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Pepperdine University

Graduate School of Education and Psychology

EFFECTS OF IMPROVISATION TECHNIQUES IN LEADERSHIP DEVELOPMENT

A dissertation submitted in partial satisfaction

of the requirements for the degree of

Doctor of Education in Organizational Leadership

by

Farnaz Tabaee

May, 2013

Diana B. Hiatt-Michael, Ed.D. - Dissertation Chairperson

This dissertation, written by

Farnaz Tabaee

under the guidance of a Faculty Committee and approved by its members, has been submitted to and accepted by the Graduate Faculty in partial fulfillment of the requirements for the degree of

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

DEDICATION

This study is dedicated to my entire family. To my parents, Hassan Tabaee, and Ashraf Mirhosseini, who planted the seed of lifelong learning and pursuing further education from an early age. Their sacrifices and unconditional love through the years have served me as a guide to live my life with much integrity, truth, and kindness. To my brother and sister, Behrouz Tabaee and Mehrnaz Tabaee for showing their support and encouragement in multitude of ways. To my husband, Ali Bidarian, who supported me through the years by ensuring that our beautiful girls were always well taken care of, and finally to my daughters, Tara Alyssa Bidarian and Nadia Arianna Bidarian, who fill my life every day with their love, creativity, and power of imagination. May your lives be full of happiness, joy, learning, and love. An honorable mention is my energetic year old puppy, Sophie, who sat on my lap tirelessly as I typed all the 300+ pages of this dissertation.

My beautiful daughters, always live your life to the fullest, pursue your dreams, learn, and always be curious, and never forget that after all is said and done, as Einstein's saying goes, play is still the highest form of research.

ACKNOWLEDGMENTS

I have now realized that my dissertation was never something I needed to accomplish; rather, it was something I needed to become. In this journey, I have grown through the wisdom of improvisation by celebrating failures and triumphs along the way, and allowing this gift of spontaneity to flow through me and all those I have taught and performed with. Although this dissertation has been by far the most challenging endeavor I have ever undertaken, it has also been the most rewarding. Many acknowledgements are due to all those who have supported me through the design, research, and editing of this dissertation and have encouraged me along the way.

By far, the most instrumental in my doctoral journey at Pepperdine University has been meeting my Dissertation Chairperson, Dr. Diana B. Hiatt-Michael. This dissertation would not have been possible without her guidance, patience, insights, and ongoing support and advice. She invested innumerable hours providing sound advice, direction, and encouragement throughout this journey. I am forever in debt and grateful to her for her outstanding guidance and support throughout my journey.

I am tremendously grateful to my outstanding committee members, Dr. Jack Gregg and Dr. Kim Armstrong, for their insight, support, and guidance throughout the dissertation process. I would like to extend my thanks and gratitude to my Pepperdine family including all my professors and univeristy adminnistrators, and members of my cohort who assisted me in making my academic dreams a reality. Many thanks to my dissertation group who encouraged me along the way and provided much insight into the design and analysis of findings for this study. I am grateful to Michael Wojciechowski, Dr. Fred Rodriguez, and Jessica Boro for their superb assistance in connecting me to

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Tabaee, F. (2011h). The Rise of the Right Brain: The Imperative Role of Art Education in Developing the Right Brain Skills Critical in Ensuring America's Future Global Competitiveness. Proceedings of the 34th Annual Conference of the Society of Educators and Scholars. October 13-15, 2011, Corpus Christi, Texas.

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ABSTRACT

Studies show that improvisation in leadership decision making is on the rise, and it transpires in organizations 75-90% of the time, yet very little research has explored this skillset. No other leadership skillset that is applied two thirds of the time has ever been so underdeveloped. The purpose of this study was to assess the effects of a pilot workshop applying a Holistic Improvisational Leadership Model as developed by the researcher and based on the latest improvisation research. The study employed a mixed methods design to gather qualitative and quantitative data for a descriptive evaluation of the pilot training workshop. Nonproportional quota sampling and triangulation were used to maximize cross verification and validity of the data. This study explored the skills leaders acquired and applied during, immediately after, 1 month after the workshop, and in 3 months. The study was pilot-tested on 6 different groups and a total of 67 leaders from various regions, industries and organizations.

Primary findings revealed that participants gained the highest benefits in working with others and their ability to lead. Executive and educational leaders gained the awareness that 79% of their decisions at work were made spontaneously as opposed to 71% for all leaders. 100% of executives and senior leaders indicated acquiring more effective listening skills. Moreover, the concept of competent risks and celebrating failure appeared to have the most transformational impact on the participants' sense of self, willingness to take risks, and acquire new skills. The workshop seemed to bring participants' stress level down to an optimal level and enhance mindfulness. Ultimately, it was concluded the study's workshop was most effective as a continuous 3.5 hours.

Learning to improvise experientially includes a process of unlearning old routines of decision making and re-learning more effective skills. Hence, the researcher recommends follow-up learning sessions to complete the cycle of learning. Utilizing grounded theory, the findings from the study led to the revision of Tabaee's Holistic Improvisational Leadership Model. The researcher recommends following the model by teaching the competencies not only to leaders but to all employees for achieving OPTIMAL strategy and performance for the organization.

KEY WORDS: Improvisation, Holistic, Improvisational Leadership, Model, Leadership Development, Workshop, Evaluation, Adult learning, Decision Making, Improv, Applied Improv, Facilitation, Experiential learning, Organizational improvisation, Strategic planning, Stress, Mindfulness, Celebrating Failure, OPTIMAL Spontaneous Decisions.

Chapter 1: Problem and Purpose

Introduction

This study explored the impact of improvisational techniques in leadership development. The traditional leadership and strategic planning tools of logic and rationality of twentieth century assume that the business world is steady and predictable. According to the classic organizational change theory, organizations tend to be homeostatic, incessantly working to maintain a state of equilibrium (Weick, 2007). However, according to Purser and Petranker (2005), both scholars and practitioners confirm that today's competitive and fast-changing global environment is emergent with continuous change, and hence, the future cannot possibly be predicted or planned. Leaders today would not be able to imagine and create a new future using the traditional tools of logic that have characterized most leadership development and business school education in the past century (Montuori, 2012; Taylor & Ladkin, 2009; Weick, 2007). Moreover, modern organizations' fast-changing global environment and growing complexity is resulting in an increasing level of stress among leaders and their staff (Bennis, 2001; Burke, 2011; Campbell, Baltes, Martin, & Meddings, 2007; Purser & Petranker, 2005; Weick, 2007).

The amount of stress, uncertainty, and anxiety that leaders feel today is greater than any time in history (Bennis, 2001; Campbell et al., 2007). One of the most critical consequences of leaders becoming more susceptible to the high pressure and urgency of stress is its effect on leaders' ability to think clearly and judge situations accurately (Everly, Strouse, & Everly, 2010). Studies on leadership and stress have indicated that in addition to leaders becoming increasingly predisposed to stress, their organizations are inadequate in

providing them with the necessary skills and tools to manage their stress (Campbell et al., 2007; Selart & Johansen, 2011). Despite the increasing levels of complexity and stress, today's organizations face the "need for members at all levels to be able to think, plan, innovate, and process information" quickly and effectively (Barrett, 1998, p. 605).

Although leaders have every intention of following their organization's formal strategic plan, the ambiguous realities of the twenty-first century, and the resulting amount of stress, drive leaders to improvise and make decisions spontaneously in the face of new problems. This form of ad-hoc improvisation in business is not intentional, yet it transpires as often as 75-90% of the time (Meyer, 2010; Mintzberg, 1973), and is often ineffective due to the leader's inability to think clearly while under high levels of stress (Bennis, 2001; Boyer 2009; Campbell et al., 2007; Moorman & Miner, 1998a). According to Montuori (2012), leaders must learn to manage stress, and become more adaptive problem solvers, capable of creating, innovating, and working quickly and under conditions of great uncertainty.

The experiential, emergent, and mindful nature of improvisational techniques has shown to be a successful tool for coping effectively with continuous change, making spontaneous decisions, managing stress, and developing the adaptable skillset of leaders, teams, and organizations (Cunha, Cunha, & Kamoche, 1999; Jackson, 1995; Safian, 2012; Van de Walle & Vogelaar, 2010). Although leaders' interest in improvisation-based programs has been increasing in the last decade, research on the topic is still in its early stages (Vera & Crossan, 2004). The impact of such trainings is still fragmented, conceptual, and mainly based on personal and anecdotal stories (Hatch, 1998; Vera & Crossan, 2004, 2005). If organizations wish to thrive in and adapt to this century's

changing requirements, it is vital for academic research to evaluate and further validate the capacity of improvisational techniques in order to serve as a facilitator of this change.

For this study, a holistic model of improvisation was developed by the researcher, and later revised using a grounded theory approach. The purpose of this study was to assess the effects of a pilot workshop applying the holistic model of improvisation to leadership development. Utilizing this framework in addition to adult learning (Knowles, 1984), and experiential learning principles (Kolb, 2000), the Improvisation for Leaders Workshop was designed and developed. Best practice adult learning and facilitation skills were incorporated into the framework to enhance learning, and the impact of the workshop in different intervals was evaluated.

Statement of the Problem

In a complex and ambiguous business world, leaders require nimble and adaptive decision making techniques. Numerous studies have emphasized the relationship between leadership and organizational performance (Burke, 2011; Mumford, Zaccaro, Harding, Jacobs, & Fleishman, 2000; Weiner & Mahoney, 1981). Leadership accounts for as much as 44% of the variance in profits, and 47% in stock price, as well as billions of dollars in employee productivity and performance (Burke, 2011; Mumford et al., 2000; Weiner & Mahoney, 1981). Without effective leadership, organizations will not be able to succeed in the ever more complex and uncertain business environment (Burke, 2011; Mumford et al., 2000). One of the most critical roles of a leader is decision-making, and a strong measure of a leader's effectiveness lies in the quality of those decisions (Bass, 1990; Trauffer, 2008). Modern organizations must navigate through highly complex environments, and this level of complexity is bound to increase in the future, causing an

increasing amount of stress and burnout (Burke, 2010; Zaccaro, 2001). In today's competitive global environment, leaders still rely on formal strategic planning, yet they need new techniques to act faster than the competition and be intuitive, innovative, and adaptive (Crossan, 1997; Montuori, 2012; Safian, 2012). Mankins and Steele (2006) found that only 11% of executives were highly satisfied with their strategic planning efforts. Because of the instability of the business world, the well-intentioned formal strategic plan of most organizations frequently fails to materialize. In fact, according to Mintzberg (1994), only 10-30% of intended strategy is actually realized, resulting in leaders improvising a solution, often under an increasing amount of stress (Bennis, 2001; Boyer, 2009; Campbell et al., 2007; Moorman & Miner, 1998a), yet without a proper improvisational skillset, the resulting decision can be highly ineffective (Moorman & Miner, 1998a). Studies show that improvisation in leadership decision-making is on the rise, and that it transpires in organizations up to 75-90% of the time (Meyer, 2010; Mintzberg, 1973). There has been no scientific empirical study completed since 1973 to reveal the actual percentage of managerial decision-making that is made spontaneously, and very little attention has been given to developing a skillset that would make managers more effective in this area (Meyer, 2010). No other leadership skillset that is applied over two thirds of the time has ever been so neglected and underdeveloped in managerial literature and training, while the classic management's model of planning, organizing, and controlling has been the dominant model in MBA curriculums and managerial trainings across the nation (Cross & Parker, 2004; Meyer, 2010).

Due to the frequency of improvisation occurring in organization, and the effectiveness of combining of spontaneity of action and intuition in a powerful yet simple

framework, developing improvisational techniques in leaders can offer a solution (Crossan, 1997, 1998; Montuori, 2012). However, the amount of existing research on the use of improvisational techniques in organizations is limited, and is frequently metaphorical or anecdotal in nature (Vera & Crossan, 2005). The applied aspects of improvisation have benefited from an even scarcer amount of research. Consequently, empirical research connecting and assessing the concepts of improvisation and leadership development in organizations is greatly needed (Vendelø, 2009). This is the problem that this study addressed.

Statement of Purpose

The purpose of this study was to assess the effects of a pilot workshop by applying a holistic model of improvisation to leadership development. This study explored the skills the leaders acquired during the workshop, the extent of the application of those skills immediately, in 2 weeks to 1 month, and subsequently, in 3 months following the workshop. This study also investigated which facilitation techniques used by the instructor more effectively supported this transfer of learning.

Research Questions

To carry out this study's purpose, the following research questions were explored:

1. In what ways, if any, did participants' perceptions of improvisation as a learning tool change as a result of attending the workshop?

2. What changes, if any, did the participants perceive in themselves and others by attending the workshop?

3. What facilitation techniques did the participants perceive to be the most effective in enhancing their learning?

4. In what ways, if any, did the participants' awareness of their spontaneous decision making change as a result of attending the workshop?

5. What changes, if any, did the participants identify in their level of stress by attending the workshop?

6. What other factors influenced the participants' learning?

7. How did the participants' learning affect their own or others' behavior and business results in their work environments?

Conceptual Framework

The conceptual framework used for this study centered on a Holistic Improvisational Leadership Model. Additionally, Hiatt-Michael's Theoretical Model of Curriculum Design was employed to develop the Improvisation for Leaders Workshop utilized in the study.

First Generation Holistic Improvisational Leadership Model. The conceptual framework for this study centered on a Holistic Improvisational Leadership Model that was initially influenced by Crossan's (1998) areas of improvisation, and then integrated with the latest research on improvisation. The researcher takes full responsibility for the design and creation of this Holistic Improvisational Leadership Model, which is based on the foundation of improvisation and improvisation principles, to develop the first generation of the Holistic Improvisational Leadership Model depicted in Figure 1 (Creswell, 2007). During an iterative process of applying grounded theory, the themes found as a result of qualitative analysis were utilized to revise the model after each collection of workshop data (Birks & Mills, 2011; Glaser, 2001, 2003; Strauss & Corbin,

1990a, 1990b, 1998), leading to the final version of the Holistic Improvisational Leadership Model, as depicted in Figure 3 and described in Chapter 5.

A visual representation of the first generation of the Holistic Improvisational Leadership Model, which was designed and created by the study's researcher, is depicted in Figure 1. This model has six key interrelated areas that link improvisation to effective leadership, resulting in creativity, innovation, and adaptive problem solving:

Foundation. Improvisation is the foundation of this model. For the purpose of this study, *improvisation* was defined as *spontaneous decision making within boundaries, based on available resources, focused toward solving problems, realizing opportunities, and discovering the future as it unfolds*. The model was designed based on this definition of improvisation.

The model's six key interrelated areas that link improvisation to effective leadership were:

1. Accurate perception of the external environment (Aram & Walochik, 1996; Corsun, Young, McManus, & Erdem, 2006; Crossan, 1998; Montuori, 2003a, 2003b, 2012; Purser & Petranker, 2005; Sharkansky, 2000; Vera & Crossan, 2004, 2005; Weick & Sutcliffe, 2001),

2. Tolerance of risk and ambiguity (Crossan, 1998; Montuori, 2003a, 2003b, 2012; Vera & Crossan, 2004, 2005),

3. Realized strategy: Merging planning with action (Brown & Eisenhardt, 1998; Crossan, 1998; Mintzberg, 1988, 1993, 1994; Montuori, 2003a, 2003b, 2012; Vera & Crossan, 2004, 2005; Weick, 2007),

4. Shared leadership (Crossan, 1998; Dickerson, 2011; Kocolowski, 2010; O'Toole, Galbraith, & Lawler, 2002),

5. Active listening (Brown & Eisenhardt, 1998; Conflict Research Consortium, 2004; Crossan, 1998; Diggles, 2004; Montuori, 2003a, 2003b, 2012; Spolin, 1963; Vera & Crossan, 2004, 2005; Weick, 2007), and

6. Collaboration (Crossan, 1998; Mintzberg, 1973, 1988; Montuori, 2003a, 2003b, 2012; Vera & Crossan, 2004, 2005).

With the effective implementation of these six elements in leadership development, the seventh and final element of the model can be achieved.

End result: *Creativity, innovation, and adaptive problem solving.* (Mintzberg, 1973, 1988; Montuori, 2003a, 2003b, 2012; Vera & Crossan, 2004, 2005). The application of improvisation as the foundation, combined with the above six key interrelated areas result in creativity, innovation, and adaptive problem solving for the organization.

This study's conceptual framework revolved around this First Generation Holistic Improvisational Leadership Model and Hiatt-Michael's (2008) Theoretical Model of Curriculum Design to develop the Improvisation for Leaders Workshop employed in the study. Furthermore, adult learning (Knowles, 1984), experiential learning principles (Kolb, 2000), and Kirkpatrick's evaluation model (Kirkpatrick, 1998) were utilized to design, implement, and evaluate the Improvisation for Leaders Workshop. The first generation model, developed in 2012, is further described at the end of Chapter 2, under conceptual framework.

Realized Strategy:
Merger of Planning with Action

Accurate Perception of:
External Environment

Collaboration

Tolerance of Risk & Ambiguity

Creativity, Innovation & Adaptive Problem-Solving

Active Listening

Shared Leadership

©Farnaz Tabaee's Holistic Improvisational Leadership Model
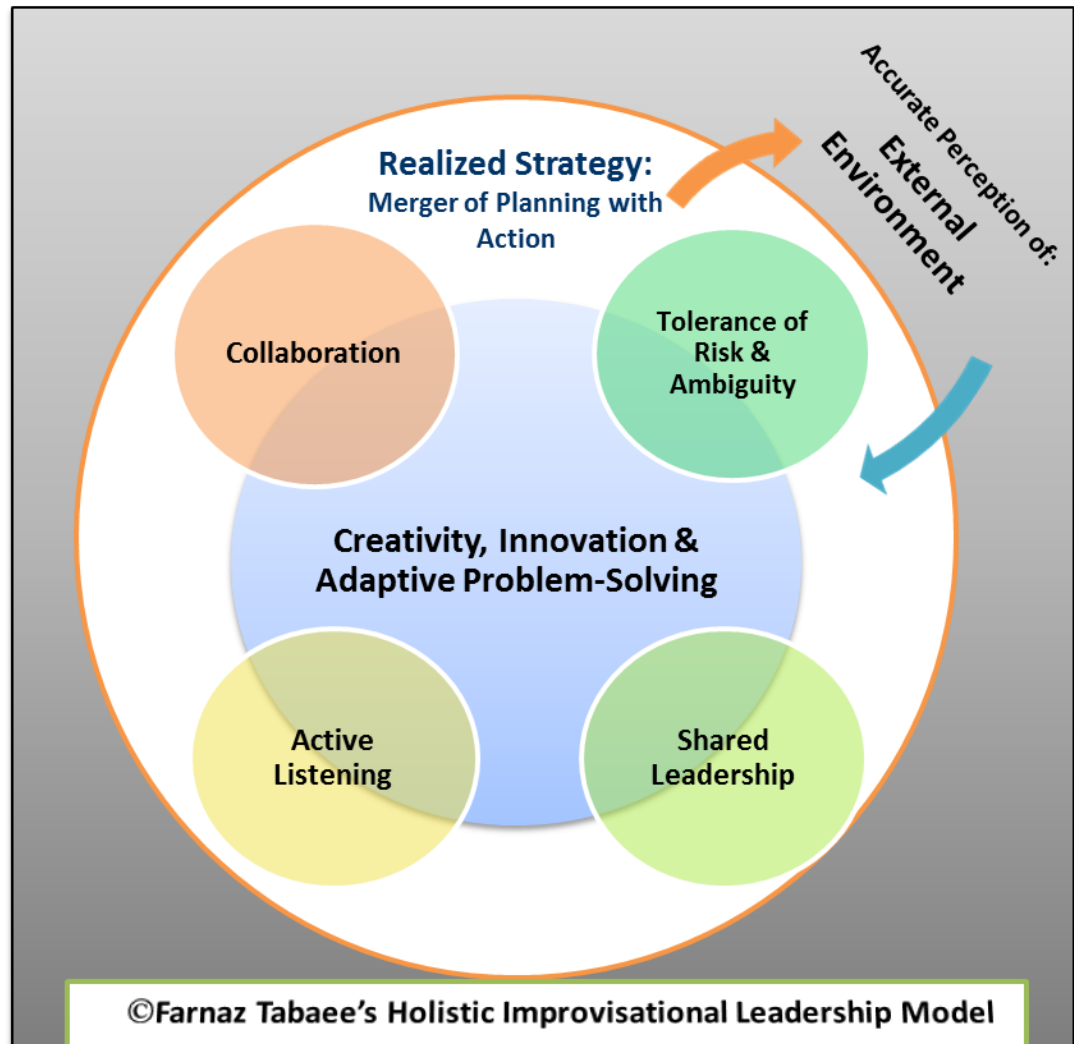
Figure 1. Tabaee's First Generation Holistic Improvisational Leadership Model.

Hiatt-Michael's Theoretical Model of Curriculum Design. Another conceptual model that was utilized throughout the curriculum design process in this study was the Hiatt-Michael's Theoretical Model of Curriculum Design, shown in Figure 2. This model was used as a roadmap to ensure all stakeholders' interests had been taken into account in the design and delivery of the leadership development workshop. The model is a valuable tool for workshop curriculum decision-makers, as a designer should consider all

stakeholders' interests when developing the workshop (see Figure 2). This model is further explained at the end of Chapter 2, under conceptual framework.
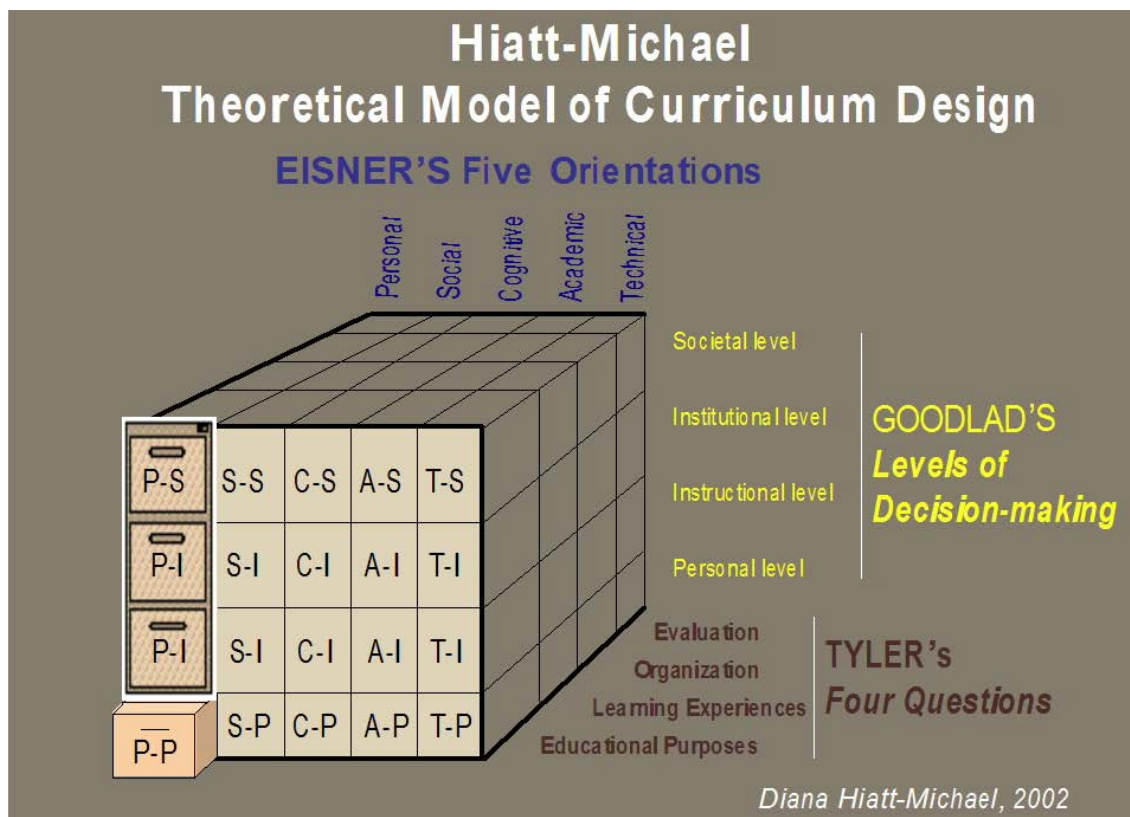
Figure 2. Hiatt-Michael's Theoretical Model of Curriculum Design. Reprinted from Teaching, Curriculum, and Community Involvement, 2008, by D. Hiatt-Michael, p.52, Charlotte, NC: Information Age. Copyright 2008 by the author. Reprinted with the permission of the author.

Significance of the Topic and Rationale

The significance of this topic is fourfold. First, the study of the application of improvisational techniques in organizations is still in its infancy, with minimal existing empirical research. In addition to minimal documented research, much of the evaluation of the impact of improv-based training has been metaphorical or anecdotal in nature, and based on personal stories with little supporting empirical data (Crossan, 1998; Cunha et. al., 1999; Leone, 2010; Vendelø, 2009; Vera & Crossan, 2005). In fact, the very first

empirical contribution in the area is dated 1998, by Moorman and Miner, in which the use of improvisation for new product development was examined (Moorman & Miner, 1998b). Furthermore, the subject of leadership and improvisation, specifically, has received even less attention within the improvisation and organizational literature, with only one article (Cunha et. al., 2003), and one master's thesis (Bilsen, 2010) completely devoted to it.

Second, most studies to date have mainly adopted a qualitative methodology (Leone, 2010), with a few empirical quantitative studies (e.g., Akgün, Byrne, Lynn, & Keskin, 2007; Leybourne, 2006; Leybourne & Sadler-Smith, 2006; Moorman & Miner, 1998b, Vera & Crossan, 2005). The gap in literature still remains for a mixed method study aimed at holistically understanding improvisation in leadership. Combining quantitative and qualitative methodologies within a single study allows for capturing and analyzing the results in addition to exploring the details behind the results (Creswell, 2002, 2007; Ivankova & Stick, 2007).

Third, existing studies have investigated the effects of improvisation either at the team level (e.g., Akgün et al., 2007; Moorman & Miner, 1998b; Vera & Crossan, 2005), or the project level (e.g., Leybourne & Sadler-Smith, 2006; Moornan & Miner, 1997). Only a few studies have explored the individual aspects of the improvisation or in combination with individual and team level applications (Leone, 2010). One such inquiry at the individual level is Meyer's (2006) expansive investigation into the process of improvisation for eight participants. This study was used to explore the application of improvisation at the individual level, and subsequently at the team level, with a larger and diverse sample of 67 participants.

Fourth, the existing research on improvisation frequently follows the jazz model, and is not holistic due to it being primarily used as a metaphor. According to McCort (1997) and Morgan (1996), this model has limitations in directly being transferred to business applications. Lessons from theater-based improvisational exercises are more accessible and the skills are transferable to business applications because of the shared rules and commonalities between the two disciplines (Berk & Trieber, 2009). Furthermore, only a few studies exist that describe the development of such transferable skills through improvisation training and development, including Thomson (2003), who studied graduate students learning improvisation, and Meyer (2006), who studied the process of learning improvisation. This study was used to fill this gap and augment the body of knowledge related to the impact of developing theatrical improvisation techniques, using a holistic yet practical model to facilitate learning.

The results of this study may benefit the participant leaders, leaders' staff, co-workers, families and organizations, corporate training programs, other businesses and corporations, the applied improvisation workshop leaders, and anyone looking for more research on utilizing techniques of improvisation in leadership development.

The rationale for this study emerged from the researcher's desire as an adult educator to advocate for improvisation techniques as a practical enhancement to traditional classroom learning. Moreover, this study met the need for furthering the improv-based learning research in business by an experienced leadership development educator, which is a characteristic of the researcher of this study. The researcher is a graduate of Second City Hollywood Improv program, and performs with various improv groups at Second City Hollywood and other improvisational ensembles such as UCLA

Extension and Toastmasters ImprovMasters. The researcher anticipated that by teaching

the critical improvisation skills in this study, leaders would be better prepared for the

unpredictability of the contemporary business environment. The researcher hopes that

leaders can teach these newly found improvisational skills to other leaders and their staff,

thus transforming their organization's ability to adapt to change.

Definition of Terms

Accurate perception of the internal and external environment. Accurate

perception of the internal and external environment occurs when leaders develop their

intuitive capacities through improvisation, so that they can be mindful of changes within

and outside of their organization, can accurately perceive its unexpected occurrences, and

learn to react to them with confidence (Aram & Walochik, 1996; Montuori, 2003a,

2003b, 2012; Purser & Petranker, 2005; Sharkansky, 2000; Vera & Crossan 1998, 2004,

2005; Weick & Sutcliffe, 2001). The continuous sharing of information between the

members of the organization, the external environment, and the organization are vital for

OPTIMAL (for this study, OPTIMAL stands for Open to the Present Thought and

Intuition, and Mindful in Action and Leadership) performance in the organization (Cunha

et al., 2003).

Action. In improvisation, the spontaneous merger of planning and action is

crucial for its effectiveness (Leone, 2010). *Action* is used in this study to denote mindful

action, as opposed to inaction, analysis paralysis, or impulsive actions.

Affirmative competence. In the midst of uncertainty, affirmative competence is

having sufficient expertise in one's content area, combined with the affirmative belief

that a solution exists, allowing the individual to leap forward with both action and a working strategy (Barrett, 2012).

Autonomy within boundaries. In this study, members of the organization are given autonomy within reasonable structure and boundaries, and minimal control to create maximum flexibility and a safe environment for exploration and risk taking in the organization (Barrett, 1998, 2012; Craig & Hart, 1992; Cunha et. al, 2003; Eisenhardt & Tabrizi, 1995; Meyer, 2006, 2011).

Behavior. Job performance or the extent to which employees apply their newly acquired knowledge and skills on the job and can include measures such as morale, motivation, engagement, decreased conflict, creative and innovative ideas, and is related to Level 3 of Kirkpatrick's evaluation model (Kirkpatrick, 1998; Kirkpatrick & Kirkpatrick, 2006).

Business results. Any changes in the performance of the business at the participants' place of employment. The business results could include increased sales, lower turnover, decreased costs, or increased production. Corresponds with Level 4 of Kirkpatrick's evaluation model (Chang, 2010; Kirkpatrick, 1998; Kirkpatrick & Kirkpatrick, 2006).

Celebrating failure. For the purpose of this study, in an experimental culture, mistakes that result from competent risks or a comprehensive plan, are not only tolerated, but also advocated and celebrated. Furthermore, to achieve OPTIMAL performance, leaders need to create a culture that does not reprimand people for admitting to mistakes, but highlights the mistakes, discusses what occurred, celebrates the results of

experimentation, and regards the failure as a valuable source of learning (Barrett, 2012; Picken & Dess, 1997).

Collaborative creativity. For this study, *collaborative creativity* is defined as the phenomenon which occurs in group flow, or *group mind* (Halpern, Close, & Johnson 1993) during improvisation, when team members collaborate effortlessly as a self-organizing team, where time flies, and individuals experience a sense of effortless action, characterized by a feeling of great absorption, fulfillment, and skill, an optimal state of mindfulness to the surroundings, and intrinsic motivation, allowing the group to produce highly creative, novel, and useful ideas (Csikszentmihalyi, 1990, 1996; Gloor, Oster, & Fischbach, 2012; Halpern et al., 1993).

Competent risks. In an experimental culture aimed at achieving OPTIMAL performance, competent risks are taken, and mistakes are tolerated. For this study, competent risks result from taking action on novel ideas and thoughtful experimentation, and not from careless or unsound ideas, or their execution (Barrett, 2012; Picken & Dess, 1997).

Exercise. In this study, the term *exercise* is analogous to an activity or an improvisational game. Various types of improvisational games (also called *theater games* or simply *games*) or are used to teach and practice the art of improvisation. According to Spolin (1963), a game is a natural group form providing the personal freedom essential for cultivating spontaneous and creative expression. The individual's skills are developed while playing the game because that is the exact moment an individual is truly open to learn and experience them.

Experimental culture. An organizational culture grounded in experimentation promotes improvisation in organizations. Experimental culture can tolerate competent risk and failure, and endorses action and experimentation, as opposed to reflection and planning (Barrett, 1998, 2012; Craig & Hart, 1992; Cunha et al., 2003; Eisenhardt & Tabrizi, 1995; Meyer, 2006, 2011).

Facilitation techniques. The techniques training facilitators use make learning easy for the participants. Using adult-learning principles, the techniques a facilitator utilizes such as training exercises, questioning techniques to elicit participation, stories, humor, media, and other learning tools to create an engaging, safe, and supportive learning environment (Biech, 2008), which can relate to Level 1, 2, and 3 of Kirkpatrick's evaluation model (Kirkpatrick, 1998; Kirkpatrick & Kirkpatrick, 2006).

Holistic improvisational leadership. To thrive in the increasingly complex contemporary organizations (Burke, 2010; Zaccaro, 2001), leaders require new skillsets, including improvisational techniques that will allow them to make OPTIMAL Spontaneous Decisions (OSD) and successfully navigate the business world (Zaccaro, 2001). OSDs use improvisational techniques to allow the leader to be open to present reality, thus making a decision that combines rational thought, intuition, and mindfulness in action and leadership to rapidly solve a problem. For this study, the term holistic improvisational leadership supports collaboration and employees' autonomy within minimal boundaries and without strict controls or constant monitoring (Barrett, 1998, 2012; Craig & Hart, 1992; Cunha et al., 2003; Eisenhardt & Tabrizi, 1995; Meyer, 2006, 2011).

Holistic improvisational leadership competencies. In Tabaee's Holistic Improvisational Leadership Model, these competencies or sets of skills and behaviors are based on the foundation of improvisation and holistic improvisational leadership and result from achieving the target organizational and member variables. The holistic improvisational leadership competencies include Affirmative Competence, Collaborative Creativity, Responsive Listening & Expression, OPTIMAL Spontaneous Decisions (OSD), and Shared Leadership.

Improvisation. Definition used for the purpose of this dissertation, which is spontaneous decision making within boundaries, based on available resources, focused on solving problems, realizing opportunities, and discovering the future as it unfolds. In short, improvisation is the extemporaneous merger of planning and execution (Leone, 2010). The following are the four principles of improvisation:

1) Spontaneity: Say the first thing that occurs to you. Don't self-judge. Mistakes are opportunities for learning.

2) Say, "Yes, And...": Accept and don't deny others' ideas.

3) Stay with the Group: Listen and observe the environment.

4) Make each other look good in your team.

Innovation. Ramus and Steger (2000) defined innovation as "the implementation of creative ideas within an organization" (p. 605).

Intuition. According to Burke and Miller (1999), intuition is "a cognitive conclusion based on the decision maker's previous experiences and emotional inputs" (p. 93). Intuition is further divided into inferential intuition, the instantaneous and unconscious processing of exhaustive amounts of information in the form of experience

or existing knowledge, and holistic intuition, the tacit, raw, gut feeling hunches that are still made instantaneously and unconsciously (Huang, 2012; Pratt & Dane, 2007; Simon, 1972, 1982; Sinclair, 2010, 2011a, 2011b).

Kirkpatrick's evaluation model. The most extensively used model of evaluation in corporate training evaluation is Kirkpatrick's (1998) four levels of evaluation (Hogan, 2007). The model includes four levels of evaluation: Level 1, or reaction, which evaluates how the program was received by the participants. Level 2, learning, measures a participant's changes in attitudes, knowledge, or skills as a result of the training. Level 3 measures behavior, which is a change in participants' job performance and behavior as a result of training. Finally, Level 4, results, examines the result of training on the organization as a whole (Kirkpatrick, 1998; Kirkpatrick & Kirkpatrick, 2006).

Leader. For the purpose of this study, a leader can specify all leaders and managers in an organization, including directors, project managers, supervisors and team leaders, and anyone who has influence over a team, group, or the creation and implementation of new products, services or processes. For the purpose of this study, the words *leader*, *executive*, and *manager* were used interchangeably to mean *leader*.

Leadership. According to Northouse (2007), leadership is "a process whereby an individual influences a group of individuals to achieve a common goal" (p. 3).

Learning tool. For the purpose of this study, a learning tool is any method used for delivering the instructional content to the participant by following adult-learning principles to enhance learning. Learning tools can include learning exercises, videos, demonstrations, and practice sessions. Silberman (2006) asserted that the highest levels of learning occur when the applied learning tools can actively engage participants in

hands-on activities that are designed to enliven learning, and include practice and application of what has been learned (Knowles, 1984; Kolb, 2000; Silberman, 2006). The learning tool is related to Level 1 and 2 of Kirkpatrick's evaluation model (Kirkpatrick, 1998; Kirkpatrick & Kirkpatrick, 2006).

Level of stress. Stress, originally coined by Selye (1936), can be comprised of both positive stress, or *eustress,* and debilitating stress, or *distress* (Selye, 1936, 1974, 1978). Unless otherwise noted, in this study, references to *levels of stress* are defined as the intensity of the physiological, psychological, and behavioral changes, which result when the demands from the environment exceed an individual's cognitive resources (Fevre, Matheny, & Kolt, 2003; Salas, Driskell, & Hughes, 1996). Yerkes and Dodson originated the concept of an optimal amount of stress in 1908, explaining that increasing the amount of stress is beneficial to performance until some optimal level of stress is reached, after which performance will decline in an inverted U diagram (Fevre et al., 2003; Yerkes & Dodson, 1908).

Mindfulness. Mindfulness is described as the purposeful attention and awareness to the present moment, approached with openness, acceptance, and nonjudgment (Brown & Ryan, 2003; Dane, 2011; Giluk, 2009).

Minimal structure. Minimal organizational structure and control enforced on people can foster trusting relationships and allow for maximum flexibility, creating a safe environment for exploration and risk taking within the organization (Barrett, 1998, 2012; Craig & Hart, 1992; Cunha et. al, 2003; Eisenhardt & Tabrizi, 1995; Meyer, 2006, 2011).

Open. For this study, the letter O in OPTIMAL denotes, being open and aware, flexible and nonjudgmental.

OPTIMAL. For this study, OPTIMAL stands for Open to the Present Thought and Intuition, and Mindful in Action and Leadership. OPTIMAL Spontaneous Decisions (OSD) are the building blocks of reaching an OPTIMAL performance and strategy.

OPTIMAL performance. For this study, OPTIMAL Spontaneous Decisions (OSD) and high performance are building blocks of reaching an OPTIMAL performance and culture. Using these constructs of an OPTIMAL culture, where stress is managed to an ideal level, and leaders and teams can produce high levels of performance, which lead to superior productivity and business results in complex, ambiguous times.

OPTIMAL Spontaneous Decisions (OSD). OSDs use improvisational techniques to allow an individual to be open to present reality and then make a decision by combining rational thought, intuition, and mindfulness in action and leadership to rapidly solve a problem. OSD is a combination of rational conscious decisions, and inferential and holistic intuition (Huang, 2012; Pratt & Dane, 2007; Simon, 1972, 1982; Sinclair, 2010, 2011a, 2011b), and is often made in the face of uncertainty and complexity, frequently with limited information and time pressure (Leybourne & Sadler-Smith, 2006). OSD can lead to ever more effective results due to increased practice, knowledge, expertise, and control of negative reactions to stress (Huang, 2012; Mintzberg, 1976; Pratt & Dane, 2007; Simon, 1972, 1982; Sinclair, 2010, 2011a, 2011b). OSDs are the building blocks for reaching an OPTIMAL performance or strategy.

OPTIMAL strategy. OPTIMAL strategy is adapted strategy, resulting from OSD, which emerges when leaders combine rational thought and planning with intuition, and adapt their strategy to the changing external and internal circumstances by the use of mindful action and leadership.

Participant. A leader (see the definition of the leader above) who participated in this study.

Organizational Outcomes. In Tabaee's Holistic Improvisational Leadership Model, the end result for following the competencies, and variables within an organization, which includes OPTIMAL Strategy, OPTIMAL Performance Productivity, innovation, and retention.

Perception. A participant's ability to collect and categorize signals and meaning coming from the environment, and processing and acting on that message (Noe, 2001).

Present. In this study, present is used to denote the idea of being in the moment, as it relates to the individual, the inside of the organization, and the external environment.

Productivity. Productivity is the application of resources directed at achieving the desired results (Baines, 1997; Johnson, 2009). Increase in productivity occurs when using the same resources, more output is generated by the employees (Johnson, 2009).

Responsive listening and expression. In this study, responsive listening and expression illustrate that in improvisation, one must express what is on his/her mind, allowing the individual a chance to bypass critical self-judgment and express the truth (Diggles, 2004; Spolin, 1963). In return, responsive listening is defined as listening that fully accepts and receives what the other person is expressing, paying complete attention to the speaker's words, body language, and feelings without judging the content of the message.

Retention. Retention is the process of ensuring that employees stay at the same organization and do not leave their positions (Billingsley, 2004; Morris, 2006).

Shared leadership. The concept of shared leadership, also referred to as distributed or rotating leadership, is defined by Pearce and Conger (2003) as "a dynamic, interactive influence process among individuals in groups or organizations for which the objective is to lead one another to the achievement of the group or organizational goals or both" (p. 1).

Spontaneous decisions. The form of ad-hoc and on the spot decisions in business which may or may not be *optimal* or *intentional* and can be ineffective if the leader's ability to think clearly under stress has not been mastered (Bennis, 2001; Boyer 2009; Campbell et al., 2007; Moorman & Miner, 1998a).

Target organizational and member variables. In this study and for the description of Tabaee's Final Holistic Improvisational Leadership Model, Target Organizational and Member Variables are considered to be the desired characteristics of an organization and its members. To achieve holistic improvisational leadership, certain desired organizational and member variables must be present. Target Organizational and Member variables are separated into organizational variables and individual organizational members' variables. For holistic improvisational leadership, the Organizational variables include Support from Senior Management, Experimental Culture, and Minimal Structure, and Accurate Perception of the External and Internal Environment. Each of the organizational variables lead to a desired organizational members' behaviors and assumptions including: the Improvisation Taught to All Members, Competent Risks, Celebrating Failure, Autonomy within Boundaries, and Mindfulness (Burke, 2011; Whetten, 1989).

Thought. In this study, thought is used to denote rational thinking and planning, as opposed to intuition.

Work environments. Participants' place of employment where they interact in teams, with subordinates and other leaders, and is related to Levels 3 and 4 of Kirkpatrick's evaluation model (Kirkpatrick, 1998; Kirkpatrick & Kirkpatrick, 2006).

Workshop. A workshop in this study specifies a class meant for adult learners, lasting three to three and a half hours in which up to 24 participants learn practical tools, actively participate in activities, and practice their newly skills in a safe supportive environment.

Key Assumptions

First, it was assumed that participants' self-reports were accurate and revealing of their true experiences at the workshop and on the job. A certain degree of discomfort was to be expected in the participants' actual performance of the improvisational exercises and in the interview process, as improvisation was an unfamiliar ground for many participants. The emotional and transformative nature of the learning may surprise some participants and make them feel uncomfortable. In order to be successful in conducting the interviews, the researcher must ensure a level of trust and comfort is established prior to engaging in the interview process.

Second, it was also assumed that due to the researcher's extensive background as a change agent and leadership development facilitator, the researcher attempted to encompass the qualities of a change agent, and be an unbiased instructor and observer. Change agents are facilitators and designers of systems for change, devoid of their own personal biases and innate predispositions (Tabaee, 2011b; Ulrich, 1996). Third, it was

assumed that improvisation-based learning should assist the learners to operate with using *whole brain* learning rather than the sole use of only *left brain* or *right brain* competencies. Fourth, in the literature of recent years, the concepts of *organization development* and *change management* have been melded together, and for the purposes of this study, the terms were used interchangeably (Rothwell, Stavros, Sullivan, & Sullivan, 2010).

Fifth, the words *instructor*, *facilitator*, and *teacher* in this study were used interchangeably to mean an instructor of a classroom. Similarly, the words *learner*, *participant*, and *student* were used interchangeably to mean the participant in a classroom, and *workshop* and *classroom* were used interchangeably to mean the classroom. Sixth, it was assumed that the participants are voluntarily attending the workshop.

Limitations of the Study

The researcher in this study acted as the instructor and a change agent in order to create a safe environment for change and learning in the workshop (Tabaee, 2011b). In all qualitative studies, "the researcher is the primary instrument of data collection and analysis" (Merriam, 1998, p. 42). The results of a study are inherently subject to some unintended bias and inherent assumptions of the researcher. To reduce researcher bias, an outside transcriber was used to transfer participant responses into an electronic format, in addition to four outside coders used to develop collectively the qualitative themes for this study.

One of the limitations is that this study was conducted at six different locations and organizations, encompassing 67 participants, the number of which was limited to the

individuals who signed up for the workshops, with 24 being the maximum number of participants at each location. Hence, the background and experience of participants that took part in the study inadvertently affected the outcome of the study. Furthermore, severely handicapped persons could not participate in the study without proper modifications and accommodations. A more extensive study would allow the researcher to apply to a larger population and enhance the significance of the findings.

Moreover, the business language used in the survey and interview questions in this study may affect findings from a group of leaders in other environments such as an educational institution. Using terminology unfamiliar to the leaders of a group may hinder their ability to respond accurately to the questions.

In conclusion, any qualitative study involving personal interviews has certain limitations. Logistics and participant cooperation, availability, and truthfulness are not within the control of the researcher, and, depending on the individuals, hindered or delayed the study progress and the analysis of the data.

Summary

Leaders are faced with the strategic imperative of developing their organizations' competitive edge in an era marked by chaos and complexity. To thrive in this complex and uncertain business environment, a very different way of coping is required (Montuori, 2012). The experiential and emergent nature of improvisation has shown to be an effective technique for developing the adaptive skillset of individuals, teams, and organizations (Cunha et al., 1999; Heames & Harvey, 2006; Jackson, 1995; Safian, 2012; Van de Walle & Vogelaar, 2010). This study was used to provide a holistic framework

for improvisation and of how the techniques of improvisation can develop the needed

competencies for twenty-first century leaders and their staff.

Organization of the Remainder of the Study

      This dissertation research is organized into five chapters. Chapter 2 gives a

foundation for the topic through the review of academic literature, and a critique and

analysis of the topic. Chapter 3 includes the methodology in which the design,

population, measurement, and data collection procedures are described, and the

limitations and expected findings are shared. Chapter 4 contains the data analysis and

reports the findings of the study. Chapter 5 includes the main findings, and interprets the

results, provides conclusions, and recommendations to practitioners, and suggests the

direction of future research.

Chapter 2: Review of Literature

> All efforts at deep change are efforts in improvisation: There is a commitment to an important purpose, but there is no prior knowledge of how to get there. (Quinn, 2000, p. 168)

Introduction

The purpose of this chapter was to present a thorough review of current literature related to the topic of this study. To conduct the literature review, the researcher used multiple information sources including books, dissertations, Internet resources, professional journals and periodicals. These were accessed through various books and electronic sources such as ERIC, EBSCOhost, ProQuest, WorldCat, and dissertation and thesis databases, Business Source Premier Databases, and Google Scholar.

To review the literature for this study, a multidisciplinary approach was taken. This study's literature review covers eight main topics. The first topic is a discussion of the timeline of organizations, from machines to systems, and to complex adaptive systems, followed by twenty-first century leaders, as well as the realities and skillsets of a leader in modern organizations. Organization development and change management concepts, followed by adult leaning and leadership development, are explored next. History and principles of improvisation, and subsequently, organizational improvisation and group outcomes of improvisation, are covered next. Strategic planning, or decision-making under stress, followed by curriculum development and evaluation, conclude this study's review of related literature. The conceptual framework comprised of the First generation Holistic Improvisational Leadership Model, developed by the researcher, and Hiatt-Michael's Theoretical Model of Curriculum Design, are examined in detail at the end of the chapter.

Timeline of Organizations: Machines, Systems, Complex Adaptive Systems

Background. This section explores the timeline of organizational theories and the evolution of improvisation and Complex Adaptive Systems (CAS) as a more suitable metaphor for the reality of organizations in the twenty-first century. The section starts with classical and scientific management theories of the early-to-mid-twentieth century, in which bureaucratic organizations were viewed as machines, to systems theory of the post-bureaucratic mid-to-late-twentieth century, in which organizations were viewed as systems.

Although these stances vastly differ in their views of organizational rigidity/flexibility, both assume similar positions regarding change management. Both orientations are geared towards planned change, seeking to manage change in order to return to equilibrium, and thus are inadequate in describing the dynamics of managing continual change of the twenty-first century (Ford, 2008). As of the late twentieth century and into early twenty-first century, the concept of organizations as CASs and the metaphor of improvisation are more suited to understanding contemporary organizations, as well as the uncertain and continuous change processes within them. Combining a CAS-improvisation framework more accurately describes the dynamics of continuous change, in which, instead of reducing, managing, or minimizing change, change is embraced, or absorbed, and the impact of turbulence is directed into creative energy.

Early-to-mid-twentieth century: Organizations as machines.

Planning for predictability. The early-to-mid-twentieth century signifies the birth and development of the classical scientific management. The traditional leadership tools of logic and rationality of early-to-mid-twentieth century assumed that the business world

operates as a machine and is steady and predictable (Pepper, 2003; Taylor, 1911/1967; Weick, 2007). According to this classic organizational change theory, organizations tend to be homeostatic, incessantly working to maintain a state of equilibrium (Weick, 2007). Regarded as the father of scientific management, Taylor (as cited in Pepper, 2003), first applied Newtonian physics to the world of work, which gave rise to the new industrial age at the start of the twentieth century.

