

A Juggler's Manifesto: Elevating Creativity to Stay Productive Amid Uncertainty

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A Juggler's Manifesto: Elevating Creativity to Stay Productive Amid Uncertainty

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Abstract

Purpose

The Industry 4.0 environment is characterized by fast data, vertically and horizontally interconnected systems, and human-machine interfaces. In the middle stands the manager, whose sustained performance is critical to the organization's success. Business disturbances—such as supply chain disruptions during the pandemic—can quickly test the manager's resiliency. While creativity and flexibility are critical for success in these situations, these skills are often not promoted directly. This paper will discuss strategies for enhancing managers' creativity and resiliency and give suggestions for improving professional development training and post-secondary business education.

Design/methodology/approach

A synthesis of the literature in business and psychology provides a foundation for creating a conceptual model incorporating strategies to promote managerial creativity and resiliency. While the model focuses on managerial performance under adverse conditions, the tenets of the model also apply during times of relative stability.

Findings

Findings based on a synthesis of the literature on creativity in business and psychology provide the foundation for a conceptual model to identify potential elements in training and curriculum design to further managers' creativity and resiliency. This model recommends clear, actionable training and program-level curriculum design suggestions for improved managerial performance.

Originality

This paper identifies a conceptual model to enhance managerial creativity leading to increased resiliency through professional development programs and suggestions for educators in post-secondary business education. This model provides tools for managers to deal with adverse and rapidly changing conditions flexibly, promoting employee productivity and satisfaction.

Keywords: productivity, management development, resilience, creativity, training

Introduction

Today's fast-paced and interconnected business environment—often labelled VUCA—for *Volatile, Uncertain, Complex, and Ambiguous* (Horstmeyer, 2020; Millar *et al.*, 2018; Rodriguez and Rodriguez, 2015) readily exposes managers to a range of challenges that can quickly test their resiliency. Disruptive Black Swan¹ events, such as the COVID-19 pandemic and the resulting supply chain disruptions, put additional constraints on managers to respond agilely, flexibly, and creatively to navigate the complexities and lead staff to maintain organizational productivity while preventing personal burnout. However, despite the importance of creativity to uphold resilience in such situations, these skills often fall outside what is typically considered professional skills in training or post-secondary business education (e.g. Benson and Enstroem, 2017).

While the definition of creativity can be considered dynamic (Carruthers and MacLean, 2019), we draw upon the conceptualization suggested by Sternberg (1999), where creativity is described as the ability to produce work that is novel, useful, and high in quality and appropriate to the situation. Creativity has received extensive coverage in the management literature, but the context is often the organizational environment, emphasizing creativity and innovation within organizations (Kerr and Lloyd, 2008; Klijn and Tomic, 2010), new product development, such as using Knowledge Sharing Platforms (KPS) to facilitate novel ideas creation in open innovation (Ben Arfi *et al.*, 2019), creative design in management education (Sunley *et al.*, 2019), or activities to foster creativity understanding among students (Boulocher-Passet *et al.*, 2016).

In contrast, the study and use of creativity as a primary tool in problem-solving dilemmas to build resilience are often not promoted and trained in post-secondary business education or professional development. Therefore, business professionals are often unaware of strategies and methods that would permit them to set free situational creativity to reframe decision-making quandaries and cut the Gordian knots. This article mends this shortcoming by presenting a set of tools and a basic conceptual model for heightening situational creativity and resiliency. From the ground up, organizations can use these tools as a component of fostering a culture of creativity and resilience. By implementing these evidence-based strategies, managers can forge a path for inventive resolutions and enduring accomplishments in a challenging business environment.

