2018

# Leaders' Endorsement of Idiosyncratic Workplace Fun, Organizational Playfulness Climate, And Organizational Creativity

Krasimir Karamfilov
*Walden University*

# Walden University

College of Management and Technology

This is to certify that the doctoral dissertation by

Krasimir Karamfilov

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

Review Committee
Dr. David Banner, Committee Chairperson, Management Faculty
Dr. Steven Tippins, Committee Member, Management Faculty
Dr. Jean Gordon, University Reviewer, Management Faculty

Chief Academic Officer
Eric Riedel, Ph.D.

Walden University
2018

Abstract

Leaders' Endorsement of Idiosyncratic Workplace Fun, Organizational Playfulness Climate, And Organizational Creativity

by

Krasimir Karamfilov

MFA, American Film Institute Conservatory, 2003

BA/MA, National Academy for Theater and Film Arts, Bulgaria, 1994

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Ph.D. in Management

Walden University

November 2018

Abstract

Emotionally disconnected employees, about 70% in the U.S., do not experience positive affect at work, are disengaged, and not creative. The purpose of this quantitative quasi-experimental study was to investigate the effects of leaders' endorsement of idiosyncratic workplace fun (independent variable) and organizational playfulness climate (independent variable) on organizational creativity (dependent variable). Complexity-based theoretical perspectives on organizational creativity framed this quantitative study. Data were collected via three survey instruments at two data points from 7 project teams, divided into two experimental groups, at 6 companies in northwestern United States. One group received an intervention for 1 month. Pearson's correlation analysis showed no significant relationships between leaders' endorsement of idiosyncratic workplace fun and organizational playfulness climate with organizational creativity. Repeated measures analysis of variance revealed that the 2 experimental groups did not differ significantly in terms of their creativity when team leaders endorsed idiosyncratic workplace fun and when project teams worked in an organizational playfulness climate. Bivariate regression analysis and multiple regression analysis showed that leaders' endorsement of idiosyncratic workplace fun and organizational playfulness climate did not predict organizational creativity, neither individually nor collectively. Although the study's findings cannot be used to affect social change, the examination of the relationships between leaders' endorsement of idiosyncratic workplace fun, organizational playfulness climate, and organizational creativity in the future might yield important insights about the mechanisms facilitating the emergence of organizational creativity at companies.

# Leaders' Endorsement of Idiosyncratic Workplace Fun, Organizational Playfulness Climate, And Organizational Creativity

by

Krasimir Karamfilov

MFA, American Film Institute Conservatory, 2003

BA/MA, National Academy for Theater and Film Arts, Bulgaria, 1994

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Ph.D. in Management

Walden University

November 2018

# Dedication

To my mom, Marinka Karamfilova (1950-2018).

To my daughter Zoe, the love of my life.

To my parents, Marinka and Petyu, who did not get a chance to go to college, but gave me everything, so that I can get that chance.

To all playful, creative, and funny people in the world.

# Acknowledgments

This dissertation could not have been completed without the support of a few key people. I thank my dissertation chair, Dr. David Banner, who provided me with invaluable insights and guidance during the dissertation process. I could not have had a more spirited captain in the treacherous waters of dissertation writing and research.

I thank my methodological expert, Dr. Steven Tippins, and my University Research Reviewer, Dr. Jean Gordon, for their feedback on the dissertation.

Cheers go out to my professors at Walden University, whose instruction paved the way for the successful completion of my doctoral studies.

My peers in the doctoral program provided invaluable support and encouragement during the writing of the dissertation, for which I thank them.

The doctoral journey has been extremely challenging, with many ups and downs along the way. I thank my life partner, Michelle, and my daughter, Zoe, for believing in my abilities even when I lost faith in myself.

The moral and material help I received from my parents played a crucial role in the completion of the doctoral degree. Their constant support and encouragement sustained me during the doctoral program. I thank them from the bottom of my heart.

Table of Contents

List of Tables

List of Figures

# Chapter 1: Introduction to the Study

On August 26, 2012, a group of lifeguards at the El Monte Aquatic Center in El Monte, California, posted a video of themselves dancing to "Gangnam Style," a hit song by South Korean pop star PSY, on YouTube. Ten days later, the lifeguards were fired for filming the video during their lunch breaks (NBCUniversal, 2014). After 15,654 supporters signed a petition on Change.org to rehire the lifeguards, all fired lifeguards were reinstated (Change.org, 2014).

The lifeguards in this story were fired for being creative and having fun on the job. Their actions violated a policy that stated that no employee could use the pools for private use (NBCUniversal, 2014). The work policies at the El Monte Aquatic Center reflected the perspective that work could not involve fun, play, or creativity.

Incidents like this one occur because work is considered a good thing in contemporary societies, while fun and play are considered bad (Comm, 2018). In organizational settings, having fun at work is often seen as ineffective and unproductive behavior (Plester & Hutchison, 2016). Such a view is the result of the incongruence between employees' needs and organizational needs (Argyris, 1974). Whereas most employees seek meaning and self-actualization at work (Maslow, 2000), most corporations seek profits, growth, and increased market share (Korten, 2015).

Meaning and self-actualization emerge when employees do work that develops their human potential (Robinson & Aronica, 2009). The three activities that develop human potential the most are having fun, playing, and being creative (Bateson, 2014; Henricks, 2014; Sicart, 2014). None of these three activities played a role in the history

of management over the last 100 years (Witzel, 2016). Although this omission is somewhat remedied today at companies in the technology sector (Bock, 2015), workplace fun, organizational play, and creativity are not evident at every organization. This is a problem, as humanity faces societal and environmental problems that demand creative solutions beyond our current human capabilities (West, 2018).

Despite the absence of workplace fun, organizational play, and creativity from the management cannon, several early management theorists noted their importance at work. DeMan (1929) claimed that human beings possessed a natural inclination to seek joy in work, while Follett (1924) wrote that having a creative experience through the integration of two or more interests is "seminal for our future thinking" (p. 4). To arrive at joy and creativity, however, employees must experience enjoyment, fulfillment, and job satisfaction, all states based on the satisfaction of needs (Maslow, 2000). The needs to have fun, play, and be creative are as fundamental to people as basic needs for food and shelter and emotional needs for love and affection (Bateson, 2014).

In this dissertation, I developed a quantitative study in order to investigate the effects of leaders' endorsement of idiosyncratic workplace fun (LEIWF) and organizational playfulness climate (OPC) on organizational creativity. The study findings revealed the extent to which idiosyncratic workplace fun and organizational play impacted organizational creativity and showed whether their influence was as significant as some researchers and practitioners (Sicart, 2014; Tews, Michel, Xu, & Drost, 2015) claimed it to be.

The chapter begins with a summary of the extant research related to each examined variable, followed by a description of the knowledge gap in the literature on organizational creativity that the study addressed. Next, I present the research problem and the purpose of the study. I posit three research questions and advance six hypotheses. I build the theoretical foundation of the study on the integration of the systems theory of creativity (Csikszentmihalyi, 1996), complexity-based theory of organizational creativity (Stacey, 1996), and organizational creativity theory (Woodman, Sawyer, & Griffin, 1996) within the conceptual framework of the general contingency theory of management (Luthans & Stewart, 1977). I also explain the nature of the study and state key definitions; discuss assumptions, delimitations, and limitations; and clarify the significance of the study. The chapter concludes with a brief summary of its key points.

## Background of the Study

Creativity is the current buzz word in the business world. Everything, from office designs to leadership practices and organizational narratives, is geared toward enhancing employee, team, and organizational creativity (Catmull, 2014; Sheridan, 2015). Anecdotal accounts of the effect of organizational factors on organizational creativity are continuously published in publications such as *Inc.*, *Fast Company*, and *Fortune*.

Two organizational influences that dominate the anecdotal evidence of enhanced organizational creativity are workplace fun and organizational climate. Stories about the fun employees have at companies such as Google, Nike, Facebook, and Apple, among many others, are legendary. Employees play foosball and board games, work out in the

company gym, have massages, eat as much as they want for free, and enjoy time with their children at company-funded daycare spaces (Bock, 2015; Morgan, 2014).

Despite all the anecdotal evidence, there is a dearth of empirical evidence that supports the claim that workplace fun and an organizational climate rooted in playfulness and leisure contribute to organizational creativity. The purpose of this study was to provide empirical evidence in support of or against this claim. Without empirical research on *how* and *when* workplace fun and organizational climates influence organizational creativity, their benefits and usefulness in business organizations remains a myth.

Recent research on workplace fun shows that workplace fun falls into three types: managed fun, organic fun, and task fun (Plester, Cooper-Thomas, & Winquist, 2015). The existence of a fourth type of workplace fun, idiosyncratic workplace fun, is proposed in this study. In contrast to organic fun, which Plester et al. (2015) defined as fun that occurs spontaneously at work, idiosyncratic workplace fun encompasses the fun activities that employees enjoy doing after work. These are the activities that employees already know are fun for them.

Four streams of workplace fun research dominate the scholarly literature: studies on the effect of workplace fun on employees (e.g., Becker & Tews, 2016; Chan & Mak, 2016; Plester & Hutchison, 2016), studies on the impact of workplace fun on organizational outcomes (e.g., Fluegge-Wolf, 2014; Han, Kim, & Jeong, 2016; Tews, Michel, & Allen, 2014), studies on the influence of humor on team and organizational outcomes (e.g., Lehmann-Willenbrock & Allen, 2014; Lussier, Grégoire, & Vachon,

2017; Tremblay & Gibson, 2016), and studies related to the effect of workplace fun on different generational cohorts (e.g., Lamm & Meeks, 2009; Tews, Michel, & Bartlett, 2012; Tews, Michel, & Drost, 2015).

Out of the more than 50 studies on workplace fun conducted since the turn of the 21st century, only one study (Fluegge-Wolf, 2014) showed that workplace fun influenced creative performance. The current study fills a research gap pertaining to a possible relationship between leaders' endorsement of idiosyncratic workplace fun and organizational creativity. The gap widens when the influence of organizational playfulness climate on organizational creativity is considered.

Recent research on organizational climate has been plagued by disagreements in defining the dimensions that collectively constitute the organizational climate construct (Denison, 1996). This has forced organizational researchers to resort to studying the effects of a general organizational climate on both employee outcomes (e.g., Shanker, 2014; Shih, Lie, Klein, & Jiang, 2014; Viitala, Tanskanen, & Santti, 2015) and organizational outcomes (e.g., Khan, Qureshi, Rasli, & Ahmad, 2015; Shahin, Naftchali, & Pool, 2014).

The current study is the first U.S.-based study that provides empirical evidence on the relationship between organizational playfulness climate and organizational creativity. Although the effects of creative climates and climates for innovation on organizational outcomes have been studied in the past (Ingram, 2016; Mafabi et al., 2015; Ren & Zhang, 2015), there is no scientific evidence on the impact of an organizational playfulness climate on organizational creativity. This omission might be partly due to the integrative

nature of the organizational playfulness climate construct, which encompasses dimensions of both organizational climate and organizational play.

Based on the effects of various factors on organizational creativity, six research streams can be identified in recent scholarship on organizational creativity: leadership factors (e.g., Khattak, Batool, & Haider, 2017; Wu & Cormican, 2016), team factors (e.g., Rodríguez-Sánchez, Devloo, Rico, Salanova, & Anseel, 2017; Hu, Erdogan, Jiang, Bauer, & Liu, 2018; Zhu, Gardner, & Chen, 2016), communication factors (e.g., Boies, Fiset, & Gill, 2015; Jia, Shaw, Tsui, & Park, 2014), psychological factors (e.g., Homan, Buengeler, Eckhoff, van Ginkel, & Voelpel, 2015; Kim, Choi, & Park, 2012), control factors (e.g., Chiang & Hung, 2014; Rosso, 2014), and miscellaneous factors (e.g., Guistiniano, Lombardi, & Cavaliere, 2016; Olszak, Bartus, & Lorek, 2018).

Despite its current preeminence in organizational research, organizational creativity needs further exploration, as it is a multifaceted construct that forms intricate relationships with many organizational components (Blomberg, 2014). This study was relevant and necessary because its findings filled numerous gaps in the literature on organizational creativity, workplace fun, and organizational climate. The inherent complexity of idiosyncratic workplace fun, organizational playfulness climate, and organizational creativity portended the existence of unexplored relationships that advanced organizational and management scholarship.

## Problem Statement

According to a Gallup report on the state of the American workplace between 2010 and 2012, 70% of American employees are “emotionally disconnected from their

workplaces and less likely to be productive" (Gallup Inc., 2013, p. 6). This detachment might reflect the combined dissatisfaction of employees with both the work and the work settings. Low job satisfaction and lack of positive affect at work prevent employees from flourishing at work (Lin, Yu, & Yi, 2014; Walumbwa, Muchiri, Misati, Wu, & Meiliani, 2018). Given that detached and unhappy employees are not creative employees (Patkin, 2014; Donaldson, Dollwet, & Rao, 2015), the long-term survival and success of business enterprises is threatened (Mafabi, Munene, & Ahiauzu, 2015).

The general research problem was that work needs to be reformed, so that organizations become cherished places, full of thriving employees, who do work that is fun, meaningful, and creative (Xu, Zhao, Li, & Lin, 2017). The specific research problem was that the relationship between leaders' endorsement of idiosyncratic workplace fun, organizational playfulness climate, and organizational creativity is unclear (Caniels, De Stobbeleir, & De Clippeleer, 2014) and might play a critical role in this reformation.

## Purpose of the Study

The purpose of this quantitative quasi-experimental study was to test the theory of organizational creativity that related contextual factors, such as leaders' endorsement of idiosyncratic workplace fun and organizational playfulness climate, to organizational creativity, controlling for age, race, and gender in project teams at companies in northwestern United States. The study is significant to society because it advocates for societal health through full human development, expression, and creativity in the workplace.

## Research Questions and Hypotheses

Three descriptive questions prompted this study. Based on these research questions, I advanced the following hypotheses:

Research Question 1 (RQ1): How does leaders' endorsement of idiosyncratic workplace fun relate to organizational creativity?

Null Hypothesis ($H_0$1): Leaders' endorsement of idiosyncratic workplace fun does not relate to organizational creativity.

Alternative Hypothesis ($H_a$1): Leaders' endorsement of idiosyncratic workplace fun relates positively to organizational creativity.

Research Question 2 (RQ2): How does organizational playfulness climate relate to organizational creativity?

Null Hypothesis ($H_0$2): Organizational playfulness climate does not relate to organizational creativity.

Alternative Hypothesis ($H_a$2): Organizational playfulness climate relates positively to organizational creativity.

Research Question 3 (RQ3): What is the predictive relationship between leaders' endorsement of idiosyncratic workplace fun and organizational playfulness climate and organizational creativity?

Null Hypothesis ($H_0$3): Leaders' endorsement of idiosyncratic workplace fun and organizational playfulness climate do not predict organizational creativity.

Alternative Hypothesis ($H_a$3): Leaders' endorsement of idiosyncratic workplace fun and organizational playfulness climate predict organizational creativity.

Shown in Figure 1 is the research model, based on the hypothesized relationships between the variables.

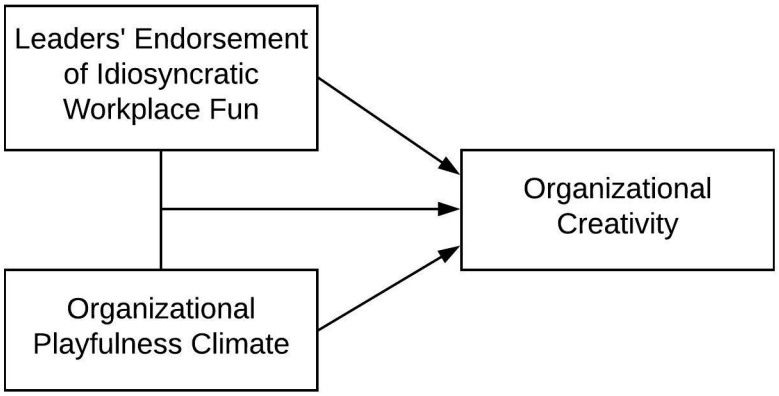


*Figure 1*. Research model

## Theoretical and Conceptual Framework

### Theoretical Foundation

Assuming that management is a scientific field, the theories pertaining to the field must be explanatory and predictive (Reynolds, 1971). Out of all major management theories developed over the last 100 years, not a single theory is a predictive management theory that could be expressed with "if-then" statements. This is partly because management is not a field of knowledge with its own theories (Stewart, 2010). The core theories currently used in management science are borrowed from the fields of psychology and sociology.

Among the theories underlying the three variables in this study, only one, leadership theory, is directly related to management and to the variable *leaders' endorsement of idiosyncratic workplace fun*. Viewed from a strictly scientific point of view, however, extant leadership theory cannot be used to explain leadership in the past

or predict leadership outcomes in the future because it is based on a series of normative statements. The theories underlying the variables *organizational playfulness climate* and *organizational creativity* belong to the fields of psychology and sociology and, as such, have more explanatory and predictive power.

Organizational creativity theory is the main theory underlying this study. There are three theoretical perspectives of this theory, each built on a different foundation: (a) complexity-based perspective of organizational creativity, (b) interactionist perspective on organizational creativity, and (c) systems perspective of creativity.

**Complexity-based perspective on organizational creativity.** This perspective on organizational creativity theory emerged in the work of Stacey (1996), who claimed that creativity on an organizational level takes place in the transitional space between organizational stability and instability. If we view a business organization as a complex adaptive system, the key causes for organizational stability are negative feedback, self-organization of employees, and the dominant organizational schemas (i.e., mental models). The sources of organizational instability are positive feedback, recessive organizational schemas and symbols, and play.

In the transitional space, the organization is in a state of paradox. Without the presence of both stability and instability, an organization cannot be creative. If an organization is too stable, the negative feedback and dominant organizational schemas act as constraints to creativity. Employees are efficient, but not effective. If positive feedback and play are not constrained, the organization spins into instability and disintegrates. The transitional space is the edge of chaos, where employees strike a

balance between efficiency and effectiveness. Five control parameters could push an organization from stability to the edge of chaos, where creativity takes place: (a) rate of information flow, (b) degree of diversity, (c) richness of connectivity, (d) level of contained anxiety, and (e) degree of power differentials.

Stacey's (1996) perspective on organizational creativity theory is relevant to this study because the two independent variables in the study are part of the recessive shadow system in business organizations. Leaders' endorsement of idiosyncratic workplace fun and an organizational playfulness climate push an organization towards instability and oppose the legitimate, stable ways of organizational behavior. According to this complexity-based perspective on organizational creativity theory, leaders' endorsement of idiosyncratic workplace fun and organizational playfulness climate will positively influence organizational creativity.

**Interactionist perspective on organizational creativity.** Woodman, Griffin, and Sawyer (1993) advanced this organizational creativity perspective, emphasizing the importance of social and contextual influences on individual, group, and organizational creativity. From this perspective, creative behavior across all organizational levels emerges from the interaction of individual and group characteristics with contextual factors both within and across levels of analysis. Specifically, organizational creativity is perceived as a function of group creativity and contextual components, such as organizational climate and culture, resource constraints, and rewards systems, among others.

At the core of this perspective is the recognition that organizational creativity is the product of complex individual, group, and organizational dynamics that take place in a complex social system. Feedback loops on individual and group levels, as well as reciprocal influences between situations and employee behavior, underscore the dynamics on each level of social organization. The interactionist perspective on organizational creativity is relevant to this study, as leaders' endorsement of idiosyncratic workplace fun is a social influence on organizational creativity on individual level, while organizational playfulness climate is a contextual influence on organizational creativity on group level. Due to the cross-level organizational dynamics present at most business organizations, it was expected that both variables would influence organizational creativity.

**Systems perspective on creativity.** Csikszentmihalyi (1996) wrote that creativity can occur only when three parts of a system—domain, field, and individual person—interrelate. Whereas the domain is the knowledge area within which creativity takes place, the field constitutes the experts in the field, who validate the novelty and usefulness of an idea, product, process, or service created by an individual or a group of individuals. If the field does not recognize a phenomenon as novel, useful, and worthy for inclusion in its respective domain, it cannot be claimed that creativity has taken place.

From this perspective, organizational creativity depends on the recognition of products, services, and processes as novel and useful by the industry peers of a company. The industry peers constitute the field that determines the organizational creativity of an enterprise. No novelty can exist without the peer-to-peer feedback within an industry.

This creative validation by a field of experts can also be applied within a company where research and development teams, for example, can validate the novelty of products both within a team (i.e., individual level) and across teams (i.e., group level).

Stacey's (1996) and Woodman et al.'s (1993) perspectives on organizational creativity pertain to the independent variables in this study and their possible effect on the dependent variable. Csikszentmihalyi's (1996) systems perspective of creativity relates solely to the dependent variable. Because this study did not involve the interrelated feedback between industry peers or teams within a company, the systems perspective of creativity did not apply to this research.

**Conceptual Framework**

The conceptual framework that underlies this study is the general contingency theory of management (GCT), advanced by Luthans and Stewart (1977). Although not a theory in the strict sense of the word (Longenecker & Pringle, 1978), GCT is termed a theory because it aims to explain how primary, secondary, and tertiary organizational variables interact and affect organizational performance. GCT is based on a contingency theory of institutional design, which postulates that organizational performance is the result of a match between an organization's external and internal contexts, or environments (Schoonhoven, 1981; Van de Ven, Ganco, & Hinings, 2013). The theory can be applied to various organizational and institutional elements, such as design, structure, strategy, management, and leadership.

Luthans and Stewart (1977) applied contingency theory to management and advanced the general contingency theory of management with the ultimate goal of

uncovering functional relationships between managerial, environmental, and performance variables. In contrast to situational leadership models, where the focus is on leader and follower behaviors (Hersey & Blanchard, 1977; Peretomode, 2012), the contingency approach to management accounts for environmental influences that interact with organizational resources and leadership factors to impact organizational performance (Luthans & Stewart, 1977).

A related model to GCT is Fiedler's (1967, 1971) contingency model of leadership effectiveness. Fiedler's model is based on the premise that leadership effectiveness, expressed as group or unit performance, is the result of a match between a leadership style and the suitability of the situation to the leader (Mitchell, Biglan, Oncken, & Fiedler, 1970). Shown in Figure 2 is the relationship between contingency theory of institutional design and its derivatives in the field of management.

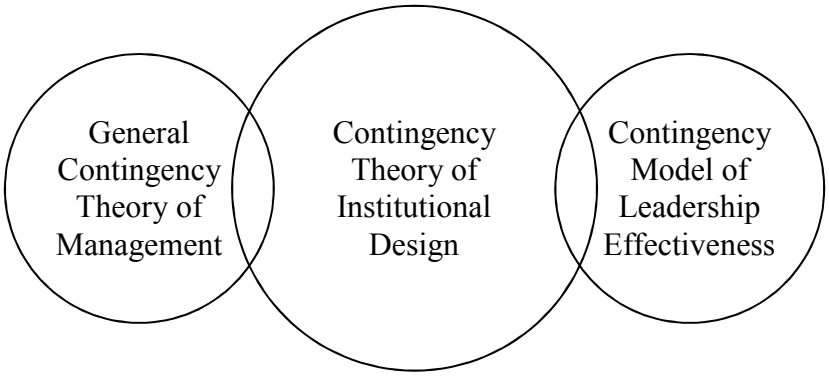


*Figure 2*. Contingency theory and its derivatives

Compared to Fiedler's contingency model of leadership effectiveness, GCT does not require matching of leadership and situational variables for achieving organizational outcomes and accounts for situational complexity (Luthans & Stewart, 1997). GCT is also grounded in systems theory, which aligns with Stacey's (1996) complexity-based

theory of organizational creativity. While Fiedler's leadership model is a maximizing model, where for every $X_1$ there is a matching $X_2$ at which $Y$ is maximized, GCT is a multiplicative framework, where both $X_1$ and $X_2$ must be present for best organizational results ($Y = X_1X_2$) (Schoonhoven, 1981).

Within the conceptual framework of the general contingency theory of management, leaders' endorsement of idiosyncratic workplace fun represented a primary leadership variable. Organizational playfulness climate represented a secondary organizational variable. Organizational creativity represented a tertiary performance variable. The current study's results revealed the degree to which organizational creativity (OC) was a function of leaders' endorsement of idiosyncratic workplace fun (LEIWF) and organizational playfulness climate (OPC), or $OC$ = f($LEIWF$ x $OPC$).

## Nature of the Study

The nature of the study was quantitative and quasi-experimental. The philosophical worldview that underlies quantitative research is post-positivism (Hoy & Adams, 2015). This worldview is based on the belief that our reality is deterministic and governed by cause and effect (Hoy & Adams, 2015). Such a worldview is reductionist in that it requires phenomena and ideas to be reduced or divided into small units suitable for examination (Wrench, Thomas-Maddox, Richmond, & McCroskey, 2015). In doing so, researchers can objectively observe and measure phenomena (Leavy, 2017). The purpose of quantitative research is to discover, test, verify, and refine theories and laws that govern reality (Hoy & Adams, 2015). This quantitative study aligned with the post-

positivist paradigm, as I measured three phenomena, examined their relationships, and tested theories related to them.

In the study, I selected a quasi-experimental design, using intact project teams at companies located in northwestern United States. The sampling frame consisted of member companies of the Seattle Metropolitan Chamber of Commerce and the Portland Business Alliance in the states of Washington and Oregon, respectively. I intended to examine the relationships between the variables longitudinally, as most studies on workplace fun and organizational creativity have been cross-sectional. In contrast to the cross-sectional approach, a longitudinal approach has more power in detecting causality between the variables (Caruana, Roman, Hernández-Sánchez, & Solli, 2015). The three study variables included leaders' endorsement of idiosyncratic workplace fun (independent variable), organizational playfulness climate (independent variable), and organizational creativity (dependent variable).

I analyzed the collected data with SPSS 21 software package. I used repeated measures analysis of variance (ANOVA) to test whether the project teams in the two quasi-experimental groups differed significantly in terms of their creative output. I calculated Pearson correlation coefficients to establish the direction and magnitude of the relationship between the examined phenomena. I used bivariate regression analysis and hierarchical multiple regression analysis to test whether leaders' endorsement of idiosyncratic workplace fun and organizational playfulness climate predicted organizational creativity, both individually and collectively.

The study was feasible, because validated quantitative instruments measured each variable independently. Due to limited company access and limited resources, the desired sample size of 66 project teams was not achieved. I conducted the study with a small sample size of randomly selected project teams.

## Definitions

This quasi-experimental quantitative study had three variables, two independent and one dependent. The two independent variables were leaders' endorsement of idiosyncratic workplace fun and organizational playfulness climate. The dependent variable was organizational creativity. Each variable is defined as follows:

*Leaders' endorsement of idiosyncratic workplace fun*: leaders' support of workplace fun chosen by employees and exercised at their discretion (Tews et al., 2015).

*Organizational playfulness climate*: employees' shared perceptions of and meaning attached to organizational interactions, activities, practices, and procedures rooted in playfulness (Yu et al., 2003).

*Organizational creativity*: the generation of novel and useful products, processes, and services in organizational settings by organizational teams (Woodman et al., 1993).

## Assumptions

Several assumptions underlay the study. The main assumption was that management is a scientific field. Although the history of management thought is over a 100 years old (Witzel, 2016), a close examination of management theory and the seminal works that built it reveal that the field of management is founded on highly questionable premises (Stewart, 2010).

A key assumption specific to this study was that all business organizations are inherently creative. It was further assumed that leaders' endorsement of idiosyncratic workplace fun and organizational playfulness climate would influence the creativity of project teams at companies over and above the influence of other factors, such as individual characteristics, contextual cues, leadership style, organizational culture, and team composition. It was also assumed that the positive influence of leaders' endorsement of idiosyncratic workplace fun and organizational playfulness climate on team creativity constituted the existence of organizational creativity.

A related assumption was that members of project teams would find idiosyncratic workplace fun and organizational playfulness climate appropriate and conducive to creativity. Different people have different creative processes, as they are motivated by different stimuli, have different educational backgrounds, adopt different perspectives in approaching creative tasks, and have different skillsets (Leski, 2016). Given that the research involved project teams, it was assumed that the effects of LEIWF and OPC would propagate across organizational levels.

It was further assumed that the measuring instruments in the study were adequate in measuring the examined phenomena. For example, the Organizational Playfulness Climate Questionnaire (OPCQ) was developed in Taiwan and written in Chinese, which raised questions about the validity and reliability of the measure's English translation. It was assumed that the English version of the OPCQ survey would be as valid and reliable as its original version.

## Scope and Delimitations

The proposed study had four delimitations: (a) research problem, (b) research site location, (c) sample population, and (d) research design. The focus of prior studies on the effects of contextual factors on organizational creativity has been on employee creativity (Joo, Yang, & McLean, 2014; Ritter & Ferguson, 2017). In contrast, I chose not to equate general employee creativity with organizational creativity, thus adopting an atypical approach to the research problem. Employees could be individually creative, but their creativity may not aggregate and lead to the production of novel and useful products or processes that reflect the accomplishment of an organizational goal. Organizational goals that build the competitive advantage of a company are made possible only by the combined talent and skills of many employees (Catmull, 2014).

The lack of adequate resources to sample project teams from across the United States necessitated the use of research sites proximal to my place of residence. The research sites were located in urban centers in the northwestern United States already known as hubs of creativity. Whereas researchers in several extant studies used university students to investigate group creativity (Carmeli, Dutton, & Hardin, 2015; Han, Han, & Brass, 2014; Homan et al., 2015), I elected to use project teams, engaged in the solving of actual workplace problems.

Although the use of project teams across industries widened the generalizability of the study's findings, the small geographic area from which the population was drawn prevented the generalizability of the study's results to project teams located in other geographical areas. The two-wave quasi-experimental design used in the study also

differed from the typical approach in testing leadership and organizational climate effects on employee and organizational creativity, as most past studies with a similar focus favored a cross-sectional design (Khattak et al., 2017; Yoon, Kim, & Song, 2016; Yoshida, Sendjaya, Hirst, & Cooper, 2014).

## Limitations

The study had a few design and methodological limitations. First, the study did not have adequate financial resources and time. This imposed the use of a quantitative methodology for the study, decreased the probability of gaining access to many companies, and necessitated a short intervention period. This limitation was addressed by applying for research grants and using credit card debt to finance the study.

Second, the chosen quasi-experimental design prevented control over intrinsic factors, such as history and testing, which lowered the internal validity of the study (Hoy & Adams, 2015). Third, the study's population included project teams only in the northwestern United States, which limited the generalizability of the findings to U.S.-based project teams. In addition, the sample was chosen from an incomplete sampling frame, comprised of member companies of the Seattle Metropolitan Chamber of Commerce and the Portland Business Alliance. These limitations could have been addressed by adding additional variables to the study, widening the population, and expanding the sampling frame. However, such changes could have been made only when ample resources were available, which was not the case in this study.

The study's internal threats to validity included both extrinsic and intrinsic factors. The main extrinsic factor was selection effects, as the project teams in the

sample were diverse and engaged in different projects. The intrinsic factors included history, maturation, and testing. These threats to internal validity were addressed by allowing a longer time period between the administration of the pretest and posttest and selecting project teams with similar number of team members (Wrench et al., 2015).

The external threats to validity pertained to the non-representativeness of the sample, due to the selection of project teams in one country and two states, and reactive arrangements in the different contexts in which the project teams operated. The reactive arrangements could not be minimized by selecting project teams in only one industry (Hoy & Adams, 2015). Choosing project teams from several industries, however, minimized the setting-treatment interaction effects. Thus, the study triangulated on occupation and settings, as the project teams included in the sample represented both different companies and different industries.

## Significance of the Study

### Significance to Theory

The study contributed to three management domains: organizational theory, organizational behavior, and human resources management. Specifically, the study contributed new knowledge to three theoretical streams: leadership, organizational climate, and organizational creativity. The study is important to scholars of workplace fun, organizational climate, and organizational creativity, as its purpose was to provide empirical evidence on the relationships between concepts from three areas of organizational life that have been rarely, if ever, examined together.

