The Improvisational Entrepreneur: Improvisation Training in Entrepreneurship Education

by Lakshmi Balachandra ⓘD

Entrepreneurs constantly face unexpected and unanticipated situations; those that thrive are ones that are identified by the literature as "improvisational." Yet extant entrepreneurship research has not distinguished what improvisation is from how to do it. I propose training in the principles developed from the theory of performing improvisation promotes the entrepreneurship mindset through pedagogy. Qualitative studies reveal entrepreneurial self-efficacy themes related to interpersonal/team considerations for entrepreneurs, and introduce "improvisational alertness" as a critical entrepreneurship consideration. Entrepreneurs can learn to keenly pay attention to interpersonal conditions of the present and the future in order to adapt potential limitations for venture success.

When you reach an obstacle, turn it into an opportunity. You have the choice. You can overcome and be a winner, or you can allow it to overcome you and be a loser. The choice is yours and yours alone. Refuse to throw in the towel. Go that extra mile that failures refuse to travel. It is far better to be exhausted from success than to be rested from failure.

—Mary Kay Ash, founder of Mary Kay Cosmetics

Pursuing entrepreneurship implies a seemingly endless path of unknown events, risk-taking, and uncertainty that requires entrepreneurs to improvise (Aldrich and Martinez 2001). Because improvisation has been identified as critical to the entrepreneurial process (Hmieleski and Corbett 2008), substantial research has sought to identify an improvisation process (e.g., Baker, Miner, and Eesley 2003; Baker and Nelson 2005). For example, recent research explores the effects of improvisational behavior on venture performance and work satisfaction (Hmieleski and Corbett 2008), as well as the influence of improvisational competencies in the founding process (Baker et al. 2003). Much of this research identifies improvisation processes retrospectively by examining an entrepreneur's overall endeavors or personality traits. As Mary Kay Ash, the founder of Mary Kay Cosmetics, illustrates in the opening quote, though, facing the unknown is not and cannot be a retrospective process. Moreover, perhaps more importantly for the entrepreneurship student, it would be very useful to learn how to overcome unexpected or unanticipated obstacles that can act as make-it-or-break-it moments for the entrepreneurship process.

Entrepreneurs often do face events that are often beyond the scope of their established business plans (Brown and Eisenhardt 1997; Baker et al. 2003; Baker and Nelson 2005; Hmieleski and Ensley 2004). How an entrepreneur "chooses" to respond to these unexpected events can have serious ramifications. These

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ramifications can lead entrepreneurs to question their motivation to continue with the venture or to give up, due to the feeling of failure (Delmar and Wiklund 2008; Yamakawa, Peng, and Deeds 2015). Entrepreneurial self-efficacy has been used to describe entrepreneurs who can adapt to the unexpected and manage, or even thrive in uncertainty. Such moments could occur with great frequency in the early stages of entrepreneurship, for example—how an entrepreneur recovers after providing an incorrect answer to a question from potential investors or reacts to a new customer's unusual requests (Chen, Greene, and Crick 1998; Kuratko, Hornsby, and Naffziger 1997; Rawhouser, Villanueva, and Newbert 2017). Entrepreneurial self-efficacy has been identified in tandem with improvisation as it relates to opportunity development (Hmieleski, Corbett, and Baron 2013) as well as creativity and idea generation (Fisher and Amabile 2009; Neck 2010). Indeed, when entrepreneurs face obstacles, a critical capability has been identified as the ability to continue developing their opportunities (Alvarez and Barney 2004; Shane and Venkataraman 2000; Tang 2012). Given the importance of teaching entrepreneurship as a method (Neck and Greene 2011), having the means to teach adaptation in the entrepreneurial process is a promising and important entrepreneurship pedagogical contribution.

Therefore, in this paper, I seek to do just that. I propose that the principles from the theory of performing improvisation (Spolin 1959) provide a means to promote the entrepreneurship mindset through pedagogy. I explore how learning the principles of performing improvisation enables entrepreneurship students to learn how to they can incorporate adaptation as part of the entrepreneurial process. Improvisation, particularly improvisation performance, offers a powerful tool for entrepreneurship educators to teach their students how to read, react, and respond "in the moment" to unexpected situations. Because performing improvisation has an underlying theory and framework, entrepreneurship educators can use this framework in the classroom as an integrated component of their overall entrepreneurship pedagogy.

In order to build the pedagogical theory, I provide an overview of the theory for performing improvisation (Spolin 1959) and how improvisational performance, i.e., acting performances that are done without scripts, props, costumes, or sets based solely on a rough story line and/or live suggestions during the performance from the audience, functions for actors to create an art form. I took this theory, and the framework that underlies how actors are able to create an improvisational performance, to develop a class session for an entrepreneurship course. I propose learning the principles of improvisational performance can offer entrepreneurial students the means to develop agility to adapt to unstructured or uncertain situations. In doing so, I connect this with entrepreneurial self-efficacy theory to explore how learning to improvise can promote an entrepreneurial mindset through pedagogy. To do this, I first review the extant literature in improvisation to illustrate the principles of the theory for performing improvisation. I conducted two treatments where I taught the principles of performing improvisation (1) to MBA entrepreneurship students in a semester-long Entrepreneurship course; and (2) to entrepreneurs in an accelerator program. I used a qualitative approach to identify the entrepreneurial self-efficacy insights that resulted that specifically motivate and encourage adaptation in entrepreneurial mindsets.

This study makes several important contributions to theory in the field of entrepreneurship education. First, I offer a new theoretically based lens on incorporating improvisation into entrepreneurship learning goals. Improvisation has been acknowledged as important to the entrepreneurship process, yet scholars have not effectively distinguished what improvisation *is* from *how* to do it. Much of the entrepreneurship literature examining various impacts of improvisation for venture performance has taken the perspective of identifying improvisation behaviors retrospectively (Garud and Karnøe 2003; Hmieleski and Corbett 2006, 2008; Hmieleski, Corbett, and Baron 2013; Hmieleski and Ensley 2004), where improvisation is assumed to have occurred and is self-reported. More importantly, the theory has not addressed what exactly developing an ability to improvise may offer to the entrepreneurial process. In this paper, I offer the means to teach entrepreneurship students *how* to improvise as well as *what* they learn regarding the entrepreneurial process from this effort. This theoretically based premise brings a pedagogy lens on entrepreneurial learning, rather than merely identifying outcomes in entrepreneurship that

indicate improvisation has occurred (Kassean et al. 2015).

Second, I offer generalizable pedagogical lessons from the theory on performing improvisation that I extend to the entrepreneurship domain and, more importantly, learning outcomes for entrepreneurship pedagogy. My findings illustrate that there are specific interpersonal/team applications that learning the theory of performing improvisation produces. This aspect of the role of the interpersonal has been largely abstracted in the entrepreneurship research, which focuses largely on strategic level/firm-level considerations. By identifying the potential benefits from improvising for the entrepreneurial process as well as the means to develop the entrepreneurial mindset, I develop a general theoretical model of teaching improvisation for entrepreneurship educators. The entrepreneurial mindset for this study is rooted in entrepreneurial self-efficacy, specifically to broaden the definition across the venture creation process, so that entrepreneurs recognize their own capabilities to adapt and/or take action in critical moments (Chandler et al. 2011). Next, I provide an overview of improvisation as it has been used in the entrepreneurship and management literature.

