Entrepreneurial Skill Development Through Improvisational Theatre Practices
Arts-based method usage for improving entrepreneurial competencies

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ABSTRACT

The 21st century created a fast paced and quickly changing environment for economic actors. Between these circumstances entrepreneurial activity and entrepreneurial qualities are becoming more and more important for creating sustainable economic growth in the increasingly competitive markets due to globalization and technological advancements. This necessitates the need for highly capable individuals with entrepreneurial skills, both as entrepreneurs and intrapreneurs. Therefore, effective entrepreneurial education plays a pivotal role in attaining these required capabilities, regarding both hard and soft skills. Nevertheless, traditional higher education still tends to focus mostly on hard skill development in this field. Arts-based methods, acknowledged by management and leadership literature, are discussed with growing interest nowadays for business soft skill training. However, academic investigation that would provide evidence for the applicability of these methods for entrepreneurs is extremely scarce. Therefore, this research's main purpose is to address this gap in academic literature and provide empirical evidence on the subject. The thesis's main body relies on the construction of a comprehensive theoretical framework and its testing through research following a qualitative cross-experimental strategy, which incorporates the conduction of an arts-based method experiment, researcher observations and individual interviews with participants. The research aimed to answer how entrepreneurial skills can be enhanced through improvisational theatre practices, by looking into (1) the exact capabilities that can be affected by these methods, (2) the learning method's characteristics and (3) the attitude of aspiring entrepreneurs towards this particular arts-based method usage. Based on the collected primary data (observation, interviews) from a small random sample of aspiring entrepreneurs, the findings support, that certain skills can significantly be activated through improvisational theatre-based exercises, and therefore they have the potential to be developed by these methods. Moreover, participants showed a significantly positive attitude while assessing the learning process and the incorporation of this arts-based method into educational programmes. Relying on these research findings, further propositions were made, and future research venues were suggested, as the results of the analysis directly suggest that through improvisational theatre-based training certain entrepreneurial characteristics can be enhanced and they create an enjoyable and memorable way of learning transferable skills for participating individuals.

Keywords: arts-based methods, improvisational theatre, entrepreneurial characteristics, entrepreneurship development, entrepreneurship education

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1. Introduction

"Entrepreneurs are everybody's favourite heroes" (para.1) as it is noted in The Economist (2014). They are people "who organize and manage a business and undertake the risk for the sake of profit" (Carland et al, 1988, p.33) by definition of the profession. As entrepreneurs undeniably play a huge role in economic and cultural growth within the areas where they are present, it is relevant to investigate what are those personality traits and skills that can lead to a fruitful entrepreneurial career. These characteristics include the necessary hard skills of understanding business mechanisms, but also a lot of soft skills which contribute to entrepreneurial success. For these characteristics, through already existing literature certain attributes can be identified that contribute to successful entrepreneurship, and which also reveal the relevance of soft skills for entrepreneurs next to the obvious hard skills needed in this field.

Artists are "creative individuals who use imagination and skill to communicate in visual form" (Ragans, 2005, p.11). They are motivated by their curiosity and the "sense of wonder" ("a feeling of awakening or awe triggered by an expansion of one's awareness of what is possible" ("Sense of Wonder," 2007). As Ragans (2005) characterizes them, artists are willing to take on risks to avoid suppressing their creative impulses, that other individuals would do out of the fear of failure or making mistakes. Artists also have the capacity to observe their surroundings in a novel and exceptional way. Furthermore, they are apt to put on intense work for extended time periods to attain their objectives (Ragans, 2005).

When it comes to education, cross-disciplinary approaches started to emerge around the millennium in artistic and business education to address the increasingly complex, ambiguous, and fast-changing environment considering both domains (Adler, 2006; Sutherland, 2012; Toscher, 2019). On one side, fine arts are argued to provide a fertile source for learning essential skills to managers and leaders, who have to adopt to the changed needs of the 21st century (Mockler, 2002). These skills are no less important for entrepreneurs, who have even higher need for adaptability, innovation, and creativity. On the other side, artists also benefit from entrepreneurial knowledge to decrease the uncertainty of their career sustainability (Toscher, 2019).

Generally, artistic and entrepreneurial professions are regarded as strictly separate occupations, however, this notion limits seizing opportunities and synergies from the combination and interaction of these two fields. Moreover, contrary to popular belief, these professions have a lot in common actually. Mockler (2002) brings forth Shakespeare's example to illustrate the interplay between artistic and managerial qualities, as he was both a

businessman and artist ("creative business artist" (p.576)) at the same time. In the core of the similarities of entrepreneurship and art further lays the parallel that artists and entrepreneurs are both people who essentially create things, let it be a piece of artwork or a new venture. Moreover, in the process of creation lies the innovation, creativity, and challenge to address societal needs and problems, which are defining features of both spheres.

This thesis will focus on this cross-fertilization between domains from the entrepreneurs' side, by investigating how improvisational theatre practises, as a specified group of arts-based methods can contribute to their education and soft skill training. This means the addressing of a niche considering that the new trend of incorporating arts in developmental trainings for managers and leaders, has been researched only little regarding the field of entrepreneurship. Exploring the potential of these new methods by cross-fertilizing arts and business in education gains further significance and gets endowed with a sense of urgency, as governments advocate the education of transferable entrepreneurial skills (used by both entrepreneurs and intrapreneurs) for the sake of creating a dynamic economy sufficient to stimulate sustainability and growth in the modern world (Galloway et al., 2006). This necessitates the academic understanding of how education can be best enhanced for both aspiring and practising entrepreneurs. Although several arts-based training methods could have been proposed to cross the domains of arts and entrepreneurship, improvisational theatre-based practices were found to be the most pertinent for skill development possibilities while exploring already existing studies (Balachandra, 2019; Crossan, 1998; Taylor & Ladkin, 2009; Wang & Chia, 2019). As traditional theatrical roles align with traditional organizational processes (Crossan, 1998), innovative and entrepreneurial activity in turn rather resembles the workings of improvisational theatre, where actors have to react flexibly to the environmental influences by using a diverse set of personal and social skills. Moreover, due to the well-observable similarity between the desirable skill sets in these professions, the idea of conducting research on the topic was regarded by the researcher useful to collect some scientific evidence for the positive contribution of arts-based methods in entrepreneurial training. Furthermore, as the effectivity of these methods have the potential to transform the educational structure of entrepreneurs, the understanding of both the exact functioning of improvisational techniques in this context, and the potential entrepreneurs' attitude towards the method can be highly beneficial for the entrepreneurial community, and more widely to the business sphere.

The thesis will follow a deductive logic in its structure. First, the available literature of entrepreneurship, entrepreneurial skills, arts-based methods, and the possibly enhanced skills

by improvisational theatre will be reviewed to identify their shared qualities and create a hypothetical model. This framework lays the foundation for the research, where a specified experiment on a small sample of individuals with entrepreneurial aspirations will be conducted. The research seeks to answer how entrepreneurial skills can be enhanced through improvisational theatre practices, by looking into (1) the exact capabilities that can be affected by these methods, (2) the learning method's characteristics and (3) the attitude of experiment participants towards this particular arts-based method usage. For this reason, primary data will be collected from both field observation by the researcher and interviews with the participants, which will be analysed qualitatively, with introducing both deductive and inductive codes to capture all essential attributes that can contribute to answering the research question more thoroughly.

Even though that there are certain acknowledged limitations of this current research, such as the small sample size or the specific nature of the constructed experiment, which both affect the generalizability of found evidence, this study can still have meaningful implications for entrepreneurship education as it follows already existing trends, which presumably will result in a more common usage of arts-based training practices in upcoming years. Hence, it is also anticipated from this thesis to provide a solid initial foundation for future investigations and contribute to the scarce literature connecting entrepreneurial education and arts-based methods.

2. Theoretical framework

2.1. Entrepreneurship

2.1.1 The concept of entrepreneurship

The concept of entrepreneurship can be perceived as old as mankind's existence (Mokaya et al., 2012) in the sense that entrepreneurial activity is closely linked to human nature with its developmental aspiration driving constant evolution. Nowadays, entrepreneurship is a prominent topic of research from all fields, including economics, sociology and psychology, even though it is hardly a new subject of interest and was already conceptualized academically in the 1770s (Hinddle & Gillin, 1992; Hebert & Link, 1989; Mokaya et al., 2012). However, despite its long-standing nature, the exact definition of entrepreneurship and what it takes to be an entrepreneur lacks unanimity in literature (Carland et al., 1988), aggravated by researchers using multiple conceptual frameworks for investigating the subject (Bygrave & Hofer, 1992; Moyaka et al., 2012).

Entrepreneurship is often referred to as new venture creation (Gartner, 1988; Shane, 2008; Ahmetoglu et al., 2011). Druker (1985) describes it as the process using new, valuable and unique resource combinations for the purpose of profit extraction in an environment characterized by uncertainty and ambiguity. Schumpeter (1934) also refers to business creation by combining new factors for economic growth, however he also addresses the innovative and creative nature of the entrepreneurial activity (Moyaka et al., 2012). In addition, entrepreneurship also involves the behaviour patterns and activities taken on by specific individuals (Ahmetoglu et al., 2011), who inherently have certain attributes that drives them and makes them able to seek career in this field.

Defining what it takes exactly to be an entrepreneur is even more complex than to define the activity itself because next to the seen actions, one also has to consider underlying traits and qualities. Mill (1848) identifies the risk-taking as the key difference between entrepreneurs and other business professions, such as managers (Carland et al., 1988). They also possess distinctive characteristics, like the previously mentioned risk-taking propensity, good problem-solving skills, high need of achievement and control (Mokaya et al., 2012) to just highlight a few, which will be discussed more in depth through later chapters. The combination of these distinguishing skills and abilities help to navigate in making a difference between the rather intertwined professional qualities of managers, leaders and entrepreneurs.

In the 21st century's turbulent and ambiguous environment, entrepreneurial qualities gained even more significance, as business organizations started to become more and more

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entrepreneurial to ensure their viability. Even rather conservative firms are changing their way of workings to create an overall supporting culture for creative and innovative processes (Pathak, 2019). This indicates the shift towards the increasing presence of entrepreneurial organizations, where employees are also required to bring an entrepreneurial mindset into the corporation to help establishing firm-level entrepreneurial orientation. Corporate entrepreneurship, or intrapreneurship, is a widespread phenomenon, where distinct units are created within the organization for entrepreneurial ventures (Gwynne, 2008). Therefore, it can be seen that entrepreneurship has become a notion deeply embedded and important in the business sphere.

From the perspective of fresh graduates from entrepreneurial programmes, working in firms that can allow them to have creative thinking and adequate freedom became a common aspiration, before and if even starting their own venture in later career stages. Moreover, due to its increasing presence, plenty business higher education programmes started to incorporate entrepreneurship to keep up with the demands towards workforces, to provide students with a skillset that enables them to fit hiring criteria with a greater chance (Gwynne, 2008).

Entrepreneurship education (EE) started at Harvard University with one course in 1947, and since then it became a widely thought subject all across the globe with prominent investments channelled into its development (Lyons et al., 2015). Its rapid recognition is connected to the realization of the important part it plays in economic growth in certain demographic areas (Pathak, 2019). In developing counties, entrepreneurial activity has the potential to bolster economy, tackle unemployment problems, and boost technical and market innovation (Anwar & Saleem, 2019; Gürol & Atsan, 2006; Mueller & Thomas, 2000; Jack & Anderson, 1999). The growing interest in the field can also be seen as an outcome explained by the changed views of how employment should look like in recent years (Gwynne, 2008). To fit current trends, entrepreneurial programmes and courses are no longer only focused on the hard skills necessary to enterprise creation and maintenance, but they also incorporate training for the needed soft skills required to create an entrepreneurial mindset (Lyons et al., 2015; Gwynne, 2008) and to develop the distinctive characteristics specific to the profession. Out of this reason, Fayolle et al.'s (2006) definition seems the most appropriate to describe EE as "any pedagogical process that develops entrepreneurial attitudes and skills as well as personal qualities" (p. 702).

However, Edelman et al. (2008) highlight that we know really little about if the thought skills are actually enhancing entrepreneurial efficiency considering evidence from academic research. Thus, they inherently question whether the practices used are the most productive to

equip students with the inevitable abilities of entrepreneurs and facilitate their aspirations for new venture creation. Therefore, this study aims to contribute with some evidence to the subject of entrepreneurship education, investigating the usage of a newer method group of teaching (arts-based methods) and their possible effectiveness. Graham Mitchell, director of Lehigh University's Program in Entrepreneurship, notes that traditional educational models are going through a shift, to address the students' increased need for participating actively during classes, and to have the possibility to learn through original problem-solving processes (Gwynne, 2008). This seems to further indicate, considering entrepreneurship as an important business principle, that EE is facing a shift in paradigm not only due to external factors from the uncertain environment, but also to fit the internal expectations of potential future entrepreneurs regarding their schooling.

2.1.2 Entrepreneurial characteristics

In entrepreneurship theory, we can generally make difference between two schools of thinking, one based on contingency, and one based on traits. While contingency models reflect upon the entrepreneurial activity's embeddedness in the organizational environment and in certain situations, the trait model pays attention solely to the differentiating personality traits of entrepreneurs without contextualization (Littunen, 2000). However, Littunen (2000) states the importance of considering these two different models in interaction with each other in discussing the characteristics, personal attributes, and behaviour of entrepreneurs. Moreover, Carland et al. (1988) directly states that separating the two approaches is impossible for understanding the concept of entrepreneurship precisely. Even though the literature background discusses differentiating skills and abilities of top entrepreneurs, the frameworks will consider traits, as well as certain abilities that are highly reflective of the environment, therefore the interaction of the mentioned models is also true for this present thesis, similarly to Littunen's (2000) and Carland et al.'s (1988) treatise.

Traits are "dimensions of individual differences in tendencies to show consistent patterns of thoughts, feelings, and actions" (p.23) according to McCrae and Costa's (1990) definition. They are often distinguished from skills as the natural abilities of individuals, opposed to skills which are mainly learnt. However, both skills and abilities affect one's entrepreneurial activity, characteristics, and how effectively someone can deploy them in certain scenarios. Moreover, entrepreneurial skills and abilities can be enhanced through education and training, and both have a huge impact on venture success and profitability. Therefore, in this research

skills and abilities will be investigated likewise, using the terms "skills", "abilities", "traits" and "characteristics" interchangeably to refer to them.

Throughout the academic literature, scholars differentiate general entrepreneurial qualities, which ensure the capability to pursue a career as entrepreneurs, and success factor skills, which can grant outstanding performance and distinguish individuals from the average. However, clearly separating these groups is hardly possible as authors discuss traits under different classifications or even without them, where overlaps are frequent (see Appendix A). Therefore, Table 1 provides a general summary of significant entrepreneurial capabilities identified by academic literature, with an emphasis on soft skills for providing a more transparent and focused review regarding the topic of this current thesis.

Table 1. Entrepreneurial skills

Entrepreneurial skills	Literature
Risk-taking propensity	Casson, 1982; Caird, 1988; Mokaya et al., 2012; Mill, 1848; Lyons et al., 2015; Galor & Michalopoulos, 2012; van Praag & Versloot, 2007; Wong et al., 2005; Sexton & Bowman, 1980; Schwer & Yncelt, 1984; Gürol & Atsan, 2006; Anwar & Saleem, 2019; Kusmintarti et al., 2014; Miller, 2020
Need for Achievement	McClelland, 1987; Mokaya et al., 2012; Gürol & Atsan, 2006; Anwar & Saleem, 2019; Hornaday & Aboud, 1971; Kusmintarti et al., 2014
Internal locus of control	Rotter, 1966; Gürol & Atsan, 2006; Anwar & Saleem, 2019; Kusmintarti et al., 2014
Innovativeness	Casson, 1982; Mokaya et al., 2012; Gürol & Atsan, 2006; Anwar & Saleem, 2019; Miller, 2020
Tolerance of Ambiguity	Gürol & Atsan, 2006; Anwar & Saleem, 2019; Kusmintarti et al., 2014
Emotional Intelligence	Boren, 2010; Ahmetoglu et al., 2011; Pathak, 2019
Self-confidence	McClelland, 1987; Mokaya et al., 2012; Gürol & Atsan, 2006
Creativity	McClelland, 1987; Mokaya et al., 2012; Kusmintarti et al., 2014;
Persistence	McClelland, 1987; Miller, 2020
Initiative	McClelland, 1987; Mokaya et al.,2012
Opportunity identification and realization	Caird, 1988; Mokaya et al., 2012
High degree of independence	Mokaya et al., 2012; Hornaday & Aboud, 1971
Adaptability	Miller, 2020
Decisiveness	Miller, 2020
Team Building	Miller, 2020
Comfortable with failure	Miller, 2020
General self-efficacy	Anwar & Saleem, 2019
Effectiveness leadership conduction	Hornaday & Aboud, 1971
Social networking	Kusmintarti et al., 2014
Persuasion	McClelland, 1987
Resourcefulness	McClelland, 1987
Foresight	McClelland, 1987
Proactivity	McClelland, 1987
Commitment to others	McClelland, 1987
Ability to cooperate	Casson, 1982
Ability to correct errors effectively	Caird, 1988
Good problem-solving ability	Mokaya et al., 2012
High need of control	Mokaya et al., 2012
Action and goal orientation	Mokaya et al., 2012
Ability to learn from mistakes	Mokaya et al., 2012

2.1.2.1 Generally associated characteristics:

2.1.2.1.1 Risk-taking propensity

One of the most associated characteristics with entrepreneurship is the higher willingness to take on risks. Interest in discussing and researching the risk taking propensity of entrepreneurs is high (Galor & Michalopoulos, 2012; van Praag & Versloot, 2007; Gürol & Atsan, 2006; Wong et al., 2005; Sexton & Bowman, 1980; Schwer & Yucelt, 1984; Lyons et al., 2015; Casson, 1982; Caird, 1988; Littunen, 2000; Mokaya et al., 2012; Anwar & Saleem, 2019, Kusmintarti et al., 2014; Miller, 2020), due to its closely linked nature to the core new venture creating activity. An individual's risk-taking propensity can be measured by their capacity to what extent they take or avoid risks in hazardous situations (Anwar & Saleem, 2019; Gürol & Atsan, 2006), for the purpose of future benefits from the undertaking. This increased ability to be comfortable with taking risks is also often mentioned as the main distinctive factor between employees and entrepreneurs (Anwar & Saleem, 2019).

2.1.2.1.2 Innovativeness

Being innovative plays a crucial role in entrepreneurial orientation, and it is perceived inherently connected to the profession, and entrepreneurial inclination (Stewart et al., 2003; Gürol & Atsan, 2006). Mueller and Thomas (2000) denote this capability as a foundational aspect of entrepreneurs' profiles. Moreover, it is also found to be in a positive correlation with venture success by Utsch and Rauch (2000) (Anwar & Saleem, 2019; Gürol & Atsan, 2006). The phenomenon of innovativeness is often used interchangeably with creativity, where both refer to the tendency to bring forward novel, unique solutions within even unfamiliar situations (Littunen, 2000; Kusmintarti et al., 2014) and to explore new opportunities (Anwar & Saleem, 2019; Gürol & Atsan, 2006). Additionally, this ability also requires to be paired with strong leadership skills, which ensure the willpower above all else, to successfully carry out the innovation or creative process.