**Significance to Practice**

To the extent that the study was conducted in companies where the creative power of project teams was used, the study's findings are important to team leaders and team members at companies that depend on teams of any kind, such as project development teams, cross-functional teams, virtual teams, and research and development teams, among others. To fully understand the study's significance, a company can be imagined operating without workplace fun, playfulness, and organizational creativity. Without organizational creativity, a company cannot produce novel and useful products, processes, and services (Brandt & Eagleman, 2017). This diminishes the company's competitiveness and survivability (De Bono, 2015) and prevents employees from learning and developing their potential (Tews & Noe, 2017; Tews, Michel, & Noe, 2017).

Leaders' efforts to promote organizational creativity affirm employees' rights to learn and express themselves in new and creative ways at work. Without being joyful, playful, and celebratory at work, employees earn their pay without expressing their full humanity. As such, work becomes a means to an end. Leaders' endorsement of idiosyncratic workplace fun and play supports employees' right to rejoice and be fully human in the workplace (Cable, 2018).

**Significance to Social Change**

In today's global business environment, in which companies compete for market share and profits at the expense of humanity's well-being and the earth's health (Korten, 2015), leaders' endorsement of idiosyncratic workplace fun, playful organizational climate, and organizational creativity may seem inconsequential. Laughter, joy,

engagement, and creativity define positivity and, as such, are essential to people and the social systems they create. A society abundant of fun, play, and creativity is a healthy society (Reckwitz, 2017). The discovery of positive relationships between leaders' endorsement of idiosyncratic workplace fun, organizational playfulness climate, and organizational creativity contributes to positive social change, because it shows that both employees and organizations can thrive when workplace fun and playfulness are core elements of organizational life.

## Summary and Transition

People and organizations are creative entities. In today's technologically advanced human society, business organizations deliver the creative breakthroughs that advance human civilization. Although there is ample anecdotal evidence on the positive influence of workplace fun and playfulness at business organizations, the reality is that more than half of the employees at business organizations are emotionally disconnected from their work (Gallup Inc., 2013) and do not experience positive affect and job satisfaction (Lin et al., 2014). As a result, employees cannot flourish at work and be creative, which threatens the long-term success and survival of companies (Mafabi et al., 2015). This study filled a gap in the extant research by providing empirical evidence on the effect of contextual organizational factors on organizational creativity.

Organizational creativity theory, as explicated by Woodman et al. (1993) and Stacey (1996), provided the theoretical foundation for this study. The two independent variables, leaders' endorsement of idiosyncratic workplace fun and organizational playfulness climate, are both driving forces in the shadow system within organizations

and contextual components that influence individual, team, and organizational creativity. The study was also situated within the conceptual framework of general contingency theory of management (Luthans & Stewart, 1977).

Based on the theoretical foundation and conceptual framework, the study was conducted as a quasi-experimental quantitative study, using project teams at business organizations. Six hypotheses were tested and three research questions were answered to explain the effect of leaders' endorsement of idiosyncratic workplace fun and organizational playfulness climate on organizational creativity.

The small scale and limited generalizability of the study notwithstanding, the study is significant to theory, practice, and social change. In Chapter 2, I provide a comprehensive literature review of the research streams that underlie each variable in the study, discuss additional theories that play a role in the examined relationships, explain in detail the research gaps this study fills, and show how the study extends knowledge in the field of management.

# Chapter 2: Literature Review

Most work environments are devoid of human emotions (Gopinath, 2011). While it is easily understandable why negative emotions, such as anger and hatred, are undesired at work, it is baffling why positive emotions, such as joy and excitement, are rarely witnessed in office spaces. The lack of positive affect at work might be caused by the Puritan work ethic embedded in business organizations (Costea, Crump, & Holm, 2007; Kavanagh, 2011). At the receiving end of this work ethic are the employees, who work without fully expressing their voice or positive emotions. This has a triple negative effect on employees: they perceive their work as boring (Harju, Hakanen, & Schaufeli, 2014); they disengage from work (Anitha, 2014); and they stop being creative (Rego, Sousa, Marques, & Cuhna, 2014).

In this study, I investigated the impact of two organizational factors rooted in positive affect, leaders' endorsement of idiosyncratic workplace fun and organizational playfulness climate, on organizational creativity. This chapter begins with a review of the literature search strategy used for each variable in the study. Next, I present the theoretical foundation of the study, followed by an explanation of the nature of work, which lays the foundation for the literature review. Then I synthesize and critically examine research on workplace fun, organizational playfulness climate, and organizational creativity. The chapter concludes with a summary of the major themes in the literature and a description of the gaps in the literature that this study filled.

## Literature Search Strategy

For dependent variable organizational creativity, I conducted a search for peer-reviewed articles in Academic Search Complete, Business Source Complete, ProQuest Central, PsycARTICLES, ScienceDirect, Emerald Management, SAGE Premier, and ABI/INFORM Complete databases. The search criteria included articles with *organizational creativity*, *employee creativity*, *group creativity*, *creativity in groups*, and *team creativity* in the title for the period between 2014 and 2018. The search for seminal literature on creativity, team creativity, and organizational creativity began with an exploration of the applications of creativity in business. Using the snowball technique, I discovered seminal works on creativity pertaining to constrained creativity (e.g., Stokes, 2006), creativity in context (e.g., Amabile, 1996), creative confidence (e.g., Kelley & Kelley, 2013), creative action in organizations (e.g., Ford & Gioia, 1995), and general creativity (e.g., Csikszentmihalyi, 1996).

For independent variable leaders' endorsement of idiosyncratic workplace fun, the same databases and time period were used in finding peer-reviewed articles with *fun*, *workplace fun*, *fun at work*, *workplace humor*, and *organizational humor* in the title. Resources found through the snowball approach included three recent books on workplace fun (Cable, 2018; Comm, 2018; Johnson, 2017). The same search procedures and databases were used for finding peer-reviewed articles related to the second independent variable, organizational playfulness climate. Keywords included *organizational play*, *organizational playfulness*, *play at work*, *playfulness climate*, and

*organizational climate*. Seminal works referenced in this study include books by Huizinga (2014), Piaget (1962), and Papert and Harel (1991).

## Theoretical Foundation

Creativity is a complex phenomenon. It can emerge from one person, or from many people; it can be fostered by some environments and not by others; it can flourish with and without constraints. In spite of this complexity, creativity theory, like any other social science theory, has limits. According to Baer (2012), a key limit is that creativity is domain-specific. Transfer of creativity skills across domains is difficult. Motivation and expertise are also domain-specific. Being creative in one domain does not mean creativity across domains. Creativity training in a domain improves creativity only in that domain.

There may be, however, metatheories of creativity, such as intrinsic motivation and divergent thinking (Baer, 2012). Torrance (1965) was the first to propose divergent thinking as a key cognitive process for creativity. Amabile's (1996) componential theory of creativity included task motivation, based on intrinsic motivation, as one of the three components of creative performance (domain-relevant skills and creativity-relevant skills being the other two). Sternberg and Lubart's (1991) investment theory of creativity added four other creativity-spurring factors (i.e., intellectual skills, domain knowledge, personality, and environment) to thinking style and motivation. All these creativity theories pertain to individual creativity.

When individuals assemble in groups to be creative, individual creativity becomes only a building component to team and organizational creativity. To account for the

escalation of creativity to the group and organizational levels of analysis, Stacey (1996) examined organizational creativity through the prism of complexity theory. In the complexity-based theory of organizational creativity, companies are creative only when they occupy a space defined by both stability and instability (Stacey, 1996). An enterprise in which negative feedback and top-down organizational schemas dominate is bound to be more stable than a company in which positive feedback, play, bottom-up organizational schemas, and recessive organizational symbols are the norm.

Based on this conceptualization of organizational creativity, business organizations are most creative at the edge of chaos, where both stability and instability are present. Although paradoxical, this is the space where organizational efficiency and effectiveness are in balance. This is also a fragile space, in which the rate of information flow, degree of diversity, richness of connectivity, level of contained anxiety, and degree of power differentials can push an organization to stability or instability (Stacey, 1996).

This theoretical perspective is relevant to the current study because both leaders' endorsement of idiosyncratic workplace fun and organizational playfulness climate belong to the recessive organizational schema without which organizational creativity cannot emerge. The three research questions in the current study relate to the complexity-based theory of organizational creativity as they aim to reveal whether leaders' support of autonomous fun at work and an organizational climate rooted in playfulness influence, ether individually or jointly, organizational creativity. The questions also aim to examine empirically anecdotal claims about the existence of such relationships. Recent studies that have applied Stacey's (1996) complexity-based theory

of organizational creativity include a study on the influence of complex adaptive systems theory on firm product innovativeness (Akgun, Keskin, & Byrne, 2014), a study on the application of complexity science perspective on new business development (Tsai, 2014), and a study on strategy transformation through strategic innovation capability (Kodama & Shibata, 2013), among others.

A second theoretical perspective on organizational creativity that is relevant to this study is the interactionist theory of organizational creativity, proposed by Woodman et al. (1993). While Stacey (1996) adopted a macro-perspective in explaining organizational creativity through nonlinear systems dynamics, Woodman et al. (1993) focused solely on the micro-components, such as resource constraints and rewards systems, that feed into and amplify organizational complexity. In Woodman et al.'s conceptualization of organizational creativity, complexity is seen as the result of interactions between individual and group characteristics and contextual factors present within and across levels of analysis.

A key tenet of this theoretical perspective is that organizations are complex social systems, in which feedback between organizational levels and influences between employees and situations define the organizational dynamics. In relation to leadership, Woodman et al. (1993) contended that high-level creative results could be obtained only through democratic leadership. The word *democratic* implies leadership that encourages individual liberties and freedoms, one of which is the freedom to have volitional fun.

The interactionist perspective of organizational creativity is pertinent to the current study as it directly relates to the two independent variables. Leaders'

endorsement of idiosyncratic workplace fun is a social influence on individual level that reflects democratic leadership. Organizational playfulness climate is a contextual influence on the group level. The research questions that I posited in this study emerged from the understanding of the cross-level organizational dynamics present in most companies. This is why the expectation of both independent variables to influence organizational creativity is embedded in the questions. Prior studies rooted in Woodman et al.'s (1993) interactionist theory of organizational creativity include a study on the impact of leadership on small business innovativeness (Dunne, Aaron, McDowell, Urban, & Geho, 2016), a study on the effect of conflict on team creativity (Langfred & Moye, 2014), and a study on the influence of diversified knowledge and R&D team centrality on radical creativity (Tang & Ye, 2015), among others.

A study grounded in organizational creativity theory lies outside of the leadership and management cannon that dominated management research over the last 100 years (Witzel, 2016). This necessitates a brief examination of the nature of work, as the variables in the current study imply the existence of workplace dynamics that oppose, if not contradict, long-standing organizational norms and standards. The research gap this study fills is clearly revealed when we answer three work-related questions: (a) why do people work? (b) how do people work? and (c) how do people work best?

## Literature Review

### The Nature of Work

In 1956, during an interview for *The Paris Review* (Stein, 1956), writer William Faulkner (1897-1962) said:

> One of the saddest things is that the only thing a man can do for eight hours a day, day after day, is work. You can't eat eight hours a day nor drink for eight hours a day nor make love for eight hours—all you can do for eight hours is work. Which is the reason why man makes himself and everybody else so miserable and unhappy (p. 19).

According to Cable (2018), people work to satisfy psychological, emotional, and personal needs. The satisfaction of these needs gives meaning to people's lives, but only when the work performed is a calling, not just a means to an end. Such a conceptualization of work is rooted in hedonistic philosophy, underscored by the belief that people are governed by both pleasure and pain (Sayers, 2005).

Marx (1887) noted that the hedonistic perspective of work alienated the worker from the work and engendered feelings of discontent, dissatisfaction, unhappiness, and meaninglessness. Once alienated, the worker feels that work is forced on and external to her. It logically follows that at the other end of the alienation-closeness continuum is work that is enjoyable, engaging, creative, and fulfilling. Such work would be an end in itself, resulting in employees' human development at work and self-actualization through work (Maslow, 2000; Sayers, 2005).

The steady rise in employees' dissatisfaction at work over the last 25 years (i.e., from 34% in 1991 to 70% in 2012) suggests that (a) jobs are too small for people's capabilities, and (b) the use of the corporation as a legal entity through which people do work needs to change (Gallup, Inc., 2013; Winkler, 2018). These two issues are

connected, as changes in the way corporations operate could expand jobs to accommodate more human capabilities.

The corporation is a political, legal, and economic entity, vested with limited liability and governed by its executives and shareholders (Winkler, 2018). With employees playing a secondary, sometimes tertiary, role in the modern corporation, and with finance being the master instead of the servant (Korten, 2015), notions of job satisfaction, human development, job autonomy, and employee creativity seem outright preposterous. Instead of enjoying work, employees are driven to work. In a study of 346 managers at 311 U.S. organizations, Graves, Ruderman, Ohlott, and Weber (2012) discovered that being driven to work related negatively to self-esteem and did not relate to performance, while enjoyment at work related positively to managerial performance and career satisfaction, but related negatively to psychological strain.

The divergent aims of the corporation and its employees create friction in the employee-organization relationship (OER) that can be allayed only when the corporation stops seeking a solely transactional relationship with its employees and embraces relational strategies that give meaning to employees' work experience (Fitzsimmons & Stamper, 2014). Drawing on social exchange theory (Cropanzano & Mitchell, 2005), the OER is most optimal when it is reciprocal, with both sides having a common understanding of the relationship, and the exchanged resources are valued by each recipient (Coyle-Shapiro & Shore, 2007).

The following comprehensive review of the literature on workplace fun, organizational playfulness climate, and organizational creativity shows that, when

implemented and realized, these organizational variables turn work into an end in itself. The hypothesized relationships stem from the belief that the "employee-organization relationship should be related to pressing organizational issues, such as creativity" (Coyle-Shapiro & Shore, 2007, p. 176), and from the premise that being creative is the highest level of human development (Sayers, 2005).

**Workplace Fun**

Fun at work sounds good to some people and strange to others. It could be fun to talk to a coworker in a hallway about tennis. It could be fun to look at a body of water out an office window. It could also be fun to sing, or read phone texts from friends during a conference call. Although such activities may seem unproductive and non-essential for the operation of a company, they serve several purposes.

One purpose is employee relaxation or taking a break from the stress of work. Another purpose is meditation, or focusing of one's attention. A third purpose is playing with friends, or deepening workplace relationships through communication, interaction, and exchange of ideas. When promoted, such non-essential activities at work become organizational resources (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001; Wernerfelt, 1984).

Workplace fun is one of those seemingly non-essential employee activities turned a resource. Research conducted over the past 15 years confirms this claim. Karl, Peluchette, Hall, and Harland (2005) surveyed employees at 18 companies across sectors (i.e., five public, seven private, and six nonprofit) and found that they viewed workplace fun as important, desirable, appropriate, and leading to positive consequences. In a

related study including 572 human resource managers, Ford, Mc Laughlin, and Newstrom (2003) reported that most managers believed in promoting workplace fun, because it offered benefits to both employees and the organization. One those benefits is that workplace fun dispels boredom, which, according to Harju et al. (2014), often leads to negative health- and work-related outcomes, such as poor overall health, higher stress, high turnover intentions, and low workability, among others.

Another important benefit of workplace fun is that it alleviates the burden imposed on employees by work (Bolton & Houlihan, 2009). When employees have fun at work, they change cognitive frames and focus on non-work-related activities that lead to mental and physical relaxation. Glasser (1994) claimed that fun at work is the highest employee need. In contrast to Maslow's (2000) hierarchy of needs, in which the highest human need is self-actualization, Glasser looked at human needs in organizational settings from a control theory perspective. Given that most work aspects are controlled by management or policies instituted by management, the locus of control at work is not with the employee, but with the management. In having fun at work, employees regain control of their work experience.

In addition to employees' hierarchy of needs proposed by Glasser (1994), Baptiste's (2009) exploration of the well-being of 12 public sector managers in England showed that some employee needs must be satisfied before workplace fun can occur. For example, factors that defined well-being for those managers included work-life balance, stress management, management support, and a sense of purpose. The managers

revealed that if issues such as stress, anxiety, anger, pessimism, and unhappiness are not addressed at work, workplace fun cannot be enacted.

When workplace fun is adopted by organizations, employees go to work knowing that a portion of their workday will be enjoyable and that time will pass faster. Sucala, Stefan, Szentagotai-Tatar, and David (2010) tested this hypothesis by examining the relationship between expectancies and the perception of time progression. Study participants in the "enjoyment expectancies" group rated a task as more enjoyable and less boring than participants in the "boredom expectancies" group. Time passed more quickly for the "enjoyment expectancies" group than for the "boredom expectancies" group. Based on these findings, it follows that employees evaluate time as passing more quickly if they expect to have enjoyable tasks at work and more slowly if they expect to have boring tasks.

Although both researchers and working professionals agree on the general benefits of workplace fun, studies in which fun at work is used as a unitary construct do not reveal its complexity. In two qualitative studies at four companies (Study 1) and eight companies (Study 2), Plester et al. (2015) revealed the existence of three categories of workplace fun (i.e., managed fun, organic fun, and task fun), with each category having its own distinctive features. Managed fun was fun created by management and imposed on employees. Although appreciated by employees, managed fun had a coercive element, which created negative emotions in employees and provoked cynicism. Organic fun emerged spontaneously and was the most common type of workplace fun.

Task fun, whereby employees have fun while doing specific work tasks, was considered most important by study participants.

McDowell (2004) was the first to propose four workplace fun dimensions (i.e., socializing, celebrating, personal freedoms, and global fun) whose impact on various workplace outcomes has been investigated in several studies (Becker & Tews, 2016; Fluegge-Woolf, 2014; Tews et al., 2014; Tews et al., 2015). In a study of 195 servers at a national restaurant chain, Tews, Michel, and Stafford (2013) examined the impact of two workplace fun dimensions, fun activities and manager support of fun, on employee turnover and performance. Findings indicated that fun activities did not relate to turnover, but related positively to performance. Manager support for fun related negatively to turnover, but did not relate to performance. Further, the impact of fun activities on turnover and performance was not stronger when there were greater levels of manager support for fun. Across ages, fun activities were a stronger predictor of performance for older than younger employees, while manager support for fun was a stronger predictor of turnover among younger employees than among older employees.

Becker and Tews (2016) extended Tews et al.'s (2013) findings by investigating the impact of workplace fun on experienced fun, work engagement, constituent attachment, and turnover. Results showed that fun activities related positively to employee engagement and constituent attachment. Out of the three facets of workplace fun used in the study (i.e., fun activities, socializing with coworkers, and manager support for fun), only celebrations, a fun activity, had a negative relationship with turnover. Socializing with coworkers was not significantly related to turnover. Manager support

for fun related positively to turnover for employees over 30, but not for employees under 30.

Although some of Tews et al.'s (2013) results align with Becker and Tews's (2016) results, other findings, such as the effect of manager support of fun on turnover, contradict Becker's findings. These contradictions might be occurring because the organizational contexts in the two studies were different (i.e., hotels vs. restaurants) and the studies used different samples (i.e., hotel workers vs. restaurant servers). This highlights the importance of contextual factors in determining the outcomes of workplace fun.

In a follow-up study that tested the relationship between workplace fun and employee turnover, Tews et al. (2014) added constituent attachment as an independent variable, in addition to fun activities, coworker socialization, and manager support of fun. Using a sample of 296 servers at a casual dining restaurant chain, the researchers found that fun activities did not relate to turnover, while coworker socialization and manager support for fun related negatively to turnover. Coworker socialization had a stronger relationship with constituent attachment and turnover than did fun activities, while fun activities had a slightly stronger relationship with constituent attachment than manager support for fun. These results indicate that the relational aspects of workplace fun have the strongest influence on organizational outcomes.

An argument can be made that the results in the studies by Tews and colleagues stem from the specific organizational context in the hospitality industry, which facilitates the salient outcomes of workplace fun. Research in the healthcare industry by Karl and

colleagues (Karl & Peluchette, 2006; Karl, Harland, Peluchette, & Rodie, 2010) counters such an argument. In an experimental study on the impact of workplace fun on perceptions of service quality at a hospital, Karl et al. (2010) found that workplace fun did not significantly influence patients' responsiveness, assurance, intent to return, intent to refer, and intent to complain. Level of fun had a positive effect on intent to complain for patients waiting a short time and a negative effect on intent to complain for patients waiting a long time. In an earlier study with a sample of 142 healthcare workers, Karl and Peluchette (2006) reported that the greater the degree of experienced emotional labor, the greater the emotional exhaustion of healthcare workers. The negative impact of emotional exhaustion on job satisfaction was significantly weaker for those employees who experienced greater levels of workplace fun than it was for employees who experienced low levels of workplace fun.

Recent research on workplace fun has also revealed the influence of workplace fun on employees. Chan and Mak (2016) surveyed 240 employees at a retail firm in Hong Kong and reported that workplace fun related positively to employees' job satisfaction and trust-in-management, with the positive relationship between workplace fun and trust-in-management being stronger when employees experienced high level of fun at work. In India, Patel and Desai (2013) discovered a significant positive relationship between workplace fun and employee morale and performance, as well as a positive influence of workplace fun on employee and organizational reputation, organizational culture, employee enthusiasm, and employee productivity.

Fluegge-Woolf (2014) found similar relationships between fun at work and job performance in a study of 245 working university students. Whereas fun at work positively impacted both task and creative performance, albeit through indirect effects, it also related positively to positive affect, work engagement, and organizational citizenship behaviors. These findings indicate that workplace fun provides an array of work-related individual benefits and has cross-cultural validity as an organizational construct.

On a team level, using a sample of 271 hotel employees across the United States, Han et al. (2016) discovered that workplace fun activities facilitated both emergent states and promoted positive team processes, which enhanced team performance. Specifically, workplace fun activities related positively to experienced workplace fun and interpersonal trust. Experienced workplace fun moderated the positive relationship between workplace fun activities and interpersonal trust and related positively to group cohesion. Experienced workplace fun and interpersonal trust mediated the relationship between workplace fun activities and group cohesion. While interpersonal trust mediated the negative impact of workplace fun activities on task conflict and relationship conflict, group cohesion mediated the relationship between experienced workplace fun and interpersonal citizenship behavior. In turn, group cohesion and interpersonal citizenship behavior related positively to team performance.

The positive influence of workplace fun on employees and work teams indicates its significance as a job resource. This might be the reason why companies that promote workplace fun tend to attract more job applicants than companies that do not promote workplace fun. Tews et al. (2012) tested the effect of fun on applicant attraction and

reported that workplace fun had a positive impact on applicant attraction, as well as a stronger positive impact on applicant attraction than compensation and advancement opportunities. Fun coworker interactions had a stronger positive impact on applicant attraction than did formal fun activities across perceived fun, perceived person-organization fit, and offer acceptance intentions.

Despite its positive role in organizational life, workplace fun is not equally perceived by all employees. Lamm and Meeks (2009) investigated the effect of workplace fun on three generations—Baby Boomers (born between 1941 and 1960), Generation X (born between 1961 and 1980), and Millennials (born after 1980)—and found that generational cohorts had different attitudes toward workplace fun. Specifically, the associations between workplace fun and job satisfaction, and workplace fun and task performance, were stronger for Millennials than for Generation Xers. Although the relationship between workplace fun and organizational citizenship behavior was more positive for Generation Xers than Millennials, Baby Boomers had higher job satisfaction than Generation Xers due to workplace fun.

The importance of workplace fun for Millennials was tested in a recent study by Tews et al. (2015), who used a sample of 234 full-time working Millennials. Findings showed that 49% of the variance in job embeddedness was explained by workplace fun. Coworker socializing and fun job responsibilities were positively and significantly related to Millennials' embeddedness, while fun activities and manager support for fun were non-significant to embeddedness. The three best predictors of embeddedness were fun job responsibilities (38.5%), perceived career opportunities (16.5%), and tenure (10.2%).

In addition to the difference in perception of workplace fun across generations, individuals also have different dispositions toward workplace fun. Hart and Albarracin (2009) showed that people's level of achievement motivation impacted the goals they pursued. Over the course of four experimental studies, individuals with chronically high-achievement motivation prioritized achievement over fun, while people with low-achievement motivation prioritized fun over achievement. The two groups performed differently depending on the framing of a task and the presence of achievement primes. These findings reveal the role of employees' motivation in perceiving workplace fun. Whereas some employees may see fun at work as a distraction that negatively affects their performance, other employees may view workplace fun as a performance booster.

To further examine types of fun, individual attitudes toward fun, and their relation to personality and biological factors, McManus and Furnham (2010) conducted a mixed-method study with 1,100 participants. The types of fun that emerged included sociability, contentment, achievement, sensual, and ecstatic. Fun also meant different things to different people. To some participants fun was akin to risk-taking, while to others fun was being around fun people, or having money, or being spontaneous. In general, extraverts had more fun than introverts. The descriptors of fun with the highest percentage of agreement among the participants were happy (71.8%), laughing (62.2%), entertained (51.6%), stress-free (47.9%), excited (47.7%), energetic (47.6%), relaxed (46.6%), joyful (44.0%), joking (43.8%), playful (43.2%), and talking (40.3%).

These results show that fun is a complex concept encompassing affective and motivational dimensions. Based on their personality characteristics, individuals see fun in different ways and in different types of activities. A construct that unifies most descriptors of fun is humor.

According to Westwood and Johnson (2013), there are two approaches in addressing humor in organizations: functionalist approach (i.e., humor as a managerial tool towards a goal) and a non-functionalist approach. In the functionalist approach, humor is perceived as serving a purpose and objectives. In the non-functionalist approach, humor is perceived as resistance to and subversion of the status quo. In addition, prior research has discovered four humor types (i.e., affiliative, self-enhancing, self-defeating, aggressive) and tree humor clusters (i.e., humor endorsers, humor deniers, self-enhancers) (Evans & Steptoe-Warren, 2015). In alignment with the non-functionalist perspective, Kenny and Euchler (2012) observed the role humor played in organizational settings during a qualitative study at an advertising agency, where they found two contradictory approaches to humor: (a) humor as a tool to subvert forms of dominance and challenge the status quo, and (b) humor as a tool for both questioning and asserting control at work.

In a recent field study, Watson and Drew (2017) complemented the findings by Euchler (2012) by showing that humor could serve as a means to accomplish strategic ends that could be otherwise damaging or unacceptable to members of a group. Using a sample of six university officials and four local Scottish authorities during three official meetings on the subject of long-term professional learning of teachers, the researchers

found that different group members used humor for different purposes. In the first meeting, a local official used humor to assert her influence on the workgroup. In the second meeting, a university official used humor to assume authority by making a turn in the conversation, which established her leadership position in relation to the group chair. In the third meeting, a university official used humor to show power covertly during a tense discussion between university officials and local authorities. These observations reveal the benefits of using humor within a play frame to settle matters of leadership, decision-making, and power in nonthreatening and amusing ways.

Recent research points to important individual and group benefits of workplace humor. Mesmer-Magnus et al. (2012) conducted a meta-analysis of positive humor in the workplace and discovered that employee humor related positively to health, coping effectiveness, work performance, workgroup cohesion, but related negatively to burnout, stress, and work withdrawal. Supervisor humor related positively to workgroup cohesion, subordinate perceptions of supervisor performance, subordinate job satisfaction, subordinate work performance, and subordinate satisfaction with supervisor, and related negatively to subordinate work withdrawal. This evidence implies that workplace fun and humor should be cultivated by both leaders and employees.

Expanding the level of analysis to the team, Lehmann-Willenbrock and Allen (2014) examined the relationship between humor patterns in team interactions and team performance, using a sample of 54 German teams at two industrial organizations. Results showed that humor patterns related positively to team performance, with job security climate moderating the relationship between humor patterns and team performance, such

that the relationship was stronger when job security climate was low. Humor patterns triggered new ideas (i.e., creativity), and it was humor patterns, not humor alone, that related to team performance. These findings highlight the importance of humor in organizational contexts.

Workplace humor is especially important in the service industries. In examining the role of humor usage on creativity, trust, and performance in business-to-business relationships, Lussier et al. (2017) reported that salesperson humor did not have a direct effect on salesperson objective performance in a sample of 149 salesperson-customer dyads across four industries in Canada. Humor usage had a direct positive effect on salesperson creativity and customer trust, with salesperson creativity and customer trust mediating the relationship between salesperson humor usage and objective performance. An interesting finding in this study was that salesperson creativity served as a more proximal variable to salesperson objective performance than humor usage.

The recent empirical research on organizational humor confirms Westwood and Johnson's (2013) view that humor is pervasive in organizations and central in human interactions. Despite mounting positive evidence in support of implementing workplace fun and humor in organizational settings, a few critical questions remain unanswered: Is workplace humor and fun boundless? What are the negative effects of workplace fun? If there are negative effects of workplace fun, what are the underlying dynamics of these effects?

Plester (2013) answered these questions in an ethnographic study at a small IT firm in New Zealand. Findings from 13 interviews showed that when humor had no

boundaries, its darker side appeared. Humor distracted from business processes, led to the damage of property, and hurt people, both physically (from a practical joke) and emotionally. Humor was also used to control employees' behavior. Employees who didn't join in the festivities felt that their position in the company was threatened.

In an earlier ethnographic study at four companies, Plester (2009) discovered that organizational formality influenced workplace fun boundaries. The more formal the organization, the less fun was experienced by employees, and the more defined the boundaries of workplace fun. Boundaries were determined by both employees and external factors (i.e., industry, society), which indicated that workplace fun was a bounded social activity.

In another ethnographic study, Medeiros and Alcapadipani (2016) interviewed 13 current and past employees at fast-food and call-center companies in Brazil in order to examine whether misbehavior and humor served as forms of resistance and subversion. Thematic analysis of the interviews showed that when employees felt wronged, they engaged in overt or covert misbehaviors that served as revenge toward the wrongdoer and resulted in laughter among coworkers. Employees used humor as a revolt against feeling undervalued and to resist a sense of alienation caused by the type of work they did. In this type of misbehavior, humor resulted from dissatisfaction of personal needs. In other situations, humor expressed dissatisfaction with company policies, management, or customers. Employees felt helpless and needed to retain some control. In those cases, pranks and humorous behaviors became a form of subversion against the status quo.

These findings counter the functionalist, positive perspective of organizational humor and support the complex, non-functionalist perspective of humor as a form of resistance and subversion.

More recently, Tremblay and Gibson (2016) found that different styles of humor act as boundary conditions in the relationship between transactional leadership behaviors and perceived supervisor support within a sample of 284 employees at nine small companies in Canada. Employees perceived high contingent reward leaders as less supportive when they used constructive humor and more supportive when they used less constructive humor. Conversely, employees perceived weak contingent reward leaders as more supportive when they used constructive humor. Employees perceived high contingent reward leaders as less supportive when they used self-defeating humor and more supportive when they used less self-defeating humor. Employees perceived high contingent reward leaders as more supportive when they exhibited aggressive humor and weak contingent reward leaders as less supportive when they used aggressive humor (i.e., undermining effect). Aggressive humor exacerbated the negative effect of laissez-faire leadership behaviors on perceived supervisor support, such that employees perceived high laissez-faire leaders as least supportive when they used aggressive humor. The use of constructive humor had no effect on the relationship between laissez-faire leadership behaviors and perceived supervisor support.

While Tremblay and Gibson (2016) focused on the negative impact of leaders' humor usage, Söderlund and Oikarinen (2018) examined the effect of employee humor in the hospitality industry on customer satisfaction in two experimental studies. Employee

joke-telling in face-to-face encounters with customers reduced the customers' perceptions of the relevance of what the employee said and attenuated customer satisfaction. Perceived relevance and customer affect mediated the negative relationship between joke-telling and customer satisfaction. These findings imply that humor is not superior to non-humor across workplace situations. Who uses humor (i.e., manager vs. employee) is important in understanding the various organizational outcomes stemming from humor usage.

Based on the presented empirical evidence, a clear gap in the study of workplace fun has emerged. Despite its demonstrated benefits at work, workplace fun is not always fun for all employees and remains a management tool used to manipulate the organizational climate, stifle employees' self-expression and true identities, and keep the locus of control with management. As such, the current procedures used by managers to implement fun at work do not yield optimal organizational results. The recent research on workplace fun explains why workplace fun should be implemented in organizations, but not how.

**Idiosyncratic Workplace Fun**

A solution that might resolve the negative effects of workplace fun and enhance its positive effects is idiosyncratic workplace fun (IWF). Idiosyncratic workplace fun is volitional workplace fun that is specific to an employee. It is rooted in the notion that "it is the very person who knows best what is fun to himself/herself" (Han et al., 2016, p. 1408). As such, IWF is an intrinsically motivated type of workplace fun. Because IWF is chosen by employees and exercised at their discretion, the coercive element of

management-imposed fun is removed and the locus of control is transferred to employees. This allows employees to engage in fun activities that reflect their true identities and bring them joy, amusement, and laughter at work.