Improvisation Theory in Entrepreneurship and Management

Improvisation has been of great interest for entrepreneurship and management theory. Improvisation has been widely identified across a range of managerial processes (e.g., Balachandra et al. 2005; Barrett, 2012; Kamoche and Cunha 2001; Kanter 2002; Miner, Bassoff, and Moorman 2001; Moorman and Miner 1998; Orlikowski 1996; Vera and Crossan 2004; Weick 1993). Frequent analogies have been made to connect improvisation to organizational actions (Chelariu, Johnston, and Young 2002; Kamoche, Cunha, and Cunha 2002; Weick 1998). For entrepreneurship, improvisation has been identified as a means for entrepreneurs to use when starting and developing their opportunities (Hmieleski and Ensley 2004; Hmieleski and Corbett 2006, 2008; Hmieleski, Corbett, and Baron 2013). Given this theoretical assumption in the literature, the question remains as to what exactly entrepreneurs *do* when they are improvising. In other words, more importantly for

entrepreneurship pedagogy, given the benefits identified in the literature from improvisation, the question becomes: How can entrepreneurs learn to be improvisational? In order to bridge the theoretical gap, I next present the history of performing improvisation as well as the corresponding theory that has developed for *how* actors perform improvisation on stage. By exploring the theory of performing improvisation with the lens of entrepreneurship, I theorize how to bring the two together in order to develop the entrepreneurial mindset through pedagogy.

Background on Performing Improvisation

To have an improvisational performance means that the actors on stage do *not* have set, strict scripts that they must memorize and adhere to on stage; they may or may not have sets or even props that are used on stage (Freedley and Reeves 1968; Wiles 2007). Instead, the actors are given the freedom to invent and ad lib new material as part of the performance. Such theater has been seen across cultures throughout time as having actors improvise to create a performance on stage for centuries. One of the earliest forms of acting improvisational performances occurred in ancient Greece where *all* theatrical performances were largely improvisational. In the Renaissance period of Italy, the Commedia dell'arte performances were improvised shows that consisted of actors who created lines and actions on stage that pertained to what their character would say or do (Freedley and Reeves 1968; Andrews 1993). Similarly, in India, since hundreds of years ago to present day, acting troupes would travel across the country and perform plays consisting of loose structures from the religious stories of the Ramayana and the Mahabharata; the acting performances consisted of mostly improvised lines (Yarrow 2012).

In the modern Western age, improvisational theater grew out of vaudeville, which took suggestions from the audience as part of creating the theatrical performance (Freedley and Reeves 1968). A theory for performing improvisation was developed, codified by Viola Spolin in the 1940s and 1950s when she worked with children teaching them how to act (Johnstone 1987). Spolin wrote the first definitive book on the theory and provided techniques and exercises for teaching improvisational theater (Coleman 1991). Her son, Paul Sills, and

his friends practiced the theory developed by Spolin in the late 1950s and 1960s in Chicago (Coleman 1991). They used the theory in their newly formed theater, The Compass Players, and this group evolved into the Second City Theater, which remains one of the most famous and foremost improvisational comedy theaters in the world (Coleman 1991). Today, there are improvisational theaters and training centers around the world based on teaching the theory of performing improvisation and its underlying principles that Spolin articulated in 1959. There is a framework established that enables actors to "do" improvisation on stage that are taught and learned by aspiring improvisational performers (Salinsky and Frances-White 2008).

The theory for performing improvisation is grounded in building a coherent scene on stage. This means that actors must all focus on furthering the action of the performance while meeting the objectives, or the goal, of the scene (Salinsky and Frances-White 2008). In many improvisational theater performances today, actors will take suggestions from the audience for content that they must incorporate into the scene. Suggestions can range from ideas for the "place," or the "relationship between the actors," or even the "topic" that should be then weaved in as the focus of the performance. By learning the principles of the theory for performing improvisation, the actors can produce a successful improvisational scene. They effectively incorporate the suggestions into their lines and actions to produce a cohesive scene— in the moment—immediately after hearing the suggestions. There is no time for the actors to script their lines, coordinate their interactions or to prepare their own actions; instead, to be successful, the actors must embrace the suggestions and be able to produce action in the form of a relevant and funny performance (Salinsky and Frances-White 2008).

The theory for performing improvisation consists of underlying principles, or a framework, that enable an improvisational performance to occur (Johnstone 1987; Spolin 1959). By considering the framework and the underlying principles of the theory of performing improvisation, it is possible to identify outcomes from learning to improvise for entrepreneurship and develop a theory of improvisational pedagogy for entrepreneurship education. Actors train in the framework and learn the theory of improvisational performance and then *improvise* on stage. In doing so, actors are said to develop an improvisational "mindset" that enables them to adapt and react to any suggestion or unexpected action on stage (Weick 1998).

I propose similarly that entrepreneurs can learn how to adapt quickly and effectively when faced with unexpected challenges. I build on the theoretical assumptions of entrepreneurial self-efficacy and the role of having an entrepreneurial mindset throughout the new venture creation process (e.g., McGee et al. 2009; Werthes, Mauer, and Brettel 2018). I bring these schools of thought together to theorize how entrepreneurship educators can promote an entrepreneurial mindset through pedagogy.

Principles of Performing Improvisation

Listening. A key principle from the theory of performing improvisation is the form of listening that actors engage in when improvising. This type of listening is intense and focused. While listening could be assumed to be a skill every actor or musician should do, for performing improvisation the theory is that individuals must listen in a different way. The listening is described as a deeper form of listening. "Deeper listening" may sound like the concept of "active listening" from communication and psychology training—where individuals learn to develop mutual understanding occurs through a form of listening and repeating of the speaker's words (Fischer 1978). However, the listening for performing improvisation is distinctly different from this. The listening required for performing improvisation requires heightened attention to *all* of the contributions of the other performers as well as of the audience. This means that improvisers not only listen to the other performers' words but also "listen" to the expressions of the other performers, their body language, as well as the other performers' reactions to their words (Salinsky and Frances-White 2008).

The improvisation performer must therefore be intensely focused "in the moment" and act so to be highly attuned to all the information around him or her (Johnstone 1987; Halpern, Close and Johnson 1994). The ability to focus in this intense fashion results from strict adherence to the principle of listening. Often, even though individuals believe they are listening, most are instead preparing what to say or do next. Improvisational actors fight this tendency; to follow the principle, they are instructed to

"let go" of any scripting that they may be form-ing in their heads (Balachandra and Wheeler 2006). Improvisation can only occur when per-formers focus and listen with intensity to the most recent information and actions. If actors fail to listen to the information spoken by other actors in the scene, then they will not be able to improvise and produce a coherent improvi-sation performance.

Observation. The next key principle from the theory of performing improvisation is observation; actors are attentive to everything on stage. Improvisational actors observe every-thing that occurs during the performance—from the actions and words of the other performers to the reactions by the audience (Salinsky and Frances-White 2008). For this type of observation, a higher intensity of focus is also required, similar to the focus required for listening. Actors must also observe the physical space around them to be aware of the context, specifically how the context might suddenly change because of a suggestion from the audience or a statement or action by the other performers. Improvisational actors observe new information as it occurs, so they can "listen" and focus on the new information immediately. Actors are taught to maintain rigorous eye contact with the other performers so that they are observing every-thing by the other actors. Maintaining eye contact also reminds actors that they should listen to and support the other actors on stage as performing improvisation is not a solo per-formance (Balachandra and Wheeler 2006; Johnstone 1987). Eye contact also creates a sense of connection between the perform-ers as well as a sense of shared team empa-thy. By observing each other, the actors are communicating nonverbally so that they feel that they are engaging with each other in more meaningful ways (Crossan 1997; Vera and Crossan 2004). Observing (and eye contact) suggests actors' high attentiveness or a height-ened sense of awareness and sensitivity to the actions of their fellow actors and the environ-ment around them.

Agreement and Building On. A final key principle from the theory for performing improvisation is agreement and building on others' contributions. Actors use the phrase, "yes, and" to develop an internationalization of this principle. This phrase is commonly used to

articulate "how" improvisational performance "works" as it captures the essence of the agreement and building on from the theory of improvisational performance. Actors accept (or say "yes") to whatever has already occurred in the performance "and" then they build on whatever has already occurred (Barrett 2012; Spolin 1959). Actors internalize this principle in multiple ways. For example, actors must say or think "yes, and" to *themselves* before making their next statement or action (Balachandra and Wheeler 2006; Halpern, Close, and Johnson 1994; Salinsky and Frances-White 2008). By saying or thinking "yes, and" before making a new statement or action actors are accepting all of the prior actions and statements before they themselves contribute a new line or action to the scene.