Taylor (1911/1967) introduced *scientific management* in a series of essays, stating, "[T]he best management is a true science, resting upon clearly defined laws, rules, and principles, as a foundation" (p. 7). Taylor further asserted, "[F]undamental principles of scientific management are applicable to all kinds of human activities, from our simplest individual acts to the work of our great corporations" (p. 7). Henry Ford used this machine-like assumption about people and organizations, and applied it to the process of manufacturing cars through the model of mass production (Pepper, 2003). According to Morgan (1996), managements' tasks were summarized as command, control, and plan, in which managers gave clear instructions (command), ensured goals were being met (control), and planned the next set of activities and decisions (plan).

Mid-to-late-twentieth century: Organizations as systems.

Managing change. In the mid-to-late-twentieth century, scholars began to adopt a less mechanical view of organizations, and shifted their focus to the human influences within organizations, viewing organizations more as systems. Leaders were still trying to stabilize an unpredictable business world through change management. Using that mindset, any attempt to manage or plan change required a complete understanding of the organizational system. According to Senge (1994), systems thinking, or viewing

organizations as systems, is a framework for seeing interrelationships rather than individual things. The rationale for this systems view is that when managing rapid change, only organizations that can see the collective knowledge of the organization as a system, and tap into the people's capacity to learn continuously, will ultimately succeed. Senge described such organizations as learning organizations in which new and open ways of thinking are encouraged. Hiatt-Michael (2001) defined a learning organization as a place where "all members acquire new ideas, values, and skills and accept responsibility for making the organization work" (p. 4).

This organic form of organization differs from the more mechanistic form that features strictly defined processes and instructions. Superiors give orders and expect they will be obeyed; information flows up to superiors, allowing them to maintain their command and control of the hierarchy. In an organic structure, individuals perform their tasks outside a clearly defined hierarchy and rules; information no longer rests solely with superiors, and the organization attempts to control the unstable conditions of the environment (Burns & Stalker, 1961). This was the foundational model of managing change in the 1950s and beyond.

Late-twentieth to twenty-first century: Organizations as complex adaptive systems.

Ambiguous uncertainty. Although the view of looking at organizations as systems is still highly relevant and applicable, the concept of how change occurs and how it must be managed may need a revision in light of recent understandings about how living systems change. While classic scientific management and systems theory hold very different underlying assumptions about organizations, both theories hold similar positions

when describing the functioning of organizations while responding to turbulence and managing change. Both philosophies seek to maintain an equilibrium state, returning to stability. The mechanistic rigidity of classic management vs. the organic flexibility of an organization as a system differ topologically in their organizational forms, which are bureaucratic vs. postbureaucratic organizational design; functionally, however, they predictable stability or equilibrium, which is the desired state for both philosophies. Change, therefore, is seen to punctuate or disrupt this equilibrium (Ford, 2008; McDaniel, 2007; Stevenson, 2012; Tushman & Rosenkopt, 1994). Neither theory is adequate for defining and coping with the ambiguous uncertainty of the twenty-first century organization.

According to Hollnagel (2004), when work is planned, the assumption is that four conditions are present: (a) input to work processes are predictable, (b) resources are within normal limits, (c) working conditions are within normal limits, and (d) output conforms to the expectations. In the reality of the twenty-first century business environment, these conditions are frequently not satisfied, causing employees to alter their processes to complete the job. Not being proficient in making decisions under high stress with limited time, leaders and their employees are neither efficient nor effective at dealing with the unexpected, and often compromise safety, stability, resources, or results along the process (Grøtan, Størseth, Rø & Skjerve, 2008).

According to Safian, (2012), not only is the speed of change in business accelerating, but also "our visibility about the future is declining" (p. 62). The ability to predict the future is becoming exponentially more difficult. Safian continued,

Uncertainty has taken hold in boardrooms and cubicles, as executives and workers (employed and unemployed) struggle with core questions: Which competitive advantages have staying power? What skills matter most? How can you weigh risk and opportunity when the fundamentals of your business may change overnight? (p. 62)

Furthermore, according to Safian, the types of problems that are prevalent in the business world today are not just complex but also ambiguous. Dev Patnaik (as cited in Safian, 2012), strategy adviser to General Electric Executives, stated, "[T]he business community focuses on managing uncertainty," but added that the true challenge is that "in an increasingly turbulent and interconnected world, ambiguity is rising to unprecedented levels."

Patnaik continued, noting, "A difference exists between the kind of problems that companies, institutions, and governments are able to solve and the ones that they need to solve" (Safian, 2012, p. 66). Organizations know how to solve simple problems (Westley, Zimmerman & Patton, 2006), and as Patnaik asserted (as cited in Safian, 2012), most organizations are superb at solving clear but complicated problems, but not problems that are both ambiguous and complex. Complex processes are not run by a linear cause-and-effect relationship, and therefore cannot be solved by the logical methods used to decipher and implement complicated processes (Westley & Antadze, 2010; Westley et al., 2006). The business community does not know where to begin with the ambiguous and complex problems of today. This is precisely where improvisation skills can be of utmost importance to leaders trying to solve the complex problems of business.

Organizations as living complex adaptive systems. Interdisciplinary approaches to leadership have been pursued by scholars and practitioners searching for ways to understand the new realities of life and work in the twenty-first century. Concepts from

biology, quantum physics, evolution, distributed intelligence, and the dramatic and visual arts are being adapted to the task of understanding and envisioning a sustainable human and organizational system, which is akin in function to a living system, as opposed to a machine (Quirk, 2012; Wheatley, 1999). Using concepts such as CASs, or self-organizing systems, and improvisation, scholars and practitioners have identified interconnected systems, whole brain intelligence, creativity, and collaboration as the three essential and interdependent elements for organizational learning and performance (Adler, 2006; Quirk, 2012; Senge, Laur, Smith, Kruschwitz & Schley, 2008; Wheatley, 1999; Westley et al., 2006). As in the biology of living systems, CAS represents a network of diverse but interconnected agents with the capacity to change and learn from experience. This dynamic of change can be a used as a model for organizations and leaders adapting to change in a postindustrial era (Westley et al., 2006).

Scholars and practitioners now concur that modern organizations of the twenty-first century are more like CASs, in that they are immersed in uncertainty and ambiguity (Ford, 2008; McDaniel, 2007; Stevenson, 2012; Tushman & Rosenkopt, 1994). Ritter, Wilkinson and Johnston (2004) defined contemporary organizations as "self-organizing systems in which order emerges in a bottom-up fashion from the local relationships in which they are involved" (p. 175). Stevenson (2012) uses the analogy of an automobile to differentiate between a simple system and a complex adaptive business system:

> We cannot understand or hope to work with more specialized human social systems in the same manner as with simpler more fundamental systems, such as the automobile. We cannot pull a social system apart, check out the parts, fix the leaks and put it back together and expect it to work better. Many leaders and managers in organizations today still feel that social systems can be understood from a mechanistic and rational-comprehensive perspective. (p. 72)

CASs function differently than a machine in that they are unpredictable and emergent, and require leaders to recognize their underlying self-organizing nature. Stevenson (2012) maintained that leaders in must grasp that the complexity and ambiguity of twenty-first century organizations can only be expounded through understanding the nature of complex adaptive systems.

CASs function differently than a machine in that they are unpredictable and emergent, and require leaders to recognize their underlying self-organizing nature. Pascale, Millemann, and Gioja (2000), in their book, *Surfing the Edge of Chaos*, offer the following four principles for working with complex human social systems such as a business:

1. Dis-equilibrium is crucial for growth and sustainability;

2. Working at the edge of chaos is essential for adaptation;

3. Self-organization and emergence are vital for survival;

4. Complex business systems must be disturbed, not directed.

Using this new view of organizations, the focus and strategies for dealing with organizational issues become possible.

Complex adaptive systems and self-organization. According to Brown and Eisenhardt (1998), CASs are made up of multiple diverse agents such as people, or organizations, who are interacting. These systems display complex behavior, which is orderly yet adaptive, and full of flexibility and surprise. Any agent's behavior adjusts to changes, and is therefore emergent because it arises unexpectedly from the system with simple rules that guide this complex system. Systems that display this type of leaderless

but orderly conduct are self-organized because the agents organize to change. This

principle of self-organization orchestrates the change in CASs.

Chaos theory. According to chaos theory, within the defined boundaries of a

complex system, there can be random disorder (Cheryl, 1997). In other words, chaos can

be described as:

> An intricate mixture of order and disorder, regularity and irregularity: patterns of
> behavior, which are irregular but nonetheless recognizable as broad categories of
> behavior, or archetypes, within which there is endless individual variety. (Parker
> & Stacey, 1994, p. 11)

Cheryl (1997) described the conditions of chaos by differentiating between linear and

nonlinear relationships and systems. In a linear, simple relationship and a simple system,

there is one cause and one outcome. A nonlinear relationship is complex; one cause may

have many outcomes, and one outcome may have numerous causes. A nonlinear system

is more than the sum of its parts, meaning that a complex system cannot be studied in

parts or in separation from the whole system. A scientist can break apart a simple system

to comprehend how it works and its sections and then put it back together again with that

knowledge of the simple system. However, a nonlinear system necessitates a more

holistic approach in which the patterns produced through the behavior of the whole,

rather than the individual parts, are significant.

Chaos and complexity—Small changes create big results. The concept that

small changes create big results is not new. Drucker (1964) claimed that a small number

of exchanges create a large proportion of results. As such, management actions must

focus on creating those few exchanges that account for a large proportion of results

(Morrison & Morrison, 2011; Wallman, 2009).

Understanding CASs requires the search for, and understanding of, patterns of nonlinear relationships (Anderson & McDaniel, 1999; Ashmos, Duchon & McDaniel, 2000; Ashmos & McDaniel, 1991) in which inputs are not proportional to outputs, and small efforts to change systems can lead to big effects, while large efforts may result in little or no change. This nonlinearity is often the result of the positive and negative feedback systems between agents (Arthur, 1996; Brown & Eisenhardt, 1998; Kauffman, 1995; Morel & Ramanujam, 1999). An example of this phenomenon is the famous Butterfly Effect, in which Edward Lorenz (as cited in Pepper, 2003) asserted that a butterfly flapping its wings in Brazil could trigger an ever-increasing process leading to an eventual tornado in Texas. Consequently, any change effort, such as the workshop implemented in this study, can set into motion phases to create lasting change.

At a global level, by viewing organizations as CASs, chaos theory adds to the understanding that more planning and more information do not assist in predicting future behavior. Stacey demonstrates that according to chaos theory, beyond a certain point, any increased knowledge or planning of complex, dynamic systems does little to improve one's ability to extend the predictability of those systems. Therefore, having the capability to react in a spontaneous and flexible manner is critical to organizational success (Crossan, 1998; Stacey, 1991).

Components of the edge of chaos. In systems, too much structure creates deadlock, and too little structure creates chaos. Hence, the principles of self-organization can be applied to create a more adaptive organizational system with less strict structure (Bansler & Havn, 2004; Zheng, Venters, & Cornford, 2011). Complexity theory focuses managerial thinking on the relationships among diverse sections of an organization, in

which less control and greater adaptation results in effectiveness of the system. Hence, according to complexity theory, adaptation is most effective in systems that are only partially connected (Brown & Eisenhardt, 1998). Brown and Eisenhardt (1998) share the following example to describe the concept:

> A great example would be the traffic lights in a city. If there are no lights, traffic is chaotic. If there are too many lights, traffic stops. A moderate number of lights creates structure, but still allows drivers to adapt their routes in surprising ways in response to changing traffic conditions. (p. 14)

Accordingly, the fundamental way to create effective change is to stay gracefully on the *edge of chaos* (Brown & Eisenhardt, 1998; McDaniel, 2007; McDaniel & Driebe, 2001, 2005).

Organizations of the twenty-first century are faced with a fast changing, exceedingly competitive, and turbulent global environment characterized by plans which do not materialize (Purser & Petranker, 2005; Weick, 2007). Before an organization can successfully stay at the edge of chaos and be adaptive and flexible to change, the reality of modern organizations and the role of leadership in guiding this change need to be better understood.

Twenty-First Century Leader: Realities and Skillsets

General Dwight D. Eisenhower, former President of the United States, was quoted as saying, "In preparing for battle, I have always found that plans are useless, but planning is indispensable" (as cited by R. Nixon, 1962, p. 235). The process of planning is a key component of every business. Planning includes strategic plans, to annual reviews, to tactical and project plans. A leader must have the necessary tools to adjust the execution of the plan as new information, changing markets, and uncertainties will

invariably alter the most meticulously designed plans. In a highly competitive business environment, a leader needs a new set of skills to cope with and thrive in face of ambiguity and complexity (Burke, 2011; Mumford et al., 2000). Most leaders do not know where to begin with solving the complex problems they are facing (Westley et al., 2006).

Uncertainties of the twenty-first century. Modern organizations of the twenty-first century face a highly competitive and technologically advanced global environment characterized by continuous and ambiguous change (Purser & Petranker, 2005; Weick, 2007). Without effective leadership, organizations will not be able to succeed in this increasingly complex and uncertain business environment of today or the future (Burke, 2011; Mumford et al., 2000). Recent developments globally have intensified this influx of uncertainty and chaos. At the macro-level, the power of the global business environment seen in the Chinese and Indian economies, the frantic growth of global communications, and a host of social and environmental crises, such climate change, are increasing the rate and magnitude of change (Jepperson & Meyer, 2011; Rothwell & Sullivan, 2005; Senge et al., 2008). At the meso-level, (Jepperson & Meyer, 2011), organizational uncertainties and the increasing importance of knowledge capital (Jepperson & Meyer, 2011; Rothwell & Sullivan, 2005), in addition to a host of intergenerational challenges, information overload, stress, anxiety, and burnout, are creating an unsustainable amount of pressure on the organizations' human capital. At the micro-level (Jepperson & Meyer, 2011), burnt-out employees are disengaged, hoard information from team-members, and do not trust their leaders or their organizations. It is

safe to say that the twenty-first century has been instigated to be one of the most

unpredictable ever for business leaders (Heames & Harvey, 2006).

The Need for Creativity, innovation, and whole-brain thinking. According to

The Quest for Innovation: A Global Study in Innovation Management 2006-2016,

appointed by the American Management Association and performed by the Human

Resource Institute (HRI), more than two thirds of the 1,356 global respondents

designated innovation as *extremely important* or *highly important* to their organizations

due to its positive impact on productivity, receptiveness to customer needs, and new

product development (Bear et al., 2006).

Albert Einstein (as cited in O'Connor & Robertson, 2006) once said, "The world

we have made, as a result of the level of thinking we have done thus far, creates problems

we cannot solve at the same level of thinking at which we created them" (p.1). Daniel

Pink (2006) asserted that whole brain thinking, needed to succeed in the twenty-first

century, is required for success both amongst individuals, and for the nation as a whole,

now and in the future, requiring a level of thinking that engages all the senses and utilizes

the right brain capabilities as well as the left brain. Pink (2004) maintains that right brain

competencies, including design, empathy, creativity, and holistic thinking may

fundamentally be more crucial for success in today's organizations than the more

conventional left brain competencies of the twentieth century, including rationality and

logic.

According to Pink (2004), "The MFA is the New MBA. An arts degree is now

perhaps the hottest credential in the world of business" (p. 21). This assertion does not

mean MBAs are no longer needed, nor that leaders are excused from needing to be able

to think linearly, rationally, and logically. Pink emphasized that the left brain capabilities mentioned previously will always be needed to solve problems, think strategically, and to make decisions. Pink (2006) argued that these left-brain capabilities and competencies are no longer sufficient for success. Whole brain thinking is required for success in the conceptual age because, as Levitin (2006) asserted, "Both sides of the brain engage in analysis and both sides in abstract thinking" (p. 122). Therefore, in this study, the concept of left brain and right brain was not to be taken literally as the physiological left and right hemispheres of the brain, but rather metaphorically. Left-brain competencies represent analytic abilities such as thinking linearly, logically, and rationally. Right brain competencies, in contrast, represent abstract thinking abilities such as thinking nonlinearly, intuitively, artistically, and holistically (Pink, 2006).

Robinson, an internationally recognized leader and advocate of creativity in education, stated that today creativity has become as important as literacy, and it should be given the same significance in matters of education (Robinson & Aronica, 2009). According to Robinson (2001), creativity is the ingenuity to come up with new ideas, products, and processes that have value. Although creativity and innovation are used somewhat interchangeably in this study, some distinguish a difference between the two (Tabaee, 2011a). Ramus and Steger (2000) defined creativity as "the production of novel and useful ideas" (p. 605), and innovation as the implementation of those creative ideas in the organization. It is imperative that leaders in organizations learn how to make the most out of each employee's creative potential, in order to bring innovation to the organization (Tierney, Farmer, & Graen, 1999). Leadership, influence, and the ability to

effectively develop leaders of the future, are critical in creating a positive environment that is primed for success due to its being innovative.

Before any further discussion of twenty-first century leadership skills, an introduction to leadership terminology and relevant theories is warranted.

Leadership defined. Researchers and practitioners have developed numerous leadership theories and approaches over the years. According to Northouse (2007), over 65 different categories have been developed to explain the concept of leadership. Some of these categories define leadership using the characteristics and actions of leaders, whereas others emphasize the process or the relationship between leaders and their followers. Northouse defined leadership as "a process whereby an individual influences a group of individuals to achieve a common goal" (p. 3). Astin and Astin (2000) defined a leader as anyone who acts as a social change agent, regardless of his/her title or position. Based on this definition, all employees can be potential leaders.

Looking at the available literature on leadership, the one common element seems to be the notion that leadership is a process of influence (Northouse, 2010), which has been described by researchers such as Goleman, Boyatzis, and McKee (2002) to be *primal*, whereas Heifetz, Linsky, and Grashow (2009) described it as *adaptive*. Commonalities with regard to attributes of effective leadership in the contemporary organizations include integrity and trustworthiness. Influencing others, one's followers, and those outside the leader's immediate circle of influence indirectly builds leadership character, and without maintaining integrity and trustworthiness, the capability to influence will soon disappear (Maxwell, 1998). To be a leader, one must have followers who recognize the value of leader's contribution and choose to follow him/her (Kragness,

1993). To be successful as an organization, leaders need to inspire outstanding performance from their followers towards the mission and goals of the organization (Williams, 2013).

Leadership effectiveness requires a leader to choose among various leadership styles with a sense of adaptiveness. According to Goleman (2000), "Many managers mistakenly assume that leadership style is a function of personality rather than strategic choice. Instead of choosing the one style that suits their temperament, they should ask which style best addresses the demands of a particular situation" (p. 2). The success and performance of an organization depends on the effectiveness of its leadership. The behavior and vision of an organization's current and future leaders establish the culture of the organization and set the tone for desired behavior and productivity. Various leadership approaches have been used in literature ranging from autocratic leadership, to democratic leadership, to servant leadership, to name a few. Other leadership theories developed by researchers and practitioners include the great man theory, path-goal theory, and leader-member exchange theory. Leadership theories relevant to success in the contemporary organizations were chosen for this study, including transformational leadership, servant leadership, shared leadership, improvisational, conceptual complexity leadership, and finally, creative leadership. To show the range of leadership styles with some contrast in effectiveness and to identify styles of leadership, which may still be used in contemporary organizations, transactional leadership, Laissez-faire, and directive leadership theories are also explored.

Transactional, transformational, & laissez-faire leadership. Transactional and transformational leadership models are two models of leadership that cover a wide range

of leadership styles (Avolio & Bass, 2002; Bass, 1998; Bass & Avolio, 1994; Bass & Riggio, 2006). At one end, there exists the Laissez-faire leadership, which is a style of leadership that assumes individuals are motivated by internal forces and should be left alone to complete their work (Avolio & Bass, 2002). The next point in the continuum is the transactional style of leadership in which members agree to obey their leader totally when they accept a job. The leader is very clear about what is required and expected from the team members. In exchange for members' work and compliance, members get paid, and depending on their performance, there is a promise of reward or a threat of punishment (Avolio & Bass, 2002; Bass, 1998; Bass & Avolio, 1994; Bass & Riggio, 2006; Williams, 2013). Transactional leadership focuses on short-term tasks. Although this style of leadership is needed in organizations to get the job done, it is not a recommended approach long term, as it does not move members towards achieving a higher objective (Avolio & Bass, 2002; Bass, 1998; Bass & Avolio, 1994; Bass & Riggio, 2006; Bilsen, 2010). Transformational leadership is the end point of this leadership continuum, in which leaders inspire and motivate followers to work toward a mutually rewarding goal (McLean & Weitzel, 1991). Transformational leadership is described next.

Transformational leadership. Transformational leadership has been highly associated with success in contemporary organizations (Tichy & Ulrich, 1984/2008; Williams, 2013). There are three reasons for this. First, transformational leaders create an environment conducive to learning and development. According to Stanfield (2000), transformational leaders have a genuine, passionate concern for others in their learning and leadership. Second, transformational leaders are the true change agents in

organizations. Although a true change agent may be directive, as a whole, change agents place a strong emphasis on enhancing collaboration and participation among their followers. In addition, concepts such as power, authority, control, conflict, and coercion are held in relatively low esteem among authentic change agents (Avolio & Bass, 2002; Bass, 1998; Robbins, 2003; Tabaee, 2011b).

In the transformational leadership model, leaders inspire and motivate followers to work toward the organization and leader's vision (McLean & Weitzel, 1991). According to Northouse (2007), transformational leadership is "the process whereby a person engages with others and creates a connection that raises the level of motivation and morality in both the leader and the follower" (p.176). Bass (1998) wrote that authentic transformational leadership is based on four distinct components: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. In addition, it is based on three moral aspects: the moral character of the leader; the ethical values embedded in the leader's vision, articulation, and program; and the morality of the processes of social ethical choice and action that leaders and followers engage in and collectively pursue (Avolio & Bass, 2002; Bass & Bass, 2008; Bilsen, 2010; Tabaee, 2011a; Williams, 2013).

According to Bass and Avolio (1994), transformational leadership is defined in terms of how followers trust, admire, and believe in the leader, as well as the type of effect the leader has on the followers (Bass & Avolio, 2002; Tabaee, 2011a). According to Burns (1978), the authentic transformational leader is undoubtedly linked with higher-order values, which are much needed for success in the twenty-first century, such as self-transcendence and openness to change.

Servant leadership. Robert Greenleaf (1996) defined the term servant leader in 1970 as a leader who is a servant first and leader second. A servant leader contributes to the well-being of others and the community. Servant leadership characteristics create trust. Greenleaf's (as cited in Daft, 2008) essays included four basic precepts of the servant leadership model, including service to others before the self, listening receptively, empathizing, accepting and developing others, and inspiring trust.

Both transformational and servant leadership styles have similar characteristics, essential to effective leadership and change management, including being a visionary, creating trust in followers, and generating employee engagement. Transformational leaders generally focus on followers' well being as it serves organizational objectives, while servant leaders focus primarily on the well-being of their followers as the main goal (Bass & Bass, 2008; Bilsen, 2010; Sendjaya, Sarros, & Santora, 2008; Williams, 2013). Focusing on both organizational objectives and employees' development and growth are essential for effective leadership in the contemporary organizations.

Shared leadership. The concept of shared leadership, also referred to as distributed or rotating leadership, has become the focus of much research in recent years due to its utility in facing the realities of the contemporary organizations. In the twenty-first century, organizations and the problems that they face have become so complex that a single leader at the top of a hierarchy is no longer an effective or efficient way of managing the complexity. Pearce and Conger (2003) defined shared leadership as "a dynamic, interactive influence process among individuals in groups or organizations for which the objective is to lead one another to the achievement of the group or organizational goals or both" (p. 1). Heifetz (1994) contended that a paradigm shift was

needed to redefine leadership as "a collective process whereby groups or teams fulfill the leadership role thus enhancing the capacity of organizational members, both individually and collectively, to accomplish work effectively" (p. 23). To fit this new reality of the business environment, this perspective of shared leadership is needed for organizations to remain nimble and adaptive (Pearce & Conger, 2003; Williams, 2013).

Improvisational leadership. The central quandary for leaders in the ever-changing climate of organizations today is how to respond to, and integrate the inherent paradoxes that arise in, organizations (Cunha et. al. 2003). The skillset needed to make a synthesis of the paradoxes, such as directive and permissive styles, planning and acting behaviors, or control and freedom, call for a specific type of leadership. This type of leadership is termed *improvisational leadership* (Cunha et. al. 2003). In other words, improvisational leadership is the exercise of dialectical action by a leader, which can be defined as "the simultaneous integration of apparently contradictory behaviors, values, and beliefs in the process of leading a group" (Cunha et. al., 2003, p. 39). This style of leadership is not necessarily a new type of leadership theory, but it forms a set of skills in which leaders need to thrive in unexpected, contradictory, and ambiguous situations (Bilsen, 2010; Cunha et al., 2003).

Conceptual complexity leadership. The conceptual complexity theory of leadership is based on the notion that organizations operate within highly complex environments and this level of complexity is bound to increase in the future (Burke, 2010; Zaccaro, 2001). In the book, *The nature of executive leadership: A conceptual and empirical analysis of success*, Zaccaro (2001) illustrates the need for the conceptual complexity theory of leadership as follows: "Complexity results in the stratification of

organizations, wherein higher levels of leadership are characterized by greater information-processing demands and by the need to solve more ill-defined, novel, and complex organizational problems" (p. 17). To thrive, leaders require new skillsets including a great conceptual information processing ability that would allow them to make effective decisions in the midst of complexity, and to navigate the business world successfully (Zaccaro, 2001). As this study will show, the capacity for great conceptual information processing and rapid decision-making may be achievable with improvisational skillsets.

Directive leadership. Directive leadership is "the extent to which a leader engages in one-way communication; spells out the employee's role and tells the employee what to do, where to do it, when to do it and how to do it; and then closely supervises performance" (Blanchard, 1991, p. 22). Blanchard continues, describing the directive leadership behavior with words such as "structure, control, and supervise" (1991, p. 22). According to Chuck Williams (2013), directive leadership is "a leadership style in which the leader lets employees know precisely what is expected of them, gives them specific guidelines for performing tasks, schedules work, sets standards of performance, and makes sure that people follow standard rules and regulations" (p.787). Hence, the specific directive leadership behaviors may include setting goals and objectives, developing detailed action plans and schedules, and setting priorities (Williams, 2013; Benson, 2009; Blanchard, 1991).

Creative leadership. Creativity and innovation are vital to developing the future of organizations with alternate possibilities to the existing systems and processes that are failing organizations today (Montuori, 2012; Weick, 2007). Individuals would need to

unlearn their mechanistic and ingrained perceptions of reality, and learn new ways of perceiving and reacting in this emergent world. Leaders and their staff must be able to thrive with faster cycle times and come up with more creative and innovative solutions (Crossan, 1997).

Even if the significance of creativity and innovation are clear, the absence of creativity and ways of enhancing it, provide evidence for the difficulty of changing individuals' perceptions for implementing creativity in organizations (Heames & Harvey, 2006; Montuori, 2012; Palus & Horth, 2002; Safian, 2012). To address this challenge, Palus and Horth (2002) proposed ways in which creative leadership can be advanced to deal with the complex challenges of contemporary organizations. According to Palus and Horth (2002), six creative leadership competencies are needed:

1. *Paying attention*: Paying attention refers to a disciplined art of taking the time to slowly observe the depth and breadth of every moment while deferring the perceptual shortcuts that occur when one assumes the answer is already known.

2. *Personalizing*: Personalizing is a way to recognize that each person has unique experiences that can be cultivated and utilized to tackle challenges in the workplace.

3. *Imaging*: Imaging is the process of sense-making and creating understanding using the aesthetic, such as images, stories, and metaphors, above and beyond the purely logical.

4. *Serious play*: Serious play is a way of learning about the complexities of a problem in a safe environment by playing, testing the limits, and bending the

rules. The risks associated with mistakes in such an environment will not be
costly, allowing for a sense of freedom in experimentation.

5. *Collaborative inquiry*: Collaborative inquiry is the ability to nurture a
   productive dialogue across the borders of community, language or culture.

6. *Crafting*: Crafting is the integration of issues and actions with some of the
   forsaken competencies to create a new whole.

The integration of deeds and actions for a leader, and ensuring the consistency of
that message towards the employees, is regarded as one of the most crucial elements of
leaders' influence.

Human capital: Organizations' most valuable asset. Human capital is by far
an organization's most valuable asset, but its value is more pivotal today than it has ever
been. Bennis (2001) described the value of human capital as he asserted,

> I don't recall a time like today. A time when it's clear that we don't have the
> answers, when younger people may know more than their seniors and the
> importance of experience is declining, when the foundations of success have
> morphed from natural resources to human capital, when the economy is changing
> at warp speed and the life of the proverbial deal-making, world-shaking,
> tyrannical mogul just doesn't cut it, when employees really are a company's most
> valuable asset. (p. 1)

The concept of shared leadership, discussed earlier, is a solid indication for the
value of utilizing all employees as leaders. Furthermore, human capital is an
organization's most elusive asset as it is "the only intangible asset that can be influenced,
but never completely controlled" (Weatherly, 2003b, p. 1). Consequently, human capital
can represent the most opportunities and challenges for an organization by being the asset
with the greatest impending value while being the most challenging to delineate, manage
or control (Weatherly, 2003a, 2003b).

Intergenerational challenges in organizations. As discussed earlier, human capital is the most critical driving force for business success. Individuals' diverse perspectives and attitudes toward leadership style, values, loyalty to the organization, and communication change the dynamics of leadership effectiveness in a profound way. Intergenerational challenges in organizations deserve a more in depth look due to their prevalence and increasing relevance to leadership development.

Four generations of employees. For the first time in history, four generations of employees are working in tandem at organizations around the globe. These generations, along with their basic views about work, feedback, and work life balance are generally broken into the following four categories:

- *Traditionalist* (Born 1900-1945): Members of this generation want support in shifting the balance (Lancaster & Stillman, 2002; Trunk, 2007).

- *Baby boomers* (Born 1946-1964): Members of this generation want help in balancing everyone and finding meaning (Lancaster & Stillman, 2002; Trunk, 2007).

- *Generation X* (Born 1965-1980): Members of this generation want balance now, not when they are older (Lancaster & Stillman, 2002; Trunk, 2007).

- *Generation Y (Millennials,* born 1981-1999): Members of this generation want more and more training and development, to be heard, feedback, flexibility, autonomy, fun, experiential learning, and to be treated equally with potential for promotion (Hammill, 2005; Kolb, 2000; Lancaster & Stillman, 2002; PriceWaterhouseCoopers', 2008; Trunk, 2007).

Organizations need all four generations to appreciate their strengths and differences to create a collaborative working environment.

Demographic shifts and Generation Y. According to PriceWaterhouseCoopers (2008), demographic shifts indicate that life expectancy is increasing in much of the world while birth rates continue to decline. These dramatic shifts will lead to an unparalleled scarcity of younger employees and older employees working well past the current retirement age. The result of this shift is that,

> fewer younger people will be working to support a significantly larger older generation in the future. Even if we assume that older generations stay in work for longer, it is clear that the millennials will have a significant role to play in driving businesses forward. (p. 4)

The consequences of these variants could indicate that Millennials may become an extremely powerful generation of employees. To attract and retain this generation of workers, they first need to be understood. Generation Y leaders on average have a more democratic view of leadership and power sharing, and their numbers are increasing every day, both as employees and as leaders.

Generation Y and importance of training. Simply having Millennials join the workforce without considering their different motivations and needs will likely result in high turnover as Millennials do not shy away from seeking other suitable employment opportunities. According to PriceWaterhouseCoopers (2008), for Millennials, "training and development is the most highly valued employee benefit. The number choosing training and development as their first choice of benefit is three times higher than those who chose cash bonuses" (p. 5). Organizations need to discover ways to retain Millennials and maximize collaboration between generations. Millennials seek out

training that is experiential in nature, which has important implications for the improvisational development approach of this study (Epstein & Howes, 2006; Lancaster & Stillman, 2002; PriceWaterhouseCoopers, 2008; Trunk, 2007).

Lobman and Lundquist (2007) established how improvisational methods can produce dynamic learning environments for all generations. A core improvisational method involves setting up an environment that is mutually respectful and safe for making errors, and is supportive of the collective efforts of all generations. Furthermore, improvisation can be a great tool for both emerging and existing leaders in all generations precisely because of its capacity to bring a collaborative approach to the working environment.

Holistic improvisational leadership. For this study, the term holistic improvisational leadership is defined by combining the concepts of conceptual complexity leadership, improvisational leadership, and the outcomes of this study. One of the most critical roles of a leader is decision-making, and a strong measure of a leader's effectiveness lies in the quality of those decisions (Bass, 1990; Trauffer, 2008). Modern organizations operate within highly complex environments, and this level of complexity is bound to increase in the future (Burke, 2010; Zaccaro, 2001). With this additional complexity and stress, leaders need to solve more ambiguous, unique, and complex organizational tribulations. To thrive, leaders require new skillsets, including the techniques of improvisation, which will allow them to make more effective decisions and navigate the business world successfully (Zaccaro, 2001). A holistic improvisational leader supports collaboration and employees' autonomy within minimal boundaries, and

without strict controls or constant monitoring (Barrett, 1998, 2012; Craig & Hart, 1992; Cunha et. al, 2003; Eisenhardt & Tabrizi, 1995; Meyer, 2006, 2011).

Change is inevitable, and to identify and cope with the uncertainties and the intentional and unintentional changes in the business environment, organizations need an in-depth understanding of the field of organization development and change management, which is described next (Rothwell et al., 2010).

Organization Development and Change Management

Organization development (OD) can be defined as "the long-range efforts to improve an organization's problem-solving and renewal processes, particularly through a more effective and collaborative diagnosis and management of an organization's culture through the use of theory and applied behavioral science such as psychology, sociology, cultural anthropology, and organizational behavior" (French, Bell, & Zawacki, 2005, p. 35). OD can also be described as "an effort (1) planned, (2) organization-wide, and (3) managed from the top, to (4) increase organization effectiveness and health through (5) planned interventions in the organization's 'processes,' using behavioral-science knowledge" (Beckhard, 1969, p. 9).

One of the most influential scholars in developing the theories of organization development, social psychology and change, Kurt Lewin, originally created the foundational model of change management in the 1950s. According to Lewin (1951), change management is a three-step process of Unfreeze, Change, and Refreeze. Schein's (1995) and other change theories developed after Lewin have used his basic change model and have built upon it. Schein (1995) described the dynamic of change as follows:

The key, of course, was to see that human change, whether at the individual or group level, was a profound psychological dynamic process that involved painful unlearning without loss of ego identity and difficult relearning as one cognitively attempted to restructure one's thoughts, perceptions, feelings, and attitudes. (p. 3)

Schein (1995) asserted that Lewin's notion of *unfreezing* led to the insight that there is an equilibrium point that individuals or organizational systems try to preserve. He affirmed that any form of learning and change for individuals are initiated by some dissatisfaction or frustration that disconfirms their expectations. Senge (1994) reinforced this notion by stating that the creative and transformative learning that occurs in individuals requires this disconfirmation of hopes and expectations. Disconfirmation is, therefore, the primary driving force in this equilibrium.

Change management. Change management can be described as the process of assisting and managing a person, group, or organization to learn, transform, and change effectively (Rothwell et al., 2010). In the research and literature of recent years, the terms *organization development* and *change management* have been merged, and for the purposes of this study were used interchangeably. Furthermore, in OD and change management terminology, the concepts of change and learning have been melded and used to refer to the same concept (Rothwell et al., 2010).

Anderson and Anderson (2001) described three different types of change. *Developmental change* signifies an *improvement* of a performance standard or existing skillset that does not fulfill the requirements of current or future demands. *Transitional change*, on the other hand, does not merely improve, but replaces what is with something entirely different. The most complex type of change is *Transformational change,* in which a radical shift of culture, behavior, and mindset needs to happen and be sustained over time.

Resistance to change. Naturally, individuals tend to ignore the new information regarding change or deny its validity unless they accept the information and consider it valid and relevant. What typically prevents individuals from doing so is an anxiety called *learning anxiety* or the feeling that if one allows oneself to enter a learning or change process, one admits making an error and will lose face, self-esteem, and even a sense of identity (Schein, 1995). According to Schein (1990, 1995), change only happens when the individual feels psychologically safe to do so. The job of leaders and change agents, he adds, is to guide the direction of this learning or change. In Schein's words,

> When the learner finally feels psychologically safe, he or she may experience spontaneously an insight that spells out the solution. Change agents such as process consultants or nondirective therapists count on such insights because of the assumption that the best and most stable solution will be one that the learner has invented for him or herself. (p. 10)

As it relates to learning as change, this guidance takes the shape of encouraging the learners to discover their own solutions.

Change projects often fail in large part due to leaders not expecting resistance to change, and therefore not managing it properly Schein (1990, 1995). To ensure the proper implementation of a change project, consultants and leaders can try to predict and plan for obstacles and resistance, thereby managing and leading the process through the application of a practical and proven change model (Kotter, 1996).

Kotter's eight-step change management model and its critique. One of the best known and the most applied models of change management, following the systems model, is Kotter's (1996) eight-step change management model, which is based on the assumption that although change is a natural part of any organization's life cycle,

transformational change does not occur effortlessly or without planning. Kotter's model

consists of the following linearly executed eight-step model:

1. Create a sense of urgency,

2. Form a powerful coalition,

3. Create a vision for change,

4. Communicate the vision,

5. Empower others to act on the vision (remove obstacles),

6. Create short-term wins,

7. Build on the change,

8. Anchor the changes in corporate culture.

Although Kotter's (1996) model is widely applied in today's organizations and

can provide a practical roadmap for communicating and predicting obstacles, it is still a

linear model that assumes predictability and manageability of the change process. In a

hierarchical organization, such as the U.S. Army, with a top-down change effort, this

model could produce the desired change. However, most organizations do not fit into

classical hierarchies. Moreover, the complexity and ambiguity of modern organizations

can present major challenges in executing a top-down change, thereby assuming a certain

measure of stability. As a result, the linearity of the model does not take into account the

ever-so-present surprises and ambiguities of the twenty-first century, and can lead to a

misguided direction once it has started, with no room for co-creation or other forms of

participation.

Reality of new leadership. According to Senge et al. (2008), the real difficulties

are not as much the crises themselves, but rather, the inadequacy of our responses to

them. If each problem is viewed as a separate issue and is approached as such, the solutions that are created will be short-term and opportunistic, quick fixes that do nothing to address the issues in the long term (Senge et al., 2008). When leaders sense that all the crises they face are interconnected, their view of these issues shifts to uncover the remarkable opportunities that exist for innovation, which can only occur when we abandon reacting to fear and anxiety. Leaders will then realize that the crises of today are only the result of an outdated way of thinking (Senge et al., 2008).

Senge et al. (2008) asserted that no era can last forever, including the Industrial Age, which has shaped society's view of issues and their resolutions for generations. Furthermore, the onset of globalization has created a level of interdependence between nations and regions that has no precedent. The Industrial Age is ending because leaders, organizations, and their governments are becoming conscious of the side effects of industrialization, which cannot be sustained any longer. When faced with challenges of this magnitude, Senge et al. maintain that the majority of institutions try even harder to maintain the status quo, but as neuroscientists say, the human brain *downshifts* under stress, and reverts to the most primitive and habitual modes of behavior, as will societies. Leaders need a shift of thinking and working to a more conscious level for collaboration, creativity, and innovativeness in order to flourish and create sustainable teams and organizations (Senge et al., 2008).

Organizations as complex adaptive systems. As discussed previously, scholars and practitioners acquiesce that modern organizations of the twenty-first century are more like CASs, immersed in uncertainty and ambiguity (Ford, 2008; McDaniel, 2007; Stevenson, 2012; Tushman & Rosenkopt, 1994). Ritter et al. (2004) classified

contemporary organizations as "self-organizing systems" (p. 175) in which the order is no longer top-to-bottom, but rather transpires in a bottom-up manner from the local relationships of employees. Stevenson (2012) noted that leaders must grasp that the complexity and ambiguity of modern organizations can only be explained through understanding the nature of complex adaptive systems. As Brown and Eisenhardt (1998) described, CASs are made up of multiple diverse agents such as people or organizations that are interacting. These systems are adaptive, and full of flexibility and surprise. Any agent's behavior adjusts to changes and is emergent as it arises from the system without warning while guided by simple rules. These systems are leaderless but orderly and self-organized (Brown & Eisenhardt, 1998).

Chaos, on the other hand, can be described as a mix of order and disorder (Parker & Stacey, 1994). As Cheryl (1997) described, in a linear simple system, there is a cause and effect, while in a nonlinear and complex relationship, one cause can have many results, and one result can have several causes. Therefore, in such a complex system, a small change can create colossal results (Morrison & Morrison, 2011; Wallman, 2009). Thus, by viewing organizations as CASs at the global level, chaos theory alerts us that beyond a certain point, more information does not assist us in predicting future behavior (Crossan, 1998; Stacey, 1991). Consequently, having the aptitude to react in a spontaneous fashion to unpredictable stimuli can be critical to organizational success (Crossan, 1998; Stacey, 1991).

Edge of chaos. Complexity theory alerts us that in complex systems, such as organizations, too much structure creates gridlock, and too little structure can create chaos (Brown & Eisenhardt, 1998). Therefore, adaptation is most effective in partially

connected systems (Brown & Eisenhardt, 1998). Fundamentally, the way to produce effective change is to stay subtly on this *edge of chaos* (Brown & Eisenhardt, 1998; McDaniel, 2007; McDaniel & Driebe, 2001, 2005). For organizations to stay at the edge of chaos and be a partially connected system, the reliance on strict planning of traditional organizations must change to a more responsive and improvisational style.

Before an organization can successfully stay at the edge of chaos and be adaptive to change, the skillsets of leaders need to be augmented to incorporate this change. Adult learning and leadership development guidelines can create the safe environment in which leaders can gain these valuable skills and help to create and implement the Improvisation for Leaders Workshop used in this study.

Adult Learning and Leadership Development

Leadership development in the twenty-first century. Without the needed leadership skills, organizations will not be able to succeed in the ever more complex and uncertain business environment (Burke, 2011; Mumford et al., 2000), yet according to Buchel and Antunes (2007), there are no established standards for executive or leadership development workshops or their assessment. They request that a considerable research investment be placed into the creation and evaluation of leadership development workshops and evaluation of their outcomes. They continue by asserting that for the period of 1956-2007, the Social Sciences Index of the Web of Knowledge found only 32 papers on the topic of executive education, and call for future research in the leadership and executive development workshops.

Nohria and Khurana (2010) in their *Handbook of Leadership Theory and Practice*, asked the question: "Do we really understand what it takes to develop better

leaders?" (p. 3), noting that, "[T]he current state of scholarly research on leadership doesn't allow us to answer these questions with confidence" (p. 3). Hogan and Warrenfelz (2003) have developed a leadership development model based on four competencies: (a) intrapersonal skills, (b) interpersonal skills, (c) leadership skills, and (d) business skills. These skill sets are hierarchical, and therefore, in order to develop a higher skill, one must first develop the lower-ranking skill sets. Hence, once business skills are learned, leaders can focus on leadership skills, then interpersonal skills, and lastly intrapersonal skill sets.

In their leadership development model, Hogan and Warrenfelz (2003) ranked business skills as the easiest to learn, while intrapersonal skills are in fact the hardest to achieve, because of their hierarchical nature. Ironically, business skills have traditionally been the focus of most leadership development workshops, followed by some leadership and interpersonal skills. Intrapersonal skills, in the form of knowing oneself, self-limiting beliefs and assumptions, and seeking change, are seen very infrequently in leadership development workshops. This study focused on revealing self-limiting beliefs of leaders and developing their communication skills and interpersonal skills, as well as agility in their leadership style, using improvisation techniques. Before the rationale for the design of the leadership development workshop used in this study can be discussed, however, a thorough analysis of how adults learn, namely adult-learning theories, is warranted.

Adult learning theories. The field of adult learning, also called andragogy, is comprised of a set of assumptions about how adults learn (Knowles, Holton, & Swanson, 2005). According to Knowles (1984), following these six adult-learning assumptions will enhance the learning outcomes of for adult learners. These assumptions are often

contrasted with the widespread pedagogical model (the art and science of how children learn) of the past. Knowles' theory of andragogy outlines effective methodologies for how adults learn. Each of Knowles' six assumptions can bring about new possibilities for enriching the learning experience of adult learners (Knowles et al., 2005).

The need to know. According to Knowles (1984), the *need to know* is the first principle of adult learning. Adults need to know why they need to learn something as well as how it will apply to their lives. In the pedagogical model of learning, it is assumed that children will learn what they are told. In contrast, adults need to know how *why* they should learn a new concept before they learn it (Knowles et al., 2005).

One way to apply this principle to a leadership development class is to ask learners before the start of the class to reflect on their goals and expectations from the class, how they plan to apply what they learn in the future, and how it will help them meet their goals (Knowles et al., 2005). Lawler (1991) suggested that these goals and expectations be used throughout a class or workshop to reinforce the importance of learning activities. The learning activities must be then aimed towards the importance of learning the concepts in the course, and the instructor must be prepared to adjust the course materials in a dynamic fashion to more effectively meet the learners' needs. One way to apply this goal is to ask learners at the end of a class to share how they will apply the concepts learned in class (Knowles et al., 2005).

The learner's self-concept. The learner's self-concept is the second assumption of andragogy or adult learning (Knowles, 1984). As a person enters adulthood, his/her self-concept moves from one of being a dependent personality toward one of being a self-directed human being. According to Knowles et al. (2005), adults "resent and resist situations in

which they feel others are imposing their wills on them" (p. 65). Providing an opportunity for learners to choose how they want to learn, such as self-directed learning, will allow adults to maintain their self-concept and increase their receptiveness to learning (Knowles, 1984). For adult learners to fully learn and participate in a class, they must feel as if they will not be ridiculed or criticized (Knowles, Holton, & Swanson, 1998). Therefore, the facilitator must work to create a safe-learning environment, and demonstrate caring for the participants by listening to, understanding, and accepting their points of view (Bolman & Deal, 2001). In fact, Hiatt-Michael (2001) asserted that *caring* is the characteristic that most effectively creates a learning community (Hiatt-Michael, 2001).

 The role of experience. The role of experience is the third principle of adult learning. Adults have a lifetime of experiences (Knowles, 1984). The adult learners' accumulated experience is an ever-increasing resource for learning that can and should be used in the learning experience. Adults normally enjoy sharing their knowledge and experience, and being recognized for having that knowledge. To utilize this rich reservoir of knowledge, instructors can include various forms of group discussion or team activity, allowing learners to benefit from each other's knowledge and experience (Knowles et al., 2005).

 Readiness to learn. Readiness to learn is the fourth principle of adult learning (Knowles, 1984). Adults become ready to learn based on the developmental needs of their real-life roles, usually to solve or better cope with a real-life task or problem they are facing. To apply this principle to developmental activities, instructors can implement real-life role-plays where learners can see how learning a new skill can assist them in solving their current problems (Knowles et al., 2005).

Orientation to learning. Orientation to learning is the fifth principle of adult learning. Adults' orientation to learning is not subject-centered; rather, it is life, task, or problem centered. Adults seek immediate application of knowledge for solving their real-life problems (Knowles, 1984). The problem-centered orientation of mature learners requires specific implementation. Learning topics needs to be followed by a chance for learners to immediately apply the knowledge learned to a real-life problem they are facing. Moreover, allowing flexibility in lesson plans to inquire about learners' interests and needs will allow an opportunity to address learners' immediate issues in the classroom, rather than delivering a preplanned instruction that may have no relevance to learners' real lives (Knowles et al., 2005).

Motivation. The sixth and final principle of adult learning is motivation. Although some external sources can be a motivator, adult learners are largely motivated to learn by their own internal sources and intrinsic motivations. Asking specific questions to uncover intrinsic and extrinsic motivations of learners, and when feasible, providing a choice between topics covered, as well as the pace at which learners complete the course, can provide applications of this principle in the classroom. These tactics should increase the likelihood of adult learners completing a course successfully. Furthermore, retention of the knowledge gained should also be much higher because the topic has intrinsic significance for the learners (Knowles et al., 2005).

Knowles' work on andragogy, and how adults process and learn new knowledge, changed the way educators teach both adults and children. Although one may not agree with all of Knowles' principles of adult learning, it can be argued that at least some of his principles can be applied in almost every learning situation. As educators, it is imperative to

keep these principles in mind when designing a lesson, and, after a carefully looking at

specific learner characteristics and environments, select the best delivery method to ensure

optimum results for learning (Knowles et al., 2005).

Learning retention. Learning retention is sometimes an overlooked area of learning

precisely because it is practically synonymous with learning. The phenomenon of memory

and forgetting, which is highly related to the concept of retention, was first identified by

Ebbinghaus in 1885. Ebbinghaus created the *forgetting curve,* in which he exhibited the

decline of memory retention as time passes. Ebbinghaus also observed the *spacing effect* in

which humans learn more easily if they have spaced practice wherein regular practice of the

knowledge/skill occurs over a period of time to allow for the concept to be processed into

long-term memory (Ebbinghaus, 1885/1962).

In contrast, Silberman's (2006) learning retention research focused on techniques of

teaching and learning. Silberman reports that the average learning retention from various

instructional modes are: lecture (5%), reading (10%), audiovisuals (20%), demonstration

(30%), discussion (50%), practice by doing (75%), and teaching others (90%). Silberman

asserted that the highest levels of learning occur when learners are actively engaged in hands-

on activities designed to enliven learning, including practice and application of what has been

learned.

To follow the adult-learning principles, maximize learning, and minimize forgetting,

the practice of teaching a skill should be repeated at intervals. Although that is not always

practical, there can be continuous feedback, repetition of materials, and use of various

modalities for delivering the material, coaching between sessions, and follow-up and support.

Therefore, if adults learn best by doing, combining adult-learning principles with experiential

learning in a spaced and repeated fashion would be the most effective way of teaching adult learners. Improvisational techniques are based on this experiential type of training.

