 Behavior Research Methods, 39(2), 175-191. https://doi.org/10.3758/bf03193146
- Feenstra, S., Jordan, J., Walter, F., & Stoker, J. I. (2020). Antecedents of leaders' power sharing: The roles of power instability and distrust. *Organizational Behavior and Human Decision Processes*, 157, 115-128.

 $\underline{https://doi.org/10.1016/j.obhdp.2020.01.005}$



- Fernandez, S., & Moldogaziev, T. (2011). Empowering public sector employees to improve performance: Does it work? *The American Review of Public Administration*, 41(1), 23-47. https://doi.org/10.1177/0275074009355943
- Fineman, S. (2006). On being positive: Concerns and counterpoints. *The Academy of Management Review, 31*(2), 270-291. https://doi.org/10.5465/AMR.2006.20208680
- Fleischer, A., & Mead, A. D. (2015, April 15-19). *Detecting inattentive pilot test*examinees in an MTurk sample [Paper presentation]. NCME Annual Meeting,

 Chicago, IL, United States.
- Fleischer, A., Mead, A. D., & Neuhengen, J. (2014, May 15-17). *Comparability of big five scores from online and traditional samples* [Paper presentation]. Society of Industrial Organizational Psychologists 29th Annual Meeting, Honolulu, HI, United States.
- Fleischer, A., Mead, A. D., & Huang, J. (2015). Inattentive responding in MTurk and other online samples. *Industrial and Organizational Psychology*, 8(2), 196-202. https://doi.org/10.1017/iop.2015.25
- Focht, A., & Ponton, M. (2015). Identifying primary characteristics of servant leadership: Delphi study. *International Journal of Leadership Studies*, *9*(1), 44-61.
- Fong, K. H., & Snape, E. (2015). Empowering leadership, psychological empowerment and employee outcomes: Testing a multi-level mediating model. *British Journal of Management*, 26(1), 126-138. https://doi.org/10.1111/1467-8551.12048
- Forrester, R. (2000). Empowerment: Rejuvenating a potent idea. *Academy of Management Perspectives*, 14(3), 67-80. https://doi.org/10.5465/ame.2000.4468067



- Fowler, F. J. (2009). *Applied social research methods: Survey research methods* (4th ed.). SAGE Publications, Inc. https://doi.org/10.4135/9781452230184
- Fowler, F. J. (2014). Survey research methods. SAGE.
- Gao, L., Janssen, O., & Shi, K. (2011). Leader trust and employee voice: The moderating role of empowering leader behaviors. *The Leadership Quarterly*, 22(4), 787-798. https://doi.org/10.1016/j.leaqua.2011.05.015
- Gelinas, L., Largent, E. A., Cohen, I. G., Kornetsky, S., Bierer, B. E., & Fernandez Lynch, H. (2018). A framework for ethical payment to research participants. *The New England Journal of Medicine*, 378(8), 766-771.

 https://doi.org/10.1056/NEJMsb1710591
- George, J. M. (2007). Creativity in organizations. *Academy of Management Annals, 1*(1), 439-477. https://doi.org/rg/10.1080/078559814
- George, J. M., & Zhou, J. (2007). Dual tuning in a supportive context: Joint contributions of positive mood, negative mood, and supervisory behaviors to employee creativity.

 **Academy of Management Journal, 50(3), 605-622. https://doi.org/10.2307/20159875
- George, J. M., & Zhou, J. (2001). When openness to experience and conscientiousness are related to creative behavior. *Journal of Applied Psychology*, 86(3), 513-524. https://doi.org/10.1037/0021-9010.86.3.513
- Gerstein, M., & Friedman, H. H. (2017). A new corporate ethics and leadership paradigm for the age of creativity. *Journal of Accounting, Ethics, and Public Policy, 18*(2), 179-230. https://ssrn.com/abstract=2986603



- Giessner, S. R., van Knippenberg, D., & Sleebos, E. (2009). License to fail? How leader group prototypicality moderates the effects of leader performance on perceptions of leadership effectiveness. *The Leadership Quarterly*, 20(3), 434-451. https://doi.org/10.1016/j.leaqua.2009.03.012
- Giluk, T. L., & Postlethwaite, B. E. (2015). Big five personality and academic dishonesty: A meta-analytic review. *Personality and Individual Differences*, 72, 59-67. https://doi.org/10.1016/j.paid.2014.08.027
- Gong, Y., Cheung, S., Wang, M., & Huang, J. (2012). Unfolding the proactive process for creativity. *Journal of Management*, 38(5), 1611-1633. https://doi.org/10.1177/0149206310380250
- Gong, Y., Huang, J., & Farh, J. (2009). Employee learning orientation, transformational leadership, and employee creativity. *Academy of Management Journal*, *52*(4), 765-778. https://doi.org/10.5465/AMJ.2009.43670890
- Gosling, S. D., Vazire, S., Srivastava, S., & John, O. P. (2004). Should we trust webbased studies? *American Psychologist*, *59*(2), 93-104. https://doi.org/10.1037/0003-066X.59.2.93
- Graen, G. B., & Uhl-Bien, M. (1995). Relationship-based approach to leadership:

 Development of leader-member exchange (LMX) theory of leadership over 25 years:

 Applying a multi-level multi-domain perspective. *The Leadership Quarterly*, 6(2), 219-247.
- Grant, A. M., & Ashford, S. J. (2008). The dynamics of proactivity at work. *Research in Organizational Behavior*, 28, 3-34. https://doi.org/10.1016/j.riob.2008.04.002



- Greenleaf, R. K. (1977). Servant leadership: A journey into the nature of legitimate power and greatness. Paulist Press.
- Greenleaf, R. K. (1998). *The power of servant-leadership: Essays*. Berrett-Koehler Publishers.
- Grehan, P. M., Flanagan, R., & Malgady, R. G. (2011). Successful graduate students: The roles of personality traits and emotional intelligence: Successful students.

 Psychology in the Schools, 48(4), 317-331. https://doi.org/10.1002/pits.20556
- Gronn, P. (1999). Substituting for leadership: The neglected role of the leadership couple.

 The Leadership Quarterly, 10(1), 41-62. https://doi.org/10.1016/S1048-9843(99)80008-3
- Guilford, J. P. (1950). Creativity. American Psychologist, 5(9), 444-454.
- Gumusluoglu, L., & Ilsev, A. (2009). Transformational leadership, creativity, and organizational innovation. *Journal of Business Research*, 62(4), 461-473. https://doi.org/10.1016/j.jbusres.2007.07.032
- Guo, W., & Wang, D. (2017). Does joint decision making foster team creativity? Exploring the moderating and mediating effects. *Personnel Review*, 46(8), 1590-1604. https://doi.org/10.1108/PR-03-2016-0055
- Gupta, V., Singh, S., Kumar, S., & Bhattacharya, A. (2012). Linking leadership to employee creativity: A study of Indian R&D laboratories. *Indian Journal of Industrial Relations*, 48(1), 120-136. https://www.jstor.org/stable/23509771
- Gupta, V., & Singh, S. (2013). How leaders impact employee creativity: A study of Indian R&D laboratories. *Management Research Review*, *36*(1), 66-88. https://doi.org/http://dx.doi.org/10.1108/01409171311284594



- Ha, B., Park, Y., & Cho, S. (2011). Suppliers' affective trust and trust in competency in buyers. *International Journal of Operations & Production Management*, 31(1/2), 56-77. http://www.econis.eu/PPNSET?PPN=659405326
- Han, S., Harold, C. M., & Cheong, M. (2019). Examining why employee proactive personality influences empowering leadership: The roles of cognition- and affect-based trust. *Journal of Occupational and Organizational Psychology*, 92(2), 352-383. https://doi.org/10.1111/joop.12252
- Hao, P., He, W., & Long, L. (2018). Why and when empowering leadership has different effects on employee work performance: The pivotal roles of passion for work and role breadth self-efficacy. *Journal of Leadership & Organizational Studies*, *25*(1), 85-100. https://doi.org/10.1177/1548051817707517
- Harris, T. B., Li, N., Boswell, W. R., Zhang, X., & Xie, Z. (2014). Getting what's new from newcomers: Empowering leadership, creativity, and adjustment in the socialization context. *Personnel Psychology*, 67(3), 567-604. https://doi.org/10.1111/peps.12053
- Hassan, S., DeHart-Davis, L., & Jiang, Z. (2019). How empowering leadership reduces employee silence in public organizations. *Public Administration*, *97*(1), 116-131. https://doi.org/10.1111/padm.12571
- Hauser, D., & Schwarz, N. (2016). Attentive turkers: MTurk participants perform better on online attention checks than do subject pool participants. *Behavior Research Methods*, 48(1), 400-407. https://doi.org/10.3758/s13428-015-0578-z



- Hayat Bhatti, M., Ju, Y., Akram, U., Hasnat Bhatti, M., Akram, Z., & Bilal, M. (2019).
 Impact of participative leadership on organizational citizenship behavior: Mediating role of trust and moderating role of continuance commitment: Evidence from the Pakistan hotel industry. Sustainability, 11(4), 1170.
 https://doi.org/10.3390/su11041170
- Hayes, A. F., Montoya, A. K., & Rockwood, N. J. (2017). The analysis of mechanisms and their contingencies: PROCESS versus structural equation modeling.