Thinking "yes" so that actors agree with whatever the other actors have said or done helps actors develop a new, flexible mindset. Improvisational performers refer to this new mindset as an "in-the-moment" mindset (Weick 1998). By accepting others' actions, improvi-sational performers avoid "pre-scripting" their own actions on stage. In addition, all impro-visational actors develop a *common* mindset. Everyone performing improvisation on stage knows that everyone else will agree with each other's words or actions. This common aware-ness of a culture of agreement provides a shared sense of comfort so that each actor feels empowered to contribute ideas to the scene (Crossan 1997).

Actors also must be a contributor to the im-provisation scene. Newness is an essential value in improvisational performance (Barrett 2012), and actors create newness in a scene by contrib-uting their own ideas through the actions they perform. Actors are therefore agreeing with the other performers' actions while they are, at the same time, acting themselves (Salinsky and Frances-White 2008). Improvisational per-formers also develop a collaborative mindset that is similar to the rule of reciprocity—one acts in one manner that can produce an equal and similar action by others (Cialdini 2000), where an improvisation performance becomes a collaborative endeavor as performers build on each other's contributions.

Yet actions that improvisation performers take to build on other performers' actions are not blindly generated. Because the actors were attentive by carefully listening and observing, the theory suggests that actors can then follow

through and build on other's actions in a meaningful, relevant, and productive way (Salinsky and Frances-White 2008). A meaningful action is one that makes effective use of time to provide additional information to the performance. A relevant action builds on the existing information logically rather than adding some obscure, random new thought or action. Finally, a productive action moves the performance in a new direction seamlessly. Improvisational performances on stage can be produced based on this theory in large part because actors do *not* ask questions to other actors (Balachandra and Wheeler 2006). Asking a question implies the actor neither is accepting the others' lines or actions nor is building on the current scene. Actors who ask questions have not been attentive and lack in support for the other actors on stage.

Thus far, I have outlined the principles from the theory of improvisation performance. Actors learn these principles in improvisation classes where the theory is explained and the principles are considered and practiced. The most common form of improvisational performance in theater today is comedy improvisation. Moreover, because of the strong theoretical foundations for performing improvisation, any individual can learn the principles underlying the theory for performing improvisation. There are numerous schools and training centers worldwide for performing improvisational comedy. Most programs operate for several weeks (4–10-weeklong programs) where participants learn the theory of performing improvisation, and then practice the concepts with the goal of performing in an improvisational comedy context. By learning the framework and the principles of improvisation, anyone can learn how to perform improvisational comedy on stage. Thus, to examine how entrepreneurship education might benefit from the theory for performing improvisation and the underlying principles, I developed a study to explore what entrepreneurship students enrolled in a basic MBA entrepreneurship course would learn as it relates to entrepreneurial self-efficacy and adaptation for entrepreneurship. Next, I present the methods and the findings from the study.

Methodology
Design

To understand how improvisational theater training may benefit entrepreneurship education, I created two treatments of improvisation training based on improvisational performance for the stage. In one treatment, I taught students a class session of theater improvisation in an MBA entrepreneurship course and entrepreneurs engaged in an incubator program. Ninety student participants enrolled in an entrepreneurship course (2 groups of 45 students, 55 men and 35 women, between 25–45 years old) were trained in one class session in the theory and concepts of performing improvisational theater (1.5 hours in each session). In a second treatment, I taught 18 entrepreneurs enrolled in an entrepreneurial accelerator program who were given the same improvisation theater seminar as part of a weekly seminar offered as part of the accelerator program's content. All participants were asked to provide feedback following the class session, in a structured manner that was used as the data for this study.

As improvisation training offers a unique pedagogical approach, there are few comparable treatment options to serve as control settings. Therefore, rather than a quantitative survey-based outcome analysis, I opted to conduct a qualitative study to determine how the application of principles of performing improvisation theory extend to entrepreneurship. As an exploratory study to develop theory, the qualitative approach allowed me to identify and understand the specific applications that may relate to entrepreneurship education from the incorporation of improvisation training. It also enabled me to assess how performing improvisation as an education intervention may have pedagogical insight for developing entrepreneurs in a more traditional entrepreneurship education setting.

The student participants were already enrolled in an MBA entrepreneurship course at a top-tier business school where the rigor and focus on learning traditional entrepreneurship frameworks is deeply embedded. This course in entrepreneurship is a "basic"-level course and is a required course in the first year of a two-year MBA curriculum. The entrepreneur participants were all selected to be part of a regional entrepreneurship accelerator program; all of the participants have started ventures that they are in the process of developing through enrollment in this year-long accelerator program. Both the entrepreneurs and the MBA students in the course received the same training that I developed based in the improvisation comedy framework.

I developed a series of brief exercises that are used in comedy improvisation classes to illustrate the performing improvisation principles identified earlier. Participants engaged in exercises that I selected from a basic beginner-level class in an improvisational comedy training program. The first 30 minutes introduced the theory of performing improvisation. The background presented in this paper was discussed, and a demonstration of comedy improvisation was shown to illustrate the theory in action. The remainder of the class operated as if the participants were enrolled in a comedy improvisation workshop. The participants were led through a series of "warm-up" exercises that comedy improvisation actors frequently use to get themselves in an improvisation mindset (e.g., "nonsense naming," "word association," and "mirroring.") (Please see Appendix 1 for an overview of these exercises.)

Following this, the participants were taught the principles from the theory for performing improvisation—and then led through exercises that highlighted listening, observing, and agreement and building on. Participants were given a topic and asked to have a conversation with a partner to experience how these principles enabled improvisational performance. For example, for "yes, and," either participant could start the conversation and had to make a statement about the topic. The other person in the pair had to say the words, "yes, and" and then make a new statement about the topic, without asking questions or disagreeing. The participants began understanding how the framework enables actors to perform improvisation on stage.

Participants then tried a few comedy improvisation performance pieces ("one word at a time story," "the conducted story," "the expert talker," please see Appendix 2 for an overview of these exercises). Finally, participants role-played investor pitches where they incorporated the improvisation framework in their role-playing (Please see Appendix 3 for a sample of the case). Participants assigned with investor roles could ask any questions they wanted, so that participants assigned with entrepreneur roles had to improvise responses to the investors' unexpected questions.

The session was an hour and a half in length (one typical MBA class duration) and was conducted about three-fourths of the way through the semester for the MBA students and halfway through the accelerator program.

The timing was by design: at this point in the semester and the program, many of the traditional entrepreneurial frameworks and tools have been taught. Similarly, the entrepreneur participants have received most of the content of the program. As the research question was open-ended (to understand how the theory for performing improvisation apply for entrepreneurial self-efficacy and adaptation), participants were asked to reflect on their experience learning the theory for performing improvisation, and then to write about a prior work/professional experience where they wish they had been able to improvise. The assignment was for participants to write about a situation where they "wished they had said or done something different." After writing about the situation, they were asked to explain how the theory of performing improvisation might have helped in that situation, as well as where the improvisation framework may have fallen short. The open-ended responses were approximately 1–2 pages in length and were open coded and analyzed for entrepreneurship education implications.

Analysis of Improv Situations

I coded the participant reflections to construct a preliminary typology based on the situations participants chose to describe that illustrated where they "wished" they could improvise. Of the 126 responses, all but 4 described specific experiences where improvisation would have been helpful. I went through the responses and coded each response for what they wished they had done and how the theory would have changed the outcome. Once initial categories emerged from the data, I revisited the categories within the initial data to understand how the respondents related the framework for performing improvisation in their scenarios. I grouped the responses by what the participants "missed" from not knowing the framework for performing improvisation, and why they did not achieve the outcome they desired to create categories as they related to entrepreneurial self-efficacy and adaptation. These categories were regrouped with related outcomes to identify themes across the principles of improvisation identified by the participant. An example of a participant's reflection as well as the coding process and theme categorization is provided as Appendix 4.