Experiential learning. The application of adult-learning principles to learning by doing, or experiential learning, allows adult learners to flourish in a learning environment. According to Kolb (2000), experiential learning is a key route to the integration of education, work and self-development. Experiential learning emphasizes that the learner attains knowledge, skills, and personal development by participating in relevant experiences.

According to Kolb (2000), experiential learning theory stems from the concept that "ideas are not fixed and immutable elements of thought but are formed and reformed through experience" (p. 319). Kolb's learning theory aligns with Dewey's (1938), in which he asserted that effective learning occurs when there is a balance between real-life experiences and knowledge. The use of improvisation in leadership development allows the learners to be immersed in an experience of self-discovery and offers new approaches to old issues within their organizations.

Experiential learning cycle. Experiential learning theory offers "a holistic model of the learning process and a multilinear model of adult development" (Baker, Jensen, & Kolb, 2002, p. 51). Kolb's experiential learning theory presents a cycle of four elements of concrete experience, reflective observation, abstract conceptualization, and active experimentation. Although this model is presented as a cycle, the steps may occur in any order and overlap as needed for the learning to take place (Oxendine, Robinson & Willson, 2004). The cycle starts with learners having a concrete experience, leading them to observe and reflect. After this reflective observation, the learners put their thoughts together to create abstract concepts

about what had occurred, guiding them to actively test what they have constructed in the future, leading to new experiences, and re-starting of the learning cycle (Baker et al., 2002; Oxendine et al., 2004).

Recent research has shown that the approach to teaching adult learners has dramatically changed from a traditional, knowledge transfer practice to an interactive, experiential practice in disciplines such as business and management, medicine, and psychology (Kolb & Kolb, 2006). As evidence of experiential learning's value increases, so too does the need arise for new ways of incorporating experiential learning practices into organizational training (Boggs, Mickel & Holtom, 2007). Improvisational theater techniques are experiential by nature, providing an effective tool for incorporating its techniques into organizational training (Kolb & Kolb, 2005).

Knowles (1984) expressed the value of experiential learning by stating, "The psychic rewards are greater from releasing the energy of learners than from controlling it" (p. 97). Experiential learning enables the participant to free this energy by engaging in an activity, drawing insights from it, and employing that insight in the work environment, and as a result, to be responsible for his/her own learning, also called self-directed learning.

Self-directed learning. According to Knowles (1975), self-directed learning is a process "in which individuals take the initiative, with and without the help of others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies, and evaluating learning outcomes" (p. 18). Improvisation offers a great opportunity for self-directed learning because although it originates from the self, the

learning does not occur in isolation. Rather, according to Knowles, it necessitates collaboration with others, which improvisation provides.

Transformative learning. A form of experiential learning (Kolb, 2000), transformative learning is "the process of learning through critical self-reflection, which results in the reformulation of a meaning perspective to allow a more inclusive, discriminative, and integrative understanding of one's experience. Learning includes action on these insights" (Mezirow, 1991, p. xvi).

According to Mezirow (2000), transformative learning is the process of "becoming critically aware of one's own tacit assumptions and expectations and those of others and assessing their relevance for making an interpretation" (p. 4). Transformational learning occurs when an individual has had the opportunity to reflect on his/her set of assumptions and expectations that have been established by others from childhood and beyond, finds those assumptions to no longer be valid, and revises those assumptions to match the new reality.

According to Mezirow (2000),

Transformative learning refers to the process by which we transform our taken-for-granted frames of reference (meaning perspectives, habits of mind, mind-sets) to make them more inclusive, discriminating, open, emotionally capable of change, and reflective so that they may generate beliefs and opinions that will prove more true or justified to guide action. (p. 8)

Transformative learning frequently involves very deep and powerful changes in one's beliefs and is evidenced in action in experiential learning (Kolb, 2000). Bodily-kinesthetic arts methods are experiential and when used effectively, can be also transformative in nature.

Cooperative learning groups. Cooperative learning can be described as "the instructional use of small groups so that students work together to maximize their own

and each other's learning" (Johnson, Johnson & Smith, 1991, p. iii). To implement

cooperative learning, lessons and activities need to be judiciously designed so that

students can cooperatively work together to reach a common goal (Johnson et al., 1991;

Wallestad, 2010). The activities in this study were designed utilizing small groups, with

the goal of achieving cooperative learning goals.

Cognitive and emotional learning. According to Cherniss, Goleman,

Emmerling, Cowan, and Adler (1998), it is imperative to differentiate between two types

of learning: cognitive learning and emotional learning. Cognitive learning is about taking

in new data, but emotional learning requires adults to literally change the pathways in the

brain for a new way of responding emotionally in a given situation. According to adult-

learning theories, all learning requires practice, and for social and emotional learning, there

has to be even more practice and feedback. Leaders will first have to unlearn their ways of

interacting with self and others so that they can learn a new way of dealing with emotions.

For learning to occur, adults must have the knowledge of what is being learned. The four

ways of knowing, composed of how we gain knowledge about the world, is described next.

Knowledge and four ways of knowing. Human beings participate in, and express

their experience of the world through, four interdependent ways of knowing, or gaining

knowledge about the world around them: experiential, presentational, propositional, and

practical. In this worldview, called the participative worldview, there is a given cosmos, in

which human intelligence—body, mind and spirit—actively participates in a dance to co-

create reality (Reason, 1998). In other words, experiential, presentational, propositional, and

practical ways of knowing are segments of human intelligence through which individuals can

interact with the universe to co-create reality (Heron, 1992, 1996a, 1996b; Heron & Reason, 2001; Reason, 1998).

Reality, therefore, is "subjective-objective…subjective because it is only known through the form the mind gives it; and it is objective because the mind interpenetrates the given cosmos which it shapes" (Heron, 1996a, p. 11). According to Heron (1996a), "Worlds and people are what we meet, but the meeting is shaped by our own terms of reference" (p. 11). We do not learn about the world around us through only a one-dimensional rational mind. According to Reason (1998), we meet the world and the people in it, through four ways of knowing (or epistemology) including experiential, presentational, propositional, and practical knowing.

According to Reason (1998), experiential knowing is the unspoken phenomenon that conveys reality through an inner recollection with reality, and is the foundation of other forms of knowing. In other words, experiential knowing is "knowing through participative, empathic resonance with a being, so that as knower I feel both attuned with it and distinct from it. It is also the creative shaping of a world through imaging it." (p. 19). Presentational knowing, on the other hand, transpires from, and is grounded in, experiential knowing. Reason (1998) stated that presentational knowing, "clothes our experiential knowing of the world in the metaphors of aesthetic creation." (p. 20). Prepositional knowing is comprised of knowing in theoretical terms and transpires from presentational knowing. Reason (1998) asserted that propositional knowing "is knowledge by description expressed in statements and theories that come with the mastery of concepts and classes that language bestows." (p. 20).

The fourth and final form of knowing is practical knowing, which is knowing how to do something, validated in a skill or competence. Reason (1998) contends that practical knowing "fulfills the three prior forms of knowing, brings them to fruition in purposive deeds, and consummates them with its autonomous celebration of excellent accomplishment." (p. 20). Heron (1996b) maintains that although one can separate thought from action, one cannot separate action from thought. Practical knowing, therefore, both brings together all other forms of knowing, and is simultaneously based on them. Within a participative worldview, inquiry is a way of life that integrates action with reflection, and practice with learning.

Heron (1992) distinguishes between presentational knowing and propositional knowing in his extended epistemology. According to Heron and Reason (2001):

> Presentational knowing…provides the first form of expressing meaning and significance through drawing on expressive forms of imagery through movement, dance, sound, music, drawing, painting, sculpture, poetry, story, drama, and so on. Propositional knowing "about" something is knowing through ideas and theories, expressed in informative statements. (p. 183)

Presentational knowing can only be understood in relation to the other ways of knowing, since each one is grounded in, and builds upon, the previous way of knowing. Accessing our aesthetic knowing through presentational methods rather than through propositional methods is the identifying characteristic of bodily-kinesthetic arts methods. Although all ways of knowing are crucial to learning, presentational knowing using forms of art has typically not been used in leadership development unless as a means to *taking a break* from other types of learning. This study is aimed at proving that bodily-kinesthetic arts methodologies can be used alongside other methods of learning to increase understanding and the effect of learning of any professional development workshop.

Improvisation-based learning for leaders. In the complex, unstable, and unknowable environment of business today, Weick (2007) asserted that to forgo the use of logic is to "gain access to lightness in the form of intuitions, feelings, stories, improvisation, experience, imagination, responsive listening, and awareness in the moment, novel words, and empathy. All of these nonlogical activities enable people to solve problems and enact their potential" (p. 15).

Improv-based methods can provide a means of accessing leadership and the world of business in a more holistic way. Lobman and Lundquist (2007) have demonstrated how improvisational methods can be used to create safe and productive learning environments. Mistakes are tolerated and even encouraged in improvisational theater, and participants work collegially together and listen to one another. Utilizing improvisational methods can create the trust and safety that is so conducive to learning and collaborative teamwork. To utilize the full potential that improvisation offers, a more detailed understanding of its origins and principles are warranted.

Improvisation: History and Principles

Improvisation, often known as improv or impro, is simply acting or playing without a script. The applications of improvisation reach all fields and continue to cross boundaries due to its inherent power to create and transform. Improvisation has been defined by a host of authors in a multitude of ways, from clear and simple to complex and multifaceted. One of the simplest ways improvisation has been defined is by Crossan and Sorrenti (1997) as "intuition guiding action in a spontaneous way" (p. 156), zeroing in on spontaneity and intuition as the two nonnegotiable ingredients of effective improvisation. Jackson (1995) simply defined improvisation as "freedom within structure" (p. 26).

According to Jackson, the structure must be firmly in place before the freedom of improvisation can flourish. Without that structure, there will be chaos; and without that freedom, there will be suffocation. He compared improvisation in organizations to improvisational Jazz music, where there must be a balance between freedom and structure to make it a successful undertaking. Other definitions of improvisation include "the conception of action as it unfolds, drawing on available material, cognitive, affective, and social resources" (Cunha et al., 1999, p. 302). Similar to improvisation, and sometimes interchangeably used, bricolage is finding solutions from available, rather than optimal, resources (Ciborra, 2002; Weick, 1998). Cunha et al. (1999) considered bricolage to be inextricable from improvisation. Ciborra (1996) described improvisation as the "ability to efficiently generate new combinations of resources, routines and structures which are able to match the present, turbulent circumstances" (p. 104), whereas Barrett (1998) described improvisation as "fabricating and inventing novel responses without a prescripted plan and without certainty of outcomes; discovering the future that action creates as it unfolds" (p. 605).

It is imperative to note that the common themes in these definitions of improvisation all seem to include (a) a concept of doing, as in taking action; (b) unexpected circumstances; (c) a concept of time, as in spontaneity; (d) a concept of having no predetermined plans; and (e) utilizing available resources. Hence, in this study, a new definition of *improvisation* will be used as spontaneous decision making within boundaries, based on available resources, focused on solving problems, realizing opportunities, and discovering the future as it unfolds. In short, improvisation is the extemporaneous merger of planning and execution (Leone, 2010). Most improvisations

are based on contexts of improvisation in jazz, theater, or sports. In organizational settings, the contexts of jazz and theater have been the most applicable.

Improvisation in jazz. Early applications of improvisation often followed the jazz metaphor. Many of the earlier studies and some of the contemporary cases are based on jazz as an effective blueprint for great performance. "Jazz improvisers are interested in creating new musical material, surprising themselves and others with spontaneous, unrehearsed ideas. Jazz differs from classical music in that there is no clear prescription of what is to be played" (Barrett, 1998, p. 606). The misconception about jazz players is they are untutored geniuses who randomly happen to pick notes and form music from it, when in reality "the art of jazz playing is very complex and the result of a relentless pursuit of learning and disciplined imagination" (p. 606). Jazz players are highly committed to self-awareness, renewal, and creating their own learning opportunities.

Social creativity or the lone genius. When improving in jazz, there are no road maps that can predict what one must do to coordinate with fellow jazz players. In improvisation, one's best tool is always listening deeply and being attentive to what each player is doing and not doing. According to Barrett (2012), "When someone asked Miles Davis how he improvises, he said that he listens to what everyone is playing and then plays what is missing" (p.122). Hence, just as in a jazz band, where listening intently to your fellow band members is key for an outstanding performance, research on collective intelligence shows that when people are sincerely listened to, groups become more eloquent, skillful, and productive (Barrett, 2012).

According to Barrett (2012), in the traditional business world, enormous amounts of energy pour into rewarding individual performance, for both leaders and followers.

Yet scholars and practitioners have discovered that the notion of the *lone genius* or individual brilliance is not ordinarily the way breakthroughs occur. Innovations are the result of social relationships and conversations between diverse groups of people with divergent skills.

Improvisation in both jazz and theater can be a model for this innovative way of interacting with one another. In a corporate culture, where this mutual reliance exists, information flows easily between team members who know that they will do what is necessary to make each other look good, and help the team accomplish its goals (Barrett, 2012). Social creativity can create performance beyond any one person's genius could have possibly accomplished, and improvisation, both as a metaphor and in action, can teach teams how to reach that level of creativity and performance (Barrett, 2012; Berk & Trieber, 2009).

Although improvisation in jazz has profound significance and abundant learning intrinsic to it, according to McCort (1997) and Morgan (1996), the jazz metaphor has some limitations. The jazz metaphor can only be used as a metaphor for organizations and not as active experiential learning activity due to a need for musical instruments for appreciating its full potential. For those who have played jazz, this concept of improvisation is inherently understood, but to practice improvisation in music, one must have the understanding of musical instrumentation, and many individuals do not. Improvisation is theater uses language, gestures, and movements, mechanisms that are accessible to all individuals without a major disability.

Consequently, this study utilized holistic improvisational exercises from theater, which can be easily transferred to business, and is therefore more applicable to

organizational and leadership development and applications. Because people are the instrument, the principles of this form of improvisation are also the principles of effective business (Berk & Trieber, 2009). The holistic improvisational exercises from the theater were adapted for use in this study.

Improvisation in theater. Modern improvisation as a form of performance and theater games originated in the late 1940s by Viola Spolin, as she began her work with the Young Actors Company (Leep, 2004). Spolin (1963, 1990) described improvisation as art and transformation. Spolin placed a high value on intuition, a skill that is available to all, but is rarely given much emphasis. She wanted people to experience improvisation physically, mentally, and intuitively. Spolin asserted that improvisation allows for spontaneity of thought, discovery, creative expression, and experience (Spolin, 1963, 1990).

The techniques of theater-based improvisation can be used for transformation and self-development; according to Spolin (1963), "The heart of improvisation is transformation" (p. 38). Improvisation in theater can also be described as the "exploring, continual experimenting, tinkering with possibilities without knowing where one's queries will lead or how action will unfold" (Barrett, 1998, p. 606). Enhanced self-awareness, more accurate perception of others, learning, trust-building, and increased creativity, can all transpire when one uses the techniques of improvisational theater as a way to transform the self (Spolin, 1963).

History of improvisation in theater. According to Blatner and Wiener (2007), the history of improvisation as a form of storytelling has its roots in early Greek narrative epics like *The Odyssey* and *The Iliad*, which had their genesis in improvised story telling

(Hodgson & Richards, 1966). The Commedia dell'Arte was essentially improvised comedy, structured to follow very simple plot lines and scenarios consisting of a handful of stock characters.

The roots of American improvisation as an art form trace back to the twentieth century, and surprisingly, do not have their origins in theater. The roots of improvisation rest in social group work, developed by Neva Boyd's contributions towards the social and educational reforms of the early twentieth century (Bonifer, 2008; Duffy, 2011). Improvisation became a ubiquitous staple of modern classroom drama due in part to the progressive education movement initiated by Thomas Dewey (1916). His views of improvisation focused on the premise that children learn through the spontaneity of playing and action (Dewey, 1916).

During early-to-mid-twentieth century, educators and social reformers were embracing innovative approaches to teaching and learning. Parallel to Spolin, Josephine Raciti Forsberg started a movement that supported individuals in their journeys to reach their full creative potential (Bonifer, 2008; Duffy, 2011). Alongside Dewey, the three women, Neva Boyd, Viola Spolin, and Josephine Raciti Forsberg, all first-generation Americans, have played significant roles in the expansion of the art of American improvisation and learning where play and process surpasses the focus of the end-result (Duffy, 2011).

Spolin's son, Paul Sills, began using Viola Spolin's theater games in his theatrical work, which he later turned into The Compass Theatre, which evolved into The Second City. Not long after, in the mid-1950s, Keith Johnstone began his own theatre games, first for education, then for actor training in England. Both Spolin and Johnstone were

working independently of each other, but both were attempting to create a method of spontaneity. Both first taught children and later applied improvisational ideas to adults. Although Spolin did not create The Compass Theatre or The Second City, she is called the high priestess of improv by Compass historian Janet Coleman (1990), as virtually everyone associated with those theatres at that time acknowledged the influence of her approach on the growth of their theaters. Johnstone (1979) began working as a teacher, then as a play reader, then as a developer of new plays. His ideas on spontaneity became well known with the publication of his book, *Impro*, still used by many as a handbook for acting, and highly influential in the development of TheatreSports.

>>>>>> **Origins of the term improvisation.** The root of the word improvisation is *proviso,* which means *to bring something in advance.* The prefix *im*, once added to the word proviso, changes the meaning to the *opposite* of *proviso,* or dealing with the unanticipated (Weick, 1998).

>>>>>> *Improvisational games.* Various types of games (short for theater games or improvisational games) are used to teach and practice the art of improvisation. According to Spolin (1963), a game is a natural group form providing the personal freedom essential for cultivating spontaneous and creative expression. The individual's skills are developed while playing the game since that is the exact moment in which an individual is truly open to learning and experiencing them.

>>>>>> There are various styles and types of improvisation. It is important to distinguish between the styles of improvisation: gag improv and narrative improv, and discuss which style will be referred to when discussing improvisation activities.

Types and styles of improvisation in theater. There are several types of theatrical improvisation. Short form improv consists of short scenes usually constructed from a predetermined game, structure, or idea, and is driven by an audience. Many short form games were first created by Viola Spolin based on her training from Neva Boyd (Spolin, 1963, 1990, 1999). The short form improv comedy television series "Whose Line Is It Anyway?" has familiarized American and British viewers with short form improv.

Long-form improv performers create shows in which short scenes are often interrelated by story, characters, or themes (Spolin, 1963, 1990, 1999). Long-form shows may take the form of an existing type of theatre, for example a full-length play or Broadway-style musical such as Spontaneous Broadway. One type of long-form theatrical improvisation, referred to as the Harold, was originally developed by Del Close and actualized by Close's collaboration with Charna Halpern. It is a popular structure performed by improvisational theater troupes around the world (Drinko, 2012; Halpern et al., 1993).

Just over 30 years old, Playback Theater is an improvisational ensemble, primarily noncomedic, founded by Jonathan Fox, intended to evoke a type of ceremonial enactment in which art and healing meet (Fox, 2007; Park-Fuller, 2008; Rowe, 2007; Weinstock-Wynters, 1997). In Playback Theater, actors and a musician act out life stories told by volunteer members of the audience without using any costumes or scripts (Park-Fuller, 2008; Rowe, 2007). Playback Theater is a form of Community Theater that gives the overlooked and the ignored members of society visibility and a voice (Fox, 2007; Park-Fuller, 2008; Rowe, 2007; Weinstock-Wynters, 1997).

Styles of improvisation. Improvisation may be intimidating to many due to the reputation of gag improv in which two skilled stand-up comedians try to top each other's comedy at the expense of the story. It is highly competitive and dangerous in the hands of unskilled performers, and is therefore not recommended for corporate applications because in gag improv one's relationship is mainly with the audience and not one's partner (Diggles, 2004). Gag improv, therefore, will not be used for this study.

By contrast, in narrative improv, the improviser's humor is a result of listening actively to his/her partner, and pursuing the objective of the story. The improviser's relationship is primarily with his/her partner and not the audience. It is cooperative, and as a result instills trust in one's partner, allowing people to begin to have fun with one another. The humor is not based on cleverness; it is based on saying the first thing that comes to mind, and consequently, it is easier to perform than gag improv (Diggles, 2004). Narrative improv, therefore, will be used in this study.

Improvisation is not about comedy. Improv does yield comedy, but improvisation is not primarily the study of comedy (Madson, 2010). The popularity of shows such as Drew Carey's "Whose Line Is It Anyway?" has resulted in greater mainstream popularity of improv, but also the viewers' equating of improv with the fast-paced witty humor of stand-up comedians, whereas improv is quite distinct from stand-up comedy (Gale, 2004). Improv is a relational activity, while stand-up comedy is based on an individual's lines and performance. The relationship aspects of improv can be manifested through the player-player relationships, the player-audience relationships, and the player's relationship with the self (Gale, 2004). As Spolin (1963) noted,

"improvisation is not an exchange of information between players; it is communion" (p. 45).

Spolin's (1963) improv classes sought to teach socialization skills, build the confidence of performers, and foster community, although many improv groups can focus solely on being funny. Nonetheless, improv can be utilized for considerably wider applications than comedy, such as therapy, healing anxiety, improving presentation skills, and strengthening leadership.

Improvisation is not about talent. Everyone can improvise (Madson, 2010; Spolin, 1963, 1990). "Human beings are improvisers by nature. Today there are more than 293 million Americans who will need to improvise" (Madson, 2010, p. 18), and every one of them will be able to do so. Spolin (1963, 1990) refuted the notion of talent needed for improvisation or acting in general. Spolin (1963) stated, "We learn through experience and experiencing, and no one teaches anyone anything. This is true for the infant moving from kicking to crawling to walking as it is for the scientist and his equation" (p. 3). Spolin (1963, 1990, 1999, 2001) emphasizes that improvisation is not about performance and result, or going for the joke, but rather about the process and the experience of playing. This is an important distinction for any manager or leader concerned about his/her lack of talent in improvisation.

Improvisation is about authenticity. If improvisation is not about comedy or talent, then one might ask what is improvisation about? The answer time and time again seems to point towards being your natural self and reacting to the moment at the height of your intelligence. Viola Spolin (2001) explained this concept brilliantly in the book *Theater Games for the Lone Actor: A Handbook,* writing:

> In present time a path is opened to your intuition, closing the gap between thinking and doing, allowing you, the real you, your natural self, to emerge and experience directly and act freely, present to the moment you are present to. (2001, p.xii)

Authenticity in improvisation is revealed when the Broadway legend, Barbara Cook articulated the following point when asked to reveal her "big secret" of improvisation:

> To be as authentic as we know how to be at the moment, so that we can be more and more present in what we do. The more we can do that, the safer we are. The problem is it feels most dangerous, because what I ask people to do is in effect undress emotionally, so that's very frightening and new. But this very thing that seems most dangerous is where safety lies. (cited in Purdum, 2002, p. B3)

The paradox is that as dangerous as it sounds, authenticity is where true safety resides (Meyer, 2010). Authenticity not only is safest for the person who risks it, but it is safest for others, as it creates a comfortable space for others' new ideas and perspectives (Meyer, 2010).

When others feel safe to be themselves, they also feel safe to be spontaneous, work to their full, unlimited potential, and unleash the passion and creativity of their team. Authenticity is at the heart of effective leadership, and it cannot be faked; or if faked, it certainly cannot be faked for long (Goffman, 1959; Hagen, 1991; Hindin, 2007; Locander, Luechauer, & Pope, 2007; Schiffman, 2006). When not being authentic, the role of a leader can be seen as the role of an actor playing a scripted character. Both leaders and actors must be able to deliver a performance that is highly believable, but even actors cannot play at all times. Consequently, leaders playing a role every day for 60-70 hours a week can become exhausted and highly ineffective.

Role theory and leader as actor. According to role theory, each social role is associated with a set of expectations and norms, imposed by others and the self, that a person is expected to fulfill (Goffman, 1959; Hagen, 1991; Hindin, 2007; Locander et al., 2007; Schiffman, 2006). Social psychologists and sociologists such as Goffman (1959) have used the analogy between organizations and stage play to depict the subtle forms of social influence. In that depiction, some play the role of the leader by doing what is expected of their role, the way an actor would, and must deliver a performance in such a way that resonates with their audience, the way a leader would have to meet the needs of customers and employees (Goffman, 1959; Hagen, 1991; Hindin, 2007; Locander et. al., 2007; Schiffman, 2006).

As in theater, the "ideal communication between actor and audience occurs when the actor is intensely alive…within the magic circle of his playing area," (Hagen, 1991, p.154). In theater, this ideal communication is described as "breaking the fourth wall" and is considered the job of the actor to penetrate this imaginary boundary between the actors and the audience (Hagen, 1991; Schiffman, 2006).

Those in leadership positions must be prepared to play many roles for many audiences, which can cause *role strain*, which refers to the felt difficulty in fulfilling role obligations in which the role expectations may be beyond what a leader might be able to achieve. The process can be exhausting mentally, physically, spiritually, and emotionally, if a leader is just trying to *play the role of leader*. Real leadership is authentic and engaged, and it requires significant alignment between words and deeds, with integrity at the heart of both leadership and acting (Goffman, 1959; Hagen, 1991; Hindin, 2007; Locander et al., 2007; Schiffman, 2006).

Another essential element of improvisation, when it is coming from a place of authenticity, is its inherent power of play and humor that is revealed and discovered through its exercises. Humor also plays an essential role in reducing the anxiety of leaders and their followers.

The power of play and humor. As mentioned earlier in this section, improvisation is not primarily the study of comedy, but by following the principles of improvisation, including being in the moment, humor and a spirit of playfulness are bound to transpire. The complex and multifaceted nature of humor has been a source of fascination for the world's greatest philosophers, from Aristotle to Kant to Bergson (Lang & Lee, 2010). As the practice of improvisation can often bring laughter and humor to the workplace, it can easily be dismissed as frivolous and undeserving of serious attention. Aside from all other benefits of improvisation, the role of humor in the workplace is deserving of serious consideration due to its numerous organizational benefits.

In *Changing Corporate Perceptions of the Value of Humor*, McGhee (2010) argued that as more employees who used to love their jobs become more and more frustrated, angry, overworked, burned out, and anxious, leaders must acknowledge the strong longing of an educated workforce to have work that they enjoy doing and is fun. In the future, successful companies will increasingly be populated with resilient employees who can laugh at themselves and move on to the next task at hand. These and other considerations have reinforced the movement to put humor back into work. Humor boosts productivity and collaboration and is an invaluable skill in coping with ever-increasing levels of job stress, anxiety, and information overload (McGhee, 2010).

Health benefits of humor. A review of the literature identified more than 1500 articles focusing on the health benefits of humor since the 1980s (McCreadie & Wiggin, 2008; Stevens, 2012). There is a growing body of evidence supporting various physiological changes as a result of laughter and humor, including: positive effects on the immune system (McCreadie & Wiggin, 2008; Stevens, 2012); positive effects on emotional states such as depression; improvement in heart disease progression and cardiac rehabilitation (McCreadie & Wiggin, 2008); decreased levels of pain and discomfort; and stress reduction (McCreadie & Wiggin, 2008; McGhee, 2010; Stevens, 2012). Moreover, a substantial part of literature correlates the intentional use of humor with building interpersonal skills (McCreadie & Wiggin, 2008), confidence, self-esteem, and self-belief (McCreadie & Wiggin, 2008; McGhee, 2010; Stevens, 2012).

With an awareness of the history, styles, and benefits of improvisation, the reasoning behind improvisation's guiding principles can be better acknowledged and appreciated.

Principles of improvisation. Authors and improvisational actors have created many *rules* or *guiding principles* for improv. Numerous improvisational methods have been established from Spolin's (1999) work, but fundamentally these principles all can be placed in one of the following categories:

1. Spontaneity: Say the first thing that occurs to you (Barrett, 2012; Diggles, 2004; Koppett, 2001; Spolin, 1999).

2. "Say, 'Yes, And...'": Acceptance and no denial (Barrett, 2012; Diggles, 2004; Koppett, 2001; Moshvi, 2001; Spolin, 1999).

3. Stay with the group (Barrett, 2012; Hough, 2011; Johnstone, 1979; Koppett, 2001; Lobman & Lundquist, 2007; Spolin, 1999).

4. Make each other look good (Barrett, 2012; Diggles, 2004; Koppett, 2001; Madson, 2010; Spolin, 1999; Sawyer, 2000, 2003, 2011).

According to improvisational theater experts such as Diggles (2004) and Spolin (1999), if individuals follow these four principles, regardless of their background, they will be able to be great improvisers. Specifically, Principles 2, 3, and 4 distinguish improvisation from solo art forms like sculpting and painting, and other communal art forms such as acting or dancing.

Other improvisers have documented various versions of these principles. Mick Napier (2004) is a respected improviser with a somewhat nontraditional perspective on improvisational concepts. Napier has delineated 10 rules for improvisation, emphasizing that these rules are not meant to stop the flow of creative expression but rather to guide it. Napier's rules for great improvisation are as follows:

1. Don't deny.

2. Don't ask questions.

3. Don't dictate action.

4. Don't talk about past or future events.

5. Establish who, what, and where.

6. Don't negotiate

7. Don't do teaching scenes.

8. Show, don't tell.

9. Say *Yes,* and then say *And.*

10. Don't talk about what you are doing. (p. 3)

Other improv rules or principles include: accept offers, take responsibility for the group, let the environment teach you, no negating, participate fully, consider risks as invitations, and don't ask questions (Barrett, 2012; Diggles, 2004; Koppett, 2001; Lobman, 2005; Lobman & Lundquist, 2007; Madson, 2010; Sawyer, 2003, 2007; Spolin, 1999).

Although the principles of improv sound simple, they are the opposite of everything that life has taught most individuals, so it takes a certain level of persistence to accomplish them (Diggles, 2004; Spolin, 1999). This is precisely what makes improvisation so powerful in broadening one's perspective and perception of the environment. This study's four principles of great improvisation are described in the following sections.

Principle 1: Spontaneity - Say the first thing that occurs to you. Adults have been conditioned to abstain from uttering the first thoughts they think, but in improvisation, one is specifically asked to do just that (Diggles, 2004; Spolin, 1968). The purpose of improv is not to go for the joke or try to be clever. Saying the first thing that comes into one's head requires taking a risk of being obvious and average (Diggles, 2004). The improviser's relationship is primarily with his/her partner. It is cooperative, and the humor is not based on cleverness, but it is based on saying the first thing that comes to mind (Diggles, 2004).

In addition, improvisation, by its spontaneity, liberates the intuitive and innovative and challenges the players to work at the pinnacle of their intelligence (Bonifer, 2008). The first thing that comes to mind when improvising includes this

element of genius in it, and even if it seems ordinary, it can lead to brilliant new ideas that could not have existed prior to reaching this height of consciousness (Barrett, 2012; Diggles, 2004).

Celebrating failure. The inherent risk taking and potential for failure in improvisation provides an opportunity to learn, and is welcomed and celebrated (Barrett, 2012; Diggles, 2004; Koppett, 2001; Johnstone, 1979; Lobman & Lundquist, 2007; Madson, 2010; Sawyer, 2003, 2011; Spolin, 1968). In an improv workshop, the learning environment must be make participants feel safe enough to take risks and create new realities as a group so that mistakes are not just tolerated but celebrated as opportunities for learning and innovation (Diggles, 2004; Koppett, 2001; Johnstone, 1979; Lobman & Lundquist, 2007; Madson, 2010; Sawyer, 2003, 2011; Spolin, 1968).

Principle 2: "Say, 'Yes, And..." - Acceptance and no denial. According to Madson (2010), "The world of yes may be the single most powerful secret of improvising" (p. 27). Weinstein (2006) clarified that Second City's improvisational philosophy is based on the first principle of "Yes, And…" Participants are required to answer "Yes, And…", to accept offers presented by others, and add to others' ideas instead of using a *yes, but* or *no* or *I can't* to a colleague's contribution to an improvised story (Shechtman & Knudsen, 2009; Weinstein, 2006; Barrett, 2012). Madson (2010) encouraged all improvisers to nurture all the ways to express affirmation since a *yes* answer opens up a whole new world of action and possibilities. Keith Johnstone (1979) encouraged everyone to use this most essential principle of improvisation, saying Yes, And… can be learned.

There are people who prefer to say "Yes," and there are people who prefer to say "No." Those who say "Yes" are rewarded by the adventures they have, and those who say "No" are rewarded by the safety they attain. There are far more "No" sayers around than "Yes" sayers, but you can train one type to behave like the other. (p. 92)

Lobman's (2005) study using improvisation for early childhood professional development referred to this principle as "accepting offers" (p. 309). He argued that in theater improvisation, one accepts and builds on what other individuals have offered as part of the storyline. Hence, by affirming one's team member's contributions, the storyline does not end abruptly (Anderson, 2008; Lobman, 2005; Madson, 2010; Spolin, 1968).

This second principle, according to Lobman (2005), also implies the elimination of "negating" or denying what someone else has offered to you (p. 310). No denial or *blocking,* as it is referred to in many texts, should occur in improv. This concept is best described by Madson (2010) in the following way:

Blocking comes in many forms; it is a way of trying to control the situation instead of accepting it. We block when we say no, when we have a better idea, when we change the subject, when we correct the speaker, when we fail to listen, or when we simply ignore the situation. The critic in us wakes up and runs the show. Saying no is the most common way we attempt to control the future. (p. 29)

Principle 3: Stay with the group. Staying with the group is about observing the environment and those in one's surroundings, listening well, being aware of new offers being made, accepting them, and developing those ideas. Staying with the group is a collective process that involves the whole group going somewhere together to create a cohesive story (Barrett, 2012; Johnstone, 1979; Koppett, 2001; Lobman, 2005; Lobman & Lundquist, 2007; Spolin, 1999).

Principle 4: Make each other look good. Making each other look good emphasizes that improv is a group activity and not an individual form of art (Diggles, 2004; Koppett, 2001; Madson, 2005; Sawyer, 2003; Spolin, 1999). Consequently, improv is not about competition, but rather is about cooperation and collaboration. Diggles (2004) maintained that by accepting a stage partner's offer and making him/her look good, something larger occurs; individuals become a better version of themselves in the presence of others who support them and delight in what can only be discovered in this process.

Organizational improvisation. The application of improvisation in organizations, often referred to as organizational improvisation, is described by Cunha et al. (2002) as "the conception of action as it unfolds, by an organization and/or its members, drawing on available material, cognitive, affective, attitude and social resources" (p. 99). Simply stated, organizational improvisation is the formation of action as it unfolds, by organizational members, using available resources.

Organizational Improvisation and Group Outcomes of Improvisation

History of organizational improvisation. In the 1960s, improvisation was perceived as an organizational dysfunction, since it was a diversion from the traditional route of planning, then implementing philosophy (Quinn, 1980). However, since that time there has been increased receptiveness towards improvisation as a skill that can support effective organizational and day-to-day management and leadership. This movement accelerated in intensity in the 1990s, with the ever rising need for faster cycle times and more flexible and innovative solutions for organizational success (Crossan, 1997; Leybourne, 2006).

The very first empirical contribution in the area occurred in 1998, by Moorman and Miner, who examined the use of improvisation for new product development (Moorman & Miner, 1998b). Moorman and Miner concluded that "in some contexts, improvisation may be not only what organizations actually practice but also what they should practice to flourish" (Moorman & Miner, 1998b, p.1). According to Lei, Slocum, and Pitts (1999), the long-term strategic advantage of an organization is a function of an organization's capacity to learn. Hence, improvisation is tied very closely with learning (Miner, Bassoff & Morrman, 2001). There is a framework in which improvisation can take place, where certain principles of engagement must be upheld, ensuring that the chaotic environment's sporadic decisions are more productively aligned with the organizational vision and guide the organization to move in the proper direction (Miner et al., 2001; Vera & Crossan, 2005). Weick (2001) calls improvisation a just-in-time strategy and described that there is a new urgency "in organizational studies to understand improvisation and learning is symptomatic of growing societal concerns about how to cope with discontinuity, multiple commitments, interruptions, and transient purposes that dissolve without warning" (Weick, 1998, p. 551).

Conditions for organizational improvisation. Through formal and informal skill development, practice, and reinforcement, the individual improvisational skillsets of the members of the organization can be developed. However, it is important to note that certain conditions are needed for effective improvisation to take place in the organization. These conditions include experimental culture, minimal organizational structure, low procedural memory, leadership, members' characteristics, and information flow (Barrett,

1998; 2012; Cunha et. al, 2003; Craig & Hart, 1992; Eisenhardt & Tabrizi, 1995; Meyer, 2006, 2011).

Experimental culture. An organizational culture grounded in experimentation promotes organizational improvisation. Experimental culture can tolerate mistakes and risks and endorses action and experimentation, as opposed to reflection and planning (Cunha et. al, 2003; Picken & Dess, 1997).

Competent mistakes. In an experimental culture, mistakes are tolerated, and preferably, advocated and celebrated. Competent mistakes can occur as a result of executing novel ideas and are not from negligent or erroneous execution (Picken & Dess, 1997). Organizations that value an experimental mistake as the invaluable side of imperfection (Weick, 1990) develop their capacity for innovation.

Barrett (2012) considered the challenge to be differentiating between mistakes that are a result of carelessness, or failure to think through an action, versus mistakes that are a failure of thoughtful experimentation. Furthermore, leaders need to create a culture that does not reprimand people for admitting to mistakes and that regards failure as a valuable source of learning. According to Barrett,

> As important as it is to treat errors as teaching opportunities, it's equally critical to build a culture in which people feel comfortable admitting and discussing their mistakes, and that requires leveling status differences. Substantial research shows that the biggest obstacle to creating the psychological safety that allows people to learn from mistakes is a hierarchy. When those with status are distant or intimidating, those beneath them are more likely to save face by hiding or ignoring errors. (Barrett, 2012, p. 53)

Minimal organizational structure. Minimal structure and enforced control foster trusting relationships and allow for maximum flexibility and create a safe environment for exploration and risk taking in the organization**.**

Low procedural memory. Although Moorman and Miner (1997) find a positive link between memory dissemination and organizational improvisation, they also find that a high level of procedural or routine memory inhibits improvisation.

Leadership. Leadership can either encourage or hinder the occurrence of improvisation. A leader whose style supports collaboration, without strict controls or monitoring and micro managing, encourages improvisation. Task oriented leaders (Bilsen, 2010; Cunha et al., 2003; Sendjaya et al., 2008) may create conditions that hinder the occurrence of effective improvisation, including low levels of autonomy and a higher dependency on orders.

Members' characteristics. Skill and expertise in an individual's content area, improvisational skillset, and a heterogeneous group configuration all support improvisation in organizations.

Information flow. The flow of information between the external environment and the organization and within the organization is vital for the success of improvisation. When these conditions are present there is a greater chance for both the incidence and success of organizational improvisation (Barrett, 1998; Craig & Hart, 1992; Cunha et al., 2003; Eisenhardt & Tabrizi, 1995; Meyer, 2006, 2011).

Paradoxes in leadership and organizational improvisation. Cunha et al. (2003) found that the main dilemma for improvisational leaders is how to respond to the paradoxes that arise from implementing improvisation in organizations. One of the most fundamental paradoxes of improvisation is its playful nature as opposed to the seriousness of its application in modern organizations' most significant problems. One way to reconcile this paradox is by acknowledging the profound success that use of

improvisation has had in teaching doctors and medical students how to more effectively

deal with unexpected and emergency procedures (McKnight & Scruggs, 2008; O'Reilly,

2011).

The paradox, however, is that in order to implement organizational improvisation,

a leader has to strike a balance between freedom and control. The team members need

freedom to be able to have their input in the process, but the process needs to be

controlled so that the improvisation does not get out of hand and the outcome is

beneficial for the organization. Paradoxes such as to "plan not to plan" (Baskerville,

2006. p.1) are indicators of how imperative it is to have a plan and how vital it is that the

plan allows for freedom and spontaneity in action. Similar to the concept of the *edge of*

chaos, explained in the first section of this chapter, there is inherent value in structure,

design, and order, but the tension and interaction between these factors and their

opposites of change, chaos, and freedom, is where creative and innovative outcomes can

thrive (Baskerville, 2006; Bilsen, 2010; Cunha et al., 2003).

Turbulence and organizational improvisation. The incidence and success of

organizational improvisation are also affected turbulence in the environment, making the

twenty-first century a most fertile ground for organizational improvisation. Crossan et al.

(2005) affirmed that,

> While the execution of an experiment usually involves an iterative cycle
> (Thomke, 1998) of design, build, run, and analyze steps, as environmental
> turbulence increases these four phases start to overlap and to be executed
> simultaneously...Under these circumstances, experiments are no longer planned
> and controlled, but become improvisational (p. 138)

This uncertainty compels members to adjust as new information becomes available and

implement the phases simultaneously. One of the best examples of improvisation in

action in response to the turbulence in the organization can be seen in the development of an agile organization.

Agile organizations and agile methodology. The past decade has seen a growing interest in more efficient, improvisational, and self-organized organizations, referred to as *agile organizations*. With improvisation ingrained in the organizational culture, and as the improvisational skills of leaders and their staff increase, the capacity of the organization to respond quickly to surprises increase, transforming the organization into an agile organization (Meyer, 2011).

Conversely, agile methodology is the process used as the remedy to the inefficiency, bureaucracy, and excessive planning and documentation of traditional plan-driven methodologies (Fowler, 2002; Fowler & Highsmith, 2001). In *Agile Manifesto*, Fowler and Highsmith (2001) defined agility as quickness, lightness, and nimbleness, and similar to the concepts of CAS, the authors present four guiding values that candidly critique the plan-driven methodologies used in most organizations:

- Individuals and interactions over processes and tools;

- Working software over comprehensive documentation;

- Customer collaboration over contract negotiation;

- Responding to change over following a plan;

Accordingly, the same principles of improvisation and self-organization of agile systems can be applied to organizational change, and for creating a more adaptive organization (Bansler & Havn, 2004; Zheng et al., 2011). Another example of the use of improvisational self-organized methodologies is depicted in the use of Open Space Technology.

Open Space Technology. Open Space Technology, or theory, is a simple self-organizing methodology that enables groups of individuals to gather and successfully tackle their highly complex and conflicted organizational issues. It first appeared in 1985 and has subsequently been used hundreds of thousands of times in 136 countries to good effect (B. Nixon, 1998; Owen, 1998, 1999). The distinction of Open Space to other meetings is its development as a natural experiment for life and work in a self-organizing system.

While scientists and mathematicians explored theories about why complex systems self-organize, Harrison Owen was creating conditions for people to experience the dynamics of self-organization and creativity and leadership (B. Nixon, 1998; Owen, 1998, 1999). Four Principles and One Law that guide behavior in Open space provide the clues. The principles of Open Space are:

1. Whoever comes is the right people.
2. Whatever happens is the only thing that could have.
3. When it starts is the right time.
4. When it's over, it's over. (Owen, 1999, p. 235).

These principles are simple statements about the way things happen when people interact. The Law of Two Feet says that if you feel you are not learning where you are, use your two feet and go somewhere where you can contribute to a topic you care deeply about. It makes it apparent that you are the only person responsible for your experience (B. Nixon, 1998; Owen, 1998, 1999).

Open Space Technology brings out the inherent creativity and leadership in people (Owen, 1999), and is similar to the effect that practicing the art of improvisation can have on an organization.

As discussed earlier in this section, effective improvisation in organizations requires that some necessary conditions be met related to organizational structure, member characteristics, and flow of information, to name a few. In addition, there can be positive and negative outcomes related to organizational improvisation, and the style of leadership used can also influence the outcome of effective improvisation.

Outcomes of improvisation in organizations. Positive outcome of improvisation is dependent upon the circumstances and conditions present in the organization, its leaders, and employees. As stated earlier in the paradoxes of leadership and organizational improvisation, in order to lead organizational improvisation, a leader has to create a fusion between two extremes, such as freedom and control, which are both needed for improvisation (Cunha et al., 2003). In the leadership section of this literature review, servant leaders, transformational leaders, shared leaders, improvisational leaders, and directive leaders, among others, were illustrated. The influence of leadership style on improvisation is described next.

Leadership style and improvisation. As it relates to improvisation, servant leaders generally lead from a low status rather than a high status, focused on getting the best out of their followers, instead of focusing on the results (Bilsen, 2010; Williams, 2013). Similarly, shared leadership is another term used for rotating or team leadership in which the team member with the most competencies to handle a task will become the leader, and the leaders change as issues and competencies change. A directive leader uses a large amount of control and takes all the decisions himself, directing his followers to perform specific tasks in a particular fashion (Bass & Bass 2008).

Directive leadership does not solve the paradox of freedom and control, as it only focuses on control without giving freedom to team members. Servant leadership and shared or rotating leadership can cultivate an environment of trust, autonomy and flexibility in which effective improvisation can occur (Bass & Bass, 2008; Bilsen, 2010; Sendjaya et al., 2008). Directive leaders, or transactional leaders, who enforce detailed controls and adhere to inflexible plans and structures stifle the likelihood that improvisation will occur, and as a result limiting the possibility for creating positive results. Improvisational leadership, as a synthesis among dissonant styles of planning and acting behaviors, can facilitate the attainment of goals by allowing members of the organization abundant freedom while maintaining adequate control (Cunha et al., 2003). Similar to the relationship between differing leadership styles and effective improvisation, there are several conditions that can lead to positive or negative outcomes of improvisation within organizations.

Negative group outcomes of improvisation. With all the benefits listed for improvisation, one may wonder why is it that improvisation is not the customary way of doing things in organizations. Specifically, in modern turbulent organizations, the advantages of improvisation can be evident and include rapid spontaneous decision making, flexibility, and learning, to name a few (Cunha et al. 1999). In contrast, the negative aspects of improvisation, such as increased anxiety, biased learning, opportunity traps, and addiction to improvisation, can likewise manifest (Cunha et al. 1999). When such conditions are present, there is a greater chance for improvisation to not occur at all, or if it does occur, negative consequences may ensue (Bilsen, 2010; Cunha et al., 1999, 2003; Eisenhardt & Tabrizi, 1995; Meyer, 2006, 2011).

The increased anxiety is derived from the fear of the unknown in the outcome and process. One of the opportunities and challenges of improvisation is in balancing this anxiety on order to reach an optimal level. Therefore, biased learning can ensue if a solution of an improvisational process is generalized to be used in circumstances in which it is not applicable (Bilsen, 2010; Boyer, 2009; Cunha et al., 1999). Opportunity traps arise when an organization fails to take advantage of the ideas attained during improvisation, as leaders may distrust improvisation and disregard a highly appropriate impromptu solution worth pursuing (Bilsen, 2010; Boyer, 2009; Cunha et al., 1999). Furthermore, the positive feelings associated with improvisation can lead to a compulsion and resemble an improvisation addiction (Bilsen, 2010; Cunha et al., 1999). Improvisation is not effective in every circumstance, and does not always lead to an ideal positive outcome, especially when the conditions are not prime for improvisation (Bilsen, 2010; Cunha et al., 2003; Cunha et al., 1999; Eisenhardt & Tabrizi, 1995; Meyer, 2006, 2011). Effective planning, as a general rule, should not be disregarded, as improvisation can be used as a tool to augment an effective unrestricted plan, not completely replace it (Bilsen, 2010; Boyer, 2009; Cunha et al., 2003; Meyer, 2006, 2011).

Furthermore, several other conditions can either annihilate improvisation in organizations or result in negative results if improvisation is employed, including an organizational culture that discourages risk-taking, or has maximum control enforced on its employees (Barrett, 1998; Craig & Hart, 1992; Cunha et al., 2003; Eisenhardt & Tabrizi, 1995; Meyer, 2006, 2011). In addition, overuse of improvisation, without a clear vision, lack of information flow or planning can result in negative consequences for the

organization. Correspondingly, members of the organization must be competent in their areas of expertise, otherwise improvisation will be ineffective.

Madson (2010) explained that improvisation is just a tool and not a license to live life thoughtlessly, or without planning. Improvisation should be used alongside one's intelligence, and employed along with a healthy dose of common sense, in a manner in which planning and improvising can be used in balance, as required. Furthermore, Madison (2010) re-iterated that the concept of "Yes, And…", the most powerful secret of improvising, which allows players who do not even know one another to effortlessly create a scene. Likewise, Madson (2010) argued that improvisers should not use this tool to become a *yes-man*, which implies mindlessness and is in contrast to improvisation, in which saying yes is an act of conscious acceptance and optimism. "Yes, And…" is a way to share control, not giving it up and accepting unconsciously and mindlessly, which can result in the concept of groupthink.

Groupthink and improvisation. In his first writing on groupthink in 1971, Irving Janis defined the term as the mode of thinking that members of a group in a cohesive group engage in when concurrence seeking becomes so prevalent that it supersedes the realistic assessment of alternative solutions. Groupthink may become more of an issue in organizations today, according to Buchanan (2012), because while organizations are consciously seeking ethnic diversity in their members, they are not necessarily seeking diversity in thought.

Although a homogeneous group configuration without ethnicity, age, or thought diversity can be a prime condition for groupthink, improvisation seeks and encourages diverse heterogeneous groups with thought diversity as a precursor to innovative

breakthroughs. One of the characteristics of members of a group that is prone to groupthink is the fear of speaking up when operating under directed leadership. In a true organizational improvisation, directive leadership would not be prevalent. In such a situation, members are highly valued, and empowered and given autonomy of thought and speech. Fear of speaking up is the opposite of the first principle of improvisation, spontaneity in speech and action. Therefore, following the principles of true improvisation in organizations can help ensure that teams circumvent groupthink:

Positive group outcomes of improvisation. The next topic further exemplifies the positive group outcomes of improvisation in organizations, such as group flow.