Our methodology is structured as follows: First, examining the challenges posed by VUCA environments, we explore managers' experiences and coping mechanisms during the COVID-19 pandemic. Subsequently, drawing from self-regulation research in business and psychology, we

¹ A black swan event is an unlikely or unforeseen occurrence with profound and wide-ranging implications. These events shed light on the constraints of conventional risk management models, which frequently operate under the assumption that the future will mirror the past. Such events emphasize the criticality of readiness in the face of unforeseen circumstances and the necessity of implementing precautionary measures to curtail their potential aftermath.

discuss four evidence-based and easy-to-implement strategies with demonstrated positive outcomes in enhancing both situational creativity and resilience. Finally, we offer a systematic approach for implementing these techniques, tailored towards business professionals and management education. Our implementation model takes inspiration from Kolb's Experiential Learning Cycle (2014), providing a well-structured framework for practical application.

What are managers' experiences?

Present-day managers are entrenched in dynamic business environments characterized by the four aspects of VUCA (Lawrence, 2013; Millar *et al.*, 2018): Volatile, Uncertain, Complex, and Ambiguous. The VUCA acronym highlights the challenges organizations and their employees face in navigating an environment distinguished by rapid and unpredictable changes, high uncertainty, and interconnectivity among multilayered systems. In unpacking VUCA, Volatility refers to the speed and magnitude of changes in the external environment, which can be difficult for organizations and their employees to anticipate. Uncertainty describes the lack of predictability and comprehension of future events and the mounting level of ambiguous information. Complexity, in turn, refers to the system and process intricacy that organizations must manage, the diversity of stakeholders, and factors that can affect decision-making. Ambiguity relates to the challenges in interpreting information and making sense of events to guide effective action (Bennett and Lemoine, 2014). The four aspects can be summarized into a matrix with the dimensions of *Action Outcome Predictability* (low vs. high) and *Situation Knowledge* (low vs. high). Figure 1 illustrates the dimensionality of VUCA (adapted from Bennet and Lemoine, 2014).

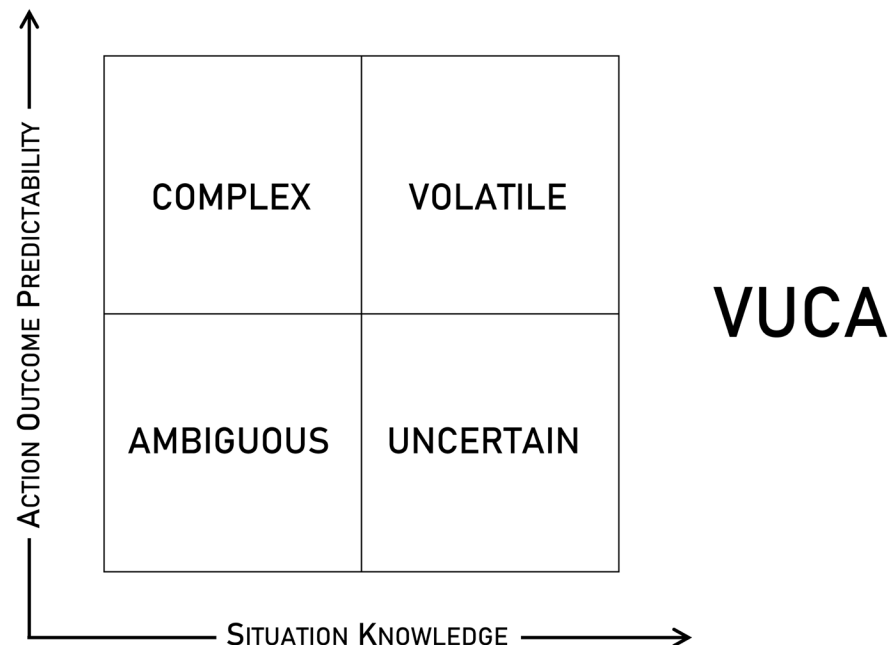


Figure 1. The two-dimensional VUCA structure

In general, any VUCA environment requires professionals that adapt quickly to changed scenarios, alter their perspective-taking, communicate effectively across diverse stakeholders, make decisions under conditions of uncertainty and ambiguity, and, above all, have resilience (Hall and Rowland, 2016; Lawrence, 2013; Rodriguez and Rodriguez, 2015). However, business school education often does not reflect the imminent need for relevant management education and training to equip business professionals for the VUCA environments (Hall and Rowland, 2016).