 *Australasian Marketing Journal, 25(1), 76-81.

 https://doi.org/10.1016/j.ausmj.2017.02.001
- Hayes, A. F., & Preacher, K. J. (2014). Statistical mediation analysis with a multicategorical independent variable. *British Journal of Mathematical & Statistical Psychology*, 67(3), 451-470. https://doi.org/10.1111/bmsp.12028
- Hayes, A. F., & Scharkow, M. (2013). The relative trustworthiness of inferential tests of the indirect effect in statistical mediation analysis: Does method really matter?
 Psychological Science, 24(10), 1918-1927.
 https://doi.org/10.1177/0956797613480187
- Hayes, A. F. (2018). *Introduction to mediation, moderation, and conditional process analysis* (Second edition ed.). Guilford Press.
- Hayes, A. F. (2020). *The PROCESS macro for SPSS and SAS (Version 3.5.3)*. https://processmacro.org/download.html
- Hensley, N. (2020). Educating for sustainable development: Cultivating creativity through mindfulness. *Journal of Cleaner Production*, *243*, 118542. https://doi.org/10.1016/j.jclepro.2019.118542



- Hernandez, M., Long, C. P., & Sitkin, S. B. (2014). Cultivating follower trust: Are all leader behaviors equally influential? *Organization Studies*, *35*(12), 1867-1892.
- Hersey, P., & Blanchard, K. H. (1982). Leadership style: Attitudes and behaviors. *Training and Development Journal*, 36(5), 50.
- Hickman, A., & Robison, J. (2020). *Is working remotely effective? Gallup research says*yes. https://www.gallup.com/workplace/283985/working-remotely-effectivegallup-research-says-yes.aspx
- Hill, B. (2017). Does leadership style of modern matrons contribute to safer and more effective clinical services? *Nursing Management*, 24(1), 21-25. https://doi.org/10.7748/nm.2017.e1488
- Hirschfeld, R. R., Jordan, M. H., Thomas, C. H., & Feild, H. S. (2008). Observed leadership potential of personnel in a team setting: Big five traits and proximal factors as predictors. *International Journal of Selection and Assessment*, 16(4), 385-402. https://doi.org/10.1111/j.1468-2389.2008.00443.x
- Hirst, G., Van Dick, R., & van Knippenberg, D. (2009). A social identity perspective on leadership and employee creativity. *Journal of Organizational Behavior*, 30(1), 963–982. https://doi.org/10.1002/job.600
- Hofstede, G. (1980). Motivation, leadership, and organization: Do American theories apply abroad? *Organizational Dynamics*, *9*(1), 42-63.
- Hofstede, G. (1986). Cultural differences in teaching and learning. *International Journal of Intercultural Relations*, 10(3), 301-320.
- Hofstede, G. (1991). *Empirical models of cultural differences*. Swets & Zeitlinger Publishers.



- Hon, A. H. Y., & Chan, W. W. H. (2013). Team creative performance. *Cornell Hospitality Quarterly*, *54*(2), 199-210. https://doi.org/10.1177/1938965512455859
- Hon, A. H. Y., & Leung, A. S. M. (2008, August 8-13). How a person's different motive relates to creativity: The moderating role of organizational culture [Paper presentation]. Annual Meeting of the Academy of Management, Anaheim, CA, United States.
- Howard, M. C. (2019). Applying the approach/avoidance framework to understand the relationships between social courage, workplace outcomes, and well-being outcomes. *The Journal of Positive Psychology, 14*(6), 734-748.

 https://doi.org/10.1080/17439760.2018.1545043
- Huang, L., Krasikova, D. V., & Liu, D. (2016). I can do it, so can you: The role of leader creative self-efficacy in facilitating follower creativity. *Organizational Behavior and Human Decision Processes*, 132, 49-62. https://doi.org/10.1016/j.obhdp.2015.12.002
- Huang, X., Iun, J., Liu, A., & Gong, Y. (2010). Does participative leadership enhance work performance by inducing empowerment or trust? The differential effects on managerial and non-managerial subordinates. *Journal of Organizational Behavior*, 31(1), 122-143. https://doi.org/10.1002/job.636
- Hui, M. K., Au, K., & Fock, H. (2004). Empowerment effects across cultures. *Journal of International Business Studies*, 35(1), 46-60.
 https://doi.org/10.1057/palgrave.jibs.8400067
- Hulme, E., Thomas, B., & DeLaRosby, H. (2014). Developing creativity ecosystems:

 Preparing college students for tomorrow's innovation challenge. *About Campus*,

 19(1), 14-23. https://doi.org/10.1002/abc.21146



- Humborstad, S. I. W., Humborstad, B., Whitfield, R., & Perry, C. (2008). Implementation of empowerment in Chinese high power-distance organizations. *The International Journal of Human Resource Management*, 19(7), 1349-1364.
 https://doi.org/10.1080/09585190802110224
- Humborstad, S. I. W., & Kuvaas, B. (2013). Mutuality in leader–subordinate empowerment expectation: Its impact on role ambiguity and intrinsic motivation.

 The Leadership Quarterly, 24(2), 363-377.

 https://doi.org/10.1016/j.leaqua.2013.01.003
- Humborstad, S. I. W., Nerstad, C. G. L., & Dysvik, A. (2014). Empowering leadership, employee goal orientations and work performance. *Personnel Review*, 43(2), 246-271. https://doi.org/10.1108/PR-01-2012-0008
- Humphrey, S. E., Nahrgang, J. D., & Morgeson, F. P. (2007). Integrating motivational, social, and contextual work design features: A meta-analytic summary and theoretical extension of the work design literature. *Journal of Applied Psychology*, 92(5), 1332. https://doi.org/10.1037/0021-9010.92.5.1332
- Jain, R. (2016). Innovation management: Conceptualization for practice & research. *Indian Journal of Industrial Relations*, 52(2), 203.
- Jaiswal, N. K., & Dhar, R. L. (2015). Transformational leadership, innovation climate, creative self-efficacy and employee creativity: A multilevel study. *International Journal of Hospitality Management*, *51*, 30-41.

 https://doi.org/10.1016/j.ijhm.2015.07.002



- Jaiswal, N. K., & Dhar, R. L. (2017). The influence of servant leadership, trust in leader and thriving on employee creativity. *Leadership & Organization Development Journal*, 38(1), 2-21. https://doi.org/10.1108/LODJ-02-2015-0017
- Javed, B., Rawwas, M. Y. A., Khandai, S., Shahid, K., & Tayyeb, H. H. (2018). Ethical leadership, trust in leader and creativity: The mediated mechanism and an interacting effect. *Journal of Management & Organization*, 24(3), 388-405.
 https://doi.org/10.1017/jmo.2017.56
- Jia, X., Chen, J., Mei, L., & Wu, Q. (2018). How leadership matters in organizational innovation: A perspective of openness. *Management Decision*, 56(1), 6-25. https://doi.org/10.1108/md-04-2017-0415
- Jiang, W., Jiang, W., Gu, Q., Gu, Q., Tang, T., & Tang, T. (2019). Do victims of supervisor bullying suffer from poor creativity? Social cognitive and social comparison perspectives. *Journal of Business Ethics*, 157(3), 865-884. https://doi.org/10.1007/s10551-017-3660-x
- Jo, N. Y., Lee, K. C., Lee, D. S., & Hahn, M. (2015). Empirical analysis of roles of perceived leadership styles and trust on team members' creativity: Evidence from Korean ICT companies. *Computers in Human Behavior*, 42, 149-156. https://doi.org/10.1016/j.chb.2014.03.015
- Jones, H. L. (1956). Investigating the properties of a sample mean by employing random subsample means. *Journal of the American Statistical Association*, *51*(273), 54-83. https://doi.org/10.1080/01621459.1956.10501311



- Joo, B. (2007). The impact of contextual and personal characteristics on employee creativity in Korean firms (UMI No. 3263468) [Doctoral dissertation, University of Minnesota]. ProQuest Dissertations & Theses Global.
- Jung, D. I. (2001). Transformational and transactional leadership and their effects on creativity in groups. *Creativity Research Journal*, 13(2), 185-195.
 https://doi.org/10.1207/S15326934CRJ1302_6
- Jung, D. I., & Avolio, B. J. (2000). Opening the black box: An experimental investigation of the mediating effects of trust and value congruence on transformational and transactional leadership. *Journal of Organizational Behavior*, 21(8), 949-964. https://doi.org/10.1002/1099-1379(200012)21:83.0.CO;2-F
- Jung, D. I., & Sosik, J. J. (2002). Transformational leadership in work groups: The role of empowerment, cohesiveness, collective-efficacy on perceived group performance.
 Small Group Research, 33(3), 313-336.
 https://doi.org/rg/10.1177/10496402033003002

Kahn, R. L. (1964). Organizational stress. Wiley.