Group flow and improvisation consciousness. Csikszentmihalyi (1990, 1996) has described the state of flow, also referred to as being *in the zone*, as the state in which time flies, and individuals experience a sense of effortless action, characterized by a feeling of great absorption, fulfillment, and skill, and an optimal state of intrinsic motivation. One of the outcomes of organizational improvisation is the state of group flow, which many improvisers call improvisational consciousness, or group mind, and can be described as a group that experiences the concept of flow together. Group flow occurs during improvisation when team members collaborate effortlessly as a self-organizing team that is involved in highly creatively work (Csikszentmihalyi, 1990, 1996; Gloor et al., 2012; Halpern et al., 1993).

These connections between players, or group mind (Halpern et al., 1993), are at the heart of a successful form of long-form improv, as Harold described earlier in this chapter. Following the guidelines of the long-form improv allows the team to give up control, lose self-consciousness, tune in to on another, and be in the moment. Therefore,

this idea of group flow, or group mind, which is complete group mindfulness, is entirely a different concept from groupthink, described earlier, which indicates passive mindlessness. Group mind "only happens when the group members are finely attuned to each other, but it almost seems like they are tapping into the same universal consciousness that enables individuals with special abilities." (p.93). Csikszentmihalyi (1990) stated, "When a [leader] is able to organize his or her consciousness so as to experience flow as often as possible, the quality of [decisions] is inevitably going to improve" (p. 40). Hence, the experience of flow as a group or individual, Csikszentmihalyi (1990) argued, puts us in control of our mental energy, raises our self-confidence, and improves the quality of our decisions by controlling the energies directed and invested in these decisions.

In contrast, the risk for modern organizations lies in the increased stress and information overflow of leaders, which may inhibit the concept of flow from occurring, resulting in less than ideal decision-making.

Strategic Planning or Decision Making under Stress

Decision-making research dates back to the middle of the twentieth century with classical decision theory (Edwards, 1954) and the rational choice model (Janis & Mann, 1977), which describe decision making as choosing between alternative courses of action and the types of search, deliberation, and selection processes they use in such processes (Janis & Mann, 1977). However, in complex decision making marked by uncertainty and ambiguity, time, overabundance of information, and conflicting goals may confound the weighing of alternative decisions (Huang, 2012; Sharkansky, 2000).

In rational or classical decision theory which has predominated classical management, a rational decision maker knows all the alternatives, has strong preferences, can weigh characteristics of all alternatives, and possesses the skills to optimize choices while never making a mistake (Edwards, 1954; Janis & Mann, 1977; Simon, 1972; Huang, 2012). In reality, such circumstances, as well as optimum planning and rational decision-making, do not exist (Simon, 1972; Huang, 2012). Therefore, due to many personal and environmental limitations, one can only exercise *bounded rationality*, that is, rationality limited by uncertainty and ambiguity (Simon, 1972, 1982). It is for this reason Simon (1972) stated that in real life, decision makers simplify their calculations and *satisfice*, or settle, for a satisfactory, instead of the best, decision.

Naturalistic decision-making (NDM), on the other hand, is "the study of how people make decisions in the 'real world', under difficult conditions, in order to help them do a better job" (Orasanu & Connolly, 1993, p. 3). NDM studies focus almost exclusively on populations of decision makers in high-demand settings under stress (Thompson, 2010). In the field of NDM, decision makers have studied the circumstances that create the most stress for leaders. Those conditions include ill-defined goals and ambiguity, changing and competing goals, numerous demands and stakeholders, high stakes, and lack of time or information to make decisions (Orasanu & Connolly, 1993).

Plan-driven organizations: fact or fiction. Numerous contemporary scholars in the sciences and organizational studies legitimize a new use of a responsive and improvisational style to system and organization development. These researchers endorse the observation from the field that traditional plan-driven methodologies and strategic

plans have neither been effectively nor extensively executed in practice (Zheng et al., 2011).

Numerous authors, including Bonifer (2008), referred to this "highly communicative, internet-supported global stage on which business gets conducted" (p.216) as the networked world. These authors believe that most often, in the networked world, the scientific and extensively planned methodologies are used as *fiction* to create a sense of coherence in day-to-day activities and are often *faked* (Bansler & Havn, 2004; Zheng et al., 2011). Ciborra (2002) urged leaders to "suspend the belief that behind the messy everyday reality there is a geometric universe" (p.18). Scholars as early as 1987 warned leaders that the process of organizational change "is not a neat, sequential process" (Beckhard & Harris, 1987, p. 30) that can be precisely planned and executed. Organizational change is emergent (Weick, 2001), and therefore, technology and businesses are created 'in-practice' (Orlikowski, 2000). As a result, the same principles of improvisation and self-organization can be utilized to develop systems, manage change, and create a more adaptive and responsive organization (Bansler & Havn, 2004; Zheng et al., 2011).

Strategic planning or Decisions. The traditional strategic planning model is based on Mintzberg's (1994) classification of seven stages including planning, objective setting, external audit, internal audit, strategy evaluation, operationalization, and scheduling. Mintzberg defined deliberate or intended strategy as a plan, organized direction, or course of action for the future that is conceived by top management. If deliberate and emergent strategies are the two extreme ends of a continuum, the realized strategy, or the real-world strategy, that is actually implemented would be somewhere in

the middle of this continuum. Emergent strategy is the result of the decisions that emerge when managers try to adapt their strategy to changing external circumstances.

In practice, much of the energy spent trying to strictly adhere to an organization's strategic plan is unexploited due to the realities of the business environment (Kouzes & Posner, 1995; Boyer, 2009; Moorman & Miner, 1998a). Mankins and Steele (2006) affirm that in most organizations, strategic planning isn't as much about making decisions as it is about recording the choices that have already been made, which are often arbitrary. According to Mintzberg (1994), only 10-30% of intended strategy is actually implemented. In the survey of executives from 156 large companies, Mankins and Steele (2006) found that 100% of the executives stated their strategic decisions are made without regard to the calendar. Furthermore, although strategic plans are conducted every year at a specified time, only 11% of the executives were highly satisfied with their strategic planning efforts. While leaders set out to follow their organization's strategic plan as it has been devised, the approach most leaders resort to in facing this constant change in twenty-first century is to improvise and do what is necessary to correct the deviations from the plan. This form of improvisation in business is not deliberate, yet it emerges frequently and is most often futile because leaders do not have the necessary toolset for doing business other than following the planned agenda (Boyer, 2009; Moorman & Miner, 1998a).

The solution resides not in abandoning the plan, but rather in optimizing the use of improvisation in planning. According to Sharkansky (2000),

> Planning seeks to reduce the uncertainty entailed in improvisation; improvisation may be employed to overcome the limitations of planning. Actions differ not so

much in whether they are planned or improvised as in the proportion of planning and improvisation they contain. (p. 322)

Regardless of leadership style, all leaders and their staff engage in spontaneous activities and improvisation, although leaders may not readily accept this fact, inadvertently harming the rate of success in unexpected situations (Barrett, 1998; Meyer, 2010). Consequently, in an uncertain global business environment, leaders face uncertainties that require additional tools and skillsets such as improvisational techniques to bring their organizations to success. This concept applies to the twenty-first century leaders in all fields and disciplines and in the most consequential of roles encompassing the arts, business, and medicine (O'Reilly, 2011; McKnight & Scruggs, 2008).

One of the most crucial reasons why leaders' use of improvisational techniques is imperative in modern organizations is due the level of stress they experience, and its consequential impact on their decision-making.

Stress, eustress, and optimal level of stress. Stress, a term originally coined by Selye (1936), can be comprised of both positive stress, or *eustress,* and debilitating stress, or *distress* (Selye, 1936, 1974, 1978). Unless otherwise noted, in this study, references to stress are defined as the intensity of the physiological, psychological, and behavioral changes which result when the demands from the environment exceed an individual's cognitive resources (Fevre, et al., 2003; Salas, Driskell, & Hughes, 1996). Yerkes and Dodson originated the concept of an optimal amount of stress in managerial literature beginning in 1908, known as Yerkes and Dodson Law. Yerkes and Dodson explained that increasing the amount of stress is beneficial to performance until some optimum level of stress is reached, after which performance will decline in an inverted U diagram

(Fevre, et al., 2003; Yerkes & Dodson, 1908). The inverted U diagram is often used with

performance on the vertical axis, and stress or arousal is represented on the horizontal

axis (Fevre, et al., 2003; Yerkes & Dodson, 1908).

Stress and leaders' judgment. Senge et al. (2008) indicated that today's leaders

have more distress, and therefore, their brains will downshift under stress to a state of

habitual and primitive behavior. The amount of stress, uncertainty, and anxiety that leaders

feel today are above and beyond any time in history (Bennis, 2001; Campbell et al., 2007).

According to a study conducted on stress amongst leaders in 2007, 88% of reported that

work is the main cause of stress in their lives (Campbell et al., 2007). Lack of resources

and time are the most stressful strains experienced by leaders in the study. "Stress is

caused by trying to do more with less, and to do it faster" (Campbell et al., 2007, p. 3).

Studies on leadership and stress indicate that in addition to leaders becoming

increasingly predisposed to stress, their organizations are inadequate in providing them

with the necessary skills and tools to manage their stress (Campbell et al., 2007; Selart &

Johansen, 2011). One of the most critical consequences of leaders becoming more

susceptible to the high pressure and urgency of stress is its effect on leaders' ability to think

clearly and judge situations accurately (Everly et al., 2010). This statement by Tichy and

Bennis (2007) highlighted the importance of good judgment under stress:

> The essence of leadership is judgment. The single most important thing that
> leaders do is make good judgment calls. In the face of ambiguity, uncertainty, and
> conflicting demands, often under great time pressure, leaders must make decisions
> and take effective actions to assure survival and success of their organizations. (p.
> 12)

The effects of overload, fatigue, and other stressors on leaders' judgment and

decision making has been known to lead to impulsive decisions or decision making

paralysis (Everly et al., 2010), and "with the challenges facing organizations and their leaders becoming more complex, coupled with rising uncertainty about the future, stress will only continue to increase" (Campbell et al., 2007, p. 14). If the stress remains at high levels for a long enough period of time, it can wipe out or diminish current capacity for short-term and long-term memory and the awareness of surroundings (Thompson, 2007). Furthermore, chronic stress in leaders can result in a temporary drop in IQ, as well as hamper the ability of the leader to control emotions, thus not only becoming temporarily cognitively impaired, but also less emotionally intelligent. The consequence of such debilitated judgment errors can have substantial and detrimental impact on organizations (Flin, 1966), making leaders predisposed to "[c]atastrophic leadership failures" (Thompson, 2007, p. 3).

Information anxiety and overload. It is estimated that "the amount of information created over the last thirty years is greater than what was produced over the previous five thousand years" (Rothwell et al., 2010, p. 13). In one year, more than 100,000 new book titles are published in the United States, with total number of books printed globally surpassing one million (Rothwell et al., 2010). The sheer magnitude and pace of the information is increasing so fast that one person cannot possibly keep up with it all. In addition, individuals are experiencing an invasion of their private times with an incredible amount of phone calls, e-mails, and voice mails every day, 24 hours a day.

This *information overload,* or *information anxiety* as it is sometimes termed, occurs when individuals are introduced to an overwhelming amount of information beyond their natural capacity to consume, resulting in confusion, anxiety, and uncertainty, and thus reducing productivity and goal achievement (Bawden & Robinson,

2009; Wurman, 1989, 2000). Kirsch (2000) described a condition of *cognitive overload*, which occurs when information overload is added to an already overloaded amount of multitasking and interruptions. Individuals respond to information overload in different ways. Various mental health conditions have been associated with information overload and information anxiety, such as *continuous partial attention* and *distractibility and impatience* due to excessive amounts of mental stimulus (Bawden & Robinson, 2009; Hallowell, 2005).

The environment and perceptual shortcuts. According to Noe (2001), *perception* can be defined as a learner's ability to collect and categorize signals and meaning coming from the environment, and process and then act on the gathered information. With stress, information overload, and pressure for real time response, leaders, without their active knowledge, resort to perceptual shortcuts. Along with information overload, leaders often take shortcuts in absorbing and processing information, causing perceptual shortcut biases to occur, potentially yielding serious consequences for organizations (Corsun et al., 2006).

Additionally, the rapid speed of organizational changes may significantly increase management's use of perceptual shortcuts, preventing them from watchfully and correctly assessing and processing the tangible and intangible clues in the environment until a substantial threat transpires (Corsun & Enz, 1995; Corsun et al., 2006). Management development programs that incorporate techniques from bodily-kinesthetic arts, such as improvisation, can help protect long- and short-term organizational health and success by increasing the use and impact of conscious perception in managerial behavior (Schreyägg & Häpfl, 2004). Accurate information processing can particularly

increase the decision-making quality of leaders that have been under stress. Therefore, leadership development workshops with the purpose of improving perception and its associated behavior and decision making can arrest dysfunctional interaction patterns in organizations, which may considerably lower the cost of doing business (McLean, 2001).

Spontaneity: Need for real-time speed. Lack of resources and time have been reported as the most stressful demands placed on leaders. According to Rothwell et al. (2010), "Time has become a key strategic resource. The challenge of the future is to help people adapt to change, often in real time and as events unfold." (p. 13). To succeed, leaders and their staff need to do more with less resources, utilizing technological innovations to increase production speed, and make it to the market faster than the competition (Campbell et al., 2007; Rothwell et al., 2010). One of the reasons improvisation can be a highly valuable tool is the spontaneous opportunity it offers for accurate perception of the environment as well as effective decision making in real-time.

Role of intuition in decision-making. Intuition is "a cognitive conclusion based on decision maker's previous experiences and emotional inputs" (Burke & Miller, 1999, p. 93). Sinclair (2011a) further defined intuition as the direct knowing, or the product of the subconscious processing of information, which can occur in a holistic or inferential manner. Holistic intuition is the process in which less information is integrated holistically, while inferential intuition is an automated way of accessing and analyzing large amounts of information, which can be deliberative or experiential. Holistic intuition does not rely on previous experience or existing cognitive structures, but rather on the ability to make holistic associations. One can be deliberate and analyze quickly without being consciously aware (Sinclair, 2011b), which significantly differs from previous

theories that associated deliberate decision making with consciousness and awareness.

Research indicates that whole-brain thinkers who employ a mix of analysis and intuition

are better decision-makers (Huang, 2012; Pratt & Dane, 2007; Mintzberg, 1976; Simon,

1972, 1982; Sinclair, 2010, 2011a, 2011b). As a result, intuition does not necessarily

come from the non-rational, or tacit thought, but it can also come from the rational,

deliberate and rule-based exhaustive processing of information in a way that is

unconscious (Sinclair, 2011b).

  Your brain on improv. According to researchers (Johns Hopkins Medicine

Media Relations and Public Affairs, 2010; Limb, 2011) using fMRI in studying the brain

and spontaneity, creativity, and improvisation have found that once improvisation

becomes second nature, parts of the brain related to self-censorship and editing quiet

down, allowing the regions of the brain related to intuition and creativity to take

possession (Drinko, 2012; Johns Hopkins Medicine Media Relations and Public Affairs,

2010; Limb, 2011). This outward focus on improvisation allows the intuitive and creative

centers of the brain to flourish, while drastically inhibiting the self-censoring parts of the

brain. It is important to emphasize that inhibiting self-censorship is related to creating

new ideas, storylines, and concepts, and is not associated with acting immorally or

illegally, which require other motives. If the parts of the brain that habitually alert one to

being afraid of speaking up are drastically inhibited, the creative areas of the brain

become engaged (Drinko, 2012; Halpern et al., 1993). Improvisation is a way to train the

brain to use the creative and imaginative areas of the brain that would normally be stifled

by the self-censoring regions of the prefrontal cortex and allow for the effective

improvisation of novel experiences to flourish. Ciborra (2002) defines this state for

effective improvisation as being situated between panic and boredom, which is explained next.

Panic, boredom, and improvisation. Ciborra (2002) noted that leaders can respond to stress with panic, which does not allow for effective improvisation, or respond with boredom, which inhibits the possibility of effective improvisation as well, as it will lack a lively awareness of the present moment and its opportunities (Ciborra, 2002; Meyer, 2010). Ciborra (2002) suggested that improvisation consciousness lies somewhere between panic and boredom, as in an optimal level of stress, for effective improvisation and performance. Therefore, following the concept of Yerkes and Dodson's Law, which originated the concept of an optimal amount of stress in 1908, increasing the amount of stress is beneficial to performance until some optimal level of stress is reached, after which point performance will decline in an inverted U diagram (Fevre, et al., 2003; Yerkes & Dodson, 1908).

Besides the effects of stress on decision-making, several other theories govern groups and individuals' influences on decision-making, one of which is Adaptive Structuration Theory (AST).

Adaptive Structuration Theory (AST). Adaptive Structuration Theory (AST) is founded on Giddens' (1984) theory of structuration. DeSanctis and Poole (1994) adapted Giddens' theory to formulate AST, which states that the production of social systems in groups is based on the members' use of rules and resources through their interactions. In other words, AST claims that each group forms its own rules and structures (DeSanctis & Poole, 1994; Green, 2012; Griffin, 2009). AST focuses on groups "to make them aware

of the rules and resources that they are using so that they can have more control over what they do in the groups" (Griffin, 2009, p.236).

By utilizing improvisation techniques in leadership and teams, and following the principles of improvisation, the rules of the group are established (Green, 2012). The principles allow for a simple yet sufficient structure to allow for maximum freedom in an open and accepting environment. Improvisational rules could serve as "positive resources" (Griffin, p. 240) for a group's development to performance and structuration. The practice of these principles through games may help a group experience collaborative and "relational thinking" (Gale, 2004) by creating an open environment for decision-making and collaboration (Boesen, Herrier, Apar, & Jackowski, 2009; DeSanctis & Poole, 1994; Green, 2012; Griffin, 2009).

In addition to the benefits of collaboration and relational thinking, following the principles of improvisation can allow for the resolution of cognitive dissonance in team members.

Cognitive dissonance theory. Initially developed by Leon Festinger, cognitive dissonance theory is the feeling of psychological discomfort formed by the presence of two conflicting thoughts (Harmon-Jones & Mills, 1999). The greater the discomfort, the greater is the perceived need by the individual to decrease the conflict between the two thoughts (Aronson, 1992; Green, 2012; Grohol, 2008; Harmon-Jones & Mills, 1999). Dissonance theory suggests that if individuals act in ways that oppose their beliefs, they will change either their beliefs to align with their actions or their actions to match their new beliefs (Grohol, 2008; Harmon-Jones & Mills, 1999).

Individuals with a higher need for stability and certainty will usually feel the effects of cognitive dissonance more often than those who have a lesser need for such consistency (Boesen et al., 2009; Green, 2012). According to Aronson (1992), as it relates to cognitive dissonance, individuals have an underlying need to strive to preserve a consistent, stable, competent, and morally virtuous self at all times. Specifically during improvisation, an internal conflict can potentially be developed that could send the individual into self-editing and the need to control the situation.

Cognitive dissonance can increase stage fright and lack of cooperation in many small groups. When a group is established, members may initially enter the group as confident individuals (Aronson, 1992; Boesen et al., 2009; Green, 2012), but when the time comes to participate in the group, the fear of failure and unfavorable judgment can create a dissonance in the individual's original feeling of confidence (Aronson, 1992; Boesen et al., 2009; Green, 2012). The students then either reluctantly participate with self-doubt, internal editing, and personal judgment, or they completely talk themselves out of participation, therefore limiting the ability of the participants to fully interact in the group (Aronson, 1992; Boesen et al., 2009; Green, 2012).

Improvisational games provide an opportunity for individuals to overcome cognitive dissonance by taking the focus off of them and on accomplishing a small goal in the game for the greater good of the group (Aronson, 1992; Boesen et al., 2009; Green, 2012). Hence, assisting the group takes precedence over the individual and reduces insecurity and self-consciousness so that individuals can then fully participate in the group. The games' inherent ability for mindfulness (Brown & Ryan, 2003; Dane, 2011; Giluk, 2009) distracts from the internal noise of fear and instead facilitates the feelings of

confidence. The games are fast paced and rule focused so that the individual does not have the time to create dissonance with fear (Brown & Ryan, 2003; Dane, 2011; Giluk, 2009; Green, 2012). Participants' sense of self is affirmed by the "Yes, And…" principle, allowing their confidence to return (Aronson, 1992; Boesen et al., 2009; Green, 2012). Slowly and with more practice, the dissonance disappears in favor of the participants' confident self in all interactions of the group.

Mindfulness in improvisation. Mindfulness can be described as the purposeful attention and awareness to the present moment, approached with openness, acceptance, and non-judgment (Brown & Ryan, 2003; Dane, 2011; Giluk, 2009). Research on mindfulness has intensified significantly (Brown & Ryan, 2003; Dane, 2011) and seems to be justified. Mindfulness has been shown to have positive effects on mental health and psychological wellbeing such as in reducing depression and anxiety, and improving physical health, thereby increasing the quality of human interactions and relationships. Likewise, mindfulness can reduce stress and burnout in the workplace (Brown & Ryan, 2003; Dane, 2011; Giluk, 2009) and may have broader effects such as more external awareness at work, more positive relationships at work, and increased adaptability (Brown & Ryan, 2003; Dane, 2011; Giluk, 2009). Fundamentally concerned with "being attentive to and aware of what is taking place in the present" (Brown & Ryan, 2003, p. 822), mindfulness has been posited to help people become *alive* to the present moment and in touch with their internal processes, including their feelings and intuitions (Brown & Ryan, 2003; Dane, 2011; Giluk, 2009).

Mindfulness is a psychological state of consciousness, and because of this, it is not a quality that only some individuals possess. Mindfulness can be described as the

emergence of that which does not require meditation (Brown & Ryan, 2003). Mindfulness is, therefore, within the reach of all humans, once they focus their attention on events and phenomena transpiring in the present moment (Brown & Ryan, 2003; Dane, 2011; Giluk, 2009). This concept is crucial in organizational studies, as the manner in which organizational members focus attention affects how they make strategic decisions and how they gain the awareness of key resources at their disposal (Weick, 1993).

Mindfulness involves careful attention to both external (environmental) and internal (intrapsychic) phenomena. In a state of mindfulness, individuals are attuned to a relatively large number of external and internal stimuli or attentional breadth (Brown & Ryan, 2003; Giluk, 2009). Researchers have associated mindfulness with a wide attentional breadth, as even in extremely short intervals of milliseconds, mindfulness increases the number of stimuli that individuals perceive in their environments (Brown & Ryan, 2003; Dane, 2011; Giluk, 2009).

Mindfulness is analogous to, and distinctive from, the state of flow, given their comparable present-moment orientation along with their disparate focus and attentional breadth. Flow involves a merging of action and awareness in such an intense fashion to a very limited stimulus that the individual no longer perceives a range of intrapsychic stimuli, and is therefore a field unlikely to perceive external phenomena (Csikszentmihalyi, 1990), while mindfulness has a very wide attentional breadth, both internally and externally (Brown & Ryan, 2003; Dane, 2011; Giluk, 2009). In this fashion, mindfulness is a large measure of what occurs during improvisation.

In dynamically changing and complex environments, use of improvisation and mindfulness can allow a wide range of attentional breadth, as well as the merger of creation and execution in the moment (Moorman & Miner, 1998). Maintaining a wide external attentional breadth in the dynamic environments in which improvisation often occurs is vital to achieving improvisational success. Effective improvisation depends on being "attentive and alert to what is happening in the now" (Vera & Crossan, 2005, p. 208). Because of this, maintaining a wide external attentional breadth can enhance successful task performance in a dynamically changing environment, suited for improvisational action (Giluk, 2009). However, in static task environments in which relationships, the environment, and the conditions are relatively stable and predictable, preserving a wide external attentional breadth may not be as beneficial (Brown & Ryan, 2003; Dane, 2011; Giluk, 2009). Given that static environments involve relatively stable and predictable relationships, task performance in such an environment may require focusing more narrowly on the task at hand (Brown & Ryan, 2003; Dane, 2011; Giluk, 2009).

In improvisation, a spontaneous decision can include this sense of attentional breadth and mindfulness, and therefore result in an effective and optimal decision.

OPTIMAL spontaneous decisions. In this study, OPTIMAL stands for Open to the Present Thought and Intuition, and Mindful in Action and Leadership. The use of the term *OPTIMAL Spontaneous Decisions*, or OSD, is used to refer to rapid decisions that leaders must make, which are then adapted to the complex external environment, and refers to the skill with which rational conscious decisions and inferential or holistic intuition are combined to make an effective decision spontaneously in order to solve a

problem rapidly, in face of uncertainty or complexity, often with limited information and time pressure (Leybourne & Sadler-Smith, 2006). In other words, OSD can be a combination of rational conscious decisions and inferential intuition, which is the instantaneous and unconscious processing of an exhaustive amount of information in the form of previous experience or existing knowledge, as well as holistic intuition, which is the tacit, raw, unconnected, gut feeling hunches that are still made instantaneously and unconsciously.

Individuals have varying degree of ability in analyzing and intuiting. Experts, as a whole, are naturally better at using inferential intuitions, whereas beginners can produce holistic intuitions just like experts, because holistic intuitions do not rely on previous experience or existing knowledge, but instead on their ability to make holistic connotations (Pratt & Dane, 2007). It can be deduced that experts function better in an ambiguous environment with high quality of information even if the amount of information is low, while beginners can function just as well as experts in an ambiguous environment with low quality of information, if they have access to high amounts of information (Huang, 2012; Pratt & Dane, 2007; Sinclair, 2010, 2011a, 2011b). Moreover, studies show that it could be challenging for individuals to rely on their intuition in completely unfamiliar tasks, and that can produce a high level of anxiety and stress in individuals.

This study utilized the Holistic Improvisational Leadership Model (Figure 1) in addition to principles of adult learning (Knowles, 1984), and experiential learning (Kolb, 2000) to develop the Improvisation for Leaders Workshop. Applying best practice improvisation techniques, combined with curriculum design principles, helped to

construct and implement the leadership development workshop. The impact on leaders that attended the workshop was evaluated by following curriculum development and evaluation principles:

Curriculum Development and Evaluation

Many curriculum writers and instructional designers have developed step-by-step procedures for curriculum planning, design, development, and evaluation (Walker, 1982). Due to its comprehensive design, Hiatt-Michael's Theoretical Model of Curriculum Design was utilized in this study to develop the Improvisation for leadership workshop. This model is explained at the end of Chapter 2 under conceptual framework.

Tyler's basic principles of curriculum and instruction. The most influential writer of curriculum planning, development, and evaluation (Walker, 1982) is Ralph Tyler, whose practices of curriculum design, known as Tyler's rationale, are still being practiced today (Cunningham & Billingsley, 2003; Walker, 1982). According to Tyler's (1949) now classic text, *Basic Principles of Curriculum and Instruction*, there are four fundamental questions that help design, develop and implement any educational curriculum:

1. What educational objectives should be attained?
2. What learning experiences can be provided that would result in achieving those objectives?
3. How can learning experiences be organized to achieve effective instruction?
4. How can the effectiveness of these learning experiences be evaluated?

Many scholars have based curriculum design and development theories on Tyler's (1949) four questions. Stufflebeam (1966, 1967) was one such scholar who introduced

the concept of accountability in curriculum design and development. He emphasized that the design and delivery of curriculum should interact with and serve the full range of stakeholders who need to make judgments and choices about a curriculum.

The ADDIE instructional design model. The ADDIE model (Biech, 2008), is a generic and systematic instructional design model, and is an acronym for Assessment, Design, Deliver, Implementation, and Evaluation. ADDIE (Biech, 2008) is based on adult-learning principles (including Tyler's [1949] four questions), and used by instructional designers and trainers to develop training programs. This model consists of five phases: (a) assessment (or analysis), (b) design, (c) development, (d) implementation, and (e) evaluation (Biech, 2008), in which each step is meant to feed into the next step in the sequence. This model follows Tyler's (1949) four questions and concept of needs assessment in addition to the adult-learning principles set out by Knowles (1984).

Needs assessment. The first phase of the ADDIE instructional design model is Assessment, in which an assessment of the learning needs is conducted to identify training requirements, current and future states, and any performance gaps (Biech, 2008; Molenda, 2003). Tyler's (1949) concept of a needs assessment defined a need as the gap between what is and what should be, according to the learner, the society, and the subject matter experts.

Design and development. The second and third phases of ADDIE, or Design and Development, are often performed in parallel due to the interrelated tasks involved in these phases. In the Design phase, a plan is determined to achieve the training goals and bridge the performance gaps. In the Development phase, the training program and all the necessary learning tools, job aids, and participant workshops are developed and made

ready for a pilot and the implementation (Biech, 2008). For the purpose of this study, a learning tool is a tool used for delivering the instructional content to the participant by following adult-learning principles to enhance learning. Learning tools can include learning exercises, videos, demonstrations, and practice sessions (Knowles, 1984; Kolb, 2000; Silberman, 2006).

Implementation. The next phase is Implementation, in which the training (or the pilot) is delivered to the learners (Biech, 2008). The results of the pilot are incorporated back into the design and development, and then the course is implemented.

Evaluation. The last phase, Evaluation, consists of evaluating the performers, classes, learning, and the results of training in the working environment to ensure the program has achieved the desired results (Biech, 2008). The ADDIE model and Hiatt-Michael's (2008) Theoretical Model of Curriculum Design, described further under conceptual frameworks, were used for the workshop's design and delivery. For evaluation, Bloom's taxonomy, Harrow's psychomotor domain, or Kirkpatrick's model of evaluation can be utilized.

Bloom's taxonomy of learning domains: Cognitive, affective, and psychomotor. Bloom's taxonomy was originally created to develop categories of learning behavior for the design and assessment of educational learning. Bloom's taxonomy has since been expanded over many years by Bloom and other contributors (notably Anderson, Krathwhol Simpson, and Harrow), whose theories extend Bloom's work to far more complex levels. Bloom, in collaboration with Tyler, his students, and colleagues, developed three taxonomies in the areas of the cognitive, affective, and psychomotor domains (Anderson &

Krathwohl, 2001; Biech, 2008; Bloom & Krathwohl, 1956; Chapman, 2012; Cruz, 2004; Eisner, 2002; Forehand, 2005):

1. Cognitive domain (intellectual capability, or knowledge, or "think") consisting of six levels;

2. Affective domain (feelings, emotions, or attitude, or "feel") consisting of five levels;

3. Psychomotor domain (manual and physical skills, or skills, or "do") consisting of six levels.

This has given rise to popular variations on this theme in training and development fields that summarize the three domains as KSA or Knowledge, Skills and Attitude, or Think-Do-Feel (Biech, 2008; Chapman, 2012).

Anderson and Krathwohl (2001) later developed the taxonomy for the affective domain with five levels ranging from receiving, to the complex level of characterization. Harrow and Simpson's Psychomotor Domain interpretations more specifically address sensory, perception (and by implication attitudinal), and preparation issues.

Harrow's psychomotor domain. Harrow's psychomotor domains (Harrow, 1972) are particularly applicable for developing skills that are intended to ultimately express, convey, or influence feelings. Harrow's final level specifically addresses the translation of bodily activities (movement, communication, body language, etc.) into conveying feelings and emotion, including the effect on others (see Table 1). For example, public speaking, training or high-level presentation skills, and teaching adults to run a difficult meeting, will almost certainly warrant attention on sensory perception and awareness, and on preparing oneself mentally, emotionally, and physically for these activities. Due to the experiential

nature of improvisation, Harrow's Psychomotor Domain, depicted in Table 1, can be applied

to teaching and learning improvisation.

Table 1

Harrow's Psychomotor Domain

Level	Category	Description	Examples of activity or demonstration and evidence to be measured	Action verbs which describe the activity
1	Reflex movement (Involuntary Movement)	Involuntary reaction reflexes	Respond physically instinctively	React, respond
2	Basic movements	Basic simple movement	Perform simple action	Walk, stand, throw
3	Perceptual abilities	Basic kinesthetic, visual, auditory and tactile	Use than one ability in response to different sensory perceptions	Catch, explore, distinguish using senses
4	Physical abilities	Flexibility and agility.	Develop agility, control	Endure, maintain, repeat
5	Skilled movements	Complex adaptive skills, advanced learned movements	Execute and adapt integrated movements	Improvise, play an instrument
6	Nondiscursive communication (intuitively expressed)	Expressive and interpretive movement, effective body language	Activity express meaningful interpretation	Express and convey feeling and meaning through movement and actions

Note. Adapted from *A taxonomy of the psychomotor domain*, 1972, by A. J. Harrow, New York, NY: David McKay. Copyright 1972 by the author.

Kirkpatrick's evaluation model. Evaluation, or the assessment of learning, is used

to quantify the benefits of a program, substantiate the reasons for having a program, or

specify areas for improvement (Kirkpatrick, 1998). The most extensively used model of

evaluation in corporate training is Kirkpatrick's (1998) four levels of evaluation (Hogan,

2007).

Kirkpatrick's (1998) four levels of evaluation include level 1, or reaction, which

evaluates how the program was received by the participants. Level 2, learning, measures a

participant's changes in attitudes, knowledge, or skills as a result of training. Level 3

measures behavior, which is a change in participants' behavior as a result of training. Finally, Level 4 examines the result of training on the organization as a whole.

Level 1, reaction, involves an assessment of how well the participants enjoyed the workshop, or as Kirkpatrick (1998) noted, it is a measure of customer satisfaction. If participants enjoy the program, they are more likely to learn. To measure the leaders' reactions to the Improvisation for Leaders Workshop, evaluation sheets were handed out at the end of the workshop (see the appendices for the evaluations used for this workshop).

Level 2 measures a participant's learning, in other words, any changes in attitudes, knowledge, or skills as a result of the training. It is a measurement of the increase in knowledge or intellectual capability, from before to after the learning experience, and hence, a pretest and posttest to evaluate the difference in results is a common practice in Level 2 evaluations (Kirkpatrick, 1998).

Level 3 is behavior evaluation, or the extent to which the participants applied the learning and changed their behavior. This can occur immediately, 2 weeks to 1 month after, or several months after the learning experience, in which case there would be noticeable and measurable change in the learners' activity and performance (Kirkpatrick, 1998). This can be measured individually with the learner, or by using an evaluation, or interview, or it can involve others by using 360-degree feedback (Biech, 2008; Chapman, 2012; Hogan, 2007).

Level 4, or results, measures the effects of training on the business or environment, resulting from the participants' performance. The measures would typically be business or organizational performance indicators, and can include the tangible results of the learning process in terms of reduced cost, improved quality, increased production, and efficiency (Biech, 2008; Chapman, 2012; Hogan, 2007).

All these measures are recommended for a meaningful evaluation of learning in organizations, although their application broadly increases in complexity, and usually cost, through the levels. Because of the strengths of the Kirkpatrick (1998) evaluation approach, namely its widespread and practical use in corporate training, its simplicity, and its focus on behavioral outcomes of the participants (Hogan, 2007), it was used for this study. Levels 1, 2, and 3 were used in addition to Harrow's Psychomotor Domain model. Level 4 of Kirkpatrick's (1998) model is highly time consuming, costly, and requires a substantial amount of time and resources to undertake. For these reasons that it was not attempted for this study.

Phillips' evaluation approach. Training professionals have been challenged to provide evidence of how training contributes to businesses financially (Hogan, 2007). Phillips (1991, 1996) suggested adding a fifth level to Kirkpatrick's (1998) evaluation approach to calculate the Return on Investment (ROI) generated by the training. As Phillips (1991) explained:

> Evaluation should occur at each of the four levels and a comprehensive evaluation process will focus on all four levels in the same program. The common thread among most evaluation experts is that emphasis should be placed on the ultimate outcome, which results in improved group or organization performance. (p. 51)

Due to the difficulty, cost of, and limitations in the scope of this study, Philips' evaluation approach was not utilized for this research study.

Conceptual Framework

The conceptual framework used for this study centered on a Holistic Improvisational Leadership Model developed by the researcher, alongside employing Hiatt-Michael's Theoretical Model of Curriculum Design to develop the Improvisation

for Leaders Workshop utilized in the study. The models were briefly touched upon in Chapter 1 under conceptual framework and are explained in detail next.

First generation Holistic Improvisational Leadership Model. Research indicates that a need exists for a holistic framework for using improvisation in leadership and assessing its effect on performance (Vera & Crossan, 2004). The holistic organizational improvisation model used in this study is an adaptation of Crossan's (1997, 1998) Areas of Improvisation model, which along with the robust research represents the integration of six key areas that link improvisation exercises to effective management and leadership. The researcher takes full responsibility for the design and creation of the First Generation Holistic Improvisational Leadership Model. During the iterative process of applying grounded theory, the themes found as a result of qualitative analysis were utilized to revise the model after each collection of workshop data (Birks & Mills, 2011; Glaser, 2001, 2003; Strauss & Corbin, 1990a), leading to the final Holistic Improvisational Leadership Model depicted in Figure 3 and described in full in Chapter 5.

The first generation of Holistic Improvisational Leadership Model (see Figure 1 in Chapter 1) has been designed by the researcher, and depicts these six key interrelated areas, resting on a solid foundation of improvisation and its principles. When the six areas are brought together holistically, the end result is the organizational capacity that can bring about creativity, innovation and adaptive problem solving, described next.

Foundation: Improvisation is the foundation of this model. For the purpose of this study, improvisation is defined as "spontaneous decision making within

boundaries, based on available resources, focused toward solving problems,

realizing opportunities and discovering the future as it unfolds."

These six interrelated areas that link improvisation to effective leadership include:

1. Perception of the external environment (Aram & Walochik, 1996; Corsun et al., 2006; Crossan, 1998; Montuori, 2003a, 2003b, 2012; Purser & Petranker, 2005; Sharkansky, 2000; Vera & Crossan, 2004, 2005; Weick & Sutcliffe, 2001),

2. Tolerance of risk and ambiguity (Crossan, 1998; Montuori, 2003a, 2003b, 2012; Vera & Crossan, 2004, 2005),

3. Realized strategy: Merging planning with action (Brown & Eisenhardt, 1998; Crossan, 1998; Mintzberg, 1988, 1993, 1994; Montuori, 2003a, 2003b, 2012; Vera & Crossan, 2004, 2005; Weick, 2007),

4. Shared leadership (Crossan, 1998; Dickerson, 2011; Kocolowski, 2010; O'Toole et al., 2002),

5. Active listening (Brown & Eisenhardt, 1998; Conflict Research Consortium, 2004; Crossan, 1998; Diggles, 2004; Montuori, 2003a, 2003b, 2012; Spolin, 1963; Vera & Crossan, 2004, 2005; Weick, 2007), and

6. Collaboration (Crossan, 1998; Mintzberg, 1973, 1988; Montuori, 2003a, 2003b, 2012; Vera & Crossan, 2004, 2005).

Research has shown that with the solid foundation of improvisation and the

implementation of the above six elements in leadership development through

improvisational exercises, the following end result is enriched:

End Result: Capacity for creativity, innovation, and adaptive problem solving (Mintzberg, 1973, 1988; Montuori, 2003a, 2003b, 2012; Vera & Crossan, 2004, 2005).

Each of the above areas is explicated next.

Accurate perception of the external environment. The external environment includes any entity that is outside the organization (Rothwell et al., 2010). Techniques of improvisation are powerful in broadening one's perspective and perception of the environment, as well as one's reaction to the external environment (Aram & Walochik, 1996; Montuori, 2003a, 2003b, 2012; Purser & Petranker, 2005; Sharkansky, 2000; Vera & Crossan 1998, 2004, 2005; Weick & Sutcliffe, 2001)

According to Weick and Sutcliffe (2001), the chaotic and unpredictable world of contemporary organizations will bring about a series of unexpected events that would derail any well-crafted plan. Weick and Sutcliffe maintain that extensive planning actually detracts leaders' perceptions from the distractions of the external environment, while these so-called distractions are, in fact, part of a greater pattern of incidents that leaders should pay attention to.

Perceptual shortcuts. Noe (2001) defined perception as a learner's ability to collect and categorize signals and meaning coming from the environment, and then process and act on the message. As described earlier in this chapter, with increasing stress, information overload, and pressure for real time response, leaders resort to perceptual shortcuts that occur without their active knowledge. Additionally, the rapid speed of organizational change may significantly increase leaders' use of perceptual shortcuts, thereby preventing them from correctly assessing and processing the tangible and intangible cues in the environment until a substantial threat transpires (Corsun &

Enz, 1995; Corsun et al., 2006). Resulting perceptual biases can have very serious

consequences for the organizations (Corsun et al., 2006).

Accurate information processing can particularly increase the decision-making

quality of leaders who are under stress. Therefore, leadership development workshops,

with the purpose of improving perception, as well as its associated behavior and decision

making, can halt dysfunctional interaction patterns in organizations, which may

considerably lower the cost of doing business (McLean, 2001).

According to Crossan (1998), one of the main beliefs of improvisation is,

The environment will teach you if you let it, rather than trying to control it.
Learning from the environment often requires that individuals break out of their
traditional frames of reference to see the environment in its full richness and
complexity. (p. 595)

In improvisation, one can free up one's intuition by carrying out contradictory actions

(Crossan, 1998). Leaders can develop their intuitive capacities through improvisation,

whereby they can monitor the external environment and pay attention to unexpected

occurrences and learn to react to them with confidence (Aram & Walochik, 1996;

Montuori, 2003a, 2003b, 2012; Purser & Petranker, 2005; Sharkansky, 2000; Vera &

Crossan 1998, 2004, 2005; Weick & Sutcliffe, 2001).

Although the principles of improv sound simple — (a) "say the first thing that

comes into your head;" (b) "say, 'Yes! And...' to all of your partner's offers;" and (c)

"make your partner look good" (Diggles, 2004, p. 1), they are the opposite of everything

that life has taught an individual. Therefore, learners often need to bend their will to

accomplish these tasks (Diggles, 2004). This is precisely what makes improvisation so

powerful in broadening one's perspective and perception of the environment.

Tolerance of risk and ambiguity. Risk, ambiguity, and tolerating mistakes are the cornerstone of improvisation (Aram & Walochik, 1996; Montuori, 2003a, 2003b, 2012; Purser & Petranker, 2005; Sharkansky, 2000; Vera & Crossan 1998, 2004, 2005; Weick & Sutcliffe, 2001)

According to Sharkansky (2000), improvisation is likely to be practiced in organizational cultures that can tolerate ambiguity (not knowing what lies ahead), and support or reward risk taking, as opposed to punishing it. In this culture, mistakes are treated as opportunities for learning. Sharkansky maintained that improvisation is more likely to occur in organizations, teams, or situations that contain few principles, regulations, and formal procedures, or principles that are not strictly enforced. This phenomenon applies to other cultures internationally as well. As researchers Aram and Walochik's (1996) observed, countries such as Germany, Great Britain, the Netherlands, and United States are much less tolerant of improvisation and more inclined to structures and planning than countries such as Italy, France, Spain, and Israel. Yet to remain nimble, organizations, and individuals need to maintain a balance of planning and logic, with risk and spontaneity in their decision-making (Aram & Walochik, 1996; Montuori, 2003a, 2003b, 2012; Purser & Petranker, 2005; Sharkansky, 2000; Vera & Crossan 1998, 2004, 2005; Weick & Sutcliffe, 2001). Furthermore, a significant portion of an individual's ability for tolerating ambiguity and risk rests on managing the anxiety that is inherent in the unknown.

Positive and negative roles of anxiety. Rosen (2008) suggests there is such a thing as "just enough anxiety" (p. 96), and the balance between too little and too much anxiety is the challenge successful leaders must face. Rosen defined "just enough anxiety" (p. 96)

as consistent with "the ability to be comfortable with discomfort. If you have just enough anxiety, you embrace change. You reach for opportunities to learn and grow" (p. 96). Koestenbaum (1991) approached anxiety not only as a fact of life, but also the result of the new economy of impossible demands and overworked employees and leaders, creating an unparalleled level of stress. Taking into account the extraordinary demands on today's leaders, Koestenbaum offered a different definition of anxiety:

> Anxiety is how it feels to grow. One becomes an adult by learning to move through anxiety, to stay with and not avoid it. Leadership, therefore, means to face anxiety, not fear it, to make it your constant companion. Anxiety is the natural condition of human beings. Anxiety reveals truths that we wish to hide but in fact need for our greater health. Anxiety is the experience of growth itself. How does it feel to proceed to the next stage of growth? The answer is, be anxious. Anxiety must, therefore, be valued, not denied. (p. 192)

Kouzes and Posner (1995) noted, "With a positive view, you can transform stressful events into manageable or desirable situations" (p. 208). Working with anxiety is an important aspect of leadership, especially since contemporary Western culture of speed and efficiency can foster much anxiety in individuals (Nunez, 2010). With improvisation, this anxiety can be positively channeled to create energy and produce a more innovative workforce. Furthermore, as is described under the creativity and innovation section, innovation is the life force for many contemporary organizations today, and without a tolerance of some risk, innovation cannot be actualized (Christensen, 1997; Dyer, Gregersen & Christensen, 2009; Christensen, Gregersen, & Dyer, 2011).

Realized strategy. The concept of realized strategy has been referenced in several studies, and for the Holistic Improvisational Leadership Model, it is used to mean *the*

merger of planning with action (Brown & Eisenhardt, 1998; Mintzberg, 1973, 1988, 1993, 1994; Montuori, 2003a, 2003b, 2012; Vera & Crossan, 2004, 2005; Weick, 2007).

Mintzberg defined deliberate strategy as the organized direction, or course of action, for the future, while emergent strategy is the result of the decisions that emerge when managers try to adapt their strategy to changing external circumstances. Realized strategy is the actual strategy that gets implemented. Mintzberg reported that only 10%-30% of intended strategy is actually implemented. By using the techniques and principles of improvisation, the realized strategy can be the real time effective merger of the planned strategy with improvised action (Mintzberg, 1988, 1993, 1994).

Effective management in the twenty-first century is unlikely to rely solely on either planning or improvisation. To remain nimble, nations, organizations, and individuals need to maintain a balance of both logic and spontaneity in their decision-making (Aram & Walochik, 1996; Montuori, 2003a, 2003b, 2012; Purser & Petranker, 2005; Sharkansky, 2000; Vera & Crossan 1998, 2004, 2005; Weick & Sutcliffe, 2001).

Shared leadership. Successful leaders recognize that for any change to be lasting, it must transpire at all levels of an organization and be shared (Dickerson, 2011; Kocolowski, 2010; O'Toole et al., 2002; Senge et al., 2008).

Senge et al. (1999) wrote, "[L]ittle significant change can occur if it is driven from the top. CEO proclamations and programs rolled out from corporate headquarters are great ways to foster cynicism and distract everyone from real efforts to change" (p. 12). According to Pearce and Conger (2003), the concept of shared, distributed, or rotating leadership is defined as "a dynamic, interactive influence process among individuals in groups or organizations for which the objective is to lead one another to the

achievement of the group or organizational goals or both" (p. 1). Leaders who bring about transformational change are not necessarily leaders in positions of authority (Pearce & Conger, 2003; Senge et al., 2008). A leader, or an innovator, can be any employee, but to tap into the potential of these employees, the leaders with positional authority must create a safe space in which risk taking is allowed, provide the autonomy to pursue new ideas, and take action in a way that goes against the status quo of the organization (Senge et al., 2008). Improvisation can enable leaders to create this space for others to flourish, and develop their own skills to have an open mind, be adaptable, share leadership, and listen to their staff, skills that are vital to the future of their organizations.

Active listening. Active listening is listening that focuses entirely on what the other person is saying, paying complete attention to the speaker's words and body language, and confirming the accurate understanding of content and the feelings underlying the message (Conflict Research Consortium, 2004).

Effective listening skills (Brown & Eisenhardt, 1998; Conflict Research Consortium, 2004; Diggles, 2004; Montuori, 2003a, 2003b, 2012; Spolin, 1963; Vera & Crossan 1998, 2004, 2005; Weick, 2007) include attention to the content of the message in addition to reading the body language. For a leader, as Drucker (as cited in Cashman, 2008) observes, "The most important thing in communication is to hear what isn't being said" (p. 96). In addition, according to Diggles (2004), in improvisation one must say what is on his/her mind in a spontaneous fashion, allowing the individual a chance to bypass critical self-judgment and communicate the truth using intuition (Diggles, 2004; Spolin, 1963).

Collaboration. Collaboration includes "jointly developing and agreeing to a set of common goals and directions; sharing responsibility for obtaining those goals; and working together to achieve those goals, using the expertise of each collaborator" (Bruner, 1991, p. 6). Collaboration is the essence of why improvisation creates such team cohesiveness and creativity (Mintzberg, 1973, 1988; Montuori, 2003a, 2003b, 2012; Vera & Crossan 1998, 2004, 2005).

Vera and Crossan (1998) described effective teamwork and collaboration in improvisation to mean,

> [J]okes are not made at the expense of other people, individuals do not impose themselves on the scene in a controlling fashion; individuals do not just survive in the scene, they work actively to build it; and individuals do not put, or leave, one another out on a limb. (p. 597)

If teams were to follow the improvisation principle of "Yes, And…", trust and collaboration would develop organically as a result. Team members in many organizations would find it quite challenging to live up to this concept of teamwork and collaboration, yet to operate effectively as part of a team, share leadership, accurately assess the external environment, and communicate actively, individuals would need to cultivate their improvisational skills (Mintzberg, 1973, 1988; Montuori, 2003a, 2003b, 2012; Vera & Crossan, 1998, 2004, 2005). The effective implementation of the six elements results in the seventh and final element of the model:

Creativity and innovation and adaptive problem solving. The end result of adopting the areas of improvisation in leadership results in the twenty-first century's most desired attributes, creativity and innovation, with problem solving becoming automatic

and adaptable (Cappelli, Singh, Singh & Useem, 2010a, 2010b; Mintzberg, 1973, 1988; Montuori, 2003a, 2003b, 2012; Ramus & Steger, 2000; Vera & Crossan, 2004, 2005).

