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Building Resilience with Creativity: A Reflective Card Deck Prototype by Lakshmi Sithambaram

An Abstract of a Project in Creativity and Change Leadership

Submitted in Partial Fulfillment
of the Requirements
for the Degree of Master of Science

May 2023

Buffalo State University
State University of New York
Department of Creativity and Change Leadership

ii

Abstract of project

Building Resilience with Creativity: A Reflective Card Deck Prototype

The increasing complexity and adversity in today's world emphasize the need for resilience as a

critical skill to navigate these challenges. The World Economic Forum identifies resilience, stress

tolerance, and flexibility as essential skills for thriving in the 21st century. But how can we

intentionally develop resilience? Through this project, I explore the relationship between creativity

and resilience and how creativity skills can be deliberately cultivated to build resilience. To

achieve this, I developed a prototype of a reflective card deck that offers a unique approach to help

individuals gain knowledge, make connections, explore their relationship with the skill, and

practice the creativity skills. This tool is a practical and engaging way to build a reservoir of skills

that can be drawn upon when facing adversity, empowering individuals to unlock their full

potential and bounce back in the face of challenges. Creativity could be the superpower, allowing

us to see beyond adversity and explore a world of endless possibilities.

Keywords: Creativity, Creativity Skills, Resilience, Creative Mindset, Metacognition, Reflection,

Adversity, Possibilities

Your Signature

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May 6th, 2023

Date

Buffalo State University State University of New York Department of Creativity and Change Leadership

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Dates of Approval: May 6 th , 2023	Molly Arty
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Acknowledgments

I dedicate this project to the memory of my beloved father, whose love and support remain a source of inspiration for me.

I am deeply grateful to my father for encouraging me toward my passion when I was uncertain about my future. His encouragement opened a world of possibilities for me, and I am forever grateful for his unwavering support. While I deeply miss him, I take comfort in knowing that his legacy lives on through the work I do and the impact I hope to make.

I would also like to express my gratitude to my husband, Rahul, who has been an unwavering source of support throughout my entire Master's program. His love, encouragement, and understanding have been the pillars of my success, and I could not have reached the finish line without him. Whether helping me manage my time, discussing creativity around the house, or providing emotional support during moments of stress, Rahul has always been there for me.

I want to give a special shoutout to my advisor, Dr. Hollinger, for being an incredible support system throughout this project. She not only offered her valuable time and expertise but also held space for me during moments of stress and uncertainty. Her guidance and encouragement have been instrumental in shaping this project and making it a success. I'm especially grateful for the connections she helped me make with individuals who were able to offer their insights and perspectives on resilience. Through her connections, I was able to engage in meaningful conversations that informed my work and provided a deeper understanding of the topic. Thank you, Dr. Hollinger, for your unwavering support and for being a true mentor in every sense of the word.

A big thank you to Dr. Susan Keller- Mathers for being willing to answer all the questions and provide guidance throughout the project.

A special mention and thank you to Dr. Puccio for his encouragement and support throughout the Master's program and for taking the time to give me feedback on my project.

I want to extend a heartfelt thank you to my friends and cohort members Samantha Monaghan, Selma Dawani, and Kathy Frazier for the invaluable support they provided me throughout the Master's program. Their Monday night discussions, feedback, and encouragement kept me motivated and focused. They not only helped me to think through various options but also provided valuable feedback that helped me to improve my work.

A big thank you to Anne Brisson, a good friend and cohort member, for always being willing to provide feedback on my project and helping me think through my ideas.

A sincere appreciation to my mother and brothers for their consistent support during my Master's program, especially when I had to study remotely from India.

I would also like to express my gratitude to each member of the cohort who has been a supportive presence throughout my Master's program, especially during the challenging time after the loss of my father.

Finally, I would like to thank Laura, Maude White, and Dr. Latise Hairstone. I am grateful for the time they took to share their expertise and experiences with me, which enriched my research and project.

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SECTION ONE: BACKGROUND TO THE PROJECT

Purpose and Description of Project

"I suppose it is tempting, if the only tool you have is a hammer, to treat everything as if it were a nail." – Abraham Maslow (1969)

The world has become increasingly complex and chaotic, transitioning from a volatile, uncertain, complex, and ambiguous (VUCA) to a brittle, anxious, nonlinear, and incomprehensible (BANI) environment (De Godoy & Filho, 2021). BANI world, emphasizing constant change and uncertainty, inherently brings the potential for adversity. Adversity is a part of life, increasingly prevalent in today's landscape. Adversity refers to experiences that have the potential to produce undesirable outcomes by disrupting normal functioning (Riley & Masten, 2005). The COVID-19 pandemic, economic downturn, political and social divisions, and natural disasters are just a few examples of the many forms of adversity people face today. The pandemic has brought unprecedented changes to how we live, work, and interact with others, highlighting the importance of resilience and adaptability to change. As the world continues to evolve at a rapid pace, individuals are faced with the daunting task of navigating through the increasing complexities of life. Uncertainty and stress often accompany these challenges, leaving people searching for effective ways to cope and thrive in the face of adversity. The World Economic Forum (2020) recognizes resilience, stress tolerance, and flexibility as key skills needed to thrive in the 21st century. Kellerman and Seligman (2023) define resilience as the ability to adapt, psychologically and behaviorally, to new challenges without suffering worse consequences. According to them, Tommorowmind is the mindset that empowers individuals to foresee changes, plan effectively, overcome obstacles, and reach their maximum potential. They propose that this mindset is what one needs to thrive now and in an uncertain future. Resilience is considered a fundamental

Tomorrowmind skill (Kellerman & Seligman, 2023). When life throws curveballs, resilience is the superpower that helps us see beyond hardship and into the realm of endless possibilities. Resilience is not just a survival tool; it is the key to unlocking our full potential and achieving true well-being in the face of any challenge. What follows is an exploration of how this skill can be developed through creativity and emotional intelligence.

Creativity Journey

Embarking on my creativity and change leadership journey has opened up Pandora's box of creativity skills and tools, allowing me to acquire new abilities while at the same time recognizing and strengthening the ones I have already been practicing. Realizing that creativity skills can significantly contribute to our well-being has been empowering for me. Developing and honing our creative abilities allows us to express ourselves and find innovative solutions to problems, adapt to challenging situations, and ultimately lead more fulfilling lives. Knowing that I can positively impact my well-being through creativity has given me a sense of control and agency.

The more I explore creativity, the more I realize how closely it is intertwined with resilience. Through my graduate program, I've uncovered what skills and abilities make up creativity. In addition, I have also learned how to develop the necessary skills and adopt a creative mindset for problem-solving. In today's world, creativity is essential for thriving in the face of challenges and adversity (Kellerman & Seligman, 2023). I believe that creativity can help individuals not only cope with adversity but also improve their overall well-being and quality of life. By cultivating creativity, we can better navigate obstacles and find new, innovative solutions. The questions I began asking myself are: How can the skills of creativity be leveraged in order to

build resilience and foster growth and well-being following adversity? Are there any other key factors that could play a role in enhancing creativity when facing adversity?

Mediating Role of Emotions

The graduate program has also brought to light the critical importance of affective skills in creative thinking. While creativity skills could play a key role in building resilience, it is essential to acknowledge the pivotal role of emotions in driving these processes. Emotions drive the creative process. I believe emotions would play a mediating role in creativity by influencing how we approach and respond to challenges and building resilience. Understanding the complex interplay between emotions and creativity can help individuals process and regulate their emotions in a healthy way and foster a more conducive environment for creative thinking. This can help individuals use their own emotions positively to drive their creative process. Is emotional intelligence the missing piece to unlocking boundless creativity and fortifying resilience against life's challenges? This is an intriguing question that begs to be explored.

Recognizing Relationships

According to the World Economic Forum (2020), emotional intelligence and creativity continue to be crucial skills needed to help individuals navigate through challenging situations and bounce back from adversity. Creativity skills have the potential to unlock resilience, making us more resourceful and allowing us to grow from adversity. Emotional intelligence enhances our ability to understand, use and regulate our emotions, which in turn helps us to be more creative and resilient. Understanding the interplay between these skills is valuable in developing a skillset that can help individuals navigate challenging situations and emerge stronger from them. Psychological research demonstrates that the resources and skills associated with more positive adaptation, that is, resilience, can be cultivated and practiced (American Psychological

Association, 2014). Similarly, creativity and emotional intelligence skills can be intentionally nurtured and practiced (Goleman, 2006; Osborn, 1963; Puccio, 2017). Thus, exploring how creativity and emotional intelligence skills can be leveraged to build resilience and facilitate personal growth in the face of adversity is of great interest to me personally. The question I aim to answer is, "How can creativity and emotional intelligence skills be cultivated to build resilience, and what tools can be developed to support this growth?". My project aims to develop work on answering this question.

Integrating Creativity

In Rising Strong: How the Ability to Reset Transforms the Way We Live, Love, Parent, and Lead, Brené Brown (2015) stated:

Creativity embeds knowledge so that it can become practice. We move what we are learning from our heads to our hearts through our hands. We are born makers, and creativity is the ultimate act of integration — it is how we fold our experiences into our being. ... creativity is the mechanism that allows learning to seep into our being and become practice. The Asaro tribe of Indonesia and Papua New Guinea has a beautiful saying: "knowledge is only a rumor until it lives in our muscle." What we understand and learn about rising strong is only a rumor until we live it and integrate it through some form of creativity so that it becomes part of us. (p.6)

(...) One more thing they have in common is that they don't try to avoid emotions- they are feeling machines who think and engage with their emotions and the emotions of people they love, parent, and lead. The most transformative and resilient leaders that I've worked with over the course of my career have three things in common: (...) Second, they understand and stay curious about how emotions, thoughts, and behaviors are connected in the people they lead, and how those factors affect relations and perception. (p.7)

Brown suggests that integrating knowledge and experiences through creativity is an essential way to rise strong and bounce back after adversity. The transformative and resilient leaders that Brown has worked with have shown curiosity and engagement with their emotions and those of the people they lead, highlighting the importance of emotional intelligence in building resilience.

In Tomorrowmind: Thriving at Work with Resilience, Creativity, and Connection, Now and in an Uncertain Future, Kellerman and Seligman (2023) stated:

(...) These skills described here won't be developed overnight. They will take thought, practice, and commitment. In time they will function as superpowers to guide you steadily over swirling waters, to help you preserve balance and focus through a centered, empowered lens in the world. We call this thriving. (p.13)

Kellerman and Seligman (2023), in their book, talk about resilience, cognitive agility, creativity, and innovation as the key skills that will function as a superpower in the face of challenges. They explain that adaptability, creativity, and generalism were valuable skills for centuries, but the upcoming era of labor will require a quick repurposing of cognitive abilities to tackle new challenges. For example, generations ago, the Asaro tribe in Papua New Guinea began making masks. One man's makeshift mud costume frightened wedding guests and inspired a plan to win a tribal war by using masks to disguise themselves as ghosts. The enemy fled at the sight, resulting in a decisive victory for the Asaro tribe. The story of the Asaro tribe's masks demonstrates how creativity can be used to solve problems and overcome adversity. Similarly, Kintsugi is a 15th-century Japanese technique that involves repairing broken objects by highlighting their cracks with gold rather than disguising them. Beyond its artistic purpose, the philosophy of kintsugi represents healing and resilience (Santini, 2019). The practice of kintsugi is a beautiful

representation of the transformative power of resilience and the use of creativity skills as the "gold" that accentuates the broken parts when facing adversity. These highlight the significance of honing your creative skillset and making it a part of your everyday living as a way to build your capacity to adapt to change and cope with adversity.

Master's Project

Through conducting a literature review on the intersection between creativity, emotional intelligence, and resilience, I aim to gain a more detailed understanding of how these concepts are related. This exploration will guide the development of a tool that enables individuals to hone their creativity skills, along with weaving in emotional intelligence skills, as a means of enhancing their resilience (beyond the scope of the project). Specifically, the master's project will involve creating a prototype of this tool that provides individuals with the means to recognize and strengthen their creativity skills along with their emotional intelligence skills. This tool will utilize metacognitive reflection and practice as the primary learning method. Reflection has been recognized as a valuable technique for building creativity and emotional intelligence skills. Incorporating reflection into one's daily routine can be an effective way to enhance both creativity and emotional intelligence (Gill, 2014; Kaufman & Beghetto, 2009). The end result will be a comprehensive set of reflective questions, simple yet effective, that can facilitate these skill sets and lead to meaningful changes. Over time, this will enable individuals to develop a reservoir of skills that can be tapped into and utilized when facing adversity. I envision this project as my first of many steps towards creating a ripple effect that enhances the resilience and well-being of individuals, empowering them to not only navigate life's challenges but also thrive.