2.1.2.1.3 Internal locus of control

An internal locus of control (LoC) means one's belief in their ability to control certain events. In contrast with the external end of the dimension, someone with an inner LoC considers event outcomes as the result of their own actions, instead of seeing it as a consequence of other people's influence, sheer luck or destiny. It is a personality variable first identified by Rotter's (1966) model, who suggests that the locus of control is frequently

internal for entrepreneurs. It is also a trait expected to a certain level for people with entrepreneurial aspirations. Moreover, it can be considered not just as a parameter that sets apart entrepreneurs and non-entrepreneurs (Mueller & Thomas, 2000; Anwar & Saleem, 2019), but a trait that can make a difference between successful and unsuccessful ones (Gilad, 1982; Anwar & Saleem, 2019). Despite the several proposed modifications to the original LoC model (Levenson, 1981; Littunen, 2000), and the questioned nature of what extent keeping control is either possible or desirable in today's highly ambiguous environment, Gürol and Atsan (2006) points out that nonetheless, numerous studies verify the occurrence and relevance of this characteristic amongst entrepreneurs in entrepreneurship research (Mueller & Thomas, 2000; Hansemark, 1998; Koh, 1996; Utsch & Rauch, 2000).

2.1.2.1.4 Tolerance for ambiguity

Entrepreneurs have to face ambiguous situations repeatedly in an often uncertain environment, where they necessarily need to make firm decisions based on inadequate data. Tolerance of ambiguity is conceptualized by Gürol and Atsan (2006) as a person's inclines to be able to make choices effectively under risky circumstances. Kusmintarti et al. (2014) further adds the endeavour of individuals to gather the most possible information at the timepoint and manage it efficiently to lessen uncertainty. Entrepreneurs have a greater capacity to navigate in vague situations compared to ordinary managers, because they have to work generally within less structured and unambiguous settings, where the responsibility of making the best possible decision lies on their shoulder solely (Gürol & Atsan, 2006). This heightened tolerance to uncertainty is also closely linked to the previously mentioned risk-taking propensity and innovative problem-solving capability of entrepreneurs, creating an interlinked and interdependent trait set that characterises entrepreneurial personality.

2.1.2.1.5 Need for achievement

Need for achievement (nAch) is a trait probably as commonly associated with entrepreneurship as risk-taking. It was first described by McClelland (1961) meaning the motivation detected in small business owners to perform tasks driven by outstanding quality standards (Lyons et al., 2015). Individuals with a high need of achievement are "problem solvers, target setters and working towards them through their own endeavour, exhibit high execution in challenging tasks and are unconventionally imaginative while searching for different approaches their performance improvement (Littunen, 2000; Utsch and Rauch,

2000)" (Anwar & Saleem, 2019, p.286). With many comparative studies backing up the validity of McClelland's (1961) model (Hansemark, 1998; Littunen, 2000) nAch is recognized as a one of the most significant determinants for conducting entrepreneurial activity (Gürol & Atsan, 2006).

2.1.2.2 Skills of successful entrepreneurs:

   McClelland (1987) also identifies certain characteristics especially for successful entrepreneurs following three dimensions: (1) proactivity, (2) achievement orientation and (3) commitment to others. Proactivity is captured by a person's (1a) initiative abilities, to undertake acting prior to being forced to do them by events, and (1b) assertiveness, to discuss problems openly and directly with others when they occur. This later characteristic also refers to taking on a leader role and giving instructions to others. Achievement orientation relies on the already discussed need for achievement, which distinguishes entrepreneurs and non-entrepreneurs. However, as a success skill the (2a) concern of high quality of work is complemented by (2b) efficiency orientation, (2c) systematic planning and (2d) monitoring skills and the capability to (2e) see and act on opportunities in this subgroup. Moreover, McClelland (1987) pinpoints the importance of social skills next to assertiveness in how eminent entrepreneurs should (3a) recognize the importance of business relationships, next to the inevitable (3b) commitment to work contracts while discussing the commitment to others success factor segment (McClelland, 1987).

   Interpersonal abilities started to gain more significant ground with the realization of how Emotional Intelligence (EI) traits can play an important role in entrepreneurial, managerial or leadership success, therefore they should not be excluded either from the conversation about entrepreneurial competencies. Boren (2010) notes that the shift from individual to interactional characteristics is reflected in the increasing number of promising research about the role of entrepreneurs' feelings and emotions. Moreover, it is indicated by many studies (Barber et al., 1999; Graham et al., 2002; Chandler & McEvoy, 2000) that "the ability to effectively manage the human side of the business" (Boren, 2010, p.56) plays an inevitably important part in the viability of new ventures. The trait of having advanced EI, can be interpreted as "a person's self-perceived ability to understand and manage his or her own and other people's emotions" (Ahmetoglu et al., 2011, p.1029) and "serves as a crucial psychosocial meta-capacity for successful adaptation in various spheres of life (Jain, 2012), including the realm of careers (Puffer, 2011) and related choices and decision-making" (Pathak, 2019, p.8). Trait EI, which is also called "interpersonal awareness skills" (Boren,

2010, p.56) consists of self-awareness, self-management, social-awareness and relationship management aspects defined along the social-personal and recognition-regulation dimensions as described in Figure 1. Furthermore, EI competencies are especially noteworthy considering entrepreneurship education, because the used skills and abilities to achieve these capabilities are not strictly trait-based, and can be developed well (Boren, 2010).

Figure 1. The four quadrants of Emotional Intelligence (Riopel, 2022)

	Recognition	Regulation
Personal Competence	**Self-Awareness** • Self-confidence • Awareness of your emotional state • Recognizing how your behaviour impacts others • Paying attention to how others influence your emotional state	**Self-Management** • Keeping disruptive emotions and impulses in check • Acting in congruence with your values • Handling change flexibly • Pursuing goals and opportunities despite obstacles and setbacks
Social Competence	**Social Awareness** • Picking up on the mood in the room • Caring what others are going through • Hearing what the other person is "really" saying	**Relationship Management** • Getting along well with others • Handling conflict effectively • Clearly expressing ideas/information • Using sensitivity to another person's feeling (empathy) to manage interactions successfully

Miller (2020) additionally recognizes the team building activity, an entrepreneur undertakes within the organization, as a predeterminant of success considering social relations. Besides this, he also denotes the personality traits curiosity, adaptability, persistence, the ability to be comfortable with failures and the desire for structured experimentation as further individual characteristics of successful entrepreneurs. Furthermore, it can be tracked from the analysed literature, that high associated levels of differentiating characteristics of entrepreneurs and non-entrepreneurs, such as Need of achievement, Innovativeness, Tolerance of ambiguity are also described frequently as success factor skills.

2.1.2.3 Entrepreneurial Self-Efficacy

Entrepreneurial Self-Efficacy (ESE) describes how the cognitive and affective reasoning of entrepreneurs is influenced by the relationship between individual and situational context (Lyons et al., 2015) and it is used to illustrate entrepreneurs who have great adaptability skills in case of unforeseen events and can manage ambiguity well. Furthermore, ESE is also connected to improvisational alertness and generally improvisation itself (Balachandra, 2019), which has been recognized by Hmieleski and Corbett (2008) as a critical parameter in

entrepreneurial processes. In addition, Lyons et al. (2015) also adds to the definition of ESE the additional meaning that the entrepreneur believes in the owned abilities to secure success and regulate cognition to achieve challenging goals in this context. Out of its malleability as a construct, Entrepreneurial Self-Efficacy holds a prized position in entrepreneurship education (Lyons et al., 2015), as it has a capacity to be facilitated through developmental programmes (Zhao et al., 2005). Additionally, in accordance with its popularity in education, the ESE conception is also used in several research in this field (Maritz & Brown, 2013; Zhao et al., 2005; Lyons et al., 2015). It is therefore clear that Entrepreneurial Self-Efficacy is a highly relevant concept for entrepreneurship and its education for the above-mentioned reasons. However, it is mostly important for this current research because it relies on personal and social skills identified to be relevant for entrepreneurs, such as Adaptability, Confidence or Tolerance for ambiguity, which can be potentially improved by improvisational theatre-based training techniques, as it will be discussed later below Chapter 2.4 (Improvisation theatre practices for entrepreneurial development).

2.2. Cross-fertilization of arts and business

Arts and business have been considered as separate practices for long, keeping the fields strictly disconnected in the work environment and education. However, nowadays these dividing walls seem to crumble, due to the changed environmental, technological and social circumstances. David Pearl, consultant and opera singer, suggests in Adler's (2006) study that these profession areas should not be regarded separately, but as "different aspects of the creative process" (p.488). Harvey Seifter (2004) also claims that business leaders have started to see the value in learning from the insights of artists for facing challenges within and outside the company (Adler, 2006). At the same time, integrative forms were also proposed from the artistic side to incorporate entrepreneurship in education, as artmaking was identified as an essentially entrepreneurial process and therefore, it should be considered entwined with entrepreneurship rather than just co-existent (Callander, 2019). This realization of the possible benefits of crossing boundaries of traditionally conceived distinct spheres of arts and business (Adler, 2006) brought in a bigger potential scope for effective skill development for successful performance in both fields through the cross-fertilization of practices. Adler (2006) notes that the time appears to be right for this commingling because the hierarchies of corporations are transforming, and are increasingly reliant on creative, committed and innovative work forces, as it was discussed in Chapter 1.

For this shift that resulted in the emergence of combining arts and business conventions, Adler (2006) identifies five drivers: (1) the rapidly increasing global interconnectedness, (2) the increasing domination of market forces, (3) the increasingly turbulent, complex and chaotic environment, (4) the decreasing costs of experimentation due to technological advances and (5) the increasing psychological yearning for significance within individuals. Weick (2007) and Sutherland (2012) consider the "complex, dynamic, chaotic and highly subjective, interactional environments of contemporary organisational contexts" (Sutherland, 2012, p.26) as the cause behind the growing trend of "combining the global influence and entrepreneurial skills of business with the inspirational creativity and improvisational skills of the artist community"(Adler, 2006, p.497), while Kerr and Lloyd (2008) highlight the redefined expectations towards workforce, both supporting Adler's (2006) statements. As it can be seen, all of these reasonings fall in line with the one that make certain entrepreneurial skills inevitable for the 21st century.

From the perspective of arts-based methods used in the business sphere, they often emerge where traditional methods failed to achieve the desired outcome (Barry & Meisiek, 2010). In higher education. Martin (2019) connects the usage of these new developmental

practices in answer to the need for increasing student's engagement where their willingness to participate in learning activities shows a declining trend. Moreover, Gibb (2004) emphasizes that arts-based methods tend to be a useful tool to enliven teaching practices for such original curriculum parts, as communication skills training. He also suggests that while learning by following instructions can result in dubious success for adult learners, these methods tend to assist effectiveness.

For further illustration of the interaction between arts and business in developmental programs, Table 2 contains examples of already existing arts-based method implementations, that were investigated or mentioned by academic literature.

Table 2. Examples of using Arts-based Methods

Mentioned by	Example of Arts-based methods
Adler, 2006	- The Wharton School of the University of Pennsylvania: "compulsory MBA workshop entitled "Leadership Through the Arts," facilitated by the world-renowned dance company Pilobolus, in which participants explore movement, improvisation, and collaborative choreography." (p.488) - MIT: "three of the 2003/2004 Sloan Leadership courses had arts-based components, including "Unconventional Leadership: A Performing Advantage" (Flaherty, 2002) and "Leadership as Acting: Performing Henry V." (p.488) - University of Chicago: "Leadership Exploration and Development course", where "MBAs write, produce, and showcase a film." - Oxford University: "offers executives conductor Peter Hanke's course, "Leadership as a Performing Art." (p.488) - Cranfield University: "leadership development programs based on Shakespeare" (p.488) with the course Mythodrama in Residence held by Richard Olivier actor/director.
Taylor & Ladkin, 2009	- Virginia Commonwealth University: "medical residents are taught theater skills to increase their clinical empathy (Dow, Leong, Anderson, & Wenzel, 2007)." (p.55) - LEGO company in Denmark: "managers build 3-dimensional representations of their organizational strategy using LEGO bricks (Roos, Victor, & Statler, 2004)." (p.55) - U.S. Army: "leaders look to the film Twelve O'Clock High to illustrate key lessons about leadership (Bognar, 1998)." (p.55) - Babson College: MBA students "take art classes to enhance their creativity (Pinard & Allio, 2005)." (p.55)
Mockler, 2002	- Shakespeare Globe Theatre: "offers a weekend executive management skills training program based on Shakespeare's plays (Cowell, 1999; Hamilton, 1999)." (pp.578-579) - The Royal Shakespeare Company: "has a 1-day program in which managers are coached by a director, using theatrical techniques, in skills from voice projection to problem solving." (p.579)
Moshavi, 2001	- Ogilvy & Mather and PricewaterhouseCoopers: pay "for employees to attend improvisational theatre classes, convinced that improvisation can help employees generate creative responses to client demands, facilitate meetings, and offer ideas to superiors (Quintanilla, 1999)." (p.447)

Even though that most of the educational programmes and professional trainings represented in Table 2 are for managers or leaders, this research proposes that the skillsets sought with these methods are intertwined with the ones determined following entrepreneurial research. Colbert (2003) admits this interconnectedness by proposing leaderships skills as essential tools of entrepreneurs wishing to succeed. Supplementing this, Mehmood et al. (2020) introduces the relatively new concept of entrepreneurial leadership, which serves as additional evidence that the essential capabilities of entrepreneurs and leaders are increasingly aligned. To further prove this assumption, Table 3 illustrates the conceptual and theoretical convergence of leadership and entrepreneurship (Cogliser & Brigham, 2004).

Table 3. Conceptual overlap of leadership and entrepreneurship (Cogliser & Brigham, 2004)

Construct	Leadership application	Entrepreneurship application
Vision (followers/larger constituency)	Vision is the main component in inspiring followers toward exemplary performance or other goal-directed behavior as well as organizational performance (Baum et al., 1998; Kirkpatrick, Wofford, & Baum, 2002; Zaccaro & Banks, 2001)	Vision attributes (brevity, clarity, abstractness, challenge, future orientation, stability, and desirability or ability to inspire) and content (growth imagery) are related to new venture growth (Baum et al., 1998); followers need to be motivated through involvement, participation, and a professionally meaningful mission (Keller, 1997).
Influence	A commonality across many of the various definitions of leadership is the ability to influence others toward a goal (Hunt, 2004). Rational persuasion is widely used for both upward, lateral, and downward influence (Yukl & Falbe, 1990)	Entrepreneurs not only see opportunities (understand the ways and means), but are able to marshal resources to carry out their vision. Use of rational persuasion and inspirational appeals (Gartner et al., 1992) are likely to be effective when the request is legitimate and in line with the entrepreneur's values and the constituencies' needs.
Leading in the context of Innovation/Creativity	Leading creative people requires technical expertise and creativity, employing a number of direct and indirect influence tactics (Mumford et al., 2002b)	Entrepreneurial leadership should involve idea generation, idea structuring, and idea promotion (where idea generation is critical in the early stages of a venture and idea structuring and promotion are more important in latter stages).
Planning	In complex, dynamic environments where people must coordinate their activities, planning represents a key influence on performance (Mumford et al., 2002a)	Entrepreneurs have a clear need for the mental simulation of future actions to anticipate potential biases in strategic choices (Busenitz & Barney, 1997).

2.3. Arts-based methods

2.3.1 Arts-based methods in general

Arts-based methods denote the incorporation of art forms, such as drama, drawing, literature or music into business skill development practices (Garavan et al., 2015) in aim to cultivate soft skills and general understanding of issues through creative processes and to achieve learning goals by a transforming aesthetic experience (Sutherland, 2012) that includes reflection, awareness, imagination, collaboration and adaptability (Kerr & Lloyd, 2008; Darsø, 2004; Gibb, 2006; Turner, 2006). These methods can also be used to develop mindset characteristics in regard of affecting emotional intelligence capabilities, identity formation, openness to experience and feedback orientation (Krasman, 2010; Garavan et al., 2015).

Taylor (2008) names four main advantages of incorporating arts-based practices in training structure: "(a) they represent tacit/embodied forms of knowing or direct sensory experience; (b) such experiences may be interpreted holistically rather than through logical, systematic processes; (c) they encourage meaning-making related directly to personal experiences and (d) arts-based experiences may have lasting impacts because they are enjoyable and shareable" (Sutherland, 2012, p.27). Barry and Meisiek (2010) further highlights how these methods lead to the realization of multiple perspectives and interpretations in individuals in a playful way, which can contribute to the better understanding of situational context.

Arts-based methods are also capable of supporting development by:
- improving skills and abilities, such as:
    (a) relational sensitivity, which embraces emotional sensitivity, inclination to engage with others and be responsive to them and initiative to keep up beneficial social connections (Woods et al., 2020)
    (b) effectiveness of perceiving the environment by listening and noticing (Woods et al., 2020) and developing new ways of describing and relating to its complexity, which results in a wider variety of possible responses to circumstances (Taylor, 2008; Wicks & Rippin, 2010)
    (c) adaptability to the unfamiliar, and willingness to undertake risks and take responsibility (Woods et al., 2020)
    (d) impression management, that supports the perceived picture of a leading individual from the perspective of followers, builds willingness for acceptance in subordinates (Bass, 1985; Biehl-Missal, 2010) and increase overall commitment for the vision (Conger and Kanungo, 1987; Fairhurst, 2001;

Biehl-Missal, 2010) within organizations by using rhetoric tools, presentation skills and controlling passion (Biehl-Missal, 2010)

    (e) non-logical, non-rational capabilities (Sutherland, 2012) and self-knowledge (Sutherland, 2012; Barry & Meisiek, 2010)

    (f) aesthetic awareness, which assists the usage of emotional and intellectual tools and complement conventional education methods (Garavan et al., 2015; Bathurst et al., 2010)

- providing a diverse set of learning forms:

    (a) learning by doing, or experimental learning (Taylor & Ladkin, 2009, Sutherland, 2012), which is defined as the knowledge formation through the transformative forces of experience (Kolb, 1984; Sutherland, 2012)

    (b) self-configurative development (Sutherland, 2012) with the provision of self-review activities (Woods et al., 2020)

    (c) embodied, tacit knowledge transfer (Taylor & Ladkin, 2009; Sutherland,2012)

    (d) meta-level learning, that is described by Springborg (2012) as "changes in processes of perception, reasoning, and ways of experiencing that shape our current experience and learning" (p.117)

    (e) fostering alternative learning processes that can complement or challenge the previous traditional frameworks of understanding, and support analytical and critical abilities (Woods et al., 2020)

- Emphasize cooperation and collaboration, by promoting pro-activity, innovativeness (Woods et al. 2020) and teamwork (Crossan. 1998)

2.3.2 The four groups of arts-based methods

Arts-based methods are as diverse as the artistic processes they are reliant on. Therefore, multiple groupings can be made following distinctive characteristics in an attempt to understand their scope and impact more unequivocally, than considering all educational phenomena under the umbrella term "arts-based". Based on existing literature, the European Arts-Based Development of Distributed Leadership and Innovation in Schools (ENABLES) project differentiated (1) General Arts-Based Methods, where a mixture of methods are used, or the exact methodology is not specified in studies, (2) Craft-based (clay, dolls or masks), (3) Art-based (drawing, painting, visual and studio-based arts), (4) Narrative-creative (poems, storytelling), (5) Music, (6) Embodied (movement related practices), (7) Dance or performance methods (specifically employing dance movement or drama and improvisational

theatre techniques) and a further distinguished group for (8) the mixture of General Arts-Based and Embodied Methods (Woods et al., 2020). However, even though tracking the areas of conducted research in the field of the cross-fertilization of arts- and business-related practices is extremely helpful for having a holistic view on achievements and theoretical suggestions in the subject, it gives a somewhat unclear differentiation on method specificities, which makes it hard to distinguish similarities in impact and inner mechanisms and guide educational process formation smoothly.