According to Adler (2006), in the global business world, the ability to innovate is critical for organizations to survive and thrive. Adler (2006) continued by stating, "creating the next great thing demands constant innovation; it's a design task, not merely an analytical or administrative function." (p. 5). As firms strive for faster cycle times and more innovative solutions, the spontaneous and creative facets of improvisation have been proposed as a pathway to understand and begin acting on what it takes to innovate (Crossan 1997a; Vera & Crossan, 2005). The role of improvisation in innovation processes, such as new product development, has attracted growing attention (Eisenhardt & Tabrizi, 1995; Kamoche, Cunha, & Cunha, 2003; Moorman & Miner 1998b). Brown and Eisenhardt (1998) contend that improvisation "enables managers to continuously and creatively adjust to change and to consistently move products and services out the door" (p. 33).

Creativity and innovation. Robinson (2001) classifies creativity as the ingenuity to come up with new ideas, products, and processes that have value, while Ramus and Steger (2000) defined creativity as "the production of novel and useful ideas," and innovation as "the implementation of creative ideas within an organization" (p. 605). Furthermore, an organization's culture is by far the most significant driver of innovation (Yu, 2007), for it is the culture that can either hinder innovation or champion it.

This rapid need for creativity and innovation has led researchers to seek new methods of culture change and leadership development. Improvisation methods can provide a means of accessing leadership in a more holistic way, and to exhibit leadership

behaviors that not only change the culture gradually but also foster an environment conducive to creativity and innovation.

How to bring about innovation. Disruptive innovation, which can bring the highest profit and a low competition market, occurs when a new product is brought to the market unexpectedly, bringing a recognized market to an end (Christensen, 1997; Christensen et al., 2011; Dyer et al., 2009). While studying what motivates disruptive innovators, Dyer et al. (2009) found that time and again, innovators actively go against the status quo, and regularly take risks.

The six-year research study of Dyer et al. (2009) identified five discovery skills that differentiate the most creative executives from ordinary managers. These discovery skills, which can be cultivated through practice and training include associating, questioning, observing, networking, and experimenting. *Associating* is the ability to connect seemingly unrelated ideas from unrelated fields. Improvisation and leadership could not have been any more unrelated at first glance. The second discovery skill is *questioning*, posing questions that challenge the status quo. *Observing* is dissecting the conduct of customers, suppliers, and competitors to pinpoint new ways of accomplishing things. *Networking* allows an innovator to meet people from different industries and perspectives, and finally, *experimenting* is the relentless pursuit of constructing experiences and eliciting unconventional responses to see what they can explore. In addition, the innovative leaders' time spent on these discovery activities is vastly different from other ordinary leaders. Furthermore, Dyer et al. (2009) and Christensen et al. (2011) identified that the most creative CEO spends 50% more time on these discovery activities than do CEOs who have no track record for innovation.

Adaptive problem solving. For this study, *adaptive problem solving* refers to the skill in which intuition and cognition, or the rational mind, are combined to make an effective decision to solve a problem, in the face of ambiguity, and often with limited information and time pressure (Leybourne & Sadler-Smith, 2006). According to Burke and Miller (1999), *intuition* is "a cognitive conclusion based on decision maker's previous experiences and emotional inputs" (p. 93). Previously learned experiences lead to decisions on the basis of an unconscious reasoning process that may have an affective component (a *gut feel* or *hunch*), and although to some intuition may sound like a sixth sense, it is important to note that the information one receives intuitively is in fact based on the individual's explicit and implicit experiences and prior learning (Leybourne & Sadler-Smith, 2006).

Hiatt-Michael's Theoretical Model of Curriculum Design. Integrating Tyler's (1949) and many of his successors' curriculum design and evaluation research into one comprehensive model is Hiatt-Michael's (2008) Theoretical Model of Curriculum Design. Throughout the curriculum design process, Hiatt-Michael's model, shown in Figure 2, was used as a roadmap to ensure all stakeholders' interests were taken into account in the design and delivery of a corporate leadership development workshop. Her theoretical model of curriculum design depicts curricular decision making as the process of examining alternatives from the possible supply of knowledge, making selections, and "determining the end and the means of education" (p. 41). The model is a valuable tool for workshop curriculum decision-makers, as a designer should consider all stakeholders' interests when developing the workshop. This model discusses four levels of curricular decision-making: personal, institutional, instructional, and societal (see Figure 2).

Chapter Summary

The purpose of this chapter was to present a thorough review of current literature related to the topic of this study. This literature review covered eight main topics. First, the discussion of the timeline of organizational theories, from machines to systems to CASs were addressed, and continued to the topic of the twenty-first century leader, and the realities and skillsets of a leader. A discussion of organization development and change management theories, followed by adult learning and leadership development were explored next, moving on to the history and principles of improvisation. Next, organizational improvisation and group outcomes were covered. Strategic planning, or decision-making under stress, was followed by curriculum development and evaluation to conclude this study's review of related literature. In conclusion, the conceptual framework comprised of the First generation Holistic Improvisational Leadership Model and Hiatt-Michael's Theoretical Model of Curriculum Design were explored in detail. The methodology used in this study's research is described in the next chapter.

Chapter 3: Methodology

Introduction

This chapter focuses on the methodology of the study and includes the population under investigation, protection of human subjects, workshop design, data collection procedures, and data categories. The study utilized a mixed-method design, qualitative and quantitative research (Creswell, 2007), in the form of a descriptive treatment evaluation of curriculum design, and application of grounded theory for generating and revising a model through the analysis of data. The purpose of this study was to assess the effects of a pilot program applying a holistic model of improvisation to leadership development. This study was designed to address the following research questions:

1. In what ways, if any, did participants' perceptions of improvisation as a learning tool change as a result of attending the workshop?

2. What changes, if any, did the participants perceive in themselves and others by attending the workshop?

3. What facilitation techniques did the participants perceive to be the most effective in enhancing their learning?

4. In what ways, if any, did the participants' awareness of their spontaneous decision making change as a result of attending the workshop?

5. What changes, if any, did the participants identify in their level of stress by attending the workshop?

6. What other factors influenced the participants' learning?

7. How did the participants' learning affect their own or others' behavior and business results in their work environments?

Researcher's Qualifications

The researcher of this study acted as the instructor and a change agent in order to create a safe environment for change and learning in the workshop. The researcher is a respected training professional with over 20 years of experience in all phases of leadership development, performance improvement, and organization development, including needs analysis, design, development, facilitation, and evaluation. She has extensive experience in facilitating leadership and employee development training in the utilities, automotive, financial services, aerospace, high-tech, and healthcare industries. In addition to her extensive leadership development background, the researcher has completed improvisation workshops and participated in various improv groups at Second City, UCLA Extension, and ImprovMasters Toastmasters for the past 5 years. The researcher continues to practice and teach improvisational skills to better understand the experiences of corporate leaders engaged in an improvisation workshop. The researcher is an active member of Applied Improvisation Network and is the champion for the organization's Southern California Chapter.

Population under Investigation

The target population of leaders included executive management, directors, middle managers, supervisors, team leaders, project managers, and anyone who had influence over a team, group, or the creation and implementation of new products, services, or processes. The sample population is defined as "the selection of a subset of a population for inclusion in a study" (Daniel, 2012, p.1), as the selection of the proper sample "can save money, time, and effort, while providing valid, reliable, and useful

results" (Daniel, 2012, p.1). The researcher used a nonproportional quota sample design, which is further described under the research design section of this chapter.

The researcher contacted the training and development representatives at various organizations nationally, called and e-mailed advertisements that briefly summarized the purpose, benefits, and the intent of the workshop, including creating an "Improvisation for Leaders Workshop" flyer (see Appendix B) sent to potential organizations and various leadership conferences nation-wide. The researcher met with the organizational representatives to obtain approval to conduct the workshop and interview the participants for this study. The researcher collected letters of agreement from the organizational representatives (see Appendices C-E), and prior to starting the workshop, collected letters of consent from all participants in the workshop to affirm that all parties involved approved the researcher's use of data collected for this study (see Appendix A). A total of six workshops were offered at no cost to the participants. There were no incentives, monetary or otherwise, provided to attract the population of leaders for this study, apart from this workshop being a low cost option for client organizations. The researcher acted in accordance with ethical principles and protection of human subjects.

The leaders, managers, and team leads attending the workshop were the primary source of data for this study. There were a total of 67 participants in this research study. The number of study participants per workshop were between 4-24 with a mean of 11 participants. A total of 9 participants attended workshop one, and were from the state of Texas, part of the Chamber of Commerce leadership program; they included leaders from a variety of industries, management positions, and educational levels. The researcher received permission to conduct the workshops at a national leadership conference. A

flyer created to announce the Improvisation for Leaders Workshop was passed along to each conference attendee (see Appendix B). The second workshop included a total of eight participants who were volunteer attendees of the conference, and included leaders from academia and business. Although the two workshops were the only ones planned at the time, once the participants got the word out about the workshop, they personally recruited participants for the third and fourth workshop, for a total of 4 and 14 participants respectively, which included other volunteer conference attendees, such as leaders in Manufacturing and Aerospace industries. The third workshop had 4 attendees due to its early morning start time, while the fourth had 14 participants. The fifth workshop occurred in Los Angeles, and included 8 members of the executive management of a well-known insurance company. The sixth and final workshop included 24 leaders and teachers from a public charter middle school in the San Fernando Valley region of Southern California. Due to time limitations the workshop was divided into two segments. Due to verbal feedback from participants regarding minor changes to the evaluation sheets and the division of the workshop into two segments, an IRB modification, as well as original IRB approval, was submitted and approved prior to utilizing the new format (see Appendices F-G for IRB approvals).

Protection of Human Subjects

The researcher requested all participants to sign the Letter of Consent in Appendix A, and informed all participants of their right not to participate in the workshop and the data gathering. The participants were told that the data and information collected would remain confidential, and their names would not appear in the published results (a code number was assigned to each participant). The researcher also informed all

participants that there were no anticipated physical or emotional risks involved in participating in the study. The researcher was the only person who knew the names of the interviewees, and susequently removed all their names during the transcription proccess and assigned them a code number. Participants were told that to protect their identity, the researcher was the only person with access to this data.

All data collected from the leaders attending the workshop, organizational contacts, and researcher's field note observations were used as the primary source of data for this study. The consent forms and personal data were stored separately from the research data. The evaluation forms and the interview transcriptions were kept in a locked file cabinet in the researcher's home. All electronic data collected were stored on a password-protected computer at the primary researchers' home office. Only the researcher has the password to the computer and the key to the locked file cabinet. The data and any supporting documents will be shredded and electronically deleted within 5 years after the completion of the study.

The researcher submitted an application for a claim of exemption review to the Institutional Review Board (IRB) and stated the rationale for exemption review status. The IRB reviewed the application and determined that the proposal met the requirements for exemption under federal regulation 45 CFR 46 §101(b)(1) status (see Appendix F for the IRB Approval Letter). In the application, the researcher included the letters of agreement from the organizational representatives (see Appendices C-E).

According to 45 CFR 46.101(b)(2), this study met the exempt status because the research activity involved the use of surveys and interviews with an adult population. Information collected did not directly identify the participant, nor were identifiers used

that linked a participant's identity to his/her data. The study neither presented more than

a minimal risk to the participants, nor would disclosure of the data outside the study place

participants at risk of criminal/civil liability or damage to their financial standing,

employability, or reputation. A modification to the original IRB was submitted and

approved prior to utilizing the new format to incorporate minor changes to the evaluation

sheets and the division of the workshop into two segments for one of the organizations

(see Appendix H-L for the final evaluation forms and handout, and appendix G for the

modified IRB approval letter).

Research Design

The study employed a mixed methods design by gathering both qualitative and

quantitative research data (Creswell, 2007) in a descriptive treatment evaluation of

curriculum design. The study applied grounded theory for generating and revising a

model based on the analysis of research data. The purpose of the study was to assess the

effects of a pilot program applying a holistic model of improvisation to leadership

development. The intent of the study was to pilot the workshop with six different groups

of leaders from various regions, industries and organizations.

Rationale for mixed-method design. The rationale for combining quantitative

and qualitative methodologies within a single study was that the combination allowed the

researcher to understand the research problems more thoroughly and completely.

Selecting either quantitative or qualitative methodology alone would not have been

sufficient to capture and analyze the results and explore the complex details of the

participants' learning, changes, and reactions (Creswell, 2002, 2007; Ivankova & Stick,

2007). The disadvantage of a mixed method design was the amount of time and resources

needed for designing, gathering, analyzing and reporting the results (Creswell, 2002). The additional effort in time and resources resulted in a more comprehensive research design due to triangulation of findings.

Application of grounded theory. Grounded theory research design was applied to revise the Holistic Improvisational Leadership Model based on data that did not exist prior to the start of this research (Creswell, 2007). Grounded theory research methodology seeks a set of procedures used to analyze data to identify and construct a theoretical model. Grounded theory development is not off the shelf, but is grounded in data from the participants who have experienced the process. (Creswell, 2007; Merriam, 2001; Patton, 2002; Strauss & Corbin, 1998). Although improv-based training is not a new concept and other scholars have studied it in the past, the data gathered from this study fostered new insights, leading to the modification of the Holistic Improvisational Leadership Model used in the study. The revised model is further explained in Chapter 5.

Triangulation of findings. Triangulation designates a combination of at least two or more theoretical frameworks, data sources, methodological approaches, data analysis procedures, or researchers to collect and analyze the data (Azulai & James, 2012; Denzin, 1978, 1989, 2012; Wray, Markovic, & Manderson, 2007). Triangulation is typically used to strengthen the research design by decreasing, renouncing, or counterbalancing the deficiency inherent in any single design strategy (Azulai & James, 2012; Denzin, 1978, 1989; Patton, 1999). The overarching principle of triangulation is that by combining multiple researchers, theories, methods, and empirical materials, researchers can hope to overcome the weakness or intrinsic biases and the problems that come from single method, single-data source, and single-theory studies. In quantitative and qualitative

research, the multiple viewpoints allow for greater accuracy of the design, analysis and interpretation of the research findings (Patton, 2002).

Validity and types of triangulation. There can be five basic types of triangulation as data triangulation, researcher triangulation, theory triangulation, methodological triangulation, and environmental triangulation (Denzin 1970, 1978, 2012; Guion, 2002; Patton, 2002). To maximize the cross verification and validity of data, all five types of triangulating were used in this study.

Data triangulation consists of using multiple data and data gathering points with regards to time and participants. In this study, data triangulation was used by gathering data at three intervals in time: pretest, posttest, and interview. Furthermore, participant data triangulation was used by nonproportional quota sampling to ensure that the 67 participants included a quota of eight categories related to region, industry, age, sex, position, years with the organization, educational level, and ethnicity, which were included in the sample. Researcher triangulation involves multiple researchers at the point of gathering or analysis of data in the study. The principal researcher utilized a researcher to transcribe the data, four separate researchers for coding and qualitative analysis of the data, and an expert researcher to review the quantitative analysis of data to increase validity of interpretations and decrease principle researcher bias. Theoretical triangulation captures more than one theoretical framework in the interpretation of the phenomenon (Denzin 1978; Guion, 2002; Patton, 2002). This study's conceptual framework revolved around the First generation Holistic Improvisational Leadership Model and Hiatt-Michael's (2008) Theoretical Model of Curriculum Design to develop the Improvisation for Leaders Workshop. Furthermore, adult learning and experiential

learning principles (Knowles, 1984; Kolb, 2000), and Kirkpatrick's evaluation model (Kirkpatrick, 1998) were applied to design, implement, and evaluate the Improvisation for Leaders Workshop. Methodological triangulation involves using more than one method to gather data, as is the case with mixed method designs, such as surveys, observations, informal conversations, and interviews (Azulai & James, 2012; Denzin, 1978, 1989). This study was a mixed-method design and utilized surveys, observations, informal conversations, and interviews to gather data, applying grounded theory to reach the revised model. Finally, environmental evaluation corresponds to using various locations and settings to verify if the findings differ or remain the same (Denzin 1978; Guion, 2002; Patton, 2002). In this study, multiple locations, organizations, cities, and regions of the United States were used in addition to interview locations distinct from the original workshop space.

  Treatment of missing data. There were three categories of missing data in this study. Each were confronted with an appropriate measure to add to the validity of the results. First, there were the participants not attending the complete workshop, and were therefore unable to complete all evaluation material. Three participants at the conference were not able to complete the workshop, and therefore, only had pretest data. For two participants, the reason for their leaving was that they were presenting a workshop. The third participant attended almost the entire workshop, but still needed to rush out to pick up a child from daycare, and as a result, did not complete the posttest or interview. As their intention was presented at the beginning of the workshop to the researcher, their departure did not indicate a negative reaction to the workshop. Due to the majority of data missing, these three participants' data were not used in the analysis of data.

The second group of missing data involved the qualitative data missing. Due to the triangulation of methods, data points, questions, and findings, many of the survey questions produced similar responses. If any question was not fully answered, the researcher and coders were able to use the answer to other questions to code. The third group of missing data was quantitative data. Results of pretest and posttest evaluations were reviewed by the researcher to ensure complete data sets, however, when calculating the data, there were two missing information from spontaneous decisions, and two Yes or No responses to whether the participants would change their spontaneous decisions. For computational purposes with SPSS, mean substitution (Howell, 2011) was utilized comprised of substituting a mean for the missing data. This method does not change the overall data because with or without replacing the missing data, the mean will be the same (Howell, 2011). Due to low frequency of missing data, the resulting calculations were deemed valid (Howell, 2011).

Sampling design. Nonproportional quota sampling design was used for this study to ensure that the sample size included a minimum number of elements in each category, or quota, of the target population of leaders. Therefore, the distribution of the number of participants to be selected for each quota category was not necessarily based on their proportions in the target population; however, the goal of non-proportional quota sampling was used to ensure representation in each category (Daniel, 2012). Therefore, some categories in the sample could be larger or smaller than their proportion in the target population (Daniel, 2012).

The inclusion of various quota categories in a sample augments the representation of majority and minority categories, and the ability to compare subgroups that exist in the

target population (Daniel, 2012). Compared to other sampling methodologies, such as availability sampling—also known as convenience sampling, in which participants are selected because they're available (Creswell, 2007)—quota sampling ensures the inclusion of members of different subcategories of populations, and introduces stratification of population into the sampling process, which, due to the quota controls, has less data collector error (Daniel, 2012). However, it should be noted that as a nonprobability sampling procedure, one cannot make statistical estimates from the sample to the target population (see Table 1). Quota sampling has the major strengths and weaknesses of other forms of nonprobability samplings. As availability sampling is used in its final steps, it shares the selection bias that is typical of availability sampling (Creswell, 2007; Daniel, 2012).

Utilizing nonproportional quota sampling, although the researcher did not specifically select each participant, care was given to reach out to wide-ranging contacts, organizations, and venues to get the most diverse population the researcher could gather to ensure that even smaller groups in the population were represented in the sample. The demographics in this study included a quota of eight categories of participants related to region, industry, age, sex, position, years with the organization, educational level, and ethnicity.

The source and dimensions of the eight categories for this study were comprised of the following:

Source: Field Notes/Interview:

1.   Regions (South/Texas; East/NJ-NY; Midwest/Minnesota, Michigan; West/Northern, Southern CA)

2. Industries (Finance/Insurance; Manufacturing; Government; Education; Aerospace/Engineering)

Source: Pretest Survey:

3. Position (Supervisor; Educational Leader; Mid-manager; Executive Manager)

4. Gender (M, F)

5. Age (20-29, 30-39, 40-49, 50 or older)

6. Years at Org (2-5; 5-10; 10-15; over 15 years)

7. Education (high school; Associates, Bachelors, Masters, Doctorate)

8. Ethnicity (White; Hispanic; African American; Asian; Native American; Other)

Facilities. Classroom space was at the participating organizations, at Pepperdine University Culver City Campus, or at a convenient location hosted by the conference, which the researcher and the participants were attending. The utilized facilities for the workshops consisted of comfortable rooms with installed projectors for display of PowerPoint slides, and available chairs for every participant and the instructor, in addition to a large space in the center of the room to conduct all physical activities related to the improv exercises. Participants were encouraged to participate in all improv exercises but were not in any way coerced to participate. The rooms were obstacle free, the floors were flat, and the facility was located in a convenient location for participants to attend. Accommodations were made for anyone seeking assistance in the workshop. Water was provided to the participants, in addition to a minimum of two 15-minute breaks in the 3.5-hour workshop.

Workshop Curriculum Design

The design and implementation of the Improvisation for Leaders Workshop

applied the concepts of adult-learning theory (Knowles, 1975, 1984) and experiential

learning (Kolb, 2000), and utilized the five-step model of Assessment, Design,

Development, Implementation, and Evaluation (ADDIE; Biech, 2008), an instructional

design model that is widely applied in business professional development. As discussed

in Chapter 2, ADDIE is based on Tyler's (1949) four questions and stands for the five

phases of (a) Assessment (or Analysis), (b) Design, (c) Development, (d)

Implementation, and (e) Evaluation (Biech, 2008). The workshop was designed following

each of the steps in the ADDIE model depicted below:

Workshop assessment/needs analysis. An assessment of the learning needs was

conducted to identify training requirements, current and future states, and any

performance gaps (Biech, 2008; Molenda, 2003; Tyler, 1949). To understand the

participants' learning needs, Hiatt-Michael's (2008) Theoretical Model of Curriculum

Design was used. The primary decision making for this research study occurred at the

instructional level. At this level, the researcher synthesized information from literature,

participated in improvisation workshops/conferences, and met with other improvisation

instructors. These activities at the instructional level substantiated the selected

educational objectives, choice of exercises, and organization of these exercises, as well as

instructional delivery, and evaluation tools for this workshop. The objectives of the

workshop were also created in the needs assessment phase as follows:

Upon the completion of the workshop, the participants will be able to:

1. Articulate the four primary principles of improvisation as outlined by workshop handout;

2. Practice the four principles of improvisation in interactive group exercises;

3. Communicate the application of the four primary principles of an improvisational methodology to their role;

4. Select one learning from the workshop and apply it to the workplace for the next 14 days -1 month;

5. Express the effect of applying improvisational principles to their work environments in 3 months.

Workshop design and development. Design and development were performed in parallel; a plan was devised to achieve the training goals, and bridge the performance gaps. In the Development phase, the lesson plan was developed and made ready for a pilot and implementation. The Improvisation for Leaders Workshop was designed based on the workshop sequence prescribed by Spolin (1963) in her book, *Improvisation for the Theatre*, as well as exercises and debriefing suggestions from Anderson (2008), Balachandra (2004), Bradecich (2008), Diggles (2004), Huffaker and West (2005), and Koppett (2001). The experiential nature of this workshop was based on adult-learning theories set forth by Knowles (1975, 1984) and Kolb (2000), as described in Chapter 2 to enable participants to engage in an activity, draw insights from it, and carry that insight into the work environment in the form of self-directed learning (Knowles, 1975).

Furthermore, the researcher's experience and conversations with improvisation instructors, adult learning and experiential learning theories (Kolb, 2000), as well as supplemental reading material, aided in the creation and structure of the workshop. A

summary of lessons learned through the results of these studies is given in the following sections.

Provide ample time for exercises and present their application to work.
Bradecich's (2008) study aimed to use improvisation to increase creativity and listening skills in psychotherapy. Bradecich stated that the participants suggested more time be given to experiential improvisation exercises, and proposed a clear discussion as to how improvisation can assist them in their work. These suggestions were incorporated into the creation of the workshop in this study by providing more time to the exercises, and creating debriefing activities presenting their relationship to leadership skills and their application to the work environment.

Reduce participants' performance anxiety. Koppett (2001) and Spolin (1963, 1990, 1999, 2001) emphasized the need to attempt to reduce participants' performance anxiety. Spolin emphasized that improvisation is not about performance, but rather is about the process and the experience of playing. This is an important distinction for employees and leaders that might be concerned about their lack of talent in improvisation (Spolin, 1963, 1990, 1999). Although there is no way for any facilitator to guarantee the elimination of all participant discomfort, measures were taken to provide an environment in which participants could feel safe to experiment. The researcher utilized her professional training and coaching skills to ease participants into trying new ways of being and acting in the world without coercion.

Moreover, a safe learning environment was cultivated by using ground rules for promoting respect and open-mindedness. The exercises started out simple and in private teams of two before moving into the larger group. The researcher asked for volunteers

instead of assigning exercises to individuals, and throughout the workshop, the importance of process and the simple principles of improv were highlighted in place of focusing on talent, comedy, or the content of the exercises. In addition, the facilitator read a quote from the prominent management consultant and philosopher Koestenbaum (1991) that the experience of *just enough* anxiety was necessary for growth, and that some anxiety was actually beneficial in these learning situations (see Appendix D). Above all, the participants were told that no participant was going to be coerced into partaking in an exercise if there was any sense of distress, and anyone could withdraw from any activity at any time. As a safe environment was cultivated, no participant withdrew from any of the activities in the six workshops.

Workshop implementation. The actual workshop was delivered to the learners in the implementation phase. The results of the workshop prepilot were incorporated into the design and implementation of the workshop. The researcher gathered feedback data from a prepilot test course.

Prepilot results. Feedback data were gathered from a prepilot test course conducted by researcher with volunteers from participants at Toastmasters ImprovMasters on August 9, 2012. The prepilot served as the start of the application of grounded theory for the Holistic Improvisational Leadership Model, and as a test for the exercises from the workshop. It lasted 1.5 hours. All participants indicated that they learned more about the benefits of improvisation and improv principles, enjoying the exercises and how they were laid out. Two comments for improvement included starting Exercise 3 in teams of two prior to placing them in front of an audience to increase the likelihood that the participants would be able to conduct the activity. The second piece of

feedback included making sure that leaders in the workshop knew about the shared leadership and equality concept of improv, because if some leaders attended the workshop with their superiors, they could potentially limit their participation if they felt any judgment from their superiors. Both feedback items were integrated into the design of the workshop. Exercise 3 was changed and a note was added to the ground rules, reinforcing respect and equality, encouraging everyone to feel they have the freedom to easily voice their opinions prior to, during, and at any point during the workshop.

Expert panel review. On September 23, 2012, at the Applied Improvisation World Conference in San Francisco, California, the researcher held a review meeting in which six experts in the field of applied improvisation in leadership development attended. The experts reviewed the study and provided feedback on the study's research questions, workshop design, and exercises, as well as the pre and postevaluation instruments. The six experts included Henk van der Steen, Rita Fernandez, Yuri Kinngawa, Ali Rezvani, Alex Cleberg, and Pamela Meyer. The experts provided significant feedback that was incorporated into the design of the workshop. Their feedback included:

1. Reordering of workshop exercises and starting the "Yes, And…" exercises first with a "Yes", then with a "No", and then continue with "Yes, But", followed by "Yes, And…"

2. Start all exercises in teams of two first.

3. Change the "meeting" exercises from choosing a work topic to "what I like about your idea is."

4. Change all references from "Rules of Improv" to "Principles of Improv".

5. Remove the word "anxiety" from pre and posttests.

6. Add "Say Yes, And … instead of Yes, But…" to the handout.

After changes were incorporated into the final design, the workshop was finalized for implementation and was delivered to participants based on the organizations' timeline and their leaders' availability.

Workshop agenda. The following is the outline of the Improvisation for Leaders Workshop:

1. Instructor welcome and introduction to the workshop.

2. State the objectives of the workshop:

    i) Articulate the four primary principles of improvisation as outlined by the workshop handout.

    ii) Practice the four primary principles of improvisation methodology in group exercises.

    iii) Communicate the application of the four primary principles of an improvisational methodology to their role.

    iv) Select one learning from the workshop and apply it to the workplace for the next 14 days - 1 month.

    v) Express the effects of applying improvisational principles to their work environments in 3 months.

3. Explaining the dissertation topic, necessary forms, and ground rules:

    • Participant's Informed Consent Forms collected (Appendix A).

    • Hand out the Improvisation for Leaders Workshop pretest (Appendix H).

- State the ground rules: Creating a safe learning environment to reduce participants' anxiety (Balachandra, 2004; Bradecich, 2008; Koppett, 2001; Spolin, 1999).

4. Introductions - Exercise 1: Three things in Common (Adapted from Diggles, 2004; Koppett, 2001; Spolin, 1968):

- Debriefing and application to the work environment. (Adapted from Anderson, 2008; Bradecich, 2008; Diggles, 2004; Koppett, 2001; Spolin, 1968).

5. Start PowerPoint: Show the Principles of Improv explained. Principles of Improv Handout provided to participants (see Appendix I):

- Describe the 4S Principles of Improv and Principles 1 and 2.

- Describe the concept of celebrating failure in improv.

6. Warm-up - Exercise 2: Celebrating Failure and debrief (Adapted from Koppett, 2001; Spolin, 1968).

- Debriefing and application to the work environment. (Adapted from Anderson, 2008; Bradecich, 2008; Diggles, 2004; Koppett, 2001; Spolin, 1968).

7. Exercise 3: "Word at a Time Story"- Based on Improv Principle 1: Say the first thing that comes to your head. One word story from Huffaker and West (2005).

- Debriefing and application to the work environment. (Adapted from Anderson, 2008; Bradecich, 2008; Diggles, 2004; Koppett, 2001; Spolin, 1968).

10. Exercise 4: "Yes, And… with Denial" – based on Improv Principle 2: Say "Yes, And…" with no denial (Koppett, 2001).

- Debriefing and application to the work environment. (Adapted from Anderson, 2008; Bradecich, 2008; Diggles, 2004; Koppett, 2001; Spolin, 1968).

11. Exercise 5: "Accepting Offers" – Based on Improv Principle 2: Say "Yes, And…" with no denial (Koppett, 2001).

- Debriefing and application to the work environment. (Adapted from Anderson, 2008; Bradecich, 2008; Diggles, 2004; Koppett, 2001; Spolin, 1968).

1. Describe the 4S Principles of Improv and Principles 3 and 4.

2. Exercise 4: "Lead and Follow" – Based on Improv Principles 3 and 4: Stay with the group and make your partner look good. Adapted from Gesell's (1997) Monster Talk exercise.

- Debriefing and application to the work environment (Adapted from Anderson, 2008; Bradecich, 2008; Diggles, 2004; Koppett, 2001; Spolin, 1968).

3. Exercise 5: "Ad Campaign" – Based on Improv Principles 4, 3, 2, and 1 and Gesell's (1997) Ad Campaign exercise.

- Debriefing and application to the work environment (Adapted from Anderson, 2008; Bradecich, 2008; Diggles, 2004; Koppett, 2001; Spolin, 1968).

4. Show PowerPoint: Share simple/complicated/complex concept of modern environments (Safian, 2012; Westley et al., 2006; Westley & Antadze, 2010).

5. Share the holistic improvisational model and relate it back to principles of improvisation and then debriefing of exercises conducted so far.

   - Transition to Final Simulation Activity.

6. Exercise 6: "The Meeting" – Based on Improv Principles 4, 3, 2, and 1 and Gesell's (1997) Ad Campaign exercise.

   - Debriefing and application to the work environment. (Adapted from Anderson, 2008; Bradecich, 2008; Diggles, 2004; Koppett, 2001; Spolin, 1968).

19. Application to work. "Contract for Change (Nunez, 2010)" Worksheet (Appendix K).

   - Debriefing: Ask participants if anyone would like to share their list or the one activity.

20. Questions and Posttest:

   a. Time for Questions.

   b. Improvisation for Leaders Workshop Posttest (see Appendix J).

   c. Explanation of the interview questionnaire with instructions for follow-up in 2 weeks to 1 month (see Appendix L) .

21.   Summarize, conclude, and thank participants!

Workshop evaluation. Because of the strengths of the Kirkpatrick evaluation approach, namely its widespread and practical use in corporate training, its simplicity, and focus on behavioral outcomes of the participants, Kirkpatrick's (1998) Evaluation

Levels 1, 2, and 3, along with Harrow's (1972) psychomotor domain were used as delineated in the workshop outline (Hogan, 2007). Kirkpatrick's (1998) Level 1 consisted of a portion of posttest evaluation, Level 2 consisted of the pretest and the remaining posttest evaluation results, and Level 3 consisted of the interview, which included the contract for change agreement. Harrow's psychomotor domain was used for debriefing after each exercise during the workshop to ensure participants were relating the physical movements and exercises to learning, and invite them to reflect upon their experiences.

Data Collection Procedures

The data collection methodology included pretests and posttests, participant satisfaction surveys following the workshop, follow-up interviews of workshop participants 2 weeks to 1 month after the workshop, as well as observation, field notes, and informal conversations. The interview questions aimed at gaining information regarding the participants' changes in learning, behavior, and business results when participants were back at their work environments.

Pretest and posttest. A pretest was provided prior to the start of each of the six workshops to elicit the participants' level of stress, and their knowledge regarding improvisational principles and practices (see Appendix F). The posttest had the same construction as the pretest regarding the participants' level of stress, plus additional questions to elicit Level 1 and Level 2 evaluation data from the participants. The posttest was provided to all participants at the end of the workshop while participants were still in the classroom (see Appendix J). The researcher checked to ensure participants answered all questions.

Interviews. The researcher had developed interview protocols for individual phone interviews. Participants received a form as part of Kirkpatrick's Level 3 evaluation (Appendix L), which comprised of five questions. To ease data collection from the participants, the researcher provided multiple options for participants to submit their data, including e-mail. The participants were told that if the researcher did not receive their response in an e-mail format after 30 days, she would contact them individually by phone to conduct an interview to elicit the same content included in the interview protocol (Appendix L), which was provided to the participants at the end of the workshop. The researcher conducted follow-up interviews over the phone or via e-mail 14 days to 1 month after each workshop. A total of three participants' data was not counted in the total results (originally comprised of 70 participants) due to missing posttest and interview data, resulting in the total of 67 participants with completed surveys.

Field notes including observations and informal conversations. Field notes were collected and dated throughout the study for the six workshops conducted, which included observations, experience of the researcher facilitating the class, and informal conversations. The researcher made notes immediately after the workshops and filed the notes electronically by date (Elmoghrabi, 2012). The notes were also used to complete and interpret the analysis of the pretests and posttests, as well as evaluation and interview data. These notes are included in the findings in Chapter 4.

Data Categories

This study collected three categories of data, including demographic and participant changes during the workshop, and changes at their organizations. The demographic data included information about the participants including age, gender,

ethnicity, current job position, and number of years with the organization. The researcher also gathered and analyzed data about participants' industry and region prior to, or during, the workshop or interviews. The data were recorded in the interview data transcriptions or researcher's field notes, and were transcribed into an Excel sheet containing all quantitative data.

Answering the research questions required obtaining information regarding changes in participants' behavior and learning, as well as their level of stress and awareness of spontaneous decision making before and after the workshop. These data were obtained in the pretest, during the workshop through observation and informal conversations, and after the workshop through posttest and evaluation. In addition, at the end of the workshop, participants completed a Contract for Change Worksheet (Nunez, 2010; see Appendix K), which encouraged them to think about learning from the workshop, including the principles of improv, and consider their potential influence on their development as leaders, or on the growth of their team; they were also encouraged to list three specific actions that they would like to start, stop, or continue doing as a result. During the following 2 weeks to 1 month, participants were encouraged to apply at least one of the actions they had listed, and commit to making a behavioral change (start, stop, or continue doing something). Participants were told by the researcher that they could use more than one action, and may make more than one change attempt if they chose to, but were only asked to attempt to make one change. The data regarding changes back at the participants' organizations were collected through subsequent data collection/interviews, which occurred 2 weeks to 1 month after the workshop (see Appendix L).

Summary of Chapter

The chapter includes a description of the study's mixed methods design, the process of gathering qualitative and quantitative research data for a descriptive treatment evaluation of curriculum design, and application of grounded theory. The data collection methodology included pretests, posttests, and interviews of workshop participants, in addition to researcher observation, field notes, and informal conversations. The following chapter will describe the analysis and the results of the data collected.

Chapter 4: Data Analyses and Findings

Introduction

The purpose of this study was to assess the effects of a pilot workshop applying a holistic model of improvisation to leadership development. This study explored the skills the leaders acquired during the workshop, the extent of the application of those skills immediately, in 2 weeks to 1 month, and subsequently, in 3 months after the workshop. This study was also used to investigate which facilitation techniques used by the instructor most effectively brought about this transfer of learning.

This chapter presents the study's analysis and findings under five main headings: analysis of demographic data, analysis of quantitative data, analysis of qualitative data, findings per research question, and summary of major findings by research question. The study included a mixed-method design to serve as a descriptive evaluation of a pilot training program, tested six times on 67 participants. The participants included managers, professors, directors, teachers, presidents, and chief operating officers (COOs) of a multitude of organizations nationwide. The quantitative data were comprised of the data extracted from 19 of the survey questions given to all participants who attended the Improvisation for Leaders Workshops conducted by the researcher. The qualitative data were derived from 22 qualitative questions in the pretest and posttest and during the interview process presented to the same audience. Grounded theory was applied to generate and revise the Holistic Improvisational Leadership Model through the analysis of data.

Analysis of Quantitative Data

For quantitative data analysis, Leedy and Ormrod (2005) divided data analysis into data interpretation, where data is mathematically calculated, and statistically evaluated. For this study, the quantitative data were analyzed using the Statistical Package for the Social Sciences (SPSS). All procedures used, including the data setup and analysis, were followed from the outline provided in the *SPSS Survival Manual 4th edition: A Step by Step Guide to Data Analysis Using SPSS Version 18* (Pallant, 2011).

Quantitative analysis was primarily tabulated using standard summary statistics including means, standard deviations, frequencies, and percentages to analyze the demographic data. A Cronbach alpha reliability coefficient was then calculated, as seen in Table 8, to measure the internal reliability consistency of the five aggregated Likert scale benefits ratings. Spearman rank-ordered correlations were calculated to correlate the six benefit ratings with the five demographic variables as depicted in Table 9. Wilcoxon matched pairs tests were used to compare the percentage of spontaneous decision making at three points in time (pretest, posttest, and subsequent interview) depicted in Table 10. Lastly, the Wilcoxon matched pairs test was used to measure stress levels at pretest and, subsequently, at posttest, as demonstrated in Table 11.

Analysis of Demographic Data

Utilizing nonproportional quota sampling, the demographics in this study included a quota of eight groups of participants related to region, industry, age, sex, position, years with the organization, educational level, and ethnicity. The researcher tried to ensure that each of the subcategories was represented in the study's participants.

The researcher inputted all demographic data into an Excel spreadsheet and analyzed the data using Microsoft Excel and SPSS. Frequencies were calculated for each item. There were a total of 67 participants in this research study. The researcher coded the participants as P01-P67 on an Excel data sheet and conducted research by hosted workshops. The researcher hosted six workshops in which both qualitative and quantitative data were collected. An analysis of the descriptive data shows that 13% of the total participants attended Workshop 1, 12% attended Workshop 2, 6% attended Workshop 3, 21% attended Workshop 4, 12% attended Workshop 5, and 36% attended Workshop 6. Clearly, the largest workshop was Workshop 6, with 36% of the total population in attendance. The smallest workshop was Workshop 3, with only 6% in attendance. The factors that contributed to the fluctuation in participation included the schedules of participants, their availability, as well as the time and location of the workshop. Specifically, the third workshop's early morning start time during a very busy schedule limited the participants' attendance. Conversely, for the sixth workshop, all participants attended, as the workshop was scheduled in between the participants' required leadership training workshop at the client organization's location.

Data were initially tabulated using standard summary statistics (means, standard deviations, frequencies, and percentages). Next, the details of the demographic data analysis were depicted in various tables along with the narrative of the most significant findings.

Table 2

Frequency Counts for Gender and Age Range

Variable	Category	n	%
Gender			
	Female	33	49.3
	Male	34	50.7
Age range			
	20-29 years	19	28.4
	30-39 years	20	29.9
	40-49 years	15	22.4
	50 or older	13	19.4

Note. N = 67

Table 2 displays the frequency counts for the demographic characteristics of the sample. There were approximately equal women (49.3%) and men (50.7%) in the sample. Ages ranged from "20 – 29 years (28.4%)" to "50 or older (19.4%)" with the median age being 34.5 years.

Table 3

Frequency Counts for Region and Industry

Variable	Category	*n*	%
Region			
	South	16	23.9
	East	12	17.9
	Midwest	6	9.0
	West	33	49.3
Industry			
	Finance/insurance	12	17.9
	Manufacturing	7	10.4
	Government	6	9.0
	Education	32	47.8
	Aerospace/engineering	10	14.9

Note. N = 67

In Table 3, participants were from four regions of the country with most (49.3%) living in the West with another 23.9% living in the South. Participants worked in one of five industries with the most common being education (47.8%). The researcher resided in California and had easier access to obtaining participants living in the West.

Table 4

Frequency Counts for Position and Years in the Organization

Variable	Category	*n*	%
Position			
	Supervisor	9	13.4
	Educational leader	32	47.8
	Middle or senior manager	11	16.4
	Executive	15	22.4
Years in the organization			
	2-5 years	33	49.3
	5-10 years	17	25.4
	10-15 years	8	11.9
	Over 15 years	9	13.4

Note. N = 67

In Table 4, all participants were in some sort of leadership position ranging from supervisors (13.4%) to executives (22.4%). The percentage of middle or senior managers (16.4%) included seven senior managers, making the category of 22 executives or senior leaders (33%) of the participants. Almost half the participants (49.3%) had been with their organization between 2 and 5 years.

Table 5

Frequency Counts for Education and Race/Ethnicity

Variable	Category	*n*	%
Education			
	High school	6	9.0
	Associates	3	4.5
	Bachelors	26	38.8
	Masters	24	35.8
	Doctorate	8	11.9
Race/ethnicity			
	White	22	32.8
	Hispanic	12	17.9
	African-American	8	11.9
	Asian	6	9.0
	Other	19	28.4

Note. N = 67

In Table 5, education level of the participants ranged from "high school (9.0%)"
to "doctorate (11.9%)" with the median level of education being a bachelor's degree.
About a third of the participants (32.8%) were Caucasian, about another third of
participants described themselves as other (28.4%), another third described themselves as

either Hispanic or African American (29.8%). The smallest group reported to be Asian

(6%). None of the participants reported to be Native American.

Quantitative Analysis of Pretest, Posttest and Interview Data

The researcher developed pretest and posttest surveys to determine the extent of

participants' knowledge of improvisation and the use of improvisation principles in

spontaneous decisions, level of stress, and benefits the participants received from

attending the workshop (see Appendices I, J, and L). The researcher utilized SPSS to

analyze the data from pretest, posttests, and interview's quantitative data. Data were

initially tabulated using standard summary statistics (means, standard deviations,

frequencies, and percentages). Cronbach alpha reliability coefficient Spearman rank

ordered correlations and Wilcoxon matched pairs tests were used to compare and

measure corresponding data from pretest to posttest and the interview. Next, the details of

the analysis were depicted in the tables that followed along with the narrative of the most

significant findings.

The researcher tallied the responses from the pretests and posttests by item for

frequency counts as shown in Table 6. When the participant was asked at the pretest

about how often they experienced stress during an average work week, over a third of the

participants (37.3%) reported "almost every day," and (27%) reported "Mostly," while

only 1% of the participants responded "Rarely," and almost all (91.0%) reported that they

did not know the percentage of time they used the principles of improvisation to make

spontaneous decisions.

Table 6

Frequency Counts for Pretest Stress and Percent Spontaneous Decisions Using
Improvisation Principles

Variable	Category	*n*	%
Pretest-stress times per week			
	Rarely	1	1.5
	Sometimes	23	34.3
	Mostly	18	26.9
	Almost everyday	25	37.3
Pretest- percent spontaneous decisions where improvisation principles were utilized			
	Don't know	61	91.0
	10%-40%	1	1.5
	40%-75%	4	6.0
	Over 75%	1	1.5

Note. N = 67

Table 7 displays the frequency counts for change in the amount of spontaneous

decision making for the participant both at the posttest and reported later at the interview.

Table 7

Frequency Counts for Change in the Amount of Spontaneous Decision Making Both at Posttest and Reported Later at the Interview (N = 67)

Variable	Category	*n*	%
Pretest to posttest-change in the amount of spontaneous decision making			
	No	17	25.3
	Yes	50	74.7
Posttest to interview-change in the amount of spontaneous decision making			
	No	41	61.2
	Yes	26	38.8

Note. N = 67

At the posttest, when asked if there was a change in the amount of spontaneous decision making from the pretest percentage, 74.7% answered "yes." At the interview, when asked if there was a change in the amount of spontaneous decision making from posttest percentage, 38.8% answered "yes."

Participants were asked a series of five questions pertaining to the benefits they received from participation in the workshop (see Table 8). Five benefits (working with others in your organization; ability to lead others; aware of your listening skills; personal benefits; aware of how quickly you trust others) were measured using a Likert scale of 1

(*Don't know*), 2 (*Not beneficial*), 3 (*Unlikely beneficial*), 4 (*Beneficial*), 5 (*Likely*

beneficial), 6 (*Highly beneficial*).

Table 8

Descriptive Statistics for Types of Benefits Received from the Training Sorted by Highest Mean Rating

Type of benefit	M	SD
Working with others in your organization	5.76	0.50
Ability to lead others	5.69	0.50
Aware of your listening skills	5.54	0.64
Personal benefits	5.54	0.59
Aware of how quickly you trust others	5.22	0.67

Note. $N = 67$. Aggregated score: $M = 5.55$, $SD = 0.43$. Cronbach alpha reliability coefficient ($\alpha = .79$).

Participants indicated that they had received the most benefit from the workshop

in the top two areas of "working with others in your organization" with a mean of $M =$

5.76, ($SD = 0.50$) and "ability to lead others" $M = 5.69$, ($SD = 0.50$). The lowest ranking

benefit resulted from the construct of "make you aware of how quickly you trust others"

with a mean of $M = 5.22$ ($SD = 0.67$).

The Cronbach alpha reliability coefficient was calculated to determine whether

the items on the Likert scale could be aggregated for reporting purposes. Cranach alpha

reliability coefficient is the most commonly used statistic for measuring internal

reliability and consistency of responses, which was used to measure the degree to which

the items that make up the Liker scale were all measuring the same construct (Pall ant,

2011). Values range from 0 to 1, with higher values indicating greater reliability (Pallant, 2011). Nunnally (1978) recommended a minimum level of .7 as indicating an "Acceptable" level of reliability. The resulting Cronbach alpha reliability coefficient ($\alpha = .79$) was acceptable, indicating that aggregating the constructs into one table was acceptable. All five of the benefit ratings were at least 5.0 on a six-point scale. The aggregate benefit score had a mean of $M = 5.55$ ($SD = 0.43$).

Table 9 displays the Spearman rank-ordered correlations between the six benefits scores and five demographic variables to describe the strength and direction of the relationship between the benefits scale variables (Pallant, 2011). While the commonly used Pearson correlations are designed for interval level variables, Spearman rank-ordered correlations are designed for use with ordinal or ranked scale variables. As depicted in Table 9, the exact numeric quantity on the Likert scale has no significance except for its ability to establish a ranking over a set of Likert scales (Pallant, 2011). Seven of 30 resulting correlations were statistically significant at the $p < .10$ level. Specifically, participants who had positions higher in their organizations reported significantly greater benefits for four of the six indicators including total benefits from the workshop, listening skills, ability to lead others, and working with others in their organization. In addition, male participants gave significantly higher benefit ratings for "personal benefits (rs = .22, $p < .10$)" and "ability to lead others (rs = .21, $p < .10$)." Also, there was a significant positive correlation between the participants' level of education and the benefit of "make you aware of how quickly you trust others (rs = .35, $p < .005$)" (see Table 9).

Table 9

Spearman Rank-Ordered Correlations for Benefit Scores with Demographic Variables

Demographic variables [a]					
Benefits ratings	1	2	3	4	5
Total benefits score	.21 *	.07	.10	.13	.17
5. Personal benefits	.04	.22 *	-.11	.08	.02
6. Make you aware of your listening skills	.26 **	.10	.16	.18	.05
7. Make you aware of how quickly you trust others	.12	-.17	.11	.08	.35 ****
8. Ability to lead others	.28 **	.21 *	.15	.14	.10
9. Working with others in your organization	.23 *	.15	.03	.03	-.07

Note. N = 67

* $p < .10$. ** $p < .05$. *** $p < .01$. **** $p < .005$.

[a] Demographic Variables: 1 = *Organizational Level*; 2 = *Gender* (1 = *Female*, 2 = *Male*); 3 = *Age*; 4 = *Years in Organization*; 5 = *Education Level*.

Table 10

Wilcoxon Matched-Pairs Tests Comparing Levels of Spontaneous Decisions from Three Time Periods

Test	Comparison	*M*	*SD*	*z*	*p*
First				2.53	.01
	Pretest	0.56	0.240		
	Posttest	0.61	0.203		
Second				4.46	.001
	Pretest	0.56	0.240		
	Interview	0.71	0.142		
Third				4.02	.001
	Posttest	0.61	0.203		
	Interview	0.71	0.142		

Note. N = 67. Ratings are percentages expressed as decimals.

Table 10 displays the results of the Wilcoxon matched-pairs tests. In a matched-pair samples design, both members of a pair must be on the same data record or Likert scale, and the researcher needs to observe the same participant before and after the treatment (Pallant, 2011). A *t* test was not appropriate since the data have a ranking but no exact numerical interpretation, therefore, nonparametric methods that measure ordinal data—here a Wilcoxon matched-pairs tests—were used instead (Pallant, 2011). The Wilcoxon matched-pairs tests measured the percentage of spontaneous decision making from three times (pretest, posttest, and interview). For all three tests, significant gains in

spontaneous decision-making were noted. At the final interview, leaders admitted to

making 71% of their decisions spontaneously (see Table 10). This figure jumped to 79%

for the 22 Senior Management and Executives leaders in the study (Presidents, CEO,

COO, CTO, VPs, Department heads, Directors).