Personal Goals

I aim to accomplish the following objectives through this master's project:

- 1. Enrich my knowledge of creativity, emotional intelligence, and resilience: As I delve into the literature on creativity, emotional intelligence, and resilience, my goal is not only to expand my understanding of each concept but also to explore how they can work in harmony to foster personal growth and well-being. By examining the latest research and best practices, I hope to gain insights into the most effective ways to cultivate these skills in myself and others and develop a deeper appreciation for their role in building resilience and adaptability.
- 2. Discovering how CPS tools can promote resilience: My master's program has provided me with ample exposure to various CPS tools that can enhance creativity skills. Now, I aspire to delve deeper and explore how these tools can be adapted and utilized to build creativity skills in the context of resilience in individuals.
- 3. Fostering empowerment through creativity: As a certified coach and a psychology major, one of my main interests is empowering individuals to turn inward when facing challenges. I believe that developing creativity along with emotional intelligence skills can make individuals more resourceful in navigating life's difficulties. Through my master's project, developing a prototype of a reflective card deck would serve as a means to provide individuals with the understanding of skills and practical methods to build and strengthen these skills.
- 4. **Connecting the dots:** Steve Jobs once said, "Creativity is just connecting things." He believed that creativity involves connecting the dots between experiences and synthesizing new ideas. Jobs suggested that this is only possible when we have more experiences or

when we devote more time to reflecting on our experiences (Wolf, 1996). As Brené Brown notes, creativity is a powerful tool that allows us to pay attention to our experiences and connect the dots to learn more about ourselves and the world around us (Brown, 2015). Brown (2015) emphasizes that through creativity, we can gain new insights and perspectives that can help us enhance our well-being and resilience. I aim to contribute to the field of creativity and use this opportunity to connect the dots between creativity, emotional intelligence, and resilience. By developing a prototype of a reflective card deck that leverages creative problem-solving tools to build creativity skills, emotional intelligence, and, ultimately, resilience, I hope to provide individuals with a practical means of integrating creativity into their daily lives.

Rationale for Selection

Shortly after I began my Master's program in creativity, I lost my father to COVID. Following this loss, I found myself in profound need of meaning and something positive and constructive to channel my energy towards. Despite the difficult circumstances, or perhaps more accurately, *because* of the difficult circumstances, I had a strong desire to learn and grow. The program provided me with not only an opportunity to learn and develop new skills but also an outlet to process my emotions. I deeply appreciated having a space for both in the program. This unexpected coincidence created a powerful impetus for me to explore the intersection of creativity and resilience and delve deeper into how creativity and emotional intelligence can be harnessed as tools for personal growth and resilience.

What differentiates individuals who grow and thrive from adversity versus those who crumble and suffer? While researching the role that metacognition plays in creativity during CRS 625, Current Issues in Creativity, it led me to think about how these skills can be tapped into in the face

of adversity. The ability to reflect on one's own thinking processes and emotions is a crucial component of both creativity and resilience. My increased awareness of creativity as a skill and how significant it is in one's life has made me captivated by the creativeness that comes from the unconscious and how it shows itself in the ordinary affairs of life (Maslow,1958). The learning that resilience arises from ordinary adaptive processes rather than extraordinary ones provides an optimistic outlook for intervention (Masten & Powell, 2003). Using creative skills to nurture a creative mindset and enhance emotional awareness could be the way.

In these turbulent times, building a foundation of skills that can help us navigate through the challenges of life is more critical than ever. I believe that the intersection of creativity, emotional intelligence, and resilience represents a powerful toolset that can serve as a reservoir of strength and support when we need it most. It's a captivating journey of discovery, exploring how we can cultivate these skills and use them to not only survive but thrive in the face of adversity. My project aims to bring skills that are now seen as extraordinary and only accessible to a select group of people who grow through adversity into the realm of ordinary skills. Resilience should be seen as something that is needed in every aspect of ordinary living (Brooks & Goldstein, 2004) and not be viewed as a safeguard against tragedy and crisis.

Developing the skillset of creativity and emotional intelligence can benefit individuals significantly in two ways. First, it allows them to become more resourceful and better equipped to deal with challenges, setbacks, and emotional upheavals. By paying attention to their experiences and emotions and connecting the dots between them, individuals can gain insights and perspectives that help them understand themselves and the world around them better. This increased self-awareness can help individuals make more informed decisions, cope with stress more effectively, and improve their overall well-being.

Secondly, the development of creativity and emotional intelligence skills can have a positive impact not only on individuals but also on the world as a whole. Promoting creativity and emotional intelligence as tools for resilience can lead to a thriving society that is better equipped to deal with crises, such as natural disasters or pandemics. Additionally, the development of these skills can also lead to the creation of new ideas, products, and solutions that can address social, economic, and environmental issues, ultimately benefiting society at large.

Section Two: Pertinent Literature and Resources

"Creativity is a way to connect with our deepest selves and cultivate resilience in the face of challenges. It allows us to find new solutions, approach problems from different angles, and see possibilities where others see only limitations." - Dr. Scott Barry Kaufman.

In this literature review, my key aim is to delve into the intersection of creativity, emotional intelligence, and resilience by exploring existing research. Through this exploration, I also hope to gain insights into how metacognitive reflection can be leveraged as a practical tool to promote creativity, emotional intelligence, and resilience in individuals. To inform this review, I drew from the fields of creativity and psychology, with a specific focus on positive psychology.

Research Questions

To guide my literature review in exploring the potential of creativity and emotional intelligence in fostering resilience, I identified several key research questions as a starting point.

- 1. What does it take to bounce back? Exploring the multifaceted concept of resilience
- 2. What is creativity? Revisiting knowledge gained through the Master's program to uncover creativity's transformative power as a skill
- 3. What is emotional intelligence? Understanding the components that make up emotional intelligence
- 4. What role does emotion play in creativity? When emotions meet creativity
- 5. How can creativity be a catalyst for resilience? Uncovering the transformative power of creative thinking.
- 6. Looking within: How can metacognitive reflection fuel creativity and cultivate resilience?

Resilience

The American Psychological Association (2014) defines resilience as "the process of adapting well in the face of adversity, trauma, tragedy, threats or even significant sources of stress." Resilience refers to a class of phenomena characterized by good outcomes in spite of serious threats to adaptation or development (Masten, 2001). Panter-Brick and Leckman put it another way, defining resilience as the process of harnessing resources to sustain well-being. Others (Masten, 2008) refer to resilience as "ordinary magic" rather than extraordinary resources. The concept that resilience originates from ordinary magic is the notion that human beings are capable of astonishing resilience in the face of adversity when given simply the typical human adaptational skills and resources, functioning normally (Masten, 2001). Resilience represents the probability that someone can go through extremely difficult situations while maintaining their psychological well-being (Rutter, 2007). Resilience is a crucial construct in positive psychology and is believed to play a significant role in promoting one's well-being (Mak et al., 2011). Various models of resilience emphasize the transactional interaction between the individual and the environment (Luthar et al., 2000), in which individuals mobilize personal and social resources in response to stressful situations to protect themselves from risks (Block & Kremen, 1996; Eriksson & Lindstrom, 2005; Rew & Horner, 2003). Mak et al. (2011) suggest that developing resilience is an ongoing process that can be built, rebuilt, and strengthened over time. This perspective of resilience emphasizes the importance of this ordinary ability that individuals can cultivate and enhance over time, even after facing challenging circumstances.

Resilience is a complex and multifaceted construct that has been conceptualized in various ways in psychological literature. Rutter (1987) viewed resilience as a protective factor that can inoculate against the detrimental effect of future challenges, as well as a promotive factor that can

moderate the effect of exposure to risk. Masten (2001) characterized resilience as an outcome of successful coping with threats, while Lee and Cranford (2008) defined it as an enhancing capacity for coping with adversity. Connor and Davidson (2003) viewed resilience as a personality trait or characteristic, while Windle (2011) conceptualized it as a process of successfully negotiating, adapting to, or managing significant sources of stress or trauma. Luthar et al. (2000) described resilience as a dynamic process of positive adaptation in the context of adversity, focusing on the conditions and processes that interact to infer resilience. Finally, Fletcher and Sarkar (2012, 2013) defined resilience as the function of mental processes and behaviors in enhancing personal resources and safeguarding individuals against the detrimental impact of stressors. Based on this definition, Baker et al. (2021) proposed a skills-based model of personal resilience, which highlights the idea that resilience is a set of skills that can be learned and developed over time. Similarly, Sandberg and Grant (2017) emphasize that resilience is not just a trait that some people are born with but rather a skill that can be learned and developed over time. Adopting this view of resilience is beneficial for this project, as it suggests that individuals can be trained to become more resilient, potentially reducing the negative impacts of stress and adversity.

Creativity

Creativity is a complex construct with various definitions provided by researchers and scholars. For instance, Stein (1953) defined creativity as the capacity to produce novel and useful ideas, while Ackoff and Vegara (1988) defined creativity as the ability to alter self-imposed limitations. The current study defined creativity as the ability to solve problems and overcome obstacles by generating novel and appropriate ideas and actions (Moran, 2010). Our capacity to create has been a fundamental aspect of human survival and is essential in responding to the fast pace of change that characterizes our current environment (Puccio, 2015). Having a flexible

mindset to create and adapt in response to the rapid pace of change provides us with a competitive edge, enabling us to survive environmental challenges and transform our living and working environment. Creative thinking skills are key for solving complex and open-ended problems. It is widely recognized that this set of skills, including both cognitive and affective, can be developed and enhanced through practice and training (Hennessey & Amabile, 2010; Plucker et al., 2015). Research has shown that creative individuals possess a unique set of skills, including the ability to generate original and innovative ideas, recognize and solve complex problems, think divergently and critically, and communicate effectively (Cropley, 2006; Runco, 2014). These skills are malleable, not fixed, and can be developed and honed over time through deliberate practice, exposure to diverse experiences, and influenced by one's environment (Kaufman & Beghetto, 2009; Sawyer, 2012). In this sense, creativity can be viewed as a learnable skill set that can be applied across a wide range of domains, from the arts to business and science. These perspectives suggest that creativity is a dynamic process involving both internal and external factors that can be nurtured and developed over time, which aligns with the goal of the current project.

Rhodes (1961) conceptualized creativity as involving the reorganization of knowledge, whether general or specific, and the ability to express this synthesis in a way that is understandable to others. He proposed a model of creativity that includes four interrelated components: person, process, product, and press. The process component of creativity pertains to motivation, perception, learning, thinking, and communication, supporting the notion that the creative process is teachable and individuals can acquire the necessary skills and knowledge to engage in creative thinking (Rhodes, 1961).

Kaufman and Beghetto (2009) identified four categories of creativity: Big-C, little-c, mini-c, and Pro-c. This project focuses on little-c and mini-c creativity. Beghetto and Kaufman (2007)

define mini-c creativity as the novel and personally meaningful interpretation of experiences, actions, and events, and the term "little-c" creativity pertains to the creative process involved in everyday activities that even non-experts engage in regularly (Richards et al., 1988). Little-c creativity is about 'acting with flexibility, intelligence, and novelty in the everyday' (Craft, 2005, p. 43). This results in creating something new that has 'originality and meaningfulness' (Richards, 2007, p. 5). This type of everyday creativity can manifest in various individuals, from those who can navigate complex work problems to individuals with a passion for gardening and design or those who take creative photographs and share them on online platforms. Mini-c creativity, on the other hand, 'happens when a person demonstrates "flexibility, intelligence and novelty" in their thinking' (Craft, 2005, p. 19). It may not be visible to outsiders and may consist purely of ideas and connections that the learner creates. As Vygotsky (1967, p. 7) explains: 'Any human act that gives rise to something new is referred to as a creative act, regardless of whether what is constructed is a physical object or some mental or emotional construct that lives within the person who created it and is known only to him.' Piaget suggested that 'to understand is to invent' (1976, cited by Richards, 2007, p. 95), meaning that a learner 'invents' an understanding of new material for themselves.

By recognizing that creativity is not a fixed trait, but a skill that can be honed and improved, this project will take advantage of this malleability to foster creativity in individuals. With this understanding, individuals can develop strategies and interventions that target specific levels of creativity, such as little-c and mini-c, to promote creative thinking and problem-solving. A primary aim of this project is to empower individuals with the skills to adapt and thrive in an ever-changing environment, ultimately leading to improved well-being in the face of adversity.

Emotional Intelligence

Emotional Intelligence is defined as the ability to identify, assess, and manage the emotions of oneself and others (Goleman, 1995). Salovey and Mayer (1990) proposed another similar definition of emotional intelligence, as the capacity to observe and differentiate between one's own and other's emotions and apply this knowledge to steer one's thoughts and behaviors. They put forward a set of four abilities that are interlinked but separate: the ability to perceive emotions, the ability to use emotions, the ability to understand emotions, and the ability to manage emotions (Mayer & Salovey, 1997). *Perceiving emotions* is the ability to recognize and interpret emotions in oneself and others, including through facial expressions, images, sounds, and cultural context. (Salovey & Grewal, 2005). Using Emotions involves using one's emotions to enhance cognitive processes such as problem-solving (Salovey & Grewal, 2005), which is significant in the creative process. Understanding Emotions refers to the ability to comprehend the language of emotions and recognize complex relationships among emotions (Salovey & Grewal, 2005). Managing emotions involves the capacity to control and handle emotions effectively, not only in oneself but also in others (Salovey & Grewal, 2005). Understanding the components that make up emotional intelligence is essential for comprehending the building blocks of emotional intelligence; yet, for the sake of this project, emotional intelligence is considered a single component that incorporates these variables.