Results

Table 1 depicts the types of entrepreneurial adaptations identified from the reflections as they relate to entrepreneurial self-efficacy and the corresponding principles of performing improvisation for the stage along with illustrative phrases from the reflections.

I grouped the entrepreneurial self-efficacy outcomes that emerged in terms of how they related to the three principles from improvisational performance theory. For the "Listening" principle, the entrepreneurial self-efficacy concept identified was (1) impression management and creating a good team environment. From the "Observing" principle, the entrepreneurial self-efficacy concept identified was (2) creating a positive working environment with a team focus. Finally from the "Yes, And" principle, the entrepreneurial self-efficacy concept identified was (3) being constructive during conflict. I describe these three concepts in terms of entrepreneurial self-efficacy theory and how they develop an entrepreneurial mindset as illustrated in the data next.

Listening-Impression Management and Creating a Good Team Environment

Entrepreneurs have been successful when they know the "right answer" due to their expertise in planning and the procedures they

Table 1
Self-Efficacy Skills Identified from Training in Performing Improvisation

Concept from improvisation framework	Entrepreneurial self-efficacy	Illustrative quotes
Listening	Impression management	"I followed my manager's direction or my manager's manager's direction … rather than my own direction."
	Creating a good team environment	"Organizations are typically very rigid … I could have used improv techniques to better facilitate the discussions and improve the flow of ideas."
Observation	Creating a collaborative culture with a team focus	"I should have recognized that [employee] was extremely sensitive to criticism, especially related to her expertise. I could have improved the initial tone of the relationship and perhaps beyond that."
		"Being a manager is about seeing, identifying and creating positive situations … and a positive learning environment, a team dynamic that would have allowed us to find some commonality in the situation."
Agreement and building on	Being constructive during conflict	"I try too hard to be original … my delivery is indeed forced and thus causing me to be misunderstood … I need to worry less about planning my words."
		"I want to go beyond the face value of statements to understand the motivations and intents of those involved."
		"There was a lot of relevant information I could have added to advance the conversation."

establish in their ventures (Hmieleski and Corbett 2008; Weber 1947). Entrepreneurs continually engage in impression management, also referred to as frame alignment, where they develop a shared identity with their teams. The theory for performing improvisation offers entrepreneurs the means to engage with others. One participant explained, "in the business world where companies are relying more and more on teams to solve complex and ever changing problems," the ability to "create a positive learning environment, a team dynamic, is possible through listening … a key component of improvisation." A participant identified this principle as critical for managerial success. "The best managers must listen, feel, and relate to others."

Another participant reflected, "So often we assume that everything we are experiencing inside is completely transparent to the other involved parties—this is generally not the case. Listening [and adding information] … gives you a better chance of reaching a reasonable resolution for all parties involved." Participants discussed how a "lack of rapport" can cause damage when setting a venture's strategy that others will be willing to engage, in particular as "[others] will only trust you if they are motivated … and feel their ideas are being listened to …" The connection of improvisation concepts with an entrepreneur's ability to be self-aware of how impressions can foster team relationships is important but often not commonly cited for entrepreneurial self-efficacy in new venture development.

This theme was consistent as there was evidence that participants identified how improvisation could help them develop relationships and rapport with team members. There were several discussions about the ease with which entrepreneurs "become more entrenched in our positions and … take things personally." The theory of performing improvisation does not allow actors to become defensive of their choices. Being defensive goes against the agreement and building on principle from the theory of performing improvisation and therefore can inhibit constructive conversation and general relationship building overall. By learning the framework of performing improvisation, participants learned that they could themselves foster a good team environment for others. Defensiveness, disagreement, and non-relational actions (like "scripting" or not listening to others) are simply not possible to

do when improvising, and less useful for crafting entrepreneurial mindsets that value entrepreneurial self-efficacy for developing a strong venture team.

Observation–Creating a Collaborative, Creative Culture with a Team Focus

Traditional entrepreneurship theory has focused on an entrepreneur's ability to analyze the market and related dynamics of the industry (Alvarez and Barney 2007; Kuratko et al. 1997). Such approaches require that entrepreneurs establish a set plan with clear goals (Barney 1997). Entrepreneurs must establish performance metrics so that potential investors can determine if the company is on track with stated goals and vision (Kuratko et al. 1997). While productive for entrepreneurial ventures, operating within a set of predefined routines and scripts can lead individuals to follow established organizational processes, even when they may not be the best option for the situation. The duality between establishing best practices and selectively adapting is one that entrepreneurs must navigate—but this can become difficult when the business plan now feels limiting (Farjoun 2010).

This aspect of improvisation emerged as a clear theme from the responses—that breaking out of learned routines that often include "towing the company line" and "denying and retrenching into traditional firm positions" have had serious individual and entrepreneurial consequences because they are routinized actions. One aspect from the theory of performing improvisation that resonated for participants was how actors must "let go" and "try something new" on stage. This would have led to participants to revisit such circumstances and "trust their [my] own instincts" and "break rank and make decisions on their [your] own." For group members involved in the failed situations, participants identified that "it was difficult for people to let go of their own biases and think openly about the ideas that were introduced."

Deviating from corporate scripts can cause individuals to bear great risks (March and Shapira 1987). Taking on such risks often means that "you have to put aside self-interests and listen to and agree with other members," which emerged as a theme that is difficult for entrepreneurs to do. Participants noted, "We [MBAs] are trained to protect our self-interests rather than be collaborative." Given the incentive structures with most large corporate firms,

protecting managers' self-interests rather than taking risks becomes the prevalent thinking. Many companies often do not encourage—or worse yet punish—risk-taking (Crossan 1997, 1998).

Participants who had corporate backgrounds found this type of thinking was typical in their experience as well. "My firm is exactly one of those organizations that does not encourage risk-taking, however, one of the comments that came up in this incident was that [firm X] should encourage its managers to think creatively and take risks. It was a topic that everyone was interested in, but no one knew how to implement programs that encourage risk. Looking back, on the situation, I think [firm X] could have encouraged improvisation during meetings to improve the flow of ideas and risk-taking." To develop goals that are meaningful and relevant to their teams, entrepreneurs can encourage improvisation to nurture risk-taking and collaboration in the fledgling corporate culture. By incorporating entrepreneurial self-efficacy for the values entrepreneurs can promote, improvisation offers a means to encourage creativity across the mindsets of all team members.

Agreement and Building On Being Constructive During Conflict

The theory of performing improvisation offered participants a means to utilize different behaviors, in the moment, to draw others into sharing their vision and even working toward a unified goal. This can happen even when others around them feel conflicted about doing so. Research into the interpersonal interactions entrepreneurs must understand, navigate and navigate to build their ventures has been growing in recent years (e.g., Balachandra et al. 2017; Chen, Yao, and Kotha 2009; Kanze et al. 2018). Entrepreneurs who can master the appropriate interpersonal skills "in the moment" to make the right connections and articulate their value propositions are ones that suggest the entrepreneurial self-efficacy for being adaptable yet focused on an interpersonal level.