Table 11 displays the results of the Wilcoxon matched-pairs test comparing stress

levels from pretest to posttest. Significant decline in stress (*p* = .001) was noted from

pretest (*M* = 5.14) to posttest (*M* = 2.45; Table 11).

Table 11

Wilcoxon Matched-Pairs Test Comparing Pretest and Posttest Stress Levels

Stress score	*M*	*SD*
Pretest	5.14	100 2.19
Posttest	2.45	1.49

Note. N = 67. Ratings based on an 11-point scale (0 = *Mild* to 10 = *Severe*). Wilcoxon
test results: *z* = 6.34, *p* = .001.

At pretest, 80% participants had moderate to severe stress, with an average stress

of 5.14 (moderate to severe) while at posttest 100% of participants had mild to moderate

stress with a mild to moderate stress at 2.45 (mild to moderate) indicating a 52% decline

in stress.

Analysis of Qualitative Data

Hsieh and Shannon (2005) defined qualitative data analysis as "a research method

for the subjective interpretation of the content of text data through the systematic

classification process of coding and identifying themes or patterns" (p. 1278). Creswell

(2007) described the process of data analysis as the gathering of raw data, managing the data (including how data is ordered and organized), interpreting the data, and comparing and representing the data so that useful information can be extricated from it. According to Creswell (2007), the process of qualitative data analysis can occur simultaneously with data collection. The researcher's task is to reduce a sizable amount of information into significant patterns and themes and then interpret that information.

The process of coding and analyzing data is a critical part of any qualitative study. Coding is a process that enables the researcher to reduce wordy interview data into meaningful responses, ensuring that research questions are addressed (Lichtman, 2010). Throughout this data analysis, the researcher employed Powell and Renner's (2003) five-step model:

1. Get to know your data,

2. Focus the analysis,

3. Categorize information,

4. Identify patterns and connections within and between categories, and

5. Interpretation: bringing it all together.

The researcher read and got to know all qualitative posttest and interview data in the form of filled paper surveys, email responses, and live interview notes. To remove researcher bias, the researcher hired a third party to transcribe the qualitative portion of the pre and posttest, and interview data into individual Microsoft Word files named P01W1 to P67W6 to indicate the respective participant and workshop number. Each line of participant responses was in a table with the participant codes attached to it for easy identification, coding, and using significant quotes cut off from the printed copies. 67

Word files were printed for the coding session. To remove researcher bias further, the researcher employed four doctoral students trained in coding to assist in the process. The doctoral students worked in pairs. Each doctoral student pair received 30-35 transcribed posttests and interviews. They were given the research questions and a coding form, and instructed to use three colored highlighters to determine which responses connected to the research questions. The coders met with the researcher at a 3.5-hour session to code the data and then discuss the themes that were derived from their coding process. Although the researcher worked with these doctoral students to remove any personal bias in the interpretation, ultimately, the researcher is responsible for accurate and thorough interpretation of qualitative data (Strauss & Corbin, 1990a, 1990b).

Application of Grounded Theory

Grounded theory was first applied in developing the first iteration of the Holistic Improvisational Leadership Model, and based on the results of this study (Creswell, 2007), the model was revised (Glaser, 2001, 2003). Grounded theory research seeks out a set of procedures to construct a theoretical model, which was grounded in data from the participants who experienced the workshop (Birks & Mills, 2011; Creswell, 2007; Merriam, 2001; Patton, 2002; Strauss & Corbin, 1990a, 1990b, 1998). The process of concurrent data generation or collection and analysis is essential to grounded theory research (Birks & Mills, 2011). The process starts with the researcher reviewing existing literature, constructing a theoretical model, collecting data based on the model with an initially purposive sample at the pre-pilot of this study. The data were then coded to reconstruct the model to use for collecting more data, and the analysis and reconstruction

of the model continued throughout each data-gathering workshop (Birks & Mills, 2011; Creswell, 2007; Merriam, 2001; Patton, 2002; Strauss & Corbin, 1990a, 1990b, 1998).

By utilizing the grounded theory approach, the Holistic Improvisational Leadership Model emerged from the literature and series of empirical data analysis (Birks & Mills, 2011; Srauss & Corbin, 1990a, 1998). During this iterative process, the themes found as a result of qualitative analysis were utilized to revise the generations of the model after each collection of workshop data. Although improv-based training is not a new construct, the new insights from the workshops led to the final holistic improvisational model, described in full in Chapter 5.

Use of qualitative software packages. Due to the size and enormity of coding 67 transcribed narratives from pretest, posttest, interview data, and field notes, the researcher considered using qualitative data analysis software (Creswell, 2007; Rand, 2012). These software packages provide organized storage file system availability, as well as ease of retrieval of data, codes, and themes. However, there are disadvantages, such as the need for training, as well as the intricate nuances and transactional complexities of the spoken word that a machine can miss. According to Creswell (2007), "The process used for qualitative data analysis is the same for hand coding or using a computer" (p. 165). Therefore, for this study, due to the richness of data, the use of qualitative analysis software was ruled out. As a result, all data were coded by hand and analyzed with the help of four doctoral students to maintain objectivity of results.

Qualitative Themes Found

Eight major qualitative themes were discovered by comparing qualitative data from pretest to posttest and interview data and field notes. Five themes were of

significance during the posttest and interview, including *responsive listening and expression, collaborative creativity, lowered level of stress and mindfulness, competent risks and celebrating failure, and OPTIMAL spontaneous decisions (OSD)*. At the 1-month interview, the above five themes were apparent—in addition to three major themes of *shared leadership, Affirmative competence, and OPTIMAL Strategy and Performance, productivity, innovation, and retention*—back at the participants' work environments. The eight major themes are described below.

Theme 1: Responsive listening and expression. In qualitative responses to changes they would like to make and changes made back at their work environments, 90% of participants indicated gaining either listening skills, or the ability to express thoughts without judgment, or both. Calculated separately, 81% of participants in the study reported gaining more effective listening skills, while 62% reported the ability to express thoughts without judgment as a learned skill. The participants expressed how the workshop had allowed them to be more cognizant of listening effectively, and in a way that created positive results. Participants also felt more confident in expressing themselves without fear of being wrong or judged, and were able to speak the truth.

In the interview after 1 month, P19W3 described what the effect of the workshop has been for her regarding application of improvisational principles:

> I am more attentive and I say "Yes, And..." even to my family. I come from a family of 11 children. I had learned to be extraverted and talk to be heard; listening is not a skill you learn in such a large family. This time though, when I met my family, I listened. They expected a negative somewhere in my conversation. The negative never showed up. I was being more attentive to others. They were positively shocked. I will continue to work use spontaneity and saying, "Yes, And..." at work and at home.

She continued to describe what she thinks the effect would be in 3 months:

Open up more opportunities for others to speak. I am very extraverted and I want to give them [my co-workers] the opportunity to speak and be part of the team. They are becoming more positive around me. I found a way to pass my positive energy to others and immediately see their attitude change for the better. The people I work with are more open and comfortable around me and speak up more. You have to believe in this for it to work. Thank you so much for teaching me such great tools.

Two subthemes emerged as a result of coding the qualitative participant responses. First, a subtheme indicated that out of the 22 executives or senior leaders in the study, 100% of them reported that they had become more cognizant of their listening skills, or had become more responsive listeners as a result of attending the workshop. Only 3, or 13%, of executives or senior leaders listed speaking their minds as a learned skill. The second subtheme that emerged was that out of out of 33 females in the study, 24 (72%) expressed feeling more confident in expressing themselves without fear of being judged, while only 17 males (50%) indicated speaking their minds as a gained skill. Equal percentage of males (82%) vs. females (79%) indicated more effective listening as a gained skill.

Theme 2: Competent risks and celebrating failure. In an improvisational environment, competent risks are taken, and mistakes are tolerated. The words celebrating failure, accepting mistakes, taking risks, and tolerating mistakes were indicators of the *taking competent risks and celebrating failure* theme. Out of 67 participants, 54 (81%) reported that this concept had influenced them positively in accepting their and their staff's mistakes, and in learning from them. Additionally, participants indicated that the concept of *taking competent risks and celebrating failure* trickled down positively to other areas of a leader's effectiveness, including allowing them to feel less stress and be more productive by not being as concerned about the

possibility of failure as a negative consequence. In response to, "If you made the change, what was the result of the change?" P21W3 stated, "The result of the change has been significant. It's not easy to make the change, but it has benefitted me in not feeling too restricted in my choices and take a risk and speak up more often." The instructor modeled the concept of celebrating failure as a way to reinforce the behavior for the participants. As P26W4 indicated, "Instructor was very enthusiastic about the topic and she energized us. She really believed in what she was teaching and it showed."

Theme 3: Collaborative creativity. The words *collaboration*, *creative*, *creativity*, *teamwork*, *team creativity*, and *time flying by* were indicators of the collaborative creativity theme. Out of 67 participants, 48 (72%) indicated observing this phenomenon occurring at the workshop, or later, back in their work environments. Collaborative creativity occurred during the improvisation workshop, when team members collaborated effortlessly and time flew by, allowing the group to produce highly creative ideas. P30W4, in response to, "Please describe any strength(s) of the Improvisation for Leaders Workshop" said, "It went by so quickly because it was fun and interactive."

Responses also indicated that collaborative creativity required relationship focus among co-workers to flourish. In response to, "Can you list how improvisational techniques can be used in business and leadership?" P30W4 said,

> In every aspect of business. Business is about relationships and relationships can be enhanced by improvisation techniques. So everything. Even if I don't get along with some people, to never forget to focus on maintaining and flourishing your relationships at home and work.

P30W4 continued with, "I saw myself and others be creative." After the workshop was over, P37W5, the president of a financial company mentioned "…Thank you for showing us how to be creative together like that."

  Theme 4: Lowered level of stress and mindfulness. A majority of participants believed that the instructor, by bringing her own examples of having been afraid when she started out with improv, helped them reduce their own anxieties. P26W4 expressed how his anxiety was reduced by stating, "I had lot of anxiety coming to this workshop. I cannot believe what we all accomplished in so little time. How fun it was to learn and play." Participants indicated that the humor and play, in addition to the concept of celebrating failure, allowed them to experience mindfulness, leading to a lower and more productive amount of stress.

  Theme 5: Affirmative competence. The theme of affirmative competence can be described as having sufficient expertise in one's content area, combined with the affirmative belief of improvisation, exhibited through the principle of "Yes, And..." to create an environment that allows the individual to feel confidence and take appropriate action. During the 1-month follow-up interview, in response to what was the result of making a positive change and using the principal of "Yes, And...", P26W4, a VP of manufacturing, said,

> It was very difficult at first to say "Yes, And…" It seems artificial but then I realized I can say "Yes, And..." without actually using those words and use my own words and tried to make sure it was authentic and the result was a lot more participation in our team meetings. I also became more relaxed as I tried to delegate more and listen more instead of try to run the whole show by myself.

A majority of participants believed that the instructor's belief in their abilities and belief in the power of improvisation affected their level of positive thinking and confidence in themselves and others.

Theme 6: Shared leadership and delegation. During the 1-month follow-up interview, the concept of shared leadership and delegation came up often. In response to what was the result of making a positive change and using the principal of "Yes, And..." P26W4 stated, "I also became more relaxed as I tried to delegate more and listen more instead of try to run the whole show by myself."

Theme 7: Making OPTIMAL Spontaneous Decisions (OSD). As stated earlier, for this study, *OPTIMAL* stands for Open to the Present Thought and Intuition, and Mindful in Action and Leadership. The theme of OPTIMAL Spontaneous Decisions (OSD) were evident when, by applying improvisational principles, one can be open to the present reality and making a decision by combining the rational thought, intuition, and mindfulness in action to solve a problem rapidly. In the follow-up interview, leaders admitted their job requires them to make rapid decisions. In response to, "What was the most significant learning for you?" P26W4 said, "Plans are overrated especially in today's fast paced business world. Spontaneity does not mean irresponsibility or carelessness. Using it is often a necessity."

Theme 8: Resulting in OPTIMAL strategy and performance, productivity, innovation and retention. The use of OSD and other competencies gained through the improvisation workshop resulted in high performance and productivity after 1 month and 3 months at the participants' work environments. In response to, "If you made the change, what was the result of the change?" P19W3 expressed how OSD, risk-taking,

speaking up, and celebrating failure can result in more productivity: "It is impossible to always have a plan for decisions. As a result I am not that stressed anymore. I don't feel the pressure that I have to have all the plans and details to make a decision. It was comforting to know that. I was more productive; knowing that whatever happened would determine my next move."

After 3 months, P21W3 stated, "I believe that others will be happy, more productive, and in turn, I will be happier." In response to the question, "In 3 months, what do you feel the effect on your work with others will be if you continued to apply improvisational principles?" P26W4 said, "We may be able to actually keep our generation Y employees and not have them leave after a few months or a year." In response to, "Would you continue to use the tools you learned in the future?" P26W4, one of the executives in the study, responded that he would continue using, "almost everything [he] learned." For this study, *OPTIMAL* stands for Open to the Present Thought and Intuition, and Mindful in Action and Leadership. The theme of OPTIMAL performance was observed when high levels of engagement, collaboration, and innovation in teams and individuals lead to superior productivity and business results.

Innovation was another theme that became apparent in participant responses. P07W1 described her experience of the workshop, and the application of principles at the workplace, by stating:

> It was very eye opening to see myself be creative at the workshop, so I tried to transfer what I had learned to my staff at staff meetings including the 4S principles of improvisation and not looking at failure as a mistake but an opportunity. We now do an opening exercise with these principles in mind. The energy level has gone up in my team and more innovative ideas are flowing out of my staff.

Hence, the results of the study showed that for the participants who attended the workshops, applying improvisational principles resulted in OPTIMAL strategy and performance, productivity, retention, and innovation back at the workplace.

Analysis of Field Notes.

Field notes were collected and dated throughout the study for the six workshops conducted. Field notes included observations, experience of the researcher facilitating the workshop, and informal conversations. The researcher made notes immediately after each workshop and filed the notes electronically by date (Elmoghrabi, 2012). The notes were used to complete and interpret the analysis of the pretests, posttests, and interview data. The researcher wrote notes immediately after the workshop to record the participants' regions, which were comprised of South/Texas; East/New Jersey/New York; Midwest/Minnesota, Michigan; West/Northern, Southern California. As for industries, workshop participants hailed from Finance/Insurance, Manufacturing, Government, Education, and Aerospace/Engineering. The trained coders then assisted the researcher with the interview data to analyze and interpret the researcher's notes. For example, the researcher wrote notes immediately after the fifth workshop as follows:

> November 6, 2012. 1:30 pm: My organizational contact greeted me and allowed me to the room so that I could set up my laptop for a brief PowerPoint slide and place the pretest evaluation sheets in preparation for the participants to arrive. Eight participants arrived at the workshop within a 10-minute time frame allowing others to complete the pretest as they waited for the remaining participants to arrive. I was relieved to see that they seemed interested and excited to be at the workshop, although they did admit that they were exhausted from their long day. The President, the COO, CTO, three directors, two managers were among the participants. They completed the pretest in less than 5 minutes. One participant started talking about his previous improv experience which made my transition easy for the start of the workshop.

A significant observation was noted after the fifth workshop was over when P37W5, the president of a large financial company stated, "Thank you for allowing me to play!" He continued saying that "I am in my mid-50 and have no kids. It seems as if I had forgotten how to play. Thank you for showing us how to be creative together like that. I didn't realize how much I needed that."

Furthermore, the researcher's notes immediately after the final workshop included:

> November 16, 2012. 1:30 pm: I was allowed into the room by my organizational contact so that I could set up my laptop for a brief PowerPoint slide and place the pretest evaluation sheets in preparation for the participants to arrive. Twenty-four participants arrived at the workshop within a 15-minute period allowing others to complete the pretest as they waited for the remaining participants to arrive. Participants admitted that they were extremely tired and they had had a long day. My organizational contact filled me in on the events of the past week. One of their teachers, at the age of 28, had had three heart attacks that week. He was in critical condition and accepted no visitors. The teachers were distraught.

Notes such as these helped filled in the missing information, allowing researchers to discern deeper meaning from often-disjointed research data. Hence, the notes were utilized in interpreting and analyzing themes from the pretest, posttest, and interview data.

Findings per Research Question.

Findings for Research Question 1. Perception of improvisation as a learning tool. Research Question 1 asked, "In what ways, if any, did participants' perceptions of improvisation as a learning tool change as a result of attending the workshop?"

At pretest, Table 6 showed that 91.0% of leaders in the study reported that they did not know the percentage of time they used the principles of improvisation to make spontaneous decisions (later coined as OPTIMAL Spontaneous Decisions or OSD). In

addition, at pretest, 94% of participants, even those with prior knowledge of improvisation, indicated that they did not know what the relationship between improvisation and leadership could be. P09W1 said, "Not sure how [improv] comedy is related to leadership." At the posttest, 100% of leaders in the study indicated that they could now see the benefits of using improvisation techniques in business. When P30W4 was asked, "what really surprised you about the workshop, his answer was, "I had done some improv before in college years ago but I could not see the relationship of how leadership and improvisation are so connected. I could not see the relationship before." In response to, "Can you list how improvisational techniques can be used in business and leadership?" P30W4 said,

> In every aspect of business. Business is about relationships and relationships can be enhanced by improvisation techniques. So everything. Even if I don't get along with some people, to never forget to focus on maintaining and flourishing your relationships at home and work. There is no other way around it.

Other responses to the relationship between improv and business included better communication skills (75%), team building (65%) and effective meeting management (33%).

Findings for Research Question 2. Changes in participants. Research Question 2 asked, "What changes, if any, did the participants perceive in themselves and others by attending the workshop?"

This research question aimed at finding the perceived changes in participants and others at posttest. Participants were asked a series of five questions pertaining to the benefits they received from participation in the workshop (see Table 8). The most commonly used statistic for measuring internal reliability and consistency of responses is

Cronbach alpha reliability coefficient. The resulting Cronbach alpha reliability coefficient ($\alpha = .79$) was acceptable, indicating the acceptable aggregating of constructs into one table. Six indicators included the five benefits (Working with others in your organization; Ability to lead others; Aware of your listening skills; Personal benefits; Aware of how quickly you trust others) and an aggregate total benefits score. The benefits were measured using a Likert scale of 1 (*Don't know*), 2 (*Not beneficial*), 3 (*Unlikely beneficial*), 4 (*Beneficial*), 5 (*Likely Beneficial*), 6 (*Highly beneficial*). All five of the benefit ratings were at least 5.0 on a 6-point scale. The aggregate total benefit score had a mean of $M = 5.55$, ($SD = 0.43$) indicating that most participants saw the workshop as "Likely beneficial" to "Highly beneficial" to them.

Participants indicated that they had received the most benefit from the workshop in the top two areas of "working with others in your organization" with a mean of $M = 5.76$, ($SD = 0.50$) and "ability to lead others" $M = 5.69$, ($SD = 0.50$). The lowest ranking benefit resulted from the construct of "make you aware of how quickly you trust others" with a mean of $M = 5.22$, ($SD = 0.67$).

In Table 9 for this analysis, Spearman rank-ordered correlations were used to describe the strength and direction of the relationship between the benefits scale variables (Pallant, 2011). While the commonly used Pearson correlations are designed for interval level variables, Spearman rank-ordered correlations are designed for use with ordinal or ranked scale variables, as in this case in which the exact numeric quantity on the Likert scale has no significance except for its ability to establish ranking over a set of Likert scales (Pallant, 2011). Table 9 displayed the Spearman rank-ordered correlations between the six benefits scores and five demographic variables. Seven of 30 resulting correlations

were statistically significant at the $p < .10$ level. Specifically, participants who had positions higher in organizations reported greater benefits for four of the six indicators, including total benefits from the workshop, listening skills, ability to lead others, and working with others in your organization. Moreover, male participants gave significantly higher benefit ratings for "personal benefits (rs = .22, $p < .10$)" and "ability to lead others (rs = .21, $p < .10$)." Similarly, there was a significant positive correlation between the participants' level of education and the benefit of "make you aware of how quickly you trust others (rs = .35, $p < .005$)" (see Table 9).

At posttest, 91% of participants were able to correctly recall in their own words the four principles of improv. Moreover, participants were able to recite ways in which they could use improvisation techniques in their communication, meeting management, brainstorming sessions, and team building efforts. In addition, several common themes were of significance in both the posttest and interview. Those themes included responsive listening and expression, collaborative creativity, lowered level of stress and mindfulness, competent risks and celebrating failure, and OPTIMAL spontaneous decisions (OSD). The findings for the theme of OPTIMAL spontaneous decisions (OSD) are described in Research Question 4. The theme of lowered level of stress and mindfulness are described in Research Question 5. The themes of responsive listening and expression, collaborative creativity, and competent risks and celebrating failure are discussed under findings for Research Question 7.

Findings for Research Question 3. Effective facilitation techniques. Research Question 3 asked, "What facilitation techniques did the participants perceive to be the most effective in enhancing their learning?"

Participants indicated that the instructor had modeled the concepts taught, such as bringing her own examples of starting out with improv and being afraid, explaining the cerebral and productivity benefits of having *just enough anxiety*. As P26W4 indicated, "Instructor was very enthusiastic about the topic and she energized us. She really believed in what she was teaching and it showed." Taking Competent Risks and Celebrating Failure appeared to be the most influential concept to the participants, which was modeled by the facilitator. As P26W4 stated, "I had lot of anxiety coming to this workshop. I cannot believe what we all accomplished in so little time. How fun it was to learn and play." The instructor modeled the concepts of celebrating mistakes to place the participants in an optimal state for learning. In response to, "Please describe any strength(s) of the Improvisation for Leaders Workshop", P08W1 stated,

> Experiencing uncomfortable and unknown situations in class so you can practice experiencing discomfort and ambiguity at work and be ok with it. Farnaz demonstrated that by being lighthearted about the equipment issues she was having or the fact that she had forgotten to give us the handout sooner. It made us feel at ease with her and more comfortable in making mistakes.
> Participants stated that a vital reason the workshop was effective was because that

it was well designed, interactive, and fun. P17W2, CEO of a Law Firm, described the workshop as, "highly interactive with great activities and handouts." In response to, "What was the most significant learning for you?" P17W2 noted, "How the techniques used in the class made interactions with others that I did not know too well, easy and our groups productive."

Findings for Research Question 4. Awareness of spontaneous decision making. Research Question 4 asked, "In what ways, if any, did the participants' awareness of their spontaneous decision making change as a result of attending the workshop?"

Awareness leading to increase in SD. In this study, the percentage of spontaneous decisions and the reasons for the change were measured from three time periods (pretest, posttest, and interview). For all three tests, significant gains in spontaneous decision-making were noted. At the posttest, 75% (see Table 7) of leaders increased their percentage of SD from a pretest percentage mean of 56% to 61%, indicating a 9% increase in the number of SD. At the interview, 39% increased their percentage of SD from a posttest percentage mean of 61% to 71%, indicating a 16% increase in the number of SD. At the final interview, leaders also admitted to making 71% of their decisions spontaneously (see Table 10), indicating a total of 27% increase in the number of spontaneous decisions from a pretest mean of 56%.

Awareness of SD. When asked what the reason was for this increase, the study showed that almost half of the leaders (46%) increased their admitted percentage of spontaneous decisions (SD) from the pretest because they did not have the awareness that they actually made that many spontaneous decisions in a given week, or they did not have the level of comfort to admit to making such a high percentage of spontaneous decisions. 31% of leaders admitted that, as a result of learning the tools at the workshop, they were able to make more OPTIMAL spontaneous decisions, and 20% indicated that due to what they experienced at the workshop, they were able to make their spontaneous decisions with more confidence and trust in their instinct and intuition. Only 3% of leaders had a

lower percentage when admitting to their comfort in planning, noting that they actually do follow the plan as intended. Both individuals, in this case, were teachers.

Awareness of OSD. At pretest, 91% of leaders indicated they were not aware whether they used improvisational techniques in making OSD. At the posttest, after learning improvisational and OSD skills, 71% of participants agreed that they would change the method used to make spontaneous decisions to OPTIMAL decision-making, using improvisation skills. From posttest to interview, 85% of participants changed the method used to make spontaneous decisions to OPTIMAL Decision Making using improvisation skills. At the final interview, a cumulative total of 97% of leaders reported that they would change the way they make spontaneous decisions from pretest by using their intuition more and using improvisation principles to make OSD. In response to the question, "Can you list how improvisational techniques can be used in business and leadership?" P08W1 summed it up elegantly, stating, "Spending too much time on planning and not enough on how to make better spontaneous decisions is self-defeating."

Reasons for Change to OSD. Reasons leaders cited for Changing Spontaneous Decision Making Process to OSD were that 40% of leaders mentioned using tools from the Workshop; 58% cited the reason that they learned how to be more Spontaneous; 68% admitted to having more Confidence and trusting their Intuition; and 98% noted they gained an awareness of using improvisational skills to make OSD.

Differences between SD in Executive Leaders and middle managers. At the final interview, 1 month after attending the workshop, leaders admitted to a mean of 71% *SD* (see Table 10). This figure jumped to 79% for the 22 Executive leaders or Senior Managers (Presidents, CEO, COO, CTO, VPs, Department heads, Directors) in the study.

At the final interview, the mean percentage of *SD* for the 45 remaining leaders who were not senior leaders or executives had a mean SD of 67% (middle managers, supervisors, or teachers) resulting in the total mean of 71% (see Table 10) for all 67 leaders in the study.

In the follow-up interview, executive leaders group admitted their job requires them to make rapid decisions. In response to "what was the most significant learning for you?" P26W4 said, "Plans are overrated especially in today's fast paced business world. Spontaneity does not mean irresponsibility or carelessness. Using it is often a necessity." They also admitted to their increasing confidence with decision making on the spot and trusting their intuition. They trusted their instantaneous decisions more and felt their decisions were superior to, or just as good as, the decisions made with lots of planning and time. During the 1 month follow-up interview, in response to OSD and the question as to whether he would continue to use the tools in the future, P26W4, one of the executives in the study and VP of manufacturing, answered, "This is how I normally function. Now I feel like I have permission to use it at work."

Findings for Research Question 5. Changes in stress level. Research Question 5 asked, "What changes, if any, did the participants identify in their level of stress by attending the workshop?"

Table 6 indicated that (64%) of participants experienced stress "Mostly" or "Almost Every day" during an average week. At pretest, 12% of participants reported to have mild stress, 35% moderate, and 53% severe stress, while at posttest, 52% of the participants responded to having mild stress, 48% moderate stress and 0% of the participants responded to having severe stress. Table 11 displays the results of the Wilcoxon matched-pairs test comparing stress levels from pretest to posttest. Significant

decline in stress (p = .001) was noted from pretest (M = 5.14) to posttest (M = 2.45; Table 11).

At pretest, 80% participants had moderate to severe stress, with an average stress of 5.14 (moderate to severe) while at posttest 100% of participants had mild to moderate stress with a significant decline in stress at 2.45, indicating a 52% decline in stress. During the 1-month follow-up interview, in response to what was the result of making a positive change, P26W4, VP of manufacturing, answered that using the workshop tools resulted in, "a lot more participation in our team meetings. I also became more relaxed as I tried to delegate more and listen more instead of try to run the whole show by myself."

Findings for Research Question 6. Other factors influencing learning.

Research Question 6 asked, "What other factors influenced the participants' learning?"

Other factors that influenced the participants' learning included:

Use of PowerPoint. One of the factors that influenced the participants' learning had to do with use of PowerPoint slides. A small portion of introduction to improvisation at the workshop included going over four PowerPoint slides. In Workshop 1 and 2, the facilities had a very small projector and a small screen while the rooms used were quite large. Participants' complaints had to do with not being able to see and read the slides well. Conversely, participants indicated they were delighted that the facilitator did not use PowerPoint slides for the whole workshop, happy that it consisted of only a small portion of the 3.5 hours. Other participants in Workshops 3, 4, 5 and 6 stated that the slides were engaging and they wish that the facilitator had gone over all the slides in a less rushed manner. They also had requested handouts of the slides, as they found them quite useful.

Co-Worker's hospitalization. During the second half of workshop 6, participants admitted they were extremely tired and had had a long day. The researcher's organizational contact filled in on the events of the past week, in which one of the teachers, at the age of 28, had a heart attack. He was in critical condition and was not accepting visitors. Thus, this event had left workshop participants in a drained and distraught state.

Dividing that class into two. For Workshop 6, the class was divided into two 1 hour and 45 minute classes. The result was less observed engagement in the material and activities. The aggregate total benefit score for all 67 participants comprised of a mixture of positions had a mean of $M = 5.55$, ($SD = 0.43$), while the aggregate benefit score for Workshop 6, comprised of all educators, was 5.39. Comparing the benefits of Workshop 6 with a similar workshop in the study, comprised of all educators was Workshop 2, which had a mean aggregate benefit score of 5.85, indicating a difference of 0.46 points in benefits.

Findings for Research Question 7. Changes at Work. Research Question 7 asked, "How did the participants' learning affect their own or others' behavior and business results in their work environments?"

Eight total qualitative themes were found by coding qualitative data from pretest to posttest and the interview describing the changes in participants and others after 1 month at their work environments. The eight themes included responsive listening and expression; collaborative creativity; lowered level of stress and mindfulness; competent risks and celebrating failure; OPTIMAL spontaneous decisions (OSD); affirmative competence; high Performance, productivity and retention; and shared leadership. The

findings for the theme of OPTIMAL spontaneous decisions (OSD) were described in Research Question 4. The theme of lowered levels of stress, and increased mindfulness were described in Research Question 5. The themes of affirmative competence, responsive listening and expression, collaborative creativity, competent risks and celebrating failure, high performance, productivity and retention, and shared leadership are described below.

The theme of affirmative competence, or belief in the ability of themselves and others was one of the apparent themes at the interview. Affirmative competence includes more participation from staff members and can be revealed through leaders letting go of control, believing in their staff's competence, and providing them with more responsibilities. As P26W4 noted, after 1 month of using the improvisational tool of "Yes, And…", "The result was a lot more participation in our team meetings. I also became more relaxed as I tried to delegate more and listen more instead of try to run the whole show by myself."

OPTIMAL strategy and performance, productivity, retention and innovation were among some of the other changes participants agreed they have and will continue to see in the future at their organizations. P21W3 stated that he will, "continue to work towards spontaneity and include the strategy of saying "Yes, And...", "in my attempt to accept others people's ideas, as much as home as at work." And in 3 months, P21W3 continued, "I believe that others will be happy, more productive, and in turn, I will be happier." In response to the question, "In 3 months, what do you feel the effect on your work with others will be if you continued to apply improvisational principles?" P26W4 said, "We may be able to actually keep our generation Y employees and not have them leave after a

few months or a year." During the 1-month follow-up interview, in response to, "Would you continue to use the tools you learned in the future?" P26W4, one of the executives in the study, answered that he will continue to use "almost everything I learned." In response to, "Describe the leadership behavior (s) you attempted to change," P21W3 stated, "Spontaneity, I wanted to be able to "say the first thing" that occurred to me and speaking up more."

In qualitative responses to changes they would like to make and changes back at their work environments, 90% of participants indicated gaining either listening skills or the ability to express thoughts without judgment, or both. Calculated separately, 81% of participants in the study reported gaining more effective listening skills while 62% reported the ability to express thoughts without judgment as a learned skill. The participants expressed how the workshop has allowed them to be more cognizant of listening more effectively and in a way that creates positive results. Participants also felt more confident in expressing themselves without fear of being wrong or judged were able to speak the truth. As P23W4 noted, regarding the changes she has committed herself to making, "[I need to] trust my intuition and speak up. I can contribute a lot." Two subthemes emerged as a result of coding the qualitative participant response related to responsive listening and speaking. The first subtheme indicated that out of the 22 executives or senior leaders in the study, 22 (or 100%) of them reported they had become more cognizant of their listening skills, and had become more responsive listeners as a result of attending the workshop. Only 3 (or 13%) of executives or senior leaders listed speaking their minds as a skill learned. The second subtheme that emerged was that out of out of 33 females in the study, 24 (72%) expressed feeling more confident in

expressing themselves without fear of being judged, while only 17 males (50%) indicated speaking their minds as a gained skill. Equal percentage of males (82%) vs. females (79%) indicated more effective listening as a gained skill.

Competent risks and celebrating failure was another common and transformational theme found in coding qualitative responses. The words *celebrating failure*, *accepting mistakes*, *taking risks*, and *tolerating mistakes* were indicators of the taking *competent risks and celebrating failure* theme. Out of 67 participants, 54 (81%) reported that this concept had influenced them positively in accepting their own and their staff's mistakes, and learning from them. In addition, participants indicated that the concept of *taking competent risks and celebrating failure* trickled down positively to other areas of a leader's effectiveness including allowing them to feel less stress and be more productive as they were not as concerned about the possibility of failure as a negative consequence.

In addition, collaborative creativity was a theme found through coding of qualitative data. The words *collaboration*, *creative*, *creativity*, *teamwork*, *team creativity*, and *time flying by* were indicators of the collaborative creativity theme. Out of 67 participants, 48 (72%) indicated observing this phenomenon occurring at the workshop or later back in their work environments. Collaborative creativity occurred during the improvisation workshop, when team members collaborated effortlessly and when time flew by, allowing the group to produce highly creative ideas. P30W4, in response to "Please describe any strength(s) of the Improvisation for Leaders Workshop" said, "It went by so quickly because it was fun and interactive." Responses also indicated that collaborative creativity required relationship focus among co-workers for it to flourish. In

response to, "Can you list how improvisational techniques can be used in business and leadership?" P30W4 said,

> In every aspect of business. Business is about relationships and relationships can be enhanced by improvisation techniques. So everything. Even if I don't get along with some people, to never forget to focus on maintaining and flourishing your relationships at home and work. There is no other way around it.

The theme of shared leadership and delegation were found during the 1 month follow-up interview. Although delegation was not a concept taught in the workshop, the rules of improv, and specifically the rule of "Yes, And…" engaged everyone at the same level, making delegation a natural consequence. The theme of shared leadership and delegation came up in response to the question, "What was the result of making a change?" P26W4, a VP of manufacturing, responded by stating, "I also became more relaxed as I tried to delegate more and listen more instead of try to run the whole show by myself." Shared leadership was also apparent. In response to the question, "List no more than three things you would like to START doing to grow as a leader," P63W6 listed the following skills, "Be more assertive. Delegate responsibility and leadership. Ask for feedback."

Summary of Major Findings by Research Question

This study assessed the effects of a pilot workshop, applying a holistic model of improvisation to leadership development for 67 participants. This chapter presented the data analyses and findings for the quantitative and qualitative national data collection portion of this study. The quantitative data are comprised of 67 participants in total spread across six conducted workshops of 3.5 hour each. The qualitative data were derived from 67 pretest, posttest, and interviews of the workshop participants, which

included a cross section of the population from a variety of positions, degrees, and ethnic backgrounds.

Summary Research Question 1. Perception of improvisation as a learning tool. Research Question 1 asked, "In what ways, if any, did participants' perceptions of improvisation as a learning tool change as a result of attending the workshop?"

Pretest results (Table 6) indicated that 91.0% of leaders in the study reported they did not know the percentage of time they used the principles of improvisation to make spontaneous decisions (later coined as OPTIMAL Spontaneous Decisions [OSD]). Furthermore, at pretest, 94% of participants, even those with knowledge of improvisation, indicated they did not know what the relationship between improvisation and leadership could be. At posttest, 100% of leaders in the study indicated they could now see the benefits of using improvisation techniques in business. Other responses to the relationship between improv and business included better communication skills (75%), team building (65%), and effective meeting management (33%).

Summary Research Question 2. Changes in participants. Research Question 2 asked, "What changes, if any, did the participants perceive in themselves and others by attending the workshop?"

Participants were asked a series of five questions pertaining to the benefits they received from participation in the workshop (see Table 8). All five of the benefit ratings were at least 5.0 on a 6-point scale. Participants indicated they had received the most benefit from the workshop in the top two areas of "working with others in your organization" with a mean of $M = 5.76$, ($SD = 0.50$) and "ability to lead others" $M = 5.69$, ($SD = 0.50$). The lowest ranking benefit resulted from the construct of "make you aware

of how quickly you trust others" with a mean of $M = 5.22$, $(SD = 0.67)$. The aggregate

benefit score had a mean of $M = 5.55$, $(SD = 0.43)$, indicating that most participants saw

the workshop as "Likely beneficial" to "Highly beneficial" to them. Table 9 displayed the

Spearman rank-ordered correlations between the six benefits scores and five demographic

variables. Seven of 30 resulting correlations were statistically significant at the $p < .10$

level. Specifically, participants who had positions higher in their organizations reported

significantly greater benefits for four of the six indicators, including total benefits from

the workshop, listening skills, ability to lead others, and working with others in your

organization. In addition, male participants gave significantly higher benefit ratings for

"personal benefits (rs $= .22$, $p < .10$)" and "ability to lead others (rs $= .21$, $p < .10$)." Also,

there was a significant positive correlation between the participants' level of education

and the benefit of "make you aware of how quickly you trust others (rs $= .35$, $p < .005$)"

(see Table 9).

This research question aimed to find the changes in participants and others at

posttest. 91% of participants were able to correctly recall the four principles of improv in

their own words, in addition to reciting ways in which they could use improvisation

techniques in their meetings, brainstorming sessions, and team building efforts. Several

themes were of significance in both time periods of posttest and interview. Those themes

included responsive listening and expression, collaborative creativity, lowered level of

stress and mindfulness, competent risks and celebrating failure, and OPTIMAL

spontaneous decisions (OSD). The findings for the theme of OPTIMAL spontaneous

decisions (OSD) are described in Research Question 4. The theme of lowered level of

stress and mindfulness are described in Research Question 5. The themes of responsive

listening and expression, collaborative creativity, and competent risks and celebrating failure are discussed under findings for Research Question 7.

Summary Research Question 3. Effective facilitation techniques. Research Question 3 asked, "What facilitation techniques did the participants perceive to be the most effective in enhancing their learning?"

Participants indicated that the instructor had modeled the concepts taught, such as bringing her own examples of starting out with improv and being afraid, explaining the cognitive and productivity benefits of having *just enough anxiety*, competent risk, and failure. As P26W4 indicated, "Instructor was very enthusiastic about the topic and she energized us. She really believed in what she was teaching and it showed." Taking competent risks and celebrating failure appeared to be the most influential concept to the participants. The instructor provided exercises and examples of celebrating mistakes to place the participants in an optimal state for learning. Participants also stated that a vital reason the workshop was effective was because it was well designed, interactive, exercises built on one another, and it was fun. P17W2 described the workshop as, "highly interactive with great activities and handouts." In response to, "What was the most significant learning for you?" P17W2 stated, "How the techniques used in the class made interactions with others that I did not know too well, easy and our groups productive."

Comments regarding the facilitator's use of PowerPoint are further explained under Research Question 6, and include participants' request that they wished the facilitator had gone over all the slides in a less rushed fashion, or that the PowerPoint was too far away and too small to read.

Summary Research Question 4. Awareness of spontaneous decision-making.

Research Question 4 asked, "In what ways, if any, did the participants' awareness of their spontaneous decision making change as a result of attending the workshop?"

In this study the percentage of spontaneous decisions and the reasons for the change were measured from three time periods (pretest, posttest, and interview). For all three tests, significant gains in spontaneous decision-making were noted. At the posttest, 75% (see Table 7) of leaders increased their percentage of SD from a pretest percentage mean of 56% to 61%, indicating a 9% increase in the number of SD. At the interview, 39% increased their percentage of SD from a posttest percentage mean of 61% to 71%, indicating a 16% increase in the number of SD. At the final interview, leaders also admitted to making 71% of their decisions spontaneously (see Table 10), indicating a 27% increase in the number of spontaneous decisions from a pretest mean of 56%.

When asked what the reason was for this increase, the study showed almost half of the leaders (46%) increased their admitted percentage of spontaneous decisions (SD) from the pretest because they did not have the awareness that they actually made so many spontaneous decisions in a given week, or they did not have the level of comfort to admit to making such a high of a percentage of spontaneous decisions. 31% of leaders admitted that as a result of learning the tools at the workshop, they were able to make more OPTIMAL spontaneous decisions, and 20% indicated that due to what they learned at the workshop, they were able to make their spontaneous decisions with more confidence and trust in their intuition. Only 3% of leaders lowered their percentages in SD and admitted to having a level of comfort in planning. Both individuals in this case were teachers.

At pretest, 91% of leaders indicated they were not aware whether they used improvisational techniques in making OSD. At the posttest, after learning improvisational and OSD skills, 71% of participants agreed that they would change the method used to make spontaneous decisions to OPTIMAL Decision Making using improvisation skills. From posttest to interview, 85% of participants changed the method used to make spontaneous decisions to OPTIMAL Decision Making using improvisation skills. At the final interview, a cumulative total of 97% of leaders reported that they would change the way they make spontaneous decisions from pretest by using their intuition more effectively and applying improvisation principles to make OSD. Reasons leaders brought for Changing OSD included 40% using tools from the Workshop; 58% noted they learned how to be more Spontaneous; 68% admitted to having more Confidence and better trusting their Intuition; and 98% noted they now possessed the awareness of using improvisational skills to make OSD.

At the final interview, 1 month after attending the workshop, leaders admitted to a mean of 71% SD (Table 10). This figure jumped to 79% for the 22 Executive leaders or Senior Managers (Presidents, CEO, COO, CTO, VPs, Department heads, Directors) in the study. The mean percentage of *SD* for the 45 remaining leaders who were not senior leaders or executives had a mean SD of 67% (middle managers, supervisors, or teachers) resulting in the total mean of 71% (see Table 10) for all 67 leaders in the study. In the follow-up interview, executive leaders acknowledged that their job requires them to make rapid decisions. In response to "what was the most significant learning for you?" P26W4 said, "Plans are overrated especially in today's fast-paced business world. Spontaneity does not mean irresponsibility or carelessness. Using it is often a necessity." They also

admitted to their increased confidence with decision making on the spot and trusting their

intuition. They trusted their instantaneous decisions more and felt their decisions were

superior to, or just as good as, the decisions made with lots of planning and time. During

follow-up interview, in response to OSD and would he continue to use the tools in the

future, P26W4, one of the executives in the study responded that, "This is how I normally

function. Now I feel like I have permission to use it at work."

Summary Research Question 5. Changes in stress level. Research Question 5

asked, "What changes, if any, did the participants identify in their level of stress by

attending the workshop?"

Table 6 indicated that 64% of participants experienced stress "Mostly" or

"Almost Every day" during an average week. At pretest, 12% of participants reported to

have mild stress, 35% moderate, and 53% severe stress, while the posttest 52% of the

participants responded to having mild stress, 48% moderate stress, and 0% of the

participants responded to having severe stress. Table 11 displays the results of the

Wilcoxon matched-pairs test comparing stress levels from pretest to posttest. Significant

decline in stress ($p = .001$) was noted from pretest ($M = 5.14$) to posttest ($M = 2.45$) (see

Table 11). At pretest, 80% participants had moderate to severe stress, with an average

stress of 5.14 (moderate to severe), while at posttest 100% of participants had mild to

moderate stress at 2.45, indicating a 52% decline in stress.

Summary Research Question 6. Other factors influencing learning. Research

Question 6 asked, "What other factors influenced the participants' learning?"

One of the factors that influenced the participants' learning had to do with use of

PowerPoint slides. A small portion of introduction to improvisation at the workshop

included going over four PowerPoint slides. Participants' complaints had to do with not being able to see and read the slides well. Conversely, participants indicated that they were delighted that the facilitator did not use PowerPoint slides for the whole workshop, as it consisted of only a small portion of the 3.5 hours. Other participants in Workshops 3, 4, 5 and 6 stated that the slides were engaging and they wish that the facilitator had gone over all the slides in a less rushed fashion.

During the second half of Workshop 6, participants acknowledged that one of their teachers had a heart attack earlier that week. He was in critical condition and was not accepting visitors. Thus, this event had left workshop participants in a drained and distraught state. Additionally, for the same workshop, the class was divided into two 1 hour and 45 minute classes. The result was less observed engagement in the material and the activities. The aggregate total benefit score for all 67 participants had a mean of $M = 5.55$, $(SD = 0.43)$ while the aggregate benefit score for Workshop 6, comprised of all educators, was 5.39.

Summary Research Question 7. Changes at work. Research Question 7 asked, "How did the participants' learning affect their own or others' behavior and business results in their work environments?"

Eight total qualitative themes were found by coding qualitative data from pretest to posttest and at the interview, after 1 month at their work environments. The eight themes included responsive listening and expression, collaborative creativity, lowered level of stress and mindfulness, competent risks and celebrating failure, OPTIMAL spontaneous decisions (OSD), affirmative competence, OPTIMAL strategy and performance, productivity, retention, innovation, and shared leadership. The findings for

the theme of OPTIMAL spontaneous decisions (OSD) were described in Research

Question 4. The theme of lowered level of stress and mindfulness were described in

Research Question 5. The themes of affirmative competence, responsive listening and

expression, collaborative creativity, competent risks and celebrating failure, OPTIMAL

strategy and performance, productivity, retention, innovation, and shared leadership are

summarized below.

The theme of affirmative competence, or belief in the ability of themselves and

others, was one of the apparent themes at the interview. Affirmative competence includes

more participation from staff members, which can be revealed through leaders letting go

of control, believing in their staff's competence and providing them with more

responsibilities. As P26W4 said after 1 month of using the improvisational tool "Yes,

And…", "The result was a lot more participation in our team meetings. I also became

more relaxed as I tried to delegate more and listen more."

In qualitative responses to changes they would like to make and changes back at

their work environments, 90% of participants indicated gaining either listening skills, or

the ability to express thoughts without judgment, or both. Calculated separately, 81% of

participants in the study reported gaining more effective listening skills, while 62%

reported the ability to express thoughts without judgment as a learned skill. Two

subthemes emerged as a result of coding the qualitative participant response. The first

subtheme indicated that out of the 22 executives or senior leaders in the study, all 100%

of them reported that they had become more cognizant of their listening skills, and have

become more responsive listeners as a result of attending the workshop. Only 3, or 13%

of executives or senior leaders, listed speaking their minds as a skill learned. The second

subtheme was that out of 33 females in the study, 24 (72%) expressed feeling more confident in expressing themselves without fear of being judged, while only 17 males (50%) indicated speaking their minds as a gained skill. Equal percentage of males (82%) vs. females (79%) indicated more effective listening as a gained skill.

Taking competent risks and celebrating failure was another common and transformational theme found in coding qualitative responses. The words *celebrating failure*, *accepting mistakes*, *taking risks,* and *tolerating mistakes* were indicators of the *taking competent risks and celebrating failure* theme. Out of 67 participants, 54 (81%) reported that this concept had influenced them positively in accepting their own and their staff's mistakes and learning from them. In addition, participants indicated that the concept of *taking competent risks and celebrating failure* trickled down positively to other areas of a leader's effectiveness, including stress reduction and delegation productivity, as they were not as concerned about the possibility of failure as a negative consequence for themselves and their staff. In addition, collaborative creativity was a theme found through coding of qualitative data. Out of 67 participants, 48 (72%) indicated observing this phenomenon occurring at the workshop or later back in their work environments.

The themes of shared leadership and delegation were found during the 1-month follow-up interview. Although delegation was not a concept taught in the workshop, the rules of improv specifically, the rule of "Yes, And…" engaged everyone at the same level, making delegation a natural consequence. The theme of shared leadership and delegation came up in response to the question, "List no more than three things you

would like to START doing to grow as a leader," in which P63W6 listed the following skills, "Be more assertive. Delegate responsibility and leadership. Ask for feedback."

Finally, high performance, productivity, and retention were among some of the other changes participants agreed they have and will continue to see in the future at their organizations. In response to the question, "In 3 months, what do you feel the effect on your work with others will be if you continued to apply improvisational principles?" P26W4 indicated that retaining their generation Y employees may be a desired and possible outcome.

In the final chapter, these findings will be compared to the literature, conclusions and implications will be drawn, and a series of recommendations will be suggested.

Chapter 5: Summary, Conclusions, and Recommendations

Study Overview

   Statement of the problem. In a complex and ambiguous business world, leaders require nimble and adaptive decision making techniques. Due to the instability of the business world, the well-intentioned formal strategic plan of most organizations frequently fails to materialize, resulting in leaders' improvising a solution (Boyer, 2009; Moorman & Miner, 1998a), yet without a proper improvisational skillset, the resulting solutions can be highly ineffective (Moorman & Miner, 1998a). Studies show that improvisation in leadership decision making is on the rise, and that it transpires in organizations up to 75-90% of the time (Cross & Parker, 2004; Meyer, 2010; Mintzberg, 1973), yet very little attention has been given to developing this improvisation skillset. No other leadership skillset that is applied up to two thirds of the time has ever been so underdeveloped (Cross & Parker, 2004; Meyer, 2010).

   Due to the frequency of improvisation occurring in organization, and the effectiveness of combining of spontaneity of action and intuition in a powerful yet simple framework, developing improvisational techniques in leaders can offer a solution (Crossan, 1997, 1998; Montuori, 2012). However, the amount of existing research on the use of improvisational techniques in organizations is limited, and is frequently metaphorical or anecdotal in nature (Vera & Crossan, 2005). Consequently, empirical research connecting and assessing the concepts of improvisation and leadership development in organizations is sorely needed (Vendelø, 2009). This is the problem that this study addressed.

Statement of purpose. The purpose of this study was to assess the effects of a pilot workshop applying a holistic model of improvisation to leadership development. This study explored the skills leaders acquired during the workshop, the extent of the application of those skills immediately after the workshop, in 2 weeks-to-1 month, and subsequently, in 3 months after the workshop. This study also investigated what facilitation techniques used by the instructor more effectively brought about this transfer of learning that enabled leaders to gain skills to respond to today's fast-changing environment.