Out of this reason, Taylor and Ladkin's (2009) clustering of methods (Skill transfer, Projective techniques, Illustration of Essence, Making) was found to be the most clearly and well-defined, and widely accepted and used by other authors (Barry & Meisiek, 2010; Sutherland, 2012). Figure 2 presents this typology determined by Taylor and Ladkin (2009).

Figure 2. Typology of Arts-based Processes by Taylor and Ladkin (2009)

2.3.2.1 Skills transfer

This method group relies on the assumption that there are certain skills that can be acquired and developed through artistic or drama pedagogical exercises, which can be later transferred into the business environment in an unchanged form. These skills do not need to be closely related to the arts, but mainly include artistic activities that develop the components of entrepreneurial, managerial or leadership competencies (Taylor & Ladkin, 2009). The manifestation of skill transfer in training can be observed in exercises designed to develop improvisational skills, listening to others and attentiveness to peers. These exercises have an anchoring power in the minds of the trainees for later use, making the lessons learned easier to recall and incorporate into everyday life. It is a so-called learning by doing process, which is perhaps the most appropriate form for management training because of its memorising and

routine-removing effects, as mentioned above. However, as with any learning process, practice is necessary (Taylor & Ladkin, 2009). Improvisation theatre techniques used for entrepreneurship development belong to this group and will be discussed more in depth in the following chapter considering their impact and the affected entrepreneurial skills by them following the theoretical and empirical works of Gagnon et al. (2012), Crossan (1998), Wang and Chia (2019), Balachandra (2019) and Moshavi (2001).

2.3.2.2 Projective technique

Projective techniques are methods that help to uncover unconscious thoughts. Organizational and personal problems, as well as the strategy and structure of organizations, can be visualized using creative means by applying these practices. Fundamentally, the aim is to develop self-awareness, to define ourselves and our problems, and development goals in the light of the realizations that came through creative processes and creative work. These techniques bring tacit knowledge to the surface in a form that can be seen and perceived by others.

Projection techniques help individuals to better understand detailed and complex organisational problems, and thus to reject the notion that only personal objective truth can be interpreted in each situation, ignoring the thoughts of other members of the organisation. Generally, this form of thinking is used when working on an existing organisational problem or when strategy is being formulated or redefined. A potential projection technique can be as easily manifested as to solely ask participants to use drawing tools as part of a workshop to visualise an existing organisational problem (Taylor & Ladkin, 2009).

2.3.2.3 Illustration of Essence

This subgroup of arts-based methods is often used to make participants understand certain situations, behavioural patterns or even tacit knowledge. Reflecting on a movie scene is a common application of this form of arts-based methods, where the observers reflect upon the seen clip by analysing it and projecting the perceptions to real life events and their personal experiences. General conclusions, character judgements can be drawn from the films, stories or other artifacts presented. These can model emotional, rhetorical and actional responses that may or may not be desirable in a given situation. In terms of business training, it is worthwhile to monitor the characteristics that influence an entrepreneur's perception by stakeholders, both in terms of communication skills and in terms of attitude and decision-

making. The "illustration of essence" brings out a self-reflective process from the participants, as desired and attractive personality traits are not perceived uniformly by everyone, even if general conclusions can be made consistently. Based on the perceived qualities, development goals can then be set, which must be accompanied by an open and realistic self-assessment and a desire to improve (Taylor & Ladkin, 2009).

In management education, examples and lessons are sought mainly through the illustration of film clips and the analysis of the works of Shakespeare and other writers on the functioning of organisations and the concept of leadership. The assumption in this method is that there are fundamental aspects of effective leading and managing that are universal and, when communicated through an art form, a personal attachment is created with the recipient who observes and interprets the situations. This process is complex and nuanced, which can lead to the formulation of developmental goals (Taylor & Ladkin, 2009).

2.3.2.4 Making

Making creative, expressive things is a cathartic experience that opens the door to subconscious ideas, experiences and feelings. It can also have a calming and meditative effect on the practitioner. Sculpture, painting or even mask-making can be part of these practices, which are intended to represent the style of leadership or the inner world of the individual in question. The underlying assumption is that the creation helps us to experience our personal presence in the process. Making teaches participants to focus on the moment, themselves and on their environment at the same time through creating artistic pieces (Taylor & Ladkin, 2009).

2.3.3 Arts-based methods in practice

In practical application, these method groups described by Taylor and Ladkin (2009) are usually not presented separately, but combinedly, often in the form of exercises that build upon each other. The resulting combinations of different kinds of methods create synergies, that can enhance the effectiveness of the training, provided that the exercises are selected according to the group's specific objectives. Accordingly, it might be preferential to design the structure of the training and define the expected results and the areas to be developed within the group in advance. In case of workshop series this might also require the monitoring of where each group member is on the developmental process, what are the already acquired skills and the ones that still aimed to be obtained.

In addition, it is important to be prepared for the difficulties that may arise during training, which should be taken into account when applying arts-based methods. One of the issues that might need to be tackled from the educational body, is the resistance of participants. Participants in the training, due to the sense of unfamiliarity coming from engaging in artistic activity, may feel that their abilities in this area are limited and may therefore feel uncomfortable, which can lead them to be reluctant to participate constructively in the training programme. As part of a well-constructed course, this resistance can be overcome with appropriate guidance from the facilitator. His or her work, albeit in the background, is essential to the dynamics of the training and the successful developmental outcome for participants. Consequently, the wrong choice of facilitator is also a risk factor for the effectiveness of the training. (Taylor and Ladkin, 2009)

2.4. Improvisation theatre practices for entrepreneurial development

2.4.1 Improvisational theatre (Improv)

Traditional managerial and leadership roles can easily be compared to traditional theatre practices. As actors have the script to lead their actions, organizational figures follow the strategy. The role of directors in production can be discussed in comparison with CEOs, entrepreneurs and leaders. And as in traditional theatre, old-fashioned corporations often operate without incorporating the input of audiences through the production process (Crossan, 1998) to just mention few of these simple similarities. Although these traditional capacities can be useful in some situations, they lack to reflect upon the accelerated, changing environment we live in, and most aspects of the entrepreneurial activity, which leads to the assumption that the incorporation of new flexible approaches both in handling businesses and learning principles of it became much needed.

Improvisation theatre (improv) counterpoints traditional approaches (Crossan, 1998). In improv, actors make a performance without script or any precious knowledge on situations in interaction with the audience as they go (Gagnon et al., 2012; Gibb, 2004). Acting is undertaken in an intuitive and spontaneous manner by performers, who are building upon "more traditional and fundamental skills" (Crossan, 1998, p.593) in an impromptu way. In organizations, this improvisational flexibility especially needs to gain acknowledgement for lasting viability (Crossan. 1998) and it is an inevitable part of entrepreneurship from various aspects (new venture success, HR expectations, responsiveness to environmental changes, etc.). Improvisation-based training refers to the utilization of improv theatre techniques,

originally designed for actors to achieve specified learning outcomes, for business skill development. Crossan (1998) argues after observing and working with the Second City Improvisation Company, that the fundamental attributes of improv can be effectively transferred into managerial training, being part of the skill transfer arts-based method group. In addition, Gagnon et al. (2012) assesses that the skills used in this kind of theatrical art perfectly match the expectations from newer leadership theories. However, there is little existing literature that connects entrepreneurship and improvisation theatre, despite their unmistakeable similarities in used skillset and mind-set creation. Although Balachandra (2019) remarks the significant acknowledgement of improvisation in entrepreneurship theory and highlights its importance for opportunity realization, in arts-based method research for the effectiveness of improvisation theatre practice incorporation in entrepreneurship education is scarce. This paper seeks to strengthen the connection between arts-based methods and entrepreneurial development practices by investigating the impact of these practices in the training structure in accordance with the already existing theoretical assumptions and empirical findings for managerial and leadership skill development.

2.4.1.1 Principles of improvisation

The core principle of practising improvisational theatre is the so-called "yes-anding". This concept embraces the notion to never deny the information received from the other actors in the scene or the suggestions made by the audience when they asked to contribute (Moshavi, 2001). In simpler terms, it means the acceptance of the offers made and building on them (Crossan, 1998). This rule of improv ensures the smooth continuity of dialogue and that no single player can dominate the outcome (Moshavi, 2001). All other directives can be seen as connected features derived from "yes-anding". Spontaneity (Wang & Chia, 2020) enables individuals to be able to react to the received information or action promptly. Following the groups choices (Wang & Chia, 2020) enhances scene fluidity and comes from the universal welcoming of ideas, which are built on afterwards by principle (Wang & Chia, 2020; Crossan, 1998, Balachandra, 2019). These fundamental phenomena in improvisation are complemented by the always present active listening (Balachandra, 2019), observation (Balachandra, 2019), attention and concentration (Crossan, 1998) through the performance, that establish and contribute to fulfilling the rules necessary to successful improvisation.

2.4.2 Interrelated areas of business and improvisation

Crossan (1998) identifies six overlapping domains of management and improvisation where these two considered related: "(1) Interpreting the Environment; (2) Crafting Strategy; (3) Cultivating Leadership; (4) Fostering Teamwork; (5) Developing Individual Skills; and (6) Assessing Organizational Culture" (p.595) as shown in Figure 3.

Figure 3. Areas of Improvisation (Crossan, 1998)
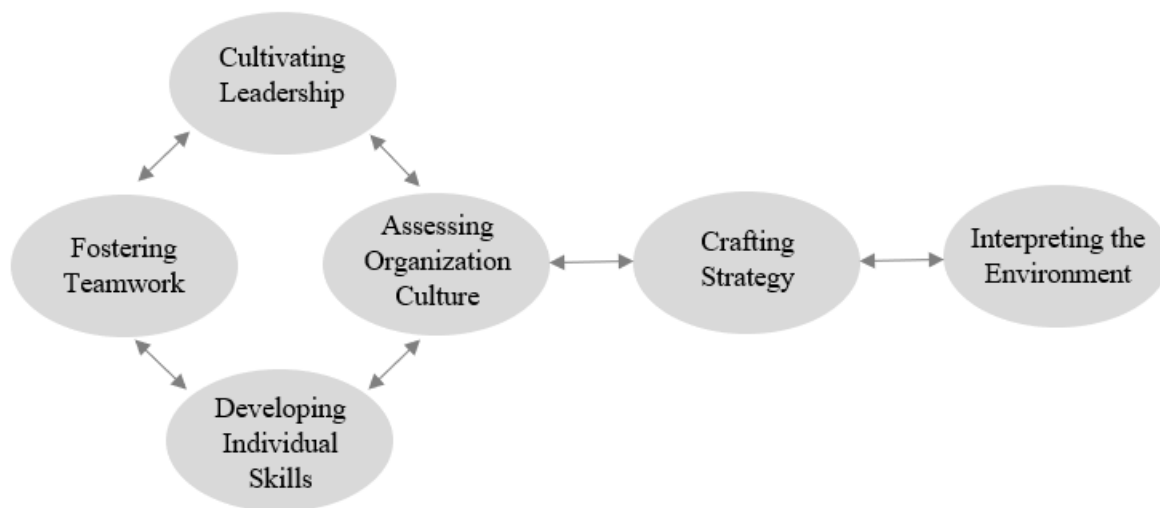
(1) Interpreting the environment: In improvisational situational exercises, participants need to react to the actions of peers (internal input in the scenes), and the facilitator/audience (external environment) spontaneously and immediately. Through the exercises, the environmental influences' importance is clearly detectable for both observers and participators, and it stretches the control boundaries and mechanisms of individuals. The adaptation to successfully perform tasks in improv often requires the participating members to break out of their traditional or general mindset in order to comprehensively explore their environment and discover opportunities in its complexity (Crossan, 1998). This also necessitates reliance on intuition, which plays an important role in entrepreneurial decision making.

(2) Crafting Strategy: While traditional, classroom-based business education prepares prospective leaders and entrepreneurs how to build an intended strategy, improvisation supports the development of skills that can help to realize emergent strategies. In contrast with traditional top-down or bottom-up strategy formulation, emergent strategy creation is a more spontaneous, intuitive and action-oriented process (Crossan, 1998).

(3) Cultivating Leadership: Improvisation theatre offers an excellent opportunity to take on various roles, which can be either leading or following in nature, in accordance with the actors' interactional dynamics. Therefore, with this arts-based method in training, practising

leadership skills is accessible to all (Crossan, 1998). In addition, certain exercises remarkably capture control delegation, which can nurture shared (Wang & Chia, 2020) or affiliative leadership practises (Gagnon et al., 2012).

(4) Fostering Teamwork: According to the already introduced core improvisational principle of "yes-anding", ideas cannot be rejected, and resistance cannot be showed against how the scene goes by the players. Although accepting others' ideas without hesitation is clearly not transmittable directly to the business environment, giving attention to other's needs and ideas, listening to suggestions and building initiatives together certainly is. Besides, the gesture of accepting proposed intentions for the scenes is also important for team building objectives. Following this improv principle assists the creation of a safe space for participants, where they can bring out the full potential of their skills and ideas. Moreover, it forges a common goal between the players in scenes, where they can feel the interdependence on each other's actions, which highlights the significance of building trust in teamwork (Crossan, 1998).

(5) Developing Individual Skills: Claxton (1984) signifies that effective learning can only be taken on by individuals who are willing to risk four identified Cs: "the desire to be consistent, comfortable, confident and competent" (Crossan, 1998, p.597). Improvisation threatens all these Cs, and it compel participants to handle psychological risk. This might occur from the unusual, unfamiliar surrounding circumstances of doing artistic exercises, or from the lack of control over situational outcomes. These new experiences that often coupled with one's internal tension and abandonment of comfort zone, can widen competencies and introduce new behavioural patterns.

(6) Assessing Organizational Culture: Training that incorporates this kind of arts-based elements can serve as a bonding point to the participating individuals. It provides a changed environment from the usual, where they can talk to each other informally and build relationships. Moreover, the situational comedy that usually comes from improvisational games brings laughter and joy to the group members and taken together can function as a base for creating a trusting organizational culture (Crossan, 1998).

2.4.3 Skills in Improvisation

In the interrelated domains, several individual and interpersonal skills are affected that can be identified either under each segment determined by Crossan (1998) or as an addition to them. Through improvisation theatre practices, all individuals experience heightened need for

listening skills (Crossan, 1998), external focus adoption, responsiveness and the mobilization of their inner ability to adapt (Gagnon et al., 2012).

Gagnon et al. (2012) argues that improvisation is an exceptional tool in contribution for affiliative leadership learning. In their model the effects can be distinguished as ones supporting maintaining and external attention-centeredness and ones influencing relationship building. External focus can be further broken down to the sub-ability groups of (1) being in the moment, (2) whole listening and (3) taking care of your partner. For (1) being in the moment, the participants of improv training have to act spontaneously, switch to active thinking from habitual, and be mindful in their actions. (2) Whole listening goes beyond the concept of simply hearing things, it expresses awareness to all audible impacts and the understanding of these cues to interpret meaning, intention and action. Moreover, (3) focusing on the others enhances empathic capabilities and a mutual supporting attitude to both reach their maximum potential and well-being in the scenes. Besides this, practising improv exercises with others strengthens one's openness to adopt multiple perspectives, builds trust within the group and requires practising both taking and giving control. Willingness to take risks also occupies a central place in their discussion, which can be seen as an outcome of being more confident in unfamiliar, quickly changing situations due to the increased creative and problem-solving skills from the group activity, and the facilitated individual capabilities to be resourceful and flexible (Gagnon et al., 2012). Furthermore, improv illustrates how commitment to actions creates engagement. When actors stay devoted to scenes, even if they might not go to the exact direction that was desired, showing convincing engagement can increase the support from the audience's part (Crossan, 1998).

This higher risk-taking propensity is also mentioned by Moshavi (2001), as a consequence of practicing improvisation principles and the constant time pressure for making decisions. Going through these challenging exercises build confidence and reduces the fear of making mistakes over time (Moshavi, 2001). Considering these influenced aspects, it is not hard to come to the conclusion that improv can contribute to building and entrepreneurial mindset, therefore self-efficacy (Balachandra, 2019). Balachandra (2019) found that impression management, team-oriented culture and environment building, and constructive conflict management are encouraged by undergoing training with improv techniques, which are all promote entrepreneurial self-efficacy. Furthermore, the related term improvisational alertness is also developed in such educational practices, which refers to the entrepreneurs' attentiveness for interpersonal aspects of handling business affairs (Balachandra, 2019). In addition, social skills of collaboration (Balachandra, 2019; Gagnon et al., 2012; Gibb, 2004;

Moshavi, 2001; Wang & Chia, 2020), communication (Crossan, 1998; Gibb, 2004; Moshavi, 2001) and interdependence are used fundamentally in improvisation.