The entrepreneur's ability to think fast on his or her feet and *communicate* timely and accordingly—articulating his or her vision in the right way to the audience in front of them or adapting the message based on contradictory or negative feedback—is a critical skill. Entrepreneurs must be able to adapt the

venture's strategy to best capture new, changing market conditions (Hmieleski and Corbett 2008; Tang 2012). An analogy for this entrepreneurial self-efficacy ability is, that, although the cruise ship may have charted a course through arctic waters, once the iceberg is observed, the ship's captain should have the adaptability to reroute the ship through southern, warmer waters. Similarly, although the venture started with a good plan, if there is an impediment to/ or obstacle ahead, the entrepreneur should be able to adapt and respond in a way so that the venture can still be financially viable. This relates to the notion of entrepreneurial alertness with regard to opportunity discovery (Kirzner 1973, 1979). The way in which entrepreneurs are able to exploit previously unnoticed opportunities is borne from subjective decision-making from how "alert" the entrepreneur is to new profit potential in conditions of sheer uncertainty (Kirzner 1979; Gaglio and Katz 2001; Eckhardt and Shane 2003). It is generally considered a state of mind that makes an entrepreneur open to opportunities, in this way, seemingly at all times (Busenitz 1996; Campos 2017). This conceptualization of alertness for entrepreneurs can be developed on an interpersonal level through improvisation. The use of improvisation by entrepreneurs suggests that an entrepreneur can have an "improvisational alertness" that then enables heightened awareness and adaptation required for entrepreneurial decision-making (Eckhardt and Shane 2003). Improvisational alertness in terms of communication with others relates to equilibrium-seeking nature of entrepreneurs where paying attention to conditions of the present and the future enable entrepreneurs to take limitations and convert them into new potential profits (Gaglio and Katz 2001; Valliere 2013).

Participants recognized this connection between future considerations and the role of adapting potential limitations for venture success on an interpersonal, communication-based level. Responses suggested that participants felt they gained this ability. "Using improvisation skills of listening more and asking less will make productive use of meetings with people at my firm and with my clients." They felt they could "go beyond the face value of statements to understand the motivations and intents of those involved." One participant reflected that a corporate "charted course" mindset could be difficult to change: "I tend to stick too long

with a chosen approach and then I go into paralysis by analysis. By the time I come up with the perfect answer the opportunity is gone."

By learning the theory for performing improvisation (and the mindset for improvisation), participants found communicating important information without "scripting" may actually offer surprising benefits. They found that actions (or speech) that were too prepared might cause others to find them "inauthentic" as a speaker. Inauthenticity is a quality that most people do not appreciate, and audiences find it hard to connect to speakers who seem inauthentic (Ekman and Friesen 1982). When impressions seem calculated rather than true, authentic expressions of feelings, then the intended impression often fails (Eastman 1994; Schneider 1981). In improvisational theater, actors do constantly have to measure their performance with the audiences' reaction and adapt accordingly. This adaptation is a constant feedback loop, much like that discussed in the lean startup method for customer development feedback processes (Blank 2013). This constant gauging of what the audience values is a critical "performance" lesson for entrepreneurs, who may be too wedded to their original business plan or presentation. As one entrepreneur participant noted in reflecting about a presentation to a venture investor, "we should have devoted time to get comfortable taking the presentation in a different, less prepared direction."

Participants also recognized the connection from improvisation to developing entrepreneurial self-efficacy skills related to self-regulation (Goleman 1988). A participant noted learning the theory of performing improvisation led to understanding how similar it is to the entrepreneurial mindset, and how difficult it is to develop it. The reflection included that "[to] maintain a keener sense of what the situation was and rise above my physical condition … understanding my own vulnerability would have been useful." In terms of entrepreneurial thinking and mindsets, this learning suggests entrepreneurs can benefit from improvisation enabling a shared sense of collective vision to foster clear common goals with their venture teams. By having improvisation training, entrepreneurs may learn how they might build a collaborative culture while teambuilding with the venture team. Overall, these interpersonal and team-focused takeaways from developing an entrepreneurial mindset offer a new and important contribution to entrepreneurship pedagogy.

Discussion

In this paper, I theorized that learning the theory for performing improvisation would promote an entrepreneurial mindset through the development of entrepreneurial self-efficacy. Entrepreneurs face uncertainty that requires them to adapt to unexpected obstacles. Entrepreneurial self-efficacy has been used to describe entrepreneurs who can adapt in uncertain environments (Chandler et al. 2011), which is very similar to the abilities said to be produced from having an improvisational mindset (Weick 1998). I took this assumption to propose the framework for performing improvisation as pedagogy for an entrepreneurship classroom.

To support my premise, I first considered the theory and framework developed for performing improvisation. I identified the key principles from improvisation on *how* to improvise. These concepts are (1) listening; (2) observation; and (3) agreement and building on. I then created a training session for entrepreneurship MBA students and entrepreneurs in an accelerator program on the theory of performing improvisation. I asked participants to reflect on an improvisational situation, and then qualitatively analyzed their stated learnings and reflections. From the pedagogical treatment, I found entrepreneurs could gain three key entrepreneurial self-efficacy outcomes that can all contribute to developing entrepreneurial mindsets.

Entrepreneurial self-efficacy is an important variable for new venture creation processes (e.g., McGee et al. 2009). Yet few proven techniques and methods are known for teaching or developing entrepreneurial self-efficacy in the current entrepreneurship pedagogy. Based on the learning outcomes from this study, teaching entrepreneurship students *how* to improvise offers one possible means of promoting agility and adaptability, key components of the entrepreneurial mindset, specifically for interpersonal and team-based ways. This study found three key entrepreneurial self-efficacy themes. The three themes are: (1) impression management and creating a good team environment; (2) creating a collaborative, creative culture with a team focus; and (3) being constructive during team conflict.

All three themes relate, interestingly, to the entrepreneur as a member of a team—how to foster a strong team, how to nurture creativity in the team culture, and how to better manage conflicts that arise in teams. Learning to improvise did develop an entrepreneurial mindset of adaptation, but the most important adaptability values related to team-based considerations—interpersonal, environmental, and cultural—for the new venture creation process. Arguably, this may be an even more valuable application and finding for the role of improvisation in entrepreneurship pedagogy than initially proposed.

Entrepreneurship educators should recognize the value of improvisational acuity for the entrepreneurial process. Improvising enables entrepreneurs to overcome obstacles and manage growing their ventures even when faced with numerous unexpected and unanticipated situations. The value of incorporating adaptability as a skill of entrepreneurial self-efficacy suggests that learning to improvise offers entrepreneurship education the means to incorporate analytic strategy skills in unstructured situations. Complexity, contradiction, ambiguity, paradox, and uncertainty have all been identified as important concepts to include in entrepreneurship education. The findings of this study introduce the value of integrating training in improvisation, as it can develop entrepreneurial mindsets not only on the level of the individual entrepreneur but also on the level of the entrepreneurial team, entrepreneurial culture, and the venture overall as part of the new venture growth process.

This notion of developing a mindset through training in improvisation also relates to the theoretical concept of entrepreneurial alertness (Kirzner 1973, 1979; Valliere 2013). This study suggests that alertness can be developed on an interpersonal level—as it relates to communication and team dynamics—from learning to improvising. By incorporating the mindset developed from improvisation, an entrepreneur also develops the related concept termed here as "improvisational alertness." Improvisational alertness in terms of communication with others relates to how entrepreneurs keenly pay attention to interpersonal conditions of the present and the future in order to adapt potential limitations for venture success.

It is important to note that the key findings of this study relate to the entrepreneur on an individual level, primarily when interacting with others, in person, together. This is a key consideration for improvisational performers, who also have the benefit of frequent rehearsals with their teammates where they practice the principles of performing improvisation. Entrepreneurs who learn the theory may not necessarily have similarly trained teammates in place with which they could improvise. In addition, the distributed nature of start-up ventures may question the role of eye contact or the need for face-to-face interactions for the ability to improvise on an interpersonal/team basis. This presents a possible limitation in terms of the applicability or effectiveness of implementing improvisation as a core practice among an entrepreneurial team that offers an interesting avenue for future research to consider.

Yet, related to eye contact, an improvisational performer's ability to connect with the audience is a key finding of this study for entrepreneurship. The theory of performing improvisation offers an important intersection point between stage performance and the process entrepreneurship where entrepreneurs must constantly gauge what the audience/customer values. The listening, observing, and agreement and building on principles all offer entrepreneurs an important consideration for the value of how they interpersonally interact with their audience/customers to ensure they are meeting the demand and needs of their market.