The outbreak of the COVID-19 pandemic meant a quickly occurring Black Swan event engrafted into the VUCA environment. In other words, a rare occurrence with an immense impact that could not be predicted (Aven, 2013). Given the recency of the COVID-19 outbreak, there is a small but growing literature on managers' lived experiences during the pandemic. Managers specifically reported difficulties in maintaining a healthy work-life balance (Hadjielias *et al.*, 2022; Rodrigues *et al.*, 2022; Vinberg and Danielsson, 2021) and suffered a negative impact on their physical and mental well-being (Hadjielias *et al.*, 2022; Vinberg and Danielsson, 2021). They experienced distress, anxiety, and depression (Graf-Vlachy *et al.*, 2020) and underwent moments of personal fear, uncertainty, and loss of identity (Terblanche, 2022).

The coping mechanisms employed by managers entailed using personal coaches to help them reflect and digest the situation and encourage them to take a forward-looking perspective (Terblanche, 2022) and changed leadership behaviour (Hadjielias *et al.*, 2022; Vinberg and Danielsson, 2021) in the domains communication, alertness, and stewardship (Hadjielias *et al.*, 2022). Their resilience in bouncing back was also unequivocally impacted by their ability to self-reflect. Optimism, readiness, and a forward-looking attitude generally influenced their resilience in enduring and thriving under adverse conditions. Personal resilience was found to project into leadership resilience (Hadjielias *et al.*, 2022). The remedies for uncertainty were optimism, proactivity, flexibility, cooperation, problem-solving, understanding rules and regulations, and social support (Hansson *et al.*, 2022). Specific job challenges were difficulties in motivating collaborators, keeping team members integrated into the virtual environment (Rodrigues *et al.*, 2022), and tensions experienced between managing staff, supervisors, and themselves (Terblanche, 2022). A summary of managers' experiences and coping tools during the pandemic is presented in Figure 2.

MANAGER EXPERIENCES DURING PANDEMIC

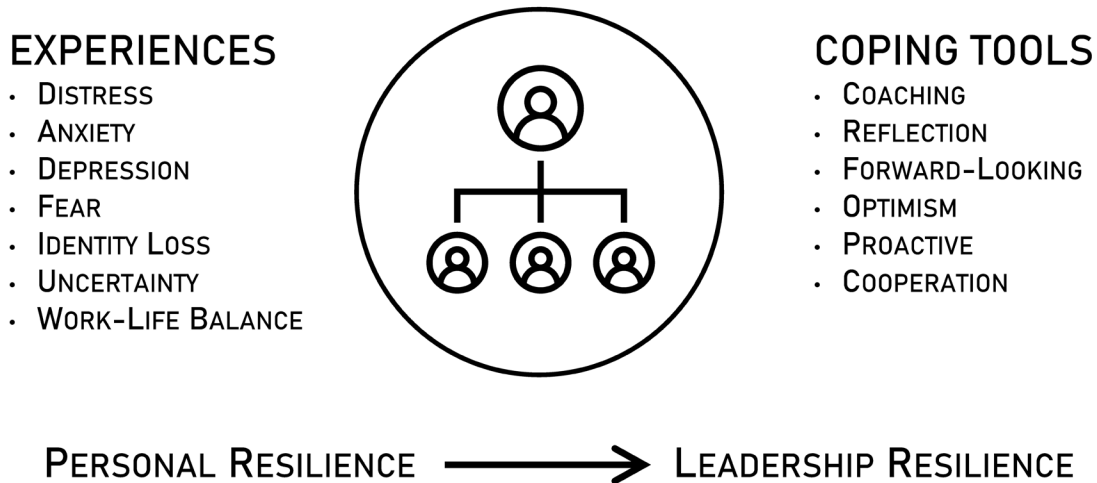


Figure 2. The main themes of manager experiences and coping tools during the pandemic