A more comprehensive overview of the affected competency areas described by the researched literature is presented in Table 4, demarcating the findings into two groups based on whether the skill development is perceived more individually (innate competency expansion) or collaboratively (external, interpersonal ability enhancement).
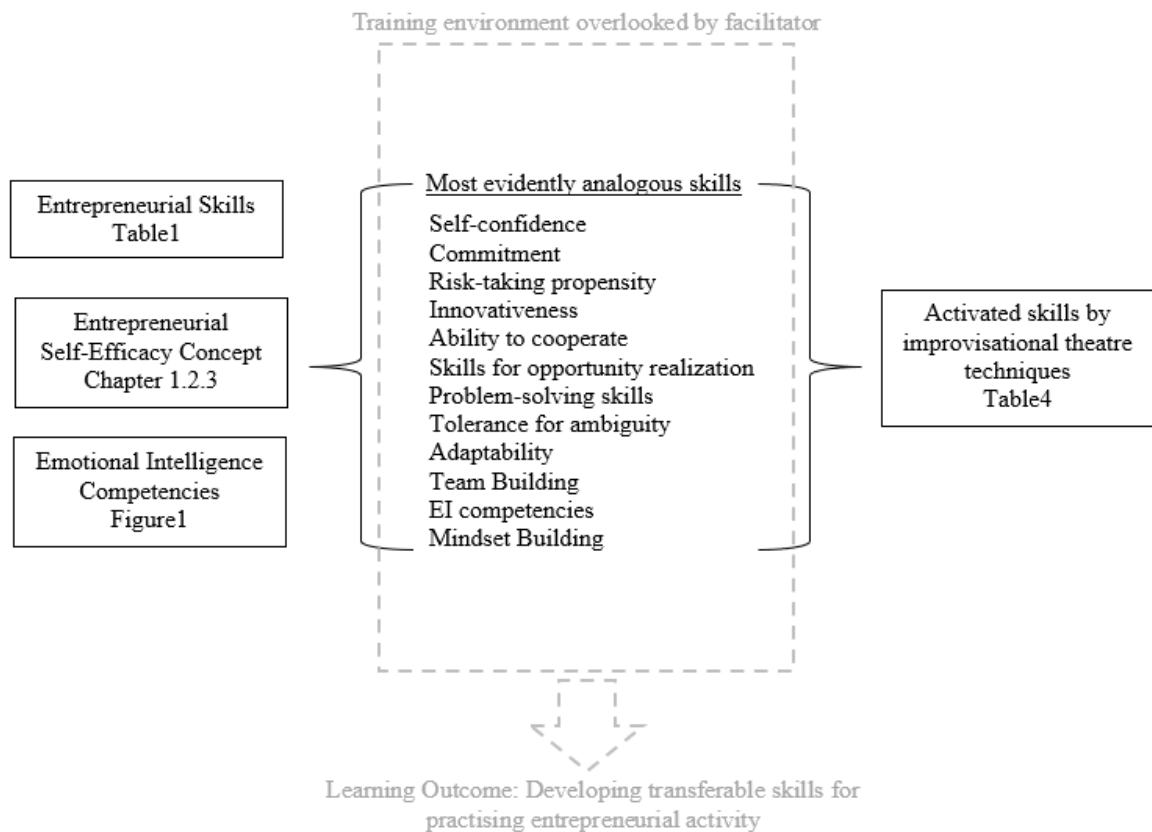
Table 4. Activated skills by practicing improvisational theatre-based training

Personal	Social
• Commitment (Crossan, 1998) • Listening skills (Crossan, 1998; Gibb, 2004; Wang & Chia, 2020) • Story-telling skills (Crossan, 1998) • Capacity to improvise (Crossan, 1998) • Promotion of innovation and effectiveness (Gagnon et al., 2012; Moshavi, 2001) • Willingness to act spontaneously (Gagnon et al., 2012; Gibb, 2004; Wang & Chia, 2020) • Active thinking (Gagnon et al., 2012) • Ability to be mindful (Gagnon et al., 2012) • Confidence, resourcefulness, flexibility (Gagnon et al., 2012) • Ability to adapt multiple perspectives (Gagnon et al., 2012; Wang & Chia, 2020) • Being in the moment (Gagnon et al., 2012; Wang & Chia, 2020) • Control (Wang & Chia, 2020) • Entrepreneurial mindset building (Balachandra, 2019) • Adaptability (Balachandra, 2019, Gagnon et al., 2012; Moshavi, 2001) • Impression management (Balachandra, 2019) • Risk-taking propensity (Moshavi, 2001) • Creativity (Gibb, 2004; Moshavi, 2001) • Awareness (Gibb, 2004) • Problem-solving skills (Moshavi, 2001)	• Communication skills (Crossan, 1998; Gibb, 2004; Moshavi, 2001) • Partner/Peer focus and orientation (Gagnon et al., 2012; Wang & Chia, 2020) • Empathy (Gagnon et al., 2012) • Relationship building (Gagnon et al., 2012; Moshavi, 2001; Wang & Chia, 2020) • Collective creativity and problem-solving ability (Gagnon et al., 2012) • External environmental focus (Crossan, 1998; Gagnon et al., 2012; Wang & Chia, 2020) • Collaboration (Balachandra, 2019; Gagnon et al., 2012; Gibb, 2004; Moshavi, 2001; Wang & Chia, 2020) • Reading followers (Wang & Chia, 2020) • Good team environment creation/Team building (Balachandra, 2019; Moshavi, 2001) • Effective interaction management (Gibb, 2004) • Improvisational alertness (Balachandra, 2019) • Trust building (Gibb, 2004; Moshavi, 2001; Wang & Chia, 2020) • Constructive conflict management (Balachandra, 2019)

2.4.4 Identified overlapping skills with entrepreneurship

Considering both the literature on essential entrepreneurial characteristics and arts-based methods for business skill development, the following overlapping competencies were identified, for which enhancement is highly probable theoretically through participating in improvisational workshops specifically designed for entrepreneurial learning: Self-confidence, Commitment, Risk-taking propensity, Innovativeness, Ability to cooperate, Skills for opportunity realization, Problem-solving skills, Tolerance for ambiguity, Adaptability, Team Building, EI competencies and Mindset Building. To support the recognition process and visualize the interplay of matching characteristics, Figure 4 presents the hypothesised "most evidently analogous" possible skills benefiting aspiring entrepreneurs by engaging in the specific arts-based method of improvisational theatre exercises, that ensure immediate skill transfer for them to their chosen business field.

Figure 4. Conclusion of theoretical framework

Training environment overlooked by facilitator

Entrepreneurial Skills Table1

Entrepreneurial Self-Efficacy Concept Chapter 1.2.3

Emotional Intelligence Competencies Figure1

Most evidently analogous skills

Self-confidence
Commitment
Risk-taking propensity
Innovativeness
Ability to cooperate
Skills for opportunity realization
Problem-solving skills
Tolerance for ambiguity
Adaptability
Team Building
EI competencies
Mindset Building

Activated skills by improvisational theatre techniques Table4

Learning Outcome: Developing transferable skills for practising entrepreneurial activity

3. Research Design

3.1 Introduction of the research

This research intends to bridge the gap between arts-based methods and entrepreneurial skill development possibilities in education and training structure, which has been addressed by few (Balachandra, 2019) despite the overlapping characteristics of practicing improvisational theatre exercises and entrepreneurial activity. Throughout the exploration of academic literature, several observations were taken that justifies the reasonability of the current study. Firstly, improvisation itself is associated with entrepreneurial opportunity creation and development, which is inescapable for entrepreneurs who want to succeed, however improvisational theatre method research for entrepreneurial development is extremely scarce (Balachandra, 2019). In addition, there is a further need for more empirical studies regarding any arts-based method usage in business education, that could support their efficacy (Wang & Chia, 2020). Moreover, previous studies tend to focus on one or two identified abilities to investigate (creativity and innovation (Kerr & Lloyd, 2008), perception refinement (Springborg, 2012), mindset building (Garavan et al., 2015) or entrepreneurial self-efficacy building (Balachandra, 2019)), rather than assessing the possibly improved skillset by a distinguished arts-based method comprehensively.

The thesis aims to investigate how exactly improvisational theatre techniques contribute to entrepreneurial skill development by inspecting the activated skills through impro practices, the learning method efficiency, and the general attitude of people with entrepreneurial aspirations towards incorporating artistic practices into entrepreneurship education. For this purpose, the research has a qualitative cross-experimental research design that will consist of a tailor-made workshop, built with an experienced improvisational trainer following the suggestions of the available academic literature regarding leadership development with improvisation theatre exercises (Balachandra, 2019; Crossan, 1998; Wang & Chia, 2020), where the researcher will make observations through the session and interview the participants individually afterwards. Therefore, the researcher participates in the research process three times: first by designing the workshop in collaboration with Act Attack improvisational theatre company, second by observing the course of the workshop, and third by interviewing all participants separately. Therefore, the research will rely on qualitative primary data from both the deductive and inductive code analysis of the interviews, which will be supported by the similarly qualitative full field notes made by the researcher.

Based on previous studies, it is hypothesised that the overlapping skills of Figure 4 would be enhanced by engaging in improvisational theatre training. Moreover, in a more

unstructured way, the research aims to comprehend the other recognized capabilities used and identified by participants and their evaluation of arts-based methods regarding subjective efficiency and enjoyability. Therefore, the qualitative analysis will be mixed in nature, using first a deductive approach for setting the study up, and then an inductive one to catch any unforeseen elements during the data analysis. Evidently, this means that the examination of the presence of identified capabilities through literature (Figure 4) will happen deductively, but place will also be left for further affected skill recognition and other general pattern detection in the participants' experience inductively, that might give valuable insights about the usage of improv between the later described training conditions.

This overall qualitative, but on closer inspection mixed (relying on both field notes and interview data) research strategy with an experiment conduction was chosen, because observations and interviewee perceptions must have relied upon a unified experience to result in reliable data to some extent, even though it effects the generalisability of the thesis findings (see Chapter4.4(Limitations)). A single workshop was planned due to financial and research timespan limitations. Between arts-based methods, the choice to investigate improvisational theatre techniques was based on: (1) their accessibility and scalability, (2) their minimal need for special equipment or previous experience from participants and (3) the fact that entrepreneur skill acquisition by improv is easier, because these practices are less abstract than other arts-based methods and can lead to immediate skills transfer (Wang & Chia, 2020).

Research constraints coming from the recruitment's outreach were anticipated, and it was also assumed that a large proportion of participants will be students, as the skill development session was mainly advertised through the researcher's available networks (online, off-line) and with posters and flyers mostly within the university's area. This presumption had been proved valid as it is later on discussed more in detail under Sampling. However, this aspect of the study was not considered as undesirable, due to several previous research on either entrepreneurial skill assessment (Anwar & Saleem, 2019; Gürol & Atsan, 2006) or arts-based method usage (Wang & Chia, 2020) were similarly conducted on a sample from tertiary education.

5.2 Workshop

Designing a workshop was inevitably part of the research, to give participants a uniform experience where their perceptions can be analysed reliably, and significant conclusions can be made despite limitations. The workshop's structure was built in cooperation with Act Attack, an improvisational theatre company that holds trainings for business corporations and

teams for team building and skill improvement purposes. Meetings were held to discuss the formation of the session and the included exercises in accordance with the literature's suggestions (Appendix B). After discussing the proposed exercises, the facilitator of the workshop proposed the course schedule presented in its entirety in Appendix C.

The facilitator of the workshop is the person who runs the session and responsible for its successful delivery. Her presence, actions, and guidance, although carefully kept in the background, are essential to steer the dynamics of the training to the desired direction and facilitate its effectiveness. The facilitator, to achieve the expected outcomes by both organizers and participants, needs to create a safe environment, where members of the workshop can have an adequate tolerance for error (Crossan, 1998). This serves the fulfilment of learning goals through improvisation, as actions will not be restricted by the fear of failure and judgement of peers.

Even though, the facilitator mainly acts as a supporter from the background, some interference is needed from her part throughout the session. For instance, at the beginning of the workshop, it is important to emphasise and make the participants understand why the session is being held and what are the skills that they need to implement to successfully go through exercises, bring the most out of themselves and enjoy the time spent on the session (Crossan, 1998). This can increase engagement in the exercises (thus reducing the barriers from resistance) and equip participants with learning goals. It also introduces the beneficial outcome possibilities for exchange of the time and energy invested, which can motivate participants. This first step taken by the facilitator in the start introduces useful concepts and improvisation principles as well, to create better probability for the participants to feel less tense in the environment that might endanger the four Cs in them. These characteristics of the facilitator will be evaluated by the research, serving as a criterion if the safe learning environment was sufficiently ensured for the workshop's party.

In Table 5, the core content of the workshop is shown with the short description of exercises and the supporting academic or professional background. As it can be seen, the workshop's phases follow an increasing intensity until they peak in improvisational scene creation exercises, and as a cool down after this, a storytelling exercise leads to the conclusion and closure of the workshop. In addition, at two points (in the middle and in the end) of the workshop the opportunity to reflect on the experience were given to the participants, following the concept of inbuilt feedback giving proposed by Wang and Chia (2020).

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Table 5. Workshop content

Phase	Exercises	Description	Inspiration
		Introduction	
1	Catch a name	Serves as an icebreaker. The participants stand in a circle facing each other. One person stands in the middle with an A4 paper, calls one of the participants' name and throw the paper in the air. The person called needs to get the paper before it falls on the floor.	Circle Ice-braker (Wang&Chia, 2020)
	Warm-up	Participants will walk around the room following the instructions of the facilitator, imagining themselves in certain environments, and expressing themselves through movement.	Act Attack Company
2	Mirroring	Participants work in pairs. One person makes movements and the other needs to follow them like a mirror.	Mirroring (Balachandra, 2019)
	Sculpture	Participants work in pairs. One person makes a sculpture out of the working partner and presents to the group the created artwork.	Act Attack Company
	Group Sculpture	All participants become part of one big sculpture, entering the picture like a fountain voluntarily. Afterwards, a few participants express what they see in the artwork.	Act Attack Company
3	Freeze	Two individuals begin to play out a scene, and at any given moment the facilitator can freeze the scene. At this point another participant need to replace and assume the pose of one of the participants in the scene, and then unfreeze the action by taking it in a new direction. Individuals must be alert to the opportunities presented by the situation, and what they have to offer to move the scene forward. When a new person enters, the person who remains must be ready to support the new direction.	Switch (Crossan, 1998) Freeze tag (Moshavi, 2001)
	Switch	Two individuals begin to play out a scene, and at any moment the facilitator can say: "Switch". The participant needs to switch the last sentence that he/she said. The scene will continue from the last word said.	Act Attack Company
	Parachute game	Two individuals begin to play out a scene, and at any moment the facilitator can ask another participant to join and add to the scene.	Act Attack Company
4	Scenes with objects	The facilitator displays objects on a table. The participant pairs need to choose one and create scenes with it, where the object can be anything except from what they actually are.	Act Attack Company
	Suddenly, then…	As a team, the participants will tell a story. One person starts. When he/she says any transition word such as 'suddenly', 'and then', 'next day', etc. another participant will continue the story. It is important to understand that the story needs a beginning, middle and end.	Building on one another's words and Story line/pop-up (Wang&Chia, 2020)
		Discussion & Conclusion	

Throughout the experiment, the researcher was present as a passive ethnographer, making observations from the corner of the room without interfering with the participants. This enabled the attainment of a wholistic view on interactions and put the observer's whole focus on monitoring the used skills and group dynamics. Moreover, the passivity of the researcher's presence ensured lesser bias for the interviewing phase, as she did not become part of the team building activity.

5.3 Sampling

The research used generic (fixed, priori) purposive sampling to gather a small (n=10) sample. The interviews relied on the common experience of participating in the improvisational workshop experiment and all individuals having entrepreneurial aspirations, which is in line with the purposive sampling characteristics described by Bryman (2012). However, it is acknowledged that some characteristics of convenience sampling can also be traced in the sampling method deriving from the recruitment strategy. The participant obtaining strategy for the workshop incorporated a wide outreach throughout Erasmus University Rotterdam, and to the active entrepreneurs' community within the city. To directly contact people, the researcher's network was utilised, moreover flyers and posters (Appendix D) were distributed to advertise the workshop more broadly within the university and entrepreneurial community. For the recruitment process, financial incentives were not used, as

they could have distorted the sample, by increasing the possibility to include participants who are not truly open to new forms of development and do not have entrepreneurial aspiration for real. To enhance the willingness to join the research, the incentive of receiving a certificate on the successfully completed business improvisation class was employed.

The sample size was restricted by the workshop formulation parameters, for which Crossan (1998) suggests 10-20 people as the ideal group magnitude. It was further discussed with the Act Attach group, who recommended the inclusion of 10-12 members. The aimed participant number was 12 theoretically when the recruitment started, but eventually the workshop was conducted with 10 people due to last minute cancellations out of sickness. The small sample made it possible to all participants to prevail and have more chance to actively take part in the practices, and for the researcher to make more accurate field notes, as the focus had to be divided between a small amount of people. These restrictions regarding the sample's size resulted in a small, differentiated research sample from the wide research population (entrepreneurs), embracing aspiring entrepreneurs as a focused subcategory in the greater population.

The participants' identity is unrevealed in this study, which further enhanced the safe environment creation, especially from the aspect of observation making. This allowed the group members to feel truly nonrestricted by the fear of acting uncommonly in the workshop, which was also the underlying reason behind not making a video tape of the session. Furthermore, the identity details of participating members of the study have less importance, as the study method efficacy tend to be more reliant upon previous experience and general personality traits than individual factual variables, such as name and age. Therefore, the participants will be referenced in this study by using code names/pseudonyms. The participants' age ranged between 21-45 years, nine are active students at Erasmus University Rotterdam, one is a practising entrepreneur. The criteria of sampling (entrepreneurial aspirations) were fulfilled either by (1) their expressed interest in entrepreneurial venture creation, (2) their choice of study programme or by (3) their current occupation as entrepreneurs. In Table 6, the general description of participants based on their personal characteristics is presented, without specifying any individual information that can reveal their identity.

Table 6. Participant description

Participant	Current occupation	Personal description (based on self-description)
Participant(A)	Student	Overthinker. Organized person, who does not necessary likes challenges because they mean leaving the organized plan behind and require a lot of flexibility. Loves to help people, active volunteer in cultural settings. Loves learning, tries to overcome her fear of new things by engaging and challenging herself in new experiences. Afraid of failure.
Participant(F)	Student Freelancer	Characterizes herself as innovative and creative, which is further supported by her engaging in several artistic activity (drawing, pottery, acting, etc.). Likes to work in cooperation/collaboration. Feedback oriented.
Participant(H)	Student	Calm and introverted person. Sometimes like social interactions, but she finds them tiring. Like doing things consistently. She tries to do her best because she does not want to have regrets afterwards. She considers herself a creative person, even though she feels less creativity since starting tertiary education. She feels herself obliged to take on challenges for future benefits, but rather feels them necessary than actually liking them. Strong achievement orientation.
Participant(I)	Student Ex-entrepreneur	Characterizes herself as innovative and strategic. Not customer oriented. Likes taking part in innovation processes, creative destruction. More of an introvert.
Participant(J)	Student	Caring person, who by her own description places other's needs in front of hers sometimes, because she likes to please others. Positive and cheerful general personality. Overthinker. Finds it hard to be in the moment sometimes. Afraid of failure.
Participant(L)	Student	Creative, persistent person. Likes to occupy herself with multiple activity. Engaged in humanitarian activity. Likes to find solutions to problems. Goal oriented.
Participant(M)	Entrepreneur	Describes herself as a creative and social person. Talkative and caring but tends to be shy sometimes. Likes challenges generally. Wants to meet the expectations of her external environment and improve herself.
Participant(R)	Student	Names flexibility as her main personality trait. She can adapt very easily according to situations. Eclectic person, in regard of her interests. She cannot choose between her several interest fields even for her career path.
Participant(T)	Student	Curious and open-minded. Likes learning about new cultures and meeting new people. Eager to learn generally. Likes to engage in creative and innovative activities, even though she believes she is not creative enough in comparison to artists. Likes coming up with new ideas for future ventures, which she records and organizes. Always up for challenges. Highly energetic. Active volunteer.
Participant(V)	Student Freelancer	INTJ (introverted, intuitive, thinking, and judging) by MBTI personality type assessment. Thinks more than he feels. Objectively he would consider himself a creative and innovative person, but subjectively he feels that he must compare himself with others, and therefore he thinks that in comparison he is less creative and innovative than some. Likes challenges to a certain extent (he prefers personally undertaken challenges over ones requiring interaction). Likes to take full creative control over the final outputs of his work but does not necessary likes to lead.