Similar to this audience/customer feedback consideration, a current popular theme in entrepreneurship education is the Lean Startup Method where entrepreneurs are taught to use a build–measure–learn feedback loop where experimentation trumps planning (Blank 2013). While the lean startup methodology has been widely incorporated across entrepreneurship classrooms, incorporating pedagogy on the theory of performing improvisation could augment lessons from lean startup. In lean startup, agility pertains to the development processes of the product or service (Blank 2013); in improvisation, agility relates to the entrepreneurial mindset and interpersonal/team considerations. Thus, incorporating pedagogy on the theory of performing improvisation offers complementary and integrated components for any entrepreneurship course (Neck, Greene, and Brush 2014). Improvisation might be a seamless addition to the current content of lean startup and other entrepreneurship courses.

While this study suggests that entrepreneurship education would benefit from incorporating improvisation pedagogy, there are certainly

a number of limitations and contingencies that need to be addressed. First, it is important to note that one class session on the theory of performing improvisation will not produce an agile, improvisational entrepreneur. Improvisational performers study the theory of improvisation and train in specific improvisational methodologies for each performance type (comedy, theater, commedia dell'arte, etc.), for years if not decades. It would be worth investigating if additional sessions in learning improvisation move entrepreneurship students from mindset shifts to improvisational agility as it directly relates to improvisational performance. One way to test this might be to conduct preclass and postclass assessments on entrepreneurship students to determine the specific impact each principle from the theory of performing improvisation has on entrepreneurial self-efficacy through surveys. Another fascinating avenue to explore would be to videotape each student in a role-play before and after the improvisation training session to determine how the student followed the principles, if at all, in the interaction by coding participant behaviors. The value of one class session may be enough to improve agility and adaptation in clear interpersonal ways identified in this study and remains an interesting avenue for future research.

Beyond the entrepreneurial mindset on an individual level and team considerations, it would be interesting to investigate how the theory of performing improvisation relates to the entrepreneurial process more broadly. Perhaps a case study exploring an entrepreneur trained in performing improvisation theory could be used to determine how awareness and mastery of the underlying concepts are implemented as entrepreneurial self-efficacy throughout the venture creation process rather than focusing on interpersonal and team and/or entrepreneurial intentions. A comparative qualitative research study could also be conducted to explore how related individuals trained in performing improvisation are to those trained in entrepreneurial improvisation.

Finally, performing improvisation requires a group of people, with immediate feedback from an audience. For entrepreneurs, perhaps this could be an extant team. However, in the nascent stages, entrepreneurs are often working alone. Given the team implications of learning improvisation from this study's findings, the entrepreneurial mindset promoted by improvisation acuity could offer benefits for interpersonal actions with customers, suppliers, and other stakeholders when dealing with unanticipated events. Nevertheless, future research might explore how the entrepreneurial mindset developed from improvisation pedagogy benefits more established entrepreneurs versus nascent entrepreneurs in terms of interpersonal and team adaptability or even if there are differences between men or women or other demographic/behavioral differences. Relatedly, this study focused on post hoc reflections primarily by entrepreneurship students and a small sample of entrepreneurs. Future research could focus on exploring how entrepreneurs incorporate the theory of performing improvisation in their real-time, market-based situations to understand how improvisation training may influence entrepreneurial adaptive actions in addition to entrepreneurial mindsets.

That said, this study offers an initial consideration of how entrepreneurship education could be enhanced by incorporating the theory of performing improvisation. Entrepreneurship education has itself been critiqued as lacking theory and "proof" for its efficaciousness for developing successful entrepreneurs. The "proven" framework from the theory of performing improvisation suggests there are tangible means to promote and develop the entrepreneurial mindset by teaching students *how* to improvise. Entrepreneurship educators might explicitly incorporate the value of learning how would-be entrepreneurs could develop interpersonal and team dynamic skills that are required to be an entrepreneur. Improvisation offers a means to teach entrepreneurship students the mechanisms for developing entrepreneurial mindsets through pedagogy that could improve entrepreneurial self-efficacy.

Conclusions

This study provides entrepreneurship educators with a training based in the framework of performing improvisation to promote an entrepreneurial mindset through pedagogy. By learning the theory and underlying framework for performing improvisation in the context of an entrepreneurship course, students can develop their own improvisational acuity. I suggest that performing improvisation theory can be incorporated as a new, innovative, and complementary content for any entrepreneurship course based on the findings from this study. Importantly, I offer this as a means to

fill a gap that has been heretofore absent in the curricula—the means by which entrepreneurship students can develop entrepreneurial self-efficacy and adapt to unexpected, potentially venture-destabilizing events. There has already been a strong interest by practitioners in obtaining improvisation training; many improvisation theaters around the world have established robust training programs that are most often used for fostering teamwork and creativity in corporations.

This study suggests the lessons from improvisation would also serve entrepreneurs well. Entrepreneurship curriculum has thus far been categorized into broad market-based analyses, and "pivot"-based venture strategy considerations, rather than taking a deep dive into how entrepreneurs themselves can develop skills that enable them to take appropriate action. Connecting improvisation theory to the entrepreneurship process has been presented as a useful complement to other entrepreneurial practices (e.g., bricolage, effectuation), yet theory for performing improvisation offers important individual-level pedagogy. Entrepreneurs can learn *how* to improvise because a theory for performing improvisation exists that is widely taught already in theater and comedy improvisation classrooms. Using a similar approach might enable the means to turn theory into actions that have only been abstractions in the literature, for example, that entrepreneurs must take obstacles and turn them into opportunities (Alvarez and Barney 2004; Shane and Venkataraman 2000). Going back to Mary Kay Ash's quote at the beginning of this article, perhaps when entrepreneurs encounter an obstacle, they can turn it into an opportunity because they have learned how to improvise.

In conclusion, entrepreneurship education seeks new methods and tools, and academia would be well served to catch up with corporate practice where improvisation training has become commonplace. Entrepreneurship theory has lagged behind practice in terms of the need to recognize how to train would-be entrepreneurs in quick thinking and adaptability. Several management schools have started offering courses on performing improvisation and have received strong support and interest from students, yet incorporating improvisation into entrepreneurship curriculum remains a novelty rather than a mainstream focus. This paper attempts to close the gap between theory and practice of improvisation's utility for entrepreneurship education. By incorporating this training and developing improvisational pedagogy, entrepreneurs will have the practical skills to turn obstacles into opportunities.

References

Aldrich, H. E., and M. A. Martinez (2001). "Many Are Called, but Few Are Chosen: An Evolutionary Perspective for the Study of Entrepreneurship," *Entrepreneurship Theory and Practice* 25(4), 41–56.

Alvarez, S. A., and J. B. Barney (2004). "Organizing Rent Generation and Appropriation: Toward a Theory of the Entrepreneurial Firm," *Journal of Business Venturing* 19(5), 621–635.

_____ (2007). "Discovery and Creation: Alternative Theories of Entrepreneurial Action," *Strategic Entrepreneurship Journal* 1(1–2), 11–26.

Andrews, R. (1993). *Scripts and Scenarios: The Performance of Comedy in Renaissance Italy*. Cambridge: Cambridge University Press.

Baker, T., and R. E. Nelson (2005). "Creating Something from Nothing: Resource Construction Through Entrepreneurial Bricolage," *Administrative Science Quarterly* 50(3), 329–366.

Baker, T., A. S. Miner, and D. T. Eesley (2003). "Improvising Firms: Bricolage, Account Giving and Improvisational Competencies in the Founding Process," *Research Policy* 32(2), 255–276.

Balachandra, L., R. Bordone, C. Menkel-Meadow, P. Ringstrom, and E. Sarath (2005). "Improvisation and Negotiation: Expecting the Unexpected," *Negotiation Journal* 21, 415–423.

Balachandra, L., T. Briggs, K. Eddleston, and C. Brush (2017). "Don't Pitch Like a Girl! How Gender Stereotypes Influence Investor Decisions," *Entrepreneurship Theory and Practice*. https://doi.org/10.1177/10422587 17728028

Balachandra, L., and M. Wheeler (2006). "What Negotiators Can Learn from Improv Comedy," *Negotiation* 9, 1–3.