Four routes to heightened situational creativity

Drawing on empirical literature from the fields of business and psychology, we recommend four specific evidence-based strategies to bolster creativity and enhance resiliency: (1) *Allotting Time for Disconnection*, (2) *Exposure to Cognitively Stimulating Material*, (3) *Purposeful and Guided Collaboration*, and (4) *Imposing Constraints*. These strategies do not represent an exhaustive list of all potential strategies to advance situational creativity. Instead, we have chosen well-supported, evidence-based methods that are easy to implement. They can be utilized as an initial step to foster creativity and resiliency or as supplementary resources to complement other organizational approaches. By employing these evidence-based techniques, organizations can create a conducive environment for innovation, problem-solving, and adaptation critical for thriving in the competitive business landscape. These strategies can also enhance employee satisfaction and well-being, contributing to the overall health and success of the organization. By integrating these practical tools into their daily operations, organizations can cultivate a culture of creativity and resilience.

Allotting time for disconnection

Managers seeking to improve cognitive performance and stimulate creativity within their teams can begin by encouraging employees to take scheduled breaks, preferably in natural settings. This recommendation is supported by research demonstrating the positive effects of such breaks on cognitive performance and creative thinking (Atchley *et al.*, 2012; Berto, 2005; Wendsche *et al.*, 2016). Managers can facilitate this by organizing outdoor team-building activities, establishing

office spaces with natural views or access to green spaces, or simply promoting a culture that values disconnection during break times. To further reduce cognitive overload, managers can create communication protocols encouraging employees to disconnect from channels like email and Slack during these breaks. This mindful approach to work can help employees focus on their immediate surroundings, promoting mental restoration (Kaplan, 1995; Yeh *et al.*, 2022)

Encouraging a mindful disconnection from work-related activities through meditation can foster increased cognitive adaptability and resilience among employees (Cheng, 2016; Moore and Malinowski, 2009; Valosek *et al.*, 2021). Managers can accomplish this by advocating for integrated meditation periods within the work schedule or providing resources that enable employees to engage in mindfulness practices at their discretion. For instance, employees might be inspired to perform short mindfulness exercises before embarking on complex, new tasks. Implementing such a strategy may present difficulties, as it requires a cultural transition towards accepting more measured, ‘slow’ practices in the typically fast-paced work environment. Nevertheless, the potential benefits lie in enhancing productivity and performance (Good *et al.*, 2016). However, managers must be mindful of individual preferences and honour the choices of those who may opt out of these practices.

Additionally, incorporating flexible work strategies, including remote work or adaptable scheduling, can serve as a tactical approach for managers seeking to strengthen employee innovation and resilience. These arrangements allow employees to balance professional and personal responsibilities more effectively, reducing stress and boosting job satisfaction (Halpern, 2005; Hill *et al.*, 2001; Shifrin and Michel, 2021). However, managers must be cognizant that the successful execution of such flexibility entails explicit articulation of expectations and providing support to ensure employees do not experience feelings of isolation or become overwhelmed by their increased autonomy.

Employers who allocate time for breaks, flexibility, and disengagement from work-related tasks can foster employee creativity and resilience. Encouraging employees to take breaks in natural settings, disconnect from communication channels, and engage in meditation can enhance cognitive performance, reduce stress, and improve well-being. Flexible work arrangements can further support a balanced and innovative work environment, benefiting the organization and its employees.

Exposure to cognitively stimulating material and nature

Creative thinking is the catalyst for driving innovation, problem-solving, and the ability to adapt to change. (Reid and Oliver, 2009). Employers and educators are critical in fostering an environment conducive to enhancing creative thinking among employees. Resources that offer intellectual enrichment—for instance, books, scholarly articles, and engaging educational platforms—can spark creativity by exposing individuals to different viewpoints and concepts.