- Kalshoven, K., & den Hartog, D. N. (2009). Ethical leader behavior and leader effectiveness: The role of prototypicality and trust. *International Journal of Leadership Studies*, 5(2), 102-120.
- Kannan-Narasimhan, R., & Lawrence, B. S. (2012). Behavioral integrity: How leader referents and trust matter to workplace outcomes. *Journal of Business Ethics*, 111(2), 165-178. https://doi.org/10.1007/s10551-011-1199-9



- Kark, R., Shamir, B., & Chen, G. (2003). The two faces of transformational leadership.

 Journal of Applied Psychology, 88(2), 246-255. https://doi.org/10.1037/0021-9010.88.2.246
- Karsli, T., Kalra, M. K., Self, J. L., Rosenfeld, J. A., Butler, S., & Simoneaux, S. (2009).
 What physicians think about the need for informed consent for communicating the risk of cancer from low-dose radiation. *Pediatric Radiology*, 39(9), 917-925.
 https://doi.org/10.1007/s00247-009-1307-5
- Katz, R. (1955). Skills of an effective administrator. *Harvard Business Review*, 3(1), 33-42.
- Kaushik, M., Guleria, N., & Professor, H. (2020). The impact of pandemic COVID -19 in workplace. European Journal of Business and Management, 12(15), 9-18.
 https://doi.org/10.7176/EJBM/12-15-02
- Kees, J., Berry, C., Burton, S., & Sheehan, K. (2017). An analysis of data quality:
 Professional panels, student subject pools, and Amazon's Mechanical Turk. *Journal of Advertising: Themed Issue Methodology in Advertising Research*, 46(1), 141-155. https://doi.org/10.1080/00913367.2016.1269304
- Keith, M. G., Tay, L., & Harms, P. D. (2017). Systems perspective of Amazon Mechanical Turk for organizational research: Review and recommendations. Frontiers in Psychology, 8, 1359. https://doi.org/10.3389/fpsyg.2017.01359
- Kelloway, E. K., Turner, N., Barling, J., & Loughlin, C. (2012). Transformational leadership and employee psychological well-being: The mediating role of employee trust in leadership. *Work & Stress*, 26(1), 39-55.

https://doi.org/10.1080/02678373.2012.660774



- Khalid, S., & Zubair, A. (2014). Emotional intelligence, self-efficacy, and creativity among employees of advertising agencies. *Pakistan Journal of Psychological Research*, 29(2), 203.
- Kim, M., & Beehr, T. A. (2018). Organization-based self-esteem and meaningful work mediate effects of empowering leadership on employee behaviors and well-being. *Journal of Leadership & Organizational Studies*, 25(4), 385-398.
 https://doi.org/10.1177/1548051818762337
- Kim, M., & Beehr, T. A. (2020). Making the case for procedural justice: Employees thrive and work hard. *Journal of Managerial Psychology*, *35*(2), 100-114. https://doi.org/10.1108/JMP-03-2019-0154
- Kim, M., Beehr, T. A., & Prewett, M. S. (2018). Employee responses to empowering leadership: A meta-analysis. *Journal of Leadership & Organizational Studies*, 25(3), 257-276. https://doi.org/10.1177/1548051817750538
- Kinman, C. L., Lemieux, C. A., Agrawal, A., Gaskins, J. T., Meriwether, K. V., & Francis, S. L. (2017). The relationship between age and pelvic organ prolapse bother. *International Urogynecology Journal*, 28(5), 751-755.
 https://doi.org/10.1007/s00192-016-3175-5
- Kirkman, B. L., & Rosen, B. (1999). Beyond self-management: Antecedents and consequences of team empowerment. *The Academy of Management Journal*, 42(1), 58-74. https://doi.org/10.2307/256874



- Kirkman, B. L., & Shapiro, D. L. (2001). The impact of cultural values on job satisfaction and organizational commitment in self-managing work teams: The mediating role of employee resistance. *The Academy of Management Journal*, 44(3), 557-569. https://doi.org/10.2307/3069370
- Kirkman, B. L., & Rosen, B. (1997). A model of work team empowerment. *Research in Organizational Change and Development*, 10, 131.
- Klijn, M., & Tomic, W. (2010). A review of creativity within organizations from a psychological perspective. *Journal of Management Development*, 29(4), 322-343. https://doi.org/10.1108/02621711011039141
- Knezovic, E., & Musrati, M. A. (2018). Empowering leadership, psychological empowerment and employees' creativity: A gender perspective. *International Journal of Innovation, Creativity and Change*, 4(2), 51-72.
- Knowles, M. S. (1990). The adult learner (4th ed.). Gulf Publ. Co.
- Konczak, L. J., Stelly, D. J., & Trusty, M. L. (2000). Defining and measuring empowering leader behaviors: Development of an upward feedback instrument. *Educational and Psychological Measurement*, 60(2), 301-313. https://doi.org/10.1177/00131640021970420
- Koopman, J., Howe, M., Hollenbeck, J. R., & Sin, H. (2015). Small sample mediation testing: Misplaced confidence in bootstrapped confidence intervals. *Journal of Applied Psychology*, 100(1), 194-202. https://doi.org/10.1037/a0036635
- Kotter, J. P. (1988). The leadership factor. Free Press.
- Kotter, J. P. (1990). A force for change: How leadership differs from management. Free Press.



- Kotterman, J. (2006). Leadership versus management: What's the difference? *Journal for Quality and Participation*, 29(2), 13.
- Kundu, S. C., Kumar, S., & Gahlawat, N. (2019). Empowering leadership and job performance: Mediating role of psychological empowerment. *Management Research Review*, 42(5), 605-624. https://doi.org/10.1108/MRR-04-2018-0183
- Kuvshinikov, J. T. (2012). A study of the relationship between dimensions of national culture and generalized disposition to trust (UMI No. 3592424) [Doctoral dissertation, Gannon University]. ProQuest Dissertations & Theses Global.
- Landers, R. N., & Behrend, T. S. (2015). An inconvenient truth: Arbitrary distinctions between organizational, Mechanical Turk, and other convenience samples. *Industrial and Organizational Psychology*, 8(2), 142-164. https://doi.org/10.1017/iop.2015.13
- Lee, A., Willis, S., & Tian, A. W. (2018). Empowering leadership: A meta-analytic examination of incremental contribution, mediation, and moderation. *Journal of Organizational Behavior*, 39(3), 306-325. https://doi.org/10.1002/job.2220
- Lee, S., Cheong, M., Kim, M., & Yun, S. (2017). Never too much? The curvilinear relationship between empowering leadership and task performance. *Group & Organization Management*, 42(1), 11-38.
 - https://doi.org/10.1177/1059601116646474
- Li, S., He, W., Yam, K., & Long, L. (2015). When and why empowering leadership increases followers' taking charge: A multilevel examination in China. *Asia Pacific Journal of Management*, 32(3), 645-670. https://doi.org/10.1007/s10490-015-9424-1



- Li, S., Huo, Y., & Long, L. (2017). Chinese traditionality matters: Effects of differentiated empowering leadership on followers' trust in leaders and work outcomes. *Journal of Business Ethics*, *145*(1), 81-93.

 https://doi.org/10.1007/s10551-015-2900-1
- Li, Y. (2018). Leadership styles and knowledge workers' work engagement:

 Psychological capital as a mediator. *Current Psychology (New Brunswick, N.J.)*,

 38(5), 1152-1161. https://doi.org/10.1007/s12144-018-9968-6
- Lichtenstein, B., & Plowman, D. (2009). The leadership of emergence: A complex systems leadership theory of emergence at successive organizational level. *The Leadership Quarterly*, 20(4), 617-630. https://doi.org/10.1016/j.leaqua.2009.04.006
- Lichtenstein, B., Uhl-Bien, M., Marion, R., Seers, A., Orton, D., & Schreiber, C. (2006).