5.4 Interviews

Semi-structured in-depth interviews were conducted with all 10 participants in a duration between 35-55 minutes, for a total of 7 hours and 18 minutes. Questions were formed beforehand and written down in the interview guide (see Appendix G). The questions primarily served (1) to map out the personality of the participants, (2) to see whether the academically described workshop parameters were met, (3) to investigate which were the main skills used by the participant in the exercises, (4) to evaluate how the participant opines on the learning method itself, and (5) to understand any common pattern in the participants' perceived individual and social experiences. Therefore, the investigation for skills and perception patterns is aligned mainly with grounded theory. Furthermore, the structure of the interviews followed the logical pattern of introduction (parameters of the participants before the workshop, or independent of the experiment), discussion on the workshop, and after thoughts. The interview's sections can be differentiated on the basis of guided questions and unguided conversation with a focus on the used skills with the participants. This later one will be most relevant in the investigation of whether Figure 4's skills and concepts can be affected by improvisational techniques truly. Moreover, this gives space to creative association from the exercises, and realizing additional significant capacities influenced. The interviews were

held within a week's timeframe from the workshop, to ensure that the experience was still rather fresh when participants were asked about their judgement on skills and practices. The place and time of the meetings were tailored to the participants' needs, therefore some interviews took place in person, some were held online via Zoom. The interviews were recorded accordingly by either using the iPhone's or the Zoom application's recording function.

5.5 Data analysis parameters

5.5.1 Ethics and data management

All participants were forwarded the consent request for the participation in the current research before the experiment. The consent form (Appendix E) included the details of the experiment and interviews, with its subject and orientation. There was no physical risk associated with participating in the research, however it was highlighted that whenever a participant feels uncomfortable either doing certain exercises or answer certain interview questions, the participant can avoid action or reply. This later aspect addressed the possible psychological risks of leaving the four Cs behind and gave the ultimate choice of withdrawing participation at any given point that made the perception of risk unbearable to participants. Moreover, participants were reassured of anonymity within the form, where any information directly leading to their identity was removed from the written documentation.

5.5.2 Analysis procedure

The interviews were transcribed with the help of Otter.ai artificial intelligence application, and the transcriptions were coded using the Atlas.ti software. The data regarding the research was safely stored in the researcher's computer, cloud and in the previously mentioned AI application's personal user page.

Codes were predetermined as represented in the Codebook (Appendix F) for the skills identified by literature (Figure 4), however further sensed activated skills and general phenomena could be derived from coding the interviews further inductively with using Emotional and In Vivo coding.

To conclude the research design, data was gathered in the subject by both observing the workshop experiment and by conducting interviews later on with the participants. The recognition of concepts within this gathered data was intended by coding the interviews to identify patterns and certain skill development possibilities, which is complemented by

researcher's observations and field notes, that will be compared with the codes from the interviews, therefore the subjective experience of participants will be investigated side by side with the seen and recognized phenomena by the researcher. The concepts of improvisational theatre techniques for business skill development and the procedure of building a fitting experiment was constructed by following previous studies (Balachandra, 2019; Crossan, 1998; Wang & Chia, 2020) also mentioned in the theoretical framework of this current paper.

4. Analysis & Results

4.1 Conditions

All participants taking part in the workshop expressed an inclination towards arts both in the beginning of the workshop (Introduction phase) and through the interview conversations. Six of them had previous experience in practicing some art field for years, and one of them already had experience with acting and improvisation (Participant(F)). This is an important feature of the sample group as previous experience and general openness towards arts most likely lowered the barriers against learning through arts-based methods, which could have led to problems or decreased effectiveness (Taylor & Ladkin, 2009).

All participants evaluated the environment sufficient to call it a safe space, where creative and developmental processes could surface. This was evaluated by asking about the external environment, the group dynamics and the facilitator's presence. Besides doing the activities in this environment, seven participants actively referred to getting out of their comfort zones during the workshop, which signifies that in spite of the created comfort, the group members could not just sink into relaxation, they constantly had to challenge themselves and "be really quick on your toes" as Participant(I) described it. Even though everyone felt the workshop to be a safe space to express themselves, some controversial things were mentioned by different participants, that lessened the sense of total creative freedom for them. Participant(L) sensed some pressure coming from the fact that the other participants were watching the scenes, and next to this Participant(I) also referred to some pressure coming from the facilitator to be funny in the scenes, which lessened the freedom of creative flow in her perception.

Despite this one feedback, the facilitator presence was assessed adequate in terms of encouragement, team building and guidance. She was assessed significantly positively by the participants regarding her personality and behaviour, which made it easier to them to interact without restraining themselves. However, the entrepreneurial concept introduction was regarded too little by Participants(I,J,L,M,R), who thought that the connection between the exercises and entrepreneurship concepts could have been made clearer and more verbally expressed regarding the entrepreneurial and educational nature of the workshop. In this matter several solutions to increase the realization of the connection between the workshop and entrepreneurial activity were proposed and will be discussed in detail under the Participants attitude towards improv based entrepreneurial skill development education part (Chapter 4.2.3).

The evaluation of the aforementioned factors was necessary for the research as the created environment highly contributes to the effectiveness of the workshop and therefore to the

creation of a reliable experiment. Even though suggestion were made for improvement, the general criteria (safe environment, facilitator's sufficient presence) were met to assess the session's conditions as optimal for conducting meaningful research on.

4.2 Findings

The findings related to skill usage are backed up by data, that can be separated into two categories. First and foremost, the discussion of perceived skills relies on the free conversation about the participants' perceptions and sensed activated skills during the workshop's exercises. This part has more significance as the mentioned skills were not suggested but recognized autonomously by the interviewees. In this segment, the investigated primary skills of Figure 4 have been realized by participants in varying extents by which their presence can be evaluated in the current experiment. Moreover, further skill usage was identified in this interview section, which indicates that these further abilities were also well-perceivably used in the improv session. These skills are indicated by X/x's in the tables, where X is used for the main investigated capacity's (Figure 4) and x refers to any further ability that was mobilized and mentioned through the interviews. The second round of recorded data complements these autonomous realizations with the participants expressed views on the provided skill table (see Appendix G (Interview guide)), where they pointed out what they felt notably utilized within the workshop. These are marked with o's. This primary data is further integrated with the researcher's observations, which are documented in the Field notes (Appendix H).

4.2.1 Affected skills by improv theatre practices

Table 7. Autonomously recognized skills from Figure 4 by semi-structured conversation

	Participants									
	(A)	(F)	(H)	(I)	(J)	(L)	(M)	(R)	(T)	(V)
Self-confidence	X	X	X		X	X			X	
Commitment				X						
Risk-taking propensity		X	X		X	X			X	
Innovativeness	X				X	X	X	X		
Ability to cooperate	X			X	X	X	X		X	X
Skills for opportunity realization	X			X	X					
Problem-solving skills										X
Tolerance for ambiguity										
Adaptability			X		X			X	X	X
Team Building	X	X	X	X	X	X	X		X	
EI competencies	X	X	X		X	X	X	X	X	X
Mindset Building		X	X			X			X	

Table 8. Further recognized skills by participants

	(A)	(F)	(H)	(I)	(J)	(L)	(M)	(R)	(T)	(V)
Active thinking				o		o		o		
Awareness of multiple perspectives	x	x	x	x		x	x	x		
Being in the moment			o		x		o	o		o
Capacity to improvise	o		x		x	o	o			
Collaboration	x	o	o	x		x	x		x	
Communication skills	x		o		x		o		x	
Concentration								x		
Confidence with failure	x		x				x			
Control	o	x		x	x					o
Creativity	x	x	x	x	x	x	o	x		
External environmental focus	x		x	o	x					
Imagination								x		
Impression management					x				x	x
Interpreting other's actions					x					
Listening	o		x		x		o			
Mindfulness		x								
Openness		x								
Peer orientation	x	x			x	x		x	x	
Quick-thinking		x		x		x	x	x		x
Reacting			x		x					x
Reading peers				o					x	
Relationship building	o	x					o			
Resourcefulness, flexibility	o		o					o		
Spontaneity		x	o	o	x					o
Tolerance		x								
Trust building	o	o				o			x	x

x: recognized autonomously
o: recognized based on the provided skill table

As it can be read from Table 7, Cooperation, Team building and EI competencies were mentioned most meaningfully by participants with nine, eight and seven persons including them in the conversation about perceived skills they used in the exercises. Self-confidence Risk-taking propensity, Innovativeness and Adaptability still can be declared significant with half of the sample group referring to them. On the other hand, Mindset building only attained marginal significance by being brought up by four individuals. The utilization of the rest of predetermined overlapping capacities (Commitment, Problem-solving skills, Tolerance for ambiguity) was deemed insignificant based upon interview data. However, in the following analysis section both Table 7 and Table 8 will be discussed with additional information from observations.

4.2.1.1 EI competencies & Self-confidence

The most mentioned skills were the EI competencies. EI competencies entail the four groups of Emotional Intelligence with varying density in perception by participants (Self-

Awareness (3/10), Social Awareness (7/10), Self-Management (3/10), Relationship Management (6/10)). This can partially explain why it became the most commonly noted concept from Figure 4, however both personal and social competencies were realized noticeably. The social competencies were mentioned during the interviews as picking up the mood of others, caring for others and taking up information effectively from the acting partners (Social Awareness), and as empathy (Relationship Management). From these interactional components empathy was the most clearly observed element by the observer, noting at 3 out of the four phases of the session, where several of the empathic expressions were not only noticed in the improvisational games, but in the conversation between participants in non-exercise circumstances. Moreover, Trust building and Relationship building can also be seen as valuable complements to the Relationship Management, which were not marked notably in the interviews, however when they were remarkably present following the observations.

Another important and independently realized aspect of the workshop was that it made the participants aware of the different perspectives (Awareness of multiple perspectives) in the same situation or related to the same thing. This was mostly stated in connection with the Group sculpture exercise and got realized by 70% of the interviewees.

Personal EI competencies were only occasionally mentioned, except from Self-confidence, which was coded in the research as a distinguished skill, instead of a part of Self-Awareness. 60% of the participants reported an increase in their confidence from the beginning to the end of the workshop. "In the beginning, I was a little more shy and not really outgoing. And then we had those warm-up exercises that really helped to get comfortable with being uncomfortable and comfortable with being awkward." as Participant(J) described the sensation, which was mentioned referring similarly to the growing self-assurance by Participants(A,F,T) and reversely to the decreasing stress, nervousness, and insecurity by Participants(H,L). Interestingly, while 2/10 of the group members revealed a neutral position towards self-confidence affectedness, Participant(I) and Participant(V) stated a significant fall in their level of confidence. Participant(I) explains the rise in her nervousness with the increasing level of difficulty in the exercises, while Participant(V) says that as he did not know what to expect from an improv course, the high engagement shown by others in the exercises made him more anxious, because this meant that they were taking things very seriously, which increased the pressure for him, and resulted in loosing self-confidence. This shift in the participants' confidence is backed up by the observations, however, these are solely reliant on noticeable signs of nervousness and their decrease. This could be seen on

Participant(H) eminently, who came into the Switch exercise shyly, but after succeeding to forward the scene with a humorous comeback she became more courageous within the situation and afterwards showed more willingness to jump into the games voluntarily. This represents how self-confidence and risk aversion might be related under such circumstances.

4.2.1.2 Cooperation & Team building

Cooperation and Team building as social interactional characteristics were mentioned by seven and eight people respectively. Cooperation was described repeatedly as interacting for reaching a common goal and was closely linked to the realization of Social Awareness attributes. Participant(V) characterises cooperating with the others so natural, that he did not even realize before the interview that he was actually in cooperation ("I didn't even realize that we were cooperating. Because to me, it just felt like play time, if that makes sense. Like recess, you're playing with your friends, and then you just switch from like one person to the other.") This naturality and instinctive social behaviour might easily come from the created safe and welcoming environment, plus the Team Building aspect of the workshop which was highlighted by 80% of interviewees. Participant(T) defines the experience "very intimate" and "very bonding", given that "you experience something together". She also adds:

> And you really see that people, like, let go of themselves a bit. So, I think, in this way, we all trusted each other, which is very important for this. And we all without really knowing each other, we just trusted each other, which is also very valuable. So, I think, and then you also have this experience together. So obviously, I would say like these experiences bond with each other.

This quote not only highlights the team building aspect of the workshop, but also represents how Trust building is essential for establishing it. Moreover, Participant(H) points out that having fun and laughing together had a great role in strengthening the team spirit and mitigating inner tension ("… it helped to loosen myself a little bit up and also be part of them, to be creative together"), and these resulted in a sense of community both mentioned by Participant(J) and Participant(L).

The researcher observed that the willingness to cooperate and to engage in the activities and get to know the group members seemed to be present in every member, which can be related to the sampling, but was a desired and happily welcomed attribute. The lack of reluctance to take part in the activities and try them out brought out several instinctual social manifestations, such as starting interactions in the individually imagined warm-up walking exercise (Cooperation) and engaging in conversation in the small breaks between activities

(Team building). Furthermore, both numerous interviewees (7) and the researcher noted that Collaboration was significantly present in the exercises, as participants did not only work together to reach a goal but produced new scenes or artworks (group sculpture) jointly. Participant(I) captures the importance of collaborating by saying that "you learn that with interaction, you create more unique results than without". This perception can also link increased creativity and innovation to collaborative processes in the workshop. In addition to the skills considered in close relation to Cooperation and Team building, Peer orientation was also highly mentioned throughout the interviews, which often appeared side by side with showing empathy in the other's direction. An example for this is Participant(L)'s description on the bodily movement session part, where she expresses a high focus on her mirrored pair, and during the sculpture she mentions that she sensed that her pair did not feel comfortable with the physical contact as a guiding tool, therefore she stopped using it and switched to using words. Similarly, Participant(T) stated that in this part she also kept in mind what can possibly be feasible and comfortable for her partner.

4.2.1.3 Adaptability

Adaptability was associated with the workshop by half of the interviewees. Further contributing abilities to adaptability were also mentioned autonomously by participants (Quick-thinking, Listening, Capacity to improvise, Spontaneity) and by pointing out as highly used skills from the provided interview table (Active thinking, Resourcefulness, flexibility, Listening, Capacity to improvise, Spontaneity). The following interview part, that illustrates the process of adapting to the quickly changing situations during Switch, Freeze and Parachute exercises and also features the ongoing intrapersonal process's details and used skills, is from the conversation with Participant(J):

It wasn't just like, I'm listening to birds, when I'm on my bike on the way to university, and just recognizing that they're there. But it's listening and really taking in the information because you had such a short amount of time, because we're changing from game-to exercise-from game-to exercise. To really comprehend what was going to happen, let's say just for the instructions of the game, for example, that you really had to, you know, listen, okay, that is what's going to happen now. And then also, with the things that people were saying during the games/exercises, you knew they were going to say it once. And you really have to take it in. And whilst you're listening to it, interpret what okay, what are the opportunities? What are the possibilities that I could answer now? And how can I react to it? So, I think it is, whilst you're listening, you're already interpretating

it, being creative putting in previous information that she stopped that you listened to before, especially, you know, with some exercises, you had to come back to what somebody said five minutes ago. So, you still remember everything, you can just toss it away. But you store it interpreted and then use it to come up with something that is innovative, but still contains something that is related to what we're saying.

This quote represents how adopting to the environment and the different roles resulted in a variety of used skills, that can contribute to the bigger concept of being adaptable. From the observer's perspective, participants were actively engaged in adopting themselves flexibly and quickly to the changing environment. For this purpose, they had to come up with resources on their own, which were often connected to personal experiences (studying, biking, partying, etc.) or even current events (MET Gala).

4.2.1.4 Risk-taking, Innovativeness & Mindset building

Five people mentioned that they had to take on risk (Risk-taking propensity affected) during the workshop to jump into scenes and take up active participation, therefore it means that this ability was less perceived by participants directly, they rather characterize their nervousness decreasing through increasing their self-confidence as the practices went on. However, Innovativeness was also only mentioned by five individuals, it has a strong connection with Creativity, which on the other hand got realized by 80%. Participant(I) expresses that the situation got truly creative where they felt that they are running out of ideas, but they were still asked to continue in the bodily expression exercises. This implies that creativity was not only brought up, but it was actively challenged.

Detecting references to Mindset building was a challenging task from the interviews as this is a highly abstract concept and is not necessary the notion that comes to one's mind when talking about perceptions and activated skills. Therefore, participants referred to the workshop mindset building aspect using the following descriptions: as the necessity to think "outside the box" (Participant(L) and Participant(T)), finding a new way of thinking (Participant(F)) and entrepreneurial spirit (Participant(H)).

The less mentioned skills throughout free conversation about the sensations and subjectively activated skills during the different exercises were the Problem-solving skills and Commitment with only one recognition per each by Participant(I) and Participant(V) respectively. Moreover, the Tolerance of ambiguity totally lacked recognition throughout these processes. As it is a highly internally perceived ability, no observations can question its absence from the present experience, and therefore it contradicts the preposition from

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academic literature regarding the developmental possibilities through improv training for this competency.

To conclude, social concepts surfaced noticeably with more recognition during the experiment compared to personal ones, even though participants tended to be also self-reflective (e.g.: "So what I gained from it is that I learned something more about myself" Participant(F)) in the learning process. As it can be seen, although they were mentioned separately, the skills most well-perceptibly affected were the ones that are EI competencies or can be connected to them. In addition, numerous skill areas can be grouped beneath the bigger umbrella terms, such as Team building, Cooperation or Adaptability, and links between similarly perceived ability usages can be made. Figure 5 attempts to illustrate the interrelated skills with EI competency group characteristics and the further connections between the discussed capabilities in the context of the current study. This visualization gives basis to the proposition that Emotional Intelligence competencies embrace several distinguishing abilities of entrepreneurs, and their development is highly possible through improvisational theatre-based practices in soft skill training structure.