Exposure to carefully curated resources related to relevant industry topics may help individuals expand their knowledge base, contributing to idea generation and the ability to connect seemingly unrelated concepts. As such, managers need to identify and utilize the most appropriate resources to facilitate knowledge enhancement, focusing on promoting creativity. To achieve this, employers and educators should prioritize providing tailored resources that cater to employees' specific needs rather than merely encouraging them to read more or providing them with workshops that are not evidence-based or focused on clear outcomes. The selection of appropriate resources for knowledge enhancement varies across industries, but some types of resources generally promote creativity. For example, Hoffmann *et al.* (2020) found that exposure to thought-provoking stimuli, such as art, increases participants' divergent thinking, a key component of creativity. Engaging with intellectually enriching resources and spending time in natural environments instead of confined monotonous spaces can also significantly invigorate creative thinking (e.g., Palanica *et al.*, 2019).

Natural environments offer a setting that promotes creativity and reduces cognitive fatigue (Kaplan, 1995). Exposure to nature has been linked to increased cognitive functioning and well-being, providing a restorative experience for the mind (Berto, 2005; Jimenez *et al.*, 2021; Kaplan, 1995). Atchley *et al.* (2012) found that spending time in natural environments, free from technological distractions, improved participants' performance on creative problem-solving tasks by 50%. This immersion in nature allowed individuals to detach from daily stressors, enabling them to engage in reflective thinking and enhancing their creative capacities. Natural environments also promote physical activity, such as walking or hiking, which has been linked to improved cognitive function and creativity. Oppezzo and Schwartz (2014) found that walking outdoors significantly increased creative thinking compared to sitting or walking indoors. The researchers concluded that combining physical activity and exposure to nature facilitates creative thinking by promoting cognitive flexibility and the ability to generate novel ideas.

Engaging with intellectually enriching resources and spending time in natural environments can invigorate creativity (e.g., Williams *et al.*, 2018). Business professionals and organizations can benefit from incorporating these strategies into daily routines to enhance creativity and drive innovation.

Purposeful and guided collaboration

In addition to the provision of tailored resources, employers and educators should carefully design seminars, meetings and workshops with well-defined, tangible goals to promote creative thinking. These events should be grounded in empirical evidence, drawing on best practices to foster creativity among participants effectively. Such workshops must transcend mere brainstorming or feel-good sessions, ensuring the knowledge gained is practical and applicable to real-world situations. If done right, employees benefit from purposeful and guided collaboration in the workplace, as it has been shown to have the potential to enhance creative problem-solving

and innovative thinking (Buggie, 2003). However, merely holding meetings or brainstorming sessions does not guarantee the emergence of creative ideas; instead, the quality of the collaborative process determines the effectiveness of such gatherings (e.g., Manca *et al.*, 2018). Providing clear guidance and creating an appropriate environment for collaboration are essential factors in fostering employee creativity.

The first step in facilitating purposeful collaboration is establishing clear goals and objectives for meetings or group sessions. This step entails setting a specific agenda that outlines the desired outcomes and encourages participants to engage in focused and meaningful discussions. Assigning roles and responsibilities to team members can enhance individual accountability, ensuring each participant actively contributes to the creative process. In this context, promoting psychological safety within the team (Edmondson, 1999) assures that employees feel comfortable expressing their thoughts and ideas without fear of criticism or judgment. Fostering a supportive and inclusive environment enables participants to take risks, share unique perspectives, and generate novel solutions to problems. Employers and team leaders can cultivate psychological safety by modelling open communication, valuing diverse opinions, and encouraging constructive feedback (Carmeli *et al.*, 2009).

In addition to clear guidance and psychological safety, the physical environment plays a role in promoting creative collaboration (Vischer, 2007). Workspace design should encourage interaction and facilitate the exchange of ideas among employees (e.g., Dul and Ceylan, 2011). For example, managers may consider hosting walking meetings instead of meeting in traditional boardrooms, preferably in natural settings. To maximize the efficacy of this approach, managers should provide employees with clear objectives and guidance on maximizing the benefits of being in nature. For instance, according to Pocock *et al.* (2023), straightforward advice, such as observing how nature impacts one's emotions, can alleviate stress, fostering discussion and creative ideas. Merely encouraging employees to spend time in nature is insufficient; appropriate guidance is crucial for optimizing its effectiveness.