Taken as a whole, emotional intelligence refers to an ability to recognize emotions and their relationships and to reason and problem-solve on the basis of them. It involves the capacity to perceive emotions, assimilate emotion-related feelings, understand the information about those emotions, and manage them (Mayer et al., 1999, p. 267). Emotionally intelligent individuals have the capability to harness and regulate their emotions, including negative ones, to achieve desired

outcomes (Salovey & Grewal, 2005). For the purpose of this project, integrating emotions in a manner that enhances cognitive processes (Mayer at al., 2008) will be the focus.

Mediating Role of Emotions in Creativity

Creativity is not solely the outcome of cognitive processes, as it is also influenced by emotions and affective states (Puccio et al., 2011). Emotions are integral to the creative process (Hoffmann et al., 2021). Emotional intelligence has been linked to better creativity as it enables individuals to regulate their emotions effectively, leading to an increase in cognitive flexibility - a crucial component of creativity (Çam & Büyükbayram, 2014). Hoffmann et al. (2021) proposed that emotions, whether positive or negative, contain valuable information that can contribute to the creative process, as different types of emotions can be more or less conducive to specific stages of the creative process. Crucially, creativity does not depend on a particular type of emotion. Instead, emotional intelligence allows a range of emotions to be utilized and controlled to facilitate creativity (Ivcevic, 2023). For example, Kaufmann and Vosburg (2002) found that positive mood led to superior scores in early idea generation, and negative mood led to superior scores in late idea generation. The key factor is the individual's ability to effectively harness and utilize those emotions in a productive manner. Throughout the creative process, emotions play a significant role, starting from the decision to take on a challenging project to the creation and presentation of the final product. Emotions are not mere impositions on individuals; rather, people have agency over their emotions and can utilize this agency to enhance their creativity (Ivcevic, 2023). Individuals who possess both high creative abilities and mastery over their emotions are more likely to be viewed as more creative by others and display greater persistence in overcoming challenges (Ivcevic & Brackett, 2015). Emotions are inherent in stressful life events (Sarason et al., 1978; Lazarus, 1999). In this project, emotional intelligence skills are not viewed as the sole

driving force for building resilience but rather as an important component that supports and enhances creativity as a protective factor in the face of adversity.

Creativity Constructs in Resilience

Individuals may develop resilience through a variety of circumstances and behaviors, both unintended and intended. One intentional path to resilience, and the focus of this project, is uncovering the transformative power of creativity skills. Despite creativity being widely acknowledged as necessary, its contribution to resilience has received limited attention until recently (See Kellerman & Seligman, 2023; López-Aymes et al., 2020; Metzl, 2009; Metzl & Morrell, 2008).

Taking this into account, the current project aims to (1) summarize the (limited) empirical connections between creativity and resilience in the literature and (2) draw theoretical connections for which there is at least some evidence and that future research might explore further. To that end, this section of the literature review highlights the link between creativity and resilience, emphasizing how creativity skills can promote resilience in individuals.

Cognitive Processes

Cognitive processing refers to the mental activities involved in generating, organizing, and manipulating information in order to understand and solve problems, make decisions, and create new knowledge (Krch, 2011). Creativity can be seen as a cognitive process that involves various mental operations, such as generating novel ideas, reorganizing existing knowledge, and evaluating and refining the resulting product (Runco & Chand, 1995). Rumination is a form of cognitive processing and is linked to creative thinking when used constructively (Forgeard, 2013). Research suggests that when rumination focuses on negative emotional states, it can lead to poor problem-solving, self-criticism, and reduced self-confidence (Lyubomirsky et al., 1999). This type

of rumination is also associated with decreased cognitive flexibility (Davis & Nolen-Hoeksema, 2000), which is important for creative thinking as it involves seeking out and applying alternative problem-solving strategies and finding relationships between seemingly unrelated concepts (Isen et al., 1985; Murray et al., 1990). On the other hand, self-reflective rumination can enhance creativity by allowing individuals to engage in deeper processing of their experiences, thoughts, and emotions. This deeper processing and the level of seriousness that individuals report while engaging in creative activities has a positive effect on their creative fluency, the originality of their ideas, and the degree of elaboration of these ideas. Additionally, this seriousness also influences the number of hours that individuals dedicate to creative endeavors (Verhaeghen et al., 2014). Individuals who score higher on measures of self-reflective rumination have been found to have better creativity, according to studies conducted by Verhaeghen et al. (2005) and Cohen and Ferrari (2010). Similarly, cognitive processing appears to be the critical factor that decides whether a person will experience growth or decline after facing adversity (Forgeard, 2013). Cognitive processes such as adaptive self-reflection and insight are positively correlated to resilience. Individuals who engage in adaptive self-reflection may develop greater resilience, but the positive effects may be stronger for those who also engage in some level of rumination, which helps to facilitate the development of insights that can enhance resilience (Bucknell et al., 2022). Overall, cognitive processing has a significant impact on both creativity and resilience. By encouraging individuals to engage in deeper processing of their experiences, thoughts, and emotions, creativity can help individuals to adapt to and overcome adversity, ultimately leading to greater resilience.

Cognitive flexibility is an aspect of cognitive processing which refers to the human ability to adapt cognitive processing strategies to face new and unexpected conditions in the environment (Cañas et al., 2006; Payne et al., 1993). Also known as "shifting," it pertains to our capacity to

transition between different mental sets, tasks, or approaches (Diamond, 2013; Miyake & Friedman, 2012). This is similar to skills that drive the creative problem-solving process. The dynamic balance between divergent thinking (a broad search for many diverse alternatives) and convergent thinking (focused and affirmative evaluation of alternatives) is central to the creative process (Puccio et al., 2011). The essence of creativity is elasticity and flexibility (Metzl & Morrell, 2008) and may be inextricably linked to the essence of resilience, which is the ability to bend and rebound to overcome challenges (Hunter, 2001). Genet and Siemer (2011) demonstrated that cognitive flexibility is a component of resilience, which aids an individual's ability to adjust to changes in their life. In a study by Sünbül (2020), cognitive flexibility emerged as a significant predictor of trait resilience, indicating that individuals who have higher levels of cognitive flexibility are likely to be more resilient in the face of adversity. By embracing cognitive flexibility, we become more resilient to life's challenges as we develop the ability to adapt to new situations and respond with openness and exploration while staying true to our chosen values (Kaufman, 2020). Essentially, individuals who exhibit higher levels of cognitive flexibility, a key skill of creativity, are better able to adjust to and cope with changes in their environment, which contributes to their overall resilience.

Csikszentmihalyi's theory of creativity highlights the importance of "flow," a mental state of complete absorption in an activity, in generating creative ideas and products (Csikszentmihalyi, 1997). "Flow," coined by Csikszentmihalyi, describes a state of intense focus and enjoyment experienced while engaged in fulfilling activities, characterized by a disregard for distractions and a willingness to continue despite challenges, simply for the sake of it (Csikszentmihalyi, 1990). Flow is conceptualized as a balance between perceived challenges and perceived skills, and such a balance leads to optimal experience (Csikszentmihalyi, 2009). This can be experienced in four

daily channels: flow (high challenge and high skill), boredom/relaxation (low challenge and high skill), apathy (low challenge and low skill), and anxiety (high challenge and low skill) (Csikszentmihalyi, 1975; Csikszentmihalyi et al., 1994; Deichter, 2011). Research has shown that flow is linked to creativity, with studies indicating that employees who experience flow at work tend to be more creative (Zubair & Kamal, 2015) and that higher levels of flow are associated with more creative musical compositions (Byrne et al., 2003). Flow, or the enjoyment of designing or discovering something new, is a well-researched protective factor of creativity that enhances personal well-being (Asakawa, 2004; Csikszentmihalyi, 1996). Similarly, flow experiences, achieved through pursuing challenging goals, can promote the development of the self and enhance resilience. Recent research supports the usefulness of everyday creative problem-solving and personal characteristics such as openness, non-defensiveness, and bravery as facilitators in responding to adversity (Gruber, 1993; Richards, 2007; Runco, 1996; Runco & Richards, 1997). Flow experiences promote the development of the self and the attainment of clear goals, leading to resilience characteristics such as commitment, self-confidence, responsibility, insight, social skills, attention, and optimism. (Parr et al., 1998). Although creativity is often defined as an act, idea, or product that transforms culture, personal creativity or "mini-c creativity" can also create change on a personal scale while benefiting from a sense of Flow (Beghetto & Kaufman, 2007). Thus, Flow, the mental state of complete absorption in an activity, is a crucial factor in promoting creativity and personal well-being, as it enhances resilience and promotes the development of the self.

Cognitive Reappraisal

Cognitive reappraisal is the deliberate act of perceiving an emotionally charged event from a different viewpoint, altering its emotional impact by reinterpreting its meaning (Lazarus &

Alfert, 1964; Lazarus & Folkman, 1984). It involves shifting attention between diverse perspectives, flexibly adapting to new situations or strategies and necessitates essential executive functions such as inhibition of highly activated or prepotent representations, memory updating, and cognitive switching (Joorman & Gotlib, 2010; Malooly et al., 2013; Weber et al., 2014), which also have a significant role in generating creative ideas to open problems in non-emotional settings (Beaty & Silvia, 2012; Benedek et al., 2012; Fink & Benedek, 2014; Gilhooly et al., 2007; Runco, 2010). The ability for cognitive reappraisal is linked to divergent thinking, which is a critical skill for creativity (Weber et al., 2014), highlighting its role in creative thinking. Cognitive reappraisal is considered a highly effective approach to dealing with adversity (e.g., Augustine & Hemenover, 2009; Webb et al., 2012) and is believed to have constructive consequences for psychological health and overall well-being (e.g., Garnefski et al., 2002; Gross & John, 2003). A person who is skilled in cognitive reappraisal is likely to have the ability to generate multiple alternative ways of interpreting or processing a distressing life event (Kaufman, in press).

Cognitive restructuring is a form of cognitive reappraisal (Nowlan et al., 2016). Cognitive restructuring is a process of recognizing unrealistic and negative interpretations of an event and replacing them with more realistic interpretations (Nowlan et al., 2016). Cognitive restructuring involves identifying and changing thought patterns, while cognitive reappraisal involves shifting one's perspective and reinterpreting the meaning of an emotional event. This ability to reframe thoughts and restructure connections is a core skill of creativity (Puccio et al., 2011). The capacity to integrate concepts from diverse areas of knowledge is a crucial aspect of creativity and contributes to its enhancement, according to Puccio et al. (2017). Creativity involves reorganizing existing materials to produce something novel and useful (Barron, 1969). This shares similarities with resilience as the ability to bounce back through positive adaptation in response to adversity

(Metzl, 2009). The integration of new or unexpected experiences with existing knowledge and experiences has been recognized as essential for personal growth (DeYoung, 2013). Psychologists have recognized "psychologically seismic" restructuring as a significant cognitive process that enables individuals to use the adversity they experience as an opportunity for growth (Kaufman, 2020), thus contributing to resilience. For example, the act of creating a narrative out of difficult experiences, writing, can help individuals make sense of what happened and integrate it into their lives, leading to a greater sense of psychological well-being (Pennebaker & Seagal, 1999). In a study that explored the potential benefits of expressive writing for nurses in the United States, they found that expressive writing promoted cognitive restructuring (Sexton et al., 2009). It helped nurses to reframe their experiences and to process their emotions, leading to improvements in overall well-being and job satisfaction. This suggested that this type of intervention could be valuable for supporting the mental health and resilience of caregivers in high-stress professions. In summary, the skills of cognitive reappraisal and cognitive restructuring, which are essential for creativity, are also critical for resilience as they enable individuals to reframe thoughts, adapt to new situations, and use adversity as an opportunity for growth.

Openness to Experience

Openness to experience refers to an individual's willingness to actively seek out and appreciate diverse experiences, as well as their ability to tolerate and explore novel situations (Pervin, 2002). Openness to experience is a comprehensive category that encompasses traits such as originality, curiosity, broadmindedness, and imaginativeness (Costa & McCrae, 1992). This concept encompasses various related aspects, including aesthetic experience, intellectual curiosity, and a preference for non-traditional or original things (Costa and McCrae, 1992; Ingram et al., 2013). McCrae (1987) noted that individuals who score high on openness tend to have a fascination

with ambiguity and open-ended tasks, possess strong cognitive abilities that are necessary for creativity, and are inclined toward seeking out novel and diverse experiences. These skills of curiosity, flexibility (Guilford, 1950), and tolerance for ambiguity and complexity (Puccio et al., 2011) are fundamental to creativity. There is a significant amount of literature that has shown a consistent and positive correlation between creativity and openness to experience, as supported by the findings of Feist (1998), Feist and Barron (2003), and Silvia et al. (2009). Similarly, being open to new experiences is also associated with identifying new opportunities and feeling more confident following adversity (Tedeschi & Calhoun, 1996). Openness to experience has also been shown to enable more flexible coping with adverse events (Kocjan et al., 2021), allowing the individual to be resilient. According to a study by Kocjan et al. (2021), openness boosted resilience because it mediated the link between openness and stress. As a result, openness had an indirect negative impact on stress through resilience. Thus, openness to experience plays a crucial role in promoting creativity, flexible coping with adversity, and ultimately resilience.