Idiosyncratic workplace fun is related to, yet distinct from, *independent play*, which is play at work that is performed individually by employees (Patelczyc, Capezio, Wang, Restubog, & Aquino, 2018). For an activity to be considered *play*, it has to meet the criteria of amusement, immersion (i.e., flow), and interactivity (Van Vleet & Feeney, 2015). Idiosyncratic workplace fun could be enjoyable and immersive, but not interactive. Engaging other employees in workplace fun initiates social dynamics and leads to *social play* (Patelczyc et al., 2018).

Recent research on autonomy in the workplace provides initial support to the possible benefits of IWF. Autonomy at work decreases employees' end-of-work fatigue (Trougakos, Hideg, Cheng, & Beal, 2014), buffers the relationship between work-life-conflict and turnover intentions, job satisfaction, and organizational commitment (Brauchli, Bauer, & Hammig, 2014), and relates positively to employees' psychological empowerment (Liu, Zhang, Wang, & Lee, 2011). Legault and Inzlicht (2013) found that autonomous motivation related positively to performance and related negatively to performance errors.

Job autonomy is also positively associated with employee creativity (Joo et al., 2014) and moderates the relationship between the quality of leader-member exchange (LMX) and creative work involvement, such that the relationship is stronger for employees with greater job autonomy (Volmer, Spurk, & Niessen, 2012). A meta-

analysis by Fischer and Boer (2011) on the effects of wealth and autonomy on the well-being of citizens in 63 countries revealed that there was no linear relationship between wealth and well-being, while individualism, rooted in autonomy, was the best predictor of well-being. This evidence confirms the primary significance of autonomy in self-regulation, highlights the importance of satisfying individuals' need for autonomy, and validates self-determination theory (SDT).

Deci and Ryan (2000) postulated that the need for autonomy, along with the needs for competence and relatedness, is an innate and universal psychological need, essential for psychological growth and well-being. Autonomy underlies all types of motivation on the motivational continuum, from amotivation to intrinsic motivation (Ryan & Deci, 2000). If autonomy is thwarted, individuals experience alienation and ill-being, and develop self-defeating behaviors that further perpetuate the dissatisfaction of the need for autonomy (Deci & Ryan, 2000, 2008). When autonomy is endorsed, individuals experience greater energy and vitality, as well as increased motivation and psychological well-being (Deci & Ryan, 2008).

Given that organizational leaders play a primary role in supporting or thwarting any type of workplace fun, their endorsement of idiosyncratic workplace fun might facilitate numerous positive organizational outcomes, including organizational creativity. According to leader-member exchange (LMX) theory, leaders can affect employees in positive ways only when the relationship between leaders and employees is of high quality (Omilion-Hodges & Baker, 2017). Recent studies have shown that the quality of the leader-member exchange associated positively with both employee creativity (Joo et

al., 2014) and teams' creative work involvement (Kahrobaei & Mortazavi, 2017). Of the seven types of leadership (i.e., transformational, transactional, ideological, servant, authentic, ethical, and spiritual) only transformational and servant leaders provide individualized consideration of their subordinates' needs (Anderson & Sun, 2017).

Leaders' endorsement of idiosyncratic workplace fun is not an isolated organizational phenomenon, as it exists alongside other organizational constructs. One of the most critical organizational constructs is organizational climate, simply defined as the sum of formal and informal ways of operating and doing business by an organization (Thumin & Thumin, 2011). In this study, I examine the impact of organizational climate rooted in playfulness, or organizational playfulness climate, on organizational creativity.

**Organizational Playfulness Climate**

Recent research on organizational playfulness climate is virtually nonexistent. Although Yu et al. (2003) developed an organizational playfulness climate questionnaire 15 years ago, no empirical studies since then have validated the instrument outside of Taiwan. This is rather strange, as companies with organizational playfulness climate, such as technology companies, advertising agencies, and toy producers, proliferate around the globe. This study was the first U.S.-based study in which organizational playfulness climate was investigated.

Organizational playfulness climate includes two components: organizational climate and organizational play. Both constructs are multidimensional and interrelated, as organizational climate subsumes organizational play. Due to the lack of studies on

organizational playfulness climate, recent research on organizational climate and organizational play has been discussed separately and then integrated into a cohesive construct for the purposes of this study.

**Organizational Climate**

Although research on organizational climate has been ongoing for over four decades, there are still gaps and inconsistencies in the literature that require investigation. A key reason for these gaps is the confusion among scholars and practitioners about the difference between organizational climate and organizational culture (Denison, 1996). Organizational climate is operationalized as employees' shared perceptions of the organizational social context, manifested in organizational behaviors, practices, policies, and procedures (Schneider, Ehrhart, & Macey, 2013). In contrast, organizational culture is defined as a set of time-tested assumptions shared by the members of a group and passed along to new group members that emerged as the group solved external problems of adaptation and internal problems of integration (Schein, 2010).

Due to the all-inclusive nature of the organizational context, researchers have not been able to agree on the structural composition of the organizational climate construct. This is reflected in two recently designed measures of organizational climate: the Survey of Organizational Characteristics (SOC) by Thumin and Thumin (2011) and the Organizational Climate Scale (OCS) by Pena-Suarez, Munoz, Campillo-Alvarez, Fonseca-Pedrero, and Garcia-Cueto (2013). Although the empirical studies on which these two instruments are based are different in terms of sample size, sample industry, and sample site, both measures encompass multiple dimensions and over 50 survey items.

Only one organizational climate dimension, rewards, is included in both the SOC and the OCS. The little overlap between macro-level organizational climate instruments have prompted researchers to focus on strategic and domain-specific climates, such as creative climate and support climate, as well as on industry-specific climates.

Based on the assumption that job satisfaction is a close proxy of the organizational climate at companies, two other recent investigations of the organizational climate construct demonstrated the complexity in measuring organizational climate at companies. Coda, da Silva, and Custodio (2015) used a sample of 518 employees at various companies in Sao Paulo, Brazil, to design and validate an Organizational Climate Measuring Tool (OCMT) that could be used in organizations across industries. After the researchers obtained 100 assertive statements from a review of the organizational climate literature, a panel of six experts grouped the statements into 15 organizational climate dimensions, which, upon validation, formed five multiple dimensions: motivation, leadership, management philosophy, nature of work, and people management. The final OCMT consisted of 15 dimensions, composed of 84 indicators (i.e., assertive statements).

Focusing specifically on the banking industry, Tortorella, Escobar, and Rodrigues (2015) developed a general satisfaction index (GSI) that improved upon prior GSIs by using matrices and vectors from linear algebra instead of the arithmetic mean of employees' satisfaction percentage rate. The resulting GSI encompassed nine dimensions and 27 questions. The dimensions included communication, company's image, training, leadership, professional growth, empowerment, motivation, recognition,

and salary. While two of these dimensions, leadership and motivation, match two of the multiple dimensions in the OCMT by Coda et al. (2015), six of the remaining seven dimensions in the GSI match six of the 15 individual dimensions in the OCMT. The match of organizational climate dimensions between these two organizational climate instruments, however, could be attributed to cultural similarities of the populations used in the construction of the instruments, as both investigations took place in Brazil.

Despite the difficulty in solidifying the organizational climate dimensions, recent studies show that researchers continue to examine the influence of a general organizational climate on organizational outcomes. In a study on the impact of organizational climate and team cohesiveness on employee commitment at public and private banks in India, Basu (2016) used a sample of 360 bankers and an organizational climate instrument with ten dimensions (i.e., appraisal and recognition, functional coordination, effective discipline and policy, participative decision making, professional growth, professional interaction, role clarity, customer orientation, supportive leadership style, security and stability). Findings showed that organizational climate and team cohesiveness did not relate significantly to employee commitment. Overall, the impact of organizational climate on employee commitment did not differ between public and private banks. The organizational climate between the private and public banks differed only in terms of participative decision making, with employees in private banks participating in decision making significantly more often than employees in public banks.

The relationship between organizational climate and job satisfaction is critical in organizational settings, as it determines how employees behave at work. In examining the effect of customer aggression and organizational climate of support on IT professionals' reaction to customer aggression and job satisfaction, Shih et al. (2014) found that organizational climate of support positively impacted job satisfaction among 118 employees at IT companies in Taiwan. A higher organizational climate of support also had a moderating effect on, or encouraged, a deep acting strategy when facing customer aggression, but did not discourage a face acting strategy when receiving customer aggression. This evidence shows the key role played by organizational climate of support in industries with high emotional labor.

The organizational context impacts an array of other employee outcomes, in addition to employees' job satisfaction. Shanker (2014) examined the effect of organizational climate on employees' intention to stay with an organization, using a cross-sectional study design and a sample of 615 participants at service organizations in western India. An interesting aspect of this study was the inclusion of subscales of three strategic organizational climates—relationship-oriented organizational climate, goal-setting and work independence organizational climate, and power-oriented organizational climate—in the survey. Results showed that both relationship-oriented organizational climate and goal-setting and work independence oriented organizational climate positively correlated to intention to stay, while power-oriented organizational climate negatively correlated with intention to stay. These findings indicate the critical role of organizational climate in predicting employee turnover.

In examining the relationship between organizational climate and turnover intentions, Hung, Lee, and Lee (2018) extended Shanker's (2014) findings. The researchers demonstrated that organizational climate related positively to organizational commitment and negatively to turnover intentions, with organizational commitment fully mediating the relationship between organizational climate and turnover intentions. Using a sample of 771employees at a large insurance company in Taiwan, Hung and colleagues found that while organizational commitment mediated the negative relationship between organizational climate and turnover intensions, salary satisfaction moderated the path from organizational commitment to turnover intentions, such that higher salary satisfaction increased organizational commitment and decreased turnover intentions even when work pressure was high.

Employee health is another individual outcome affected by organizational climate. In examining the relationship between organizational climate, employee bullying, and employee health among 400 employees at 20 universities in Pakistan, Qureshi, Rasli, and Zaman (2014) found that organizational climate related negatively to workplace bullying, while its influence on employee health was positive. Workplace bullying mediated the relationship between organizational climate and employee health, as expressed by disturbed sleep, depression, and anxiety. In South Africa, Mafini (2016) revealed that four organizational climate components (i.e., manager-employee relationships, working conditions, remuneration, and work allocation) predicted employee well-being in a sample of 164 employees at seven service companies. The four organizational climate components accounted for 44% of the variance explained in

employee well-being. These studies show the importance of a constructive and employee-centered organizational climate in mitigating social and psychosocial workplace issues.

In terms of broader organizational outcomes, Shahin, Naftchali, and Pool (2014) discovered that perceived organizational climate at medium-sized companies in Mazandaran, Iran, related positively to organizational citizenship behavior and company performance, especially in terms of the financial criteria, customers' criteria, and growth and learning criteria of performance. These results show that organizational climate significantly influences organizational outcomes on every organizational level. The richness of the organizational level outcomes affected by organizational climate is evidenced in a study by Sharma and Gupta (2012), who conducted a mixed-method study at 32 randomly selected IT companies on the impact of organizational climate and demographics on project specific risks in the Indian software industry. Results showed that the organizational climate dimensions (i.e., role clarity, high standards of work tasks, effective supervision, and intrinsic fulfilment) significantly influenced the project specific risks (i.e., SRS variability risk, team composition risk, control process risk, dependability risk) in software projects.

An interesting aspect of the organizational climate construct is that some of its dimensions directly affect organizational outcomes, while other dimensions have an indirect effect, no effect, or both direct and indirect effects. Two recent studies exemplified these situations. Fainshmidt and Frazier (2017) studied the effect of an organizational climate for trust on the dynamic capabilities and competitive advantage of

209 companies across industries in Israel and reported that climate for trust had both a positive indirect effect on competitive advantage through the dynamic capabilities of sensing, seizing, and reconfiguring, as well as a positive direct effect. In a study in Turkey with a sample of 178 employees in the food, information, and restaurant industries, Kaya and Baskaya (2016) found that the overall organizational climate and its six dimensions did not relate significantly to employee individual performance, while an ethical climate related positively to employee individual performance.

The studies by Shanker (2014) and Kaya and Baskaya (2016) highlight the importance of studying the impact of concurrent organizational climates on employee and organizational outcomes. Using a sample of 740 employees at two hospitals in Turkey, Naldoken & Tengilimoglu (2017) investigated the effects of organizational climate in terms of social interaction on knowledge management. Organizational climate, comprised of warm climate, supportive climate, and innovative climate, related positively and significantly to social interaction, comprised of trust, communication, and coordination. The three climates related positively and significantly to the collecting and sharing knowledge dimension of knowledge management, while only innovative climate related significantly to the dimension storing and using knowledge. In the presence of social interaction, the effect of organizational climate on knowledge management became negative, suggesting that social interaction did not mediate, but determined the relationship between organizational climate and knowledge management.

The integration of domain-specific climates also played a key role in a study by Törner, Pousette, Larsman, and Hemlin (2017), who used a sample of 885 employees in

137 workgroups at two construction firms and two mining companies in Sweden to test whether a second-order climate of perceived organizational support could help companies cope with paradoxical demands. Perceived organizational support (POS) climate significantly predicted team production effectiveness, team innovation, safety compliance, accident involvement, and ill-health symptoms, but did not predict sick leave. A POS climate explained the variation in the measured outcomes as well as a non-restricted second-order, general organizational climate. These findings suggest that there are overarching, second-order climates that transcend domain-specific climates and predict a wide array of organizational outcomes. This implies an overlap of organizational climate aspects within domain-specific climates.

When two or more organizational climates are present at an organization, each climate has its own unique pathways in influencing organizational outcomes. Lee and Idris (2017) demonstrated this in a study that examined the difference between psychosocial safety climate and team climate in influencing job engagement and job performance within a sample of 412 employees at 44 companies across industries in Malaysia. Findings revealed that psychosocial safety climate related positively to role clarity and performance feedback, with role clarity and performance feedback mediating the relationship between psychosocial safety climate and job engagement. Team climate did not relate to role clarity and performance feedback, yet still related positively to job engagement. Although both psychosocial safety climate and team climate related positively to job performance through job engagement, the climates differed on how they influenced those outcomes.

Collectively, these studies show not only that organizational climate is a complex, multidimensional construct, but that there is interactive complexity, created by the impact of individual organizational climate dimensions on organizational outcomes and by the interaction of multiple domain-specific climates. In recent years, two organizational outcomes, creativity and innovation, have become highly researched, due to their vital role in the success and survivability of companies. The following studies illustrate the depth and breadth of the recent research on innovative and creative climates and behaviors.

Yu, Yu, and Yu (2013) conducted a study on the effect of knowledge sharing and organizational climate on innovative behavior and found that knowledge sharing and organizational innovative climate significantly affected the innovative behavior of 403 participants at 33 financial and insurance companies in Taiwan. This finding is important, because if organizational innovative climate affects innovative behavior at financial companies, which are highly regulated, it can be assumed that this effect may be valid in less regulated organizational contexts. A few recent studies confirm this supposition.

In investigating the effect of job stressors and organizational innovation climate on employees' innovative behavior, Ren and Zhang (2015) reported that challenge stressors associated positively with idea generation, while hindrance stressors related negatively to idea generation in a sample of 282 employees in R&D teams at various organizations in China. Hindrance stressors also moderated the relationship between organizational innovation climate and innovative behavior, such that the relationship was

weaker when hindrance stressors were high. Innovative climate related more strongly to idea implementation than to idea generation. These results indicate that organizational innovative climate is a contextual variable that influences innovative behaviors along the entire innovation cycle.

The interaction between organizational climates noted earlier is also observed in the literature on innovative and creative climates and behaviors. When Kang, Matusik, Kim, and Phillips (2016) looked at the interactive effects of multiple organizational climates on employee innovative behavior in 39 entrepreneurial firms in the Unites States, they found that passion for inventing mediated the relationship between organizational innovative climate and employee innovative behavior. Proactive climate moderated the relationship between innovative climate and passion for inventing, such that the relationship was stronger when proactive climate was high rather than low. Risk-taking climate moderated the relationship between passion for inventing and innovative behavior, such that the relationship was stronger when risk-taking climate was high rather than low. The indirect relationship between organizational innovative climate and innovative behavior via passion for inventing was strongest when both proactive climate and risk-taking climate were high. A takeaway from this study is that several organizational climates can interact to influence employee innovative behavior and that the order of that interaction is of critical importance.

More recently, Hirst, van Knippenberg, Zhou, Zhu, and Tsai (2018) conducted a cross-level study on the impact of exploitation and exploration climates' influence on performance and creativity among 70 engineering teams (317 employees) across

industries in Australia, Taiwan, and China. Team exploitation climate had a linear positive relationship with performance for individuals with lower performance self-efficacy and a curvilinear relationship with performance for individuals with higher performance self-efficacy, such that the positive relationship had diminishing returns for higher levels of team exploitation climate. Team exploration climate had a linear positive relationship with creativity for individuals with lower self-efficacy and a curvilinear relationship with creativity for individuals with higher self-efficacy, such that the positive relationship had diminishing returns for higher levels of team exploration climate. These findings indicate that although supportive team climates and individual self-efficacy might encourage employees to be more creative and perform better, there is a saturation point beyond which the support and encouragement does not translate into better outcomes.

In another integrative study, Zhu et al. (2018) studied the relationships between two work team climates (i.e., collaborative climate and competitive climate), individual motivation, and creativity among 54 R&D teams (238 employees) at a large tech company in Taiwan. Intra-team competitive climate related positively to team members' extrinsic motivation, but did not relate to team members' intrinsic motivation. Intra-team collaborative climate related positively to individual intrinsic motivation and had a direct and significant effect on individual creativity, after controlling for intrinsic and extrinsic motivation. Intra-team competitive climate did not relate to individual creativity. The indirect positive relationship between collaborative climate and creativity through intrinsic motivation was stronger when extrinsic motivation was low than when it was

high. These results imply that collaboration climate facilitates enjoyment, engagement, and workplace fun, which promote creativity, while competitive climate does not lead to such team dynamics.

In terms of survivability, Mafabi et al. (2015) examined the impact of creative climate and innovation on organizational resilience in a sample of 235 managers at 51 parastatal organizations in Uganda. Findings showed that creative climate related positively to both innovation and organizational resilience, while innovation related positively to organizational resilience and partially mediated the relationship between creative climate and organizational resilience. These results suggest that variations in creative climate could cause variations in innovation, which could lead to changes in organizational resilience.

Despite the positive relationship between organizational climates and creative and innovative behaviors, the relationship is not observed in all companies across industries. In a study on the impact of abusive supervision and abusive supervisory climate on salesperson creativity and sales team effectiveness among 421 employees in 102 sales teams at a chain of pharmacies in China, Jiang and Gu (2016) found that abusive supervisory climate related negatively to both team creativity (via average salesperson creativity) and to sales team performance (via sales team creativity). Psychological safety mediated the relationship between abusive supervision and salesperson creativity. These findings suggest that the dominant organizational climate must promote physical and psychological safety for employees to be creative at work.

In some instances, however, firms have non-detrimental organizational climates, yet creative outcomes do not materialize. Bjorkdahl and Borjesson (2011) investigated the impact of organizational climate on capabilities for innovation among 462 employees at nine forest-based Nordic manufacturing firms and found that most firms scored low on the creative climate dimensions of freedom, playfulness, liveliness, and risk-taking. In terms of capabilities for innovation, half of the firms lacked systems for collecting and handling ideas, and most firms scored low on the implementation dimension. None of the firms were good at rethinking current business models. These results show that some firms have limited capabilities for innovation, and point to the fact that a creative climate is a necessary but not sufficient condition for being innovative. What is also needed, perhaps, is a little bit of playfulness.

**Organizational Play**

The second component of organizational playfulness climate is organizational play. Although the concept of *play* is well-known by every individual, research on organizational play and playfulness has been lacking the rigor, breadth, and depth evidenced in research on play in the area of child development. The paucity of organizational play research is understandable, as business management and play are two seemingly opposing constructs. Similarly to fun at work, play at work has been perceived for decades as an unnecessary distraction that has no bearing on organizational outcomes (Costea et al., 2007).

The work of Piaget (1962) and Papert and Harel (1991) established play as a foundational human behavior, without which optimal human development was

impossible. According to Piaget, children not only observe reality and build knowledge incrementally, but they form knowledge structures based on their observations and experience, most of them emerging from play. Piaget's knowledge theory is known as *constructivism*. Papert and Harel extended Piaget's theory by proposing a *constructivist* approach to learning, which involved playing with materials and tools, and gaining new knowledge through the act of making something. In this way, children build their knowledge of the world from both observation and hands-on experience, with the two processes reinforcing each other. Papert and Harel's constructivist theory aligned with the eighteenth century notion of man as *Homo faber*, or Man the Maker.

In proposing the theories of constructivism and constructionism, Piaget (1962) and Papert and Harel (1991) acknowledged the significance of play not only in human development, but also in the larger society. This argument was not new, as the importance of play in culture had been expressed in the 1940s by Huizinga (2014), who renamed the human race *Homo ludens*, or Man the Player. In his seminal text, Huizinga examined the role of play in modern civilization, as well as the linkages of play to art, philosophy, and knowing. One notable omission in Huizinga's book is the link between work and play. In the 1940s, work in organizational settings was the domain of *Homo sapiens*, or The Wise Man.

The view of work as superior to play persisted until Csikszentmihalyi and Bennett (1971) proposed an exploratory model of play, in which they looked at play from the perspective of the player. Viewing games as a key expression of play, Csikszentmihalyi

and Bennett highlighted the use of stimuli in games of all kinds (i.e., games of chance, games of strategy, and games of skill). For example, as a player's skills increase in a game of skill, new stimuli have to be introduced. The absence of new stimuli would invite boredom and collapse the state of play. In the presence of new stimuli, the player strives to master them, thus increasing skill level and prompting the introduction of new stimuli. This is how human potential is developed. In the confines of a work environment, individuals cannot develop their human potential, because, by going to work, individuals transition from a playing field with boundless stimuli to one with limited stimuli.

Csikszentmihalyi and Bennett's (1971) exploratory model of play received support from March (1979), coauthor of the management classic *Organizations* (1958) and co-creator of the term *bounded rationality* (along with Herbert Simon), who wrote that business organizations needed a balance of play and rationality, so that new organizational purposes are explored. According to March, without a theory of foolishness, which included the use of impulse, intuition, playfulness, fun, and faith, organizations relied on ideology of choice rooted in consistency and rationality, and ignored the fluidity and ambiguity of human objectives. By acknowledging the need to accept playfulness in social organizations, March revealed the need for research on organizational playfulness and fun at work.

Dandridge (1986) advanced the first conceptual framework for integrating work and play through ceremony. In this framework, ceremony encompasses organizational play, as well as other ritualized and preplanned events, such as celebrations, coffee

breaks, and ice cream socials. Ceremony creates a separate reality in organizations, where play can exist without being functional in the typical work-related sense. Although interesting, Dandridge's perspective mirrored the concept of managed fun, which recent research by Plester et al. (2015) deemed ineffective.

Four theoretical perspectives underlie current understanding of organizational play: stimulus-seeking perspective of play, flow perspective of play, cathartic nature of play, and social and cognitive perspectives of play (Petelczyc et al., 2018). The variety of theoretical approaches to organizational play has stimulated three approaches to studying play in organizations: play as an activity, play as a trait, and play as an organizational feature (Petelczyc et al., 2018). Empirical research on organizational play began in earnest in the 1990s.

The work of Tegano (1990) with 50 teachers at a childcare center showed that both playfulness and tolerance of ambiguity significantly related to employee creativity, a highly desired organizational outcome. In terms of employee performance, Webster and Martocchio (1993) found that employees who received job software training as "play" showed higher motivation to learn and performed better in a test that accessed software knowledge. In a related experimental study, Glynn (1994) reported that individuals given play task cues prior to doing a job remained means-oriented, which led to increased performance quality and performance evaluation, while individuals given work task cues remained ends-oriented, which lowered their performance quality and performance evaluation.

These early empirical studies on adult play and playfulness revealed the promise of organizational play for enhancing employee performance, learning, and creativity. Although organizational play must have happened at companies during the dot.com years in the late 1990s, no published empirical studies evidenced that trend. An advance in showing the power of organizational play occurred in the early 2000s, when Pinault (2004), with the help of his colleagues at the Imagination Lab Foundation in Switzerland, developed The Play Zone, an interactive environment using radio frequency identification tags (RFIDs) and customer relationship management (CRM), designed to deliver optimal customer experience. The Play Zone originated from LEGO® SERIOUS PLAY™, a creative process using play with LEGO bricks for modeling complex relationships between organizations and consumers.

Despite its usefulness, the LEGO® SERIOUS PLAY™ is an exclusionary process, as it is primarily used by business executives, who may or may not be playful individuals. The process does not involve all employees at an organization and represents a small part of the larger concept of organizational play. While Pinault (2004) found benefits of play from the perspective of engaging with external stimuli, he did not acknowledge the playfulness inherent in every employee and the possible organizational outcomes that could emerge from it.

Research shows that playfulness at work leads to a host of employee benefits. Yu, Wu, Chen, and Lin (2007) found that the playfulness trait and organizational playfulness climate related positively to job satisfaction, employee creativity (expressed as innovative behavior), and job productivity. Supportive leadership also related

positively to innovative behavior. By framing work as play and expressing their playfulness, employees turn workplaces into play spaces, where they can be relational, generative, safe, and highly creative (Comm, 2018).

An example of such a play space is the Danish design firm Ryland Inc., where Sorensen and Spoelstra (2012) conducted a qualitative study on the role of play at work. Data from employee interviews and company documents revealed that play takes place at work in three ways: play as a serious continuation of work, play as a critical intervention into work, and play as a usurpation of work. A critical insight from this study is that play can usurp work, while work cannot usurp play. This makes possible the emergence of organizational playfulness climate.

Given that playfulness, or a person's predisposition to make an environment or situation more entertaining and enjoyable, is consistent across gender, age, cultures, and time (Gordon, 2014), the effects of playfulness climate, as well as the significance of playfulness, can be observed across contexts. In high schools, Chang, Hsu, and Chen (2013) reported a positive relationship between playfulness climate in the class and student creativity. In relationships, data collected from 327 adults in Germany, Austria, and Switzerland showed that individuals in an intimate relationship felt more playful than single individuals, with playful individuals preferring playful partners (Proyer & Wagner, 2015). Among elderly adults (i.e., 65 years or older), the negative effects of playfulness, such as horsing around and being disruptive, disappear, and playfulness regulation across contexts becomes the norm (Yarnal & Qian, 2011).

Similarly to the playfulness dimensions of children (i.e., physically spontaneous, socially spontaneous, cognitively spontaneous, humorous, and joyful), playful adults are gregarious, uninhibited, comedic, and dynamic (Gordon, 2014). In examining 627 young adults at two Midwestern universities, Barnett (2012) found that the personality (degree of extraversion), affect (positive or negative), and motivation (intrinsic or extrinsic) of adults explained 67.64% of male total playfulness and 93.09% of female total playfulness. A salient outcome of being a playful, extroverted, and open to experience individual is creativity, as adults who think of themselves as playful also think that they are creative (Bateson & Nettle, 2014).

Whereas the expression of employees' playfulness trait is rarely encouraged in work settings, playfulness can also emerge as a state of mind provoked by contextual cues. In a quasi-experimental study at eleven companies across industries, West, Hoff, and Carlsson (2016) showed that play cues (i.e., playful props, childish sweets) influenced positively the creative climate, playfulness, and productivity of 13 work meetings in an intervention group of 123 employees. None of these effects occurred in the five meetings held by 41 employees in the control group.

Despite these empirical findings, adult boredom is more evident in organizational settings than adult playfulness (Butler, Olaison, Sliwa, Sorenson, & Spoelstra, 2011). Tokarri (2015) conducted a descriptive meta-synthesis of 12 studies on organizational play between 2002 and 2013 and reported that researchers have been investigating three research strands: play as fun, pros and cons of organizational play, and management of play. The meta-synthesis revealed that organizational play is rooted in employee

authenticity and a sense of belongingness, which are not supported at work. Study participants viewed work as "play gone wrong" (Tokarri, 2015, p. 99), a constrained and institutionalized form of play. A shortcoming of this meta-synthesis is that most of the reviewed studies related to workplace fun, not organizational play.

Based on the reviewed research on playfulness and organizational play, there seems to be a disagreement in the literature about the nature of organizational play. At one end of the spectrum is the definition of play as an autotelic activity that does not lead to the achievement of a goal (*telos*) (Csikszentmihalyi & Bennett, 1971). As such, play is intrinsically motivated and without rules (Del Mar, 2015). At the other end of the spectrum is the concept of *serious play*, defined as a deliberate, intrinsically motivated activity meant to facilitate the achievement of an extrinsically motivated organizational goal (Statler, Heracleous, & Jacobs, 2011). In this conceptualization, play is tamed for organizational purposes.

The issue with serious play is the assumption that employees can hold two cognitive frames, one for work and one for play, at the same time. Holding in mind two diametrically opposing intentions, and acting on both, cannot happen. One intention has to take over the other. Statler et al.'s (2011) main argument is that workplace play can fit into the old managerial ethos and be viewed as a paradox of intentionality. There cannot be a paradox of intentionality because, in play, individuals lack analytic or exogenous viewpoint on their behavior (i.e., self-consciousness) (Csikszentmihalyi & Bennett, 1971). If the self is forgotten in play, paradox of intentionality is impossible. The

conceptualization of serious play can be valid only if play is viewed as subordinate activity to work, which, according to Sorensen and Spoelstra (2012) can never happen.

Aware of the confusion surrounding organizational play, Spraggon and Bodolica (2013) proposed a solution by introducing the concept of social ludic activities (SLAa). In contrast to serious play, SLAs are practice-based, spontaneous, employee-initiated, and endogenously organized. While serious play is controlled, manager-driven, and artificially triggered, SLAs are defined as practices aimed at coping with organizational factors and work tasks. SLAs cannot be understood by rationality, but by the logic of practice, and may or may not result in productivity. If learning and developing expertise are the main goals of work (Örtenblad, 2018; Starbuck, 2017), organizational play must remain irrational, and the decisions that emerge from play must remain non-rational.

This autotelic view of organizational play is consonant with Stec's (2011) argument that expertise cannot be captured in rule-based expert systems, as improved performance and being creative require taking responsibility rather than taking responsibility away from employees with foolproof rules. As a rule-based domain, work does not allow the emergence of diverse aims and values, which only play can generate (Del Mar, 2015). When we play to win, or be productive, at work, we disregard the fact that play, as a concept, predates the concept of work (Del Mar, 2015). It is one of the reasons why, as Sorensen and Spoelstra (2012) demonstrated, play can take over work, but work cannot take over play.

**Defining Organizational Playfulness Climate**

The integration of the concept of organizational climate and the concept of organizational play results in the formation of a new multifaceted concept: organizational playfulness climate (OPC). Similar to any other type of organizational climate, an OPC is rooted in individual interactions that give rise to systems of shared actions and reactions that become embedded in the organization (Schneider et al., 2013). The key difference between OPC and other organizational climates is that the individual interactions are founded on the notion of playfulness. The playfulness can be a trait that employees express at work, or emerge as a state of mind prompted by organizational context.

In designing the Organizational Playfulness Climate Questionnaire, Yu et al. (2003) discovered eight factors that contributed to the emergence of an OPC: (1) close cooperation and collaboration, (2) supportive managers and relaxed interactions, (3) shared leisure time, (4) informality and humor, (5) inflexibility, criticism, and competitiveness, (6) individual leisure and free time, (7) relaxation-conducive work environment, and (8) independent work and casual dress code. It is noteworthy that the OPC factors include autonomous behaviors, playfulness behaviors, and organizational structures that are considered antecedents of individual and organizational creativity (Bateson, 2014; Caniels et al., 2014) and workplace fun (Plester et al., 2015). In the following section, I examine the organizational creativity construct and its hypothesized relationship to idiosyncratic workplace fun and organizational playfulness climate.