Employees stand to gain considerably from purposeful and guided collaboration in the workplace. Employers and team leaders should establish clear goals and objectives, promote psychological safety, and create a conducive physical environment for effective collaboration. Doing so can foster employee creativity and innovation, ultimately contributing to organizational success.

Imposing constraints

Employers should encourage employees to consider constraints to foster creative thinking. Exploring problems while imposing additional constraints has enhanced innovation and problem-solving capabilities (Tromp, 2022). This concept, often called the 'Green Eggs and Ham' model, draws inspiration from Dr. Seuss's well-known work, written using only 50 words (Seuss, 1960).

The intentional use of constraints in the creative process can stimulate novel approaches to problem-solving and generate unique solutions (Onarheim and Wiltchnig, 2010). Rather than being seen as barriers, constraints can act as stimuli for inventive thinking by compelling individuals to move beyond traditional approaches and explore alternative methods. This idea aligns with the broader body of literature, which suggests that limitations can spur creativity by pushing individuals to maximize the potential of the existing constraints (e.g., Acar *et al.*, 2019). This reframing of constraints encourages employees to adopt unconventional thinking patterns and discover novel perspectives.

Employers can implement constraint-based exercises in team meetings, workshops, or brainstorming sessions to promote creative thinking. These exercises may involve setting strict time limits, reducing available resources, or specifying unique goals and objectives. By providing a structured framework within which employees must operate, constraint-based activities can foster a sense of focus and urgency, leading to more innovative outcomes.

Conceptual model

The Conceptual Model of Managerial Creativity and Resiliency proposed in this paper serves as a tool and starting point for managers to augment employee creativity and resilience. In a business environment distinguished by adversity and the need for innovation, understanding and applying the core principles of one's work become paramount. This model facilitates creating settings that nurture creativity through short-term, easily implemented strategies. To enhance creativity, the model highlights four evidence-based techniques: 1) *Allotting Time for Disconnection*, 2) *Exposure to Cognitively Stimulating Material and Nature*, 3) *Purposeful and Guided Collaboration*, and 4) *Imposing Constraints*. Beyond these techniques, fostering positive affective states is essential, as these broaden individuals' momentary thought-action repertoires, leading to increased creativity and resilience (Fredrickson, 2001). We propose that managers should strive to create settings that facilitate such emotional states.

Recognizing the need for customized resource provision, the model encourages employers and educators to cater to the specific informational needs of employees across different industries. Moreover, the provision of mental space allows employees to synthesize knowledge creatively. Hence, employers can enhance creative output by offering designated time and guidance for employees to contemplate innovative solutions to problems. To implement the model in practice, employers and educators should provide resources to enhance organizational knowledge and develop specific approaches to bolster creativity. Promoting downtime, allowing employees to temporarily disengage from work-related issues, and encouraging them to envision additional constraints while contemplating potential solutions can be effective strategies. Figure 3 outlines the model's four routes to heightened situational creativity, positively impacting personal resiliency.