 Leadership in emergent events: Exploring the interactive process of leading in complex situations. *Emergence: Complexity and Organization*, 8(4), 2-12.

 https://doi.org/10.1016/j.obhdp.2016.08.001
- Liden, R. C., Wayne, S. J., Liao, C., & Meuser, J. D. (2014). Servant leadership and serving culture: Influence on individual and unit performance. *The Academy of Management Journal*, *57*(5), 1434-1452. https://doi.org/10.5465/amj.2013.0034
- Liphadzi, M., Aigbavboa, C. O., & Thwala, W. D. (2017). A theoretical perspective on the difference between leadership and management. *Procedia Engineering*, 196, 478-482. https://doi.org/10.1016/j.proeng.2017.07.227



- Liu, D., Jiang, K., Shalley, C. E., Keem, S., & Zhou, J. (2016). Motivational mechanisms of employee creativity: A meta-analytic examination and theoretical extension of the creativity literature. *Organizational Behavior and Human Decision Processes*, 137, 236-263. https://doi.org/10.1016/j.obhdp.2016.08.001
- Liu, W., Lepak, D. P., Takeuchi, R., & Sims, H. P. (2003). Matching leadership styles with employment modes: Strategic human resource management perspective.

 Human Resource Management Review, 13(1), 127-152.

 https://doi.org/10.1016/S1053-4822(02)00102-X
- Lorinkova, N. M., Pearsall, M. J., & Sims, H. P. (2013). Examining the differential longitudinal performance of directive versus empowering leadership in teams. *Academy of Management Journal*, 56(2), 573-596.

 https://doi.org/10.5465/amj.2011.0132
- Lorinkova, N. M., & Perry, S. J. (2017). When is empowerment effective? The role of leader-leader exchange in empowering leadership, cynicism, and time theft. *Journal of Management*, 43(5), 1631-1654. https://doi.org/10.1177/0149206314560411
- Lovelace, K. J., Manz, C. C., & Alves, J. C. (2007). Work stress and leadership development: The role of self-leadership, shared leadership, physical fitness and flow in managing demands and increasing job control. *Human Resource*Management Review, 17(4), 374-387. https://doi.org/10.1016/j.hrmr.2007.08.001
- Lutz Allen, S., Smith, J. E., & Da Silva, N. (2013). Leadership style in relation to organizational change and organizational creativity: Perceptions from nonprofit organizational members. *Nonprofit Management and Leadership, 24*(1), 23-42. https://doi.org/10.1002/nml.21078



- MacKinnon, D. P., Lockwood, C. M., & Williams, J. (2004). Confidence limits for the indirect effect: Distribution of the product and resampling methods. *Multivariate Behavioral Research*, 39(1), 99-128. https://doi.org/10.1207/s15327906mbr3901_4
- Madjar, N., Oldham, G. R., & Pratt, M. G. (2002). There's no place like home? The contributions of work and nonwork creativity support to employees' creative performance. *The Academy of Management Journal*, *45*(4), 757-767. https://doi.org/10.2307/3069309
- Maguire, S. J. (2016). Comparing transformational and transactional leadership styles of principals and their impact on school climate, teacher efficacy and student academic achievement (ProQuest No. 10143645) [Doctoral dissertation, Trident University International]. ProQuest Dissertations & Theses Global.
- Mahalanobis, P. C. (1936). *On the generalized distance in statistics*. National Institute of Science of India.
- Mallén, F., Domínguez-Escrig, E., Lapiedra, R., & Chiva, R. (2019). Does leader humility matter? Effects on altruism and innovation. *Management Decision*, 58(5), 967-981. https://doi.org/10.1108/MD-11-2018-1180
- Manion, J. (2005). From management to leadership: Practical strategies for health care leaders. John Wiley & Sons.
- Manz, C. C., & Sims, H. P. (1987). Leading workers to lead themselves: The external leadership of self- managing work teams. *Administrative Science Quarterly*, *32*(1), 106-129. https://doi.org/10.2307/2392745



- Manz, C. C., & Sims, H. P. (1991). SuperLeadership: Beyond the myth of heroic leadership. *Organizational Dynamics*, 19(4), 18-35. https://doi.org/10.1016/0090-2616(91)90051-A
- Marchiondo, L. A., Myers, C. G., & Kopelman, S. (2015). The relational nature of leadership identity construction: How and when it influences perceived leadership and decision-making. *The Leadership Quarterly*, 26(5), 892-908. https://doi.org/10.1016/j.leaqua.2015.06.006
- Marquis, B. L., & Huston, C. J. (2012). Leadership roles and management functions in nursing: Theory and application (7th ed.). Wolters Kluwer Health/Lippincott Williams & Wilkins.
- Martin, R., Guillaume, Y., Thomas, G., Lee, A., & Epitropaki, O. (2016). Leader—member exchange (LMX) and performance: A meta-analytic review. *Personnel Psychology*, 69(1), 67-121. https://doi.org/rg/10.1111/peps.12100
- Martin, S. L., Liao, H., & Campbell, E. M. (2013). Directive versus empowering leadership. *Academy of Management Journal*, *56*(5), 1372-1395. https://doi.org/10.5465/amj.2011.0113
- Mason, W., & Suri, S. (2012). Conducting behavioral research on Amazon's Mechanical Turk. *Behavior Research Methods*, 44(1), 1-23. https://doi.org/10.3758/s13428-011-0124-6
- Mason, W., & Watts, D. (2009, June 28). Financial incentives and the "performance of crowds" [Paper presentation]. ACM SIGKDD Workshop on Human Computation, Paris, France. https://doi.org/10.1145/1600150.1600175



- Massey-Winds, C. (2014). Relationship of leadership practices and teacher empowerment as perceived by teachers in urban Georgia [Unpublished doctoral dissertation]. Grand Canyon University.
- Mathieu, J. E., Gilson, L. L., & Ruddy, T. M. (2006). Empowerment and team effectiveness: An empirical test of an integrated model. *Journal of Applied Psychology*, 91(1), 97-108. https://doi.org/rg/10.1037/0021-9010.91.1.97
- Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of organizational trust. *The Academy of Management Review*, 20(3), 709-734. https://doi.org/10.2307/258792
- Mayer, R. C., & Gavin, M. B. (2005). Trust in management and performance: Who minds the shop while the employees watch the boss? *Academy of Management Journal*, 48(5), 874-888. https://doi.org/10.5465/amj.2005.18803928
- McAllister, D. J. (1995). Affect- and cognitive-based trust as foundations for interpersonal cooperation in organizations. *Academy of Management Journal*, 38(1), 24-59. https://doi.org/10.5465/256727
- McCarthy, P. J. (1969). Pseudo-replication: Half samples. *Revue De L'Institut International De Statistique*, *37*(3), 239. https://doi.org/10.2307/1402116
- McCrae, R. R., & Costa, P. T. (1994). The stability of personality: Observations and evaluations. *Current Directions in Psychological Science: A Journal of the American Psychological Society, 3*(6), 173-175. https://doi.org/10.1111/1467-8721.ep10770693



- McKersie, S. J., Matthews, R. A., Smith, C. E., Barratt, C. L., & Hill, R. T. (2019). A process model linking family-supportive supervision to employee creativity. *Journal of Occupational and Organizational Psychology*, 92(4), 707-735.

 https://doi.org/10.1111/joop.12276
- McKnight, D. H., & Chervany, N. L. (2006). Reflections on an initial trust-building model. In R. Bachmann & A. Zaheer (Eds.), *Handbook of trust research* (pp.29-51). Edward Elgar Publishing Ltd.
- Meng, Q., & Sun, F. (2019). The impact of psychological empowerment on work engagement among university faculty members in China. *Psychology Research and Behavior Management*, 12, 983-990. https://doi.org/10.2147/prbm.s215912
- Meyers, L. S., Gamst, G., & Guarino, A. J. (2016). *Applied multivariate research: Design and interpretation*. Sage Publications.
- Miao, Q., Newman, A., Schwarz, G., & Xu, L. (2013). Participative leadership and the organizational commitment of civil servants in China: The mediating effects of trust in supervisor. *British Journal of Management*, 24(1), S76-S92.
 https://doi.org/10.1111/1467-8551.12025
- Milland, K. (2016). A Mechanical Turk worker's perspective. *Journal of Media Ethics*, 31(4), 263-264. https://doi.org/10.1080/23736992.2016.1228813
- Mintzberg, H., & Mangelsdorf, M. E. (2009). Debunking management myths. *MIT Sloan Management Review*, 51(1), 12. http://www.econis.eu/PPNSET?PPN=689685696
- Montoya, A. K., & Hayes, A. F. (2017). Two-condition within-participant statistical mediation analysis: A path-analytic framework. *Psychological Methods*, 22(1), 6-27. https://doi.org/10.1037/met0000086