Originality and Flexibility

Originality is often used as one of the two defining criteria for creativity (the other being usefulness/task-appropriateness). Guilford (1977) defined originality as getting new, novel, or different ideas or responses. Flexibility (different from cognitive flexibility) refers to the variety of one's novel ideas; and is reflected by the number of diverging categories under which the meaningful ideas concerning a specific issue can be subsumed rather than the pure number of novel ideas (Plucker and Kaufman, 2011). It is commonly used as a criterion for divergent thinking (Guilford, 1967; Runco, 1991; Palmon et al., 2019). In a study by Metzl (2009), flexibility and originality emerged as predictors of resilience, both essential skills for fostering creativity. The findings of the study (Metzl, 2009) suggest that flexibility can aid in the process of bouncing back

while exhibiting originality can contribute to problem-solving and motivation by prompting individuals to tackle problems in novel ways and establishing a strong foundation. The ability to generate original and flexible ideas is not only a hallmark of creativity but also an important factor in fostering resilience and overcoming challenges, thus connecting creativity to resilience.

Divergent Thinking and Possibility Thinking

Tasks involving divergent thinking (DT) are considered one of the most crucial indicators of creative thinking (Runco & Acar, 2012), which empowers individuals to think of possibilities and options. Simply, divergent thinking refers to the capacity to generate a multitude of varied and original ideas in response to an open-ended problem or task (Runco, 1990). A form of divergent thinking is possibility thinking. Craft (2002) coined the term 'possibility thinking,' which conceptualizes creativity as the posing of questions or the surfacing of puzzles, whether as conscious questions or much more subconsciously in the flow of engagement. Asking the 'what if?' question fuels our imagination to explore different ways of doing something and move beyond preset boundaries. The more alternatives one explores for themselves, the more likely they are to advance towards their objective, as choices make you more powerful, increase your chances of success and allow you to gain insights into what will work, pushing you to go beyond the already familiar. (Puccio et al., 2022). One of the significant changes that is reported following adversity is new possibilities for one's life (Calhoun & Tedeschi, 1991; Forgeard, 2013). Identifying new possibilities requires creative thinking. Roepke and Seligman's (2015) study found that the ability to engage with new possibilities and perceive new opportunities emerging after adversity was a strong predictor of personal growth (resilience). From this, we can infer that the ability to engage with new opportunities and perceive new possibilities, i.e., creative thinking in the aftermath of adversity, may lead to resilience.

Tolerance for Ambiguity, Risks, and Complexity

This section explores the connection between creativity skills, tolerance for ambiguity, complexity, and risks and their role in fostering resilience. Tolerance for ambiguity, which is the ability to deal with uncertainty and avoid jumping to conclusions, is a key creativity skill, according to Puccio et al. (2011). This skill is believed to facilitate creativity and flexibility (Dollinger et al., 1995; Ghosh, 1994). Resilience, similarly, is characterized by the ability to tolerate long periods of ambiguity and to thrive and even grow stronger despite the lack of clarity, as argued by Boss (2012). Kellerman and Seligman (2023) also emphasize the importance of embracing ambiguity as a key skill for creativity and one that is crucial for resilience to flourish in times of uncertainty, connecting creativity and resilience.

A key creativity skill that involves not being shaken or unnerved by the possibility of failures or setbacks is tolerance for risks (Puccio et al., 2011). Adventure-seeking (often interchangeably used with sensation-seeking, Zuckerman, 1994)) involves risk-taking. The definition of sensation-seeking actually includes the willingness to take risks of various types (Zuckerman, 1994). Individuals who exhibit a tendency to seek adventure typically have lower levels of need for closure and avoidance of fear-inducing experiences (Kaufman, 2020). This suggests that individuals with a tendency for adventure-seeking also possess creativity skills, such as avoiding premature closure and tolerance for ambiguity, in addition to tolerance for risks. Avoiding premature closure is resisting the urge to push for a decision (Puccio et al., 2011), which is related to a lesser need for closure, and tolerance for ambiguity is being able to deal with uncertainty and avoid leaping to conclusions (Puccio et al., 2011). Adventure-seeking has been associated with increased resilience (McKay et al., 2018), mapping the indirect role that creativity could play in resilience.

In addition, high adventure seekers (*i.e.*, those who have a high tolerance for risks) often use problem-focused coping strategies (Carroll, 2013), which involve managing stress by confronting the source of the stress and exploring potential solutions (Kaufman, 2020). This approach requires tolerance for complexity (Puccio et al., 2011) and the ability to generate and consider multiple alternatives, which are essential creativity skills. Therefore, individuals who possess these skills are more likely to use problem-focused coping to effectively manage and overcome challenging situations, contributing to their resilience.

Playfulness

Approaching novelty or change with a playful, childlike mindset can serve as a protective barrier against relying solely on analytical and critical judgment. This is playfulness, a significant creativity skill (Russ et al., 2019). According to Proyer (2017), playfulness allows individuals to reframe everyday situations to experience them as entertaining, intellectually stimulating, and interesting. People with high playfulness are more stress-resistant and better at resolving tension, even in challenging situations. They also prefer complexity and unusual activities, objects, topics, or individuals (Proyer, 2017). Magnuson and Barnett (2013) found that individuals who are more playful tend to exhibit greater resilience and stress resistance compared to those who are less playful. Wolin and Wolin (1993), in their resiliency mandala, recognized playing as a critical factor in resilient individuals. Therefore, playfulness, a significant creativity skill, allows individuals to approach novelty with a childlike mindset, contributing to stress resistance and resilience.

Emotional Regulation

Gross (2008) defines emotion regulation as the set of strategies and processes used by individuals to manage, modulate, or shape their emotional experiences in order to accomplish their objectives. In the creative process, emotions such as anxiety, frustration, and happiness are

common, and they need to be managed to avoid hindering one's ability to move forward (Ivcevic, 2023). Individuals who have a potential for creativity (such as being curious and open to new experiences) and strong emotional regulation skills are more likely to persist in the face of challenges and maintain a strong passion for their interests (Ivcevic & Brackett, 2015). Our ability to flexibly and productively manage our emotions in order to achieve our goals, that is, regulate our emotions, is recognized as a building block of resilience (Kellerman & Seligman, 2023; Kay, 2016). By altering one's interpretations of a stressor, individuals may shift their accompanying emotions in an adaptive fashion, increasing the likelihood of resilience even under extremely stressful circumstances (Troy & Mauss, 2011). Being able to regulate emotions helps us approach challenging situations with a sense of urgency without feeling overwhelmed by potential negative outcomes. Instead, it allows us to channel any negative energy into creative inspiration (Kellerman & Seligman, 2023), lending itself to resiliency.

Creative Self-Efficacy

Bandura (2007) describes self-efficacy as the belief in one's ability to accomplish a task with the available resources. In terms of creativity, Tierney and Farmer (2011) define creative self-efficacy as an individual's confidence in their creative abilities to generate unique solutions or outcomes. This self-efficacy can positively influence an individual's creative expression (Yu, 2013) and is a key predictor of creativity. Creative action often demands perseverance despite obstacles, such as initial failures. As such, individuals need a motivating force to propel them toward creative action (Amabile, 1996). Having strong self-efficacy is a crucial motivational aspect in fostering creativity (Ford, 1996). Moreover, Bandura (1997) demonstrated that belief in self-efficacy is a key driving force behind individual creative actions. Similarly, individuals with high levels of perceived self-efficacy are confident in their abilities and tend to view challenges as

opportunities rather than threats, and tend to motivate themselves and persevere in the face of adversity (Bandura, 1997; Luszczynska et al., 2005). Self-efficacy is identified as a key driver of resilience that emerged in the study by BetterUp Labs (Kellerman & Seligman, 2023). This indicates the dual role that self-efficacy plays in creativity and resilience.

Finding Meaning

For many individuals, creativity has the capacity to enhance the meaning of life. Several fundamental components related to meaning-making, such as coherence, purpose, and significance, can be achieved through creative activities (Kaufman, 2018). According to Frankl (2006), creativity holds a pivotal position in the attainment of meaning. His logotherapy, a theory of psychological analysis, emphasized the significance of attaining meaning in leading a fulfilling life. Frankl (2006) describes three ways of finding meaning, one of which is through engaging in creative activities or producing work. In his work, Kaufman (2018) presents three general classifications (past, present, and future) of how creativity can contribute to the process of finding, preserving, or enhancing meaning. In the past pathway, creative activities like art and writing can help individuals reflect on their experiences and memories, leading to a better understanding of their personal history and identity. Using creativity to address past traumas or negative experiences can be a means of working toward a more meaningful life (Kaufman, 2018). Positive nostalgia has been suggested as a means to aid individuals in this pursuit (Sedikides & Wildschut, 2018). Imagination is required for reflection, nostalgia, and understanding one's life, which are all considered important components in finding meaning in life (Kaufman, 2018), highlighting the role of creativity in the process. In the present pathway, engaging in creative activities can provide a sense of purpose and fulfillment, allowing individuals to feel more connected to the world around

them. Finally, in the future pathway, creativity can help individuals envision a more purposeful future by finding ways to leave a legacy and connect with future generations (Kaufman, 2018).

Similarly, in his book "Man's Search for Meaning," Frankl (2006) highlighted the importance of life meaning in promoting resilience against traumatic events and its crucial role in psychological and physical well-being in the face of adversity. Findings suggest an inverse relationship between meaning and psychological distress (Steger, 2012). Ostafin and Proulx (2020) reviewed a range of studies that support the link between meaning in life and resilience to stressors and suggested that interventions aimed at fostering meaning can be beneficial in promoting adaptive coping strategies. Having a sense of meaning in life can buffer the negative impact of stressors and enhance one's ability to cope with them. It provides a framework for understanding and making sense of stressors and allows individuals to tap into a sense of purpose and motivation to overcome adversity (Ostafin and Proulx, 2020). In summary, by fostering a sense of meaning-making, creativity may help individuals overcome adversity and build resilience by providing a structure for understanding, making sense of stressors, and using adaptive coping strategies.

Summary

There is ample evidence that personal and social creativity may play a supporting role in improved well-being in the wake of adversity (Csikszentmihalyi 1996; Seligman 2011). Vanada (2018) states, "As a problem-solving venture that requires known traits associated with creativity—flexibility, openness to experience, tolerance of ambiguity, and ingenuity— it makes sense that resilience (rising above adversity) draws upon creative thinking. We need imagination to overcome and rise above unintended circumstances." Creative individuals tend to be more resilient because they can generate multiple solutions to problems and adapt to changing circumstances. Similarly, resilient individuals are more likely to be creative because they can

persevere in the face of obstacles, bounce back from setbacks, and maintain a positive outlook. Both creativity and resilience require skills such as flexibility, openness to experience, tolerance for ambiguity, cognitive reappraisal, self-efficacy, and emotional regulation. Developing these skills can enhance creativity and resilience, leading to well-being in various areas of life.

Creativity Skills

The literature review for this project established that creativity skills can contribute to the development of resilience. Therefore, this project will utilize creativity skills to attain its objective of developing resilience through creativity, with emotions playing a vital role as a mediator. While there are various creativity skills (see Amabile, 1989; Basadur, 1994; Edward de Bono, 1967) that can contribute to building resilience, this project will focus on the affective skills outlined in the Creative Problem-Solving process (Puccio et al., 2011; See Table 1), Beyonder skills (Torrance, 1979; See Table 2), and dimensions of divergent thinking (Guildford, 1950; See Table 3). These skills were selected because of their practical application in building resilience. Additionally, focusing on a specific set of skills allows for a more targeted and structured approach to the project. Finally, these sources were chosen because, collectively, they provide a comprehensive/broad range of creativity skills. However, it is important to note that building resilience requires a multifaceted approach, and users are encouraged to explore other creativity skills and resources beyond the scope of this project. Using these skills, the project aims to provide users with a reflective card deck for developing resilience through creative thinking, with emotional intelligence skills playing a mediating role.