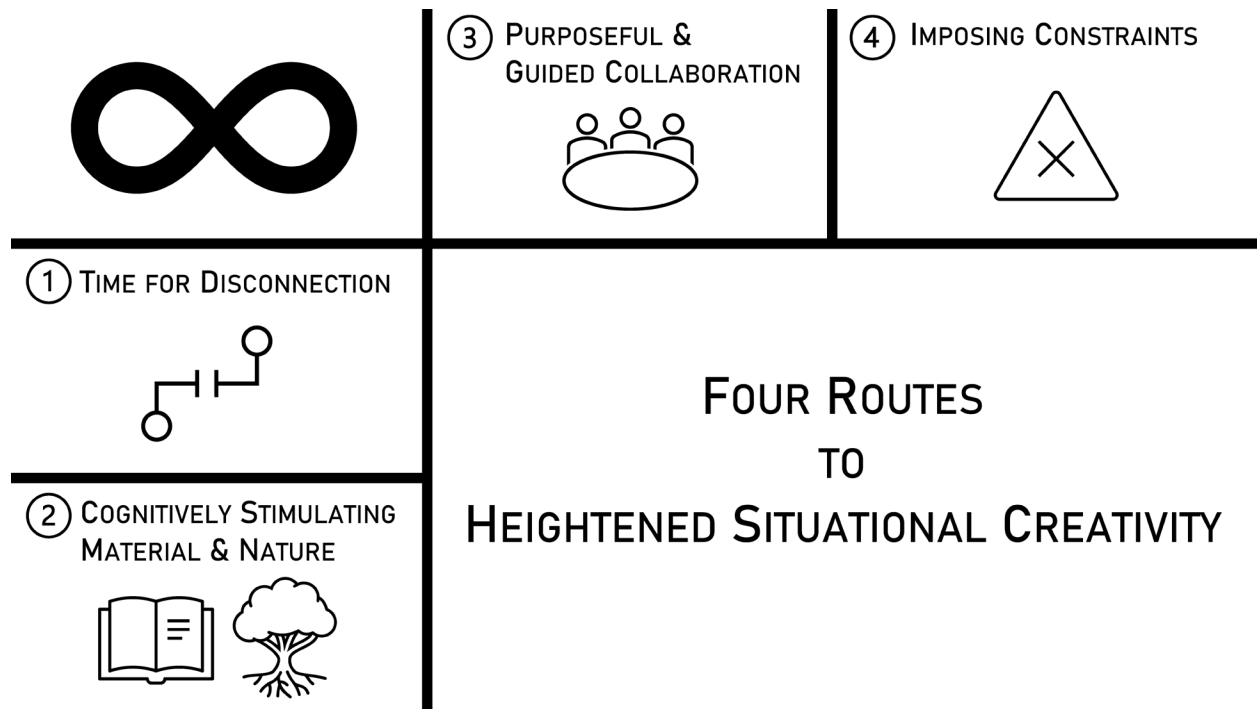


Figure 3. The four routes to heightened situational creativity

Discussion

To translate the four routes to heightened situational creativity into actionable steps implementable by business professionals and incorporated into management education, we offer a structured approach modelled on Kolb's Experiential Learning Cycle (2014). This approach invites students and industry professionals to experiment actively with these tools, reflect on their experiences, and apply their insights in increasingly uncertain circumstances. Through this iterative process of application, reflection, and adaptation into gradually more challenging managerial contexts, the full potential of these tools can be realized.

For instance, a manager facing a complex problem could first disconnect from the immediate pressures of the situation, setting aside time to reflect and gather thoughts. This deliberate pause can help reduce stress and open cognitive space for creative thinking (Boice, 1997). After this period of disconnection, the manager can seek out cognitively stimulating material relevant to the problem. Exposure to diverse perspectives and ideas can facilitate the generation of novel solutions (Kalargiros and Manning, 2015). Next, the manager can bring a team together for purposeful and guided collaboration, leveraging team members' diverse skills, knowledge, and perspectives to explore the problem and potential solutions in depth (Paulus and Yang, 2000). Finally, by imposing constraints, such as a deadline or resource limitations, the manager can help to focus the team's efforts and stimulate creative problem-solving (Gibbert *et al.*, 2007).

In management education, the same principles can be applied in experiential learning exercises, such as case studies, simulations, or project-based assignments. For example, instructors could design activities that expose students to increasing levels of VUCA while integrating opportunities for disconnection, cognitive stimulation, collaboration, and imposed constraints. After each exercise, as part of the assignment, students would be asked to reflect on their experiences and apply their insights in subsequent rounds of the exercise. Figure 4 demonstrates the structured approach to situational creativity via the recommended intervention sequence embedded in Kolb's Experiment-Experience-Reflect-Conceptualize cycle (Kolb, 2014) over increasing levels of VUCA.