- Mooney, C. Z., & Duval, R. D. (1993). *Quantitative applications in the social sciences:*Bootstrapping (5th ed.). SAGE Publications.
- Morgan, E. (2018). Servant leadership theory and information technology management (UMI No. 10807748) [Doctoral dissertation, Northcentral University]. ProQuest Dissertations & Theses Full Text: The Humanities and Social Sciences Collection.
- Mroz, J. E., Yoerger, M., & Allen, J. A. (2018). Leadership in workplace meetings: The intersection of leadership styles and follower gender. *Journal of Leadership & Organizational Studies*, 25(3), 309-322. https://doi.org/10.1177/1548051817750542
- Müceldili, B., Turan, H., & Erdil, O. (2013). The influence of authentic leadership on creativity and innovativeness. *Procedia Social and Behavioral Sciences*, 99, 673-681. https://doi.org/10.1016/j.sbspro.2013.10.538
- Mullins, L. J. (2005). *Management and organisational behaviour* (7th ed.). Prentice Hall/Financial Times.
- Mumford, M. D., Scott, G. M., Gaddis, B., & Strange, J. M. (2002). Leading creative people: Orchestrating expertise and relationships. *The Leadership Quarterly*, *13*(6), 705-750. https://doi.org/10.1016/S1048-9843(02)00158-3
- Narusis, J. D. (2013). The relationship between individual level cultural values and the perceived effectiveness of authentic leadership (UMI No. 1584849) [Master's Thesis, University of South Florida]. ProQuest Dissertations & Theses Global.
- Necka, E. A., Cacioppo, S., Norman, G. J., & Cacioppo, J. T. (2016). Measuring the prevalence of problematic respondent behaviors among MTurk, campus, and community participants. *PloS One*, *11*(6), e0157732.

https://doi.org/10.1371/journal.pone.0157732



- Neubert, M. J., Kacmar, K. M., Carlson, D. S., Chonko, L. B., & Roberts, J. A. (2008).

 Regulatory focus as a mediator of the influence of initiating structure and servant leadership on employee behavior. *Journal of Applied Psychology*, 93(6), 1220-1233. https://doi.org/10.1037/a0012695
- Newell, A., & Simon, H. (1972). Human problem solving. Prentice Hall.
- Newman, A., Kiazad, K., Miao, Q., & Cooper, B. (2014). Examining the cognitive and affective trust-based mechanisms underlying the relationship between ethical leadership and organisational citizenship: A case of the head leading the heart?

 **Journal of Business Ethics, 123(1), 113-123. https://doi.org/10.1007/s10551-013-1803-2
- Newman, D. A. (2014). Missing data. *Organizational Research Methods*, 17(4), 372-411. https://doi.org/10.1177/1094428114548590
- Ng, K., & Chua, R. Y. J. (2006). Do I contribute more when I trust more? Differential effects of cognition- and affect-based trust. *Management and Organization Review*, 2(1), 43-66. https://doi.org/10.1111/j.1740-8784.2006.00028.x
- Ng, T. W. H., & Lucianetti, L. (2016). Within-individual increases in innovative behavior and creative, persuasion, and change self-efficacy over time: A social–cognitive theory perspective. *The Journal of Applied Psychology, 101*(1), 14-34. https://doi.org/10.1037/ap10000029
- Nga, J. K. H., & Shamuganathan, G. (2010). The influence of personality traits and demographic factors on social entrepreneurship start up intentions. *Journal of Business Ethics*, 95(2), 259-282. http://www.econis.eu/PPNSET?PPN=635084155



- Nichols, A. L. (2016). What do people desire in their leaders? The effect of leadership experience on desired leadership traits. *Leadership & Organization Development Journal*, 37(5), 658-671. https://doi.org/10.1108/LODJ-09-2014-0182
- Northouse, P. G. (2018). Leadership: Theory and practice. Sage publications.
- Ohly, S., Sonnentag, S., & Pluntke, F. (2006). Routinization, work characteristics and their relationships with creative and proactive behaviors. *Journal of Organizational Behavior*, 27(3), 257-279. https://doi.org/10.1002/job.376
- Oke, A., Munshi, N., & Walumbwa, F. O. (2009). The influence of leadership on innovation processes and activities. *Organizational Dynamics*, *38*(1), 64-72. https://doi.org/10.1016/j.orgdyn.2008.10.005
- Oldham, G. R., & Cummings, A. (1996). Employee creativity: Personal and contextual factors at work. *The Academy of Management Journal*, *39*(3), 607-634. https://doi.org/10.2307/256657
- Osborn, R. N., Hunt, J. G., & Jauch, L. R. (2002). Toward a contextual theory of leadership. *The Leadership Quarterly*, *13*(6), 797-837. https://doi.org/10.1016/S1048-9843(02)00154-6
- Osborne, J. W., & Waters, E. (2002). Four assumptions of multiple regression that researchers should always test. *Practical Assessment, Research & Evaluation*, 8, 2. https://doi.org/10.7275/r222-hv23
- Özaralli, N. (2003). Effects of transformational leadership on empowerment and team effectiveness. *Leadership & Organization Development Journal*, 24(6), 335-344. https://doi.org/10.1108/01437730310494301



- Özaralli, N. (2015). Linking empowering leader to creativity: The moderating role of psychological (felt) empowerment. *Procedia Social and Behavioral Sciences*, 181, 366-376. https://doi.org/10.1016/j.sbspro.2015.04.899
- Pallant, J. (2016). SPSS survival manual (6th ed.). McGraw Hill Education.
- Paolacci, G., & Chandler, J. (2014). Inside the Turk: Understanding Mechanical Turk as a participant pool. *Current Directions in Psychological Science*, 23(3), 184-188. https://doi.org/10.1177/0963721414531598
- Parker, S. K., Wall, T. D., & Cordery, J. L. (2001). Future work design research and practice: Towards an elaborated model of work design. *Journal of Occupational and Organizational Psychology*, 74(4), 413-440.

 https://doi.org/10.1348/096317901167460
- Parris, D. L., & Peachey, J. W. (2013). A systematic literature review of servant leadership theory in organizational contexts. *Journal of Business Ethics*, 113(3), 377-393. https://doi.org/10.1007/s 10551-012-1322-6
- Pearce, C. L., Sims, H. P., Jr, Cox, J. F., Ball, G., Schnell, E., Smith, K. A., & Trevino, L. (2003). Transactors, transformers and beyond. *Journal of Management Development*, 22(4), 273-307. https://doi.org/10.1108/02621710310467587
- Peer, E., Vosgerau, J., & Acquisti, A. (2013). Reputation as a sufficient condition for data quality on Amazon Mechanical Turk. *Behavior Research Methods*, 46(4), 1023-1031. https://doi.org/10.3758/s13428-013-0434-y
- Peugh, J. L., & Enders, C. K. (2016). Missing data in educational research: A review of reporting practices and suggestions for improvement. *Review of Educational Research*, 74(4), 525-556. https://doi.org/10.3102/00346543074004525



- Pfeffer, J. (2010). Building sustainable organizations: The human factor. *Academy of Management Perspectives*, 24(1), 34-45. https://doi.org/10.5465/amp.24.1.34
- Phipps, S. (2015). Transformational and visionary leadership in occupational therapy management and administration. *OT Practice*, 20(15), CE1.
- Pituch, K. A., & Stevens, J. (2016). *Applied multivariate statistics for the social sciences:*Analyses with SAS and IBM's SPSS (6th ed.). Routledge.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879-903.
 https://doi.org/10.1037/0021-9010.88.5.879
- Podsakoff, P. M., MacKenzie, S. B., Moorman, R. H., & Fetter, R. (1990).

 Transformational leader behaviors and their effects on followers' trust in leader, satisfaction, and organizational citizenship behaviors. *The Leadership Quarterly*, 1(2), 107-142. https://doi.org/10.1016/1048-9843(90)90009-7
- Posner, B. Z., & Kouzes, J. M. (1988). Development and validation of the leadership practices inventory. *Educational and Psychological Measurement*, 48(2), 483-496.
- Prasad, B., & Junni, P. (2016). CEO transformational and transactional leadership and organizational innovation. *Management Decision*, *54*(7), 1542-1568.

 https://doi.org/10.1108/MD-11-2014-0651
- Preacher, K. J., Rucker, D. D., & Hayes, A. F. (2007). Addressing moderated mediation hypotheses: Theory, methods, and prescriptions. *Multivariate Behavioral Research*, 42(1), 185-227. https://doi.org/10.1080/00273170701341316



- Pretorius, S., Steyn, H., & Bond-Barnard, T. J. (2018). Leadership styles in projects:

 Current trends and future opportunities. *South African Journal of Industrial*Engineering, 29(3), 161-172. https://doi.org/10.7166/29-3-2057
- Puccio, G. J., Mance, M., & Murdock, M. C. (2011). *Creative leadership* (2nd ed.). SAGE.
- Qu, R., Janssen, O., & Shi, K. (2015). Transformational leadership and follower creativity: The mediating role of follower relational identification and the moderating role of leader creativity expectations. *The Leadership Quarterly*, 26(2), 286-299. https://doi.org/10.1016/j.leaqua.2014.12.004
- Raja, U., & Johns, G. (2010). The joint effects of personality and job scope on in-role performance, citizenship behaviors, and creativity. *Human Relations*, 63(7), 981-1005. https://doi.org/10.1177/0018726709349863
- Raphan, M., & Friedman, H. H. (2014). Adaptivity, creativity, and diversification in the age of convergence, *Business Quest*, 1-16.
- Raub, S., & Robert, C. (2010). Differential effects of empowering leadership on in-role and extra-role employee behaviors: Exploring the role of psychological empowerment and power values. *Human Relations*, 63(11), 1743-1770. https://doi.org/10.1177/0018726710365092
- Re, D. E., & Rule, N. O. (2016). The big man has a big mouth: Mouth width correlates with perceived leadership ability and actual leadership performance. *Journal of Experimental Social Psychology*, 63, 86-93. https://doi.org/10.1016/j.jesp.2015.12.005



- Robinson, J., Rosenzweig, C., Moss, A. J., & Litman, L. (2019). Tapped out or barely tapped? Recommendations for how to harness the vast and largely unused potential of the Mechanical Turk participant pool. *PloS One, 14*(12), e0226394. https://doi.org/10.1371/journal.pone.0226394
- Rodan, S., & Galunic, C. (2004). More than network structure: How knowledge heterogeneity influences managerial performance and innovativeness. *Strategic Management Journal*, 25(6), 541-562. https://doi.org/10.1002/smj.398
- Rogers, C. (1954). Towards a theory of creativity. *ETC: A Review of General Semantics*, 11, 249-260.
- Rost, J. C. (1991). Leadership for the twenty-first century. Praeger.
- Rovai, A. P., Baker, J. D., & Ponton, M. K. (2013). Social science research design and statistics: A practitioner's guide to research methods and IBM SPSS. Watertree Press LLC.
- Rubenstein, L. D., Ridgley, L. M., Callan, G. L., Karami, S., & Ehlinger, J. (2018). How teachers perceive factors that influence creativity development: Applying a social cognitive theory perspective. *Teaching and Teacher Education*, 70, 100-110. https://doi.org/10.1016/j.tate.2017.11.012
- Rupprecht, E. A., Waldrop, J. S., & Grawitch, M. J. (2013). Initial validation of a new measure of leadership. *Consulting Psychology Journal: Practice and Research*, 65(2), 128-148. https://doi.org/10.1037/a0033127
- Sandell, K. (2012). Transformational leadership, engagement, and performance: A new perspective (UMI No. 1532931) [Master's Thesis, Colorado State University].

 ProQuest Dissertations & Theses Global.



- Sansone, C., Morf, C. C., & Panter, A. T. (Eds.). (2004). *The sage handbook of methods in social psychology*. Sage Publications.
- Scarbrough, H. (1999). Knowledge as work: Conflicts in the management of knowledge workers. *Technology Analysis & Strategic Management, 11*(1), 5-16. https://doi.org/10.1080/095373299107546
- Schaubroeck, J., Lam, S. S. K., & Peng, A. C. (2011). Cognition-based and affect-based trust as mediators of leader behavior influences on team performance. *The Journal of Applied Psychology*, *96*(4), 863-871. https://doi.org/10.1037/a0022625
- Schmidt, G. B. (2015). Fifty days an MTurk worker: The social and motivational context for Amazon Mechanical Turk workers. *Industrial and Organizational Psychology*, 8(2), 165-171. https://doi.org/10.1017/iop.2015.20
- Schneider, G. P. (2016). *Electronic commerce* (12th ed.). CENGAGE Learning.
- Schonlau, M., Fricker, R. D., & Elliott, M. N. (2002). Conducting research surveys via e-mail and the web. Rand.
- Seibert, S. E., Silver, S. R., & Randolph, W. A. (2004). Taking empowerment to the next level: A multiple-level model of empowerment, performance, and satisfaction. *The Academy of Management Journal*, 47(3), 332-349. https://doi.org/10.2307/20159585
- Shalley, C. E., & Perry-Smith, J. E. (2001). Effects of social-psychological factors on creative performance: The role of informational and controlling expected evaluation and modeling experience. *Organizational Behavior and Human Decision Processes*, 84(1), 1-22. https://doi.org/10.1006/obhd.2000.2918



- Shalley, C. E., & Gilson, L. L. (2004). What leaders need to know: A review of social and contextual factors that can foster or hinder creativity. *The Leadership Quarterly*, 15(1), 33-53. https://doi.org/10.1016/j.leaqua.2003.12.004
- Shalley, C. E., Gilson, L. L., & Blum, T. C. (2000). Matching creativity requirements and the work environment: Effects on satisfaction and intentions to leave. *The Academy of Management Journal*, 43(2), 215-223. https://doi.org/10.2307/1556378
- Shalley, C. E., Zhou, J., & Oldham, G. R. (2004). The effects of personal and contextual characteristics on creativity: Where should we go from here? *Journal of Management*, 30(6), 933-958. https://doi.org/10.1016/j.jm.2004.06.007
- Sharma, P. N., & Kirkman, B. L. (2015). Leveraging leaders: A literature review and future lines of inquiry for empowering leadership research. *Group & Organization Management*, 40(2), 193-237. https://doi.org/10.1177/1059601115574906
- Shen, W., & Yuan, Y. (2020). Personality: Risk-taking. *Journal of Risk Research*, 8(2), 157-176. https://doi.org/rg/10.1016/B978-0-12-809324-5.23830-3
- Shropshire, K. O., Hawdon, J. E., & Witte, J. C. (2009). Web survey design: Balancing measurement, response, and topical interest. *SAGE Internet Research Methods*, 37(3), 344-370. https://doi.org/10.1177/0049124108327130
- Shrout, P. E., & Bolger, N. (2002). Mediation in experimental and nonexperimental studies. *Psychological Methods*, 7(4), 422-445. https://doi.org/10.1037/1082-989X.7.4.422
- Simha, A., & Parboteeah, K. P. (2020). The big 5 personality traits and willingness to justify unethical behavior—A cross-national examination. *Journal of Business Ethics*, 167(3), 451-471. https://doi.org/10.1007/s10551-019-04142-7



- Simonton, D. K. (2000). Creativity: Cognitive, personal, developmental, and social aspects. *American Psychologist*, 55(1), 151-158. https://doi.org/10.1037/0003-066X.55.1.151
- Slatten, T., Svensson, G., & Svaeri, S. (2011). Empowering leadership and the influence of a humorous work climate on service employees' creativity and innovative behaviour in frontline service jobs. *International Journal of Quality and Service Sciences*, 3(3), 267-284. https://doi.org/10.1108/17566691111182834
- Smith, S. V., & Garcia, C. (2019). *The real minimum wage*.

 https://www.npr.org/2019/05/16/723947780/the-real-minimum-wage
- Spears, L. C. (2010). Character and servant leadership: Ten characteristics of effective, caring leaders. *The Journal of Virtues & Leadership*, 1(1), 25-30.
- Spreitzer, G. M. (1995). Psychological empowerment in the workplace: Dimensions, measurement, and validation. *The Academy of Management Journal*, *38*(5), 1442-1465. https://doi.org/10.2307/256865
- Srivastava, A., Bartol, K. M., & Locke, E. A. (2006). Empowering leadership in management teams: Effects on knowledge sharing, efficacy, and performance.