**Organizational Creativity**

Creativity is popular. A search in the book department of Amazon.com turned up 13,207 books directly related to creativity. Individuals and companies alike want to be creative. This is ironic because individuals are wired to create (Kaufman & Gregoire, 2016). The Bible begins with the words, "In the beginning God created the heavens and the earth." The writers of the Bible did not use the verb *made*, or the phrase *put together*, but the word *create*. Throughout time, people have created magnificent works of art, buildings, tools, machines, services, and processes (Csikszentmihalyi, 1996). The creative legacy people leave when they die is the proof that a human civilization existed on earth.

Individuals were the dominant creators in society up until the beginning of the Industrial Revolution. Today, the dominant creators are business organizations (Kelley & Kelley, 2013). Although companies are social systems populated by individuals, the inherent creativity of people does not translate into organizational creativity. The structural complexity of organizations prohibits a creative employee from influencing organizational creativity, unless the employee is a company leader known as a lone genius (Coget, Shani, & Solari, 2014).

If creativity is defined as the creation of novel and useful products, services, and processes within a social system (Runco & Jaeger, 2012; Woodman et al., 1993), then employee creativity is necessary, but not sufficient to produce organizational creativity. When employees form teams, the individual creativity of many employees is integrated and organizational creativity emerges. Organizational creativity is a function of team

creativity and contextual influences, with team creativity being the dominant dimension (Woodman et al., 1993). Depicted in Figure 3 are the main components of the organizational creativity construct, along with the two contextual factors examined in this study.

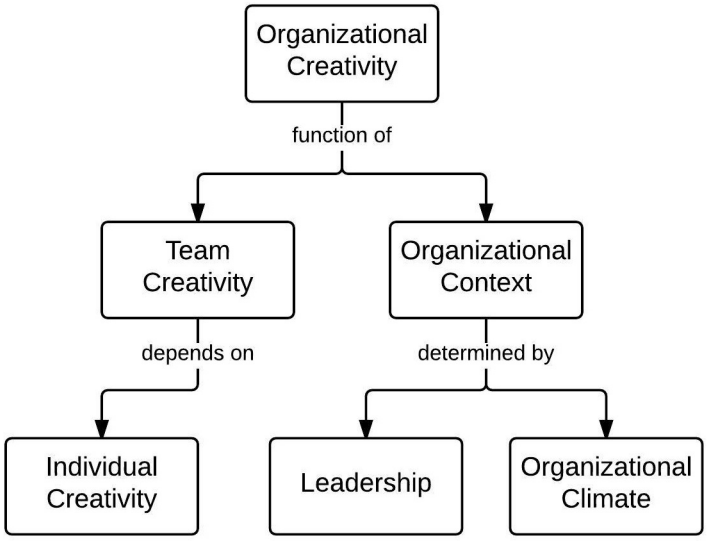


*Figure 3*. Organizational creativity components

Over the last sixty years, the main focus of creativity research has been on individual creativity. Team creativity research began in earnest at the turn of the 20th century (Pirola-Merlo & Mann, 2004). A key confusion that has persisted in the literature on organizational creativity is that team creativity, or sometimes perceived as aggregated individual creativity, is the same as organizational creativity. This misconception has diluted research on organizational creativity and lowered the validity of studies on organizational creativity (Blomberg, 2014). Recent research on both team creativity and organizational creativity is included in this review. The extant studies can be divided into six broad categories, based on the examined influence on

organizational/team creativity: leadership influences, team dynamics, communication-related factors, internal psychological characteristics, controls and constraints, and summative studies.

**Leadership influences**. In a study at 47 companies across industries in South Korea (about 1500 employees), Yoon, Kim, and Song (2016) examined the influence of top management team (TMT) characteristics on organizational creativity. The size of the TMT and the average age of the TMT related negatively to organizational creativity, while functional diversity in the TMT related positively to organizational creativity. The findings suggest that smaller, younger, and functionally diverse TMT teams should be employed at companies that rely on organizational creativity.

In an investigation with a different leadership focus, Wu and Cormican (2016) studied the effect of shared leadership on team creativity in 22 chemical and mechanical engineering design teams (158 employees) in Ireland. Density in a shared leadership network related positively to team creativity, while centralization in a shared leadership network related negatively to team creativity. Efficiency in a shared leadership network was not related to team creativity, while there was an inverted U-shaped relationship between strength and team creativity in shared leadership networks (i.e., as strength increases, team creativity increases up to a peak, then decreases).

Although transactional leadership is rarely recommended as an antecedent of organizational creativity, Hussain, Abbas, Lei, Haider, and Akram (2017) conducted a study with 300 employees at a telecom company in Pakistan and found that both transactional leadership and knowledge sharing behavior related positively to

organizational creativity, with knowledge sharing mediating the relationship between transactional leadership and organizational creativity. In contrast, Khattak et al. (2017) also conducted a study in Pakistan, this time with 350 employees in the banking sector, and reported that both transformational leadership and transactional leadership significantly related to employees' creativity, with transactional leadership having a negative effect on employees' creativity.

While empirical studies have shown that transformational leadership relates positively to employees' creativity, the pathways of the influence across organizational levels are not clearly understood. Dong, Bartol, Zhang, and Li (2017) set out to discover how dual-focused transformational leadership impacted individual and team creativity within a sample of 171 employees in 43 R&D teams at eight companies in China. Results showed that individual skill development mediated the relationship between individual-focused transformational leadership and individual creativity. Team knowledge sharing mediated the relationship between team-focused transformational leadership and team creativity. Team knowledge sharing also moderated the mediated relationship between individual-focused transformational leadership and individual creativity via skill development, such that the relationship was stronger when there were lower rather than higher levels of knowledge sharing. These findings suggest that fostering individual and team creativity requires different and varied behaviors from transformational leaders.

In addition to transformational, transactional, and shared leadership, Xu et al. (2017) found that authentic leadership related positively to employee creativity in a

sample of 428 employees in 63 teams across industries in Taiwan. Leader-member exchange (LMX) and employee thriving at work sequentially mediated the positive relationship between authentic leadership and individual creativity. Psychological safety climate and employee thriving at work sequentially mediated the relationship between authentic leadership and employee creativity. Authentic leadership also moderated the indirect relationship between LMX and individual creativity, such that the relationship was stronger when authentic leadership was high rather than low. These findings demonstrate that authentic leadership uses different cross-level pathways to affect employee creativity.

Although these studies reveal the strong influence of leadership styles and components on team and organizational creativity, recent research shows a complex web of concepts that interact with the leadership factors and contribute to the emergence of organizational creativity. The influence of leaders on organizational outcomes is not an isolated phenomenon, but a complex, interactive process.

The findings in a study by Park, Shin, Lee, and No (2015) support this argument. The researchers examined the interactive effects of human resource management (HRM) practices and CEO's learning orientation on organizational creativity and found that the employee evaluation system and the CEO's learning goal orientation had a positive interaction effect on organizational creativity. In contrast, a monetary reward system and the CEO's learning goal orientation did not have a significant interaction effect on organizational creativity. These results suggest that the alignment of HRM formal practices with informal CEO practices, such as learning orientation, positively influences

organizational creativity, while distributing monetary rewards for performance when emphasizing risk-taking and long-term perspective sends contradictory signals to employees.

Another key factor that influences team creativity is leader-member exchange (LMX) differentiation, or the degree to which the relationship quality between leaders and members varies across dyads. Using a time-lagged research design with 358 employees from 98 teams at a Chinese conglomerate, Zhao (2015) reported that relationship conflict mediated the relationship between LMX differentiation and team creativity (after controlling for the mean LMX within the team). High team member exchange alleviated the damages done by LMX differentiation on team processes and outcomes (e.g., team creativity). These findings show the importance of positive team dynamics in countering the ill effects of negative leadership factors on team creativity. It is important to note here that recent research on organizational creativity is conducted predominantly in countries in Asia, such as China, South Korea, and Taiwan, and findings often vary from country to country.

In contrast to the positive results relating transformational leadership to team creativity in a study conducted by Khattak et al. (2017) in Pakistan, Shin and Eom (2014) discovered that team leaders' transformational leadership at 11 South Korean companies did not relate to team creative performance. Team creative efficacy and risk-taking norms related positively to team creative performance, with team proactivity mediating the relationship between team creative efficacy and team creative performance and the relationship between risk-taking norms and creative team performance. These results

indicate that team characteristics and dynamics could be equally, if not more, significant to team creativity than leadership influences. A few recent studies confirm this line of reasoning.

**Team dynamics**. In a study with a time-lagged design (3 data points), using a sample of 354 employees from 72 teams at 11 information and technology companies in China, Hu et al. (2018) found that team information sharing and team psychological safety related positively to team creativity. Team power distance value moderated the indirect relationship between leader humility and team creativity, such that the positive indirect relationship became stronger when team power distance value was low than when team power distance value was high. These results show that team variables often act as mediators and moderators of the relationship between leadership and team creative outcomes.

In another time-lagged study (4 data points) at a U.S. university, Langfred and Moye (2014) used a sample of 31 four-person teams of MBA students to test the effect of two types of team conflict on two team creative processes and a team creative outcome. Relationship conflict related negatively and significantly to information exchange and team creative problem solving, but not to the team creative outcome. Information exchange and team creative problem solving did not mediate the negative and significant relationship between task conflict and team creative outcome. This implies that the different types of intra-team conflict use different pathways to affect team creative processes and team creative outcomes.

A recent study by Rodriguez-Sanchez, Devloo, Rico, Salanova, and Anseel (2017) provided empirical evidence of the relationships between team cohesion, team task engagement, and team creative performance across creativity tasks. Using a three-lagged design over three weeks with a sample of 605 participants (i.e., students, full-time employees, unemployed workers) in 118 teams, the researchers reported that team cohesion related positively to both perceived team performance and output creativity, with team task engagement mediating the relationship between team cohesion and team creative performance. In the cyclical relationship team cohesion-team creative performance-team cohesion, only perceived task performance related significantly to subsequent team cohesion, while output creativity did not facilitate the emergence of team cohesion. These findings show that both team cohesion and team task engagement play a vital role in helping teams become continuously creative.

Not all team dynamics, however, promote team and organizational creativity. Tang and Ye (2015) conducted a study on the influence of diversified knowledge and R&D team centrality on radical creativity among 207 employees in 32 R&D teams at seven research institutes in China and found that R&D teams' betweenness centrality of knowledge networks moderated the relationship between diversified knowledge from insiders and outsiders of the team and radical creativity, such that high betweenness centrality decreased the positive impact of diversified knowledge on team radical creativity. That is, diversified knowledge was better exchanged within a team when its betweenness centrality was low. This helped teams to absorb knowledge better, which led to increased team radical creativity. Collectively, the results from the studies

involving team dynamics show that team and organizational creativity are multilevel phenomena that include bottom-up interactions across organizational levels.

**Communication factors**. In addition to leadership influences and team characteristics and dynamics, the studies by Dong et al. (2017) and Hu et al. (2018) point to a third key factor that affects team and organizational creativity: communication, expressed as information exchange, knowledge sharing, or knowledge management. In studying the effects of knowledge management and self-organization on organizational creativity, Uslu and Cubuk (2015) reported that corporate innovativeness and organizational communication mediated the relationship of knowledge management and self-organization with organizational creativity in a sample of 227 employees across industries in Turkey. In that context, organizational communication and corporate innovativeness determined organizational creativity the most.

In a related study, Jia et al. (2014) surveyed 229 work teams at 55 high-tech companies in China and found that team members' work-related communication density related positively to team creativity. Task complexity moderated the relationship between communication density and team creativity such that the relationship was stronger when task complexity was high. The strength of the relationship between employee-organization relationships and team creativity depended on task complexity such that the relationship was stronger when task complexity was high.

The power of within-team communication to facilitate team creativity emerged in an experimental study by Boies, Fiset, and Gill (2015), who assigned 137 students in 44 two-to-four person teams to three leadership conditions (inspirational motivation,

intellectual stimulation, and control) and investigated the impact of leadership dimensions on task performance and creativity. Teams assigned to the inspirational motivation (IM) condition committed less task performance errors than teams assigned to the intellectual stimulation condition (IS), which had less task performance errors than teams assigned to the control condition. Teams assigned to the IS condition had a greater creative performance than teams assigned to the IM condition, which had greater creative performance than teams assigned to the control condition. Communication and trust sequentially mediated the relationship between leadership and task performance and between inspirational motivation and the novelty component of creativity. IS and IM directly impacted the novelty component of creativity. Communication also mediated the relationship between IS and the usefulness component of creativity, but not between IM and usefulness. These findings suggest that within-team communication is crucial in facilitating team trust and in translating the influence of leaders into better task and creative performance.

While team communication can be an antecedent to team creativity, Carmeli, Dutton, and Hardin (2015) found that respectful engagement (RE) acted as an antecedent to relational information processing (RIP), which, in turn, affected creativity among employees and teams. Carmeli and colleagues conducted four quantitative studies with diverse samples and designs (604 participants in total) and discovered that respectful engagement related positively to relational information processing, with RIP being positively associated with employees' creative behavior and team creativity. Relational information processing mediated the relationships between respectful engagement and

employees' creative behaviors, as well as the relationship between respectful engagement and team creativity. In addition to perceiving creativity as the result of resources exchange, the findings in this study suggest that individual and team creativity are also cultivated by the quality of employees' interactions and the way they process information at work together, in a conversation.

Leadership factors, team dynamics, and team communication are critical in promoting team and organizational creativity. These influences, however, emerge from psychological processes within the team that lay the foundation for the creative process. These psychological factors operate on both individual and team levels.

**Psychological factors**. In examining intuitiveness and creativity in groups, Kim et al. (2012) used a sample of 306 employees from 50 teams at two South Korean manufacturing companies and showed that intuitive cognitive style related positively to individual creativity, while systematic cognitive style did not relate to individual creativity. Intuitive cognitive style related positively to creativity when group task conflict was high, but not when it was low, while systematic cognitive style related positively to creativity when group relationship conflict was high, but not when it was low. The findings by Kim et al. relate to the concept of *serious play* discussed in the section on organizational playfulness climate.

These results suggest that intuitive thinkers need heterogeneous information and exhibit a promotion focus, while systematic thinkers need strict rules and exhibit prevention focus. This is another reason why teams that intend to use serious play as a tactic for promoting creativity would most likely fail. Evaluating and adjusting the

cognitive style composition of a team is a complex, time-consuming process that runs counter to the open-ended goal of generating creative outcomes.

An internal team element that also plays an increasingly important role in organizations is the diversity beliefs of teams. Using 48 teams within an experimental study design with a dual contingency model, Homan et al. (2015) discovered that for teams with less positive diversity beliefs, there was a positive relationship between attending diversity training and team creativity, but only to the extent that the teams were high on nationality diversity. Providing diversity training to teams that had low nationality diversity and low positive diversity beliefs resulted in reduced creativity. These results suggest that nationality diversity in organizations is a necessary, but not sufficient, condition for engendering team creativity.

Psychological factors facilitate team creativity on both individual and team levels. Gonçalves and Brandao (2017) investigated the influence of team leaders' humility on team creativity with a sample of 73 teams (341 employees) at 40 companies across industries in Portugal. On team level, psychological safety predicted team creativity. On individual level, leaders' humility predicted team creativity, with psychological safety and psychological capital mediating their relationship. Taken collectively, these findings indicate that psychological factors could both promote and constrain team and organizational creativity. As the fifth research stream in the literature on organizational creativity shows, organizational controls and constraints significantly impact creativity.

**Team controls and constraints**. In an exemplary longitudinal study involving 279 participants in 84 product development teams at electronics manufacturing firms in

Taiwan, Chiang and Hung (2014) showed that new product development team members' aggregate creativity related positively to new product innovativeness. Restrictive control worked in conjunction with team members' aggregate creativity to influence the innovativeness of team outcomes in teams composed of highly creative members rather than in teams with less creative members. Promotive control worked in conjunction with team members' aggregate creativity to influence the innovativeness of team outcomes in teams with lower levels of team aggregate creativity rather than in teams with higher aggregate creativity.

In terms of constraints to team creativity, Rosso (2014) conducted a qualitative study, using a purposive sample of four R&D teams at a Fortune 500 company, and discovered that teams routinely encountered two main types of constraints: process constraints (i.e., time, equipment, human resources, and money) and product constraints (i.e., product requirements, customer and market needs, business needs, and intellectual property). Process constraints limited approaches to the work, while product constraints limited the possible outcomes. On a deeper level, Rosso found that the constraints impacted team creativity in a positive or negative way depending on two types of team dynamics: enabling dynamics and disabling dynamics. When teams had enabling dynamics, they collaborated, communicated, were flexible and empowered, and exhibited playfulness and humor. In the presence of enabling dynamics, process and product constraints were perceived as opportunities. Playfulness was a big component of teams with enabling dynamics. Teams with disabling dynamics struggled with collaboration, communication, and all other organizational climate factors.

The results of these studies indicate that team controls and constraints can either enable or disable team and organizational creativity. This perspective aligns with recent research by Saetre and Brun (2012), who found that the management of innovation rested on the balance of creativity and constraint. Stokes (2006) offered a similar perspective, theorizing that creative breakthroughs often happen when constraints are in place. These results also suggest that leaders must be cognizant of the creative abilities of each employee in order to optimize the creative capabilities of project development teams.

**Multiple factors**. The last research stream in the literature on organizational creativity includes summative studies, in which a large number of variables are examined. Guistiniano et al. (2016) used a sample of 362 employees at five subsidiaries of manufacturing multi-national corporations in Italy to investigate how knowledge collecting fostered organizational creativity. Results showed that knowledge collecting, top management support, and information and communication technology (ICT) had a positive effect on organizational creativity. ICT moderated the relationship between knowledge collecting and organizational creativity, such that when knowledge collecting was low, high use of ICT was beneficial for organizational creativity. When knowledge collecting was high, the high use of ICT was detrimental to organizational creativity. Organizational creativity was highest when both top management support and knowledge collecting were also high.

In an earlier study, Chamakiotis, Dekoninck, and Panteli (2013) conducted an exploratory case study with six virtual teams (49 participants in total) at the European

Global Project Realization (EGPR) to investigate factors that influenced creativity in virtual design teams. The analysis of interview data revealed that communication skills, relevant knowledge, task engagement, centered and shared leadership, and asynchronous computer-mediated communication influenced team creativity. Team heterogeneity and high synchronicity both promoted and inhibited team creativity, while geographical dispersion only inhibited team creativity.

The summative studies on team and organizational creativity show the complexity of the creative process. Factors on every level of the organizational environment influence team and organizational creativity. Due to the high level of interaction between the factors and each employee's perception of these factors, their impact can never be completely predictable (Runco & Jaeger, 2012).

## Summary and Conclusions

The extant literature on leadership, workplace fun, organizational climate, organizational play, and organizational creativity reveals the multifaceted nature of the examined variables. In addition to managed fun, organic fun, and task fun (Plester et al., 2015), the existence of a fourth type of workplace fun, idiosyncratic workplace fun, is proposed in this study. This new aspect of workplace fun is consistent with Becker and Tews's (2016) view that "fun activities likely need to be voluntary versus mandatory, intrinsically enjoyable" (p. 293) and self-determination theory (Deci & Ryan, 2008). Although similar to the concept of *manager support for fun* (Tews et al., 2017), *leaders' endorsement of idiosyncratic workplace fun* is a more specific concept, aligned with employees' preferences for fun. The hypothesized effect of leaders' endorsement of

idiosyncratic workplace fun on organizational creativity fills a gap in the literature related to the unknown relationship between these two variables.

A second gap the current study filled pertains to the hypothesized relationship between organizational playfulness climate and organizational creativity. Research on organizational climate has not been conclusive about the dimensions that constitute the organizational climate construct (Schneider et al., 2013), which has forced researchers to examine the impact strategic and domain-specific organizational climates have on organizational outcomes (Lee & Idris, 2017; Shih et al., 2014). Studies that have tested the influence of a generic organizational climate on organizational and employee outcomes have low validity, due to the inconsistent way of measuring organizational climate (Sharma & Gupta, 2012). A strategic and integrative climate whose influence on organizational creativity has not been investigated in the literature is organizational playfulness climate. This study was the first research study to test that relationship.

Prior research on organizational creativity confirms Baer's (2012) argument that there is no unified theory of creativity. The six research streams in the literature on organizational creativity presented herein confirm Woodman et al.'s (1993) interactionist theory of organizational creativity, and show that both leadership and group influences, combined with contextual influences, play a key role in facilitating organizational creativity. In consideration of the complexity of the examined variables, qualitative approaches to studying the effects of organizational factors on organizational creativity might be more appropriate than quantitative approaches. In attempt to increase the validity of studies on workplace fun, organizational climate, and organizational

creativity, a quasi-experimental quantitative design was chosen to test the relationships between the variables. A detailed justification of the selected research methodology is presented in Chapter 3.

# Chapter 3: Research Method

The purpose of this quantitative quasi-experimental study was to test the theory of organizational creativity that relates contextual factors, such as leaders' endorsement of idiosyncratic workplace fun and organizational playfulness climate, to organizational creativity, controlling for age, race, and gender in project teams at companies in northwestern United States. The study is significant to society because it promotes societal health through full human development, expression, and creativity in the workplace. This chapter begins with an explanation of the research design used in the study and the rationale for selecting that design. I then present the study's methodology, including sampling strategy, sampling size, and sampling procedures. Next, I discuss and justify the utility of the survey instruments used in the study. I also describe the data analysis plan, the threats to the study's validity, and the ethical concerns and procedures related to various aspects of the study. The chapter concludes with a summary of the study's design and methodology.

## Research Design and Rationale

The relationships between three variables were examined in this study. The two independent variables were leaders' endorsement of idiosyncratic workplace fun and organizational playfulness climate. The dependent variable was organizational creativity. I selected a quasi-experimental quantitative research design to test the relationships between the variables.

The population for the study included intact project teams at business organizations. The aggregation of cases into project teams prevented random assignment

of individual cases to teams. Therefore, a truly experimental design was not appropriate for the study. A quasi-experimental design served the purpose of the study well. Among the known quasi-experimental designs, the nonequivalent control group design fit the study best.

According to Campbell and Stanley (1963), the nonequivalent control group design is a widely used experimental design in the social sciences, especially in situations where intact groups, such as groups of students and project teams, are used. Similar to the classic experimental design, an experimental and a control group are given a pretest and a posttest, with an intervention administered only to the experimental group between the tests (Campbell & Stanley, 1963). Shown in Figure 4 is a diagram of this design, where O represents a pretest and a posttest, while X represents an intervention.

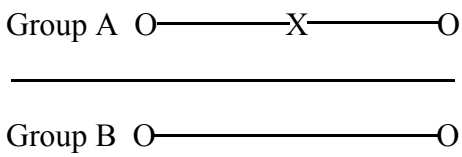


*Figure 4*. Nonequivalent control-group design

This design allowed the measurement of leaders' endorsement of idiosyncratic workplace fun and organizational playfulness climate before and after an intervention and the detection of the effects of these two independent variables on the dependent variable. The design was appropriate for the study because the sample of project teams was not matched, which, as argued by Campbell and Stanley (1963), decreased regression effects in this design. As a field experiment, the design is high on precision of measurement and realism of context, but low on generalizability. The design is also appropriate for testing the advanced inferential hypotheses, because the true effect of an intervention on a

dependent variable can be determined only when a control group is compared to an experimental group (Hoy & Adams, 2015). Additionally, the nonequivalent control group design has strong internal validity, controlling for the effects of history, maturation, testing, instrumentation, selection, and mortality (Campbell & Stanley, 1963). The design's external validity may be limited to the study participants, due to the interaction of selection and intervention, but this design has less reactive arrangements (e.g., awareness of being in an experiment) than a classic experimental design (Campbell & Stanley, 1963).

## Methodology

### Population

Leaders and employees at companies from various industries constituted the population for this study. Given that organizational creativity is a group outcome (Ford & Gioia, 1995; Woodman et al., 1993), employees who contribute to the production of creative organizational outcomes do not work in isolation, but belong to project teams (Rosso, 2014). Therefore, the unit of analysis was the group (i.e., a project team). Due to limited time and resources, the project team population included only teams operating in northwestern United States (i.e., Oregon and Washington states). The pre-hoc sample size was 66 project teams.

### Sampling and Sampling Procedures

**Sampling strategy**. The sampling strategy that I used in the study was a mix of cluster sampling and simple random sampling. According to Etikan and Bala (2017), this is a mixed sampling strategy. The sampling process began with identifying space-based

clusters (i.e., cities) and organization-based clusters in the states of Oregon and Washington. This was necessary because project teams are typically clustered in companies headquartered in or around big cities and metropolitan areas. For example, creative companies proliferate in and around Seattle, Washington, and Portland, Oregon.

Because there are no statewide sampling frames of project teams operating in each of the two states, the two organizational clusters where the research was conducted included Seattle and Portland. The large number of companies in each city provided organizational variety and more possibilities for access to project teams, which justified the selection of the two cities. A sampling frame of companies, members of the Seattle's Metropolitan Chamber of Commerce and the Portland Business Alliance, served as a pool of companies from which the project teams were drawn.

Project team leaders at the companies to which an invitation to participate in the study was sent determined the participation of project teams in the study. The companies were given a choice to participate in the study with a team or teams. When the companies decided to participate in the study, they indicated whether their team or teams would be part of the experimental group or the control group. As a result, I did not determine the randomized assignment of project teams to the two groups, the companies did. Once a company agreed to participate in the study, I obtained a list of the participating project teams and their size from the company.

Initially, my goal was for project teams to meet two criteria in order to be included in the study: (a) be in the initial or intermediate stage of the project development cycle, and (b) have a distinct goal, resulting in the design, realization, or production of a

novel and useful product, service, or process. Project teams working on projects in later stages of development were to be excluded from the study, as there was less time to estimate the effect of leaders' endorsement of idiosyncratic workplace fun and organizational playfulness climate on organizational creativity. These conditions were not met, as the limited sample size necessitated the use of all teams that chose to participate in the study regardless of their developmental stage and goal.

**Appropriateness of sampling strategy.** Out of the four major types of probability sampling designs (i.e., simple random sampling, stratified sampling, systematic sampling, and cluster sampling), two probability sampling designs were used in the sampling strategy. The combination of simple random sampling and cluster sampling was appropriate for the study, because, according to Daniel (2012), it ensured sampling precision, representativeness, and low cost. Further, it accounted for the composition and distribution of project teams in the population.

Systematic sampling and stratified sampling were the sampling designs that were not used in the study. In systematic sampling, only the first sample participant is randomly selected, while all subsequent participants are selected based on a systematic interval (Etikan & Bala, 2017). Because the selection of the first participant determines the selection of all other participants, the principle of independence was not met, making this sampling design a non-probability sampling design (Daniel, 2012). As such, systematic sampling introduces selection bias in a study and representativeness is not achieved (Etikan & Bala, 2017). The absence of a sampling frame of project teams and

the need for representativeness of project teams from different industries rendered systematic sampling inappropriate for this study.

Stratified sampling was inappropriate for this study because the population of companies in the sampling frame must be first separated into mutually exclusive, homogeneous strata, and then participants from each stratum must be selected via simple random sampling (Etikan & Bala, 2017). This sampling strategy is exclusionary and its use in this study would have underscored the assumption that only certain kind of companies produced creative organizational outcomes. Such an assumption clashed with my key assumption in this study that all companies are creative companies. Stratified sampling is also more complicated, expensive, and time-consuming than simple random sampling (Daniel, 2012). These features made stratified sampling inappropriate for this study.

**Sample size.** The initial sample size estimate was 66 project teams, divided into two experimental groups of 33 project teams each (i.e., Group A and Group B). The sampling size could be obtained in one of three ways: (a) contacted companies provided enough project teams for the two experimental groups, (b) contacted companies provided a portion of the project teams in the study and the researcher found the rest of the needed project teams purposively, or (c) contacted companies refused to provide project teams to the study and the researcher selected the project teams purposively. I computed the pre-hoc sample size with G*Power 3.1 for an analysis of variance (ANOVA), omnibus, one-way. The pre-hoc sample size was based on effect size $f = .40$, $\alpha = .05$, and 80% power. The post-hoc sampling size was seven project teams. The contacted companies provided

a portion of the project teams in the study and I found the rest of the needed project teams purposively.

**Procedures for Recruitment, Participation, and Data Collection (Primary Data)**

Based on G*Power calculations, the pre-hoc sample size was 66 project teams. The initial sampling frame included member companies of the Metropolitan Chamber of Commerce in Seattle, Washington, and the Portland Business Alliance in Portland, Oregon. While the leadership at the Metropolitan Chamber of Commerce in Seattle provided a list of its member companies without contact information, the leadership at the Portland Business Alliance refused to provide a contact list, stating that their member companies were listed on its website.

To collect the contact information of the companies in the sampling frame, I hired five freelancers to find the contact information of the companies on the Seattle's list and to compile a list in Excel of the companies in Portland. The combined list included 2,979 companies in Portland and Seattle. I sent a letter to all 2,979 companies, inviting them to contribute project teams to the study. I enclosed a letter of cooperation with a self-addressed stamped envelope. After a month, I had received four signed letters of cooperation (response rate of 0.13%).

Due to the low response rate from the mailing campaign, I started recruiting project teams purposively via personal contacts. I was able to secure three teams at two companies. I found these teams through the Portland chapter of the Project Management Institute. I attended one of the chapter's monthly meetings and talked about the study to over 100 project managers. I handed out letters of cooperation at the meeting.

In addition, I hired Qualtrics, an Internet-based survey provider to help with the recruitment of participants for the study. I had two phone meetings with an account manager at Qualtrics. The manager assured me that Qualtrics could help me recruit the needed number of project teams for the study. Because I needed signed letters of cooperation, I transformed the letter of cooperation into a survey. Qualtrics sent out the letter to 619 project managers and leaders at various companies.

When the data came back, they were useless. Most of the respondents were not project managers or leaders at companies. In reality, Qualtrics did not have a database of contacts, but used a third party's database. Qualtrics did not have control over who received the letter. I sent a confirmation email to all 619 respondents in order to find out which ones were legitimate and which ones were not. I found 11 legitimate responses. Combined with the teams from the mailing campaign, the sample size consisted of 39 teams at 17 companies.

After the Institutional Review Board (IRB) at Walden University granted full approval to the study (IRB approval #10-06-17-0331081), copies of an informed consent form (ICF) were distributed to all members of participating teams via email. Individuals were asked to review and agree to the ICF, which provided information about the study. The ICF was needed because the study disrupted the workflow of participating project teams. No project teams were excluded from the study because the declining members in a project team were a majority.

The signing of an ICF by a participant signified that he or she was a competent adult, who chose to participate in the study voluntarily, had adequate information about

the study, and comprehended the study's aims and procedures. Study participants were assured that their privacy would be kept through the protection of any and all sensitive information that was revealed in the settings where observations were made. The participants were further assured that their anonymity would be guaranteed and that the information they provided in questionnaires, meetings, and interviews would be kept confidential.

To minimize common method variance, data were collected from multiple sources in two waves (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Only employees reported their attitudes toward leaders' endorsement of idiosyncratic workplace fun at the two data collection points. Both employees and their leaders reported their perceptions of organizational playfulness climate at the two data collection points. Only team leaders reported the change in organizational creativity at the second collection point. The first wave of data collection measured the presence of leaders' endorsement of idiosyncratic workplace fun, organizational playfulness climate, and organizational creativity prior to the intervention. A month later, the second wave of data collection measured organizational creativity and the existence of leaders' endorsement of idiosyncratic workplace fun and organizational playfulness climate during the intervention month.

The data collection process involved the use of survey and Internet-based methods. The use of these data collection methods was appropriate for the study because (a) the measurement instruments used to measure the independent and dependent variables were survey questionnaires, (b) Internet-based survey service providers, such as Qualtrics, facilitate the data collection process with least error and maximum security and

speed, and (c) the study had limited resources. Each project team member received an email with links to the surveys at the beginning of the study and at the end of the study, a month later. These two occasions corresponded to the pretest and the posttest, respectively. Using the Qualtrics platform, taking the surveys at each data point took up to 30 minutes. Upon the completion of the posttest, each team member and leader were thanked for participating in the study. The collected data, aggregated by Qualtrics, was imported into SPSS 21 for data analysis. After data analysis was complete, study participants were debriefed and handouts of the study's findings were disseminated to them via email.