Table 1Affective Skills in the Creative Problem-Solving Process

Openness to Novelty	Being able to entertain ideas that at first seem outlandish and
	risky (Puccio et al., 2011, p. 64)

Tolerance for Ambiguity	Being able to deal with uncertainty and avoid leaping to conclusions (Puccio et al., 2011, p. 64)
Tolerance for Complexity	Being able to stay open and persevere without being overwhelmed by large amounts of information, interrelated and complex issues, and competing perspectives (Puccio et al., 2011, p. 64)
Mindfulness	Attending to thoughts, feelings, and sensations relative to the present situation (Puccio et al., 2011, p. 117)
Curiosity	Wanting to know more, being inquisitive (Puccio et al., 2011, p. 117)
Dreaming	To imagine as possible your desires and hopes (Puccio et al., 2011, p. 140)
Sensing Gap	To become consciously aware of discrepancies between what currently exists and is desired or required (Puccio et al., 2011, p. 156)
Playfulness	Freely toying with ideas (Puccio et al., 2011, p. 171)
Avoiding Premature Closure	Resisting the urge to push for a decision (Puccio et al., 2011, p. 191)
Sensitivity to Environment	The degree to which people are aware of their physical and psychological surroundings (Puccio et al., 2011, p. 210)
Tolerance for Risks	Not allowing yourself to be shaken or unnerved by the possibility of failure or setbacks. (Puccio et al., 2011, p. 225)

Note. These skills are derived from Creative Leadership (Puccio et al., 2011)

Table 2Beyonder Skill Set

The Problem	Recognition or awareness of a situation; definition of the problem and commitment to deal with it; recognizing the essence of the difficulty and identifying sub-problems that are manageable or can be solved.
Produce and Consider	fluency; amount; generating many and varied ideas.
Many Alternatives	
Be Flexible	Creating variety in content; producing different categories; changing one's mental set to do something differently; perceiving a problem from different perspectives
Be Original	Moving away from the obvious; breaking away from habit bound thinking; Statistically infrequent responses; die ability to create novel, different or unusual perspectives.
Highlight the Essence	Identifying what is most important and absolutely essential; discarding erroneous or relevant information; refining are dealers, abandoning unpromising information; allowing a

	single problem or idea to become dominant and synthesizing all	
	of this at the same time.	
Elaborate - but Not	Adding details or ideasdeveloping them; filling in details for	
Excessively	possible implementation.	
Keep Open	Resisting premature closure; resisting the tension to complete	
	things in the easiest, quickest way.	
Be Aware of Emotions	Recognizing verbal and nonverbal cues; responding, trusting	
	and using feelings to better understand people and situations.	
Put Your Ideas in Context	Putting parts of experience into a bigger framework; putting	
	experiences together in a meaningful way; making connection	
	between things; giving situations and ideas a history, and	
	background, a story	
Combine and Synthesize	Making new connections with the elements within our	
	perceptual set; combining a relatively unrelated elements;	
	hitchhiking; making the familiar strange and the strange	
	familiar	
Visualize it Richly and	Using vivid, exciting imagery; creating colorful and exciting	
Colorfully	images that appeal to all five senses.	
Enjoy and Use Fantasy	Imagine, play and consider things that are not concrete or do	
	not yet exist.	
Make it Swing - Make it	Using kinesthetic and auditory senses; responding to sound and	
Ring!	movement.	
Look at It Another Way	Being able to see things from a different visual perspective;	
	being able to see things from a different psychological	
	perspective or mindset.	
Visualize the Inside	Paying attention to the internal dynamic workings of things;	
	picturing or describing the inside of things.	
Breakthrough-Extend the	Thinking outside prescribed requirements; changing the	
Boundaries	paradigm or system within which a problem resides.	
Let Humor Flow – and Use	Perceiving incongruity; responding to a surprise; recognizing	
It	and responding to perceptual and conceptual discrepancies.	
Get Glimpses of Infinity	Predict, imagine and explore things that do not yet exist;	
	wonder and dream about possibilities; view events as open-	
	ended.	

Note. These skills are derived from Torrance, E. P. & Safter, H. T. (1990). Making the creative leap beyond. Buffalo, NY: The Creative Education Foundation.

Table 3

Dimensions of Divergent Thinking

Flexibility	getting variety in kinds or categories of ideas and responses
Fluency	getting a large number of ideas or responses
Elaboration	adding to or developing existing ideas or responses
Originality	getting new, novel or different ideas or responses

Note. These skills are derived from Nature of Human Intelligence by Guildford (1950)

Metacognitive Reflection as a Practice for Building Skills

Adapting to new circumstances and learning from experience can be enhanced through the practice of reflection (Argyris, 1991). Structured self-directed learning often involves reflection, as it allows for integrating theory with real-world practice. This approach is favored for its flexibility, potential for meaningful feedback, and the various frameworks available for its implementation (Moon, 1999; Schön, 1991). Although reflection can be interpreted in various ways, the notion of reflective practice originates from Dewey's (1933) seminal writings on using reflective thinking for growth. One form of reflection, metacognitive reflection, is particularly interesting to this project. Metacognitive reflection is the increasing awareness of and control over one's thinking behavior (Fogarty, 1994). Metacognitive reflection is a crucial component of reflective practice that involves intentionally thinking about "what we know" and "how we know," as well as self-regulation (Day et al., 2009). It is the process of monitoring and becoming aware of one's own thinking and learning processes while engaged in an experience (Astleitner, 2002). Metacognitive reflection occurs during an experience and involves intentional monitoring of one's cognitive and behavioral processes (Day et al., 2009). Incorporating metacognitive reflection in learning interventions is essential for creating deep, active learning and fostering self-examination that promotes transformative development (Ryan & Ryan, 2011). The potential of metacognitive

reflection to increase awareness and control over one's thinking behavior makes it a valuable tool for building creativity and resilience skills.

In the Four-C model of creativity (Kaufman & Beghetto, 2009), reflection is a crucial component of little-c creativity, which involves using creativity to explore personal experiences and emotions. Metacognitive reflection involves thinking about one's own thinking and learning processes, which can enhance creativity skills by helping individuals understand how they generate and develop new ideas (Armbruster, 1989). By reflecting on their creative processes, individuals can identify strengths and weaknesses and adjust their approach, ultimately leading to improved creative outcomes. Therefore, metacognitive reflection can be a valuable tool for building creativity skills, particularly in the context of little-c creativity, as described by Kaufman and Beghetto's Four-C model.

Section Three: Process Plan

Plan to Achieve Your Goals and Outcomes

The outcome of my master's project is twofold. Firstly, conducting a literature review is a crucial step in establishing a theoretical framework for my project. By exploring the current literature, I aim to make connections between the constructs of creativity, emotional intelligence, and resilience and understand how they intersect with one another. The literature review will enable me to identify and analyze key concepts and empirical research related to these constructs. Through this exploration, I hope to offer insights and guidance for individuals seeking to build their resilience through creative skills.

The second outcome of my master's project is to create a prototype of a reflective card deck that utilizes metacognition-based reflection as a tool to build creativity and resilience. The literature review will serve as the basis for the development of the reflective card deck by providing theoretical and practical examples of how creativity and emotional intelligence can be leveraged to cultivate resilience. Using the knowledge, I have gained throughout my graduate studies, my goal is to design a tool that empowers individuals to tap into their innate creative abilities and emotional intelligence during challenging times, reframing adversity through a lens of possibility. To achieve this, I plan to examine existing creative techniques and tools and analyze their impact on building resilience. My focus will be on how creativity can enhance resilience.

My master's project aims to have an impact by equipping individuals with the tools to build resilience and navigate life's challenges using their creative abilities. Moreover, I aspire to raise awareness about the value of harnessing one's creative potential to become more resourceful.

In order to achieve my outcomes, I will take the following steps:

- e Embrace tolerance for ambiguity and make connections: Embracing tolerance for ambiguity and making connections will be crucial for the success of my project's outcomes. By exploring the relationship between creativity, emotional intelligence, and resilience, I will need to navigate through the complexity and uncertainty of various theories, research studies, and practical examples. Building tolerance for ambiguity will enable me to remain open-minded and flexible in my thinking, allowing me to consider different perspectives and ideas that may not be immediately apparent. Making connections between seemingly disparate ideas will help me to synthesize information and construct a comprehensive understanding of how creativity skills can foster resilience. Furthermore, I will need to remain open to possibilities regarding the execution of my project, considering such questions as: What types of tools are best for fostering these skills? and What tangible materials might be developed to foster these skills? As a result, the outcomes of my project will be more robust and insightful, providing guidance and practical tools that individuals can use to build resilience through creativity in the face of adversity.
- Using Creativity Skills as the Foundation for Resilience: In my master's project, I will emphasize creativity skills as a way to build resilience. I believe that by tapping into one's inherent creativity, individuals can develop the ability to adapt and find innovative solutions to challenges they face in life. By encouraging individuals to think outside the box and explore new possibilities, creativity can help them develop a sense of control over their situation, leading to increased confidence and resilience. Therefore, I will incorporate creative exercises and reflective activities in the prototype of my reflective card deck to help individuals harness their creativity and build their resilience.

- Importance of Learning What Makes a Reflective Card Deck Effective: Learning what makes a deck effective is crucial to creating a successful reflective card deck. The design of the deck, including the format, images, and questions, can greatly impact its usefulness and effectiveness. In addition, understanding the target audience, their needs, and preferred learning styles is key to creating a deck that resonates with them. Feedback from beta testers can also provide valuable insight into how the deck can be improved and what elements are most helpful. By learning what makes a deck effective and incorporating these elements into the design, the reflective card deck can become a powerful tool for building creativity skills and resilience. However, for the scope of this master's project, my main focus will be on developing the content of the reflective card deck.
- Be Open to Feedback: I plan to collaborate with a knowledgeable partner, from my cohort, in this field to obtain their insights and feedback on the tool I am creating. Additionally, I will actively seek and incorporate feedback from my cohort members throughout the development process. Finally, I will also seek input and guidance from my advisor, Dr. Hollinger, as part of my effort to continuously improve and refine the tool.
- Gain Perspectives (beyond the scope of the project): I also plan to gather feedback from individuals and friends who are willing to provide input on how the content of my reflective deck helps them recognize and utilize their creativity and emotional intelligence skills for building resilience in the face of challenges. This will help me get perspectives from individuals who are not immersed in creativity.

Project Timeline

I have developed a comprehensive timeline to guide my progress and ensure the successful completion of my goals. The timeline includes specific project phases, such as conducting a

literature review and developing a reflective card deck prototype, along with corresponding actions and deadlines. I have estimated the necessary hours for each task and identified the necessary support, such as mentorship or feedback from peers. This timeline provides structure and accountability, helping me to stay focused and on track toward achieving my project objectives (see Table 4).

Table 4

Project Timeline and Action Plan

Task / Product	Start Date	End Date	Hours to complete	Notes
Concept Paper Approval	January 24 th 2023	February 3 rd 2023	20	Develop and submit the concept paper. Make corrections and resubmit if needed.
	Explor	ation and Clarifica	ation	
Conduct a literature search: Read and analyze articles	January 30 th 2023	February 28 th 2023	25	Deepen my understanding of creativity, emotional intelligence, and resilience through scholarly research exploration. (<i>This will be ongoing through my project</i>)
Read Books that relates creativity to resilience	February 3 rd 2023	March 1st 2023	20	By reading books written by experts in the fields of creativity and resilience, I can gain valuable insights and knowledge that will inform the development of your project. (This will be ongoing for lifetime) Transcend by Scott Barry Kaufman Tomorrowmind by Kellerman and Seligman Rising Strong by Brené Brown Wired to Create by Kaufman and Gregoire

Gather Insights	February 15 th	February 24 th	20	Review the findings to
	2023	2023		map the connections between the creativity
				skills emotional
				intelligence and resilience
Research card decks	February 5 th	February 15 th	5	This will help me
currently available on	2023	2023		understand what is
creativity and				available in the field right
resilience				now and how I can create
				something that stands
C 1 . 4 I 4 1	F -1 2 4th	March 3 rd 2023	20	apart.
Completing Initial draft of section 1-3	February 24 th 2023	March 3 ²² 2023	20	Finishing section 2(literature review) would
diant of section 1-3	2023			help with development of
				the content for the card
				deck. Submit for feedback
				from Dr. Hollinger
Discussion with the	7 th March 2023	7 th March 2023	1.5	This will help get
cohort members on				feedback on whether I am
progress and prototype				on track and if what I am
of one card				working on is accessible to
				others.
D 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Transformation 21st 2022	1.5	T 11 . 1 1
Developing the content for the Reflective Card	March 6 th 2023	March 21 st 2023	45	I will create and produce the content for the
Deck – Using Affective				reflective cards using
Skills in the Creative				Affective Skills in the
Problem-Solving				Creative Problem-Solving
Process				Process with input from
				my advisor, feedback
				partner, and fellow cohort
				members.
Update and submit	March 15 th 2023	March 21st 2023	8	I will create and produce
Sections 1-3				the content for the
				reflective cards with input
				from my advisor, feedback
				partner, and fellow cohort members.
Presenting the initial	20 th March 2023	20 th March 2023	1.5	This will help with
prototype of the card	20 1/1011 2023	20 Iviaicii 2023	1.5	understand how the card
deck to the cohort				deck is received and
members and getting				further incorporating
feedback				feedback which will

		1	1	T
				inform my Section 4
				(outcomes)
Sections $1-3$		March 21st 2023		Submission Deadline
Complete references in	March 3 rd 2023	April 10 th 2023	7	Checking that all the
APA style				references that has been
				cited in the paper is
				included and in the right
				format
Continue to develop	March 25 th 2023	April 10 th 2023	10	Craft the prototype with
the prototype of the				the final content and some
Facilitation Card Deck				aesthetic background
Write Sections 4-6	March 25 th 2023	April 10th 2023	15	Write the outcomes, key
				learnings and conclusion
				and get feedback from Dr.
				Hollinger.
Finalize sections 4-6	April 15 th 2023	21st April 2023	5	Submit final with changes
				made
Sections 4-6		23 rd April 2023		Submission Deadline
Entire project	1st May 2023			Due date for final
submission				submission of project
Class Presentation	17 th May	7mins		Present to the entire class
				on what you spend the
				spring semester working
				on.
	Beyond	the Scope of the p	roject	
Developing the content	25 th May 2023	31st July 2023		Develop the reflective
for the Facilitation				cards Using Beyonder
Card Deck				Skills (Torrance, 1979) &
				Dimensions of Divergent
				Thinking Skills (Guilford,
				1950). This will
				incorporate feedback on
				the prototype deck.
CRS 619: Advanced	Summer 2023			Use the tools and skills
Cognitive Tools				gained through the course
Course				for developing the
				facilitation card deck
Test the complete	9 th August 2023	31st August		Use the feedback to polish
facilitation card deck		2023		the deck to make it more
with groups				effective.