 Academy of Management Journal, 49(6), 1239-1251.

 https://doi.org/10.5465/amj.2006.23478718
- Stangor, C. (2014). Research methods for the behavioral sciences. Nelson Education.
- Stanley, D. (2006). Role conflict: Leaders and managers. *Nursing Management*, 13(5), 31-37. https://doi.org/10.7748/nm.13.5.31.s18



- Stone, A. G., Russell, R. F., & Patterson, K. (2004). Transformational versus servant leadership: A difference in leader focus. *Leadership & Organization Development Journal*, 25(4), 349-361. https://doi.org/10.1108/01437730410538671
- Strauss, G. (Ed.). (1963). Some notes on power equalization. Prentice-Hall.
- Stuart, A. (2014). A blended learning approach to safety training: Student experiences of safe work practices and safety culture. *Safety Science*, *62*, 409-417.
- Suifan, T. S., Abdallah, A. B., & Al Janini, M. (2018). The impact of transformational leadership on employees' creativity. *Management Research Review*, 41(1), 113-132. https://doi.org/10.1108/MRR-02-2017-0032
- Sun, L., Zhang, Z., Qi, J., & Chen, Z. X. (2012). Empowerment and creativity: A cross-level investigation. *The Leadership Quarterly*, 23(1), 55-65.

 https://doi.org/10.1016/j.leaqua.2011.11.005
- Sur, S., & Ng, E. S. (2014). Extending theory on job stress. *Human Resource*Development Review, 13(1), 79-101. https://doi.org/10.1177/1534484313492332
- Sweetman, D. (2010). Exploring the adaptive function in complexity leadership theory:

 An examination of shared leadership and collective creativity in innovation networks

 (UMI No. 3432186) [Doctoral dissertation, University of Nebraska]. ProQuest

 Dissertations & Theses Global.
- Tabachnick, B. G., & Fidell, L. S. (2013). *Using multivariate statistics* (6th ed.). Pearson Education.
- Tabachnick, B. G., & Fidell, L. S. (2011). *Multivariate analysis of variance (MANOVA)*. Springer. https://doi.org/10.1007/978-3-642-04898-2_394



- Tamkin, P. (2012). Leadership by design. *Strategic HR Review*, 11(2), 90-95. https://doi.org/10.1108/14754391211202152
- Tan, C., Lau, X., Kung, Y., & Kailsan, R. A. (2016). Openness to experience enhances creativity: The mediating role of intrinsic motivation and the creative process engagement. *The Journal of Creative Behavior*, 53(1), 109-119.
 https://doi.org/10.1002/jocb.170
- Tan, C., & Ong, A. W. (2019). Psychometric qualities and measurement invariance of the modified self-rated creativity scale. *The Journal of Creative Behavior*, 53(4), 593-599. https://doi.org/10.1002/jocb.222
- Tellis, G. J., Prabhu, J. C., & Chandy, R. K. (2009). Radical innovation across nations:

 The preeminence of corporate culture. *Journal of Marketing*, 73(1), 3-23.

 https://doi.org/10.1509/jmkg.73.1.003
- Thani, F. N., & Mokhtarian, F. (2012). Effective factors on psychological empowerment.

 Case study: Service organization. *International Proceedings of Economics*Development and Research, 47(2), 101-106. https://doi.org/10.7763/IPEDR
- Tierney, P., & Farmer, S. M. (2011). Creative self-efficacy development and creative performance over time. *The Journal of Applied Psychology*, *96*(2), 277-293. https://doi.org/10.1037/a0020952
- Tierney, P., Farmer, S. M., & Graen, G. B. (1999). An examination of leadership and employee creativity: The relevance of traits and relationships. *Personnel Psychology*, 52(1), 591-622. https://doi.org/10.1111/j.1744-6570.1999.tb00173.x



- Tu, M., Cheng, Z., & Liu, W. (2019). Spotlight on the effect of workplace ostracism on creativity: A social cognitive perspective. *Frontiers in Psychology*, 10, 1215. https://doi.org/10.3389/fpsyg.2019.01215
- Ugurlucan, F., Demir, O., Tas, S., Dural, O., Yasa, C., & Yalcin, O. (2020).

 Contraception counselling during gynecology visit does a questionnaire help?

 Ginekologia Polska, 91(10), 582-588. https://doi.org/10.5603/GP.a2020.0102
- Unsworth, K. L., Wall, T. D., & Carter, A. (2005). Creative requirement: A neglected construct in the study of employee creativity? *Group & Organization Management,* 30, 541-560. https://doi.org/10.1177/1059601104267607
- van Assen, M. F. (2018). Exploring the impact of higher management's leadership styles on lean management. *Total Quality Management & Business Excellence*, 29(11-12), 1312-1341. https://doi.org/10.1080/14783363.2016.1254543
- Van Dierendonck, D. (2011). Servant leadership: A review and synthesis. *Journal of Management*, 37(4), 1228-1261. https://doi.org/10.1177/0149206310380462
- van Knippenberg, D. (2018). Reconsidering affect-based trust. *The Routledge companion* to trust (1st ed., pp. 3-13). Routledge. https://doi.org/10.4324/9781315745572-2
- Van Winkle, B., Allen, S., DeVore, D., & Winston, B. (2014). The relationship between the servant leadership behaviors of immediate supervisors and followers' perceptions of being empowered in the context of small business. *Journal of Leadership Education*, 13(3), 70. https://doi.org/1012806/V13/I3/R5
- Van Vactor, J. D. (2012). Collaborative leadership model in the management of health care. *Journal of Business Research*, 65(4), 555-561. https://doi.org/10.1016/j.jbusres.2011.02.021



- Vecchio, R. P., Justin, J. E., & Pearce, C. L. (2010). Empowering leadership: An examination of mediating mechanisms within a hierarchical structure. *The Leadership Quarterly*, 21(3), 530-542. https://doi.org/10.1016/j.leaqua.2010.03.014
- Venckutė, M., Mulvik, I. B., & Lucas, B. (2020). *Creativity–a transversal skill for lifelong learning. an overview of existing concepts and practices*. Luxembourg:

 Publications Office of the European Union. https://doi.org/10.2760/493073
- Viñas-Bardolet, C., Torrent-Sellens, J., & Guillen-Royo, M. (2020). Knowledge workers and job satisfaction: Evidence from Europe. *Journal of the Knowledge Economy*, 11(1), 256-280. https://doi.org/10.1007/s13132-018-0541-1
- Wajdi, B. N. (2017). The differences between management and leadership. *Sinergi:*Jurnal Ilmiah Ilmu Manajemen, 7(1). https://doi.org/10.25139/sng.v7i1.31

 Wallas, G. (1926). *The art of thought*. Harcourt, Brace.
- Walter, S., Seibert, S., Goering, D., & O'Boyle Jr, E. (2019). A tale of two sample sources: Do results from online panel data and conventional data converge? *Journal of Business and Psychology*, 34(4), 425-452. https://doi.org/10.1007/s10869-018-9552-y
- Wang, C., Tsai, H., & Tsai, M. (2014). Linking transformational leadership and employee creativity in the hospitality industry. *Tourism Management*, 40, 79-89. https://doi.org/10.1016/j.tourman.2013.05.008
- Wang, P., Rode, J. C., Shi, K., Luo, Z., & Chen, W. (2013). A workgroup climate perspective on the relationships among transformational leadership, workgroup diversity, and employee creativity. *Group and Organizational Management*, 38(3), 334-360. https://doi.org/10.1016/j.tourman.2013.05.008



- Wessling, K. S. (2017). MTurk character misrepresentation. *Journal of Consumer Research*, 44(1), 211-230. https://doi.org/10.1093/jcr/ucx053
- West, M. A., Borrill, C. S., Dawson, J. F., Brodbeck, F., Shapiro, D. A., & Haward, B. (2003). Leadership clarity and team innovation in health care. *The Leadership Quarterly*, *14*(1), 393–410. https://doi.org/10.7771/1541-5015.1394
- Williams, J., & MacKinnon, D. P. (2008). Resampling and distribution of the product methods for testing indirect effects in complex models. *Structural Equation Modeling*, 15(1), 23-51. https://doi.org/10.1080/10705510701758166
- Williams, W. A., Brandon, R., Hayek, M., Haden, S. P., & Atinc, G. (2017). Servant leadership and followership creativity. *Leadership & Organization Development Journal*, 38(2), 178-193. https://doi.org/10.1108/LODJ-02-2015-0019
- Wong, S., & Pang, L. (2003). Motivators to creativity in the hotel industry –perspectives of managers and supervisors. *Tourism Management*, 24(5), 551-559. https://doi.org/10.1016/S0261-5177(03)00004-9
- Wood, S. (2012). Prone to progress: Using personality to identify supporters of innovative social entrepreneurship. *Journal of Public Policy & Marketing, 31*(1), 129-141. https://doi.org/10.1509/jppm.11.060
- Woodman, R. W., Sawyer, J. E., & Griffin, R. W. (1993). Toward a theory of organizational creativity. *The Academy of Management Review*, 18(2), 293-321. https://doi.org/10.2307/258761
- Xu, J. H. (2017). Leadership theory in clinical practice. *Chinese Nursing Research*, *4*(4), 155-157. https://doi.org/10.1016/j.cnre.2017.10.001



- Xue, Y., Bradley, J., & Liang, H. (2011). Team climate, empowering leadership, and knowledge sharing. *Journal of Knowledge Management*, 15(2), 299-312.
 https://doi.org/10.1108/13673271111119709
- Yang, J., & Mossholder, K. W. (2010). Examining the effects of trust in leaders: A bases-and-foci approach. *The Leadership Quarterly*, 21(1), 50-63.

 https://doi.org/10.1016/j.leaqua.2009.10.004
- Yang, J., Mossholder, K. W., & Peng, T. K. (2009). Supervisory procedural justice effects: The mediating roles of cognitive and affective trust. *The Leadership Quarterly*, 20(2), 143-154. https://doi.org/10.1016/j.leaqua.2009.01.009
- Yang, K., Tu, J., & Chen, T. (2019). Homoscedasticity: An overlooked critical assumption for linear regression. *General Psychiatry*, 32(5), e100148.
 https://doi.org/10.1136/gpsych-2019-100148
- Yoshida, D. T., Sendjaya, S., Hirst, G., & Cooper, B. (2014). Does servant leadership foster creativity and innovation? A multi-level mediation study of identification and prototypicality. *Journal of Business Research*, 67(7), 1395-1404.

 https://doi.org/10.1016/j.jbusres.2013.08.013
- Yu, D., & Liang, J. (2004). A new model for examining the leader member exchange (LMX) theory. *Human Resource Development International*, 7(2), 251-264. https://doi.org/10.1080/1367886042000243826
- Yuan, F., & Woodman, R. W. (2010). Innovative behavior in the workplace: The role of performance and image outcome expectations. *Academy of Management Journal*, 53(2), 323–342. https://doi.org/10.1002/job.2022
- Yukl, G. A. (2006). *Leadership in organizations* (6th ed.). Pearson-Prentice Hall.