Figure 5. Visualized possible interconnectedness of perceived skills to EI capabilities
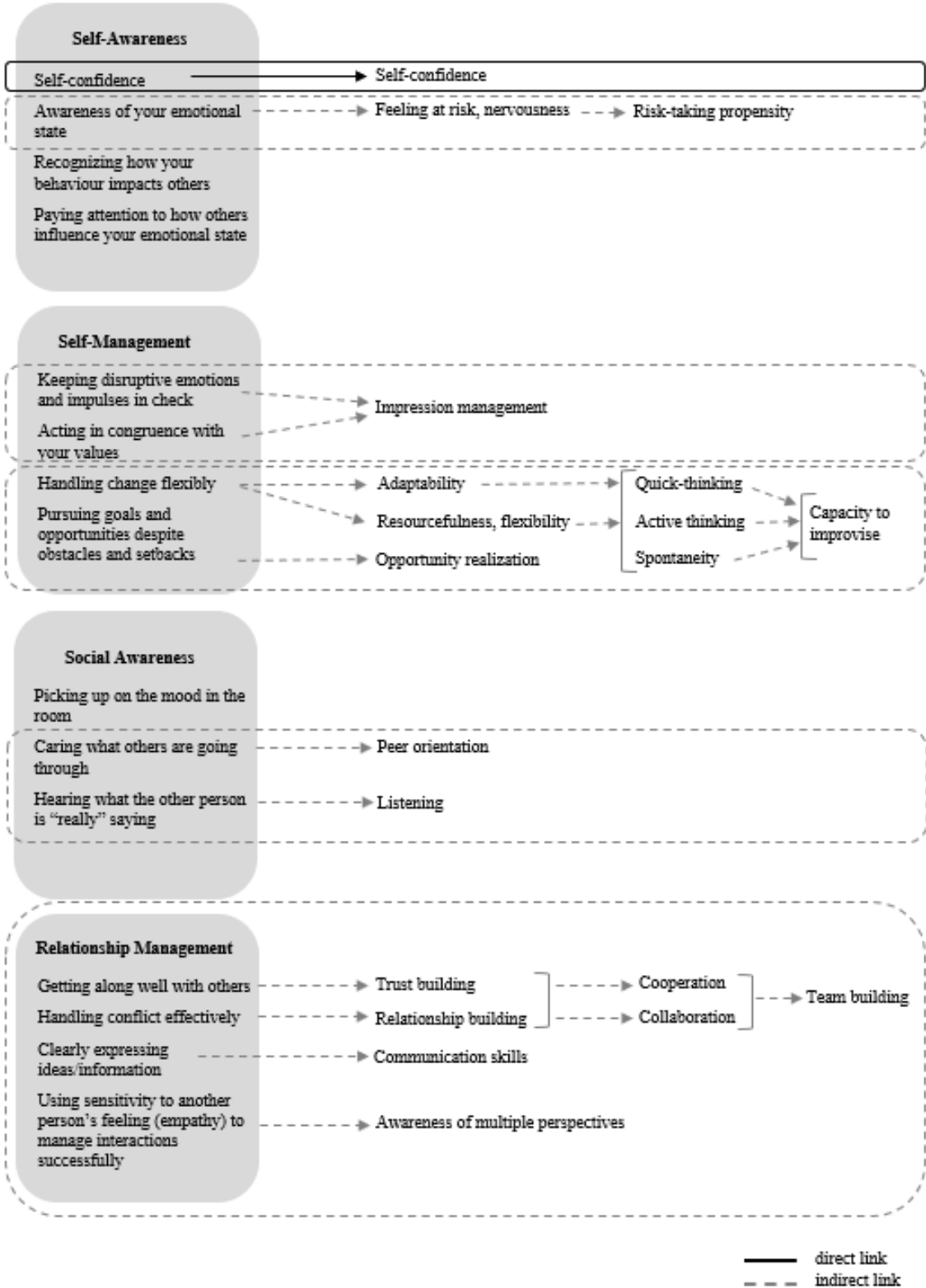
Furthermore, to conclude the overall findings for skills of this research, Figure 6 demonstrates how the theoretical framework (summarized in Figure 4) interacts with the research results introduced in this section. In the figure, the percentages represent the

proportion of participants realizing each skill, regarding all reportedly activated capability from Table 7 and Table 8 (X/x/o). The realized skills are categorised either "Significantly realized" or "Other realized" classification on the basis of the previously mentioned percentages, where recognition at least by half of the participants marked the dividing line between the two differentiated skill groups.

Figure 6. Comparison of theoretical implications and empirical findings

Activated skills by improvisational theatre techniques Table4		
EI competencies (90%) Team Building (80%) Ability to cooperate (70%) Self-confidence (50%) Risk-taking propensity (50%) Innovativeness (50%) Adaptability (50%)	Creativity (80%) Awareness of multiple perspectives (70%) Collaboration (70%) Peer orientation (60%) Being in the moment (50%) Capacity to improvise (50%) Communication skills (50%) Control (50%) Spontaneity (50%) Trust building (50%)	Quick-thinking (60%)
Mindset building (40%) Skills for opportunity realization (30%) Commitment (10%) Problem-solving skills (10%)	External environmental focus (40%) Listening (40%) Active thinking (30%) Impression management (30%) Relationship building (30%) Resourcefulness, flexibility (30%) Reading peers (20%) Mindfulness (10%)	Confidence with failure (30%) Reacting (30%) Concentration (10%) Imagination (10%) Interpreting other's actions (10%) Openness (10%) Tolerance (10%)
Tolerance for ambiguity (-)		

(Left axis label: Entrepreneurial Skills Table1; Right labels: Significantly realized skills / Other realized skills)

4.2.2 Other perception and behavioural patterns

Participants characterized the experience fun and distressing with a great freedom given by the created environment and practices ("it's super good to kind of let go of any energy that you stress up…."(Participant(F)), "…everybody was so on board, and you were really in the moment, and it was a lot of fun and it was almost like a meditation exercise because you blended out everything else." (Participant(J))) Despite all participants associated positive feelings with the participation, one of them hinted that this much fun might not be desirable for strictly entrepreneurial training context. She (Participant(I)) referred to the comedic aspect of the improv exercises in phase 3 and 4, as a feature to be careful with, because "in entrepreneurial situations, humour is appreciated, but until a certain level" and emphasizing it in the scenes might give the wrong idea to students.

Peers in the workshop influenced inner motivation to contribute to the exercises, hence Self-confidence, by introducing a "if they can do it, so can I" attitude (Participant(H)).

Although this is not a clear connection in the sense that the group members can also be seen as sources of pressure, who are aimed to be entertained and create connection with. Participant(L) interestingly stated, that for her personally the fact that she did not know anybody gave a certain freedom, which she does not think she could have achieved if her classmates would have been present.

In the constant need for ideas, retrieving them from fellow participants or leaning on past experiences and previous knowledge has surfaced. Participant(V) serves as an outstanding example for this behaviour pattern. He admittedly gathered ideas from fellow pairs in the Sculpture exercise (props usage), which was also noted by the observer. He further described the thinking process behind coming up with new outputs as following: "I could actually use something from what I know, from my memory, and kind of package it into something that could be adjustable to the situation". This later aspect was also represented with the sculpture themes given that all the participants used something related to their real-life problems, current concerns.

To stick with this example, Participant(V) considered this process uncreative, as it was based on already existing knowledge and simple utilization of memory. Even though, the exact definition of creativity ("the tendency to generate or recognize ideas, alternatives, or possibilities that may be useful in solving problems, communicating with others, and entertaining ourselves and others" (Franken, 1994, p.396)) goes against his stand, creativity in his perception was not utilized throughout the workshop from his side, therefore it could not be added to the abilities realized by him in the research. This participant subjectivity and sometimes unreasonable evaluation of skills is one of the most significant limitations of the study. Moreover, perceptions are highly reliant on personality traits described in the beginning of the interview. Everybody expressed the skills that affected them the most, which were presumably the ones that lift them out from their comfort zones. A good and clear example for this is Participant(J). In the introduction part of the interview, Participant(J) portrayed herself as an overthinker, who is afraid of failure and can be hold back by this fear from taking on even the challenges she finds interesting, because of the uncertainty regarding the outcomes. When asked about her primary takeaway based on the experiment, she said: "My overall takeaway is that being spontaneous doesn't have to be something bad. Reacting to something can happen in the moment, and it can turn into something way better than you would have expected." In addition, through two conversations, participants showed a strong tendency to seek a "correct answer" in the workshop's exercises. This was something explicitly avoided by the facilitator, as she never gave indication to any achievable direct goal

within the exercises or conversation. Despite this, the following comments were dropped within the interviews with Participants(A,V):

The thing is that sometimes when I have to take a task, I feel stressed. And I feel like that I have to do it perfectly. So, at the beginning, I was feeling stressed because I wanted to have the correct answers, if I can say that. (Participant(A))

I needed that period of learning curve in which I have to, like, observe other people first, in order to kind of like, do it, better, but better in a sense that I'm not making a fool of myself, I'm actually doing the exercise correctly, whatever correctly means for the coach. (Participant(V))

However, during the workshop, Participant(A) came to the realization that "there is no correct answer, there is no perfect answer. It's just that you have to put yourself out there and do the stuff." This understanding demonstrates the importance of using these unusual training methods, as in general learning circumstances a "good answer" to each task is expected, therefore leaving this mindset is hard, but it can lead to think outside the box more often and more easily (Mindset building).

4.2.3 Learning method

Half of the participants characterized the ongoing learning process in the workshop as something that they felt completely natural. This attribute of the workshop was perceived by all of them positively and supplemented by additional favourable added facets, such as the sense of equalness (Participant(T)) and the smooth but constantly change regarding the exercises that kept away any perception of boredom (Participant(M)). Other three members (Participants(A,H,J) of the group referred to feeling a bit forced in the beginning to challenge themselves and step out of their comfort zones, but living with Participant(J)'s words then, as they went on and got warmed up in the first few exercises, they also experienced "the natural state of learning and, and participating and, and being creative". She further described herself "being thankful for being forced so that it could become a natural way of acting", therefore signifying that this forcedness was rather referred to as the pressure to actively take part in the exercises and step out of the behaviour they are usually asked to take upon in educational environment and not as an insincere or pretentious learning process.

Even though not identifying the method as either natural or forced, Participant(R) also states her positive attitude for these kind of learning methods by saying "these type of things in general are a good way to learn because it's completely free method. Because we're so used to learn you know, from books … And doing stuff more practical I would say it's a really

good way to learn." Her assertion gains further importance, by the fact that Participant(I), Participant(J), Participant(F), Participant(L) and Participant(A) mentioned the same thought pattern, that this practical learning was the exact opposite of traditional classroom-based learning which they experienced more frequently and categorized as the normal way of learning. Following this line of thought, Participant(F) also notes that:

… it's a great learning method, because it's so much different than sitting down and being static. And this is super natural and organic in contrary. And I really like to be active when I'm learning something, because I feel like, when I'm also doing something, I remember it better. Just sitting and reading, I don't really remember things, but I remember a lot of things vividly from this workshop. So that also proves that it's something that stayed with me, because it's a good way to learn something. And a good way to make memories to develop a skill.

Her statement underlines and confirms the assumption from Taylor and Ladkin's (2009) paper that arts-based improv methods can also generally serve as an anchor for memorability and therefore contribute to the skill learning's effectiveness. Moreover, seven participant acknowledged that the workshop came to their minds after leaving the venue quite frequently reasoning it with its unusualness in comparison with their ordinarily done activities (Participants(H, L)), in interactions where they have to use the activated skills (Participant(J,M)) or trying out the exercises with other people (Participant(I)). This leads to the presumable validation of the learning method being efficient in creating a significant training experience for the ones participating. Moreover, this quality of the learning method can be connected to the effectiveness of transferring activated skills by the workshop to real-life and business situations, as two participants already reflected upon the memorability in context of using skills or reminding themselves to use them, and nine described the transfer of abilities from the workshop to real-life and business situations doable in their opinions. Although two of them also highlighted that the implementation of the skills to work environment also depends on the exact occupation and working parameters of individuals, even if just considering entrepreneurial settings. Some of them (Participants(J,M,A)) already mentioned in the interviews that since the experiment they used some realized skills from the workshop with more care, especially regarding their social interactions. Participant(A) formulated this by saying "I believe that when you learn doing things in a way, or thinking in a different way, you automatically embrace that and you can use it for the rest of your life, I mean, the information is there. And when you have to use it, it will come up and help you."

Regarding the learning method only Participant(V) remained hesitant to verify its naturality ("The natural part of it all, I don't think I can really confirm now, but it was definitely not forced"). Moreover, he was also indecisive about the skill transfer ("I've learned some things. But whether or not those things are those skills, for instance about trust building, can actually be implemented later on if I do like an entrepreneur activity, venture, or whatever I can't really say so.") Even though, he expressed sceptic behaviour towards the method throughout the learning process evaluation section of the interview, it was exciting to see his overall takeaway, which is capturing the essence of improvisational cross-disciplinary training quite thoroughly; "Use what you know, in order to adjust to the uncertainty of situations, whether it's the context of solving a problem to complete your entrepreneurial venture or just something that is related to communication to finish an entrepreneurial project or to solve a problem in order to get to your end goal as an entrepreneur." This indicates that in spite of his scepticism, some of the learning goals and the main message of the workshop got through to him none the less, which at least signifies learning method effectiveness to some extent. Other significant personal assessments of the workshop also capture interesting and illustrative aspects as well, such as the "creativity is everywhere" conclusion (Participant(T)) and notion that it is important to have more "realistic" and "more practical, more physical" training in education because the workshop makes you realize what are the skills that need to be improved to engage more successfully in entrepreneurial activities (Participant(R)).

4.2.4 Participants attitude towards improv based entrepreneurial skill development education

The participants' attitude towards incorporating these learning methods into education was generally positive. Nine out of ten group members stated straightforward that they would find it a good idea to incorporate these kinds of activities into study programmes, however both Participant(L) and Participant(R) noted that these might be dependent on the how entrepreneurial the programmes are, where they would like to build them in. Participant(L) further said that even though she would personally be happy to have arts-based methods in her master programme, she also thinks that this initiative "wouldn't fit" the "majority of business people", because they are generally not "turned to arts". The only participant, who was unsure whether arts-based trainings would be useful in business and especially entrepreneurship education, also qualified his position on the subject as context dependent. He felt proposed that if the improv activity is not a simulation for example, where players have to act out parts

of entrepreneurial venture creation, he would not like to have the method in his higher education, because he felt it disconnected from the core of entrepreneurial activity. His insights are aligned with Participant(L) proposing that the method might not be a good fit for everyone, especially if they are looking for hard skill transfer by it following Participant(V)'s report.

In addition, the interviewees gave several suggestions regarding the possible implementation of improv practices to education and university curriculums. Firstly, introducing business scenarios, where participants have to mimic venture creation activities, negotiate or solve problems in scenes within their entrepreneurial field, were proposed by three additional group members besides Participant(V). Moreover, Participant(M) advised to increase the entrepreneurial concept presentation and speak more about how the skills can be find and transferred in the work environment.

Second, four participants addressed the delicate nature of this training structure regarding both the creation of a safe environment and the personal willingness to engage in arts by their propositions. Participant(A) pointed out that being graded in such an activity would lessen the experience, and Participant(T) also added that grading would not "contribute to a positive mental health development" as everyone is different regarding their social capabilities. In addition, Participant(L) and Participant(R) would include these courses only as electives, or extracurricular activities in higher education programmes, because it might not fit everyone and forcing the participation would not be beneficial in their opinion. These insights perfectly reflect the described nature of arts-based development by Taylor and Ladkin (2009), considering the possible resistance and the caution with which personal development processes should be handled (generally signified by safe space formation).

Third, as Participant(J) said it "it's difficult to turn your life around based on a 90-minute workshop". 40% of the participants indicated that even though they felt to use the identified skills and enjoyed the workshop, they would feel the need to practice these skills more regularly to achieve true development. Participant(T) suggested having improvisation as a 10-week programme to create or change "habits" for the participating individuals, which is supported by also Participant(F)'s notion who does not only proposed having this kind of trainings monthly, but she also spoke from experience that it is highly relevant to freshen up skills from time to time. She already did improvisation, but it was around six years ago, and she acknowledged through the interview that the skills she acquired then "went down a little bit or got a bit rusty". Therefore, one workshop or some workshops with long times between them do not seem sufficient to keep up skill awareness or development. Despite this,

Participant(H) expressed that this one occasion rather served as "an opportunity to open myself and compare myself from the past. I want to think about the future personal skills that I might be able to improve."

To sum up, participants showed a generally positive attitude for having arts-based methods in entrepreneurial developmental trainings, with different ideas upon how it could be best implemented. From the personal perspective, the first participation was reported by four individuals to affect the opinion on this arts-based method, in three cases from questioning to positive out of them. For instance, Participant(A) said:

> I didn't know what to expect. I wasn't sure that these two worlds (theatre and entrepreneurship) let's say could work together and be at the workshop together. I wasn't … I mean, I had my doubts this is what I wanted to say basically. But yes, I mean, throughout the workshop I think it worked. I think that I realized why in order to be a good entrepreneur you need this kind of skills, because you go a step further. So, in order to go this step, you have to improvise. … I would say that, right now I have a really positive attitude toward these kinds of methods, instead of being of questioning.

In addition Participant(J) gave voice to her changed mindset, by stating that previously she only considered theatrical practices, and especially improv as something what only actors do and even in that sphere she did not regarded improv highly ("cabaret small artists trying to, you know, get more famous, approve some skills or do it in an acting school", which is results in "people jumping around screaming at each other doing weird stuff"), however now she "really understand how it can also help you in day-to-day life and in social interactions. But maybe also in work and university" and sees "the bigger purpose of it outside of acting". These examples show that the first interaction with arts-based methods can be crucial for participant's willingness to engage in further on with this kind of developmental programmes, suggesting that a well-established workshop can positively influence their mentality about practicing arts to improve their skills.

4.3 Limitations

As perceptions and observations were made in a single experiment, one of the main limitations of the research is generalizability. The introduced findings apply exclusively to this occasion with the exact parameters it happened with. Hence, this study does not provide unambiguous evidence on the effectiveness of improvisational theatre exercises used to improve entrepreneurship skills and does not seek to declare that the found skill usage is paradigmatic between any other circumstances. Moreover, the generalizability is further

affected by the small sample size (n=10), and the overall qualitative nature of the study which incorporates the participants' subjective value judgement, previous experiences and personal characteristics that can influence the perceived method effectivity. Moreover, the sample is not representative of all aspiring entrepreneurs, it only captures a small and highly differentiated segment of the possible population (entrepreneurs) the research topic can be meaningful for. In addition, the findings do not reflect on development over time, because the workshop was an isolated experience, followed by the interview in a short timeframe. Therefore, learning paths could not have been identified for participants and change in actual behaviour could not have been detected. Furthermore, the observer and interviewer were the same person within the project. Even though that the observations were made passively, the presence of the researcher both during the activities and in the thought-exchange might have created bias in the participants' expressed evaluation.

Using semi-structured interviews also brought in the limitations of not following exactly one thought line in all the conversations with the participants. Some skills might have not been realized because the conversation was not strictly led, and the main investigated skills were not pointed out by the researcher. On one hand this gave the realized skills more validity, because they were referred to without knowing the exact sought attributes, but it also limited their probability for recognition. Additionally, in interviews the possibility to have some self-serving bias is unavoidable, where the interviewees can report their actions more favourable manner than they actually were. Assuming the presence of this limitation is based on the previously characterized correct answer seeking behaviour from multiple participants.