Evaluation

I will establish benchmark indicators as a measure of evaluating my progress toward achieving my goals. I will consider myself as progressing toward my goals if I meet these indicators.

Indicator #1: Evidence-Based Research Credibility: The reflective card deck will feature content derived from an extensive review of literature on creativity, emotional intelligence, and resilience. The credibility and accuracy of the product will be ensured by relying on well-established research and evidence.

Indicator #2: Adequate coverage of creativity skills in the card deck prototype: The effectiveness of the reflective card deck prototype will be evaluated based on its coverage of all the relevant creativity skills. The minimum requirement is to include at least one card for each of the Affective Skills in the Creative Problem-Solving Process (Puccio et al., 2011) in the prototype as an initial step toward fleshing out the card deck. Using Beyonder Skills (Torrance, 1979) & Dimensions of Divergent Thinking Skills (Guilford, 1950) to develop reflective cards is beyond the scope of the project but maybe a future extension.

Indicator #3: Metacognitive Reflection: The metacognitive reflective questions included in the card deck will encourage users to evaluate their understanding of creativity skills and how it affects their responses to adversity. The questions will also prompt users to identify their strengths and areas for improvement, providing opportunities for self-reflection and learning. By answering these questions, users can monitor their progress and identify strategies that have been effective in building their creativity skills and resilience.

Indicator #4: Embracing the journey: The effectiveness of my project is based on my personal journey throughout this project. Embracing the journey means recognizing that the process of

designing and developing the reflective card deck will be a learning experience. It will involve testing new ideas, making mistakes, and receiving feedback from my advisor, feedback partner, and cohort members. As I progress through the project, I will reflect on what I have learned and use that knowledge to refine and improve the card deck. In addition, I will also use my creativity skills throughout the journey of the project. By embracing the journey and being open to learning, I will be able to create a more effective and impactful reflective card deck.

Section Four: Outcomes

"The creative process is a process of discovery." - Mihaly Csikszentmihalyi

This section highlights the process, explorations, and discoveries of my project on creativity and resilience, providing a thorough overview of its outcomes. Through this project, I delved into the constructs of creativity and resilience, their connections, the mediating role of emotions, and the potential benefits of fostering these skills in our lives. The range of outcomes of my project includes a literature review on creativity and resilience, a mapping of the creativity skills for the reflective card deck, and a prototype of the reflective card deck. In addition, along the journey, I also discovered rabbit holes that intrigued me and those I would like to explore further beyond the scope of the project.

Clarification

"By replacing fear of the unknown with curiosity, we open ourselves up to an infinite stream of possibility. We can let fear rule our lives, or we can become childlike with curiosity, pushing our boundaries, leaping out of our comfort zones, and accepting what life puts before us. – Alan Watts

I embarked on this project with a deep sense of curiosity and a desire to explore the connection between creativity and resilience. To begin my research, I delved into a range of books, journals, and literature that focused on these topics, seeking to understand how creativity can help individuals bounce back from adversity and overcome challenges. I was particularly interested in exploring the intersection between creativity and resilience and how creativity can help people build the skills they need to navigate the uncertainties of life and be resilient. The four books that I began reading for the project that provided valuable information on this topic were,

Tommorrowmind by Kellerman and Seligman (2023), Transcend by Kaufman (2020), Wired to Create by Kaufman (2015), and Rising Strong by Brown (2015).

As I read and learned more about the topic, I began to recognize the vital role that creativity plays in fostering resilience. These books emphasize the critical role of creativity in developing resilience for navigating unpredictable and challenging times and explore how creativity can be harnessed as a tool to cultivate adaptability, innovation, and problem-solving skills, which are essential for building resilience in both personal and professional contexts. This also led me to seek out conversations with experts in the field of creativity and resilience, hoping to gain a deeper understanding of the importance of resilience.

Through reading Switalski and Czarski's (2021) article, 'The Covid-19 Pandemic Transformed Organizational Creativity. How might we sustain it?', I gained insight into the critical conditions for sustaining organizational creativity, including the importance of investing in the well-being of employees and developing creativity to enhance resilience. Further conversations with Switalski provided a deeper understanding of these concepts and reassurance regarding the significance of building a creative learning mindset to strengthen resilience and resourcefulness in individuals and organizations during challenging times. Conversations with Maude White, former creativity student, author of the deck 'Resilience Alchemy,' and resilience facilitator, helped me learn more about how her deck was designed to help individuals explore and expand their inner strength and adaptability by generating new ways to grow and solve problems. Dr. Hairstone's session on 'Healing Centered Practices' at the creativity expert exchange 2023 highlighted the transformative power of creativity in the face of adversity. Through conversations with her, I gained a deeper understanding of how she employs creativity and creativity tools in her practices

to promote healing and resilience. These insights helped me to recognize the potential of creativity as a tool for promoting well-being and to appreciate the role of creativity in fostering resilience.

During these conversations, I acquired valuable perspectives on the importance of resilience in today's world and the crucial role that creativity can play in cultivating this capacity. The recognition of resilience as a crucial skill was a significant driving force for this project. I came to see that creativity is not just a "nice-to-have" skill but an essential tool for navigating the uncertainties and challenges of our rapidly changing world. Armed with this knowledge, I set out to create a resource that could help individuals develop their creativity skills and build the resilience they need to thrive in any circumstance. After careful consideration of my various options for an outcome, I decided to create a card deck instead of a guidebook or workbook, as I felt it would provide a more interactive and engaging experience for the user. In addition to creating a card deck, another significant outcome of the project was conducting a comprehensive literature review on the topic, which helped to inform and enhance the content of the deck.

Exploration of Literature

Exploration of literature, in section 2, was an outcome of the project and a crucial step in deepening my understanding of the constructs of emotional intelligence and resilience. In addition, revisiting all the knowledge gained through the master's program helped crystalize my understanding of creativity for this project. Beyond reading and analyzing relevant books, through the literature review, I gained insights into the various conceptualizations of these constructs, the interplay between them, and the potential benefits of developing them. In Section 2, the literature review, delving deeper into the literature and finding intersections between the creativity constructs and resilience, I was practicing a key skill of creativity, making connections - the ability to connect seemingly disparate concepts to form new ideas, which I thoroughly enjoyed. The

literature review provided a necessary basis for understanding what I wanted the outcome of my reflective card deck to be and enabled developing them accordingly.

While the literature review served as a solid foundation for my project, it is clear that there is still much to be explored in this field. As I continue to delve deeper into the topic of creativity and resilience, I look forward to uncovering new insights and expanding upon the foundational knowledge established in the literature review.

Research and Inspiration

The process of creating the reflective card deck began with research into other facilitation decks that focused on creativity and resilience. This initial step provided a wealth of knowledge and inspiration, as well as a starting point to work from. During my research, I discovered that some existing facilitation decks on resilience or creativity had a limited focus on either resilience or creativity rather than exploring the intersection of both. Additionally, many of the decks that did address creativity in the context of resilience only touched on it briefly, with a single card or section dedicated to the topic. This further emphasized the need for a deck that solely focused on the connection between creativity and resilience, providing users with a more in-depth exploration of this important relationship. Ultimately, this gap in the market and my personal interest in the topic inspired me to create my own card deck specifically designed to enhance resilience through creativity skills.

Reviewing various designs of resilience decks and connecting with individuals who had previously created such decks played a crucial role in informing the design of my own deck. Analyzing different design approaches allowed me to identify effective elements and areas for improvement. Collaborating with others provided an opportunity to learn from their experience and integrate their perspectives into the development of my deck. This research and collaboration

process established a strong foundation for creating my reflective card deck, which I anticipate will be a beneficial resource for individuals striving to enhance their creativity and resilience.

Reflective Card Deck

The prototype of the reflective card deck was an outcome of the project. I initially chose three sets of creativity skills, the Beyonder skills (Torrance, 1979), Guilford's (1950) dimensions of creative thinking, and the affective skills identified in the Creative Problem Solving (CPS) process, as described in Creative Leadership by Puccio et al. (2011), that could contribute to the development of resilience (See Section 2, Table 1, 2 & 3 for the description of the skills). However, for the scope of this project, I decided to focus on creating a prototype of the reflective card deck for only one set of skills. Specifically, I chose to focus on the affective skills identified in the Creative Problem Solving (CPS) process as described in Creative Leadership by Puccio et al. (2011) for this project. These skills, in addition to building creativity, also focus on emotions and were a great starting point for this project.

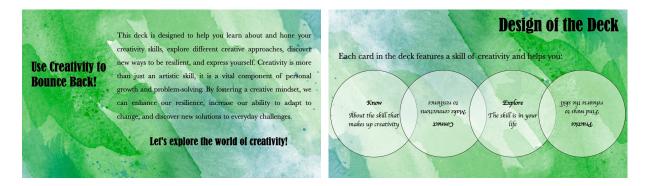
Design of the Deck

The reflective card deck prototype for this project includes 16 cards in landscape orientation, with 11 dedicated to specific creativity skills that contribute to building resilience. Incorporating the significance of resilience while keeping the name playful, I named the reflective card deck "Creative Bounce – A Deck to Explore Micro-Moments of Creativity for Resilience." The deck features a watercolor background, and every skill in the deck has its own background that corresponds to that particular skill. Each card of the deck is designed on both sides - the back and front of the card. The first card in the deck is the title card. The next four cards are the getting started cards, designed to help users get started using the deck. These cards introduce the deck, and provide guidance on the importance of creativity in resilience, how to maximize the deck

experience, how to use the deck, and the icons associated with each skill. Figures 1 and 2 depict examples of the Getting Started cards included in the Reflective Card Deck Prototype. The remaining 11 cards focus on a specific creativity skill and are designed to help the user understand the skill, make connections to resilience, explore their personal relationship to the skill, and provide a tool to practice it. Each side of the card for the specific skill is divided into two sections. The text on the left side of the card is presented upside down, requiring the user to flip the card to read it. This approach was taken to promote a sense of playfulness and to create a clear distinction between the different sections in the card.

Figure 1

Getting Started Card from the Reflective Card Deck Prototype - Introduction



Note. This is the front side of the card.

Note. This is the back side of the card.

Figure 2

Getting Started Card from the Reflective Card Deck Prototype – Importance of creativity in resilience



Note. This is the front side of the card.

Note. This is the back side of the card.

Every card dedicated to a specific creativity skill in the deck is accompanied by an icon (see Figure 3) that is displayed prominently in the center or back side upper or lower corner of the card (see Figures 4, 6 & 7). These icons serve to identify the specific primary skill being addressed in the card. The icon in the backside upper corner of each skill card corresponds to the specific primary creativity skill being addressed in that card (see Figures 6 & 7). In addition to this, there are other icons located next to the primary skill icon for the card in a smaller size that represents associated skills in the deck that can be developed through practicing the primary skill highlighted in the card (see Figures 6 & 7). These associated skills are closely related to the primary skill being focused on and can help the user further understand how these skills in the deck overlap in order to develop overall creativity.

Figure 3

Getting Started Card from the Reflective Card Deck Prototype – Icons for each primary skill in the deck



Note. This is the front side of the card.

Note. This is the back side of the card.

Figure 4

Front side of the "Tolerance for Ambiguity" Creativity Skill Card Sample from Reflective Card

Deck Prototype



Note. In the center is the icon representing the primary skill in the card.

Figure 5

Front Flipside of the "Tolerance for Ambiguity" Creativity Skill Card Sample from Reflective Card

Deck Prototype



Figure 6

Backside of the "Tolerance for Ambiguity" Creativity Skill Card Sample from Reflective Card Deck

Prototype

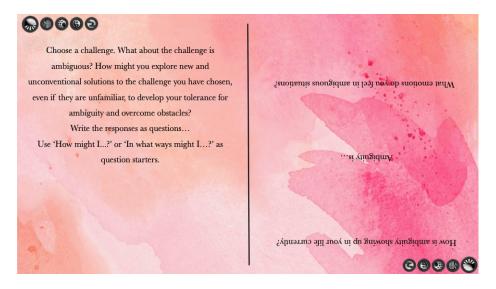


Note. In the upper left corner, the icon for the primary skill is followed by the icons for the associated skill.