Barney, J. B. (1997). *Gaining and Sustaining Competitive Advantage*. Reading, MA: Addison-Wesley, 134–175

Barrett, F. J. (2012). *Yes to the Mess: Developing a Jazz Mindset for Leading in a Complex*

World. Boston, MA: Harvard Business Press.

Blank, S. (2013). "Why the Lean Start-Up Changes Everything," *Harvard Business Review* 91(5), 63–72.

Brown, S. L., and K. M. Eisenhardt (1997). "The Art of Continuous Change: Linking Complexity Theory and Time-Paced Evolution in Relentlessly Shifting Organizations," *Administrative Science Quarterly* 42, 1–34.

Busenitz, L. W. (1996). "Research on Entrepreneurial Alertness," *Journal of Small Business Management* 34(4), 35–44.

Campos, H. M. (2017). "Impact of Entrepreneurial Passion on Entrepreneurial Orientation with the Mediating Role of Entrepreneurial Alertness for Technology-Based Firms in Mexico," *Journal of Small Business and Enterprise Development* 24(2), 353–374.

Chandler, G. N., D. R. DeTienne, A. McKelvie, and T. V. Mumford (2011). "Causation and Effectuation Processes: A Validation Study," *Journal of Business Venturing* 26(3), 375–390.

Chelariu, C., W. J. Johnston, and L. Young (2002). "Learning to Improvise, Improvising to Learn: A Process of Responding to Complex Environments," *Journal of Business Research* 55, 141–147.

Chen, C. C., P. G. Greene, and A. Crick (1998). "Does Entrepreneurial Self-Efficacy Distinguish Entrepreneurs from Managers?," *Journal of Business Venturing* 13(4), 295–316.

Chen, X. P., X. Yao, and S. Kotha (2009). "Entrepreneur Passion and Preparedness in Business Plan Presentations: A Persuasion Analysis of Venture Capitalists' Funding Decisions," *Academy of Management Journal* 52(1), 199–214.

Cialdini, R. (2000). *Influence: Science and Practice*. New York: Allyn and Bacon.

Coleman, J. (1991). *The Compass: The Improvisational Theatre That Revolutionized American Comedy*. Chicago, IL: University of Chicago Press.

Crossan, M. (1997). "Improvise to Innovate," *Ivey Business Quarterly* (Autumn), 36–44.

Crossan, M. M. (1998). "Improvisation in Action," *Organization Science* 9(5), 593–599.

Delmar, F., and J. Wiklund (2008). "The Effect of Small Business Managers' Growth Motivation on Firm Growth: A Longitudinal Study," *Entrepreneurship Theory and Practice* 32(3), 437–457.

Eastman, K. K. (1994). "In the Eyes of the Beholder: An Attributional Approach to Ingratiation and Organizational Citizenship Behavior," *Academy of Management Journal* 37(5), 1379–1391.

Eckhardt, J. T., and S. Shane (2003). "Opportunities and Entrepreneurship," *Journal of Management* 29(3), 333–349.

Ekman, P., and W. V. Friesen (1982). "Felt, False, and Miserable Smiles," *Journal of Nonverbal Behavior* 6(4), 238–252.

Farjoun, M. (2010). "Beyond Dualism: Stability and Change as a Duality," *Academy of Management Review* 35(2), 202–225.

Fischer, J. (1978). *Effective Casework Practice*. New York: McGraw-Hill.

Fisher, C. M., and T. M. Amabile (2009). "Creativity, Improvisation and Organizations," in *The Routledge Companion to Creativity*. Eds. T. Rickards, M. A. Runco, and S. Moger. London, England: Routledge, 13–24.

Freedley, G., and J. A. Reeves (1968). *A History of the Theatre*. New York: Crown Publishers.

Gaglio, C., and J. Katz (2001). "The Psychological Basis of Opportunity Identification: Entrepreneurial Alertness," *Small Business Economics* 16(2), 95–111.

Garud, R., and P. Karnøe (2003). "Bricolage versus Breakthrough: Distributed and Embedded Agency in Technology Entrepreneurship," *Research Policy* 32(2), 277–300.

Goleman, D. (1988). *The Meditative Mind*. New York: Tarcher.

Halpern, C., D. Close, and K. Johnson (1994). *Truth in Comedy: The Manual of Improvisation*. Colorado Springs, CO: Meriwether Publishing.

Hmieleski, K. M., and A. C. Corbett (2006). "Proclivity for Improvisation as a Predictor of Entrepreneurial Intentions," *Journal of Small Business Management* 44(1), 45–63.

_____ (2008). "The Contrasting Interaction Effects of Improvisational Behavior with Entrepreneurial Self-Efficacy on New Venture Performance and Entrepreneur Work Satisfaction," *Journal of Business Venturing* 23(4), 482–496.

Hmieleski, K. M., and M. D. Ensley (2004). "An Investigation of Improvisation as a Strategy

for Exploiting Dynamic Opportunities," in *Frontiers of Entrepreneurship Research*. Wellesley: Babson College, 596–606.

Hmieleski, K. M., A. C. Corbett, and R. A. Baron (2013). "Entrepreneurs' Improvisational Behavior and Firm Performance: A Study of Dispositional and Environmental Moderators," *Strategic Entrepreneurship Journal* 7(2), 138–150.

Johnstone, K. (1987). *Impro: Improvisation and the Theatre*. New York: Theatre Arts Books.

Kamoche, K., and M. P. Cunha (2001). "Minimal Structures: From Jazz Improvisation to Product Innovation," *Organization Studies* 22(5), 733–764.

Kamoche, K. N., M. P. Cunha, and J. V. Cunha, Eds. (2002). *Organizational Improvisation*. London: Routledge.

Kanter, R. M. (2002). "Strategy as Improvisational Theater," *MIT Sloan Management Review* 43(2), 76–81.

Kanze, D., L. Huang, M. A. Conley, and T. E. Higgins (2018). "We Ask Men to Win and Women Not to Lose: Closing the Gender Gap in Startup Funding," *Academy of Management Journal* 61(2), 586–614.

Kassean, H., J. Vanevenhoven, E. Liguori, and D. E. Winkel (2015). "Entrepreneurship Education: A Need for Reflection, Real-World Experience and Action," *International Journal of Entrepreneurial Behavior and Research* 21(5), 690–708.

Kirzner, Israel M. (1979). *Perception, Opportunity, and Profit*. Chicago, IL: University of Chicago Press.

———— (1973). *Competition and Entrepreneurship*. Chicago, IL: University of Chicago Press.

Kuratko, D. F., J. S. Hornsby, and D. W. Naffziger (1997). "An Examination of Owners' Goals in Sustaining Entrepreneurship," *Journal of Small Business Management* 35(1), 24–33.

March, J. G., and Z. Shapira (1987). "Managerial Perspectives on Risk and Risk Taking," *Management Science* 33(11), 1404–1418.

McGee, J. E., M. Peterson, S. L. Mueller, and J. M. Sequeira (2009). "Entrepreneurial Self-Efficacy: Refining the Measure," *Entrepreneurship Theory and Practice* 33(4), 965–988.

Miner, A. S., P. Bassoff, and C. Moorman (2001). "Contours of Organizational Improvisation and Learning: A Field Study," *Administrative Science Quarterly* 46, 304–337.

Moorman, C., and A. S. Miner (1998). "Organizational Improvisation and Organizational Memory," *Academy of Management Review* 23(4), 696–723.

Neck, H. M., and P. G. Greene (2011). "Entrepreneurship Education: Known Worlds and New Frontiers," *Journal of Small Business Management* 49(1), 55–70.

Neck, H. M., P. G. Greene, and C. G. Brush, Eds. (2014). *Teaching Entrepreneurship: A Practice-Based Approach*. Cheltenham: Edward Elgar Publishing.