Methodology. The study employed a mixed methods design by gathering both qualitative and quantitative research data (Creswell, 2007) to serve as a descriptive evaluation of a pilot training program. To maximize the cross verification and validity of data, five types of triangulation were used in this study. Nonproportional quota sampling design was used for this study to ensure that the sample size included a minimum number of elements in each category or quota of the target population of leaders. The study was pilot-tested on six different groups of leaders from various regions, industries and organizations.

The data collection methodology included pretests and posttests conducted after the workshop and follow-up interviews of workshop participants 2 weeks-to-1 month after the workshop, which included exploring the 3 months impact of the study, in addition to observation, field notes and informal conversations. The interview questions aimed at gaining information regarding the participants' learning, behavior change, and business results as a result of attending the workshop.

The study utilized the Holistic Improvisational Leadership Model (Figures 1 and 3), in addition to adult learning (Knowles, 1984), experiential learning principles (Kolb, 2000), Hiatt-Michael's Theoretical Model of Curriculum Design (Figure 2), and Kirkpatrick's Evaluation Model (Kirkpatrick, 1998) to develop, implement, and evaluate the Improvisation for Leaders Workshop. A visual representation of the Holistic Improvisational Leadership Model, which was designed and created by the study's researcher, is depicted in Figure 1, and described in Chapter 2, under conceptual framework. Grounded theory research design was utilized to revise the First generation Holistic Improvisational Leadership Model to create the final version of the Holistic Improvisational Leadership Model, depicted under Conclusion 5 in this chapter.

Summary of Findings

This study assessed the effects of a pilot workshop, applying a holistic model of improvisation to leadership development for 67 participants. Chapter 4 presented the analyses and findings for the quantitative and qualitative data collected in this study. The quantitative data were comprised of 67 participants in total, spread across six workshops of 3.5 hours each. The qualitative data were derived from 67 pretest, posttest and interviews of the workshop participants, which included a cross section of the population with a variety of positions, degrees, and ethnic backgrounds.

Summary Research Question 1. Perception of improvisation as a learning tool. Research Question 1 asked, "In what ways, if any, did participants' perceptions of improvisation as a learning tool change as a result of attending the workshop?"

Pretest results (Table 6) indicated 91.0% of leaders in the study reported they did not know the percentage of time in which they used the principles of improvisation to

make spontaneous decisions (later coined as OPTIMAL Spontaneous Decisions [OSD]).

Furthermore, at pretest, 94% of participants, even those with knowledge of

improvisation, indicated they did not know what the relationship between improvisation

and leadership could be. At posttest, 100% of leaders in the study indicated they could

now see the benefits of using improvisation techniques in business. Other responses to

the relationship between improv and business included better communication skills

(75%), team building (65%), and effective meeting management (33%).

Summary Research Question 2. Changes in participants. Research Question 2

asked, "What changes, if any, did the participants perceive in themselves and others by

attending the workshop?"

Participants were asked a series of five questions pertaining to the benefits they

received from participation in the workshop (see Table 8). All five of the benefit ratings

were at least 5.0 on a 6-point scale. Participants indicated they had received the most

benefit from the workshop in the top two areas of "working with others in your

organization" with a mean of $M = 5.76$, ($SD = 0.50$) and "ability to lead others" $M = 5.69$,

($SD = 0.50$). The lowest ranking benefit resulted from the construct of "make you aware

of how quickly you trust others," with a mean of $M = 5.22$, ($SD = 0.67$). The aggregate

benefit score had a mean of $M = 5.55$, ($SD = 0.43$), indicating that most participants saw

the workshop as "Likely beneficial" to "Highly beneficial" to them. Table 9 displayed the

Spearman rank-ordered correlations between the six benefits scores and five demographic

variables. Seven of 30 resulting correlations were statistically significant at the $p < .10$

level. Specifically, participants who had positions higher in their organizations reported

significantly greater benefits for four of the six indicators, including total benefits from

the workshop, listening skills, ability to lead others, and working with others in your

organization. In addition, male participants gave significantly higher benefit ratings for

"personal benefits (rs = .22, *p* < .10)" and "ability to lead others (rs = .21, *p* < .10)." Also,

there was a significant positive correlation between the participants' level of education

and the benefit of "make you aware of how quickly you trust others (rs = .35, *p* < .005)"

(see Table 9).

This research question aimed to find the changes in participants and others at

posttest. 91% of participants were able to correctly recall the four principles of improv in

their own words, in addition to reciting ways in which they could use improvisation

techniques in their meetings, brainstorming sessions, and team building efforts. Several

themes were of significance in both time periods of posttest and interview. Those themes

included responsive listening and expression, collaborative creativity, lowered level of

stress and mindfulness, competent risks and celebrating failure, and OPTIMAL

spontaneous decisions (OSD). The findings for the theme of OPTIMAL spontaneous

decisions (OSD) are described in Research Question 4. The theme of lowered level of

stress and mindfulness are described in Research Question 5. The themes of responsive

listening and expression, collaborative creativity, and competent risks and celebrating

failure are discussed under findings for Research Question 7.

Summary Research Question 3. Effective facilitation techniques. Research

Question 3 asked, "What facilitation techniques did the participants perceive to be the

most effective in enhancing their learning?"

Participants indicated that the instructor had modeled the concepts taught, such as

bringing her own examples of starting out with improv and being afraid, explaining the

cognitive and productivity benefits of having *just enough anxiety*, competent risk, and failure. As P26W4 indicated, "Instructor was very enthusiastic about the topic and she energized us. She really believed in what she was teaching and it showed." Taking competent risks and celebrating failure appeared to be the most influential concept to the participants. To place the participants in an optimal state for learning, the instructor provided exercises and examples of celebrating mistakes. Participants also stated that a vital reason the workshop was effective was because it was comprised of well-designed, interactive exercises that built on one another, and it was fun. P17W2 described the workshop as, "highly interactive with great activities and handouts." In response to, "What was the most significant learning for you?" P17W2 stated, "How the techniques used in the class made interactions with others that I did not know too well, easy and our groups productive."

Comments regarding the facilitator's use of PowerPoint are further explained under Research Question 6, and include participants' request that they wished the facilitator had gone over all the slides in a less rushed fashion, and that the PowerPoint was too far away and too small to read.

Summary Research Question 4. Awareness of spontaneous decision making.

Research Question 4 asked, "In what ways, if any, did the participants' awareness of their spontaneous decision making change as a result of attending the workshop?"

In this study, the percentage of spontaneous decisions and the reasons for the change were measured from three time periods (pretest, posttest, and interview). For all three tests, significant gains in spontaneous decision-making were noted. At the posttest, 75% (see Table 7) of leaders increased their percentage of SD from a pretest percentage

mean of 56% to 61%, indicating a 9% increase in the number of SD. At the interview,

39% increased their percentage of SD from a posttest percentage mean of 61% to 71%,

indicating a 16% increase in the number of SD. At the final interview, leaders also

admitted to making 71% of their decisions spontaneously (see Table 10), indicating a

27% increase in the number of spontaneous decisions from a pretest mean of 56%.

When asked what the reason was for this increase, the study showed almost half

of the leaders (46%) increased their admitted percentage of spontaneous decisions (SD)

from the pretest because they did not have the awareness that they actually made so many

SDs in a given week, or they did not have the level of comfort to admit to making such a

high percentage of SD. 31% of leaders admitted that as a result of learning the tools at the

workshop, they were able to make more OPTIMAL spontaneous decisions, and 20%

indicated that due to what they learned at the workshop, they were able to make their

spontaneous decisions with more confidence and trust their intuition. Only 3% of leaders

lowered their percentages in SD and admitted to having a level of comfort in planning.

Both individuals, in this case, were teachers.

At pretest, 91% of leaders indicated they were not aware whether they used

improvisational techniques in making SD. At the posttest, after learning improvisational

and OSD skills, 71% of participants agreed that they would change the method used to

make spontaneous decisions to OPTIMAL Decision Making using improvisation skills.

From posttest to interview, 85% of participants changed the method used to make

spontaneous decisions to OPTIMAL Decision Making using improvisation skills. At the

final interview, a cumulative total of 97% of leaders reported that they would change the

way they make spontaneous decisions from pretest by using their intuition more

effectively and applying improvisation principles to make OSD. Reasons leaders brought

for Changing OSD included 40% using tools from the Workshop; 58% noted they

learned how to be more Spontaneous; 68% admitted to having more Confidence and

better trusting their Intuition; and 98% noted they now possessed the awareness of using

improvisational skills to make OSD.

At the final interview, 1 month after attending the workshop, leaders admitted to a

mean of 71% SD (Table 10). This figure jumped to 79% for the 22 Executive leaders or

Senior Managers (Presidents, CEO, COO, CTO, VPs, Department heads, Directors) in

the study. The mean percentage of *SD* for the 45 remaining leaders, that were not senior

leaders or executives, had a mean SD of 67% (middle managers, supervisors, or

teachers), resulting in the total mean of 71% (see Table 10) for all 67 leaders in the study.

In the follow-up interview, executive leaders acknowledged their job requires them to

make rapid decisions. In response to, "What was the most significant learning for you?"

P26W4 said, "Plans are overrated especially in today's fast-paced business world.

Spontaneity does not mean irresponsibility or carelessness. Using it is often a necessity."

They also admitted to their increased confidence with decision making on the spot and

trusting their intuition. They trusted their instantaneous decisions more and felt their

decisions were superior to, or just as good as, the decisions made with lots of planning

and time. During follow-up interview, in response to OSD and would he continue to use

the tools in the future, P26W4, one of the executives in the study responded that, "This is

how I normally function. Now I feel like I have permission to use it at work."

Summary Research Question 5. Changes in stress level. Research Question 5 asked, "What changes, if any, did the participants identify in their level of stress by attending the workshop?"

Table 6 indicated that 64% of participants experienced stress "Mostly" or "Almost Every day" during an average week. At pretest, 12% of participants reported to have mild stress, 35% moderate, and 53% severe stress, while at posttest, 52% of the participants responded to having mild stress, 48% moderate stress, and 0% of the participants responded to having severe stress. Table 11 displays the results of the Wilcoxon matched-pairs test comparing stress levels from pretest to posttest. Significant decline in stress ($p = .001$) was noted from pretest ($M = 5.14$) to posttest ($M = 2.45$) (see Table 11). At pretest, 80% participants had moderate to severe stress, with an average stress of 5.14 (moderate to severe), while at posttest 100% of participants had mild to moderate stress at 2.45, indicating a 52% decline in stress.

Summary Research Question 6. Other factors influencing learning. Research Question 6 asked, "What other factors influenced the participants' learning?"

One of the factors that influenced the participants' learning had to do with use of PowerPoint slides. A small portion of introduction to improvisation at the workshop included going over four PowerPoint slides. Participants' complaints had to do with not being able to see and read the slides well. Conversely, participants indicated they were delighted that the facilitator did not use PowerPoint slides for the whole workshop, as it consisted of only a small portion of the 3.5 hours. Other participants in Workshops 3, 4, 5 and 6 stated that the slides were engaging and they wish the facilitator had gone over all the slides in a less rushed fashion.

During the second half of Workshop 6, participants acknowledged that one of their teachers had a heart attack earlier that week. He was in critical condition and was not accepting visitors. Thus, this event had left workshop participants in a drained and distraught state. Additionally, for the same workshop, the class was divided into two 1 hour and 45 minute classes. The result was less observed engagement in the material and the activities. The aggregate total benefit score for all 67 participants had a mean of $M = 5.55$ ($SD = 0.43$), while the aggregate benefit score for Workshop 6, comprised of all educators, was 5.39.

Summary Research Question 7. Changes at work. Research Question 7 asked, "How did the participants' learning affect their own or others' behavior and business results in their work environments?"

Eight total qualitative themes were found by coding qualitative data from pretest to posttest and at the interview, after 1 month at their work environments. The eight themes included responsive listening and expression, collaborative creativity, lowered level of stress and mindfulness, competent risks and celebrating failure, OPTIMAL spontaneous decisions (OSD), affirmative competence, OPTIMAL strategy and performance, productivity, retention, innovation, and shared leadership. The findings for the theme of OPTIMAL spontaneous decisions (OSD) were described in Research Question 4. The theme of lowered level of stress and mindfulness were described in Research Question 5. The themes of affirmative competence, responsive listening and expression, collaborative creativity, competent risks and celebrating failure, OPTIMAL strategy and performance, productivity, retention, innovation, and shared leadership are summarized below.

The theme of affirmative competence, or belief in the ability of themselves and others, was one of the apparent themes of the interview. Affirmative competence includes more participation from staff members, which can be revealed through leaders letting go of control, believing in their staff's competence, and providing them with more responsibilities. As P26W4 said after 1 month of using the improvisational tool "Yes, And…", "The result was a lot more participation in our team meetings. I also became more relaxed as I tried to delegate more and listen more."

In qualitative responses to changes they would like to make and changes back at their work environments, 90% of participants indicated gaining either listening skills, or the ability to express thoughts without judgment, or both. Calculated separately, 81% of participants in the study reported gaining more effective listening skills, while 62% reported the ability to express thoughts without judgment as a learned skill. Two subthemes emerged as a result of coding the qualitative participant response. The first subtheme indicated that out of the 22 executives or senior leaders in the study, all 100% of them reported having become more cognizant of their listening skills, as well as having become more responsive listeners as a result of attending the workshop. Only 3, or 13% of executives or senior leaders, listed speaking their minds as a skill learned. The second subtheme was that out of 33 females in the study, 24 (72%) expressed feeling more confident in expressing themselves without fear of being judged, while only 17 males (50%) indicated speaking their minds as a gained skill. Equal percentage of males (82%) vs. females (79%) indicated more effective listening as a gained skill.

Taking competent risks and celebrating failure was another common and transformational theme found in coding qualitative responses. The words *celebrating*

failure, *accepting mistakes*, *taking risks,* and *tolerating mistakes* were indicators of the *taking competent risks and celebrating failure* theme. Out of 67 participants, 54 (81%) reported that this concept had influenced them positively in accepting their own, and their staff's, mistakes, and learning from them. In addition, participants indicated that the concept of *taking competent risks and celebrating failure* trickled down positively to other areas of a leader's effectiveness, including stress reduction and delegation productivity, as they were not as concerned about the possibility of failure as a negative consequence for themselves and their staff. In addition, collaborative creativity was a theme found through coding of qualitative data. Out of 67 participants, 48 (72%) indicated observing this phenomenon occurring at the workshop or later back in their work environments.

The themes of shared leadership and delegation were found during the 1-month follow-up interview. Although delegation was not a concept taught in the workshop, the rules of improv specifically the rule of "Yes, And…", engaged everyone at the same level, making delegation a natural consequence. The theme of shared leadership and delegation came up in response to the question, "List no more than three things you would like to START doing to grow as a leader," in which P63W6 listed the following skills: "Be more assertive. Delegate responsibility and leadership. Ask for feedback."

Finally, high performance, productivity, and retention were among some of the other changes participants agreed they have and will continue to see in the future at their organizations. In response to the question, "In 3 months, what do you feel the effect on your work with others will be if you continued to apply improvisational principles?"

P26W4 indicated that retaining their generation Y employees might be a desired and possible outcome.

Conclusions

Based upon the findings of the study, the following conclusions were drawn:

Conclusion 1. Among five benefits, participants gained the highest benefits in working with others in their organizations and their ability to lead others. Participants were asked a series of five questions pertaining to the benefits they received from attending the workshop. Their response indicated that they had received the most benefit from the workshop in the top two areas of "working with others in your organization" with a mean of $M = 5.76$, ($SD = 0.50$), and "ability to lead others" $M = 5.69$, ($SD = 0.50$). All five of the benefit ratings were at least 5.0 on a six-point scale. The aggregate benefit score had a mean of $M = 5.55$, ($SD = 0.43$), indicating that most participants saw the workshop as "Likely beneficial" to "Highly beneficial" to them.

Therefore, this workshop appeared to be beneficial to the 67 participants who attended the six improvisation for leaders workshops. The 67 participants were comprised of a quota of eight groups related to region, industry, age, sex, position, years with the organization, educational level, and ethnicity. Even though nonproportional quota sampling was used to ensure diversity of participants, the sample cannot be considered representative because the participants did not accurately denote the population under study and were not comprised of all nonvolunteer participants (Creswell, 2007; Daniel, 2012). The study sample included a nonproportional quota of the population and was comprised of volunteers and nonvolunteer participants. It remains that the participant

leaders appeared to benefit most from the workshop in relation to working with others and how to lead others, signifying high benefits in learned leadership skills.

Conclusion 2. Utilizing the techniques of improvisation in leadership development seemed to bring participants' stress level down to an optimal level and bring about a state of mindfulness**.** Participants in this study indicated they experienced a high amount of stress during an average week. Specifically, 64% of participants indicated experiencing stress "Mostly" or "Almost every day". At pretest, 80% participants had moderate to severe stress, with an average stress of 5.14 (moderate to severe) while at posttest 100% of participants had mild to moderate stress with a significant decline in stress at 2.45 (mild to moderate), indicating a 52% decline in stress.

Hence, the workshop experience appeared to reduce stress significantly in participants, and bring a mild to moderate level of stress where participants felt most engaged. Six possible explanations for the stress reduction include mindfulness in improvisation, cognitive dissonance theory, optimal level of stress in improvisation as midway between panic and boredom, Adaptive Structuration Theory (AST), role of humor and play, and finally, taking competent risks and celebrating failure.

The first possible explanation for the participants' significant decrease in stress can be attributed to improvisation's ability to induce a state of mindfulness in individuals. Mindfulness can be described as the purposeful attention and awareness to the present moment, approached with openness, acceptance, and nonjudgment (Brown & Ryan, 2003; Dane, 2011; Giluk, 2009). Mindfulness has been shown to have positive effects on mental health and psychological wellbeing, and reduce stress and burnout in the workplace (Brown & Ryan, 2003; Dane, 2011; Giluk, 2009). Fundamentally concerned

with "being attentive to and aware of what is taking place in the present" (Brown & Ryan, 2003, p. 822), mindfulness has been posited to help people become "alive" to the present moment, in touch to their internal processes (including their feelings and intuition), healthier, and less stressed in their lives (Brown & Ryan, 2003; Dane, 2011; Giluk, 2009). Mindfulness involves attending to external (environmental) and internal (intrapsychic) phenomena and focus on the present moment (Giluk, 2009). In this fashion, mindfulness is a large measure of what occurs during improvisation, which explains the participants' lower level of stress at the conclusion of the workshop.

Cognitive dissonance theory is the second possible explanation for the participants' significant decrease in stress. Cognitive dissonance theory is the feeling of psychological discomfort formed by the presence of two conflicting thoughts (Harmon-Jones & Mills, 1999). Dissonance theory suggests that if individuals act in ways that oppose their beliefs, they will change either their beliefs to align with their actions or their actions to match their new beliefs (Grohol, 2008; Harmon-Jones & Mills, 1999). Specifically, during improvisation, an internal conflict may be produced that could send the individual into self-editing and the need to control the situation. Improvisational games give individuals an opportunity to overcome cognitive dissonance by taking the focus off of them to accomplish a small goal in the game for the greater good of the group. Helping the group takes precedence over the individual, reduces insecurity and self-consciousness, allowing individuals to participate more fully in the group. The games' inherent ability for mindfulness (Brown & Ryan, 2003; Dane, 2011; Giluk, 2009) distracts from the internal noise of fear, instead enabling confidence. The games are fast paced and rule focused so that the individual does not have time to create dissonance with

fear (Brown & Ryan, 2003; Dane, 2011; Giluk, 2009; Green, 2012). Fear is replaced by spontaneous action in an open and supportive environment. Participants' sense of self is affirmed by the "Yes, And…" principle, allowing their confidence to return (Aronson, 1992; Boesen et al., 2009; Green, 2012). Slowly, and with more practice, the dissonance disappears in favor of the participants' confidence self in all interactions within the group.

The third possible explanation for the participants' significant decrease in stress, reaching an optimal level, is demonstrated by Ciborra (2002), in which he explained that leaders can respond to stress with panic, which does not allow for effective improvisation, or conversely, respond with boredom, which inhibits the possibility for effective improvisation, as it will be lacking a lively awareness of the present moment and potential opportunities (Ciborra, 2002; Meyer, 2010). Hence, following Yerkes and Dodson's Law, which originated the concept of an optimal amount of stress in 1908, increasing the amount of stress is beneficial to performance until some optimum level of stress is reached, after which point, performance will decline in an inverted U diagram (Fevre, et al., 2003; Yerkes & Dodson, 1908). Ciborra (2002), suggesting that improvisation consciousness lies somewhere between panic and boredom. This study demonstrated this midlevel response to stress, which can achieve eustress, or an optimal level of stress, for effective improvisation and performance.

The fourth possible explanation for participants' stress reduction can be attributed to the concept of Adaptive structuration theory (AST). AST focuses on groups "to make them aware of the rules and resources that they are using so that they can have more control over what they do in the groups" (Griffin, 2009, p.236). By utilizing

improvisation techniques in leadership and teams, and following the principles of improvisation, the rules of the group are established (Green, 2012). The principles allow for a simple yet sufficient structure, resulting in maximum freedom in an open and accepting nonjudgmental environment, which can help reduce the anxiety and stress of group members (Boesen et al., 2009; DeSanctis & Poole, 1990, 1994; Griffin, 2009; Green, 2012). The sense of aliveness was best demonstrated when in response to, "What techniques did the instructor apply that should be continued in future workshops?" participant P24W4 responded, "I feel energized. I cannot believe it is the end of the day. I'm ready for so much more."

The fifth explanation for the decline in stress could be related to the power of play and humor. By following the principles of improvisation, including being in the moment, humor and a spirit of playfulness are bound to transpire. As the practice of improvisation can often bring laughter and humor to the workplace, it can easily be dismissed as frivolous and undeserving of serious attention. In addition to all the aforementioned benefits of improvisation, the role of humor in the workplace is deserving of serious consideration, due to its numerous organizational benefits. According to McGhee (2010), more and more employees who used to love their jobs are becoming frustrated, overworked, burned out, and anxious. Hence, leaders must acknowledge the strong longing of their educated workforce to have employment that they enjoy doing and is fun for them. In the future, successful companies will increasingly be populated with resilient employees who can laugh at themselves and move on to the next task at hand. Humor boosts productivity and collaboration, and it is an invaluable skill for coping with ever-increasing levels of job stress, anxiety, and information overload (McGhee, 2010).

There is a growing body of evidence supporting various physiological changes as a result of laughter and humor, including positive effects on the immune system (Stevens, 2012; McCreadie & Wiggin, 2008); positive effects on emotional states, such as depression; considerable improvement in heart disease progression and cardiac rehabilitation (McCreadie & Wiggin, 2008); decreasing levels of pain and discomfort; and stress reduction (Stevens, 2012; McGhee, 2010; McCreadie & Wiggin, 2008). Moreover, an integral part of literature correlates the intentional use of humor with building interpersonal skills (McCreadie & Wiggin, 2008), confidence, self-esteem and self-belief (Stevens, 2012; McGhee, 2010; McCreadie & Wiggin, 2008). The power of improvisation as play, and its role in stress reduction, was profoundly demonstrated when P37W5, one of the participants and the president of a large financial company said after the workshop, "Thank you for allowing me to play!" He continued, noting, "I am in my mid-50s and have no kids. It seems as if I had forgotten how to play. Thank you for showing us how to be creative together like that. I didn't realize how much I needed that."

Finally, the sixth potential explanation for stress reduction in participants, the concept of taking competent risks and celebrating failure, is further explained in conclusion 3. The participants indicated that the concept's positive effect was transferred to other areas of a leader's effectiveness, including stress reduction and productivity, as leaders were not consumed with the anxiety of conjecturing the possibility of failure as a negative result.

Conclusion 3. Concept of competent risks and celebrating failure appeared to have had the most transformational impact on the participants' sense of self including

their willingness to take risks, acquire new skills and speak up. Taking competent risks and celebrating failure was a common and transformational theme found in coding qualitative responses. The words *celebrating failure*, *accepting mistakes*, *taking risks*, and *tolerating mistakes* were indicators of the themes of taking competent risks and celebrating failure. Out of 67 participants, 54 (81%) reported that this concept had influenced them positively in accepting their own and their staff's mistakes and learning from them. In addition, participants indicated that the concept of taking competent risks and celebrating failure trickled down positively to other areas of their effectiveness as a leader, including stress reduction, delegation, and staff productivity, as they were not as concerned about the possibility of failure as a negative consequence for themselves and their staff. For this study, competent risk resulted from taking action on novel ideas and thoughtful experimentation, and not from careless or unsound ideas or their subsequent execution (Barrett 2012; Picken & Dess, 1997).

In response to, "If you made the change, what was the result of the change?" P08W1 expressed a transformation in thinking, which occurred as a result of reduced risk taking as well as accepting and celebrating failure:

> In my personal decision making, if I felt that I made a mistake, I was not as unforgiving to myself which allowed me to actually look at my mistake and learn from them. Before all of this new learning, every time I would make a mistake I would feel so ashamed of myself that it made it hard for me to even want to revisit my actions let alone learn from them. I would instead go into a protective mode or denial about my actions. This workshop allowed me to relax and understand mistakes are not exceptions but the rules. Learn from them, don't hide from them and pass this ease to my staff so they can be honest about what is going on at the office.

Similarly, at the final interview, in response to "If you made the change, what was the result of the change?" P19W3 exhibited how risk taking and thinking positively about

failure transforms the way you view your work, noting, "I was not second guessing myself anymore and I was being spontaneous, which allowed me to make a decision quicker and with more positive results. I deal with social services; I make lots of decisions every day. I cannot have a plan, [or] the details and a step-by-step design for every decision I make. The lessons in the workshop gave me the freedom and the flexibility to take a risk and be a more balanced individual, and not as rigid, telling myself that I will deal with the result of the decision when the time comes."

The transformational nature of celebrating failure stems from the process of experiential learning and the way celebrating failure clashes with one's inherent unspoken assumptions (Kolb, 2000). Bodily-kinesthetic arts methods, such as improvisational techniques, are experiential, and when used effectively, can be transformative in nature. According to Mezirow (2000), transformative learning is the process of "becoming critically aware of one's own tacit assumptions and expectations and those of others and assessing their relevance for making an interpretation" (p. 4). Transformational learning occurs when an individual has had the opportunity to reflect on his/her set of assumptions and expectations, which have been established by others from childhood and beyond, finds those assumptions to no longer be valid, and as a result, revises those assumptions to match the new reality (Kolb, 2000; Mezirow 2000). Transformative learning frequently involves very deep and powerful changes in one's beliefs, and is evidenced in action in experiential learning (Kolb, 2000).

The inherent risk taking and potential for failure in improvisation provides an opportunity to learn, and is welcomed and celebrated (Barrett, 2012; Diggles, 2004; Koppett, 2001; Johnstone, 1979; Lobman & Lundquist, 2007; Madson, 2005; Sawyer,

2003, 2011; Spolin, 1968). In an improv workshop, the learning environment must be

created in such a way that participants feel safe enough to take risks and create new

realities as a group (Diggles, 2004; Koppett, 2001; Johnstone, 1979; Lobman &

Lundquist, 2007; Madson, 2005; Sawyer, 2003, 2011; Spolin, 1968). In organizations

that value an experimental culture, mistakes are celebrated as the prized side of

imperfection, increasing organizations' capacity for innovation (Weick, 1990). In such

organizational cultures, competent mistakes occur as a result of implementing original

ideas, and not from careless execution (Picken & Dess, 1997). Furthermore, according to

Barrett (2012) leaders need to create a culture that does not reprimand people for

admitting to mistakes and that regards failure as a valuable source of learning. Barrett

(2012) continues, noting,

> As important as it is to treat errors as teaching opportunities, it's equally critical to
> build a culture in which people feel comfortable admitting and discussing their
> mistakes, and that requires leveling status differences. Substantial research shows
> that the biggest obstacle to creating the psychological safety that allows people to
> learn from mistakes is a hierarchy. When those with status are distant or
> intimidating, those beneath them are more likely to save face by hiding or
> ignoring errors. (p. 53)

In response to, "If you made the change, what was the result of the change?"

P21W3 stated, "The result of the change has been significant. It's not easy to make the

change, but it has benefitted me in not feeling too restricted in my choices and take a risk

and speak up more often." Modeling the concept of celebrating failure, providing enough

autonomy to participants within a minimal set of rules demonstrated by the instructor in

facilitating the class, reinforced the behavior for the participants. Minimal structure and

control enforced on people can foster trusting relationships and allow for maximum

flexibility and creating a safe environment for exploration and risk-taking within the

organization (Barrett, 1998, 2012; Craig & Hart, 1992; Cunha et. al, 2003; Eisenhardt & Tabrizi, 1995; Meyer, 2006, 2011). As P26W4 indicated, "Instructor was very enthusiastic about the topic and she energized us. She really believed in what she was teaching and it showed."

Conclusion 4. In posttest, executives and senior leaders reported gaining significantly higher benefits in listening skills, ability to lead others, working with others within their organization, and total benefits from the workshop**.**

The Spearman rank-ordered correlations between the six benefits scores and five demographic variables. Seven of 30 resulting correlations were statistically significant at the $p < .10$ level. Specially, participants who had positions higher in their organizations (Executives and Senior leaders) reported significantly greater benefits for four of the six indicators, including total benefits from the workshop, listening skills, ability to lead others, and working with others in your organization.

Therefore, the workshop experience appeared to be highly beneficial to executives and senior leaders. One possible explanation can be the executive and senior leaders' readiness to learn. Readiness to learn is the fourth principle of adult learning (Knowles, 1984), describing how adults become ready to learn based on the developmental needs of their real-life roles, usually to solve or better cope with a real-life task or problem they are facing (Knowles et al., 2005). Executives and senior leaders' responsibilities in real life include making high-stakes crucial decisions under duress, making a quick decision that can potentially affect the well-being and livelihoods of many employees, as well as the organization's future. Hence, the leaders may have been in more pain, and ready to learn a remedy, in order to ease their decisions making process.

Human interaction and communication in and out of organizations is largely unrehearsed (Arterburn, 2012). Many executives have attended many communication skills and leadership development workshops, which may have left them more frustrated because it may not have addressed the ever present, but largely improvised, side of human communication and decision making in their work environments. Hence, their readiness to learn may have been more pronounced by this frustration. In response to the question, "Please describe any strength(s) of the Improvisation for Leaders Workshop," P39W5, one of the executives at the workshop, stated, "I was relieved that this workshop was unlike any leadership development program I had attended in the past. I enjoyed being an active participant in my own learning unlike other workshops where you just sit and listen to a lecture."

Conclusion 5. Male participants indicated significantly higher benefit ratings for "personal benefits" and "ability to lead others."

The Spearman rank-ordered correlations between the six benefits scores and five demographic variables. Seven of 30 resulting correlations were statistically significant at the $p < .10$ level. Specifically, male participants gave significantly higher benefit ratings for "personal benefits (rs $= .22$, $p < .10$)" and "ability to lead others (rs $= .21$, $p < .10$)." In particular, participants who had higher positions in their organizations (Executives and Senior leaders) reported significantly greater benefits for four of the six indicators, including total benefits from the workshop, listening skills, ability to lead others, and working with others in your organization.

One possible explanation for this difference can be attributed to the higher ratio of males to females in the executive and senior leaders' category in this study, who had

already been identified in conclusion 4 as benefiting at a significantly higher rate than average from the workshop. The 22 executives or senior leaders in this study made up 33% of the participants, 15 of which were male (68%), and 7 female (32%), resulting in a males percentage in this group of 2.1 times that of females. Correspondingly, out of 34 total males in the study, 44% were also executives or senior leaders. Hence, a possible explanation for the higher rating of benefits for males vs. females might be that almost half (44%) were also executives or senior leaders, and conclusion 4 indicated that executives and senior managers reported gaining significantly higher benefits in listening skills, ability to lead others, working with others in their organization and total benefits from the workshop.

Conclusion 6. One month after the workshop, 85% of leaders had gained more awareness and confidence in making OPTIMAL Spontaneous Decisions (OSD)**.** In this study, the percentage of spontaneous decisions and the method used to make those decisions were measured from three time periods (pretest, posttest, and interview). For all three tests, significant gains in spontaneous decision-making were noted. At pretest, 91% of leaders indicated they did not have the in making OSD, indicating their lack of knowledge as to what improvisational principles were, or how improvisation could be applied to making OSD. At the posttest, after learning improvisational and OSD skills, 71% of participants agreed they would change the method used to make spontaneous decisions to OPTIMAL Decision Making using improvisation skills. From posttest to interview, 85% of participants changed the method used to make spontaneous decisions to OPTIMAL Decision Making using improvisation skills. At the final interview, a cumulative total of (97%) of leaders reported that they would change the way they make

spontaneous decisions from pretest by trusting their intuition and applying improvisation principles to make OSD. P08W1 summed it up exquisitely when, in response to the question, "Can you list how improvisational techniques can be used in business and leadership?" he stated, "Spending too much time on planning and not enough on how to make better spontaneous decisions is self-defeating."

Reasons leaders brought for Changing Spontaneous Decision Making Process to OSD were 40% of leaders mentioned using tools from the Workshop; 58% cited the reason that they learned how to be more Spontaneous; 68% admitted to having more confidence and trusting their intuition more; and 98% noted having the awareness of using improvisational skills to make OSD.

Conclusion 7. As a result of attending the workshop, leaders gained the awareness that 71% of their decisions at work are made spontaneously. In this study the percentage of spontaneous decisions, and the reasons for the change, were measured from three time periods (pretest, posttest, and interview). For all three tests, significant gains in spontaneous decision making were noted. At the posttest, 75% of leaders increased their percentage of SD from pretest percentage mean of 56% to 61%, indicating a 9% increase in the number of SD. At the interview, 39% increased their percentage of SD from posttest percentage mean of 61% to 71%, indicating a 16% increase in the number of SD. At the final interview, leaders admitted to making 71% of their decisions spontaneously, indicating a 27% increase in the number of spontaneous decisions from a pretest mean of 56%.

When asked what the reason might be for this increase, the study showed that almost half of the leaders (46%) increased their admitted percentage of spontaneous

decisions (SD) from the pretest because they did not have the awareness that they

actually made so many spontaneous decisions in a given week, or they did not have the

level of comfort to admit to making such a high of a percentage of spontaneous decisions.

31% of leaders admitted that as a result of learning the tools at the workshop, they were

able to make more OPTIMAL spontaneous decisions, and 20% indicated that due to what

they experienced at the workshop, they were able to make their spontaneous decisions

with more confidence and trust in their instinct and intuition. Only 3% of leaders lowered

their percentages as admitting to their comfort in planning and that they actually do

follow the plan as intended. Both individuals, in this case, were teachers.

This 27% increase in the leaders' admitted number of spontaneous decisions from

pretest to interview can plausibly be attributed to the workplace mindset and the stigma

associated with spontaneous decision making (Barrett, 1998; Meyer, 2010). The mindset

of managers is to create the "false" impression that tightly designed plans are not being

deviated from. Regardless of leadership style, all leaders and their staff engage in

spontaneous activities and improvisation. Leaders may not readily accept this fact, which

causes them to inadvertently harm their rate of success in unexpected situations (Barrett,

1998; Meyer, 2010). Consequently, the awareness of spontaneous decision making and

removing the stigma of it can allow leaders to reveal the actual percentage of spontaneous

decisions made within organizations on a given day (Barrett, 1998; Meyer, 2010).

Conclusion 8. Executive and senior leaders admitted to making 79% Spontaneous

Decisions (SD), as opposed to 67% for the remaining leaders, and a mean of 71% for all

leaders**.**

At the final interview, 1 month after attending the workshop, leaders admitted to a mean of 71% Spontaneous Decisions (SD). This figure jumped to 79% for the 22 executive leaders or senior managers (Presidents, CEO, COO, CTO, VPs, Department heads, Directors) in the study. At the final interview, the mean percentage of *SD* for the 45 remaining leaders who were not senior leaders or executives had a mean SD of 67% (middle managers, supervisors, or teachers) resulting in the total mean of 71% for all 67 leaders in the study. One possible explanation for the high rate of 79% of SD for executive and senior leaders is the advanced ability of experts in using inferential intuition in making spontaneous decisions, and therefore, experts' ease with OSD.

One of the most critical roles of a leader is decision-making, and a strong measure of a leader's effectiveness lies in the quality of these decisions (Bass, 1990; Trauffer, 2008). In this study, OSD to refers to rapid decisions using improvisational principles that are adapted to the complex external environment. OSD refers to the skill with which rational conscious decisions and inferential or holistic intuition are combined to make an effective decision spontaneously to solve a problem rapidly, in the face of uncertainty or complexity, often with limited information and under time pressure (Leybourne & Sadler-Smith, 2006). Inferential intuition is the instantaneous and unconscious processing of an exhaustive amount of information in the form of previous experience or existing knowledge; holistic intuition, on the other hand, is the tacit, raw, unconnected gut feeling hunches that are made instantaneously and unconsciously.

Individuals have varying degrees of ability in analyzing and intuiting. Studies show that experts, those with a high level of experience and knowledge, as a whole, are naturally superior in their ability to use inferential intuitions, whereas when it comes to

holistic intuition, beginners can produce just like experts due to the fact that because holistic intuition does not rely on previous experience or existing knowledge, but rather on the ability to make holistic meanings out of incidents (Huang, 2012; Pratt & Dane, 2007). When faced with new challenges, leaders combine prior knowledge and experience with rules and plans, using their intuition and creativity in an instant of spontaneous decision (Crossan, 1998; Crossan et al., 2005; Leone, 2010; Shane, 2000). In addition, studies have shown that leaders with a higher level of experience improvise more than those managers with less experience (Leone, 2010; Leybourne & Sadler-Smith, 2006), demonstrating that spontaneous action is not separate from routines or past experience.

Possible explanations for the 67% *SD* of non-executive leaders might be due to the nature of the jobs of those leaders being more structured, as opposed to executives' jobs. It is possible that the remaining leaders, with less experience, might have felt less secure in admitting the percentage of spontaneous decisions, as the executives may have. Moreover, research shows that non-experts, including novices and those with average work experience, in fact do make less spontaneous decisions.

It can be inferred that the 22 executive leaders in this study benefit from either expert experience or knowledge, and perhaps both. Because of this, it is more plausible to identify them as experts with more experience. In the follow-up interviews, the 22 executive leaders admitted that their job requires them to make rapid decisions. In response to the question, "What was the most significant learning for you?" participant P26W4, an executive leader, stated, "Plans are overrated especially in today's fast paced business world. Spontaneity does not mean irresponsibility or carelessness. Using it is

often a necessity." These 22 executive leaders also admitted to gaining increased confidence with decision making on the spot and trusting their intuition more as a result of attending the workshop. They trusted their instantaneous decisions more and felt their decisions were superior to, or just as good as, the decisions made with lots of planning and time.

It can be deduced that experts may function better in an ambiguous environment with higher clarity of information but a lower quantity of information, whereas beginners may function just as well as experts in an ambiguous environment with low quality and clarity of information, but a high quantity of information (Huang, 2012; Pratt & Dane, 2007; Sinclair, 2010, 2011a, 2011b). In addition, studies show that it could be challenging for individuals to rely on their intuition in completely unfamiliar tasks, which can produce in individuals a high level of anxiety and stress. This could explain why the total of 45 leaders with SD of 67% (middle managers, supervisors, or teachers) admitted to less comfort in SD and more comfort with planning than the executive group. It is important to note that in addition to being beginners, not all positions are as ambiguous or uncertain, and many positions require structure and planning, as uncertainties do not transpire as often. Fifty-seven percent of teachers in this study, with an age range of 22-32, showed more confidence in planning and placed less emphasis on spontaneous decision-making. One explanation could be related to the lower mean age and level of experience, which has been shown to relate to less improvisation. Another explanation could be that teachers' roles could be considered more structured than less ambiguous by nature, allowing a teacher with high need for structure to thrive in that environment.

Conclusion 9. To appropriately learn the concepts of improvisation, the workshop is most effective as a continuous 3.5 hour workshop, instead of two 105-minute workshops. For Workshop 6, the class was divided into two 1 hour and 45 minute classes. The result was less observed engagement in the material and the activities. The aggregate total benefit score for all 67 participants comprised of a mixture of positions had a mean of $M = 5.55$, ($SD = 0.43$) while the aggregate benefit score for Workshop 6, comprised of all educators, was 5.39. Comparing the benefits of Workshop 6 with the similarly-structured Workshop 2, which was comprised of educators and had a mean aggregate benefit score of 5.85, we see a difference 0.46 points in benefits.

One explanation for this difference could be the colleague's heart attack, which occurred in the same week of conducting workshop 6. It is comprehensible that such medical emergency could lower the priority of any learning workshop for the participants. Another contributing factor could be explained by the breaking of the cycle of experiential learning, and therefore losing the potential learning and engagement of the activities. Kolb's experiential learning theory presents a cycle of four elements of concrete experience: reflective observation, abstract conceptualization, and active experimentation. The cycle starts with learners having a concrete experience, leading them to observe and reflect on their experience. After this, reflective observation, in which the learners put their thoughts together to create abstract concepts about what occurred, guides them to actively test what they have constructed in the future, leading to new experiences and the re-starting of the learning cycle (Bakeret al., 2002; Oxendine et al., 2004). Improvisational theater techniques are experiential by nature, providing an effective tool for incorporating its techniques into organizational training (Kolb & Kolb, 2005). Knowles (1984) expressed the

value of experiential learning by stating, "The psychic rewards are greater from releasing the energy of learners than from controlling it" (p. 97). Experiential learning enables the participant to free this energy by engaging in an activity, drawing insights from it, and employing that insight in the work environment.

When the cycle of experiential learning breaks by dividing the class into two separate sessions, the cycle of concrete experience and reflective observation does not occur as effectively as it could, and as a result, learning suffers. In addition, the energy that Knowles refers to does not get released as effectively as it could the class had been continuous. The importance given to a 3.5-hour class in terms of participants' level of concentration also decreases when the class is only 1 hour and 45 minutes.

Conclusion 10. In the follow-up interview, 100% of executive or senior leaders indicated acquiring more effective listening skills as a result of attending the workshop. During the one-month follow up interview, out of the 22 executives or senior leaders in the study, 22 (100%) of them reported that they had become more cognizant of their listening skills, and more responsive listeners as a result of attending the workshop. Only 3 (13%) of executives or senior leaders listed speaking their minds as a skill learned. A mean of 81% of all participants in the study reported gaining more effective listening skills, while 62% of all participants reported the ability to express thoughts without judgment as a learned skill.

According to Ferrari (2012), "many senior executives take listening skills for granted and focus instead on learning how to articulate and present their own views more effectively" (p.50). Grayson (2010) concurs that indeed executives can be poor listeners. Many executives have hard executive skills, such as aggressiveness, decisiveness, follow-

through, and speed. Listening is one of those soft skills executives are not known to possess (Ferrari, 2012; Grayson 2010). Many senior executives may have heard that they need to become better listeners, but perhaps may not have found a way to easily improve their listening skills. While listening skills are the most effective way to influence, inform, and make decisions, a lack of it can mean the difference between success and failure within an executive's organization (Ferrari, 2012; Grayson 2010). The Improvisation for Leaders Workshop may have been influential in identifying the executives' need for better listening skills, and the concept of taking risks and celebrating failure mentioned in conclusion 3 may have contributed to their ease in admitting it.

Conclusion 11. Female participants indicated significantly higher gained skills in expressing themselves more without judgment. Out of out of 33 female leaders in the study, 24 (72%) expressed that by using the skills in the workshop, they were feeling more confident in expressing themselves without fear of being judged after the workshop, while only 17 males (50%) indicated speaking their minds as a gained skill. A mean of 62% of all participants reported the ability to express thoughts without judgment as a skill they learned from the workshop.

One explanation for the apparent difference may stem from the backlash effect, and the expectations female leaders still feel to have to demonstrate feminine qualities such as supportiveness, submissiveness, and listening skills, while speaking up; as a result, assertiveness can be seen as incongruent with that image. Despite significant advancements regarding women in the workplace, statistics still reveal that women have not yet achieved the same success and status of men (O'Neill & O'Reilly, 2011). One explanation is that women who have traits which match the successful leaders' stereotype

of self-confidence, assertiveness, and dominance are sometimes recognized as being in conflict with feminine gender stereotypes of supportiveness and submissiveness called the *backlash effect* (O'Neill & O'Reilly, 2011). A way to reduce this backlash may be found in individuals' abilities to accurately assess social situations and demonstrate appropriate personal responses, known as self-monitoring or emotional intelligence (Benson, 2009; Cherniss et al., 1998; Goleman, et al., 2002). Studies have shown significant associations between self-monitoring and leadership advancement for both males and females (Benson, 2009; Cherniss et al., 1998; Goleman et al., 2002), while research indicates that self-monitoring may be even more beneficial for female leaders (O'Neill & O'Reilly, 2011).

Conclusion 12. Participants were able to experience the concept of collaborative creativity, also called improvisation consciousness or group flow. The words *collaboration*, *creative*, *creativity*, *teamwork*, *team creativity*, and *time flying by* were indicators of the collaborative creativity theme. Out of 67 participants, 48 (72%) indicated observing this phenomenon either at the workshop or later back in their work environments. For this study, collaborative creativity is defined as the phenomenon, which occurs in group flow, or group mind (Halpern et al., 1993). Collaborative creativity occurred during the improvisation workshop, when team members collaborated effortlessly, where time flew, and individuals experienced a sense of effortless action, allowing the group to produce highly creative ideas (Gloor et. al., 2012; Halpern et al., 1993; Csikszentmihalyi, 1990, 1996). In response to "Please describe any strength(s) of the Improvisation for Leaders Workshop" P30W4 said, "It went by so quickly because it

was fun and interactive." The concept of time passing by quickly when absorbed in the task at hand is a function of flow (Csikszentmihalyi, 1990, 1996).

Responses also indicated that collaborative creativity required relationship focus among co-workers for it to flourish. In response to, "Can you list how improvisational techniques can be used in business and leadership?" P30W4 said, "In every aspect of business. Business is about relationships and relationships can be enhanced by improvisation techniques. So everything. Even if I don't get along with some people, to never forget to focus on maintaining and flourishing your relationships at home and work. There is no other way around it." P30W4 said, "I saw myself and others be creative. Great games." After the workshop ended, P37W5, the president of a large financial company, in addition to noting how much he enjoyed the class, said, "Thank you for allowing me to play!" He continued, noting, "I am in my mid-50s and have no kids. It seems as if I had forgotten how to play. Thank you for showing us how to be creative together like that. I didn't realize how much I needed that."

Csikszentmihalyi (1990, 1996) has described the state of flow, also referred to as being *in the zone*, as the state in which time flies, and individuals experience a sense of effortless action, characterized by a feeling of great absorption, fulfillment, skill, and an optimal state of intrinsic motivation. One of the outcomes of organizational improvisation is the state of group flow, which many improvisers call improvisational consciousness, or group mind, which can be described as a group that experiences the concept of flow together. Group flow occurs during improvisation when team members collaborate effortlessly as a self-organizing team, involved in highly creatively work (Csikszentmihalyi, 1990, 1996; Gloor et al., 2012; Halpern et al., 1993).

These connections between players, or *group mind* (Halpern et al., 1993), are at the heart of successful improv. This idea of group flow, or group mind, in complete group conscious mindfulness, is unlike the concept of groupthink, which indicates passive mindlessness. Group mind "…only happens when the group members are finely attuned to each other, but it almost seems like they are tapping into the same universal consciousness that enables individuals with special abilities." (p.93). Csikszentmihalyi (1990) stated, "When a [leader] is able to organize his or her consciousness so as to experience flow as often as possible, the quality of [decisions] is inevitably going to improve" (p. 40). Therefore, the experience of this flow as a group or individual, Csikszentmihalyi (1990) argued, puts us in control of our mental energy, raises our self-confidence, and improves the quality of our decisions by controlling the energies directed and invested in these decisions.

Conclusion 13. Tabaee's Final Holistic Improvisational Leadership Model. The findings from the study led to the final revision of the Holistic Improvisational Leadership Model for OPTIMAL performance and strategy.