**Intervention**

An intervention in this study was administered to Group A. After the pretest, team leaders in Group A began endorsing idiosyncratic workplace fun and playfulness in their respective teams for a month, as well as modeling idiosyncratic workplace fun and playfulness themselves. Guided by this researcher, project team leaders encouraged team members to interact in playful, improvisational, and humorous ways while doing their work with verbal cues, such as "Please don't forget to have fun at work today," "Let's have fun today," "Remember to play and do things you like to do for fun," "Take the time to have some fun today," "Let's play," and "It's important to do fun activities you enjoy while at work." No intervention was administered to Group B, which was a control group. In order to ensure that all participants in Group A did the intervention for a month, I contacted the team leaders in Group A two weeks after the beginning of the

intervention and encouraged them to continue with the intervention for two more weeks. Group A consisted of three project teams. Group B consisted of four project teams.

**Instrumentation of Constructs**

To the extent that the number of variables determined the number of measuring instruments in a research study, three instruments were used to independently measure the variables. The variable organizational creativity, however, could be validly measured with a single instrument, as no instrument could account for all contextual factors that could impact organizational creativity (Blomberg, 2014). Based on Woodman et al.'s (1993) conceptualization of organizational creativity, the measurement of organizational creativity required at least two instruments in order to account for group creativity and for a portion of contextual influences.

In this study, leaders' endorsement of idiosyncratic workplace fun and organizational playfulness climate represented contextual influences on organizational creativity. Therefore, the inclusion of a measure of team creativity had a dual purpose: (a) to satisfy the theoretical condition pertaining to team creativity for measuring organizational creativity, and (b) to serve as a proxy for a measure of organizational creativity in relation to contextual influences. A search in the literature revealed that there were appropriate instruments to measure the examined variables.

Although there was no extant instrument that specifically measured leaders' endorsement of idiosyncratic workplace fun, a modified version of the Fun Climate Measure (FCM) designed by McDowell (2004) could be used to measure this variable

(Appendix A). This instrument measured one contextual influence on the dependent variable organizational creativity. The Organizational Playfulness Climate Questionnaire, developed by Yu et al. (2003), measured the independent variable organizational playfulness climate (Appendix B). This instrument measured a second contextual influence on the dependent variable organizational creativity. To improve scale reliability, only factors with Cronbach's alpha greater than .70 were used in this study. The Team Creativity Scale (TCS), developed by Jiang and Zhang (2014), measured the dominant dimension of the organizational creativity construct (Appendix C). All instruments used Likert scales to measure the observed variable.

An instrument that has been used extensively in research on fun at work over the past 13 years is the Fun Climate Measure (FCM) by McDowell (2004). Developed during a doctoral study, the FCM has been validated as a reliable instrument in numerous recent studies (Fluegge-Wolf, 2014; Tews et al., 2014; Tews et al., 2015). A modified version of the FCM was appropriate for measuring leaders' endorsement of idiosyncratic workplace fun for two reasons. First, the items included in the scale encompass four domains, in which idiosyncratic workplace fun can take place: socializing with coworkers, work celebrations, personal freedoms, global fun. Second, the instrument captures a holistic perception of workplace fun, revealing it as a complex, multidimensional construct. Such a conceptualization of workplace fun is consonant with the complexity-based theoretical foundation of this study. Permission to use the FCM in the current study was obtained on November 4, 2016.

McDowell (2004) used focus groups of working adults (60 adults in total) to define *fun at work* as a construct and generate 40 initial items for the scale. Fifty graduate students in an industrial organizational psychology program evaluated the 40 items for content validity. Eighteen survey items had 60% agreement among the evaluators. McDowell added two more items related to the construct validity of the instrument. The pretesting of the measure included 182 professionals across various industries. Analysis showed strong internal consistency of the scale (Cronbach $\alpha = .90$).

Exploratory factor analysis with Varimax rotation determined a four-factor structure of the scale. Cronbach alphas for each factor are as follows: .835 (socializing with coworkers), .781 (work celebrations), .701 (personal freedoms), and .792 (global fun). Scale optimization added another four items to the scale for a total of 24 items (i.e., four factors of six items).

Confirmatory factor analysis (CFA) showed strong discriminant validity of the FCM in relation to a Fun Person Scale (FPS). The two scales correlated only at $r = .23$, accounting for less than 5% of the explained variance. Convergent validity was assessed by correlating the FCM with a measure of job satisfaction (i.e., Job Descriptive Index (JDI)) and a measure of affectivity (i.e., Positive Affect and Negative Affect Scale (PANAS)). The correlation between the FCM and JDI was $r = .83$, while the correlation between the FCM and PANAS was $r = .60$ for the positive affect subscale and $r = -.54$ for the negative affect subscale. These coefficients suggest strong discriminant and convergent validity of the Fun Climate Measure.

In order to test the validity and dimensionality of the modified Fun Climate Measure, now named Leaders' Endorsement of Idiosyncratic Workplace Fun Scale, exploratory factor analysis was performed prior to distributing the instrument to study participants. The Internet survey provider SurveyMonkey provided the data for the exploratory factor analysis. According to Field (2013), a sample of over 200 participants is adequate for factor analysis. SurveyMonkey randomly distributed the Leaders' Endorsement of Idiosyncratic Workplace Fun Scale to full-time employees in the United States across industries. For a fee, SurveyMonkey guaranteed that over 200 participants would respond to the survey. The final sample size included 210 participants. To assess whether the items in the scale fit together, the internal consistency reliability of the scale was calculated and it was optimal (Cronbach's $\alpha = .84$).

The Organizational Playfulness Climate Questionnaire (OPCQ) by Yu et al. (2003) was appropriate for this study because it incorporated findings from seminal works on organizational climate and creativity, such as Amabile's (1996) nine environmental factors that stimulate creativity and innovation, Isaksen, Lauer, and Ekvall's (1999) Situational Outlook Questionnaire (SOQ), Glynn and Webster's (1992) Adult Playfulness Scale, and case studies (Kelley, 2001). The complex nature of organizational playfulness climate is evidenced in the eight factors that comprise the OPCQ. The multidimensionality of the OPCQ aligns with the complexity-based theory of creativity used in this study. Permission to use the OPCQ in this study was obtained on June 24, 2016.

Yu et al. (2003) used two focus groups, one of 18 researchers and another one of 30 academics and high-tech professionals, to generate the 45 items in the OPCQ. A pilot study with 755 professionals in various industries tested the validity of the instrument and its eight-factor structure. Factor analysis on the pretest data, using orthogonal rotation, showed that all eight factors had eigenvalue greater than 1, explaining 63.81% of the variance in organizational playfulness climate. Internal consistency reliability of the OPCQ is .91, with six out of the eight factors having Cronbach's alpha greater than .70.

The discriminant validity of the OPCQ was tested by diving 27% of the participants in the pilot into four groups, each one having either a low or high score for "fun" and "creativity." A comparison between the high fun and low fun groups revealed significant differences ($t$ = 2.964-6.712, $p < .01$) between the two groups in each factor of the OPCQ. A comparison between the high creativity and low creativity groups also revealed significant differences ($t$ = 2.682-4.596, $p < .01$) between the groups in each factor of the OPCQ. These tests suggested that people with high fun and high creativity personality were more aware of an organizational playfulness climate than people with low fun and low creativity personalities.

The Team Creativity Scale (TCS) by Jiang and Zhang (2014) that measured the group creativity dimension of organizational creativity was appropriate to this study for two reasons. First, the researchers used a complex systems theory perspective to design the instrument that aligns with Stacey's (1996) complexity-based theory of organizational creativity that underlies the current study. Second, team creativity is measured as a

holistic construct that encompasses three dimensions: creative thinking, creative action, and creative outcome. These two properties of the instrument distinguish it from the one-dimensional instruments used to measure organizational creativity in prior studies (Janssen, 2000; Zhou & George, 2001). Permission to use the TCS in this study was obtained on June 24, 2016.

In developing the TCS, the researchers used 183 participants working in teams at two companies, a creative enterprise and a high-tech company. To diminish common error variance, different groups reported on each TCS dimension (i.e., team members on creative thinking, team leaders on creative action, and managers on creative outcome). The internal consistency reliability of each of the three subscales is .843 for creative thinking, .719 for creative action, and .755 for creative outcome. Average item-to-item correlations in each subscale range between .459 and .642.

Exploratory factor analysis using Varimax rotation revealed adequate loadings on each of the three TCS dimensions, with creative thinking, creative action, and creative action explaining 26.31%, 21.18%, and 23.65% of the variance, respectively. The loading coefficients among all factors range between .673 and .89, indicating good convergent validity. The standardized loadings of measurement items, ranging between .546 and .816, show further support for the good convergent validity of the TCS. The average variances extracted (AVE) test assessed the divergent validity of the three constructs, with the square root AVE ranging between .678 and .801, indicating good divergent validity.

Jiang and Zhang (2014) examined the predictive validity of the TCS by testing the correlations between team creativity and team trust, two constructs that have shown a positive relationship in previous studies. The standardized path coefficient between the three factors of the TCS and team trust were positive (.62 for creative thinking, .76 for creative action, and .92 for creative outcome) and significant at the .01 level, suggesting good predictive validity of the TCS.

**Operationalization of Variables**

Leaders endorse idiosyncratic workplace fun when employees feel that their leaders or supervisors encourage each employee to engage in volitional and autonomous workplace fun that may or may not involve socializing with coworkers, work celebrations, personal freedoms, and general fun activities. Leaders' endorsement of idiosyncratic workplace fun was measured with a modified version of the Fun Climate Measure (FCM), which included seven items, each measured with a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). A high overall score represents high leaders' endorsement of idiosyncratic workplace fun. An example item is "My supervisor encourages me to have fun at work."

Organizational playfulness climate (OPC) is present at an organization when employees attest that the organizational environment encompasses close cooperation and collaboration, supportive managers and relaxed interactions, shared leisure time, informality and humor, individual leisure and free time, relaxation-conducive work environment, independent work and casual dress code, and lack of inflexibility, criticism, and competitiveness. The OPC was measured with the Organizational Playfulness

Climate Questionnaire (OPCQ), which consisted of 40 items, each measured with a five-point Likert scale ranging from 1 (completely not true) to 5 (completely true). A high overall score represents a high organizational playfulness climate. An example item is "Playing or engaging in the leisure activities with my colleagues inspires me with new ideas for work."

Organizational creativity is evident when leaders agree that employees in project teams engage in creative thinking that leads to creative actions which result in creative outcomes. Organizational creativity was measured with the Team Creativity Scale, which includes nine items, each measured with a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). A high overall score represents high organizational creativity. An example item is "The team can realize a creative outcome fluently."

## Data Analysis Plan

The data analysis stage of the study included (a) data screening and cleaning, (b) descriptive analysis, (c) description of an analysis to ensure that groups were equivalent at the outset of the study, and (d) analysis plans for each hypothesis.

### Data Screening and Cleaning

Upon transferring the data from the Qualtrics platform to SPSS 21, the scores for each variable were checked for outliers. There were no extreme scores in the data as the three variables were measured with Likert scales ranging from 1 to 5. The variables were checked for normality by running histograms on each variable. The distribution of responses for the three variables was normal. This was followed by checking for missing

data by running frequencies for each variable. Missing data at the second data point for the variables leaders' endorsement of idiosyncratic fun and organizational playfulness climate were replaced by the series mean for that variable.

**Descriptive Analysis**

Since the three variables in the study were measured on the interval level, the descriptive analysis procedures included (a) organization of the data for each variable into a frequency distribution, (b) displaying the data in tables, (c) describing the distribution mean, or the average, for each variable, and (d) describing the variability of the distributions (Frankfort-Nachmias & Leon-Guerrero, 2009).

**Group Equivalence Analysis**

Probabilistic group equivalence was ensured at the outset of the study by randomly assigning the project teams in the sample to each of the two experimental groups. Initially, since the optimal project team size is seven people (Guimera, Uzzi, Spiro, & Amaral, 2005), only project teams with more than four but less than seven members were to be selected prior to their assignment to Group A and Group B. Due to the low response rate from the 2,979 companies to the call to participate in the study, project teams with three members were included in the study.

**Research Questions and Hypotheses**

The research questions that were answered in this study pertained to the relationship and significance, both individually and jointly, of leaders' endorsement of idiosyncratic workplace fun and organizational playfulness climate to organizational creativity. Based on these research questions, it was hypothesized that both leaders'

endorsement of idiosyncratic workplace fun and organizational playfulness climate would be related positively to organizational creativity. It was further hypothesized that project teams supervised by leaders who endorsed idiosyncratic workplace fun would be more creative than project teams supervised by leaders who did not endorse idiosyncratic workplace fun. Project teams working in an organizational playfulness climate would be more creative than project teams working in an organizational climate not rooted in playfulness. Both individually and collectively, leaders' endorsement of idiosyncratic workplace fun and organizational playfulness climate would predict organizational creativity.

**Analysis Plans for Hypotheses**

Three statistical tests were performed to examine the relationship between the variables in the study. Hypotheses $H_0 1$, $H_a 1$, $H_0 2$, and $H_a 2$ were tested by estimating Pearson correlation coefficients, which indicated the direction and magnitude of the relationships between the two independent variables and the dependent variable. The value of the $R$ statistic has been reported. Hypotheses $H_0 3$, $H_a 3$, $H_0 4$, and $H_a 4$ were tested with repeated-measures analysis of variance (ANOVA), which indicated whether the project teams in the two quasi-experimental groups differed significantly in terms of their creative output before and after the intervention. The value of the $F$ ratio and its $p$ value have been reported.

Bivariate regression analysis tested Hypotheses $H_0 5$, $H_a 5$, $H_0 6$, and $H_a 6$, which examined the individual predictive power of LEIWF and OPC on organizational creativity. Unstandardized beta coefficients (i.e., $\beta$ values), $p$ values, and confidence

intervals have been reported. Hierarchical multiple regression analysis tested Hypotheses $H_0$7 and $H_a$7, indicating whether LEIWF and OPC collectively predicted organizational creativity. The control variables were entered in Step 1, while the independent and dependent variables were entered in Step 2 in the regression. Pearson correlation coefficients, the *F* ratio, unstandardized beta coefficients, *p* values, and confidence intervals have been reported. Statistical significance was confirmed with *p* values lower than .05. Confidence intervals including zero indicated nonsignificant results.

## Threats to Validity

### External Validity

The external threats to validity in this study stem from wrong inferences, made by the investigator from the collected and analyzed data, which pertain to other people, settings, and times, and their interaction (Hoy & Adams, 2015). The threat emerging from the interaction of participant selection and intervention was addressed by avoiding result-based claims about teams that are not small project teams at for-profit business organizations. The threat from the interaction of setting and intervention was reduced by relating the research findings only to project teams in companies located in and around big urban centers in the United States. The threat stemming from the interaction of history and treatment was mitigated by not generalizing the results to project teams that operated in the past, or project teams that will operate in the future.

**Internal Validity**

Experimental and quasi-experimental research studies are exposed to nine threats to internal validity (Clair, Cook, & Hallberg, 2014). The first threat, ambiguous temporal precedence, concerns the cause-effect relationship between the variables in time. Using an experimental group (Group A) and a control group (Group B) minimized this threat, as the nonequivalent control-group design showed which variables occurred first. If the repeated measures analysis of variance (ANOVA) did not show any difference between the two groups in terms of organizational creativity, then only correlations could be established between the independent and dependent variables. The treat of selection, where sampling and assignment procedures can result in systematic differences between the experimental and control conditions, was mitigated by randomly assigning project teams to Group A and Group B, thus increasing the probability of equal distribution of sample characteristics among the groups. The threat of history, or the influence of external events on the participants, was minimized by having the project teams located in the same geographical location and experiencing the same external events.

The treat of maturation, or the occurrence of natural changes in the participants during the course of a study, was minimal, as the study lasted only a month. The treat of attrition, whereby participants drop out of the study, did not apply to this study, as the sample was very small and no teams dropped out during the study. Diffusion of treatment was minimized as a treat, as the project teams in groups A and B were based in separate companies, with no communication between the teams. One company contributed two project teams to the study, with one team in Group A and one team in Group B. The treat

of testing was diminished by having the pretest and posttest administered a month apart. The threats of regression artifacts and instrumentation was negligible, because participating project teams were not selected based on extreme scores and the survey instruments did not change during the study.

**Construct Validity**

There were two threats to construct validity in this study. The first one pertained to the instrument used to measure leaders' endorsement of idiosyncratic workplace fun. The instrument used in the study was a modified version of Fun Climate Measure (FCM) designed by McDowell (2004) that contains 24 items. Out of these 24 items, seven items related directly to the construct leaders' endorsement of idiosyncratic workplace fun. These seven items were modified by changing their referent (Chan, 1998) in order to express precisely the examined construct. The modification of the items notwithstanding, McDowell (2004) developed the items in the Fun Climate Measure based on a robust theoretical framework underlying the *fun at work* construct. To address this threat, exploratory factor analysis (EFA) was performed to assess the factor loadings and internal consistency reliability of the modified scale.

The second threat to construct validity in the study stemmed from the definition used to operationalize the independent variable organizational playfulness climate. Although Yu et al. (2003) based the Organizational Playfulness Climate Questionnaire on a sound theoretical foundation, they did not provide an operational definition of the construct. The definition of organizational playfulness climate used in this study emerged from synthesizing the findings of Yu et al.'s (2003) study with the findings in

other studies on organizational climate and playfulness (Chang et al., 2013; Pena-Suarez et al., 2013).

**Ethical Procedures**

Upon deciding to participate in the study with one or more project teams, representatives at participating companies signed a letter of cooperation, which provided the participants with an overview of the study. The random assignment of participants to two experimental groups precluded the use of prearranged agreements to access participants. Ethical concerns related to the recruitment process were minimal, as project teams were recruited via formal communication channels and with the assistance of the Seattle Metropolitan Chamber of Commerce and the Portland Business Alliance. There were no ethical concerns with the purposive recruitment of project teams through the Portland chapter of the Project Management Institute (PMI), as permission to contact PMI members was granted by PMI-Portland officials prior to the recruitment and the participation of PMI members in the study was voluntary.

An ethical concern related to data collection was the refusal of selected companies and project teams via Qualtrics to participate in the study. The refusal of companies to participate in the study could not be addressed by randomly selecting other companies from the sampling frame, or other teams at the companies, and inquiring about participation in the study. The lack of financial resources for recruiting more companies via Qualtrics precluded the use of these approaches. Upon the collection of all letters of cooperation from the participating companies, the IRB at Walden University approved the study for data collection (IRB approval #10-06-17-0331081).

Ethical concerns related to the intervention included the disruption of work of non-participating coworkers working at participating companies, as well as damaging and highly disruptive idiosyncratic workplace fun behaviors by the participants. These concerns were addressed in the informed consent form by asking the team leaders in Group A to remove from the study participants who exhibited such damaging and disruptive behaviors. No study participants were removed during the intervention.

**Treatment of data.** All collected data were anonymous and confidential. No identification data or computer server numbers were tracked or collected. There were no ethical issues pertaining to the sensitivity of the information, as personal attitudes and characteristics, such as religious preferences, sexual practices, and intelligence, among others, were not included or measured in the study. The office settings in which the study took place raised some ethical concerns, as the intervention might have interrupted the normal workflow of participating project teams. Team leaders in the experimental group (Group A) were instructed to cancel the intervention and remove participants from the study if the participants exhibited idiosyncratic workplace fun or playful behavior that was harmful to other employees or damaging to the work environment.

The surveys were administered via Qualtrics, a secure online survey provider. After participants completed the survey, they were be asked to delete the notification email about the survey, thus minimizing the chance of non-participants accessing the survey and proving false information. The data were initially stored on Qualtrics servers and then transferred to a personal computer for analysis in SPSS. A copy of all collected

data was also stored on a password-protected drive online. Only I, the investigator, had access to the data. The data will be destroyed five years after the study has been deemed complete by Walden University.

To avoid ethical issues during the interpretation of the data, the language used in the discussion of results is devoid of bias against participants because of sexual orientation, gender, age, disability, race, or ethnicity. No data has been falsified, suppressed, or invented to meet preconceived research needs. After the completion of the study, research findings were shared with all participating project teams.

## Summary

Despite the complexity of organizational creativity and the need for a holistic examination of the relationships between the proposed variables, the research design chosen for this study is reductionist. This was necessitated because (a) there was a history of prior research that had approached workplace fun, organizational climate, and organizational creativity quantitatively, and (b) lack of resources prevented the implementation of qualitative or mixed method research designs. The complexity of the organizational creativity construct was captured in the theoretical foundation underlying the study, as well as in the instruments used to measure the independent and dependent variables.

The effects of leaders' endorsement of idiosyncratic workplace fun and organizational playfulness climate on organizational creativity were investigated within a quasi-experimental quantitative research design. The sampling frame consisted of member companies of the Seattle Metropolitan Chamber of Commerce and the Portland

Business Alliance in the states of Washington and Oregon, respectively, in northwestern United States. The sample size was seven project teams, divided into an experimental group (Group A) and a control group (Group B). The leaders in Group A introduced an intervention, which consisted of encouraging employees to engage in idiosyncratic workplace fun and to interact with fellow employees in playful and humorous ways. No intervention was administered to the participants in Group B. The intervention lasted for a month, with data being collected from both experimental groups before and after the intervention.

The relationships between the variables was measured with validated instruments that have been successfully used in prior research studies to measure workplace fun, organizational playfulness climate, and organizational creativity. A modified version of the Fun Climate Measure by McDowell (2004) measured leaders' endorsement of idiosyncratic workplace fun. The Organizational Playfulness Climate Questionnaire by Yu et al. (2003) measured organizational playfulness climate. The Team Creativity Scale by Jiang and Zhang (2014) measured organizational creativity. All instruments have strong construct, convergent, predictive, and discriminant validities.

The study's results are presented in Chapter 4. Using statistical analyses, I tested six hypotheses through correlational analysis, repeated measures analysis of variance (ANOVA), bivariate regression analysis, and multiple regression analysis. These analyses provided answers to the three research questions that prompted this research investigation.

# Chapter 4: Results

The purpose of this quasi-experimental quantitative study was to uncover the effects leaders' endorsement of idiosyncratic workplace fun and organizational playfulness climate had on organizational creativity within a sample of intact project teams at various business organizations. The questions that guided the research investigation pertained to the magnitude and predictive nature of the relationships LEIWF and OPC had with organizational creativity. Based on the literature review of prior research, I advanced six hypotheses, anticipating positive relationships between LEIWF and organizational creativity and between OPC and organizational creativity. I also hypothesized that the two independent variables would predict organizational creativity, both individually and collectively.

This chapter begins with a description of the timeframe for data collection, including actual recruitment and response rates. I briefly review the discrepancies in data collection from the initial plan presented in Chapter 3 and report baseline descriptive and demographic characteristics of the sample. Next, I describe the representativeness of the sample of the population of interest and provide an explanation of the fidelity of the administered intervention. I then report the study results, organized by research hypotheses. The chapter concludes with a summary of the answers to the three research questions.

## Data Collection

Data collection began on March 19, 2018, and concluded on May 13, 2018, with the intervention running between March 19, 2018, and April 22, 2018. The final

recruited sample included 32 employees in seven project teams at six companies. The number of participating teams was substantially lower than the 66 teams needed to have an adequately powered study. While 2,979 companies received an official invitation to participate in the study, only four companies accepted the invitation and returned a signed letter of cooperation. The use of purposive sampling resulted in the recruitment of three project teams at two additional companies for a total of six companies.

Four teams comprised Group A (4.25 members on average per team) and three teams comprised Group B (five members on average per team). Twenty-eight employees took the pretest (87.5% response rate), while 25 employees took the posttest (78.1% response rate). The average age of the participants was around 52 years ($M = 3.71$, $SD = 1.36$). The sampled population constituted of 50% male and 50% female participants ($M = 1.50$, $SD = 0.51$), 89.3% of them Caucasian and 10.7% African-American ($M = 1.11$, $SD = 0.32$). The average tenure of the employees was around 14 years ($M = 2.82$, $SD = 1.61$), with 82.1% working for a creative company and 17.9% working for a non-creative company ($M = 1.18$, $SD = 0.39$).

Before the start of data collection, the leaders of the participating teams provided the emails of their team members so that the surveys could be sent to each team member. Out of the 17 companies that signed the letter of cooperation, nine companies recruited via Qualtrics dropped out by not responding to the request to provide their team members' emails. The sample size consisted of 8 teams (37 employees in total) at 7 companies. After the teams received the pretest surveys, one team in Group B did not

respond to the surveys and was excluded from the study. Seven teams at six companies provided data at the two data points.

The sample was representative of the population of interest as the companies included in the sample included a technology company, a manufacturing company, a financial services company, an architectural firm, a business consultancy, and a travel company. The six companies represent 0.2% of the sampling frame of 2,979 companies invited to participate in the study. This low representativeness limits the external validity of the findings to these populations and their specific context and geographical location.

## Intervention Fidelity

The intervention in this study ran for 1 month. The project team leaders who endorsed idiosyncratic workplace fun received three emails related to the intervention. The first email invited them to begin the intervention and provided them with guidance on how to endorse idiosyncratic workplace fun. Two weeks later, a second email reminded them to continue the intervention for two more weeks and encouraged their efforts. At the 1-month mark, a third email instructed them to end the intervention. The project team leaders did not report any challenges or adverse events with the implementation of the intervention.

## Study Results

To assess the reliability of the Leaders' Endorsement of Idiosyncratic Workplace Fun Scale, I performed exploratory factor analysis, using a sample of 210 randomly assigned employees across industries via the Internet survey provider SurveyMonkey. A principal axis factor analysis was conducted on the seven items with orthogonal rotation

(Varimax). The Kaiser-Meyer-Olkin measure verified the sampling adequacy for the analysis, KMO = .84, and all KMO values for individual items were greater than .79, which was well above the acceptable limit of .5 (Field, 2013). An initial analysis was run to obtain eigenvalues for each factor in the data. One factor had eigenvalue over Kaiser's criterion of 1 and explained 45.14% of the variance. The scree plot was unambiguous and did not show inflexions, which justified the retention of one factor. The optimal sample size and the convergence of the scree plot with the Kaiser's criterion value supported the retention of one factor. Internal consistency reliability analysis (Cronbach's alpha) revealed adequate reliability of the scale (α = .84), indicating that the seven items reflected the construct leaders' endorsement of idiosyncratic workplace fun. Table 1 shows a summary of the exploratory factor analysis.

Table 1

*Summary of Exploratory Factor Analysis for the Leaders' Endorsement of Idiosyncratic Workplace Fun Scale (n=210)*

| Item | *Factor Loadings* |
|---|---|
| My supervisor values fun at work. | .83 |
| My supervisor encourages me to have fun at work. | .83 |
| My supervisor supports my joking with coworkers. | .66 |
| My supervisor supports my autonomy and freedom at work. | .63 |
| My supervisor supports my celebrations at work. | .59 |
| My supervisor urges me to play at work. | .59 |
| My supervisor allows me to listen to music at work | .49 |
| Eigenvalue | 3.66 |
| % of variance | 45.14 |
| Cronbach's α | .84 |

Given that the level of analysis was the group, the aggregation of the individual ratings for LEIWF and OPC to group level required justification before testing the

hypotheses. Shown in Table 2 are the interrater agreement $r_{wg(j)}$ and two intraclass correlations, ICC(1) and ICC(2), for LEIWF and OPC at pretest (T1) and posttest (T2).

Table 2

*Interrater agreement and interclass correlations*

| | Group A | | | | Group B | | | |
|---|---|---|---|---|---|---|---|---|
| | LEIWF (T1) | LEIWF (T2) | OPC (T1) | OPC (T2) | LEIWF (T1) | LEIWF (T2) | OPC (T1) | OPC (T2) |
| $r_{wg(j)}$ | .93 | .98 | .94 | .96 | .89 | .88 | .94 | .92 |
| ICC(1) | .45 | .36 | .06 | .23 | .01 | -.03 | -.16 | .46 |
| ICC(2) | .67 | .59 | .19 | .52 | .04 | -.10 | -1.79 | .80 |

The high values for $r_{wg(j)}$ in Group A and Group B indicated very strong agreement between the team members (i.e., ratings in each group are almost interchangeable) on what LEIWF and OPC represented (James, Demaree, & Wolf, 1984). The values for ICC(1) indicate the extent to which team member ratings were affected by group membership (i.e., proportion of the total variance explained by group membership) (LeBreton & Senter, 2008). In Group A, 45% (T1) and 36% (T2) in the variability of individual ratings of LEIWF could be explained by group membership, while 6% (T1) and 23% (T2) in the variability of individual ratings on OPC could be explained by group membership. In Group B, the ICC(1) values for LEIWF and OPC were low to negative. Negative ICC(1) values denote that the within-group variance was smaller than the between-group variance (Bliese, 2000). Although the moderate ICC(1) values in Group A supported the group level of analysis of the study, the low and negative ICC(1) values in Group B supported individual level of analysis.

The values of ICC(2) indicate the reliability of the group means (Bliese, 2000). The ICC(2) values in Group A were low to medium, while the ICC(2) values in Group B were low to negative. Despite high $r_{wg(j)}$ values in both groups, the inconsistent and low values of ICC(1) and ICC(2) did not justify the aggregation of individual responses of LEIWF and OPC to group level (Koo & Li, 2016). As pointed out by Blaise (2000), ICC(1) and ICC(2) are highly dependent on the sample size used in calculating them, with low sample sizes producing unreliable ICC values.

The absence of aggregation justification of the individual ratings of LEIWF and OPC to group level necessitated the top-down distribution of the organizational creativity scores among team members. The organizational creativity rating given by each project team leader was divided by the number of team members in that team to produce the proportional contribution of each team member to organizational creativity. In order to match the level of analysis with the level of inference, the level of analysis in the study changed from group level of analysis to individual level of analysis. All statistical tests used to test the hypotheses in the study thus reflected the individual level of analysis.

Table 3 presents the descriptive statistics of the study at posttest. No variables correlated highly ($r > .80$), indicating lack of multicollinearity between the variables. Age correlated negatively with organizational creativity ($r = -.45$, $p < 0.05$). Age also correlated positively with race ($r = .51$, $p < 0.01$) and tenure ($r = .45$, $p < 0.05$). Tenure correlated negatively with organizational creativity ($r = -.42$, $p < 0.05$).

Table 3

*Descriptive Statistics*

| Variable | *M* | *SD* | *Age* | *Gender* | *Race* | *Tenure* | *CreativeCo* | *LEIWF* | *OPC* | *OC* |
|---|---|---|---|---|---|---|---|---|---|---|
| Age | 3.71 | 1.36 | 1.000 | | | | | | | |
| Gender | 1.50 | .51 | 0.000 | 1.000 | | | | | | |
| Race | 1.11 | .32 | .508** | .115 | 1.000 | | | | | |
| Tenure | 2.82 | 1.61 | .450* | .158 | .112 | 1.000 | | | | |
| CreativeCo | 1.18 | .39 | -.250 | -.093 | -.162 | -.360 | 1.000 | | | |
| LEIWF | 28.20 | 2.65 | .168 | .202 | .049 | -.031 | .150 | 1.000 | | |
| OPC | 144.46 | 18.60 | .068 | .228 | -.117 | -.122 | -.032 | .281 | 1.000 | |
| OC | 11.62 | 6.23 | -.451* | -.221 | -.061 | -.418* | .196 | -.095 | .019 | 1.000 |

** Correlation is significant at the 0.01 level (2-tailed)

* Correlation is significant at the 0.05 level (2-tailed)

LEIWF = Leaders' endorsement of idiosyncratic workplace fun; OPC = Organizational playfulness climate; OC = Organizational creativity; ($N = 28$)

Leaders' endorsement of idiosyncratic workplace fun did not correlate significantly with organizational creativity ($r$ = -.10, n.s.). This finding confirmed the null hypothesis $H_0$1 and rejected the alternative hypothesis $H_a$1, which predicted that LEIWF would relate positively to organizational creativity. To test hypotheses $H_0$1 and $H_a$1 further, I investigated whether project teams supervised by leaders who endorsed idiosyncratic workplace fun would be more creative than project teams supervised by leaders who did not endorse idiosyncratic workplace fun. I performed repeated measures analysis of variance (ANOVA), which compared the means of LEIWF for Group A and Group B after the intervention. I then compared the means of organizational creativity for Group A and Group B after the intervention. If Group A's means for LEIWF and organizational creativity were significantly higher than Group B's means after the intervention, then this hypothesis would be confirmed.