SITUATIONAL CREATIVITY – STRUCTURED APPROACH

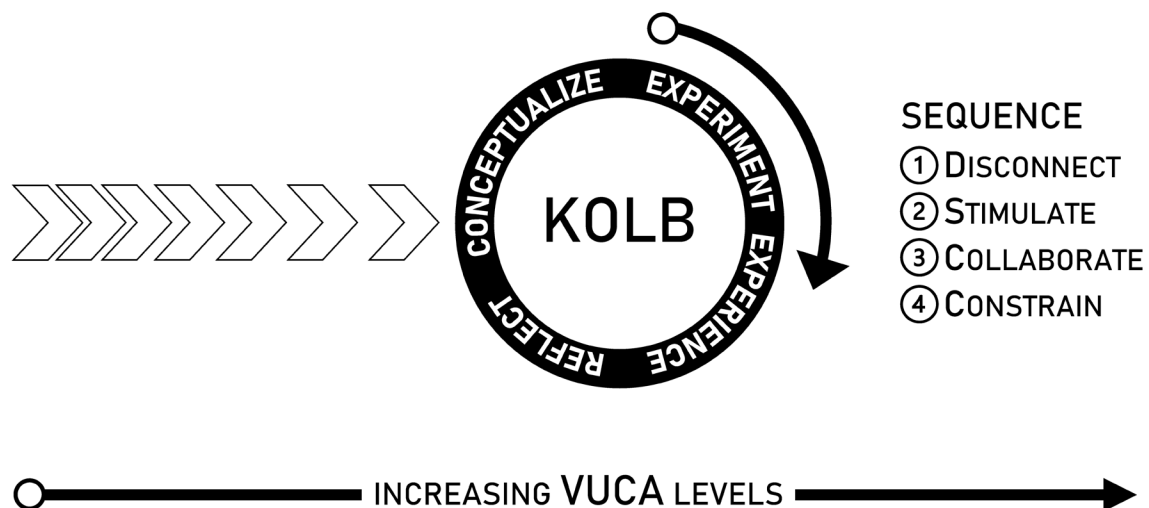


Figure 4. The structured approach to situational creativity

This approach to embedding these four tools in management education and practice has several potential impacts. For research, it contributes to the body of knowledge on managing VUCA environments, adding a practical, applied perspective to existing theory. It offers concrete strategies managers can employ to navigate uncertainty and complexity more effectively. This practice, in turn, can have significant economic and commercial implications, enhancing organizational adaptability, resilience, and performance in the face of VUCA challenges.

While these tools offer significant potential, their implementation also poses challenges. For example, implementing this approach may require a cultural shift in some organizations towards greater openness to reflection, learning, and adaptation. It also requires commitment from leaders to support and model these practices. Despite these challenges, the opportunities are

significant, offering a way forward for businesses to navigate the VUCA environment more effectively and resiliently. Grounded in empirical research, the model furnishes a suite of strategies that are easy to implement, designed to stimulate creativity and increase resilience. This model serves as both a functional tool and an intellectual launchpad. Managers and educators are encouraged to tailor and test different facets of the model, discovering how it can best serve their specific organization or institution.

The Conceptual Model of Managerial Creativity and Resiliency proposed in this paper provides a unique approach for manager development in a Volatile, Uncertain, Complex, and Ambiguous (VUCA) business environment. This model integrates Kolb's Experiential Learning Cycle (2014) and four empirical strategies to promote creativity and resilience in managers. From a managerial perspective, this framework provides a practical guide for navigating complex business scenarios, fostering resilient and innovative leaders capable of effectively dealing with challenges and disruptive events. It offers business educators and trainers an approach to enhance management training, encouraging reflection and learning from experiences. Incorporating and assimilating this model into managerial practices can give business students and managers the essential resources to flourish in a dynamic and constantly changing business environment.

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