Figure 7

Back Flipside of the "Tolerance for Ambiguity" Creativity Skill Card Sample from Reflective Card

Deck Prototype



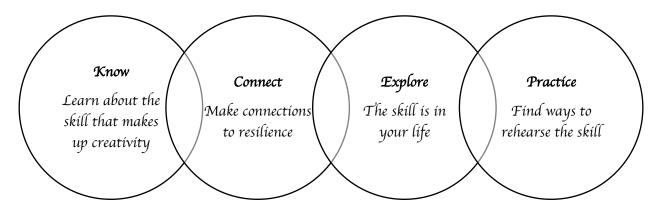
Note. This is the flip side of the card. In the upper left corner, the icon for the primary skill is followed by the icons for the associated skill.

Framework of the Deck

I developed a research-based framework to guide the creation of the reflective card deck, which has four sections: Know, Connect, Explore, and Practice. Each section is designed to help the user progress through the process of developing creativity skills that contribute to resilience. The "Know" section involves introducing the user to the specific skill addressed in the card, while the "Connect" section encourages the user to make connections between the skill and resilience. In the "Explore" section, the user is prompted to explore their personal relationship with the skill, while the "Practice" section provides tools for practicing the skill. This framework serves as a roadmap for users to engage with the deck in a structured and meaningful way.

Figure 8

Framework of the Reflective Card Deck Prototype



The content on the front left side of every skill card is dedicated to helping the user gain knowledge about the skill (see Figure 4). The purpose that each card has information about the skill on the front right side of the card is because knowledge is seen as a critical factor in the development of interest. Specifically, the acquisition of knowledge can trigger situational interest in a topic. This means that when individuals encounter new information that they find interesting, they may become curious and motivated to learn more (Hidi & Renninger, 2006). Loewenstein (1994) argued in "The Psychology of Curiosity" that curiosity is the result of recognizing and focusing on a gap in our knowledge. Interestingly, this implies that some level of knowledge or awareness must exist before we can experience curiosity (Brown, 2015). As Loewenstein (1994) suggests, in order to induce curiosity about a specific topic, we may need to provide interesting information to pique people's interest. Furthermore, Brown (2015) notes that researchers now recognize the close relationship between curiosity and knowledge-building: the more we know, the more we tend to want to know. Therefore, by providing information about each skill on the card, the user is introduced to new knowledge about that particular skill. This exposure to information can pique the user's interest and curiosity, motivating them to learn more about the

skill and how it relates to building resilience. In this sense, the information on the cards serves as a way to "prime the pump" and stimulate the user's curiosity about the skill. As they gain more knowledge, they are likely to become even more interested and curious, creating a positive feedback loop that drives deeper learning and understanding.

On each skill card, the content on the front right section is presented upside down, prompting users to flip the card (see Figure 5). This section helps users link the creativity skill addressed in the card to resilience. It invites reflection on how skills such as making connections and flexible thinking contribute to resilience. Making connections, for instance, enhances creative thinking by increasing the likelihood of obtaining unusual responses and solutions, encouraging flexible thinking, and providing cross-fertilization of ideas and results (Puccio et al., 2011). Similarly, flexible thinking helps individuals generate creative solutions in the face of adversity, leading to growth and positive outcomes, and ultimately, resilience (Roepke & Seligman, 2014). The section on making connections prompts users to reflect on the usefulness of the skill in building resilience while also encouraging them to create their own connections to enhance their learning. This process not only fosters a deeper understanding of the skill but also helps users develop their own ability to make connections, thereby promoting flexible thinking and creative problem-solving in the face of adversity.

The back left-hand side of the card prompts users to engage in metacognition by reflecting on their relationship with the creativity skill presented on the card (see Figure 6). Through openended or closed questions, users can explore what the skill means to them, how they feel about it, and ways it could be useful during challenges. Metacognition is the ability to think about one's cognitive processes (Dunlosky & Metcalfe, 2008; Flavell, 1979), and it is key to the creative process (Sithambaram, 2022). A metacognitive approach to regulating cognitive processes may

prove effective in fostering creativity (Sithambaram, 2022). Therefore, this section of the card encourages users to engage in metacognitive reflection by connecting their own thinking processes to the presented creativity skill and exploring their personal relationship with it.

The back right-hand section of the card presents the content upside down and provides a tool for the user to practice the skill using their own personal challenge (see Figure 7). Several scholars highlight that creativity skills can be taught in order to enhance an individual's problem-solving (Osborn, 1963; Torrance, 1999, Parnes, 1963). According to Ericsson and Moxley (2012), deliberate practice can enhance creativity by allowing individuals to develop specialized knowledge and skills in a particular domain. As a result, this section encourages users to practice and hone their creativity skills, enabling them to develop a repertoire of skills they can draw upon when facing challenges or setbacks.

Associated Skills Icons in the Deck

As mentioned earlier, adjacent to the primary skill icon on the back upper left side and the lower right side of the card, smaller icons depict associated skills that can be sharpened by practicing the primary skill emphasized on the card (see Figures 6 & 7). These associated skills were added during the latter part of the deck creation process to emphasize that creativity skills are not developed in isolation but rather intersect and influence one another.

By including associated skills on the cards, users are encouraged to view creativity skills as a complex network of interrelated abilities rather than isolated competencies. The associated skills serve as a reminder that developing creativity requires a range of skills that need to be honed and practiced over time. Additionally, it provides an opportunity for users to explore the relationships between different skills and identify areas where they can focus their efforts to further develop their creativity.

Mapping of Associated Skills in the Deck

To identify the associated skills for each primary creativity skill in the reflective card deck prototype, the definitions of each primary skill were used as a guide. This allowed for a systematic exploration of the interconnections between the different skills and how they relate to one another. In addition, Dr. Puccio, one of the authors of these affective skills (Puccio, 2011), approved of the connections made in the deck, with certain alterations. He suggested some additions, which have been incorporated into the table and the card deck. Through this process, the primary creativity skill and its associated skills were identified and are presented in Table 5. The identification of associated skills for each primary creativity skill also allowed for a more nuanced understanding of the complexity and diversity of each skill, highlighting the importance of a holistic approach to creativity development. Figure 9 displays an example of a card featuring the primary skill along with its associated skills depicted next to it.

Table 5

Map of Primary Creativity Skill and its Associated Skills

Creativity Skill Mapping			
Primary Creativity Skill	Associated Skills		
Tolerance for ambiguity	Sensitivity to Environment, Openness to Novelty, Playfulness, Tolerance for Risks		
Openness to Novelty	Tolerance for Ambiguity, Tolerance for Risks, Avoiding Premature Closure, Dreaming, Playfulness		
Tolerance for complexity	Avoiding premature closure, Curiosity, Openness to Novelty		
Mindfulness	Curiosity, Sensitivity to Environment		
Curiosity	Tolerance for risks, Dreaming, Playfulness		
Dreaming	Mindfulness, Curiosity		

Sensing Gaps	Avoiding Premature Closure, Tolerance for Ambiguity
Playfulness	Tolerance for Ambiguity, Tolerance for Risks, Dreaming
Avoiding Premature Closure	Tolerance for Complexity, Sensing Gaps, Tolerance for Risks
Sensitivity to Environment	Mindfulness, Tolerance for Ambiguity
Tolerance for Risks	Tolerance for Ambiguity, Openness to Novelty

Figure 9

Card featuring the primary skill along with its associated skills highlighted in the rectangles



Note. This is the front side of the card.

Note. This is the back side of the card.

Feedback

Being receptive to feedback and using it to improve my reflective card deck prototype was a critical factor in achieving my desired outcome. To ensure that I received feedback from a diverse range of perspectives, I began by sharing an initial sample of the deck with the introduction cards and four creativity skills with members of my cohort who had knowledge about creativity skills, as well as with friends and family who had very little or no knowledge about the topic. The feedback I wanted to gather from users was whether the instructions for each skill card were clear and easy to understand and their thoughts on the content and structure of each card section. Through this process, I was able to gain valuable insights and suggestions for improvement. I then used the feedback to design the rest of the skills in the reflective card deck prototype. Members of

my graduate cohort provided further feedback on the complete prototype of the reflective card deck that helped me refine the content and structure of the deck, while the perspectives of my friends and family helped me ensure that the deck was accessible and understandable to a wider audience.

Some of the feedback suggestions that I received included:

- Some task instructions in the cards were unclear and needed to be reframed for greater clarity.
- Adding images to the cards would help break up the text and make the deck more engaging.
- The use of reversed content was seen as interesting and playful.
- Adding a range of colors would make the deck appealing to a wider audience.
- Including information about each skill was useful for understanding before engaging in the practice.
- The simplicity of the deck design was appreciated.

Rabbit Holes Discovered

"The creative process is not like a situation where you get struck by a single lightning bolt. You have ongoing discoveries, and there's ongoing creative revelations. Yes, it's really helpful to be marching toward a specific destination, but, along the way, you must allow yourself room for your ideas to blossom, take root, and grow." - Carlton Cuse

During my project journey, I encountered the challenge of balancing structure and flexibility. While I needed a clear destination and a framework to follow, I also required enough room to explore and let my ideas grow. As a result, my master's project generated new questions and avenues of exploration that opened up throughout the process. I found myself exploring different constructs and discovering numerous rabbit holes that I wanted to dive deeper into. Some

of the constructs that intrigue me in relation to creativity and resilience and those I would like to delve deeper into are curiosity (Kashdan, 2010), Flow (Csikszentmihalyi, 2009), resilience (Masten, 2015), post-traumatic growth (Calhoun & Tedeschi, 1991; Forgeard, 2013), tolerance for ambiguity (Puccio et al., 2011), possibility thinking (Craft, 2002; Roekpe & Seligman, 2015), emotional intelligence (Mayer & Salovey, 1990; Goleman, 2006), mindfulness (Kabat-Zinn, 2003), cognitive flexibility (Spiro, Coulson, Feltovich & Anderson, 1988) and cognitive reappraisal (Gross and John, 2003). I realized that my desire to explore various constructs requires me to gather more resources that could aid in my understanding of them. I have started to collect numerous articles and books which could provide valuable insights into the subject matter. These resources would help me navigate the various rabbit holes that I created for myself along the journey of my project and allow me to explore new ideas and concepts that I had not delved deeper into before. Beginning the process of gathering these resources was a significant aspect of my journey, and it gave me the ability to take a more nuanced and informed approach to my exploration of creativity and resilience. It also allowed me to engage with different perspectives and recognize gaps where a deeper understanding could help me to develop a more comprehensive understanding of the constructs of creativity and resilience.

SECTION FIVE: KEY LEARNINGS

Engaging in my master's project was akin to looking through a kaleidoscope, as it allowed me to view creativity in a new light. Like a kaleidoscope, creativity provides endless complexity and unique experiences, and it enables us to see ordinary things in extraordinary ways (Sithambaram, 2022b). Through my project, I reexplored the multifaceted nature of creativity and how it can be cultivated and harnessed through the lens of resilience. The project allowed me to gain a deeper understanding of the creative process and how it can be used to address challenges and generate possibilities when none can be seen. It was a journey of discovery, much like gazing through a kaleidoscope, and it has given me a newfound appreciation for the power of creativity. Throughout this journey, I archived my thinking, insights, challenges, and reflections in a digital notebook to gain more clarity and reflect on my *process/journey*, *acquired hard and soft skills*, and *content learnings*.

My Process/Journey

Gaining Clarity

My FourSight profile is an Optimist. Optimists excel in generating and refining ideas but may struggle with clarifying problems and gathering necessary details. Collaborating with Clarifiers and becoming more proactive in problem identification can enhance their effectiveness (FourSight, 2011). Throughout the project, I found it crucial to seek guidance and support from both my advisor and cohort members, especially when it came to clarifying the goal of my project before generating ideas and progressing with the project. By doing so, I was able to ensure that I was working on the right problem and that my efforts were aligned with my personal passions. Existing decks addressing creativity and resilience only briefly cover the topic, emphasizing the need for a deck solely focusing on their interconnection for a more comprehensive exploration. To

arrive at the outcome of my project, I learned the importance of avoiding premature closure and staying open to all possible tangible outcomes. This allowed me to choose the reflective card deck prototype as the final result, which best aligned with the goals of my project.

Taking Risks

When I first chose to focus on creativity and resilience for my master's project, I feared that I might find little empirical evidence for the connection, despite a personal intuition as well as a conviction based on experience. Setting this concern aside, I decided to take on the challenge and choose the path I felt most compelled to follow, however risky. At first, the absence of clear connections between creativity and resilience was intimidating and made me question whether I should switch topics. However, as I persisted and pushed through the initial uncertainty, I realized that I had the opportunity to create new connections and explore a less-traveled area of research. Through this process, I learned that it is okay to choose a topic that is not well-studied and take on the challenge of exploring the unknown. Even if I didn't find any explicit connections between creativity and resilience, the experience of pushing past the initial resistance and making the connections myself was a valuable learning in and of itself. I learned that it is important to trust my instincts and take on challenges that stretch me outside of my comfort zone, even if there is no guarantee of a clear outcome.