Three univariate assumptions had to be met to justify the use of repeated measures ANOVA. First, the dependent variable had to be normally distributed in the population for each level of the within-subjects factor. The Kolmogorov-Smirnov test of normality was used to test this assumption. Second, the population variance of difference scores computed between any two levels of a within-subjects factor had to be the same value regardless of which two levels were chosen (i.e., sphericity assumption). This assumption was tested with Levene's test of homogeneity of variance. Third, the independence assumption had to be met, whereby the cases represented a random sample from the population and there was no dependency in the scores between participants. This

assumption was met as a random sample of companies and project teams was used in the study.

A Kolmogorov-Smirnov test of normality for Group A, with LEIWF as a dependent variable, did not deviate from normal, $D(14) = .187$, n.s., indicating that the dependent variable was normally distributed in the population. The Kolmogorov-Smirnov test produced similar results for Group B, $D(14) = .165$, n.s. The test of normality assumption was met. Levene's test revealed that the population variance between the two groups was significantly different, $F(1, 26) = 4.83$, $p < 0.05$). Based the Levene's test, the sphericity assumption was not met. According to Field (2013), however, sphericity is met when the repeated measures variable has only two levels, which is the case for the variable LEIWF. The results of the Levene's test were ignored.

A repeated measures ANOVA test revealed that, based on their group means at the pretest, Group A ($M = 27.55$, $SD = 3.01$) and Group B ($M = 29.31$, $SD = 3.44$) had similar LEIWF means, with Group A scoring lower than Group B. After the intervention, the pattern was the same, with Group A ($M = 27.97$, $SD = 1.39$) scoring lower than Group B ($M = 28.44$, $SD = 3.54$). Wilks's Lambda test showed that time did not have an effect on LEIWF, $\Lambda = 1.00$, $F(1, 26) = .07$, $p =$ n.s. The test of between-subject effects also showed a nonsignificant difference between the groups, $F(1, 26) = 2.28$, n.s.).

A Kolmogorov-Smirnov test of normality for Group A with organizational creativity as a dependent variable was nonsignificant, $D(14) = .21$, n.s. The Kolmogorov-Smirnov test results for Group B were also nonsignificant, $D(14) = .27$, n.s., indicating that the dependent variable was normally distributed in the population. The sphericity

assumption was met as organizational creativity had only two levels. The independence assumption was met from the random sample used in the study.

A repeated measures ANOVA test with organizational creativity as the dependent variable showed that, based on their group means at the pretest, Group A ($M$ = 13.10, $SD$ = 8.56) and Group B ($M$ = 11.09, $SD$ = 4.56) had similar organizational creativity means, with Group A scoring higher than Group B. After the intervention, Group A ($M$ = 12.96, $SD$ = 8.02) scored higher than Group B ($M$ = 10.27, $SD$ = 3.53). The creativity of both groups, however, decreased after the intervention. Wilks's Lambda test showed that time did not have an effect on organizational creativity, $\Lambda = .90$, $F(1, 26) = 2.75$, $p$ = n.s. The test of between-subject effects also showed a nonsignificant difference between the groups, $F(1, 26) = .92$, n.s.). The results from the repeated measures AVONA for both LEIWF and organizational creativity indicated that project teams supervised by leaders who endorsed idiosyncratic workplace fun were not more creative than project teams supervised by leaders who did not endorse idiosyncratic workplace fun. Hypothesis $H_0 1$ was fully confirmed and hypothesis $H_a 1$ was fully refuted.

Organizational playfulness climate did not correlate significantly with organizational creativity ($r$ = .02, n.s.). This finding supported hypothesis $H_0 2$ and refuted hypothesis $H_a 2$, which predicted that OPC would relate positively to organizational creativity. To test hypotheses $H_0 2$ and $H_a 2$ further, I examined whether project teams working in an organizational playfulness climate would be more creative than project teams working in organizational climates not rooted in playfulness. I

performed a repeated measures analysis of variance (ANOVA), which compared the means of OPC for Group A and Group B after the intervention. If Group A's means for OPC and organizational creativity were significantly higher than Group B's means after the intervention, then this hypothesis would be confirmed. We already found, however, that there was no significant difference between the organizational creativity of the two groups.

A Kolmogorov-Smirnov test of normality for Group A, with OPC as a dependent variable, was normal, $D(14) = .19$, n.s., indicating that the dependent variable was normally distributed in the population. The Kolmogorov-Smirnov test showed similar results for Group B, $D(14) = .121$, n.s. The test of normality assumption was met. The sphericity assumption was met as OPC had only two levels.

A repeated measures ANOVA test with OPC as the dependent variable showed that, based on their group means at the pretest, Group A ($M = 145.71$, $SD = 19.75$) and Group B ($M = 143.86$, $SD = 20.05$) had similar OPC means, with Group A scoring higher than Group B. After the intervention, Group A ($M = 143.08$, $SD = 15.42$) scored lower than Group B ($M = 145.85$, $SD = 21.84$). Wilks's Lambda test showed that time did not have an effect on OPC, $\Lambda = 1.00$, $F(1, 26) = .01$, $p =$ n.s. The test of between-subject effects also showed a nonsignificant difference between the groups, $F(1, 26) = .01$, n.s. The results from the repeated measures ANOVA for both OPC and organizational creativity indicated that project teams working within an organizational playfulness climate were not more creative than project teams operating in organizational climates

not rooted in playfulness. Hypothesis $H_0$2 was fully supported and hypothesis $H_a$2 was fully rejected.

Hypothesis $H_a$3 stated that leaders' endorsement of idiosyncratic workplace fun and organizational playfulness climate predicted organizational creativity. To test whether LEIWF and OPC predicted organizational creativity individually, I performed a bivariate linear regression analysis for Group A and Group B after the intervention. To test whether LEIWF and OPC predicted organizational creativity collectively, I performed a multiple regression analysis for Group A and Group B after the intervention.

In the bivariate regression analysis, I used a fixed-effects model, as the study was quasi-experimental (Green & Salkind, 2014). The regression equation is $Y = B_{slope}X + B_{constant}$, where $Y$ is the dependent variable, $X$ is the independent variable, $B_{slope}$ is a slope weight for the independent variable, and $B_{constant}$ is an additive constant. Three assumptions had to be considered for the fixed-effects model. First, the dependent variable had to be normally distributed in the population for each level of the independent variable. This assumption was met for LEIWF during the repeated measures ANOVA analysis. Second, the population variances of the dependent variable had to be the same for all levels of the independent variable. Third, the cases had to represent a random sample from the population, with independent scores from one case to another.

Based on the coefficients in Table 4, the linear regression equation for predicting organizational creativity in Group A is:

$$\text{organizational creativity}_{(\text{Group A})} = .729\text{LEIWF} + 12.389$$

Although the positive *b*-value of LEIWF indicated that the more leaders endorsed idiosyncratic workplace fun, the higher the organizational creativity, the 95% confidence interval for the slope, -.237 to 1.694 contains the value of zero, indicating that LEIWF did not predict organizational creativity in Group A. The correlation between LEIWF and organizational creativity was positive but nonsignificant, $r = .524$, n.s., with LEIWF accounting for 27.5% of the variance in organizational creativity.

Table 4

*Linear Regression Coefficients[a] for Group A (LEIWF)*

| | | *Unstandardized Coefficients* | | *Standardized Coefficients* | | | *95.0% Confidence Interval for B* | |
|---|---|---|---|---|---|---|---|---|
| Model | | *B* | *Std. Error* | *Beta* | *t* | *Sig.* | *Lower Bound* | *Upper Bound* |
| 1 | (Constant) | 12.389 | 11.691 | | 1.060 | .320 | -14.571 | 39.349 |
| | LEIWF | .729 | .419 | .524 | 1.740 | .120 | -.237 | 1.694 |

a. Dependent Variable: Organizational creativity

Based on the coefficients in Table 5, the linear regression equation for predicting organizational creativity in Group B is:

$$\text{organizational creativity}_{(\text{Group B})} = .215\text{LEIWF} + 32.407$$

The 95% confidence interval for the slope, -.990 to 1.421 contains the value of zero, indicating that LEIWF did not predict organizational creativity in Group B. The correlation between LEIWF and organizational creativity was positive but nonsignificant, $r = .13$, n.s., with LEIWF accounting for 1.8% of the variance in organizational creativity.

Table 5

*Linear Regression Coefficients*[a] *for Group B (LEIWF)*

| | | *Unstandardized Coefficients* | | *Standardized Coefficients* | | | *95.0% Confidence Interval for B* | |
|---|---|---|---|---|---|---|---|---|
| Model | | *B* | *Std. Error* | *Beta* | *t* | *Sig.* | *Lower Bound* | *Upper Bound* |
| 1 | (Constant) | 32.407 | 15.323 | | 2.115 | .064 | -2.255 | 67.069 |
| | LEIWF | .215 | .533 | .134 | .404 | .695 | -.990 | 1.421 |

a. Dependent Variable: Organizational creativity

Based on the bivariate linear regression results for Group A and Group B, hypothesis $H_0$3 was partially confirmed and hypothesis $H_a$3 was partially refuted. To test whether organizational playfulness climate predicted organizational creativity individually, I performed a bivariate linear regression for Group A and Group B after the intervention. The linear regression equation for predicting organizational creativity in Group A based on the coefficients in Table 6 is:

$$\text{organizational creativity}_{(\text{Group A})} = .13\text{OPC} - 9.64$$

Although the positive *b*-value of OPC indicated that the more rooted in playfulness the organizational climate the higher the organizational creativity, the 95% confidence interval for the slope, -.033 to .293 contains the value of zero, indicating that OPC did not predict organizational creativity in Group A. The correlation between OPC and organizational creativity was positive but nonsignificant, $r = .43$, n.s., with OPC accounting for 18.7% of the variance in organizational creativity.

Table 6

*Linear Regression Coefficients*[a] *for Group A (OPC)*

| | | *Unstandardized Coefficients* | | *Standardized Coefficients* | | | *95.0% Confidence Interval for B* | |
|---|---|---|---|---|---|---|---|---|
| Model | | *B* | *Std. Error* | *Beta* | *t* | *Sig.* | *Lower Bound* | *Upper Bound* |
| 1 | (Constant) | -9.640 | 10.850 | | -.888 | .390 | -33.079 | 13.799 |
| | OPC | .130 | .075 | .432 | 1.727 | .108 | -.033 | .293 |

a. Dependent Variable: Organizational creativity

The linear regression equation for predicting organizational creativity in Group B based on the coefficients in Table 7 is:

$$\text{organizational creativity}_{(\text{Group B})} = -.06\text{OPC} + 16.27$$

The negative b-value indicates that the more rooted in playfulness the organizational climate, the lower the organizational creativity. The 95% confidence interval for the slope, -.109 to -.007, does not contain the value of zero, suggesting that OPC predicted organizational creativity in Group B. The correlation between OPC and organizational creativity was negative and significant, $r = -.58$, $p < .05$, with OPC accounting for 34.2% of the variance in organizational creativity.

Table 7

*Linear Regression Coefficients*[a] *for Group B (OPC)*

| | | *Unstandardized Coefficients* | | *Standardized Coefficients* | | | *95.0% Confidence Interval for B* | |
|---|---|---|---|---|---|---|---|---|
| Model | | *B* | *Std. Error* | *Beta* | *t* | *Sig.* | *Lower Bound* | *Upper Bound* |
| 1 | (Constant) | 16.269 | 3.436 | | 4.734 | .000 | 8.782 | 23.756 |
| | OPC | - .058 | .023 | -.584 | -2.495 | .028 | -.109 | -.007 |

a. Dependent Variable: Organizational creativity

Based on the bivariate linear regression results for Group A and Group B, hypothesis $H_0 3$ was partially supported and hypothesis $H_a 3$ was partially rejected. To test

whether leaders' endorsement of idiosyncratic workplace fun and organizational playfulness climate predicted organizational creativity collectively, I performed a hierarchical multiple regression analysis with block entry. A hierarchical regression with two levels was used because the variables were selected based on prior research. The control variables were entered in the first block, while the independent variables were entered in the second block.

Three assumptions for the fixed-effects model were considered: the dependent variable was normally distributed in the population for each combination of levels of the independent variables; the population variances of the dependent variable were the same for all combinations of levels of the independent variables; the cases represented a random sample from the population and their scores were independent of each other (Green & Salkind, 2014). Since the study has two independent variables and one dependent variable, the regression equation is $Y = B_1X_1 + B_2X_2 + B_0$, where $Y$ is the score for the dependent variable, $B_1$ and $B_2$ are partial slopes for the two independent variables $X_1$ and $X_2$, and $B_0$ is an additive constant. Due to the small sample size, the squared multiple correlation $R^2$ shows bias (Green & Salkind, 2014), which necessitated the reporting of $R^2_{adj}$.

The model summary in Table 8 indicated a positive correlation between the control and the independent variables and the dependent variable (Model 2), $R = .589$. The control variables explained 18% of the variance in organizational creativity, $R^2_{adj} = .181$. With the addition of the two independence variables in the model, the explained

variance in organizational creativity dropped to 12%, $R^2_{adj}$ = .118. The increase of $R^2_{adj}$ from zero to .118 yielded an *F*-ratio of .215, which was nonsignificant.

Table 8

*Model Summary*

| | | | | | Change Statistics | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Model | *R* | $R^2$ | $R^2_{adj}$ | *Std. Error of the Estimate* | $R^2$ *Change* | *F Change* | *df1* | *df2* | *Sig. F Change* |
| 1 | .577[a] | .333 | .181 | 5.639 | .333 | 2.194 | 5 | 22 | .092 |
| 2 | .589[b] | .347 | .118 | 5.851 | .014 | .215 | 2 | 20 | .808 |

a. Predictors: (Constant), CreativeCo, Gender, Race, Tenure, Age
b. Predictors: (Constant), CreativeCo, Gender, Race, Tenure, Age, LEIWF, OPC

Shown in Table 9 is an ANOVA, which tested whether Model 2 was significantly better at predicting the dependent variable than using the mean as a best guess. Results showed that Model 2 was not significantly better at predicting the dependent variable than using the mean, $F(6, 27) = 1.517$, n.s.

Table 9

*ANOVA*[a]

| Model | | *Sum of Squares* | *df* | *Mean Square* | *F* | *Sig.* |
|---|---|---|---|---|---|---|
| 1 | Regression | 348.882 | 5 | 69.776 | 2.194 | .092[b] |
| | Residual | 699.609 | 22 | 31.800 | | |
| | Total | 1048.491 | 27 | | | |
| 2 | Regression | 363.614 | 7 | 51.945 | 1.517 | .218[c] |
| | Residual | 684.876 | 20 | 34.244 | | |
| | Total | 1048.491 | 27 | | | |

a. Dependent Variable: Organizational Creativity
b. Predictors: (Constant), CreativeCo, Gender, Race, Tenure, Age
c. Predictors: (Constant), CreativeCo, Gender, Race, Tenure, Age, LEIWF, OPC

Table 10 shows the model parameters (i.e., *b*-values). Based on the *b*-values, the multiple regression model can be expressed as:

organizational creativity = -2.388age – 3.092gender + 5.568race - .558tenure

+ .661creativeco -.043LEIWF + .045OPC + 14.760

The negative *b*-value of LEIWF indicates that the more leaders endorse idiosyncratic workplace fun, the lower the organizational creativity, but the result is not statistically significant. The positive *b*-value of OPC indicates that the more rooted in playfulness the organizational climate, the higher the organizational creativity, but the result is not statistically significant. The values of the standardized $\beta$ coefficient suggest that LEIWF is the least important predictor of organizational creativity ($\beta$ = -.018), while OPC is the third least important predictor of organizational creativity ($\beta$ = .133). These findings suggest that, collectively, LEIWF and OPC, do not predict organizational creativity. Hypothesis $H_0$3 was fully confirmed, while hypothesis $H_a$3 was fully rejected.

Table 10

*Multiple Regression Coefficients*[a]

| Model | | *Unstandardized Coefficients* | | *Standardized Coefficients* | | | *95% Confidence Interval for B* | | *Correlations* | | | *Collinearity Statistics* | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | *B* | *Std. Error* | *Beta* | *t* | *Sig.* | *Lower Bound* | *Upper Bound* | *Zero-order* | *Partial* | *Part* | *Tolerance* | *VIF* |
| 1 | (Constant) | 20.188 | 7.034 | | 2.870 | .009 | 5.601 | 34.775 | | | | | |
| | Age | -2.203 | 1.059 | -.480 | -2.080 | .049 | -4.399 | -.007 | -.451 | -.405 | -.362 | .570 | 1.753 |
| | Gender | -2.650 | 2.197 | -.217 | -1.206 | .241 | -7.206 | 1.907 | -.221 | -.249 | -.210 | ..941 | 1.063 |
| | Race | 4.599 | 4.116 | .232 | 1.117 | .276 | -3.937 | 13.135 | -.061 | .232 | .195 | .701 | 1.427 |
| | Tenure | -.713 | .813 | -.184 | -.878 | .389 | -2.399 | .972 | -.418 | -.184 | -.153 | .687 | 1.456 |
| | CreativeCo | .431 | 3.013 | .027 | .143 | .887 | -5.817 | 6.680 | .196 | .031 | .025 | .853 | 1.173 |
| 2 | (Constant) | 14.760 | 15.142 | | .975 | .341 | -16.826 | 46.346 | | | | | |
| | Age | -2.388 | 1.167 | -.520 | -2.046 | .054 | -4.823 | .047 | -.451 | -.416 | -.370 | .506 | 1.978 |
| | Gender | -3.092 | 2.442 | -.253 | -1.266 | .220 | -8.185 | 2.001 | -.221 | -.272 | -.229 | .821 | 1.219 |
| | Race | 5.368 | 4.440 | .271 | 1.209 | .241 | -3.894 | 14.630 | -.061 | .261 | .218 | .648 | 1.542 |
| | Tenure | -.558 | .880 | -.144 | -.633 | .534 | -2.394 | 1.279 | -.418 | -.140 | -.114 | .630 | 1.587 |
| | CreativeCo | .661 | 3.206 | .041 | .206 | .839 | -6.026 | 7.348 | .196 | .046 | .037 | .811 | 1.233 |
| | LEIWF | -.043 | .467 | -.018 | -.092 | .927 | -1.018 | .932 | -.095 | -.021 | -.017 | .828 | 1.208 |
| | OPC | .045 | .068 | .133 | .654 | .520 | -.097 | .186 | .019 | .145 | .118 | .792 | 1.263 |

a. Dependent Variable: Organizational Creativity

To further explore the relationships between the LEIWF, OPC, and organizational creativity beyond the advanced hypotheses, I explored the moderating and mediating effect of OPC on the relationship between LEIWF and organizational creativity. Prior studies have shown that due to their multi-dimensional composition, organizational climates tend to moderate (Khalili, 2016; Khattak et al., 2017; Shih et al., 2014) and mediate (Yoshida et al., 2014) the relationship between leadership dimensions and creativity, both on individual and team level. Using *PROCESS* for SPSS, the results of the moderation analysis for Group A at posttest are shown in Table 11.

Table 11

*Moderation Coefficients*

| | | | | | | *95% Confidence Interval* | |
|---|---|---|---|---|---|---|---|
| Model | | *B* | *Std. Error* | *t* | *Sig.* | *Lower* | *Upper* |
| 1 | (Constant) | 10.197 | 1.661 | 6.138 | .000 | 6.494 | 13.900 |
| | OPC | .196 | .366 | .537 | .603 | -.618 | 1.011 |
| | LEIWF | 2.591 | 1.546 | 1.676 | .125 | -.855 | 6.037 |
| | interaction | .281 | .406 | .694 | .503 | -.623 | 1.187 |

The interaction effect was nonsignificant, $b = .281$, 95% CI [-.623, 1.187], $t = .694$, n.s., indicating that the relationship between LEIWF and organizational creativity was not moderated by OPC. Mediation analysis in *PROCESS* for SPSS revealed that there was a nonsignificant indirect effect of LEIWF on organizational creativity through OPC, $b = 1.340$, BCa CI [.-1.604, 5.521], indicating the OPC did not mediate the relationship between LEIWF and organizational creativity.

## Summary

The three research questions that prompted this research study aimed to explain how leaders' endorsement of idiosyncratic workplace fun (RQ1) and organizational

playfulness climate (RQ2) related to organizational creativity, and whether LEIWF and OPC predicted organizational creativity, both individually and collectively (RQ3). Based on the study's findings, LEIWF and OPC did not relate significantly to organizational creativity. Project teams with leaders who endorsed idiosyncratic workplace fun were not more creative than project teams with leaders who did not endorse idiosyncratic workplace fun. Project teams working in organizational climates rooted in playfulness were not more creative than project teams working in organizational climates not rooted in playfulness. LEIWF and OPC did not predict organizational creativity individually and collectively. Beyond the research questions, OPC neither moderated nor mediated the relationship between LEIWF and organizational creativity.

These findings contradicted recent studies that explored the relationships between supportive leadership behaviors, organizational climates, and team and organizational creativity. The next chapter contains interpretations of the current study's findings relative to the findings of prior studies, as well as the theoretical foundation and conceptual framework of the study. I also discuss limitations of the study, give recommendations for improving the study should it be replicated in the future, articulate theoretical and methodological implications, and draw conclusions.

# Chapter 5: Discussion, Conclusions, and Recommendations

In this study, I aimed to provide empirical support to the anecdotal evidence of the positive influence of workplace fun and organizational playfulness climate on organizational creativity. The quantitative quasi-experimental nature of the study met the requirements for rigor and objectivity needed in the investigation of the relationships between the variables. The presence of gaps in recent research on workplace fun, organizational playfulness climate, and organizational creativity spurred this investigation. While the concept of idiosyncratic workplace fun had never been studied, organizational playfulness climate had never been related to organizational creativity.

The study's findings suggested that leaders' endorsement of idiosyncratic workplace fun and organizational playfulness climate did not relate significantly to organizational creativity. Project teams with leaders who endorsed idiosyncratic workplace fun and operated within a climate steeped in playfulness were not more creative than project teams that lacked these two contextual influences. The findings indicated that LEIWF and OPC did not predict organizational creativity.

## Interpretation of Findings

Management scholars conducting research on workplace fun agree on the positive influence of workplace fun on a host of organizational outcomes. Job satisfaction (Chan & Mak, 2016), employee engagement (Becker & Tews, 2016), turnover (Tews et al., 2013), team performance (Lehmann-Willenbrock & Allen, 2014), and employees' performance (Fluegge-Wolf, 2014) are some of the organizational outcomes positively impacted by the presence of workplace fun at business organizations. Based on this

evidence, it was expected that leaders' endorsement of idiosyncratic workplace fun would be related positively to organizational creativity.

Prior research on leadership styles and dimensions and their relationship with employee creativity (Henker, Sonnentag, & Unger, 2015), team creativity (Bai, Lin, & Li, 2016), and organizational creativity (Yoon et al., 2016) also suggested that leaders' support of workplace fun would positively impact organizational creativity. The autonomous nature of idiosyncratic workplace fun aligned with self-determination theory (Deci & Ryan, 2008) and was expected to intrinsically motivate team members, elevate their energy level, increase their positive affect, and lead to creative behaviors. Woodman et al.'s (1993) interactionist theory of organizational creativity suggested that the interaction of leaders with their teams through leaders' endorsement of idiosyncratic workplace fun and the interaction of employees' workplace attitudes while having fun with their work would positively influence organizational creativity.

The results of this study diverged from these theoretical propositions and empirical findings. Leaders' endorsement of idiosyncratic workplace fun correlated negatively, but not significantly, to organizational creativity. Compared to the control group (Group B), the project teams in Group A, led by leaders who endorsed idiosyncratic workplace fun, did not significantly differ in their creativity. In fact, the creativity of both groups decreased after the intervention. The endorsement of idiosyncratic workplace fun by team leaders did not individually predict organizational creativity.

A possible explanation of these divergent findings is that team members did not trust their leaders when they endorsed idiosyncratic workplace fun. As Chan and Mak (2016) showed, the positive relationship between workplace fun and trust-in-management was stronger when employees experienced high level of fun at work. This suggests that workplace fun has to exist to some degree at organizations in order for employees' trust of management to get stronger with high levels of workplace fun.

If the participating project teams in this study did not experience workplace fun prior to this study, then when team leaders started endorsing idiosyncratic workplace fun, the team members might have perceived the endorsement as a pretext for some other goal sought by management. This explanation is supported by Plester et al. (2015), who found that when workplace fun and management mixed, employees experienced negative emotions. Prior research has shown that positive affect, not negative affect, mediates the relationship between leadership and creativity (Rego, Sousa, Marques, & Cuhna, 2014).

At the other end of the workplace fun spectrum, it is possible that, due to the small size of the project teams and the high average employee tenure (i.e., 14 years), the team members in Group A and Group B experienced high levels of psychological safety and already enacted idiosyncratic workplace fun behaviors at work. Spraggon and Bodolica (2017) theorized that the greater the corporate climate for psychological safety, the higher the likelihood of employees to engage in social ludic activities (SLAs). Because SLAs involve interactions with other employees, there might have been a misunderstanding among team members about the nature of idiosyncratic workplace fun and how it differed from other playful and workplace fun activities.

The second independent variable, organizational playfulness climate, correlated positively to organizational creativity, but the correlation was not statistically significant. Although the teams in Group A operated in an organizational climate grounded in playfulness as their leaders endorsed idiosyncratic workplace fun, these teams were not more creative than the teams in Group B that operated within the status quo organizational climate of their company. Counter to expectations, the teams in Group A experienced weaker OPC than the teams in Group B after the intervention. The presence of OPC at companies did not individually predict organizational creativity.

These findings stand in contrast to the perception of 82.1% of the team members in the sample who indicated at pretest that they worked for a creative company. If that was the case, the team members should have already experienced some form of play at work, as organizational play is an integral part of most creative companies (Kelley & Kelley, 2013). Teams at creative companies have enabling dynamics and are often flexible and empowered and exhibit playfulness and humor (Rosso, 2014). According to Bateson and Nettle (2014), people who think of themselves as playful also think that they are creative. Although individuals can be playful without being creative, they can rarely be creative without being playful (Henricks, 2015).

The results of this study deviate from the findings by Yu et al. (2007), who found that organizational playfulness climate related positively to creativity (expressed as innovative behavior). Given that the study by Yu et al. is the only prior study that examined the relationship between OPC and creativity in organizational settings, there is not enough empirical research to draw meaningful comparisons between this study's

findings and prior research. The dearth of prior research on OPC was a key reason for including OPC as an independent variable in this study. It should be noted that while Yu et al. examined the impact of OPC on an individual-level variable, the focus in this study was on the influence of OPC on an organizational-level variable (i.e., organizational creativity). Prior studies on the effect of domain-specific climates on innovative and creative organizational outcomes have indicated that the influence of domain-specific climates, such as OPC, is often indirect and needs to be translated via mediating or moderating variables (Hirst et al., 2018; Kang et al., 2016; Zhu et al., 2018).

Another possible explanation of why OPC was not significantly related to organizational creativity is that, conceptually, having idiosyncratic workplace fun is different than being playful at work. Engaging in idiosyncratic workplace fun could include activities, such as reading a book or standing on one's head, that might not be considered playful by employees and not contribute to an organizational playfulness climate. According to play theory, playfulness is a defining feature of play and is expressed as a positive mood state, which may not be easily detectable in observable behavior (Bateson, 2014).

Playfulness is also related to extraversion and is comprised of four playfulness dimensions in adults: gregarious, uninhibited, comedic, and dynamic (Barnett, 2012). If most team members in Group A did not embody these characteristics, their behaviors would not contribute to the establishment of an organizational playfulness climate and lead to increased organizational creativity. It is entirely possible that leaders' endorsement of idiosyncratic workplace fun did not contribute to the formation or

enhancement of an organizational playfulness climate, but instead contributed to other existing climates at the participating companies.

The divergence of this study's findings from previous research and theory can be attributed to many factors. The duration of the intervention period might not have been long enough for the teams in Group A to engage in playful behaviors as a result of team leaders' endorsement of idiosyncratic workplace fun. It takes time for the ethos of play to override the ethos of management (Costea et al., 2007), especially because individual and organizational actions are justified in terms of means and ends, while playfulness and fun are viewed as antithetical to that model (March, 1979). Most people require priming by mechanical signals or cues, so that they shift into play consciousness (Csikszentmihalyi & Bennett, 1971).

Taken together, LEIWF and OPC did not predict organizational creativity. Along with working at a creative company, the two independent variables were among the three least important predictors of organizational creativity, compared to control variables age, gender, race, and tenure. As suggested by the complexity-based theory of organizational creativity, business companies are complex adaptive systems, oscillating between stability and instability (Stacey, 1996). Both LEIWF and OPC represent sources of organizational instability and push the organization toward the edge of chaos where creativity happens. Collectively present at the participating companies in this study, LEIWF and OPC most likely clashed with the dominant organizational schemas at each company and evoked negative feedback.

Recent research by Caniels et al. (2014) demonstrated this inherent organizational complexity by discovering that different types of antecedents were required in each of the three phases of the creative process: idea generation, idea promotion, and idea implementation. These phases are consonant with the three components of team creativity (i.e., creative thinking, creative action, and team creative outcome) proposed by Jiang and Zhang (2014). The joint presence of LEIWF and OPC within the project teams in Group A might have been spread among the three phases, such that the influence of LEIWF and OPC on organizational creativity as a unitary construct was diluted and not strong enough to make a significant impact.

Viewed through the perspective of the general contingency theory of management (Luthans & Stewart, 1977), the study's findings suggest that organizational creativity is not a function of leaders' endorsement of idiosyncratic workplace fun and organizational playfulness climate. The equation $OC = f(LEIWF \times OPC)$ is not valid. The primary leadership variable LEIWF and the secondary environmental variable OPC do not interact and influence the tertiary performance variable organizational creativity. The misalignment between the study's findings and the study's underlying theoretical foundation and conceptual framework raises questions about the limitations of the study.

## Limitations of the Study

The current study had several strengths. The longitudinal quasi-experimental design used in the study aimed at discovering not only correlations between the variables, but also the causal links between LEIWF, OPC, and organizational creativity. The multilevel nature of the study (i.e., individual-level and team-level variables impacting

organizational-level outcome) aligned with the conceptual complexity of the variables and the reported multilevel influence of similar constructs on organizational outcomes. The study introduced idiosyncratic workplace fun as a new type of workplace fun and was the first study to test the influence on LEIWF on organizational creativity. The study was also the first U.S. study to test the effect of organizational playfulness climate on organizational creativity.

Despite these strengths, the nonsignificant findings in the study stemmed from several limitations. I did not have adequate financial resources and time to conduct the study as initially planned. The small sample size, the short intervention duration, the inclusion of project teams with less than four members, the use of purposive sampling, and the use of a quantitative research methodology and design reflect this resource-based limitation.

While the pre-hoc sample size of 66 teams was estimated for 80% power and effect size .40, a sample size of seven project teams resulted in a severely underpowered study and effect size close to zero. Such outcomes are consonant with statistical theory on the deteriorating effect of small sample sizes on statistical power (Anderson, Kelley, & Maxwell, 2017; Fraley & Vazire, 2014; Greenland et al., 2016). The small sample size led to biased values of the intraclass correlation coefficients ICC(1) and ICC(2) in both experimental groups. The small sample size necessitated a top-down distribution of organizational creativity scores instead of bottom-up aggregation of individual scores as the study's initial level of analysis was the group.

The instrument that I used to measure LEIWF presented another limitation in the study. Although the Leaders' Endorsement of Idiosyncratic Workplace Fun Scale is based on the highly validated Fun Climate Measure by McDowell (2004), its trustworthiness is questionable. Despite adequate factor loadings of the seven scale items and acceptable Cronbach's alpha, the scale needs further validation for construct and discriminant validity. A related limitation was the use of a team creativity instrument that did not account for environmental influences to measure organizational creativity. In terms of the intervention procedures, the absence of a manipulation check to verify whether leaders actually endorsed idiosyncratic workplace fun limits the validity of the obtained data.

The generalizability of the study across industries and organizational contexts is limited by the participation in the study of companies located only in Portland, Oregon, and Seattle, Washington, most of which were perceived as creative companies by their employees. The skewed mix of creative versus noncreative companies did not represent the diversity of companies in the marketplace. Northwestern United States is culturally different than other parts of the country and the rest of the world, which limits the relevance of the study's findings to companies in other geographical areas.