Tabaee's Final Holistic Improvisational Leadership Model

For this study, the term holistic improvisational leadership supports collaboration and employees' autonomy within minimal boundaries and without strict controls or constant monitoring (Barrett, 1998, 2012; Craig & Hart, 1992; Cunha et al., 2003; Eisenhardt & Tabrizi, 1995; Meyer, 2006, 2011). Utilizing grounded theory, and based on the findings and Whetten's (1989) requirements of a complete theory, the model was revised with the new findings. When applying grounded theory, as May (1996) affirmed, "The findings are the theory itself, i.e., a set of concepts and the propositions that link

them" (p. 148). The findings from the study are linked by various organizational variables and leadership competencies to create Tabaee's Final Holistic Improvisational Leadership Model depicted in Figure 3.
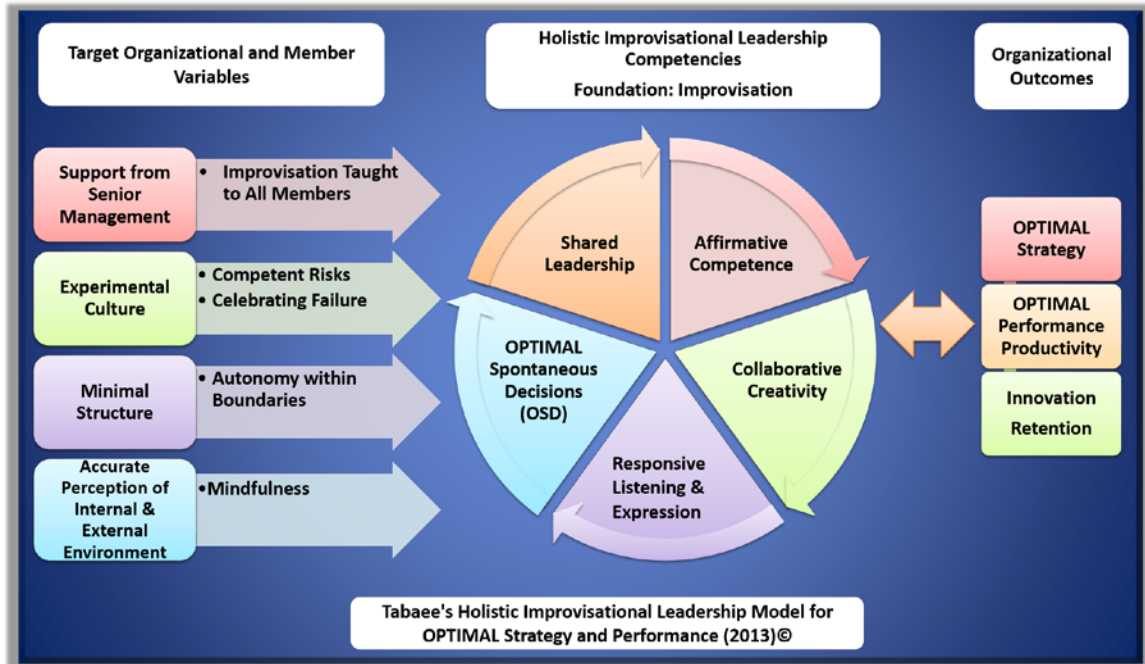
*Figure 3.*Tabaee's Final Holistic Improvisational Leadership Model for OPTIMAL Strategy and Performance.

Whetten's requirements of a complete theory. In addition to grounded theory, Whetten's (1989) requirements of a complete theory were followed to ensure the utility and comprehensiveness of the revised model. According to Whetten (1989), a complete theory is comprised of four elements, including the *What,* or the constructs of the model, such as culture, structure, strategy, and performance; the *How,* or the linkages that allow the factors to relate to one another; the *Why,* or the assumptions and logic behind the model; and the *Who/Where/When,* which set the boundary of the model (Burke, 2011; Whetten, 1989). The Final Holistic Improvisational Leadership Model can be considered

a complete model as it relates Whetten's four elements. A visual representation of the Final Holistic Improvisational Leadership Model is depicted in Figure 3.

This model depicts the progression of improvisation and change from Organizational and Member Variables to Competencies and Organizational Outcomes within an organization. For ease of representation, the model is illustrated in a linear fashion, the double arrow between outcomes and competencies, and arrows throughout the model are meant to indicate the nonlinear relationship between the four elements and the interconnectedness of drivers of change within organizations.

The model includes four elements as follows:

Why of Whetten's Model: Foundation: Improvisation. To achieve holistic improvisational leadership, the underpinning of the organization and leadership must be based on a foundation of improvisation and its principles. This category corresponds with the Why of Whetten's Model (Burke, 2011; Whetten, 1989).

Who/where/when of Whetten's Model: Target organizational and member variables. Certain desired organizational and member variables must be present in order to attain holistic improvisational leadership. Target Organizational and Member variables are separated into organizational variables such as structure, culture and leadership, as well as individual organizational members' variables, such as member competencies, knowledge of improvisation, and reaction to risk. For achieving a systematic and holistic look at an organization, these variables are placed under the same category of *Target Organizational and Member Variables,* as one variable can certainly cause the other variable to change, and they cannot truly be considered distinct from the other. For holistic improvisational leadership, the Organizational variables include *Support from*

Senior Management, Experimental Culture, Minimal Structure, and *Accurate Perception of the External and Internal Environment*. Each of the organizational variables leads to desired organizational members' behavior and assumptions, including: *Improvisation Taught to All Members, Competent Risks, Celebrating Failure, Autonomy within Boundaries,* and *Mindfulness*. To achieve holistic improvisational leadership, these desired organizational variables and individual organizational members' variables must also be present. This category corresponds with the Who/Where/When of Whetten's Model (Burke, 2011; Whetten, 1989), as the Target Organizational and Member Variables set the boundaries for the Final Holistic Improvisational Leadership Model within one organization and its members.

How: Holistic improvisational leadership competencies. These competencies, based on the foundation of Improvisation, are a result of the desired organizational variables, including *Affirmative Competence, Collaborative Creativity, Responsive Listening & Expression, OPTIMAL Spontaneous Decisions (OSD),* and *Shared Leadership*. This category corresponds with the How of Whetten's Model (Burke, 2011; Whetten, 1989), as through these competencies the core of holistic improvisation manifests within an organization.

What: Organizational outcomes. The end results for the organization include *OPTIMAL Strategy, OPTIMAL Performance Productivity, Innovation*, and *Retention*. This category corresponds with the What of Whetten's Model (Burke, 2011; Whetten, 1989). The double arrow indicates a nonlinear relationship between outcomes and competencies for a holistic approach to leadership, change, and organizations.

Four interrelated sections of Tabaee's Final Holistic Improvisational

Leadership Model explained. Next, each of the elements in the four sections of the

model are described in detail. Although the model appears linear, any element in any

category can coincide with another item from a different category. As noted in the

previous segment, the model's foundation is based on the principles of *improvisation.*

Foundation: Improvisation. For the purpose of this study, improvisation was

defined as "spontaneous decision making within boundaries, based on available

resources, focused toward solving problems, realizing opportunities, and discovering the

future as it unfolds" (Leone, 2010). In short, improvisation is the extemporaneous merger

of planning and execution. The four principles of improvisation are as follows:

1. Spontaneity: Say the first thing that occurs to you. Don't self-judge. Mistakes

   are opportunities for learning.

2. Say, "Yes, And...": accept and don't deny others' ideas.

3. Stay with the Group: listen and observe the environment

4. Make each other look good in your team.

The four main components of the holistic improvisational leadership are

explained next.

Target organizational and member variables. Target Organizational and

Member variables are separated into organizational variables and individual

organizational members' variables. To achieve holistic improvisational leadership these

certain desired organizational and member variables must be present.

Target organizational variables. To achieve holistic improvisational leadership,

certain desired organizational variables must be present. Organizational variables include

Support from Senior Management, Experimental Culture, Minimal Structure, and

Accurate Perception of the External and Internal Environment. In addition,

Who/Where/What set the boundaries for the Holistic Improvisational Leadership Model,

with the boundary being a single organization. Each of these variables is explained next.

Support from senior management. Organizations need to have the support of

senior management in implementing the Holistic Improvisational Leadership Model.

Leaders establish the culture of the organization and set the tone for desired behavior and

productivity. Organizations can teach the holistic improvisational leadership skills to the

executive and senior leaders first and emphasize that they role model the behaviors for

largest impact to the organization and culture change.

Accurate perception of the internal and external environment. Accurate

perception of the internal and external environment occurs when leaders develop their

intuitive capacities through improvisation so they can be mindful of changes within and

without their organization, and accurately perceive its unexpected occurrences so they

might learn to react to them with confidence (Aram & Walochik, 1996; Montuori, 2003a,

2003b, 2012; Purser & Petranker, 2005; Sharkansky, 2000; Vera & Crossan 1998, 2004,

2005; Weick & Sutcliffe, 2001). The continuous sharing of information between the

members of the organization and the external environment are vital optimal performance

(Cunha et al., 2003).

Experimental culture. An organizational culture grounded in experimentation

promotes improvisation in organizations. Experimental culture can tolerate competent

risk and failure, and endorses action and experimentation, as opposed to reflection and

planning (Barrett, 1998, 2012; Craig & Hart, 1992; Cunha et al., 2003; Eisenhardt & Tabrizi, 1995; Meyer, 2006, 2011).

Minimal structure. Minimal organizational structure and control enforced on people can foster trusting relationships and allow for maximum flexibility and creating a safe environment for exploration and risk taking in the organization (Barrett, 1998, 2012; Craig & Hart, 1992; Cunha et al, 2003; Eisenhardt & Tabrizi, 1995; Meyer, 2006, 2011).

Target organizational member variables. Each of the organizational variables lead to a desired organizational member variable including: the Improvisation Taught to All Members, Competent Risks, Celebrating Failure, Autonomy within Boundaries, and Mindfulness.

To achieve holistic improvisational leadership, the following desired organizational member variables must be present:

Improvisation taught to all members. In order to implement the shared leadership competency of the holistic leadership model, organizational leaders should invite all employees and intact teams to go through the improvisation workshop. One of the competencies of holistic improvisational leadership is shared leadership and its effect on team cohesion and effectiveness. To truly establish shared leadership, all employees need to go through an improvisational training.

Affirmative competence. In the midst of uncertainty, affirmative competence is having sufficient expertise in one's content area, combined with the affirmative belief that a solution exists, allowing the individual to leap forward with action and a working strategy (Barrett, 2012).

Competent risks. In an experimental culture aimed at achieving OPTIMAL performance, competent risks are taken, and mistakes are not only tolerated, but also advocated and celebrated. Competent risk results from taking action on novel ideas and thoughtful experimentation, and not from careless or unsound ideas or their execution (Barrett, 2012; Picken & Dess, 1997).

Celebrating failure. To achieve OPTIMAL performance, leaders need to create a culture that does not reprimand people for admitting mistakes, but rather highlights the mistakes, discusses what occurred, celebrates the results of experimentation, and regards failure as a valuable source of learning (Barrett, 2012; Picken & Dess, 1997).

Autonomy within boundaries. Members of the organization are given autonomy within reasonable structure and boundaries, and provided minimal control to create maximum flexibility, as well as a safe environment for exploration and risk taking within the organization (Barrett, 1998, 2012; Craig & Hart, 1992; Cunha et. al, 2003; Eisenhardt & Tabrizi, 1995; Meyer, 2006, 2011).

Mindfulness. Mindfulness is described as the purposeful attention and awareness to the present moment, approached with openness, acceptance, and nonjudgment (Brown & Ryan, 2003; Dane, 2011; Giluk, 2009).

Holistic improvisational leadership competencies. These competencies, which are based on the foundation of Improvisation, include Affirmative Competence, Collaborative Creativity, Responsive Listening & Expression, OPTIMAL Spontaneous Decisions (OSD), and Shared Leadership. These competencies are explained below. But before doing so, holistic improvisational leadership needs to be defined:

Holistic improvisational leadership. To thrive in the increasingly complex contemporary organizations (Burke, 2010; Zaccaro, 2001), leaders require new skillsets, including improvisational techniques that will allow them to make OPTIMAL Spontaneous Decisions (OSD) and navigate the business world successfully (Zaccaro, 2001). OSDs use improvisational techniques to allow the leader to be open to present reality and then make a decision by combining rational thought, intuition, and mindfulness in action and leadership in order to rapidly solve a problem. For this study, the term holistic improvisational leadership supports collaboration and employees' autonomy within minimal boundaries and without strict controls or constant monitoring (Barrett, 1998, 2012; Craig & Hart, 1992; Cunha et al., 2003; Eisenhardt & Tabrizi, 1995; Meyer, 2006, 2011).

Affirmative competence. In the midst of uncertainty, affirmative competence is defined as having sufficient expertise in one's content area, combined with the affirmative belief that a solution exists, thus allowing the individual to leap forward with both action and a working strategy (Barrett, 2012).

Shared leadership. The concept of shared leadership, also referred to as distributed or rotating leadership, is defined by Pearce and Conger (2003) as "a dynamic, interactive, influence process among individuals in groups or organizations for which the objective is to lead one another to the achievement of the group or organizational goals or both" (p. 1).

Collaborative creativity. Collaborative creativity is defined as the phenomenon which occurs in group flow, or *group mind* (Halpern, Close, & Johnson 1993) during improvisation, when team members collaborate effortlessly as a self-organizing team,

where time flies, and individuals experience a sense of effortless action, characterized by

a feeling of great absorption, fulfillment, and skill, as well as an optimal state of

mindfulness to the surroundings, and intrinsic motivation, allowing the group to produce

highly creative, novel, and useful ideas (Csikszentmihalyi, 1990, 1996; Gloor, Oster, &

Fischbach, 2012; Halpern et al., 1993).

Responsive listening and expression. Responsive listening and expression

illustrate that in improvisation, one must express what is on his/her mind, allowing the

individual a chance to bypass critical self-judgment and express the truth (Diggles, 2004;

Spolin, 1963). In return, responsive listening is defined as listening that fully accepts and

receives what the other person is expressing, paying complete attention to the speaker's

words, body language, and feelings without judging the content of the message.

OPTIMAL Spontaneous Decisions (OSD). For this study, *OPTIMAL* stands for

Open to the Present Thought and Intuition, and Mindful in Action and Leadership.

Therefore, OPTIMAL Spontaneous Decisions (OSD) uses improvisational techniques to

allow an individual to be open to present reality, and then make a decision by combining

rational thought, intuition, and mindfulness in action and leadership to rapidly solve a

problem. OSD is a combination of rational conscious decisions and inferential and

holistic intuition (Huang, 2012; Pratt & Dane, 2007; Simon, 1972, 1982; Sinclair, 2010,

2011a, 2011b), and is often made in face of uncertainty and complexity, frequently with

limited information and time pressure (Leybourne & Sadler-Smith, 2006). OSD can

result in more and more effective results with increasing practice, knowledge, expertise,

and control of negative reactions to stress (Huang, 2012; Mintzberg, 1976; Pratt & Dane,

2007; Simon, 1972, 1982; Sinclair, 2010, 2011a, 2011b). OSDs are the building blocks of reaching an optimal performance or strategy.

Organizational outcomes. The end results for the organization include OPTIMAL Strategy OPTIMAL Performance Productivity, Innovation, and Retention.

OPTIMAL performance. For this study, Optimal Spontaneous Decisions (OSD) are the building blocks of reaching an optimal performance or strategy. OPTIMAL stands for Open to the Present Thought and Intuition, and Mindful in Action and Leadership. Using these constructs of an OPTIMAL culture, stress is managed to an optimum level, and a leader and the team can produce high levels of productivity and performance in complex ambiguous times.

OPTIMAL strategy. OPTIMAL strategy is adapted strategy, resulting from OSD, which emerges when leaders combine rational thought and planning with intuition and adapt their strategy to the changing external and internal circumstances by use of mindful action and leadership.

Productivity. Productivity is the application of resources directed at achieving the desired results (Baines, 1997; Johnson, 2009). Increase in productivity occurs when using the same resources, and more output is generated by the employees (Johnson, 2009).

Retention. Retention is the process of ensuring that employees stay at the same organization and do not leave their positions. (Billingsley, 2004; Morris, 2006).

Innovation. Ramus and Steger (2000) defined innovation as "the implementation of creative ideas within an organization" (p. 605).

Recommendations for Practical Application

Based upon the prior conclusions, the following recommendations are made:

Recommendation 1. Organizations should utilize Tabaee's Holistic Improvisational Leadership Model to teach improvisation techniques to leaders. Tabaee's Final Holistic Improvisational Leadership Model was explained in Conclusion 11 and depicted in Figure 3. Primary findings of the study when using this model indicated that leaders gained the highest benefits in working with others in their organizations and their ability to lead others. In addition, utilizing the techniques of improvisation in leadership development seemed to bring participants' stress level down to an optimal level and bring about a state of mindfulness. Executives and senior managers reported gaining significantly higher benefits in listening skills, ability to lead others, working with others in their organization, and total benefits from the workshop. Specifically, 100% of executive or senior leaders indicated acquiring more effective listening skills as a result of attending the workshop, while female participants indicated significantly higher gained skills in expressing themselves more frequently and without judgment.

Organizations can implement Tabaee's Improvisational Leadership Model to instill responsive listening and speaking when teaching communication skills in organizations. Human interaction and communication in and out of organizations is largely unrehearsed (Arterburn, 2012). Many executives have attended many communication skills and leadership development workshops that may have left them more frustrated they it may not have addressed this ever-present, but largely improvised, side of communication and decision making in their work environments. Hence, their readiness to learn may have been more pronounced by this frustration.

Furthermore, study findings regarding leaders' decision making revealed that as a result of attending the workshop, leaders gained the awareness that 71% of their decisions

at work are made spontaneously. Using grounded theory, the findings from the study led to Tabaee's Holistic Improvisational Leadership Model for OPTIMAL Performance and Strategy. Organizational leaders require new skillsets, including improvisational techniques that will allow them to make strategic and expedient decisions and navigate the increasingly complex contemporary organizations. The study's findings showed that the application of improvisation skills lead to OPTIMAL Spontaneous Decisions, and result in the production of OPTIMAL strategy and performance, productivity, retention, and innovation for the organization.

Recommendation 2. Practitioners should teach the Improvisation for Leaders Workshop in a continuous 3.5 hour workshop and not divide it into two or more sessions. To appropriately learn the concepts of improvisation, the workshop is most effective as a continuous 3.5 hour workshop, and should not be shortened or broken into two segments. Breaking the cycle of experiential learning causes the potential learning and engagement of the activities to be lost. The workshop should be kept at 3.5 hours so that the learning and the energy of participants can be properly released and applied to the learning.

Based on the findings of this study, the 3.5 hours can allow this workshop to bring the leaders' and employees' level of stress to an optimal level for most learning, productivity, performance, and lasting change. Modern leaders are chronically overstretched, stressed, and face an enormous amount of information. Leaders can respond to stress with panic, which does not allow for effective improvisation, or conversely, respond with boredom, which inhibits the possibility effective improvisation, as it will be lacking a lively awareness of the present moment and opportunities (Ciborra, 2002; Meyer, 2010). Ciborra (2002) suggested that improvisation consciousness lies

somewhere between panic and boredom, and this study demonstrated this midlevel response to stress, which can achieve eustress, or an optimal level of stress, for effective learning, improvisation, and performance. A shorter time frame would not allow enough time to achieve this effect.

Recommendation 3. Practitioners should have at least one follow-up session, and if resources allow, three follow-up sessions of 3.5 hours to reinforce the skills and support culture change. The results of the study indicated that executive and senior leaders practiced spontaneous decision making 79% of the time, as opposed to 67% for the remaining leaders, indicating that leaders with a higher level of expertise improvise more than leaders with less expertise (Leone, 2010; Leybourne & Sadler-Smith, 2006). Improvisation can be learned and must be practiced often so that it can become second nature. Learning to improvise effectively as an experiential learning activity includes a process of unlearning old routines of decision-making, thus re-learning and reconfiguring more effective spontaneous decision-making using the techniques of improvisation (Kolb, 2000; Leone, 2010; Vera & Crossan, 2007). Hence, this study recommends at least one, and if resources allow, three follow-up sessions of 1.5-3.5 hours in order to complete the cycle of learning new ways of decisions-making under uncertain and stressful business conditions. Thereafter, improvisation must still be practiced within the organization and in team meetings so that innate learning can take place and produce a change in the culture.

Recommendation 4. Organizations should start teaching the holistic improvisational leadership skills to the executive and senior leaders first, and emphasize that they role model the behaviors for largest impact to the organization and culture

change.   The success and performance of an organization depends on the effectiveness of its leadership. The behavior and vision of an organization's current and future leaders establish the culture of the organization and set the tone for desired behavior and productivity. The workshop experience appeared to be highly beneficial to executives and senior leaders. Executives and senior leaders' responsibilities in real life include making high-stakes crucial decisions under stress, making a quick decision that can potentially affect many employees' well-being and livelihood, as well as the organization's future. Hence, the leaders may not only need the improvisational skills more, but they may also be more ready to apply the techniques to ease their decisions making process.

In addition, to truly implement holistic improvisational leadership and work towards a culture change, leaders must be the role models who practice and teach the new improvisational skills to all employees. Anderson and Anderson (2001) described transformational change to a radical shift of culture, behavior, and mindset that must happen and be sustained over time. To create an organization that follows Holistic Improvisational Leadership Model, leaders must role model the improvisational behavior and teach the principles of improvisation to employees (Schein, 1990, 1995) to create a more adaptive organizational culture (Bansler & Havn, 2004; Zheng et al., 2011). It can start from executive and senior leaders modeling the new improvisational behaviors such as "Yes, And…", and these behaviors will trickle down to lower-level employees (Schein, 1990, 1995).

Recommendation 5. In order to implement the shared leadership competency of holistic leadership model, organizational leaders should invite all employees and intact teams to go through the improvisation workshop. One of the competencies of holistic

improvisational leadership is shared leadership, and its effect on team cohesion and effectiveness. To truly establish shared leadership, all employees need to go through an improvisational training. To further ingrain improvisation in the organizational culture, improvisational skills of leaders and their staff must increase, thereby increasing their confidence, and their capacity of the organization to respond effectively and quickly to unplanned challenges they face (Meyer, 2011).

Recommendation 6. Leaders should expand their improvisational capacities of themselves and their staff by continuously asking questions to challenge the status quo and open up the possibilities for innovation and new opportunities.

In order to expand improvisational capacity, leaders must continuously ask themselves and their staff to question the status quo as to provide opportunities for change, efficiency, and sustaining the culture change (Barrett, 2012). Researcher recommends leaders to start with the following questions from their teams:

1. Are the possibilities we are not considering truly "not realistic" or can there be a way to implement them if given the opportunity to do so?

2. Can we simplify our processes by eliminating steps that have outlived their added value?

3. Can we say "Yes, And…" instead of "No"?

4. Have we taken a competent risk today?

5. Have we celebrated our failures today and learned from them?

6. Have we accomplished anything that we need to celebrate?

Recommendation 7. To implement improvisation for leaders workshops effectively, only qualified facilitators with backgrounds in both improvisational

performance and experiential learning should attempt to teach them. Improvisational exercises and their debriefing can look deceptively simple, but should never be approached by an unqualified facilitator as there are hidden emotional risks for the participants entrenched in each activity. When teaching improvisation techniques, the facilitator should perform the exercises with a level of comfort that could ease the participants into trying the intended activities. The facilitator should be able to create a safe environment so that participants can reach beyond their comfort zone to learn new skills, yet feel safe enough to make mistakes. To create this balanced tension, a facilitator must be comfortable with making errors, managing the unexpected, and reaching beyond his/her own comfort zone, which takes much practice. Hence, teaching these workshops should only be attempted by a facilitator with improvisational performance background and experience serving as a facilitator of soft skills and experiential leadership development.

Recommendation 8. Business schools across the globe should include improvisation techniques in their coursework to prepare aspiring leaders for the uncertainty of the business environment. An emphasis in economics and maximizing profits, proficiency in strategic planning and financial forecasting, although highly essential, are not nearly sufficient preparation for leaders. In the uncertain and ambiguous modern business environment, vital decisions cannot be made solely by relying on logic or application of formulas, but from a place of intuition and spontaneous action. Components of the Improvisation for Leaders Workshop used in the study can be utilized as is, or expanded upon to include experiential exercises that are applicable to a variety of courses in traditional MBA programs. Business courses – leadership decision making,

leading innovation, personal leadership, improvisational leadership, organization development and managing change, adaptability and influence, authentic leadership, and creativity and leadership – can benefit from a suitable set of interventions of improvisational exercises and simulations.

Recommendation 9. Leaders should sustain the culture change by removing the stigma and increase the skills and the awareness of their staff in making OSD using improvisational skills, taking competent risks and celebrating failure, and applying agile improvisational methodologies. This study showed that at the final interview, a cumulative total of 97% of leaders changed the way they make spontaneous decisions and used OPTIMAL Spontaneous Decision Making (OSD) process using improvisational principles. Leaders' regular use of improvisational skills, namely OSD, normalizes the process in the workplace, helping to remove the stigma associated with OSD and reinforcing its use. OSD uses improvisational techniques to allow an individual to be open to present reality and then making a decision by combining rational thought, intuition, and mindfulness in action and leadership to solve a problem rapidly. Making OSD can produce more effective results with increasing practice, knowledge, expertise, and control of negative reactions to stress (Huang, 2012; Mintzberg, 1976; Pratt & Dane, 2007; Simon, 1972, 1982; Sinclair, 2010, 2011a, 2011b), and are the building blocks of reaching an optimal performance and strategy.

Moreover, leaders and practitioners should teach, model, and reinforce the concept of competent risks and celebrating failure. In an experimental culture, competent risks are taken, and mistakes are not only tolerated but also advocated and celebrated. Competent risks result from taking action on novel ideas and thoughtful experimentation,

and not from careless or unsound ideas or their execution (Picken & Dess, 1997; Barrett, 2012). To achieve OPTIMAL performance, leaders need to create a culture that does not reprimand people for admitting to mistakes, but highlights the mistakes, discusses what occurred, and celebrates the results of experimentation regarding the failure as a valuable source of learning (Barrett, 2012; Picken & Dess, 1997).

Furthermore, leaders should apply improvisational methodologies, such as agile methodology, instead of excessive planning, in order to create adaptive processes conducive to an improvisational culture. Leaders should use agile methodologies, based on improvisational skills, in creating processes as the remedy to the inefficiency, bureaucracy, excessive planning, and process documentation of traditional plan-driven methodologies (Fowler, 2002; Fowler & Highsmith, 2001). As Fowler and Highsmith (2001) suggested, start by making your employees and interactions more important than the processes and tools you implement; make responding to change more important than following a plan; make working technologies and systems a priority over comprehensive documentation; make customer collaboration more important than contract negotiation.

Recommendations for Further Study

This section consists of four recommendations for further research, representing this study's limitations and perceived gaps in knowledge. First and foremost, the researcher recommends replicating the study using larger representative sample of the population to allow for a more comprehensive knowledge base, and to enhance the significance of the findings. Second, additional workshops, follow-up sessions, and reinforcement of learned material with leaders and their staff are recommended by the researcher in order to discover the longer term benefit of improvisation techniques in the

organization. Third, the researcher encourages using electronic survey forms to reduce the cumbersome work of transcribing the written comments on paper forms into an electronic format. Finally, adding a personality assessment tool, such as Myers Briggs type indicator, could perhaps uncover correlations in this study regarding participants' preferences and OSD.

Epilogue

For decades, the lingering assumption in leadership and management development have centered on the mastery in areas of forecasting, planning, organizing, deciding, and controlling (Barrett, 2012). However, forecasting, planning, and deciding are not conceivable when the business environment is ambiguous and uncertain. In this environment, deciding cannot be made from a place of rational deduction, but from a place of combining intuition with spontaneous action. Attempts to control outcomes in this business environment will result in more unintended chaos. In the face of uncertainty, the added skillset leaders need is not tighter planning and control, but improvisational skills: the ability to take effective action rapidly and with limited resources. This study showed the multitude of benefits that leaders and their organizations gained from applying improvisation techniques. When leaders face rapid change and ambiguity, and search for ways to make a rapid decision effectively, it is the researcher's hope that they can turn to this study as a guide in assisting them on their journey.

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APPENDIX A

Participants' Informed Consent Form

Dear [name of the participant]:

Hi, my name is Farnaz Tabaee, and I am a doctoral student in the process of conducting my dissertation research in partial fulfillment of the requirement for the Doctor of Education degree in the Organizational Leadership Program at the Graduate School of Education and Psychology at Pepperdine University, California. I want to inform you that the workshop is a unique opportunity for participating in an original research on "assessing the impact of improvisation techniques for leadership development". The Professor supervising my work is Dr. Diana Hiatt-Michael.

I am inviting individuals like you to participate in my study, who have influence over a team, group, or the creation and implementation of new products, services, projects or processes. Please understand that your participation in my study is strictly voluntary. The following is a description of the terms for participating in the study, and a discussion of your rights as a study participant. Please read this information carefully before deciding whether or not you wish to participate.

The overarching purpose of this study is to assess the potential benefits of utilizing the techniques of improvisational in leadership development. Your participation will be included in a research dissertation that will assist in the creation of an Improvisation for Leaders Workshop. The potential benefits to you for participation in this workshop are the learning and practice of improvisation for leaders techniques. You will be asked to take part in a three and half hour Improvisation for Leaders Workshop. You will also be asked for your feedback and thoughts about the workshop prior to and during the last portion of the workshop, and 14 days to one month after the completion of the workshop. The entire time of your participation outside of your 3.5 hour class time will be fifteen minutes.

I do not foresee any potential physical or emotional risks that you should consider before deciding to participate in this study; however, in the event you do experience any risks, please inform me immediately. If you feel any discomfort at any time during the

study you may leave the workshop or stop the interview process. You will not be treated differently from anyone else participating in this study whether you agree to participate in this study or not. The information obtained from you during this study will remain confidential, or will be disclosed only with your permission, unless required by law. You can decide whether or not you want to participate at any time, and whether you would like to answer every question. If you should decide to participate, you have the right to cease participation at any time without being questioned about your decision.

There is a low risk of loss of privacy if you participate in this study. In order to minimize the risk, your confidentiality will be protected in a variety of ways. Your real name will only be used on this form when you sign it and your name will not appear in the published results. The researcher will be the only person who will be able to identify who partook in the study. You will be given a code number when you arrive at the workshop and your name will be changed when the researcher transcribes the interview. The consent form and any personal data will be stored separately from the research data. The evaluation forms and the interview transcription will be kept in a locked file cabinet in the researcher's home. All electronic data collected will be stored electronically on a password protected computer or in a locked file cabinet in the primary researchers' home office closet. Only the researcher will have the password to the computer and the key to the locked file. The data and any supporting documents will be shredded and electronically deleted within 5 years after the completion of the study.

If you have any questions regarding the information that I have provided above, please do not hesitate to contact me at XXX-XXX-XXXX or Farnaz.tabaee@gmail.com. If you have further questions or do not feel that I have adequately addressed your concern, please contact the following individuals:

Dr. Diana Hiatt-Michael, Professor Emeritus and Chairperson of the dissertation committee for this study, at (310) 568-5600 or Dr. Doug Leigh, Chairperson of the Graduate and Professional IRB, at (310) 568-2389.

Thank you for taking the time to read this information. If you agree to be a participant in my study, please sign below:

Sincerely,

Farnaz Tabaee

I, _____, agree to participate in this research study being conducted by Farnaz Tabaee under the direction of Dr. Diana Hiatt-Michael

_____ _____

Participant's Signature   Date

I have explained and defined in detail the research procedure in which the subject has consented to participate. Having explained this and answered any questions, I am co-signing this form and accepting this person's consent.

_____ _____

Farnaz Tabaee   Date

APPENDIX B

Improvisation for Leaders Workshop Two-Page Flyer

ABOUT YOUR FACILITATOR	WORKSHOP AGENDA

FARNAZ TABAEE, ED.D. CANDIDATE
 	
Farnaz Tabaee is a respected training professional with 20 years of experience in all phases of leadership development and training. She has extensive experience in aerospace, financial services, high-tech, utilities, and healthcare industries. Her clients include such names as Northrop Grumman Corporation, Toyota Financial Services, and Southern California Gas Company. Ms. Tabaee frequently presents and publishes articles on a variety of human resource development topics at national and international conferences. In addition to her extensive leadership development background, Ms. Tabaee has participated in workshops and performed with various improv groups such as Second City Hollywood, UCLA Extension, and ImprovMasters Toastmasters for the past 5 years. She is an active member of Applied Improvisation Network, and is the champion for the organization's Southern California Chapter.
 	
Ms. Tabaee is a doctoral candidate in the Doctor of Education in Organizational Leadership Program at Pepperdine University. Prior to starting her doctoral education, Ms. Tabaee had received a Master of Arts degree in Organizational Management, specializing in Organization Development and Training from Antioch University Los Angeles, and a Bachelor of Engineering degree in Electrical Engineering and Applied Mathematics and Statistics from State University of New York at Stony Brook. Her dissertation topic is "Assessing the Impact of Improvisation Techniques on Leadership Development". She can be reached at Farnaz.tabaee@gmail.com.
	• **Welcome and introduction**
	    • *Participant's paperwork (Informed Consent Forms & pre-test)*
	• **Warm-up Exercise: Three things in Common**
	• **The Principles of Improv explained. Principles of Improv Handout provided to participants.**
	    • *Share the holistic improvisational model.*
	• **Exercise 1: "Word at a Time Story"- Based on Improv Principle 1.**
	    • *Debriefing and application to the work environment*
	• **Exercise 2: "Yes And… with Denial" – based on Improv Principle 2.**
	    • *Debriefing and application to the work environment*
	• **Exercise 3: "Accepting Offers" – Based on Improv Principle 2.**
	    • *Debriefing and application to the work environment*
	• **Exercise 4: "Lead and Follow" – Based on Improv Principle 3 and 4.**
	    • *Debriefing and application to the work environment*
	• **Exercise 5: "Ad Campaign" – Based on Improv Principles 4, 3, 2, and 1.**
	    • *Debriefing and application to the work environment*
	Transition to Final Simulation Activity
	• **Exercise 6: "The Meeting" – Based on Improv Principles 4, 3, 2, and 1.**
	    • *Debriefing and application to the work environment*
	• **Application to work. "Contract for Change Worksheet"**
	    • *Debriefing and Sharing Results*
	    • *Improvisation for Leaders Workshop Post-test*
	    • *Hand out of short interview questionnaire with instructions*
	• **Conclude and thank participants!**

APPENDIX C

Letter of Agreement to do Research (1)

Letter of Agreement to do Research

10/2/2012

To: Pepperdine University Institutional Review Board (IRB)

CC: Farnaz Tabaee

I am familiar with Farnaz Tabaee's research project entitled "Assessing the impact of Improvisation techniques on leadership development involvement." I understand that participant involvement in this research study is strictly voluntary and provides confidentiality of research data, as described in the research proposal.

Therefore, as a representative of Affordable Housing Advisors, I agree that Farnaz Tabaee's research project may be conducted at our organization.

Sincerely,

APPENDIX D

Letter of Agreement to do Research (2)

October 4, 2012
From: **Fred Rodriguez**
Subject: Workshop
To: Farnaz Tabaee
Cc: Pam Arredondo

Dear Farnaz,

I spoke with Pam Arredondo about you conducting your workshop for a group of
leaders. Leadership Corpus Christi is very much interested in your work and workshop. Hence,
we have proposed that you conduct the workshop on Thursday afternoon, from 2:00 p.m. - 5:30
p.m., at the Radisson Beach Hotel –**PRECONFERENCE WORKSHOP**. Since we will have all
the breakout rooms already setup for the conference you can use one of them for your
event. Aruba North would be the best fit – it is large enough to accommodate a group of 20,
which is the number of professionals LCC can provide. After your workshop is over the entire
group is invited to join us for the 6:00 p.m. reception with the Pacific Islander Dance Group.

You would need to arrive in Corpus Christi early Thursday morning or arrive Wednesday. I am
sure you can change your airline schedule, if needed, without incurring an additional cost. Most
airline companies allow you to do this, as long as you do not change the route.

Please let us know soon if you can host this workshop as scheduled. Congratulations on
passing you Prelims! Sharing your work with Leadership Corpus Christi, not only allows you to
start your research, but to share it with a high-powered group of professionals. Your doctoral
committee at Pepperdine will be proud when they learn that your work is valued by Corpus
Christi, Texas.

I have copied Ms. Arredondo on this e-mail. Her number is listed below.
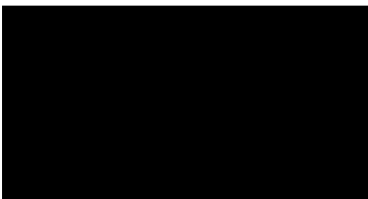 Fred
October 12, 2012
From: Fred Rodriguez
Once you get here on Thursday, we will pass your flyer to all conference attendees. You can
conduct your other workshops as participation and time allows on October 18.19, and twentieth.

Pam Arredondo, Coordinator

APPENDIX E

Letter of Agreement to do Research (3)

On Tue, Oct 30, 2012 at 12:16 PM, Jessica Boro <j.boro@valoracademy.org wrote:

Farnaz,

Thank you for your patience while I worked to smooth out details on our end at the school. My apologies for the response delay.

The following dates work best for conducting your Improvisation Workshop for Leaders:

If we break up the 3.5 hours we can do it over 2 weeks
11/9 from 2:30 - 3:45
11/16 from 2:30 - 3:45

OR

11/26 anytime between 9:00 - 4:00pm (this day would work for a 3.5 hour workshop)

Let me know!

APPENDIX F

Institutional Review Board Exempt Approval

PEPPERDINE UNIVERSITY

Graduate & Professional Schools Institutional Review Board

October 10, 2012

Farnaz Tabaee

Protocol #: E1012D03
Project Title: *Assessing the Impact if Improvisation Techniques on Leadership Development*

Dear Ms. Tabaee:

Thank you for submitting your application, *Assessing the Impact if Improvisation Techniques on Leadership Development,* for exempt review to Pepperdine University's Graduate and Professional Schools Institutional Review Board (GPS IRB). The IRB appreciates the work you and your faculty advisor, Dr. Diana Hiatt-Michael, have done on the proposal. The IRB has reviewed your submitted IRB application and all ancillary materials. Upon review, the IRB has determined that the above entitled project meets the requirements for exemption under the federal regulations (45 CFR 46 – http://www.nihtraining.com/ohsrsite/guidelines/45cfr46.html) that govern the protections of human subjects. Specifically, section 45 CFR 46.101(b)(2) states:

> (b) Unless otherwise required by Department or Agency heads, research activities in which the only involvement of human subjects will be in one or more of the following categories are exempt from this policy:

> **Category (2) of 45 CFR 46.101**, research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless: a) Information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and b) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

Your research must be conducted according to the proposal that was submitted to the IRB. If changes to the approved protocol occur, a revised protocol must be reviewed and approved by the IRB before implementation. For any proposed changes in your research protocol, please submit a **Request for Modification Form** to the GPS IRB. Because your study falls under exemption, there is no requirement for continuing IRB review of your project. Please be aware that changes to your protocol may prevent the research from qualifying for exemption from 45 CFR 46.101 and require submission of a new IRB application or other materials to the GPS IRB.

A goal of the IRB is to prevent negative occurrences during any research study. However, despite our best intent, unforeseen circumstances or events may arise during the research. If an unexpected situation or adverse event happens during your investigation, please notify the GPS IRB as soon as possible. We will ask for a complete explanation of the event and your response. Other actions also may be required depending on the nature of the event. Details regarding the timeframe in which adverse events must be reported to the GPS IRB and the appropriate form to be used to report this information can be found in the *Pepperdine University Protection of Human Participants in Research: Policies and Procedures Manual* (see link to "policy material" at http://www.pepperdine.edu/irb/graduate/).

6100 Center Drive, Los Angeles, California 90045 ▪ 310-568-5600

Please refer to the protocol number denoted above in all further communication or correspondence related to this approval. Should you have additional questions, please contact me. On behalf of the GPS IRB, I wish you success in this scholarly pursuit.

Sincerely,

Jean Kang, CIP
Manager, GPS IRB & Dissertation Support
Pepperdine University
Graduate School of Education & Psychology
6100 Center Dr. 5th Floor
Los Angeles, CA 90045
jean.kang@pepperdine.edu
W: 310-568-5753
F: 310-568-5755

cc: Dr. Lee Kats, Vice Provost for Research and Strategic Initiatives
        Ms. Alexandra Roosa, Director Research and Sponsored Programs
        Dr. Doug Leigh, Chair, Graduate and Professional Schools IRB
        Ms. Jean Kang, Manager, Graduate and Professional Schools IRB
        Ms. Diana Hiatt-Michael
        Ms. Christie Dailo

APPENDIX G

Institutional Review Board Modification Approval

PEPPERDINE UNIVERSITY

Graduate & Professional Schools Institutional Review Board

November 7, 2012

Farnaz Tabaee

Protocol #: E1012D03
Project Title: _Assessing the Impact if Improvisation Techniques on Leadership Development_

Dear Ms. Tabaee:

The GPS IRB has received your Request for Modification Form requesting permission to add a study site for your study, _Assessing the Impact if Improvisation Techniques on Leadership Development_. Your Request for Modification to your study has been approved and you may proceed with your study.

Your research must be conducted according to the proposal that was submitted to the IRB. If any further changes to the approved protocol occur, a revised protocol must be reviewed and approved by the IRB before implementation. For any proposed changes in your research protocol, please submit a **Request for Modification Form** to the GPS IRB. Because your study falls under exemption, there is no requirement for continuing IRB review of your project. Please be aware that changes to your protocol may prevent the research from qualifying for exemption from 45 CFR 46.101 and require submission of a new IRB application or other materials to the GPS IRB.

A goal of the IRB is to prevent negative occurrences during any research study. However, despite our best intent, unforeseen circumstances or events may arise during the research. If an unexpected situation or adverse event happens during your investigation, please notify the GPS IRB as soon as possible. If notified, we will ask for a complete explanation of the event and your response. Other actions also may be required depending on the nature of the event.

Please refer to the protocol number denoted above in all further communication or correspondence related to this approval. Should you have additional questions, please contact me. Thank you for submitting such complete and thorough application. On behalf of the GPS IRB, I wish you success in this scholarly pursuit.

Sincerely,

Jean Kang, CIP
Manager, GPS IRB & Dissertation Support
Pepperdine University
Graduate School of Education & Psychology
6100 Center Dr. 5th Floor
Los Angeles, CA 90045
jean.kang@pepperdine.edu
W: 310-568-5753
F: 310-568-5755

cc: Dr. Lee Kats, Vice Provost for Research and Strategic Initiatives

6100 Center Drive, Los Angeles, California 90045 ▪ 310-568-5600

APPENDIX H

Improvisation for Leaders Workshop Pretest

Please help us improve the quality of this workshop, and your learning, by completing the following evaluation. Thank you.

1. What is your perception of Improvisation for Leaders Workshop?

   _____

   _____

2. Do you know the Principles of effective improvisation?

   _____

3. Can you list how improvisational techniques can be used in business and leadership?

   _____

   _____

4. What do you hope to get out of the workshop?

   _____

5. How often do you experience stress during an average work week?
   a) Rarely
   b) Sometimes
   c) Mostly
   d) Almost everyday

6. On a scale of 1-10, circle the amount of stress you feel now:
   Mild   Moderate   Severe

   I-----I-----I-----I-----I-----I-----I----I-----I----I-----I

   0   1   2   3   4   5   6   7   8   9   10

7. Think about yesterday when you were at work; what percentage of your work-related decisions had to be made spontaneously?
   ___ %

8. For what percentage of those decisions did you use improvisational principles and techniques?
   a. Don't know
   b. 0-10
   c. 10-40
   d. 40-75
   e. Over 75%

Demographic Data:

1. Your position at the organization:
    *   ------------------

2. Gender:
    *   Male
    *   Female

3. Your age:
    *   20-29
    *   30-39
    *   40-49
    *   50 or older

4. Years working at the organization:
    *   2 – 5 years
    *   5 – 10 years
    *   10 – 15 years
    *   Over 15 years

5. Highest level of education obtained:
    *   High School Diploma
    *   Associate Degree
    *   Bachelor's Degree
    *   Master's Degree
    *   Professional or Doctorate Degree

6. Ethnicity:
    *   White
    *   Hispanic
    *   African American
    *   Asian
    *   Native American
    *   Other (please specify)…………

Thank you. Enjoy the Workshop.

APPENDIX I

Improvisation for Leaders Handout

4S Principles of Improvisation©

S

Spontaneity: Say the first thing that occurs to you*

- Say what comes to you without thinking about it
- Don't go for the joke. Dare to be average.
- Set aside personal judgment
- Mistakes are just learning opportunities
- CELEBRATE failure

Ask Yourself:

Am I making sure that I set aside my own agenda?
Am I suspending judgment of others' ideas?
Am I fully present in this moment?
Am I going for the joke or say what comes to me?

S

Say, 'Yes, And...": Acceptance and No Denial*

- Say "Yes, And …" instead of "Yes, But…"
- Accept and build on your partners' ideas.
- Do not DENY your partner's offer
- Avoid asking questions

Ask Yourself:

Am I actively listening to everyone?
Am I stopping the group from moving forward?
Am I using "Yes, But…" or "No" or equivalents?
Am I helping my group move forward?
Am I asking questions?

S Stay with the Group*

- Take responsibility for the group
- Make sure your goal is the good of the group as a whole
- Don't abandon your partner

Ask Yourself:

Do I think about the good of the group
when I make choices?
Am I aware of when to lead and when
to step back and follow?
Am I serving the overall group goal?
Am I abandoning my partner in a scene
or trying to take center stage?

S Succeed by Making Each Other Look Good*

- Build on others' ideas and change some of your
  tactics to come up with fresh ideas
- Be specific by answering the three W's to
  your audience/team/customer early on:
  Who (relationship), Where (location &
  setting) and What (objective)
- And above all: CELEBRATE failure

Ask Yourself:

Am I BUILDING off of others' ideas?
Am I propelling the group forward?
Am I changing my tactics to come up with fresh
ideas?
Am I making the three W's known to the
audience/team/customer?

> **AND REMEMBER TO HAVE FUN.**
> **IN IMPROV, MISTAKES ARE INVITATIONS FOR LEARNING!**

APPENDIX J

Evaluation Form including Posttest

Improvisation for Leaders Workshop Pilot Feedback Form

Please help us improve the quality of this workshop by completing the following evaluation. Thank you.

1. Please describe any strength(s) of the Improvisation for Leaders Workshop:
    a.

    b.

    c.

2. What techniques did the instructor apply that should be continued in future workshops?
    a.

    b.

    c.

3. What techniques did the instructor apply that should not be continued in future workshops?
    a.

    b.

    c.

4. What suggestions do you have for improvements to the Improvisation for Leaders Workshop?
    a.

    b.

    c.

5. On a scale of 1-6, how did developing improvisational skills benefit you personally?

Don't know	Not beneficial	Unlikely beneficial	Beneficial	Likely beneficial	Highly beneficial
1	2	3	4	5	6

6. On a scale of 1-6, how did developing improvisational skills make you aware of your listening skills?

Don't know	Not beneficial	Unlikely beneficial	Beneficial	Likely beneficial	Highly beneficial
1	2	3	4	5	6

7. On a scale of 1-6, how did developing improvisational skills make you aware of how quickly you trust others?

Don't know	Not beneficial	Unlikely beneficial	Beneficial	Likely beneficial	Highly beneficial
1	2	3	4	5	6

8. On a scale of 1-6, how do you think improvisational skills could benefit you in your ability to lead others?

Don't know	Not beneficial	Unlikely beneficial	Beneficial	Likely beneficial	Highly beneficial
1	2	3	4	5	6

9. On a scale of 1-6, how do you think improvisational skills could benefit you in working with others in your organization?

Don't know	Not beneficial	Unlikely beneficial	Beneficial	Likely beneficial	Highly beneficial
1	2	3	4	5	6

10. On a scale of 1-10, circle the amount of stress you feel now:

    Mild   Moderate   Severe

I-----I-----I-----I-----I-----I-----I----I-----I----I-----I

0 1 2   3 4 5 6 7   8 9 10

11. Now that you've completed the workshop, what really surprised you?

_____

12. In your own words, can you list the four principles of effective improvisation?

_____

13. Can you list how improvisational techniques can be used in business and leadership?

_____

14. Based on this workshop, what changes, if any, would you make to your spontaneous decision making?
    a) Would you change the percentage you wrote in pretest for the amount of spontaneous decisions you make at work? Yes ---- No -----
    b) If yes, what would you change it to? _____ %
    c) Why did you make the change?

_____

15. What was the most significant learning for you?

_____

Thank you for your participation.

APPENDIX K

Contract for Change Worksheet

Contract for Change*

Please identify parts of today's learning that you would like to apply back at the

workplace to help you grow as a leader. Answer the following questions as you think

about why these changes in you could potentially transform the way your staff relates to

you and to each other and how work gets accomplished:

List no more than three things you would like to START doing to grow as a

leader.

1.

2.

3.

List no more than three things you would like to STOP doing to grow as a leader.

1.

2.

3.

List no more than three things you would like to CONTINUE to do to grow as a

leader.

1.

2.

3.

Now select one change from the above list and commit to applying it in the next 2 weeks to 1
month. After 2 weeks-1 month you can answer the following interview questions in an e-mail to
Farnaz.tabaee@gmail.com regarding the effects of your change efforts. Good luck!
        * Source: Adapted from (Nunez, 2010, p.170-180)

APPENDIX L

Interview Protocol

Interview Protocol/E-mail Protocol *

Two weeks to 1 month ago, you participated in an Improvisation for Leaders Workshop. In that workshop you were introduced to the following four principles of improv:

1) Spontaneity: Say the first thing that occurs to you. Don't self-judge. Mistakes are opportunities for learning.
2) "Say, 'Yes, And...'": Accept and don't deny others' ideas.
3) Stay with the Group: Listen and observe the environment
4) Make each other look good in your team.

Some of the skills you learned were responsive listening and communication, trust, collaboration, and how to share leadership when appropriate. At the end of the workshop you isolated leadership behaviors that you wanted to start, stop or continue doing to grow as a leader. You agreed to attempt at least one behavioral change using the concepts you had learned in the workshop.

1. Describe the leadership behavior (s) you attempted to change:

2. If you made the change, what was the result of the change?

3. Which concepts would you continue to use in your development as a leader? Why or why not?

4. In three months, what do you feel the effect on your work with others will be if you continued to apply improvisational principles?

5. Based on your recent experiences, what changes, if any, would you make to your spontaneous decision making?
    a) Would you change the percentage you wrote in pre or posttest for the amount of spontaneous decisions you make at work? Yes ---- No -----
    b) If yes, what would you change it to? _____ %
    c) Why did you make the change?

Please e-mail your response to the above five questions to: Farnaz.tabaee@gmail.com. If I don't hear from you after 30 days, I will schedule a call to you to conduct a short interview. If you have any questions, please e-mail or call me at XXX-XXX-XXXX. Thank you for your participation!

* Source: Adapted from (Nunez, 2010, p.170-180).