Incubation

A significant and valuable learning from this project was coming to terms with my discomfort around the incubation process and learning to embrace it. Initially, I found incubation challenging due to its ambiguous nature, where ideas and connections may not immediately surface. It was fascinating to realize how much of a role creativity skills play in the incubation process. However, through this project, I learned to utilize different creativity skills to navigate

incubation, give myself the time and space to play with different ideas and allow them to percolate naturally. This journey taught me the importance of being mindful of the incubation process and the value of engaging with it intentionally. It allowed me to fully explore and immerse myself in the creative process without rushing or forcing outcomes. It also helped me develop patience and trust in the creative process, knowing that incubation is a crucial phase where ideas can gestate and evolve. By leaning into incubation and embracing its inherent ambiguity, I embraced that it could be a fertile ground for new insights, connections, and breakthroughs. It allowed me to tap into my subconscious mind and explore unconventional approaches, leading to fresh perspectives and creative solutions.

Creativity and Me

In my philosophy paper, *Kaleidoscope: Looking through the Lens of Creativity*, written as a part of the creativity and change leadership graduate program for CRS 625, I explored the relationship that I have come to have with creativity. The vision that I had set for myself was to be a catalyst for creative awareness and creative change. My understanding is that anyone who spends the time to learn or relearn the skills of creativity and integrate them as a part of life will live a life filled with scintillating experiences that lead to self-actualization (Sithambaram, 2022). Through my master's project, working with the creativity skills, I have become deeply curious about exploring how they can be developed over time to cultivate a creative mindset. I am fascinated with the creative potential that arises from the unconscious and how it manifests in everyday life, as highlighted by Maslow (1958). This project has helped me realize that my passion lies in serving as a catalyst to assist individuals in intentionally developing creativity skills and cultivating a creative mindset that promotes personal and professional growth and well-being.

Metacognition

Being metacognitively aware was an essential aspect of my project and a significant learning that emerged throughout the process. Metacognition refers to the ability to monitor and reflect on one's own thinking and learning. Through metacognitive awareness, I was able to recognize and understand my own cognitive strengths and limitations, as well as how I could leverage my strengths to overcome challenges in the creative process. By being mindful of my own thinking, I was able to identify when I needed to pivot my approach, seek feedback from others, or take a step back to regroup. Metacognitive awareness also allowed me to be intentional in my learning and to identify areas where I needed to further develop my skills. Overall, being metacognitively aware was a crucial element in my ability to navigate the creative process effectively and achieve the desired outcomes of the project.

Soft-Skills

Joyous Exploration

One of the dimensions of curiosity is Joyous Exploration, which encompasses the recognition and desire to seek out new knowledge and information, as well as the ensuing joy that comes with learning and personal growth (Kashdan et al., 2020). Personally, I strongly identify with this dimension of curiosity and actively embrace it in my life. Throughout my master's project journey, I had the opportunity to embrace this prototype of curiosity and explore the intersections between creativity and resilience. I found myself constantly seeking out new information, making connections between different constructs, and discovering multiple rabbit holes that I wanted to dive deeper into. In the process, I enriched my sense of curiosity and my joy for learning. It was through this joyous exploration that I gained a deeper understanding of creativity and resilience

and how they intersect. To effectively manage the scope and timeline of the project, I had to confront my fear of missing out (FOMO) and ensure that I stayed focused on the task at hand.

Stress Tolerance

The dimension of curiosity, Stress Tolerance, is about the willingness to embrace the doubt, confusion, anxiety, and other forms of distress that arise from exploring new, unexpected, complex, mysterious, or obscure events (Kashdan et al., 2020). Personally, I found this challenging as tolerating ambiguity has not been my strongest skill. However, it is the top most skill that I would like to embrace, and this project gave me an opportunity to further work on honing this skill. Creating the prototype of the reflective card deck from scratch required that I tolerate the ambiguity in the process and also be open to failing and learning from the failure, being resilient. Leaning into the ambiguity pushed me out of my comfort zone, requiring me to be vulnerable, and that was a scary space for me. At times, I found it challenging to move forward without a clear plan or roadmap. However, as I began to embrace the discomfort that came with navigating the unknown and leaned into it, I was able to move forward with lesser resistance. Additionally, the complexity that came from making connections between creativity and resilience through literature review was challenging initially. Once I began making those connections and saw the pieces of the puzzle come together, I started enjoying the process. It heightened my curiosity and desire to explore more.

Pushing Beyond Perfectionism

While the need to be perfect can sometimes be motivating to excel, for me, it is often the source of anxiety and doubt. It stifles my creativity and hinders the exploration of good ideas and perspectives. During this project, acknowledging the need for perfection and how it was hindering my progress led me to challenge this need. Learning to let go of the need for perfection and

embracing the concept of "good enough" was a significant shift in my mindset. It allowed me to focus on the process rather than the outcome. This experience has been liberating, helping me to let go of the pressure of perfection and enjoy the creative process with greater ease and freedom. Embracing the journey over the outcomes, although still a work in progress, has provided valuable insights for future situations.

Hard-Skills

Using Artificial Intelligence

During my project, I had the opportunity to explore the use of artificial intelligence (AI) as a tool for creativity. One specific example of how I used AI was in the creation of icons for the various creativity skills that I explored throughout the project. To create these icons, I utilized a tool called 'midjourney,' which is an artificial intelligence program that generates images based on natural language processing prompts. Essentially, the tool takes a written prompt and generates an image that represents it. This allowed me to quickly and easily create icons that were visually appealing and representative of the various creativity skills that I was exploring. Additionally, for this project, I used ChatGPT, a large language model, to assist me in developing ideas and insights related to the topic. While I shared the common fear of the use of AI, this project has helped me to recognize the positive side of it, particularly in terms of its potential to enhance creativity. The experience has opened up a new and unique approach to the creative process, which I may not have otherwise considered.

Adding Colors

To create the background for the cards in the Reflective Card Deck Prototype, I used the digital illustration app Procreate. Learning and using Procreate was one of the key learnings of this project as it was new to me, and I needed to learn its interface and features to create the visual

elements I had envisioned. While it was initially challenging to navigate the different tools and techniques, I thoroughly enjoyed playing with colors and exploring the different textures and effects that could be achieved. Through online tutorials, and trial and error, I discovered new ways to blend colors and create gradients that brought the cards to life. This experience not only enhanced my technical skills but also allowed me to tap into my creativity and develop a deeper appreciation for the role of design in enhancing the user experience. This broke my initial resistance to using Procreate, and I am excited to explore this space further in future projects.

Content Learnings

Mind-Mapping

For the project, I embarked on a process of mapping out and examining the various ways in which creativity skills can be harnessed to overcome adversity and cultivate resilience. This reflection on the value of creativity skills in navigating challenges and setbacks resulted in significant personal growth for me. The project was more than just an academic pursuit; it was a transformative journey of self-discovery, learning, and growth. Through the process, I gained a deeper understanding of the complex relationship between creativity and resilience, uncovering new insights and perspectives along the way. It left a lasting impact, shaping my mindset and approach toward creativity, resilience, and problem-solving in profound ways. It was a rewarding experience that has enriched my understanding of these vital skills and their applications in various contexts, and I am grateful for the opportunity to have undertaken this meaningful exploration.

Creativity as Hope

Another key learning that has emerged through the project was the significance of hope in the process of being resilient. Hope helps us buffer against the negative effects of experiencing adversity and increases our resilience (Kashdan & Rottenberg, 2010). In *Transcend: The New*

Science of Self-Self-Actualization, Kaufman (2020) talks about hope as a character strength worth cultivating on the path to purpose. The hope that he is referring to is the will and the ways to get to your goal. A mindset of hope encourages the belief that there are multiple paths to reach one's desired destination and fosters flexibility in the face of obstacles. Hopeful people are more likely to interpret failures as opportunities for growth and find new ways of coping with setbacks and navigating uncertain situations (Kaufman, 2020). Hope predicts the positive outcome of creativity (Rego et al., 2012). Having explored creativity skills in depth through this project as an intentional way to build resilience, I believe that these skills serve as a pathway for developing and sustaining hope in the face of adversity. I recognize how powerful these skills could be for creating a hopeful mindset and fostering resilience. This has opened up an exciting angle that I would like to explore.

SECTION SIX: CONCLUSIONS

When I first became interested in pursuing a Master's in Creativity, I was uncertain about what drew me to the program. Now, almost two years later, I can confidently say it has helped me rediscover my purpose in a different light. My curiosity to learn more about how to cope better with adversity has been the driving force behind this project. This project serves as a testament to the fact that creativity can contribute significantly to one's resilience and personal growth. The skills and tools I acquired from the program have played a crucial role in improving my well-being during difficult times and also have helped me be resilient, working towards the outcome of my project.

At the outset of my project, I had a curiosity about the potential interplay between creativity and resilience. As I progressed, I came to realize the immense value that creativity skills can offer in improving one's daily well-being and capacity to cope effectively with challenges. This deeply enriched my understanding of the vital role that creativity can play in our lives. I have developed a keen interest in exploring the potential of creativity skills to facilitate thriving in challenging situations.

This project has brought me immense joy and a sense of belonging. The connections I made, the new knowledge I acquired, the self-reflections, and the strengths and weaknesses I discovered have provided me with a solid foundation for a new chapter in my life. It has been a fulfilling journey that has inspired me to continue exploring the intersection of creativity and resilience and also explore all the rabbit holes I have discovered for myself through the journey of the project.

Opportunities

I am thrilled to have been accepted to volunteer at a local non-profit organization that aims to provide holistic mental health solutions to individuals while I continue to finish my master's program. I believe this is an excellent opportunity for me to share my Creative Problem-Solving skills to help others cope with adversities and challenges. As part of my role, I will be responsible for coaching individuals and training clinicians on creativity skills, which aligns with my passion for helping others discover their strengths and overcome obstacles. My first project involves designing and training clinicians on using the reflective card deck in their work. I am excited to apply the skills and knowledge I have acquired from my Master's program to support the organization's mission and make a positive impact in the community.

Next Steps

Looking ahead, there are several things that I see myself doing in order to continue exploring the ways in which creativity can be used to promote resilience and personal growth.

- Using the reflective card deck in coaching sessions as a way to help clients develop creativity skills. This deck provides a framework for individuals to explore their creative side and gain insight into how these skills can be applied in different contexts to navigate life's challenges more effectively.
- Gather more feedback on my reflective card deck Creative Bounce and incorporate the feedback to develop and refine it further.
- In addition, developing a deck using the other creativity skill sets that were identified as a
 part of this project.
- Developing and sharing content in the form of posts, blogs, and videos to share my knowledge on creativity and resilience with a wider audience.

- Commit to continually developing the creativity skills and using them as a way to approach life.
- Keep learning and following my curiosity. Joyous exploration is one of my strengths, and
 I see myself strengthening it by gaining knowledge, staying current, and gathering different
 perspectives on how the creativity skills can contribute to resilience, thriving, and wellbeing.
- Being metacognitively aware of leaning into the creativity skills when faced with a challenge as a way to be hopeful.
- Expanding one's horizons by remaining receptive to new paths of exploration could prove
 to be a valuable way of gaining knowledge and building new connections, and advancing
 my learning about creativity and resilience.

BHAG (Big Hairy Audacious Goal)

The BHAG that I set for myself during the beginning of my graduate program is to become a licensed psychologist who uses creativity as core to their practice. This project has helped me move one step closer to that goal by helping me gain clarity about the space that I want to focus on and explore – the interplay between creativity skills and resilience.

Connecting

I would be delighted to share my reflective card deck, Creative Bounce, with anyone interested in trying it out and providing feedback. As an innovator and creator, I am always eager to hear from others and get their input on my work. I firmly believe that collaboration and community involvement are essential to developing impactful solutions. Therefore, I would welcome the opportunity to connect with people who want to use Creative Bounce and see how it could benefit them. I am open to feedback, suggestions, and ideas to improve the deck and make

it more effective. Additionally, I am willing to engage in conversations to better understand the various ways the cards can be used and how I can adjust them to meet different needs. Ultimately, my goal is to contribute to the growth and development of people who use Creative Bounce, and I am excited to connect with those who share my passion for creativity and resilience. You can reach me at sithaml01@mail.buffalostate.edu or lakshmi.sithambaram@gmail.com.

Further Research

Some potential future research ideas or project expansions are:

- Creating a creativity-based intervention to support individuals in facing adversity.
- Investigating the impact of creativity skills on resilience in particular populations such as children, adolescents, or older adults.
- Examining the relationship between creativity skills and other areas of well-being.
- Developing innovative tools for building creativity skills as a means of strengthening resilience.
- Investigating the connection between specific creativity skills and resilience.
- Exploring the role of creativity skills in promoting post-traumatic growth.

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May 6th, 2023 Date