## Recommendations

The complexity of organizational creativity as a concept necessitates the use of a research methodology and design that can account for that complexity when examining relationships between organizational creativity and other concepts. The use of a quasi-experimental design and quantitative methodology in this study did not allow for a

comprehensive examination of the relationships between the variables. Future studies investigating the relationships between LEIWF, OPC, and organizational creativity should employ a mixed method research methodology, whereby both qualitative and quantitative research designs are used concurrently to answer the research questions (Morse, 2018).

As research designs accounting for conceptual complexity require more time to complete, future studies investigating the relationships between LEIWF, OPC, and organizational creativity should be conducted with sufficient human and financial resources. Well-funded future studies should first validate the LEIWF Scale and develop an organizational creativity instrument that accounts for the complexity of the organizational creativity concept prior to replicating the current study. The instruments used to measure organizational creativity in recent studies have been limited, as they have included three survey items (Guistiniano et al., 2016; Park et al., 2014) and six survey items (Hussain et al., 2017).

Sufficient resources will allow future studies a wider access to project teams at companies across industries and geographical areas. Access to project teams at companies presented the biggest challenge in this study. Several Chambers of Commerce contacted during the recruitment period refused to provide the contact information of their company members unless they got paid for supplying the information. The ample resources of future quantitative or mixed method studies on organizational creativity will allow them to widen the sampling frame, increase the sample size, improve statistical power, and result in statistically significant findings.

Qualitatively, researchers can examine in interviews and focus groups the three levels of creativity at companies (i.e., individual, group, and organizational) and how they converge to produce a holistic picture of organizational creativity at organizations. Individual, group, and organizational dimensions not captured by quantitative instruments can be brought to light in interviews and added to the model used to understand the relationships between LEIWF, OPC, and organizational creativity. For example, the interaction of organizational play and organizational climate is difficult to measure comprehensively with quantitative instruments due to the multidimensionality of the constructs, but could be uncovered in a phenomenological study.

On an individual level, the adoption of idiosyncratic workplace fun depends on each employee's degree of individual playfulness (Bateson, 2014). This, in turn, informs employees' comfort in and perception of the organizational climate facilitated by the adoption or rejection of idiosyncratic workplace fun. Future research should aim to capture such consequential nuances.

Experimental and quasi-experimental studies probing the relationships between LEIWF, OPC, and organizational creativity in the future should extend the intervention period, so that project teams have more time to adopt idiosyncratic workplace fun and settle into the organizational playfulness climate that might emerge as a result. Intervention periods longer than a month will allow project teams to discover the conditions under which idiosyncratic workplace fun is appropriate at work and how it fits within the operational model of the company. Future longitudinal studies with large

samples could uncover causal links between LEIWF, OPC, and organizational creativity and the boundary conditions under which the relationships work.

The usefulness of these recommendations depends to a large degree on the relevance of the relationships between LEIWF, OPC, and organizational creativity across cultural contexts. The fact that employees at some companies and industries in Taiwan (Yu et al., 2007), United States (Bock, 2015), and Denmark (Sorensen & Spoelstra, 2012) can play, have fun at work, and be creative does not mean that employees in other countries enjoy such workplace benefits and work in such environments. Future studies should explore where leaders can endorse idiosyncratic workplace fun, where playfulness at work is appropriate, and where the mix of idiosyncratic workplace fun, organizational playfulness climate, and organizational creativity is most beneficial.

## Implications

The nonsignificant results in this study preclude any implications to positive social change stemming directly from the findings. The study must be replicated with a larger sample size and significant findings must be obtained before any implications for positive social change are drawn. As a small sample size increases the likelihood of a Type II error (Greenland et al., 2016) the study's results should be viewed only as indicators of possible relationships between LEIWF, OPC, and organizational creativity. For example, the nonsignificant but high *b* values of leaders' endorsement of idiosyncratic workplace fun in Group A and Group B in the bivariate regression test suggest that LEIWF might be a strong predictor organizational creativity under different conditions. The weak and negative *b* values of organizational playfulness climate in both

groups in the bivariate regression test suggest that OPC might be a weak or negative predictor of organizational creativity.

The confirmation of these suggestive results across companies, industries, and geographical areas could mean that idiosyncratic workplace fun might be a valid type of workplace fun that is valued by project team leaders and members as it leads to higher organizational creativity. The multi-level influence of LEIWF could make it a desired organizational component at companies, on which society depends for the solving of its most pressing problems. The presence of an organizational climate rooted in playfulness and leisure could indicate to project team leaders and members that the conditions are right for organizational creativity. It is possible that individual employees could accrue the benefits of play and relaxation at work while the benefits of OPC for teams and the organization remain either minimal or negative. When OPC is prioritized at companies, however, play and playfulness could become vital for employees and begin to influence employees' lives outside of work. This could lead to a positive cultural shift in our society, as outdated notions of the nature of work and our relationship to it are replaced by new work-life models that integrate work seamlessly into people's lives through play, positive effect, imagination, and constant creativity.

The methodological implications of the study's findings relate to the research methodology and designs used in management studies to examine the relationships between complex phenomena. This study is an example of a robustly designed but underpowered management study, grounded in a less than ideal methodology. When too many parameters in a management study are compromised, the study's findings reflect

these shortcomings. This study's procedures and results highlight the fragility management studies and the importance of using rigorous research designs and methodology in investigating complex relationships in management science.

The theoretical implications of the results, as they relate to leadership theory, workplace fun theory, and organizational creativity theory, are insignificant. It can be proposed, however, that LEIWF might be a type of leaders' support distinct from the individualized support provided by transformational leaders and the support employees receive from various organizational components, such as information system design (Olszak et al., 2018) and workplace relationships (Colbert, Bono, & Purvanova, 2016). The confirmation of idiosyncratic workplace fun as a fourth type of workplace fun would extend the current understanding of how employees could have fun at work and add an important dimension to the concept of workplace fun.

While both LEIWF and OPC push companies to the edge of chaos, OPC might be too destabilizing for organizations. This suggests the existence of a continuum of destabilizing organizational influences, some of which might not contribute to or adversely affect organizational creativity. Such knowledge would enhance organizational play theory and the complexity-based theory of organizational creativity.

The implications for practice stemming from the study's findings pertain to the enactment of idiosyncratic workplace fun by employees and the emergence of organizational playfulness climate and organizational creativity at organizations. These processes depend to a large degree on leaders' modeling idiosyncratic workplace fun and playfulness, so that team members can identify with such behaviors, feel safe in

incorporating idiosyncratic workplace fun in their daily routine, and express their playfulness at work. Recent research by Qu, Janssen, and Shi (2015) found that follower relational identification with the leader mediated the positive relationship between transformational leadership and follower creativity.

LEIWF and OPC might have significant effects on organizational creativity if employees understood that idiosyncratic fun and being playful at work were allowed from the first day of their employment at a company. Such an understanding would most likely engender an organizational climate grounded in playfulness and spur creativity across organizational levels. When team leaders and team members express themselves freely at work through fun and play, their emotional needs would be met and the likelihood of their giving their very best to the organization would increase.

## Conclusions

Questions about the purpose of life have intrigued people for centuries. Since the Industrial Revolution, questions about the purpose of companies have captivated business leaders and managers. While Samuelson and Nordhaus (2009) asserted that the purpose of companies and individuals was to maximize either profits or utility, Csikszentmihalyi (1996) stated that the main purpose of life was to create. Kaufman and Gregoire (2016) confirmed Csikszentmihalyi's perspective by showing that the human brain was wired to create. Eagleman and Brandt (2017) further theorized that *Homo sapiens* became the runaway species because of their ability to create.

This study originated from anecdotal evidence about the positive effect of workplace fun and organizational playfulness climate on organizational creativity. To

test this thesis, I designed a quasi-experimental quantitative study and investigated the effects of leaders' endorsement of idiosyncratic workplace fun and organizational playfulness climate on organizational creativity. The study took place at companies in the northwestern United States with a sample of 7 intact project teams.

Due to the small sample size, low statistical power, and possible Type II errors, the study produced nonsignificant results. The findings contradicted extant leadership research, organizational climate research, creativity research, and workplace fun research that reported positive and significant relationships between workplace fun, domain-specific climates, and organizational creativity. The limitations of the study notwithstanding, the findings suggest that adequately powered replication studies might demonstrate that companies could thrive creatively when leaders support followers' need satisfaction and their pursuit of better work environments through fun and play.

Employees' need for full emotional expression at work has become a necessity and should not be negated by leaders and organizational structures (Van Kleef, van den Berg, & Heerdink, 2015). The link between play and creativity is undeniable (Silverman, 2016). By adopting a fun-based or play-based operational model, business organizations could change the work lives of their employees, reinvent themselves through creativity, and transform human society for the better.

References

Akgun, A. E., Keskin, H., & Byrne, J. C. (2014). Complex adaptive systems theory and firm product innovativeness. *Journal of Engineering and Technology Management, 31*(1), 21-42. doi:10.1016/j.jengtecman.2013.09.003.

Amabile, T. M. (1996). *Creativity in context*. Boulder, CO: Westview Press, Inc.

Anderson, M. H., & Sun, P. Y. T. (2017). Revewing leadership styles: Overlap and the need for a new 'full-range' theory. *International Journal of Management Reviews, 19*(1), 76-96. doi:10.1111/ijmr.12082.

Anderson, S. F., Kelley, K., & Maxwell, S. E. (2017). Sample-size planning for more accurate statistical power: A method adjusting sample effect sizes for publication bias and uncertainty. *Psychological Science, 28*(11), 1547-1562. doi:10.1177/0956797617723724.

Anitha, J. (2014). Determinants of employee engagement and their impact on employee performance. *International Journal of Productivity and Performance Management, 63*(3), 308-323. doi:10.1108/IJPPM-01-2013-0008.

Argyris, C. (1974). Personality vs. organization. *Organizational Dynamics, 3*(2), 2-17. doi:10.1016/0090-2616(74)90006-0.

Baer, J. (2012). Domain specificity and the limits of creativity theory. *Journal of Creative Behavior, 46*(1), 16-29. doi:10.1002/jocb.002.

Bai, Y., Lin, L., & Li, P. P. (2016). How to enable employee creativity in a team context: A cross-level mediating process of transformational leadership. *Journal of Business Research, 69*(9), 3240-3250. doi:10.1016/j.jbusres.2016.02.025.

Baptiste, N. R. (2009). Fun and well-being: Insights from senior managers in a local authority. *Employee Relations, 31*(6), 600-612. doi:10.1108/01425450910991758.

Barnett, L. A. (2012). Playful people: Fun is in the mind of the beholder. *Imagination, Cognition and Personality, 31*(3), 169-197. doi:10.2190/IC.31.3.c.

Basu, R. (2016). Implication of organisational climate and team effectiveness on employee commitment - a study on Indian banks. *ASBM Journal of Management, 9*(1), 1-16. Retrieved from http://www.asbm.ac.in/asbmpublication.

Bateson, P. (2014). Play, playfulness, creativity and innovation. *Animal Behavior and Cognition, 1*(2), 99-112. doi:10.12966/abc.05.02.2014.

Bateson, P., & Nettle, D. (2014). Playfulness, ideas, and creativity: A survey. *Creativity Research Journal, 26*(2), 219-222. doi:10.1080/10400419.2014.901091.

Becker, F. W., & Tews, M. J. (2016). Fun activities at work: Do they matter to hospitality employees? *Journal of Human Resources in Hospitality & Tourism, 15*(3), 279-296. doi:10.1080/15332845.2016.1147938.

Bjorkdahl, J., & Borjesson, S. (2011). Organizational climate and capabilities for innovation: A study of nine forest-based Nordic manufacturing firms. *Scandinavian Journal of Forest Research, 26*, 488-500. doi:10.1080/02827581.2011.585997.

Bliese, P. D. (2000). Within-group agreement, nonindependence, and reliability: implications for data aggregation and analysis. In K. J. Klein & S. W. J. Kozlowski (Eds.), *Multilevel theory, research, and methods in organizations:*

*Foundations, extensions, and new directions* (pp. 349-381). San Francisco, CA: Jossey-Bass.

Blomberg, A. (2014). Organizational creativity diluted: A critical appraisal of discursive practices in academic research. *Journal of Organizational Change Management, 27*(6), 935-954. doi:10.1108/JOCM-12-2013-0252.

Bock, L. (2015). *Work rules!: Insights from inside Google that will transform how you live and lead*. New York, NY: Twelve.

Boies, K., Fiset, J., & Gill, H. (2015). Communication and trust are key: Unlocking the relationship between leadership and team performance and creativity. *The Leadership Quarterly, 26*(6), 1080-1094. doi:10.1016/j.leaqua.2015.07.007.

Bolton, S. C., & Houlihan, M. (2009). Are we having fun yet? A consideration of workplace fun and engagement. *Employee Relations, 31*(6), 556-568. doi:10.1108/01425450910991721.

Brandt, A., & Eagleman, D. (2017). *The runaway species*. Edinburgh, U.K.: Canongate Ltd.

Brauchli, R., Bauer, G. F., & Hammig, O. (2014). Job autonomy buffers the impact of work-life conflict on organizational outcomes: A large-scale cross-sectional study among employees in Switzerland. *Swiss Journal of Psychology, 73*(2), 77-86. doi:10.1024/1421-0185/a000126.

Butler, N., Olaison, L., Sliwa, M., Sorensen, B. M., & Spoelstra, S. (2011). Work, play and boredom. *Ephemera: Theory & Politics in Organization, 11*(4), 329-335. Retrieved from http://www.ephemerajournal.org/.

Cable, D. M. (2018). *Alive at work: The neuroscience of helping your people love what they do*. Cambridge, MA: Harvard Business Review Press.

Campbell, D. T., & Stanley, J. C. (1963). *Experimental and quasi-experimental designs for research*. Chicago, IL: Rand McNally.

Caniels, M. C. J., De Stobbeleir, K., & De Clippeleer, I. (2014). The antecedents of creativity revisited: A process perspective. *Creativity & Innovation Management, 23*(2), 96-110. doi:10.1111/caim.12051.

Carmeli, A., Dutton, J. E., & Hardin, A. E. (2015). Respect as an engine for new ideas: Linking respectful engagement, relational information processing and creativity among employees and teams. *Human Relations, 68*(6), 1021-1047. doi:10.1177/0018726714550256.

Caruana, E. J., Roman, M., Hernández-Sánchez, J., & Solli, P. (2015). Longitudinal studies. *Journal of Thoracic Disease, 7*(11), E537–E540. doi:10.3978/j.issn.2072-1439.2015.10.63.

Catmull, E. (2014). *Creativity, Inc.: Overcoming the unseen forces that stand in the way of true inspiration*. New York, NY: Random House.

Chamakiotis, P., Dekoninck, E. A., & Panteli, N. (2013). Factors influencing creativity in virtual design teams: An interplay between technology, teams and individuals. *Creativity & Innovation Management, 22*(3), 265-279. doi:10.1111/caim.12039.

Chan, D. (1998). Functional relations among constructs in the same content domain at different levels of analysis: A topology of composition models. *Journal of Applied Psychology, 83*(2), 234-246. doi:10.1037/0021-9010.83.2.234.

Chan, S. C. H., & Mak, W. (2016). Have you experienced fun in the workplace? An empirical study of workplace fun, trust-in-management and job satisfaction. *Journal of Chinese Human Resource Management, 7*(1), 27-38. doi:10.1108/JCHRM-03-2016-0002.

Chang, C. P., Hsu, C. T., & Chen, I. J. (2013). The relationship between the playfulness climate in the classroom and student creativity. *Quality & Quantity, 47*(3), 1493-1510. doi:10.1007/s11135-011-9603-1.

Change.org. (2014). *Rehire!*. Retrieved from http://www.change.org/p/bring-back-the-14-el-monte-lifeguards-rehire.

Chiang, Y., & Hung, K. (2014). Team control mode, workers' creativity, and new product innovativeness. *R&D Management, 44*(2), 124-136. doi:10.1111/radm.12044.

Clair, T. S., Cook, T. D., & Hallberg, K. (2014). Examining the internal validity and statistical precision of the comparative interupted time series design by comparison with a randomized experiment. *American Journal of Evaluation, 35*(3), 311-327. doi:10.1177/1098214014527337.

Coda, R., da Silva, D., & Custodio, I. (2015). Multidimensional configurations of the organizational climate construct. *International Journal of Human Resource Management, 26*(14), 1827-1847. doi:10.1080/09585192.2014.962561.

Coget, J., Shani, A. B., & Solari, L. (2014). The lone genius, or leaders who tyrannize their creative teams: An alternative to the "mothering" model of leadership and creativity. *Organizational Dynamics, 43*(2), 105-113. doi:10.1016/j.orgdyn.2014.03.004.

Colbert, A. E., Bono, J. E., & Purvanova, R. K. (2016). Flourishing via workplace relationships: Moving beyond instrumental support. *Academy of Management Journal, 59*(4), 1199-1223. doi:10.5465/amj.2014.0506.

Comm, J. (2018). *The fun formula: How curiosity, risk-taking, and serendipity can revolutionize how you work*. Nashville, TN: Thomas Nelson.

Costea, B., Crump, N., & Holm, J. (2007). The spectre of Dionysus: Play, work, and managerialism. *Society and Business Review, 2*(2), 153-165. doi:10.1108/17465680710757376.

Coyle-Shapiro, J. A., & Shore, L. M. (2007). The employee-organization relationship: Where do we go from here? *Human Resource Management Review, 17*(2), 166-179. doi:10.1016/j.hrmr.2007.03.008.

Cropanzano, R., & Mitchell, M. S. (2005). Social exchange theory: An interdisciplinary review. *Journal of Management, 31*(6), 874-900. doi:10.1177/0149206305279602.

Csikszentmihalyi, M. (1996). *Creativity*. New York, NY: HarperPerennial.

Csikszentmihalyi, M., & Bennett, S. (1971). An exploratory model of play. *American Anthropologist, 73*(1), 45-58. doi:10.1525/aa.1971.73.1.02a00040.

Dandridge, T. C. (1986). Ceremony as an integration of work and play. *Organization Studies, 7*(2), 159-170. doi:10.1177/017084068600700205.

Daniel, J. (2012). *Sampling essentials*. Thousand Oaks, CA: Sage Publications, Inc.

De Bono, E. (2015). *Serious creativity: How to be creative under pressure and turn ideas into action*. London, United Kingdom: Random House UK.

De Man, H. (1929). *Joy in work*. New York, NY: Holt.

Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry, 11*(4), 227-268. doi:10.1207/s15327965pli1104_01.

Deci, E. L., & Ryan, R. M. (2008). Self-determination theory: A macrotheory of human motivation, development, and health. *Canadian Psychology, 49*(3), 182-185. doi:10.1037/a0012801.

Del Mar, M. (2015). Must we play to win? A reply to Morgan. *Philosophy of the Social Sciences, 45*(2), 266-272. doi:10.1177/0048393114543988.

Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology, 86*(3), 499-512. doi:10.1037//0021-9010.86.3.499.

Denison, D. R. (1996). What is the difference between organizational culture and organizational climate? A native's point of view on a decade of pradigm wars. *Academy of Management Review, 21*(3), 619-654. doi:10.5465/amr.1996.9702100310.

Donaldson, S. I., Dollwet, M., & Rao, M. A. (2015). Happiness, excellence, and optimal human functioning revisited: Examining the peer-reviewed literature linked to positive psychology. *Journal of Positive Psychology, 10*(3), 185-195. doi:10.1080/17439760.2014.943801.

Dong, Y., Bartol, K. M., Zhang, Z., & Li, C. (2017). Enhancing employee creativity via individual skill development and team knowledge sharing: Influences of dual-

focused transformational leadership. *Journal of Organizational Behavior, 38*(3), 439-458. doi:10.1002/job.2134.

Dunne, T. C., Aaron, J. R., McDowell, W. C., Urban, D. J., & Geho, P. R. (2016). The impact of leadership on small business innovativeness. *Journal of Business Research, 69*(11), 4876-4881. doi:10.1016/j.jbusres.2016.04.046.

Evans, T. R., & Steptoe-Warren, G. (2015). Humor style clusters: Exploring managerial humor. *International Journal of Business Communication, online*, 1-12. doi:10.1177/2329488415612478.

Fainshmidt, S., & Frazier, M. L. (2017). What facilitates dynamic capabilities? The role of organizational climate for trust. *Long Range Planning, 50*(5), 550-566. doi:10.1016/j.lrp.2016.05.005.

Fiedler, F. (1967). *A theory of leadership effectiveness*. New York, NY: McGraw-Hill.

Fiedler, F. E. (1971). Validation and extension of the contingency model of leadership effectiveness: A review of empirical findings. *Psychological Bulletin, 76*(2), 128-148. doi:10.1037/h0031454.

Field, A. (2013). *Discovering statistics using IBM SPSS statistics* (4th ed.). London, United Kingdom: SAGE Publications Ltd.

Fischer, R., & Boer, D. (2011). What is more important for national well-being: Money or autonomy? A meta-analysis of well-being, burnout, and anxiety across 63 societies. *Journal of Personality and Social Psychology, 101*(1), 164-184. doi:10.1037/a0023663.

Fitzsimmons, S. R., & Stamper, C. L. (2014). How societal culture influences friction in the employee-organization relationship. *Human Resource Management Review, 24*(1), 80-94. doi:10.1016/j.hrmr.2013.07.001.

Fluegge-Woolf, E. R. (2014). Fun at work and job performance. *Management Research Review, 37*(8), 682-705. doi:10.1108/MRR-11-2012-0252.

Follett, M. P. (1924). *Creative experience*. London, UK: Longmans, Green.

Ford, C. M., & Gioia, D. A. (1995). *Creative action in organizations: Ivory tower visions and real world voices*. Thousand Oaks, CA: Sage Publications, Inc.

Ford, R. C., McLaughlin, F. S., & Newstrom, J. W. (2003). Questions and answers about fun at work. *People & Strategy, 26*(4), 18-33. Retrieved from http://www.hrps.org/?page=PeopleStrategy.

Fraley, R. C., & Vazire, S. (2014). The n-pact factor: Evaluating the quality of empirical journals with respect to sample size and statistical power. *PLoS ONE, 9*(10), e109019. doi:10.1371/journal.pone.0109019.

Frankfort-Nachmias, C., & Leon-Guerrero, A. (2009). *Social statistics for a diverse society* (5th ed.). Thousand Oaks, CA: Pine Forge Press.

Gallup, Inc. (2013). *State of the American workplace*. Retrieved from http://www.gallup.com/strategicconsulting/163007/state-american-workplace.aspx.

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. doi:10.5465/amj.2007.25525934.

Glasser, W. (1994). *The control theory manager*. New York, NY: HarperBusiness.

Glynn, M. A. (1994). Effects of work task cues and play task cues on information processing, judgment, and motivation. *Journal of Applied Psychology, 79*(1), 34-45. doi:10.1037//0021-9010.79.1.34.

Glynn, M. A., & Webster, J. (1992). The adult playfulness scale: An initial assessment. *Psychological Reports, 71*(1), 83-103. doi:10.2466/pr0.1992.71.1.83.

Gonçalves, L., & Brandao, F. (2017). The relation between leader's humility and team creativity: The moderating effect of psychological safety and psychological capital. *International Journal of Organizational Analysis, 25*(4), 687-702. doi:10.1108/IJOA-06-2016-1036.

Gopinath, R. (2011). Employees' emotions in workplace. *Research Journal of Business Management, 5*(1), 1-15. doi:10.3923/rjbm.2011.1.15.

Gordon, G. (2014). Well played: The origins and future of playfulness. *American Journal of Play, 6*(2), 234-266. Retrieved from http://www.journalofplay.org.

Graves, L. M., Ruderman, M. N., Ohlott, P. J., & Weber, T. J. (2012). Driven to work and enjoyment of work: Effects on managers' outcomes. *Journal of Management, 38*(5), 1655-1680. doi:10.1177/0149206310363612.

Greenland, S., Senn, S. J., Rothman, K. J., Carlin, J. B., Poole, C., Goodman, S. N., et al. (2016). Statistical tests, p values, confidence intervals, and power: A guide to

misinterpretations. *European Journal of Epidemiology, 31*(4), 337-350. doi:10.1007/s10654-016-0149-3.

Guimera, R., Uzzi, B., Spiro, J., & Amaral, L. A. N. (2005). Team assembly mechanisms determine collaboration network structure and team performance. *Science, 308*(5722), 697-702. doi:10.1126/science.1106340.

Guistiniano, L., Lombardi, S., & Cavaliere, V. (2016). How knowledge collecting fosters organizational creativity. *Management Decision, 54*(6), 1464-1496. doi:10.1108/MD-04-2015-0111.

Han, J., Han, J., & Brass, D. J. (2014). Human capital diversity in the creation of social capital for team creativity. *Journal of Organizational Behavior, 35*(1), 54-71. doi:10.1002/job.1853.

Han, H., Kim, W., & Jeong, C. (2016). Workplace fun for better team performance: Focus on frontline hotel employees. *International Journal of Contemporary Hospitality Management, 28*(7), 1391-1416. doi:10.1108/IJCHM-11-2014-0555.

Harju, L., Hakanen, J. J., & Schaufeli, W. B. (2014). Job boredom and its correlates in 87 Finnish organizations. *Journal of Occupational and Environmental Medicine, 56*(9), 911-918. doi:10.1097/JOM.0000000000000248

Hart, W., & Albarracin, D. (2009). The effects of chronic achievement motivation and achievement primes on the activation of achievement and fun goals. *Journal of Personality and Social Psychology, 97*(6), 1129-1141. doi:10.1037/a0017146.

Henricks, T. S. (2014). Play as self-realization: Toward a general theory of play. *American Journal of Play, 6*(2), 190-213. Retrieved from http://www.journalofplay.org.

Hersey, P., & Blanchard, K. (1977). *Management of organizational behavior, utilizing human resources* (3rd ed.). Englewood Cliffs, NJ: Prentice Hall.

Hirst, G., van Knippenberg, D., Zhou, Q., Zhu, C. J., & Tsai, P. C. (2018). Exploitation and exploration climates' influence on performance and creativity: Diminishing returns as function of self-efficacy. *Journal of Management, 44*(3), 870-891. doi:10.1177/0149206315596814.

Homan, A. C., Buengeler, C., Eckhoff, R. A., van Ginkel, W. P., & Voelpel, S. C. (2015). The interplay of diversity training and diversity beliefs on team creativity in nationality diverse teams. *Journal of Applied Psychology, 100*(5), 1456-1468. doi:10.1037/apl0000013.

Hoy, W. K., & Adams, C. M. (2015). *Quantitative research in education: A primer*. Thousand Oaks, CA: SAGE Publications, Inc.

Hu, J., Erdogan, B., Kaifeng, J., Bauer, T. N., & Liu, S. (2018). Leader humility and team creativity: The role of team information sharing, psychological safety, and power distance. *Journal of Applied Psychology, 103*(3), 313-323. doi:10.1037/ap10000277.

Huizinga, J. (2014). *Homo ludens: A study of the play-element in culture*. Eastford, CT: Martino Fine Books.

Hung, L., Lee, Y., & Lee, D. (2018). The moderating effects of salary satisfaction and working pressure on the organizational climate, organizational commitment to turnover intention. *International Journal of Business and Society, 19*(1), 103-116. Retrieved from http://www.ijbs.unimas.my/.

Ingram, T. (2016). Relationship between talent management and organizational performance: The role of climate for creativity. *Entrepreneurial Business and Economics Review, 4*(3), 195-205. doi:10.15678/EBER.2016.040315.

Isaksen, S. G., Lauer, K. J., & Ekvall, G. (1999). Situational outlook questionnaire: A measure of the climate for creativity and change. *Psychological Reports, 85*(2), 665-674. doi:10.2466/pr0.1999.85.2.665.

James, L. R., Demaree, R. G., & Wolf, G. (1984). Estimating within-group interrater reliability with and without response bias. *Journal of Applied Psychology, 69*(1), 85-98. doi:10.1037//0021-9010.69.1.85.

Janssen, O. (2000). Job demands, perceptions of effort-reward fairness and innovative work behavior. *Journal of Occupational and Organizational Psychology, 73*(3), 287-302. doi:10.1348/096317900167038.

Jia, L., Shaw, J. D., Tsui, A. S., & Park, T. (2014). A social-structural perspective on employee-organization relationships and team creativity. *Academy of Management Journal, 57*(3), 869-891. doi:10.5465/amj.2011.0147.

Jiang, W., & Gu, Q. (2016). How abusive supervision and abusive supervisory climate influence salesperson creativity and sales team effectiveness in China. *Management Decision, 54*(2), 455-475. doi:10.1108/MD-07-2015-0302.

Jiang, H., & Zhang, Q. (2014). Development and validation of team creativity measures: A complex systems perspective. *Creativity and Innovation Management, 23*(3), 264-275. doi:10.1111/caim.12078.

Johnson, S. (2017). *Wonderland: How play made the modern world*. New York, NY: Riverhead Books.

Joo, B.-K., Yang, B., & McLean, G. N. (2014). Employee creativity: The effects of perceived learning culture, leader-member exchange quality, job autonomy, and proactivity. *Human Resource Development International, 17*(3), 297-317. doi:10.1080/13678868.2014.896126.

Kahrobaei, S., & Mortazavi, S. (2017). How leader–member exchange can uplift team's energy to increase creative work involvement. *Team Performance Management, 22*(2), 75-91. doi:10.1108/TPM-06-2015-0029.

Kang, J. H., Matusik, J. G., Kim, T., & Phillips, J. M. (2016). Interactive effects of multiple organizational climates on employee innovative behavior in entrepreneurial firms: A cross-level investigation. *Journal of Business Venturing, 31*(6), 628-642. doi:10.1016/j.jbusvent.2016.08.002.

Karl, K., & Peluchette, J. (2006). How does workplace fun impact employee perceptions of customer service quality? *Journal of Leadership & Organizational Studies, 13*(2), 2-13. doi:10.1177/10717919070130020201.

Karl, K. A., Harland, L. K., Peluchette, J. V., & Rodie, A. R. (2010). Perceptions of service quality: What's fun got to do with it? *Health Marketing Quarterly, 27*(2), 155-172. doi:10.1080/07359681003745097.

Karl, K., Peluchette, J., Hall, L., & Harland, L. (2005). Attitudes toward workplace fun: A three sector comparison. *Journal of Leadership & Organizational Studies, 12*(2), 1-17. doi:10.1177/107179190501200201.

Kaufman, S. B., & Gregoire, C. (2016). *Wired to create: Unraveling the mysteries of the creative mind*. New York, NY: TarcherPerigee.

Kavanagh, D. (2011). Work and play in management studies: A Kleinian analysis. *Ephemera: Theory & Politics in Organization, 11*(4), 336-356. Retrieved from http://www.ephemerajournal.org/.

Kaya, G., & Baskaya, R. (2016). The roles of organizational and ethical climate on individual performance of employees. *Business Management Dynamics, 5*(8), 27-38. Retrieved from http://www.bmdynamics.com.

Kelley, T. (2001). *The art of innovation: Lessons in creativity from IDEO, America's leading design firm*. New York, NY: Crown Business.

Kelley, D., & Kelley, T. (2013). *Creative confidence*. New York, NY: Crown Business.

Kenny, K., & Euchler, G. (2012). 'Some good clean fun': Humour, control and subversion in an advertising agency. *Gender, Work & Organization, 19*(3), 306-323. doi:10.1111/j.1468-0432.2012.00594.x.

Khan, N. U., Qureshi, M. I., Rasli, A. M., & Ahmad, A. (2015). The impact of multiple organizational climates on performance of public sector organizations: Evidences from Pakistan. *International Journal of Economics and Financial Issues, 5*(Special Issue), 276-282. Retrieved from http://www.ecojournals.com.

Khattak, S. R., Batool, S., & Haider, M. (2017). Relationship of leadership styles and employee creativity: A mediating role of creative self-efficacy and moderating role of organizational climate. *Pakistan Journal of Commerce & Social Sciences, 11*(2), 698-719. Retrieved from http://www.jespk.net/.

Kim, M. J., Choi, J. N., & Park, O. S. (2012). Intuitiveness and creativity in groups: Cross-level interactions between group conflict and individual cognitive styles. *Social Behavior & Personality, 40*(9), 1419-1434. doi:10.2224/sbp.2012.40.9.1419.