Neck, H. (2010). "Idea Generation," in *Portable MBA in Entrepreneurship*, 4th ed. Eds. W. Bygrave and A. Zacharakis. Hoboken, NJ: John Wiley & Sons, 27–52.

Orlikowski, W. (1996). "Improvising Organizational Transformation Over Time: A Situated Change Perspective," *Information Systems Research* 7(1), 63–92.

Rawhouser, H., J. Villanueva, and S. L. Newbert (2017). "Strategies and Tools for Entrepreneurial Resource Access: A Cross-Disciplinary Review and Typology," *International Journal of Management Reviews* 19(4), 473–491.

Salinsky, T., and D. Frances-White (2008). *The Improv Handbook: The Ultimate Guide to Improvising in Comedy, Theatre, and Beyond*. New York: Continuum.

Schneider, D. J. (1981). "Tactical Self-Presentations: Toward a Broader Conception," in *Impression Management Theory and Social Psychological Research*. Ed. J. T. Tedeschi. Cambridge, MA: Academic Press, 23–40.

Shane, S., and S. Venkataraman (2000). "The Promise of Entrepreneurship as a Field of Research," *Academy of Management Review* 25(1), 217–226.

Spolin, V. (1959). *Improvisation for the Theater: A Handbook of Teaching and Directing Techniques*. Evanston, IL: Northwestern University Press.

Tang, J. (2012). "Prior Knowledge and New Product and Service Introductions by Entrepreneurial Firms: The Mediating Role of Technological Innovation," *Journal of Small Business Management* 50(1), 41–62.

Valliere, D. (2013). "Towards a Schematic Theory of Entrepreneurial Alertness," *Journal of Business Venturing* 28(3), 430–442.

Vera, D., and M. Crossan (2004). "Theatrical Improvisation: Lessons for Organizations," *Organization Studies* 25(5), 727–749.

Weber, M. (1947). *The Theory of Social and Economic Organization*. A. M. Henderson and T. Parsons, Trans. New York: Oxford University Press.

Weick, K. E. (1993). "The Collapse of Sensemaking in Organizations: The Mann-Gulch Disaster," *Administrative Science Quarterly* 38(4), 628–652.

_____ (1998). "Improvisation as a Mindset for Organizational Analysis," *Organization Science* 9(5), 543–555.

Werthes, D., R. Mauer, and M. Brettel (2018). "Understanding Challenges and Entrepreneurial Self-Efficacy During Venture Creation for Entrepreneurs in Cultural and Creative Industries," *International Journal of Entrepreneurship and Small Business* 33(2), 265–288.

Wiles, David (2007). *Mask and Performance in Greek Tragedy: From Ancient Festival to Modern Experimentation*. Cambridge, UK: Cambridge University Press.

Yamakawa, Y., M. W. Peng, and D. L. Deeds (2015). "Rising From the Ashes: Cognitive Determinants of Venture Growth After Entrepreneurial Failure," *Entrepreneurship Theory and Practice* 39(2), 209–236.

Yarrow, R. (2012). *Indian Theatre: Theatre of Origin, Theatre of Freedom*. Surrey: Routledge.

Appendix 1: Overview of Improvisation Warm-up Exercises

Nonsense Naming
Actors walk around and point at objects and call them something they are not, out loud as quickly as they can.

Word Association
Actors form a circle and then say a word, the person to the left says a word based on the word just spoken. The actors continue going around in a circle saying words and associating them.

Mirroring
Actors pair up and one is the "mirror." The actor makes physical movements and the mirror has to mirror them exactly so the actor feels as if he/she is looking in a mirror.

Appendix 2: Overview of Comedy Improvisation Exercises

One Word at a Time Story
3 or 4 actors line up on stage and take a suggestion for a story title, one that is not real, has never been told before. The actors must then construct a story one word at a time.

The Conducted Story
3 or 4 actors line up on stage and take a suggestion for a story title, one that is not real, has never been told before. There is a volunteer from the audience who "conducts" the story by pointing at an actor for a period of time. As long as the actor is being pointed at, he or she has to tell the story. When the conductor moves to point to another actor, the new actor begins telling the story from exactly where the last actor left off.

The Expert Talker
One actor takes a topic suggestion for a talk. The expert talker must then produce an "expert talk" on the topic for 2–3 minutes.

Appendix 3: Investor-PitchRole Play

Investor
You are a high-profile venture capitalist that has agreed to take a meeting with an entrepreneur, "Pat" with a company called "Shoestring," a new budgeting software package for families. You have very little interest in this company, but you owed your angel investor friend Frank a favor, so you have agreed to have the entrepreneur come in and pitch. You have a million things to do before your trip to Aruba this weekend, for some much needed luxury R&R, but your secretary booked the entrepreneur for a 30-minute pitch meeting. You are scheduled to have an intensive travel schedule when you return from Aruba for the next 3 months.

You realize Pat is in the middle of fundraising and you imagine has some good funding prospects with some of Frank's other VC connections. So you are kind of interested in hearing more, but you really want to know how this Pat knows Frank and who else they are talking to for funding. You don't want to waste your time unless Pat

is really involved in discussions with other VCs as you don't know much about the family software market. And you have several things to finish before you have to leave to make your kids daycare pickup in time. Unless Pat can answer your questions about who else is involved and what other VCs are interested in funding the venture, you really are not interested in talking further.

Prepare for your meeting.

Pat at Shoestring

You are so excited to have secured a meeting with Charlie, a well-known VC in the area. Charlie runs a pretty big fund and is a friend of your one and only angel investor Frank, who truth be told, is your flighty aunt's new (3rd) husband. You don't know him very well except that he has a lot of money and actually decided to give you your first check of $10K. He finds that amount small considering how much he is paying his ex-wife, which is also why he liked your family budget planning software idea. You are so excited to have secured this meeting as you are about to run out of money and were thinking of ditching the entire venture. But you have a couple promising meetings with Microsoft and Intuit coming up. You started exploring, sending out a resume or two for a job, when Frank called and set up a pitch meeting with Charlie.

You have an elaborate pitch deck, ready from your time in all those entrepreneurship courses you took in business school. You are excited to meet and pitch with the first VC as everyone has told you getting a meeting is the hardest part. If Charlie is not interested, you have heard that VCs will still introduce you to other VCs that may be interested in funding, so you are super excited for this meeting.

Prepare for your pitch meeting.

Appendix 4: Reflection Paper Sample with Coding and Theme Categorization

I once traveled to another city to visit a customer. When I sat down in the plane, I noticed that there is a middle-aged man next to me in a business suit and tie. I didn't try to talk to him at the beginning, but after the plane took off, the man started talking to another businessman next to him. I heard from their conversation that he was a senior executive of a prospect company for us. Therefore, when they finished their conversation, I began trying to start a conversation with him. First I introduced myself, then I began to ask him some questions, like how he felt about the plane, if he was busy, etc. He just answered all my questions without enthusiasm. After those questions, I found I couldn't continue the conversation. I didn't want to try to sell him on our company because that was the first time we met and we were not in a business setting. I kept silent until we got off the plane. I am so regretful that I didn't use such a good opportunity to establish a relationship with him or tell him about my company. Perhaps we can get into the company through this man, and maybe we would be able to know more people through him. However, I did nothing to capitalize on the opportunity. I wish I had the ability to build rapport and let the conversation run smoothly.

Analysis

Questions killed the conversation. Each question indicated an end to the conversation.

I should *have added onto the conversation and let the conversation flow rather than stopping the conversation.* **[Agreement and Building On—Managing Conflict]**

Listening would have let me get him involved and talking more. If I don't *show interest* by listening to what he was saying, why would he expect the same from me? I should have *built rapport between us* by agreeing and listening to build a more *dynamic interaction* between us. I feel like *he would have thought better of me* if I showed him my full attention and listened to him rather than thinking about what to ask next. **[Listening-Impression Management/ Building Rapport]**