4.4 Propositions based on the findings

Despite its limitations, this research gives input and relevance to form more exact implications about how this kind of arts-based method can contribute to entrepreneurial development. Based on the above discussed findings regarding the workshop, the following proposition concerning improvisational theatre practice usage for entrepreneurial skill development were made:

1. Improvisational theatre-based practices have the potential to enhance entrepreneurial soft skills.
2. EI capabilities can be highly influenced by improvisational theatre practices for entrepreneurs.
3. Even though both social and personal skills can be affected by practising improvisation, the social aspect of the exercises is perceived to be prevalent by participants.

4. Engaging in improvisational theatre exercises has a high potential to result in team building for the participating individuals.

5. Students and young entrepreneurs show positive attitude towards incorporating improvisational theatre practices to their education for soft skill enhancement purposes.

Obviously, to verify these statements further research needs to be done in the field, that can bridge the uncertainty coming from the aforementioned limitations and can give a more holistic view on entrepreneurs' and entrepreneurial students' perceptions and attitude. The proposed further possible research avenues of interest will be discussed in the upcoming section (5.1 Potential avenues for future research).

5. Conclusion

This thesis and research focused on going around the subject of how improvisational practices can enhance entrepreneurial skill development. Its aim was to contribute to the scarce existing academic investigation regarding arts-based method usage in entrepreneurship education, and to explore what are the potential skills that can be influenced by improvisational theatre exercises. Furthermore, it sought to understand those aspiring entrepreneurs' attitude who participated in the experiment towards the learning method, and the training method's applicability for entrepreneurial education, to assess how people with entrepreneurial aspirations might react to this skill development technique. For this purpose, qualitative cross-experimental research was implemented with ten individuals, where further interviews were conducted with each participant to map out their perceptions considering the activated skills and the developmental method features.

It has been identified through these participant perceptions and the additional experiment observation that Self-confidence, Risk-taking propensity, Innovativeness, Ability to cooperate, Adaptability, Team building, and EI competencies can be affected by improvisational theatre practices, by being referenced significantly (by more than half of the participants) throughout the interviews and also remarked by the researcher. These skills are aligned with the proposed capabilities by academic literature (synthesized in Figure 4), although not all suggested ability concepts were recognized through the research considerably (Mindset building, Skills for opportunity realization, Commitment, Problem-solving skills) or ever (Tolerance for ambiguity). Additionally, numerous additional skills emerged significantly through the interview process as shown in Figure 6. Based on this, it is implicated that certain identified capabilities can be influenced by improvisational theatre techniques, and over time this influence has the potential to lead to relevant entrepreneurial skill enhancement. The learning method was characterised to be a rather natural process, which participants assessed as a positive, but also a challenging environment for making developmental progress. The method also brought out self-reflexivity from the individuals as a feature of this method. The aspiring entrepreneurs' attitude towards incorporating these methods into educational circumstances was also positive, however their vision about how it could be done best differed, and several suggestions were also made to increase the effectivity by connecting the workshop's content more to entrepreneurship to be truly incorporable into higher education curriculums.

Despite the encouraging findings both about skills, learning method and participant attitudes, the question still remained ambiguous after this current investigation whether this

type of arts-based method is unequivocally effective in entrepreneurial skill development or not. This research can only be seen as a foundation to future research about effectiveness, by claiming that certain skills are activated though practising improvisational theatre exercises. The effectivity can further be argued to be present, (1) by the fact that all participants evaluated the skills usable and transferable from the workshop to real life scenarios, and (2) by the participants' high willingness to incorporate these methods into education and their positive attitude regarding the enjoyability, importance and usefulness of these improvisational techniques. Relying on these findings of the study, several implications were made (Chapter 4.4) and avenues for future research can be suggested that might be up for interest and can result in significant scientific evidence to support the implementation of arts-based methods into entrepreneurial education.

5.1 Potential avenues for future research

Future research could address the issues arising from the limitations of this thesis and serve with clear and unquestionable evidence for the effectivity of improvisational theatre practises in entrepreneurial skill education. To avoid the problems of these current research regarding generalizability, experimentation on a wider sample is advised with keeping the experiment group sizes around 10-20 participants but organizing more experiments with different participants. This would also allow to segment the sample into different groups relying on age, socio-demographic characteristics or other realized relevant participant characteristics. Moreover, this segmentation could also differentiate already active entrepreneurs and students in higher education studying entrepreneurship in the investigation, which might lead to the realization of different behavioural patterns based on experience and career stage. Most importantly, it would be beneficial for future research to focus on entrepreneurs without inclination towards arts, as the perceptions of this distinguished segment would presumably lead to different experience characterizations, than in the case of this current thesis.

Conducting research on workshop series to monitor individual and group development would be another way to collect more reliable evidence for the benefits of using improvisational theatre practices in entrepreneurship training and map out the actual potential for development through this method. In addition, to investigate this arts-based method's effectivity over time longitudinal studies on individuals on who received this kind of education over a significant amount of time could be run compared to individuals who did not receive this kind of soft skill training from the same educational environment.

Furthermore, future research could also cover additional fields of interests which were hardly touched upon by this thesis. For instance, how the mentioned skills by participants interact in building up bigger capability groups, and how the perception of certain skills is linked to one another. Furthermore, the presented research only focused on a distinguished arts-based method for entrepreneurs, therefore it would be interesting to see how other arts-based methods, such as Projective techniques, Illustration of essence or Making can contribute to entrepreneurial learning, and how they could be implemented to this specific field.

Taken as a whole, research possibilities for arts-based methods in entrepreneur education are quite numerous and diverse, because only little research have been done that exactly focuses on entrepreneurial capability enhancement. However, the existing literature on managerial and leadership training definitely signals a positive trend in discussing and investigating these methods (Woods et al., 2020) for business capability improvement, organization problem-solving and team building amongst other things. Hence, joining into this discussion is believed to be also beneficial from the entrepreneurial community's side. This thesis wished to contribute to this starting conversation about arts-based method usage for entrepreneurship education, which has the potential to transform the training models in the professional field of entrepreneurship.

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Appendixes

Appendix A. Entrepreneurial characteristics identified by reviewed literature

Table A1. Entrepreneurial characteristics identified by reviewed literature

Literature	Characteristics of Entrepreneurs	Characteristics of Successful Entrepreneurs
McClelland, 1987	- Self-confidence - Persistence - Persuasion - Use of influence strategies - Expertise - Information seeking	- Proactivity – Initiative – Assertiveness - Achievement Orientation – Sees and acts on opportunities – Efficiency orientation – Concern for high quality of work – Systematic Planning – Monitoring - Commitment to others – Commitment to work contracts – Recognizing the importance of business relationships
Identified by McClelland following the studies: East-West Center Technology and Development Institute, 1976 Hornaday & Bunker, 1970 McBer & Co, 1986 Pickle, 1968	- Confidence - Perseverance - Energy, diligence - Resourcefulness - Creativity - Foresight - Initiative - Versatility: Knowledge of Product and Market - Intelligence - Perceptiveness	
Casson, 1982 (From Littunen, 2000)		- Ability to take risks - Innovativeness - Knowledge of how the market functions - Manufacturing know-how - Business management skills - Ability to cooperate
Caird, 1988 (From Littunen, 2000)		- Good nose for business - Desire to take risks - Ability to identify business opportunities - Ability to correct errors effectively - Ability to grasp profitable opportunities
Collected by Mokaya et al., 2012 (Based on EEP Kenya, 1993; Kuratko & Hodgetts, 1989; Bird, 1989)	- High need to achieve - Positive self-concept - Creativity and innovation - Good problem-solving ability - A desire for success and profit - High need of control - High degree of self-confidence - High risk-taking propensity - High degree of independence - Personal initiative - Aggressiveness	

	▪ Action and goal orientation ▪ Opportunistic ▪ Ability to learn from mistakes ▪ Time consciousness	
Lyons et al., 2015	▪ Risk-taking	
Galor & Michalopoulos, 2012 van Praag & Versloot, 2007 (Identified through Lyons et al., 2015)	▪ Risk-taking	
Wong et al., 2005 Sexton & Bowman, 1980 Schwer & Yncelt, 1984 (Identified through Lyons et al., 2015)		▪ Risk-taking
Rotter, 1966	▪ Internal locus of control	
Gürol & Atsan, 2006	▪ Risk-taking propensity ▪ Need for achievement ▪ Locus of control ▪ Tolerance of Ambiguity ▪ Innovativeness ▪ Self-confidence	
Anwar & Saleem, 2019	▪ Risk-taking propensity ▪ Innovativeness ▪ Locus of control ▪ Need for achievement ▪ General self-efficacy ▪ Tolerance for Ambiguity	
Miller, 2020		▪ Curiosity ▪ Structured Experimentation ▪ Adaptability ▪ Decisiveness ▪ Team Building ▪ Risk tolerance ▪ Comfortable with failure ▪ Persistence ▪ Innovation

Hornaday & Aboud, 1971	▪ High on scales reflecting
	  – Need for achievement
	  – Independence
	  – Effectiveness of their leadership
	▪ Low on scales reflecting
	  ▪ Emphasis on need for support	

Boren, 2010	▪ Emotional Intelligence	
Ahmetoglu et al., 2011		▪ Higher Trait Emotional Intelligence
Pathak, 2019	▪ Emotional Intelligence	
Kusmintarti et al., 2014	▪ Internal Locus of control ▪ Need for achievement ▪ Propensity to Risk ▪ Creativity ▪ Social networking ▪ Tolerance for ambiguity	

Appendix B. Proposed improvisational theatre exercises for business skill development by academic literature

Balachandra, L.: The Improvisational Entrepreneur: Improvisation Training in Entrepreneurship Education

"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."

(Balachandra, 2019, p.76)

"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." (Balachandra, 2019, p.76)

"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 Patis 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." (Balachandra, 2019, pp.76-77)

Crossan, M.M.: Improvisation in Action

Make A Story:

"… the audience was asked to provide a name for a story, and someone shouted out, "Look What The Cat Dragged In." The audience was then asked for the style of writing, and someone responded, "a murder mystery." Four Second City actors were positioned across the stage with one standing in front randomly selecting each actor to take a turn and continue the dialogue. There is no script. There is no planning. Everything happens in real-time and is totally spontaneous. Where you see a different person telling the story, they have been directed to pick up the story and continue." (Crossan, 1998, p.594)

Nonsense Naming:

"In this exercise, individuals quickly walk around the room and give the wrong name to the objects they point at. The exercises demonstrate that it is difficult to break out of familiar patterns of seeing things. Even when individuals find another name for a chair, for example, it is often another item of furniture like a table or desk." (Crossan, 1998, p.595)

Switch:

"Two individuals begin to play out a scene, and at any moment another person can freeze the scene, replace and assume the pose of one of the people, and then unfreeze the scene by taking it in a new direction. Individuals must be alert to the opportunities presented by the situation, and what they have to offer to move the scene forward. When a new person enters, the person who remains must be ready to support the new direction." (Crossan, 1998, p.596)

Imaginary Tug of War:

"In the "Imaginary Tug of War" two teams participate in a tug of war with an imaginary rope. Often teams pull as if they are pulling the other team over the line. Naturally, when both teams do this at the same time, it is not very realistic, as the imaginary rope must either have broken or stretched to accommodate the two teams." (Crossan, 1998, p.597)

One Word Story:

"The "Make a Story" exercise described above is usually preceded by a more simple exercise called "One Word Story" in which pairs of individuals create a story, each providing one word at a time. It is quite obvious in this exercise when individuals are simply transacting the story by adding words like "he-went-to-the-store", as opposed to using, what improvisors call, "million dollar words" that create sentences like "David-exploded-with-rage". Building a story, using million dollar words, in a spontaneous fashion requires both the creative, and quick sub-conscious processing that characterizes intuition" (Crossan, 1998, p.597)

Moshavi, D.: "YES AND . . .": INTRODUCING IMPROVISATIONAL THEATRE TECHNIQUES TO THE MANAGEMENT CLASSROOM

"Alphabet game" exercise:

"In this exercise, members of the audience are asked to call out the names of two famous people. … Audience members were also asked to name a place these two people might meet. … Based on this information, two actors were asked to create a scene, making sure to begin each new sentence with a word containing a successive letter of the alphabet. For instance, the first actor begins a sentence with a word starting with the letter A, the second actor with the letter B, the first actor with the letter C, and so on." (Moshavi, 2001, p.438)

"Freeze tag" exercise:

"In "freeze tag," two actors engage in a scene based on physical positions suggested by the audience (kneeling, hands on hips, etc.). As the actors begin to move about and create a dialogue, another actor can freeze the action. He or she then assumes the physical position of one of the actors on stage and then unfreezes the scene and redirects the action by creating a new scene. In the classroom, variations on "freeze tag" can be particularly useful for reinforcing and applying different theories relating to a specific organizational behavior concept such as leadership, motivation or power, and politics". (Moshavi, 2001, p.442)

"Movie Critics" exercise:

"In this exercise, two actors play film critics reviewing a movie, the title of which is suggested by the audience, whereas other actors bring clips from the movie to life. A variation of "movie critics" can be used in management-related role-plays. Instead of having movie critics review a fictitious big screen blockbuster, they critique a fictitious human resource or management training film. To date, I have used this exercise to reinforce concepts primarily in areas of human resource management, including performance appraisal, staffing, socializing new employees, and developing an employee relations program." (Moshavi, 2001, p.445)

Wang, J., & Chia, I.: Perspectives in AE- Towards an arts-based approach to developing shared leadership

Step-in circle ice-braker:

"Participants stand in a circle facing each other. Each person reveals something about himself/herself while stepping one foot forward into the circle. Others who identify with the statement have to step forward too. This activity demonstrates how people are often more similar than they think they are." (Wang & Chia, 2020, p.51)

Building on one another's words:

"Building on one another's words: This activity requires the group to build a story together. The facilitator gives a title and assigns one person to start, with each person adding to it one work at a time as the "story" moves around the circle. Participants may not listen to each other or may be distracted if they focused on their own perceived success (coming up with a good word9 rather than on the task at hand (telling a story). After several rounds and encouragement from facilitator, groups begin to succeed." (Wang & Chia, 2020, p.51)

Story line/pop-up:

"Story line/pop-up: Six to eight participants stand in a like. Based on a suggestion from the audience or instructor, one person steps forward and tells a story, continuing until someone else steps forward from the line to take over. The participants are encouraged to support their fellow performers if they run out of ideas by continuing the story until the instructor calls for a stop. The group will only be able to weave a strong seamless story by looking out for one another." (Wang & Chia, 2020, p.51)

Story choir:

"Story choir: A group of six to eight participants stand in front of one "conductor" who directs who should begin telling the story. The conductor has the power to move the pen whenever they like, which will have a key impact on the story and on choir members' ability to be creative. The conductor's actions can serve to create trust or to deplete it entirely. For example, if they more the pen too quickly, without warning, or hold it on one person, even if that person runs out of ideas. Each person has a turn playing conductor; the debrief then focuses on what the conductors did to facilitate the storytelling, and what they did that had an opposite effect, and why/how it happened." (Wang & Chia, 2020, p.52)

Storyteller and assistant:

"Storyteller and assistant: Participants sit in groups of two - one taking the role of a storyteller, and the other the assistant. The storyteller starts telling a story. When his/her flow of ideas begins to wane, the assistant adds some new information or a new direction, which serves to reignite the story. The game is then repeated with the roles reversed. In

the final iteration of the game, the players begin playing with one as storyteller and the other assistant, but this time the instructor periodically calls out "switch". When the hear this, the players switch roles while maintaining the same story. The players realize that by being externally focused on their partner (either as the one telling the story or the one listening), they have a much easier time accessing their own creative capacities. The storytellers learn that having an assistant allows them to be more creative as they know that help will be there." (Wang & Chia, 2020, p.52)

Follow the follower:

"Follow the follower: A group of individuals sit in a circle facing each other. On the facilitator's cue, each person starts making sounds and movements. However, at the same time, each one is also to mimic the sounds and movements of others. No one leads, and no one follows – everyone in the group is constantly shifting their attention to see what the other group members are doing. If one person shakes his/her head, everyone else has to shake their heads. When done right, an outsider would not be able to identify the original head-shaker. It's as though the group is able to anticipate the slightest change in direction with the precision and instantaneity of a school of fish. The exercise requires intense focus and listening. Participants have to remain in the moment and be acutely aware of what everyone else is doing. Sometimes the result borders on chaos; sometimes the group becomes one smoothly working organism. More often than not, the group will develop a pattern of coordinated movement and sound." (Wang & Chia, 2020, p.53)

Appendix C. Workshop: How can key entrepreneurial skills be developed through improvisational theatre practices. Workshop structural description provided by Act Attack company.

Part 1 (Warm up): 20 min

Quick introduction of the teacher and participants.

Quick introduction to the subject: What is improv, what is it for and what is expected from the participants.

Icebreaker: Catch a name exercise. The participants stand in a circle facing each other. One stand in the middle with an A4 paper. This participant calls one of the other participants' names and throws the paper in the air. The person called needs to get the paper before it falls on the floor. If the paper reaches the floor, it will always be reduced to half of its size.

Warm up: Participants will walk around the room following the instructions of the facilitator. They will be asked to imagine situations, locations, or emotions through their walking.

Part 2 (Body Expression): 20 min

Mirroring: Participants work in pairs. One person makes the movements and the other needs to follow like a mirror.

Sculpture: Participants work in pairs. One person makes a sculpture out of their working partner and presents the created 'artwork' to the group.

Group Sculpture: All participants make a part of one big sculpture, joining into the building process like a fountain without the indication of the facilitator. Descriptions of the sculpture (what does it depict?) will be asked from the selected participants.

Part 3 (Scenes): 30 min

Freeze: Two individuals begin to play out a scene, and at any moment the facilitator can freeze the scene. Another participant needs to voluntarily replace and assume the pose of one of the players, and then unfreeze the scene by taking it in a new direction. Individuals must be alert to the opportunities presented by the situation, and what they have to offer to move the scene forward. When a new person enters, the person who remains must be ready to support the new direction.

Switch: Two individuals begin to play out a scene, and at any moment the facilitator can say: "Switch". Hearing the command word, the participant who was talking needs to switch the last thing he / she said. The scene will continue from the last word said.

Parachute game: Two individuals begin to play out a scene, and at any moment the facilitator can ask another participant to join and add to the scene.

Part 4: 20 min

Scenes with objects: The facilitator displays objects on a table. The participants create scenes where the objects they choose can be anything but what they really are. (Example: a cup turns into a hat; a pair of scissors turn into glasses.)

Suddenly, then…: As a team, the participants will tell a story. One person starts. When he/she says any transition word such as "suddenly, and then, next day…" another participant will continue the story. It is important to understand that the story needs a beginning, middle and end. Since the last person of the group should end it, all participants should pay attention during the whole process.

Quick discussion and conclusion.