Kodama, M., & Shibata, T. (2013). Strategy transformation through strategic innovation capability – a case study of Fanuc. *R&D Management, 44*(1), 75-103. doi:10.1111/radm.12041.

Koo, T. K., & Li, M. Y. (2016). A guideline of selecting and reporting intraclass correlation coefficients for reliability research. *Journal of Chiropractic Medicine, 15*(2), 155-163. doi:10.1016/j.jcm.2016.02.012.

Korten, D. C. (2015). *When corporations rule the world* (3rd ed.). San Francisco, CA: Berrett-Koehler Publishers.

Lamm, E., & Meeks, M. D. (2009). Workplace fun: The moderating effects of generational differences. *Employee Relations, 31*(6), 613-631. doi:10.1108/01425450910991767.

Lang, J. C., & Lee, C. H. (2010). Workplace humor and organizational creativity. *International Journal of Human Resource Management, 21*(1), 46-60. doi:10.1080/09585190903466855.

Langfred, C. W., & Moye, N. (2014). Does conflict help or hinder creativity in teams? An examination of conflict's effects on creative processes and creative outcomes. *International Journal of Business and Management, 9*(6), 30-42. Retrieved from http://www.ccsenet.org/journal/index.php/ijbm.

Leavy, P. (2017). *Research design: Quantitative, qualitative, mixed methods, arts-based, and community-based participatory research approaches*. New York, NY: The Guilford Press.

LeBreton, J. M., & Senter, J. L. (2008). Answers to 20 questions about interrater reliability and intrarater agreement. *Organizational Research Methods, 11*(4), 815-852. doi:0.1177/1094428106296642.

Lee, M. C. C., & Idris, M. A. (2017). Psychosocial safety climate versus team climate. *Personnel Review, 46*(5), 988-1003. doi:10.1108/PR-01-2016-0003.

Legault, L., & Inzlicht, M. (2013). Self-determination, self-regulation, and the brain: Autonomy improves performance by enhancing neuroaffective responsiveness to self-regulation failure. *Journal of Personality and Social Psychology, 105*(1), 123-138. doi:10.1037/a0030426.

Lehmann-Willenbrock, N., & Allen, J. A. (2014). How fun are your meetings: Investigating the relationship between humor patterns in team interactions and team performance. *Journal of Applied Psychology, 99*(6), 1278-1287. doi:10.1037/a0038083.

Leski, K. (2016). *The storm of creativity*. Cambridge, MA: The MIT Press.

Lin, Y., Yu, C., & Yi, C. (2014). The effects of positive affect, person-job fit, and well-being on job performance. *Social Behavior & Personality, 42*(9), 1537-1547. doi:10.2224/sbp.2014.42.9.1537.

Liu, D., Zhang, S., Wang, L., & Lee, T. W. (2011). The effects of autonomy and empowerment on employee turnover: Test of a multilevel model in teams. *Journal of Applied Psychology, 96*(6), 1305-1316. doi:10.1037/a0024518.

Longenecker, J. G., & Pringle, C. D. (1978). The illusion of contingency theory as a general theory. *Academy of Management Review, 3*(3), 679-683. doi:10.5465/amr.1978.4305970.

Lussier, B., Grégoire, Y., & Vachon, M. (2017). The role of humor usage on creativity, trust and performance in business relationships: An analysis of the salesperson-customer dyad. *Industrial Marketing Management, 65*, 168-181. doi:10.1016/j.indmarman.2017.03.012.

Luthans, F., & Stewart, T. I. (1977). A general contingency theory of management. *Academy of Management Review, 2*(2), 181-195. doi:10.5465/amr.1977.4409038.

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 & Leadership, 24*(1), 23-42. doi:10.1002/nml.21078.

Mafabi, S., Munene, J. C., & Ahiauzu, A. (2015). Creative climate and organisational resilience: The mediating role of innovation. *International Journal of Organizational Analysis, 23*(4), 564-587. doi:10.1108/IJOA-07-2012-0596.

Mafini, C. (2016). The contribution of organisational climate to employee well-being *Journal of Applied Business Research, 32*(4), 1157-1168. Retrieved from https://clutejournals.com/index.php/JABR.

March, J. G. (1979). The technology of foolishness. In J. G. March (Ed.), *Decisions and organizations*. Cambridge, MA: Basil Blackwell.

Marx, K. (1887). *Capital*. Moscow, Russia: Progress Publishers.

Maslow, A. H. (2000). *The Maslow business reader*. New York, NY: John Wiley & Sons, Inc.

McDowell, T. (2004). *Fun at work: Scale development, confirmatory factor analysis, and links to organizational outcomes* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database. (UMI no. 3155834).

McManus, I. C., & Furnham, A. (2010). "Fun, fun, fun": Types of fun, attitudes to fun, and their relation to personality and biographical factors. *Psychology, 1*(3), 159-168. doi:10.4236/psych.2010.13021.

Medeiros, C. R., & Alcapadipani, R. (2016). In the corporate backstage, the taste of revenge: Misbehaviour and humor as form of resistance and subversion. *Revista de Administracao, 51*(2), 123-136. doi:10.5700/rausp1229

Mesmer-Magnus, J., Glew, D. J., & Viswesvaran, C. (2012). A meta-analysis of positive humor in the workplace. *Journal of Managerial Psychology, 27*(2), 155-190. doi:10.1108/02683941211199554.

Meyer, P. (2010). *From workplace to playspace: Innovating, learning, and changing through dynamic engagement*. San Francisco, CA: Jossey-Bass.

Mitchell, T. R., Biglan, A., Oncken, G. R., & Fiedler, F. E. (1970). The contingency model: Criticism and suggestions. *Academy of Management Journal, 13*(3), 253-267. doi:10.2307/254963.

Morgan, J. (2014). *The future of work: Attract new talent, build better leaders, and create a competitive organization*. Hoboken, NJ: Wiley.

Naldoken, U., & Tengilimoglu, D. (2017). A field study on determining the effects of organizational climate in terms of social interaction on knowledge management at health organizations. *Journal of Economics and Management, 29*(3), 75-101. doi:10.22367/jem.2017.29.05.

NBCUniversal. (2014). *El Monte lifeguards fired after making video spoof at pool*. Retrieved from http://www.nbclosangeles.com/news/local/El-Monte-Lifeguards-Fired-After-Making-Video-Spoof-at-Pool-168839546.html

Olszak, C. M., Bartus, T., & Lorek, P. (2018). A comprehensive framework of information system design to provide organizational creativity support. *Information & Management, 55*(1), 94-108. doi:10.1016/j.im.2017.04.004.

Omilion-Hodges, L. M., & Baker, C. R. (2017). Communicating leader-member relationship quality. *International Journal of Business Communication, 54*(2), 115-145. doi:10.1177/2329488416687052.

Örtenblad, A. (2018). What does "learning organization" mean? *The Learning Organization, 25*(3), 150-158. doi:10.1108/TLO-02-2018-0016.

Papert, S., & Harel, I. (1991). *Constructionism*. New York, NY: Ablex Publishing Corporation.

Park, J., Shin, S., Lee, S., & No, S. (2015). Human resource management practices and organizational creativity: The role of chief executive officer's learning goal orientation. *Social Behavior & Personality, 43*(6), 899-908. doi:10.2224/sbp.2015.43.6.899.

Patel, B., & Desai, T. (2013). Effect of workplace fun on employee morale and performance. *International Journal of Scientific Research, 2*(5), 323-326. doi:10.15373/22778179.

Patkin, T. (2014). Eight simple cures for employee disengagement. *Contract Management, 54*(3), 14-17. Retrieved from http://www.ncmahq.org/NewsPublications/CMMCurrentIssue.cfm?navItemNumber=9969.

Pena-Suarez, E., Muniz, J., Campillo-Alvarez, A., Fonseca-Pedrero, E., & Garcia-Cueto, E. (2013). Assessing organizational climate: Psychometric properties of the CLIOR scale. *Psicothema, 25*(1), 137-144. doi:10.7334/psicothema2012.260.

Peretomode, O. (2012). Situational and contingency theories of leadership: Are they the same? *IOSR Journal of Business and Management, 4*(3), 13-17. Retrieved from http://www.iosrjournals.org.

Petelczyc, C. A., Capezio, A., Wang, L., Restubog, S. L. D., & Aquino, K. (2018). Play at work: An integrative review and agenda for future research. *Journal of Management, 44*(1), 161-190. doi:10.1177/0149206317731519.

Piaget, J. (1962). *Play, dreams and imitation in childhood*. New York, NY: W. W. Norton & Company.

Pinault, L. (2004). *The play zone*. New York, NY: HarperCollins.

Pirola-Merlo, A., & Mann, L. (2004). The relationship between individual creativity and team creativity: Aggregating across people and time. *Journal of Organizational Behavior, 25*(2), 235-257. doi:10.1002/job.240.

Plester, B. (2009). Crossing the line: Boundaries of workplace humour and fun. *Employee Relations, 31*(6), 584-599. doi:10.1108/01425450910991749.

Plester, B. (2013, 4-6 December). *When is a joke not a joke? The dark side of organizational humour.* Paper presented at the Australia and New Zealand Academy of Management Conference, Hobart, Australia.

Plester, B., & Hutchison, A. (2016). Fun times: The relationship between fun and workplace engagement. *Employee Relations, 38*(3), 332-350. doi:10.1108/ER-03-2014-0027.

Plester, B., Cooper-Thomas, H., & Winquist, J. (2015). The fun paradox. *Employee Relations, 37*(3), 380-398. doi:10.1108/ER-04-2013-0037.

Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & 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. doi:10.1037/0021-9010.88.5.879.

Proyer, R. T., & Wagner, L. (2015). Playfulness in adult revisited: The signal theory in German speakers. *American Journal of Play, 7*(2), 201-227. Retrieved from http://www.journalofplay.org.

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 expectation. *The Leadership Quarterly, 26*(2), 286-299. doi:10.1016/j.leaqua.2014.12.004.

Qureshi, M. I., Rasli, A. M., & Zaman, K. (2014). A new trilogy to understand the relationship among organizational climate, workplace bullying and employee health. *Arab Economics and Business Journal, 9*, 133-146. doi:10.1016/j.aebj.2014.05.009.

Reckwitz, A. (2017). *The invention of creativity: Modern society and the culture of the new*. Cambridge, UK: Polity.

Rees, C., Alfes, K., & Gatenby, M. (2013). Employee voice and engagement: Connections and consequences. *International Journal of Human Resource Management, 24*(14), 2780-2798. doi:10.1080/09585192.2013.763843.

Rego, A., Sousa, F., Marques, C., & Cuhna, M. P. (2014). Hope and positive affect mediating the authentic leadership and creativity relationship. *Journal of Business Research, 67*(2), 200-212. doi:10.1016/j.jbusres.2012.10.003.

Ren, F., & Zhang, J. (2015). Job stressors, organizational innovation climate, and employees' innovative behavior. *Creativity Research Journal, 27*(1), 16-23. doi:10.1080/10400419.2015.992659.

Reynolds, P. D. (1971). *A primer in theory construction*. Needham Heights, MA: Allyn and Bacon.

Ritter, S. M., & Ferguson, S. (2017). Happy creativity: Listening to happy music facilitates divergent thinking. *PLoS ONE, 12*(9), e0182210. doi:10.137/journal.pone.0182210.

Robinson, K., & Aronica, L. (2009). *The element*. New York, NY: Penguin Books.

Rodríguez-Sánchez, A. M., Devloo, T., Rico, R., Salanova, M., & Anseel, F. (2017). What makes creative teams tick? Cohesion, engagement, and performance across creativity tasks: A three-wave study. *Group & Organization Management, 42*(4), 521-547. doi:10.1177/1059601116636476.

Rosso, B. D. (2014). Creativity and constraints: Exploring the role of constraints in the creative process of research and development teams. *Organization Studies, 35*(4), 551-585. doi:10.1177/0170840613517600

Runco, M. A., & Jaeger, G. J. (2012). The standard definition of creativity. *Creativity Research Journal, 24*(1), 92-96. doi:10.1080/10400419.2012.650092.

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist, 55*(1), 68-78. doi:10.1037/0003-066x.55.1.68.

Saetre, A. S., & Brun, E. (2012). Strategic management of innovation: Managing exploration-exploitation by balancing creativity and constraint. *International Journal of Innovation & Technology Management, 9*(4), 1-24. doi:10.1142/S0219877012500253.

Samuelson, P. A., & Nordhaus, W. D. (2009). *Economics* (19th ed.). New York, NY: McGraw-Hill Education.

Sayers, S. (2005). Why work? Marx and human nature. *Science & Society, 69*(4), 606-616. doi:10.1521/siso.2005.69.4.606.

Schein, E. H. (2010). *Organizational culture and leadership*. San Francisco, CA: Jossey-Bass.

Schneider, B., Ehrhart, M. G., & Macey, W. H. (2013). Organizational climate and culture. *Annual Review of Psychology, 64*(1), 361-388. doi:10.1146/annurev-psych-113011-143809.

Schoonhoven, C. B. (1981). Problems with contingency theory: Testing assumptions hidden within the language of contingency "theory". *Administrative Science Quarterly, 26*(3), 349-377. doi:10.2307/2392512.

Shahin, A., Naftchali, J. S., & Pool, J. K. (2014). Developing a model for the influence of perceived organizational climate on organizational citizenship behaviour and organizational performance based on balanced score card. *International Journal of Productivity and Performance Management, 63*(3), 290-307. doi:10.1108/IJPPM-03-2013-0044.

Shanker, M. (2014). A study on organizational climate in relation to employees' intention to stay. *Journal of Psychosocial Research, 9*(2), 389-397. Retrieved from https://www.questia.com/library/p439850/journal-of-psychosocial-research.

Sharma, A., & Gupta, A. (2012). Impact of organisational climate and demographics on project specific risks in context to Indian software industry. *International Journal of Project Management, 30*, 176-187. doi:10.1016/j.ijproman.2011.05.003.

Sheridan, R. (2015). *Joy, Inc.: How we build a workplace people love*. New York, NY: Portfolio.

Shih, S., Lie, T., Klein, G., & Jiang, J. J. (2014). Information technology customer aggression: The importance of an organizational climate of support. *Information & Management, 51*, 670-678. doi:10.1016/j.im.2014.06.001.

Shin, Y., & Eom, C. (2014). Team proactivity as a linking mechanism between team creative efficacy, transformational leadership, and risk-taking norms and team creative performance. *Journal of Creative Behavior, 48*(2), 89-114. doi:10.1002/jocb.42.

Sicart, M. (2014). *Play matters*. Cambridge, MA: The MIT Press.

Silverman, I. W. (2016). In defense of the play-creativity hypothesis. *Creativity Research Journal, 28*(2), 136-143. doi:10.1080/10400419.2016.1162560.

Soderlund, M., & Oikarinen, E. (2018). Joking with customers in the service encounter has a negative impact on customer satisfaction: Replication and extension. *Journal of Retailing and Consumer Services, 42*, 55-64. doi:/10.1016/j.jretconser.2018.01.013.

Sorensen, B. M., & Spoelstra, S. (2012). Play at work: Continuation, intervention and usurpation. *Organization, 19*(1), 81-97. doi:10.1177/1350508411407369.

Spraggon, M., & Bodolica, V. (2014). Social ludic activities: A polymorphous form of organizational play. *Journal of Managerial Psychology, 29*(5), 524-540. doi:10.1108/JMP-01-2012-0009.

Spraggon, M., & Bodolica, V. (2017). Collective tacit knowledge generation through play. *Management Decision, 55*(1), 119-135. doi:10.1108/MD-05-2015-0173.

Stacey, R. D. (1996). *Compexity and creativity in organizations*. San Francisco, CA: Bettett-Koehler Publishers.

Starbuck, W. H. (2017). Organizational learning and unlearning. *The Learning Organization, 24*(1), 30-38. doi:10.1108/TLO-11-2016-0073.

Statler, M., Heracleous, L., & Jacobs, C. D. (2011). Serious play as a practice of paradox. *Journal of Applied Behavioral Science, 47*(2), 236-256. doi:10.1177/0021886311398453.

Stec, D. (2011). Performance logics: Notions of self and our attitudes towards organizing play. *Academy of Management Annual Meeting Proceedings*, 1-6. doi:10.5465/AMBPP.2011.65869125.

Stein, J. (1956). William Faulkner, the art of fiction no. 12. *The Paris Review, Spring*(12), 1-27. Retrieved from https://www.theparisreview.org/interviews/4954/william-faulkner-the-art-of-fiction-no-12-william-faulkner.

Sternberg, R. J., & Lubart, T. I. (1991). An investment theory of creativity and its development. *Human Development, 34*(1), 1-31. doi:10.1159/000277029.

Stewart, M. (2010). *The management myth: Debunking modern business philosophy*. New York, NY: W. W. Norton & Company.

Stokes, P. D. (2006). *Creativity from constraints: The psychology of breakthrough*. New York, NY: Springer Publishing Company, Inc.

Sucala, M. L., Stefan, S., Szentagotai-Tatar, A., & David, D. (2010). Time flies when you expect to have fun: An experimental investigation of the relationship between expectancies and the perception of time progression. *Cognition, Brain, Behavior: An Interdisciplinary Journal, 14*(3), 231-241. Retrieved from http://www.cbbjournal.ro/.

Tang, C., & Ye, L. (2015). Diversified knowledge, R&D team centrality, and radical creativity. *Creativity and Innovation Management, 24*(1), 123-135. doi:10.1111/caim.12110.

Tegano, D. W. (1990). Relationship of tolerance of ambiguity and playfulness to creativity. *Psychological Reports, 66*(3), 1047-1056. doi:10.2466/pr0.66.3.1047-1056.

Tews, M. J., & Noe, R. A. (2017). Does training have to be fun? A review and conceptual model of the role of fun in workplace training. *Human Resource Management Review*(Published online November 11, 2017). doi:10.1016/j.hrmr.2017.11.003.

Tews, M. J., Michel, J. W., & Allen, D. G. (2014). Fun and friends: The impact of workplace fun and constituent attachment on turnover in a hospitality context. *Human Relations, 67*(8), 923-946. doi:10.1177/0018726713508143.

Tews, M. J., Michel, J. W., & Bartlett, A. (2012). The fundamental role of workplace fun in applicant attraction. *Journal of Leadership & Organizational Studies, 19*(1), 105-114. doi:10.1177/1548051811431828.

Tews, M. J., Michel, J. W., & Stafford, K. (2013). Does fun pay? The impact of workplace fun on employee turnover and performance. *Cornell Hospitality Quarterly, 54*(4), 370-382. doi:10.1177/1938965513505355.

Tews, M. J., Michel, J., Xu, S., & Drost, A. J. (2015). Workplace fun matters... but what else? *Employee Relations, 37*(2), 248-267. doi:10.1108/ER-10-2013-0152.

Tews, M. J., Michel, J. W., & Noe, R. A. (2017). Does fun promote learning? The relationship between fun in the workplace and informal learning. *Journal of Vocational Behavior, 98*, 46-55. doi:10.1016/j.jvb.2016.09.006.

Thumin, F. J., & Thumin, L. J. (2011). The measurement and interpretation of organizational climate. *The Journal of Psychology, 145*(2), 93-109. doi:10.1080/00223980.2010.538754.

Tokkari, V. (2015). Organizational play: Within and beyond managing. *Qualitative Research in Organizations and Management, 10*(2), 86-104. doi:10.1108/QROM-11-2013-1181.

Törner, M., Pousette, A., Larsman, P., & Hemlin, S. (2017). Coping with paradoxical demands through an organizational climate of perceived support: An empirical study among workers in construction and mining. *Journal of Applied Behavioral Science, 53*(1), 117-141. doi:10.1177/0021886316671577.

Torrance, E. P. (1965). *Rewarding creative behavior*. Englewood Cliffs, NJ: Personnel.

Tortorella, G. L., Escobar, L., & Rodrigues, C. (2015). Organizational climate research: A proposed approach focused on banking institutions. *Business Process Management Journal, 21*(6), 1377-1390. doi:10.1108/BPMJ-02-2015-0011.

Tremblay, M., & Gibson, M. (2016). The role of humor in the relationship between transactional leadership behavior, perceived supervisor support, and citizenship behavior. *Journal of Leadership & Organizational Studies, 23*(1), 39-54. doi:10.1177/1548051815613018.

Trigo, A. (2013). Mechanisms of learning and innovation performance: The relevance of knowledge sharing and creativity for non-technological innovation. *International Journal of Innovation & Technology Management, 10*(6), 1-27. doi:10.1142/S0219877013400282.

Trougakos, J. P., Hideg, I., Cheng, B. H., & Beal, D. J. (2014). Lunch breaks unpacked: The role of autonomy as a moderator of recovery during lunch. *Academy of Management Journal, 57*(2), 405-421. doi:10.5465/amj.2011.1072.

Tsai, W. (2014). Application of complexity science perspective on new business development: A case study of VISA organization. *Journal of International Management Studies, 9*(2), 152-163. Retrieved from http://www.jimsjournal.org/pi.html.

Van de Ven, A. H., Ganco, M., & Hinings, C. R. (2013). Returning to the frontier of contingency theory of organizational and institutional designs. *Academy of Management Annals, 7*(1), 393-400. doi:10.1080/19416520.2013.774981.

Van Kleef, G. A., van den Berg, H., & Heerdink, M. W. (2015). The persuasive power of emotions: Effects of emotional expressions on attitude formation and change. *Journal of Applied Psychology, 100*(4), 1124-1142. doi:10.1037/apl0000003.

Van Vleet, M., & Feeney, B. C. (2015). Young at heart: A perspective for advancing research on play in adulthood. *Perspectives on Psychological Science, 10*(5), 639-645. doi:10.1177/1745691615596789.

Viitala, R., Tanskanen, J., & Santti, R. (2015). The connection between organizational climate and well-being at work. *International Journal of Organizational Analysis, 23*(4), 606-620. doi:10.1108/IJOA-10-2013-0716.

Volmer, J., Spurk, D., & Niessen, C. (2012). Leader-member exchange (LMX), job autonomy, and creative work environment. *The Leadership Quarterly, 23*(3), 456-465. doi:10.1016/j.leaqua.2011.10.005.

Walumbwa, F. O., Muchiri, M. K., Misati, E., Wu, C., & Meiliani, M. (2018). Inspired to perform: A multilevel investigation of antecedents and consequences of thriving at work. *Journal of Organizational Behavior, 39*(3), 249-261. doi:10.1002/job.2216.

Watson, C., & Drew, V. (2017). Humour and laughter in meetings: Influence, decision-making and the emergence of leadership. *Discourse & Communication, 11*(3), 314-329. doi:10.1177/1750481317699432.

Webster, J., & Marrocchio, J. J. (1993). Turning work into play: Implications for microcomputer software training. *Journal of Management, 19*(1), 127-146. doi:10.1016/0149-2063(93)90049-s.

Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal, 5*(2), 171-180. doi:10.1002/smj.4250050207.

West, D. M. (2018). *The future of work: Robots, AI, and automation*. Washington, DC: Brookings Institution Press.

West, S. E., Hoff, E., & Carlsson, I. (2016). Play and productivity: Enhancing the creative climate at workplace meetings with play cues. *American Journal of Play, 9*(1), 71-86. Retrieved from http://www.journalofplay.org.

Westwood, R. I., & Johnson, A. (2013). Humor in organizations: From function to resistance. *Humor: International Journal of Humor Research, 26*(2), 219-247. doi:10.1515/humor-2013-0024.

Winkler, A. (2018). *We the corporations: How American businesses won their civil rights*. New York, NY: Liveright.

Witzel, M. (2016). *A history of management thought*. London, UK: Routledge.

Woodman, R. W., Sawyer, J. E., & Griffin, R. W. (1993). Toward a theory of organizational creativity. *Academy of Management Review, 18*(2), 293-321. doi:10.5465/amr.1993.3997517.

Wrench, J. S., Thomas-Maddox, C., Richmond, V. P., & McCroskey, J. C. (2015). *Quantitative research methods for communication*. Oxford, UK: Oxford University Press.

Wu, Q., & Cormican, K. (2016). Shared leadership and team creativity: A social network analysis in engineering design teams. *Journal of Technology Management & Innovation, 11*(2), 2-12. Retrieved from http://jotmi.org.

Xu, B., Zhao, S., Li, C., & Lin, C. (2017). Authentic leadership and employee creativity: Testing the multilevel mediation model. *Leadership & Organization Development Journal, 38*(3), 482-498. doi:10.1108/LODJ-09-2015-0194.

Yoon, W., Kim, S. J., & Song, J. (2016). Top management team characteristics and organizational creativity. *Review of Managerial Science, 10*(4), 757-779. doi:10.1007/s11846-015-0175-7.

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. doi:10.1016/j.jbusres.2013.08.013.

Yu, C., Yu, T.-F., & Yu, C.-C. (2013). Knowledge sharing, organizational climate, and innovative behavior: A cross-level analysis of effects. *Social Behavior and Personality, 41*(1), 143-156. doi:10.2224/sbp.2013.41.1.143.

Yu, P., Wu, J. J., Chen, I. H., & Lin, Y. T. (2007). Is playfulness a benefit to work? Empirical evidence of professionals in Taiwan. *International Journal of Technology Management, 39*(3), 412-429. doi:10.1504/IJTM.2007.013503.

Yu, P., Wu, J. J., Lin, W. W., & Yang, C. H. (2003). The development of adult playfulness scale and organizational playfulness climate questionnaire. *Psychological Testing, 50*(1), 73-110.

Zhao, H. (2015). Leader-member exchange differentiation and team creativity. *Leadership & Organization Development Journal, 36*(7), 798-815. doi:10.1108/LODJ-12-2013-0172.

Zhou, J., & George, J. M. (2001). When job dissatisfaction leads to creativity: Encouraging the expression of voice. *Academy of Management Journal, 44*(4), 682-696. doi:10.2307/3069410.

Zhu, Y., Gardner, D. G., & Chen, H. (2016). Relationships between work team climate, individual motivation, and creativity. *Journal of Management*. doi:10.1177/0149206316638161.

## Appendix A: Leaders' Endorsement of Idiosyncratic Workplace Fun Scale

Please select the answer that reflects your experience for each statement.

| | Strongly Disagree | Disagree | Neither | Agree | Strongly Agree |
|---|---|---|---|---|---|
| My supervisor supports my joking with coworkers. | 1 | 2 | 3 | 4 | 5 |
| My supervisor supports my celebrations at work. | 1 | 2 | 3 | 4 | 5 |
| My supervisor allows me to listen to music at work. | 1 | 2 | 3 | 4 | 5 |
| My supervisor supports my autonomy and freedom at work. | 1 | 2 | 3 | 4 | 5 |
| My supervisor urges me to play at work. | 1 | 2 | 3 | 4 | 5 |
| My supervisor values fun at work. | 1 | 2 | 3 | 4 | 5 |
| My supervisor encourages me to have fun at work. | 1 | 2 | 3 | 4 | 5 |

## Appendix B: Organizational Playfulness Climate Questionnaire

In your work environment, have you ever had the following feeling and experience? Please choose only one that fits your real situation most.

| | Completely not true | Somewhat true | Half true | Mostly true | Completely true |
|---|---|---|---|---|---|
| You can see many happy people around. | 1 | 2 | 3 | 4 | 5 |
| You can be informal. | 1 | 2 | 3 | 4 | 5 |
| People here have a good sense of humor. | 1 | 2 | 3 | 4 | 5 |
| People here have fun with their work. | 1 | 2 | 3 | 4 | 5 |
| A lot of well-intentioned humor occurs frequently. | 1 | 2 | 3 | 4 | 5 |
| The boss can be informal and part of the group. | 1 | 2 | 3 | 4 | 5 |
| My supervisor has a good sense of humor. | 1 | 2 | 3 | 4 | 5 |
| The management style of the organization emphasizes more on support and trust and less on micro management. | 1 | 2 | 3 | 4 | 5 |
| The organization provides opportunities and encouragement for communication and understanding among workers. | 1 | 2 | 3 | 4 | 5 |
| The working atmosphere is free and open. | 1 | 2 | 3 | 4 | 5 |
| The boss welcomes innovative and fun ideas and concepts. | 1 | 2 | 3 | 4 | 5 |
| The boss supports and encourages employees to relax and interact at work. | 1 | 2 | 3 | 4 | 5 |
| My supervisor can trust his/her workers and give them adequate power. | 1 | 2 | 3 | 4 | 5 |
| I make decisions of my own for my work quite independently under minimum supervision. | 1 | 2 | 3 | 4 | 5 |
| Workers here are close, friendly and the communication is pleasing. | 1 | 2 | 3 | 4 | 5 |
| Interaction among colleagues is positive and | 1 | 2 | 3 | 4 | 5 |

| | | | | | |
|---|---|---|---|---|---|
| provides a sense of companionship. | | | | | |
| Workers often brainstorm to generate new and interesting ideas. | 1 | 2 | 3 | 4 | 5 |
| Project teammates sometimes look like they are playing. | 1 | 2 | 3 | 4 | 5 |
| Project teammates get along with one another freely, openly and without restraint. | 1 | 2 | 3 | 4 | 5 |
| My colleagues accept, approve and are at ease with one another. | 1 | 2 | 3 | 4 | 5 |
| The staff is helpful and cooperative with one another. | 1 | 2 | 3 | 4 | 5 |
| We are encouraged to be familiar, expressive and flexible with one another. | 1 | 2 | 3 | 4 | 5 |
| The work environment is comfortable and joyful. | 1 | 2 | 3 | 4 | 5 |
| I can freely arrange and decorate my work environment. | 1 | 2 | 3 | 4 | 5 |
| There are tea/coffee breaks at the work place for people to relax periodically. | 1 | 2 | 3 | 4 | 5 |
| The workload is too heavy. | 1 | 2 | 3 | 4 | 5 |
| The work environment is very competitive. | 1 | 2 | 3 | 4 | 5 |
| There are too many rules and the operation procedures are rigid. | 1 | 2 | 3 | 4 | 5 |
| My supervisor is very serious and seldom talks or smiles. | 1 | 2 | 3 | 4 | 5 |
| There is more criticism and less support among co-workers. | 1 | 2 | 3 | 4 | 5 |
| When I am under too much pressure, I will try to relax a little without being told to. | 1 | 2 | 3 | 4 | 5 |
| My relaxation and leisure helps learn new things. | 1 | 2 | 3 | 4 | 5 |
| After accomplishing a big project, I usually will try to really relax myself. | 1 | 2 | 3 | 4 | 5 |

| | | | | | |
|---|---|---|---|---|---|
| I will discuss with my colleague the type of the leisure activities I do. | 1 | 2 | 3 | 4 | 5 |
| I will engage in leisure activities with my colleagues. | 1 | 2 | 3 | 4 | 5 |
| My colleagues and I have the same kind of leisure and hobbies. | 1 | 2 | 3 | 4 | 5 |
| When I play with my colleagues, I experience the teamwork spirit. | 1 | 2 | 3 | 4 | 5 |
| When I play with my colleagues, we will talk about work. | 1 | 2 | 3 | 4 | 5 |
| Playing or engaging in the leisure activities with my colleagues inspires me with new ideas for work. | 1 | 2 | 3 | 4 | 5 |
| The organization encourages moderate relaxation and leisure. | 1 | 2 | 3 | 4 | 5 |

# Appendix C: Team Creativity Scale

Please select the answer that reflects your experience for each statement.

| | Strongly Disagree | Disagree | Neither | Agree | Strongly Agree |
|---|---|---|---|---|---|
| We often communicate and exchange creative ideas with each other. | 1 | 2 | 3 | 4 | 5 |
| We can complement and improve each other's creative ideas and problem solving. | 1 | 2 | 3 | 4 | 5 |
| We can integrate a creative project at the team level effectively. | 1 | 2 | 3 | 4 | 5 |
| Team members can effectively cooperate and interact with each other. | 1 | 2 | 3 | 4 | 5 |
| Team members can exchange creative knowledge without obstacle. | 1 | 2 | 3 | 4 | 5 |
| Team leaders can arouse the members' creative enthusiasm through various means. | 1 | 2 | 3 | 4 | 5 |
| The team can realize a creative outcome fluently. | 1 | 2 | 3 | 4 | 5 |
| The team can realize a creative outcome with high quality. | 1 | 2 | 3 | 4 | 5 |
| The team can realize a creative outcome with great economic and social value. | 1 | 2 | 3 | 4 | 5 |