- Yun, S., Cox, J., & Sims, H. P. (2006). The forgotten follower: A contingency model of leadership and follower self-leadership. *Journal of Managerial Psychology*, 21(4), 374-388. https://doi.org/10.1108/02683940610663141
- Zaleznik, A. (1977). Managers and leaders: Are they different? *Harvard Business Review*, 55(3), 67-78.
- Zhang, S., Ke, X., Frank Wang, X., & Liu, J. (2018). Empowering leadership and employee creativity: A dual-mechanism perspective. *Journal of Occupational and Organizational Psychology*, 91(4), 896-917. https://doi.org/10.1111/joop.12219
- Zhang, X., & Bartol, K. M. (2010). Linking empowering leadership and employee creativity: The influence of psychological empowerment, intrinsic motivation, and creative process engagement. *Academy of Management Journal*, *53*(1), 107-128. https://doi.org/10.5465/AMJ.2010.48037118
- Zhang, X., & Zhou, J. (2014). Empowering leadership, uncertainty avoidance, trust, and employee creativity: Interaction effects and a mediating mechanism. *Organizational Behavior and Human Decision Processes*, 124(2), 150-164.

 https://doi.org/10.1016/j.obhdp.2014.02.002
- Zhou, J., & George, J. M. (2001). When job dissatisfaction leads to creativity:

 Encouraging the expression of voice. *The Academy of Management Journal*, 44(4), 682-696. https://doi.org/10.2307/3069410
- Zhou, J., & Hoever, I. J. (2014). Research on workplace creativity: A review and redirection. *Annual Review of Organizational Psychology and Organizational Behavior*, *I*(1), 333-359. https://doi.org/10.1146/annurev-orgpsych-031413-091226



Zhu, W., Newman, A., Miao, Q., & Hooke, A. (2013). Revisiting the mediating role of trust in transformational leadership effects: Do different types of trust make a difference? *The Leadership Quarterly, 24*(1), 94-105.

https://doi.org/10.1016/j.leaqua.2012.08.004



Appendix A

EMPOWERING LEADERSHIP QUESTIONNAIRE (ELQ)



Empowering Leadership Questionnaire (ELQ; Arnold et al., 2000)

Used a Likert scale, ranging from 1 (strongly disagree) to 7 (strongly agree).

Leading by Example

- My supervisor sets high standards for performance by his/her own behavior
- My supervisor sets a good example by the way he/she behaves
- My supervisor leads by example

Participative Decision-Making

- My supervisor encourages work group members to express ideas/suggestions
- My supervisor listens to my work group's ideas and suggestions
- My supervisor uses my work group's suggestions to make decisions that affect us

Coaching

- My supervisor suggests ways to improve my work group's performance
- My supervisor teaches work group members how to solve problems on their own
- My supervisor tells my work group when we perform well

Informing

- My supervisor explains how my work group fits into the company
- My supervisor explains the purpose of the company's policies to my work group
- My supervisor explains his/her decisions and actions to my work group

Showing Concern/Interacting with the Team

- My supervisor shows concern for work group members' well-being
- My supervisor takes the time to discuss work group members' concerns patiently
- My supervisor shows concern for work group members' success



Appendix B

Affect-Based Trust Instrument (McAllister, 1995)



Affect-Based Trust Instrument (McAllister, 1995)

Used a Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree).

- Thinking of my supervisor: We have a sharing relationship. We can both freely share our ideas, feelings, and hopes.
- Thinking of my supervisor: I can talk freely to this individual about difficulties I am having at work and know that (s)he will want to listen.
- Thinking of my supervisor: We would both feel a sense of loss if one of us was transferred and we could no longer work together.
- Thinking of my supervisor: If I shared my problems with this person, I know (s)he would respond constructively and caringly.
- Thinking of my supervisor: I would have to say that we have both made considerable emotional investments in our working



Appendix C

Self-Rated Creativity Scale (SRCS; Zhou and George, 2001)



Self-Rated Creativity Scale (SRCS; Zhou and George, 2001)

Used a Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree).

- At work, I suggest new ways to achieve goals or objectives.
- At work, I come up with new and practical ideas to improve performance.
- At work, I search out new technologies, processes, techniques, and/or product ideas.
- At work, I suggest new ways to increase quality.
- At work, I am a good source of creative ideas.
- At work, I am not afraid to take risks.
- At work, I promote and champion ideas to others.
- At work, I exhibit creativity on the job when given the opportunity to.
- At work, I develop adequate plans and schedules for the implementation of new ideas.
- At work, I often have new and innovative ideas.
- At work, I come up with creative solutions to problems.
- At work, I often have a fresh approach to problems.
- At work, I suggest new ways of performing work tasks.



Appendix D

Demographical Survey Questions



Demographical Questions

How do you currently describe your gender identity?
☐ Please specify
☐ I prefer not to answer.
What is your age in years?
☐ Please specify
☐ I prefer not to answer.
Which categories describe you? Select all that apply to you:
☐ Some high school
☐ High school diploma or equivalent
☐ Vocational training/some college
☐ Undergraduate degree
☐ Master's degree
☐ Doctorate or other professional degree
☐ Prefer not to answer



Appendix E

Consent Form



Consent Form

Linking Empowering Leadership and Employee Creativity: The Mediating Role of Affective-Based Trust in Leader

Connie D. Allison

connie.allison@eastern.edu

I am a graduate student pursuing a PhD in Organizational Leadership at Eastern University.

You are invited to be in a research study of how leadership style and trust affect employee creativity. You were selected as a possible participant because in the screening survey you identified that you are over 18 year of age and currently employed a minimum of 30 hours per week within the U.S.

We ask that you read this form and ask any questions you may have before agreeing to be in the study.

Background Information:

Currently, I am working on a research study for a doctoral dissertation. The study is designed to evaluate how leadership style impacts employee creativity.



Procedures:

If you agree to be in the study, I will ask you to do the following things: Complete the following survey related to your experience with leadership at work and your personal sense of creativity, as well as correctly answer attention check questions.

The survey is expected to take less than 5 minutes. All responses will be treated in a confidential manner.

Confidentiality:

Participation in this study is voluntary and confidential. Any identifying information will be removed from the final research report and the data will only be reported in aggregate. Research records will be stored securely in a password protected folder on Dropbox with only this researcher having access to the records. These records will be retained for 3 years after completion of the study and then destroyed.

Risks and Benefits of participating in the Study:

There are no foreseeable risks involved in participating in this study other than those encountered in day-to-day life.

Your participation will benefit the scientific community by helping researchers to better understand how leadership style affects employee creativity. As a participant in this study, there may not be any significant direct benefits to you.



Compensation:

You will be compensated \$0.99 upon successful completion of the survey.

Voluntary Nature of the Study:

Participation in this study is voluntary. Your decision whether or not to participate will result in no penalty. If you decide to participate, you are free to not answer any question or withdraw at any time without penalty.

Contacts and Questions:

The researcher conducting this study is: Connie Allison. If you have questions, you are encouraged to contact Connie Allison (connie.allison@eastern.edu). The faculty advisor of this student is Dr. Franklin Oikelome (foikelom@eastern.edu).

This project has been approved by Eastern University's Institutional Review Board as indicated by the date in the lower right-hand corner of this document. Do not agree to participate in this study if the date is older than one year. If you have any concerns about the manner in which this study is conducted, you may contact the IRB at_email irb@eastern.edu.

You may print out a copy of this consent form now for your records if you choose to do so.



CONSENT STATEMENT:

By clicking the accept button, I acknowledge I have read the above information and agree to participate in this research study. I understand that if I have any questions or concerns regarding this project, I can contact the investigator at the above location or the Eastern University Institutional Review Board at IRB@eastern.edu. I consent to participate in the study.



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