Appendix D. Workshop flyer / poster

Appendix E. Consent Form

CONSENT REQUEST FOR PARTICIPATING IN RESEARCH

FOR QUESTIONS ABOUT THE STUDY, CONTACT:

Marianna Lőrincz

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DESCRIPTION

You are invited to participate in a research about potential entrepreneurial skill development through improvisational theatre techniques (arts-based methods). The purpose of the study is to better understand how these methods contribute to entrepreneurial skill development regarding the exact specific skills effected. Moreover, it investigates the synergies that occur during trainings with this type of arts-based methods and the participants attitude towards using improvisation training for educational purposes.

Your acceptance to participate in this study means that you accept to participate in the Business Improvisation Workshop held on the 11th of May, and then be interviewed by the researcher in the following week, which will be audio recorded. In general terms,

- the questions posed in the interview will be related to your experiences at the workshop, the perceived skill development possibilities through improvisation and your overall insight on the training form
- your participation in the experiment will be related to entrepreneurial skill learning
- the interview will be audio recorded for further analysis, and used only by the researcher for this specific project
- my observations will focus on your participation in the workshop, your perceived experiences discussed afterwards and your attitude towards using arts-based method in entrepreneurial training.

You are always free not to answer any particular question, and/or stop participating at any point. Every time I want to accompany you in any activity (such as asking follow-up questions in another interview), I will ask for your permission again.

RISKS AND BENEFITS

As far as I can tell, there are no risks associated with participating in this research. Yet, you are free to decide whether I should use your name or other identifying information [such as age, nationality, occupation] in the study or not. Nonetheless, all participants of the current study will be mentioned anonymously, in which I will make sure that you cannot be identified, by using pseudonyms and only general parameters for participant identification, such as age, gender, occupation.

I will use the material from the interviews and my observation exclusively for academic work, such as further research, academic meetings and publications.

TIME INVOLVEMENT

Your participation in this study will take approximate 2,5 hours of your time, 90 minutes for the workshop and 60 minutes for the interview. You may interrupt your participation at any time.

PAYMENTS

There will be no monetary compensation for your participation.

PARTICIPANTS' RIGHTS

If you have decided to accept to participate in this project, please understand your participation is voluntary and you have the right to withdraw your consent or discontinue participation at any time without penalty. You have the right to refuse to answer particular questions. If you prefer, your identity will be made known in all written data resulting from the study. Otherwise, your individual privacy will be maintained in all published and written data resulting from the study.

CONTACTS AND QUESTIONS

If you have questions about your rights as a study participant, or are dissatisfied at any time with any aspect of this study, you may contact –anonymously, if you wish— Mariëlle van Leeuwen, confidential counsellor.

SIGNING THE CONSENT FORM

If you sign this consent form, your signature will be the only documentation of your identity. Thus, you DO NOT NEED to sign this form. In order to minimize risks and protect your identity, you may prefer to consent orally. Your oral consent is sufficient.

I give consent to be audiotaped during this study:

Name   Signature   Date

I prefer my identity to be revealed in all written data resulting from this study.

Name   Signature   Date

Appendix F. Codebook with the predetermined entrepreneurial skill development areas through improvisation theatre practices as codes.

Table F1. Codebook

Code	Definition
Self-confidence	The participant realized that his / her self-confidence positively increased as the workshop progressed.
Commitment	The participant expressed a commitment to the other players in the exercises, to the group or to the scenes.
Risk-taking propensity	The participant acknowledged that they felt like they needed to take on risk by participating in activities within the workshop, and they had to overcome their unease, and improve their risk-taking propensity.
Innovativeness	The participant described internal emergence of innovative thoughts, or external innovative outcome creation either by himself / herself or in cooperation /collaboration with others.
Ability to cooperate	The participant referenced cooperation between himself / herself and the other group members.
Skills for opportunity realization	The participant admittedly identified opportunities and lived with most beneficial ones in the created situations.
Problem-solving skills (individual and collective)	The participant noted that to reach the desired outcome they have to individually or collectively overcome problems.
Tolerance for ambiguity	The participant realized an increase in his / her tolerance to ambiguous situations as the workshop progressed.
Adaptability	The participant expressed that they needed to adopt to the
Team Building	The participant described team building phenomena through doing the improvisational training together.
EI competencies	The participant references the usage of emotional intelligence capabilities from either EI section (Self-Awareness, Self-Management, Social Awareness, Relationship Management).
Mindset Building	The participant refers to his /her mindset to be affected by the workshop environment or was influenced to step outside the traditional frame of thinking by participating in the training.

Appendix G. Interview Guide

Socio-demographic characteristics of the participant:

Could you tell me a bit about yourself and your background? For example, where are you from, what is your current occupation?

- Name, age is already registered through the application form for the workshop
- Occupation (student, entrepreneur, etc.)
- Previous experience with arts
- Personal description of character (personality traits, aspirations, …)
- Previous experience with education (have they met with non-classroom-based training before?)

Motivational profile:

Do you consider yourself innovative/creative?

What motivated you to participate in the workshop?

Do you like challenges?

What motivates you to excel at your work/studies? (Internal and external motivating factors)

Do you participate in any entrepreneurial activity right now? /Have you ever participated in any entrepreneurial activity, study programme or training?

Would you participate in entrepreneurial new venture creation or any kind of entrepreneurial activity in the future?

How was the created environment? (Evaluation of the presence of preferential workshop parameters)

How did you feel yourself through the workshop? Did you feel yourself in a safe environment? Did the exercises make you step out of your comfort zone? If yes, how did the nervousness from stepping out of your comfort zone affected you?

How would you evaluate the facilitator's presence?

How did you first feel when you arrived and how it changed towards the end of the workshop?

Perceptions during workshop:

How have you felt, which were the main skills you relied upon to perform tasks in the workshop?

In the following section I would like to go through the exercises with you and ask you about the skills activated and your perceived experience in them.

How have you felt yourself in the warmup walking? Was it easy to you to switch to this imagined situational environment?

I saw that you interacted with the others without any indication for it from the facilitator, why do you think this happened?

What kind of skills and abilities were you using in the Mirroring Exercise/ Sculpture exercise/ Group Sculpture/ Freeze/ Switch/ Parachute game/ Scenes with objects/ Storytelling?

(This section is further personalized to every participant relying on my observations (and notes) about their behaviour through the different exercises)

After the free conversation about the perceived skills through the exercises, interviewees will be given the following complementary table of other activated competencies of interest (contributing skills):

Table G1. **Provided table to participants in the interview**

Personal skills	**Social skills**
▪ Listening skills	
▪ Capacity to improvise	▪ Communication skills
▪ Promotion of innovation and effectiveness	▪ Partner/Peer focus and orientation
▪ Willingness to act spontaneously	▪ Relationship building
▪ Active thinking	▪ External environmental focus
▪ Ability to be mindful	▪ Collaboration
▪ Resourcefulness, flexibility	▪ Reading followers
▪ Ability to adapt multiple perspectives	▪ Effective interaction management
▪ Being in the moment	▪ Trust building
▪ Control (giving and taking)	▪ Constructive conflict management
▪ Impression management	
▪ Creativity	

Do you feel that the capabilities from the second group of discussed skills are contributing to the first group's identified characteristics?

Considering skills x and y (mentioned skills), do you think they are related? Does one contribute to the other?

Do you find these skills used in entrepreneurial activity? Please express your opinion.

Questions related to the learning method:

How would you characterize the learning experience? Have you felt it forced or rather natural?

Did you have to think hard during practices or did the ideas come naturally to you?

If you think about the skills you used through the workshop, what do you think, could you implement them now more easily in real-life situations? In what real-life situations may their implementation be easier / more difficult?

Were any of the practiced capabilities similar to the ones you already used in previous work experiences or academic environment?

Thoughts after the workshop:

Have you thought about the workshop since leaving the actual location? If yes, which were the situations that triggered memories from the workshop?

Now that the experience settled a bit, were there a change in your evaluation for the experience? (For example, first you thought it was just a fun activity, but now see the point of each exercise more clearly regarding business skills.)

In retrospective, what would you regard the greatest gained experience from the workshop?

Even though the workshop took place not too long ago, have you used the practised skills since then in any form/environment?

If yes, which were those and in what context?

Do you think that practising these skills in the environment of the workshop has helped you to use them with more confidence in the future?

Would you participate again in similar activities?

Would you have liked to have such a workshop as part of your classes, as educational method that could be introduced to learn entrepreneurial skill as part of the university curriculum?

If yes, what would you consider the ideal 'testing' method to be?)

Other observation/perception made in the workshop:

What is your overall takeaway from this learning experience?

How would you evaluate the enjoyment level of the workshop? How would you consider it from a social relationship building perspective?

Do you have any other observations about the workshop that you would want to share?

Appendix H. Field notes (11.05.2022) of the experimental improvisation workshop for entrepreneurial skill development

Introduction:

The participants arrived in time. The workshop truly starts at 18:05.

The participants are situated in a circle with the facilitator, who asks them to introduce themselves shortly and share their idea about what improv is.

All participants express a fondness towards arts, some of them even practise art forms such as dance (Participant(L)), and one participant (Participant(F)) is experienced in musical theatre, and already participated in improv previously, but without further educational purpose. This inclination towards arts explains their motivation to participate in the session and suggests that they will have less barriers from resistance through the experiment.

They propose the following ideas linked to improv: 'being responsive', 'agility', 'being present'. And numerous of the members express that they are here to acquire new skills.

The introduction speech by the facilitator addresses the entrepreneurial 'not knowing what will happen' as the main linkage between the profession and improvisational theatre, she highlights the skills of risk-taking, problem-solving, and reacting as the main capacities the participants have to be ready to use.

Icebreaker exercises (Part1):

Empathy is already shown from the participants, when a girl (J) proposes to go through all names once more as she saw the confusion and nervousness in some other participants who came alone and had not known anyone previously from the group.

The lighter warm up exercises became quite physical quickly (unexpected). This might resulted from following the lead of 2-3 participants behaviour, who were not afraid to use big bodily expressions already at this starting phase.

While walking around the room in different styles and speeds (situational context provided by the facilitator) participants started to engage also with the floor (crawling, moving on all fours) and with each other without any indication to use and include the others in their imagined scenarios. Participants laugh a lot while seeing each other act, the more they smile and laugh with each other the more interactions take place between them. The climate of the workshop changes to friendly, from neutral.

Observed activated skills: Ability to react quickly, Memory, Relationship building.

Observed patterns: The participants start to interact and build a team already at this stage.

Bodily expression (Part2):

Mirroring exercise:

Some participants are braver than the others. One participant's shyness well-perceivably effects the other participants willingness to act with wider and harder movements, when working in pairs.

As the exercise goes the pairs are getting more comfortable in the situation, they try out new movements. Some are doing mirrored yoga at one point with full body involvement.

The facilitator started to play music in the background to ease the tension between the pairs from the great amount of concentration they put into mirroring each other. All pairs sooner or later incorporate the rhythm into the movement sequences. Two pairs also do dance movements that fit the currently played song.

Participants seemingly try to rely on movements they know from their background knowledge (dance, yoga). (This is an assumption based on the observation that one pair used the macarena dance movement from pop culture, and another pair probably turned to this kind of movements because one of the girls said in the introduction that she practises dance as a hobby, for example.)

After the Mirroring, the facilitator gives space to reflexivity from the participants about how they felt themselves. She inquired if they could make up new movements easily or was it challenging. (J) answers first, stating that it was challenging after a while.

Observed activated skills: External environmental focus, Concentration, Peer orientation, Dealing with discomfort from the intimate situation, Coming up with constant ideas, Cooperation.

Observed patterns: After slower and timid movements the participants start to realize their possibilities. They start to use wider movements, add more speed, use their body more expressively. After a while, I see that the participants find it more difficult to come up with new movements.

Sculpture exercise:

Social dynamics are showing. Participant(J) already starts to use objects initiatively with her pair. Participant(V) sees this and ask his partner to use an object for him too, because it seems good. His pair, participant(F) redesigns the sculpture even though that it should be her turn to 'sculpt'.

The participants reflect upon subject that are currently strongly present in their lives (stress and stress release, thesis writing, biking in Rotterdam), but there are some comical outcomes too, noticeably to gain more laughter from the peers when introducing the 'artworks' (spraying in the eye, biking in Rotterdam). Interestingly, the concept of being a strong woman comes up 2 times from 10 statues.

Through the exercise participants not just instructed each other with words, but with gestures, mimicking poses and guiding them with hand contact to the right posture.

Observed activated skills: Creativity, Social-awareness, External environmental focus, Innovativeness, Cooperation.

Observed patterns: Participants interact with surprising kindness, both with words and guiding touches. I see that some of the participants try to figure out how much personal space their pair needs, and uses instructional signals (language, pointing and touching) accordingly.

Group sculpture exercise:

Participant(J) takes the first step and therefore the initiative to start the sculpture. I think she realized that this puts the others at ease, and they start to show more willingness to join in. Moreover, the more participants join the more quickly someone else comes to the group sculpture. This peaks in the last participants (5 of them) joining the sculpture at once.

Participant(A) interprets the meaning of the created assembly first. Her interpretation is rather focused on relaxation and meditation. She proposed this idea in the previous exercise too. This was probably an idea that she was preoccupied with.

Participant(F) interprets secondly, her description is more vivid and colourful. She depicts a Japan garden, uses a lot of rhetorical aid in the storytelling and timing for comedic realise. Creates a whole story with servants, praying people, and angel and some thrown away furniture.

Observed activated skills: Quick thinking, Imagination, Opportunity realization, Taking initiative, Collaboration.

Observed patterns: This exercise represents well the different perspective of each participant as some of them reflected on the co-created sculpture. However, it is not mentioned by the facilitator. It will be interesting to see whether the participants truly and actively realized that everyone probably has a different interpretation and therefore they build an awareness in themselves for multiple perspectives. The presence of this can only be determined through the interviews.

Improv scenes (Part3):

Freeze:

The facilitator enhances participants to use big body movements and manage their expressions according to the life situations they are displaying, but she also suggests exaggeration. About half of the participants follow this last piece of advice, the others do not exaggerate noticeably.

The participants feel uncomfortable in the first 2 changes, then participant(F) breaks the ice with increasing body movement and lessen the talking, also adds comical aspect.

Observed activated skills: Adaptability, Flexibility, Resourcefulness, Giving immediate reaction, Focus on the playing partner (especially at the moment of change), Cooperation, Expressive communication, Risk-taking, Opportunity realization, Regulation of expressed facial and body expressions, Taking initiative.

Observed patterns: These more active improv exercises seem to challenge the participants' confidence, but they respond positively to this. After the first few pairs, they begin to gain more confidence in themselves and that they are capable to manage these scenes well.

Switch:

Requires to be focused on your acting partner, the others (as an audience) and the facilitator who says 'Switch' at the same time.

This is the first exercise that causes a bit confusing. Participants seemingly have a hardship to find dramatic or comedic responses that can capture attention. These are longer scenes (compared to the previous exercises) and based on the participants facial expressions, they feel a loss of confidence in the beginning.

The facilitator exemplify how they should build expectations and then create a surprise by going in a totally different direction. (Rule of three's)

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The first scene is at a funeral, and they struggle a bit. Then Participant(H) breaks through with a nicely timed and reinvented 'switch'. The audience laughs and participant(H) became happy because of this and perceivably gained more confidence for the rest of the scene.

In the second scene, Participant(F) gets the rule of three's perfectly (expectation building improv rule introduced by the facilitator in the beginning of the game). This probably comes from her acting experience. She guides the scene but leaves place to the acting partner Participant(L). Signifies support and teamwork.

By the third scene participants got more enthusiastic and confident as they see the previous players succeed in making comprehensible, good scenes and having fun.

Observed activated skills: Quick thinking, Regulation of expressed facial and body expressions, Commitment to the scene and partner, Adaptability, Caring for the playing partner, Generating ideas quickly and flexibly.

Observed patterns: Compared to the previous exercise, now that the participants have to focus on more what they say (because the 'switch' affect the sentences and not the movement), their acting becomes more static.

Parachute exercise:

Smooth transition from the Switch exercise.

Building a big scene results in a more chaotic experience. Participants have problems to listen to every actor in the scene. Information gets lost quickly, the focus is not in one storyline. The participants group up to smaller groups within the scene, instead of crating one jointly.

Observed activated skills: Collaboration, Active listening, Regulation of expressed facial and body expressions, External environmental focus, Adaptability, Managing chaos, Risk-taking.

Observed patterns: The emotions of the individuals and their intensity affect each other. When new participants enter the scene, they bring in an energy that influences the whole group's and the scene's energy level and direction regarding emotional charge.

Objects and stories (Part4):

Scenes with objects:

The participants use heavily related subjects to the environment they live in (two starting scenes unequivocally could only happen in the Netherlands).

Participant(J) volunteers again when the others are reluctant. This is a strong pattern in the workshop.

By the third scene, I see that the participants are getting tired. The scenes became slower, they are less focused, and this results in more chaotic outcomes. There can a scene that does not even made sense considering the exercise, because the players (Participant(T) and Participant(J)) not just changed the object in the scene but also the scene itself.

Observed activated skills: Adaptability, Communication skills, Problem-solving skills, Commitment to the partner, Active listening, Idea formation and mediation, Innovativeness.

Observed patterns: Participants have a harder time with using, and especially handing the objects between themselves. The introduction of these props significantly decreased the intensity and the participants' focus on actually acting in the scenes (with their mimic and gestures).

Storytelling (Suddenly, then…):

Participant(A) starts the story and gets confused. Here is felt a strong sense of tiredness from not just her, but also from the group. Language barriers of storytelling here.

The participants stich to real life circumstances in the story until Participant(F) drops in a highly imaginative turn, turning the story into fantasy.

The participants use a lot of expressive phrases, they use rhetoric capabilities and timing.

Interestingly, 8 out of 10 participants used body language and played out most of the things they were saying.

Observed activated skills: Active listening, Focusing on others for an extended time period, Imagination, Rhetorical skills, Resourcefulness.

Observed patterns: Until Participant(F) does not bring in a fantasy fairy tale part, the other participants cannot step out of their normal mindset. After the interruption by the 'innovator' (Participant(F)) happens the others are combining imagination with the story more freely.

Conclusion:

The facilitator concludes the session with the concept of yes-anding. Also talks a bit about how it can be implemented into the business sphere.

Overall, she asks for reflexivity, but a participant has to leave as the workshop already over exceeded the predefined timeframe with 15 minutes, which interrupts the reflexive round, so the facilitator quickly just closes the session. The quick reflection which was given by Participant(J) and Participant(T) noted that it was a fun experience, but it could have been longer a bit. This contradicts a bit my perception of them being tired. I missed this final round from the others (who could not express themselves because of the interruption), where they could have expressed more deeply their fresh emotions about the improv experience.

Overall note about the observably used skills: Social EI competencies as I could observe were in motion, such as showing empathy to peers, caring for others, picking up the groups ruling mood and interacting both success and respect. The self-confidence to perform unusual tasks were probably affected positively by the exercises, as participants generally seemed braver and braver as the workshop went on. Team building certainly happened, the participants created a nice atmosphere and interacted and communicated with each other happily, moreover most participants stayed after the workshop to talk with each other a bit further and out of the context of the exercises.