



**HAL**  
open science

# Implicit Person Theory and Creative Behavior During the Pandemic and Beyond

Lina Masood, Carolina Serrano-Archimi

► **To cite this version:**

Lina Masood, Carolina Serrano-Archimi. Implicit Person Theory and Creative Behavior During the Pandemic and Beyond. Conférence de l'AIM - Association Information et Management, Jun 2022, Marseille, France. hal-03950844

**HAL Id: hal-03950844**

**<https://hal.science/hal-03950844v1>**

Submitted on 22 Jan 2023

**HAL** is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



# **Théorie de la personne implicite et comportement créatif pendant la pandémie et au-delà**

*Uniquement après acceptation définitive de l'article :*

***Lina Masood***

***Carolina Serrano-Archimi***

IAE, Université d'Aix-Marseille, France

## **Résumé :**

Les organisations connaissent plusieurs difficultés et problèmes en raison de la pandémie de Covid-19 en cette période difficile (Iivari et al., 2020). Au milieu d'une crise et au-delà, la créativité aide les organisations à trouver des solutions potentielles à ces difficultés et à fournir de nouveaux produits et services (Dirani et al., 2020; Lee & Trimi, 2020). Dans cette optique, il est essentiel de promouvoir le comportement de travail créatif des employés car il peut contribuer à l'innovation organisationnelle globale (Shanker et al., 2017). Plusieurs chercheurs ont tenté de définir les facteurs individuels qui sont liés au comportement créatif des employés (Alikaj et al., 2020; Zhang & Bartol, 2010). Cependant, à ce jour, on sait peu de choses sur la façon dont l'état d'esprit créatif d'un employé ; qu'il soit en croissance ou fixe, peut influencer son comportement de travail créatif (Han & Stieha, 2020). Sur la base de la théorie implicite de la personne (Dweck & Leggett, 1988; Karwowski, 2014) et de la théorie cognitive sociale (Bandura, 1986), nous tentons de construire un cadre théorique qui explique comment le comportement de travail créatif d'un employé est influencé par son état d'esprit créatif. De plus, nous explorons le rôle modérateur du leadership encourageant la créativité, car il s'est avéré jouer un rôle important dans la promotion du comportement créatif des employés sur le lieu de travail (Cheng et al., 2019). Par conséquent, notre cadre théorique offre des informations précieuses sur la compréhension du comportement de travail créatif des employés dans l'organisation pendant et au-delà de la pandémie de Covid-19.

**Mots clés :** Comportement au travail créatif, Covid-19, État d'esprit créatif, Leadership Encouragement à la créativité, Théorie sociale cognitive, Théorie implicite de la personne.

# **Implicit Person Theory and Creative Behavior During the Pandemic and Beyond**

## **Abstract:**

Organizations are experiencing several difficulties and issues as a result of the Covid-19 pandemic at this difficult time (Iivari et al., 2020). In the midst of a crisis and beyond, creativity aids organizations in addressing potential solutions to these difficulties and delivering new products and services (Dirani et al., 2020; Lee & Trimi, 2020). In line with that, it is essential to promote the creative work behavior of employees, as it can contribute to the overall organizational innovation (Shanker et al., 2017). Several researchers have attempted to define the individual factors that are related to employees' creative behavior (Alikaj et al., 2020; Zhang & Bartol, 2010). However, to date, little is known about how an employee's creative mindset; be it growth or fixed, may influence his creative work behavior (Han & Stieha, 2020). Based on the implicit person theory (Dweck & Leggett, 1988; Karwowski, 2014) and social cognitive theory (Bandura, 1986), we attempt to build a theoretical framework that explains how an employee's creative work behavior is influenced by his creative mindset. Moreover, we explore the moderating role of leadership encouragement of creativity, as it has proved to play an important role in promoting the creative behavior of employees in the workplace (Cheng et al., 2019). Consequently, our theoretical framework offers valuable insights into the understanding of employee creative work behavior in the organization during and beyond the Covid-19 pandemic.

## **Keywords:**

Covid-19, Creative Work Behavior; Creative Mindset, Leadership Encouragement of Creativity, Cognitive Social Theory, Implicit Person Theory

# 1 Introduction

The Covid-19 pandemic has caused tremendous novelty and uncertainty impacting many in the world (Barzilay et al., 2020; WHO, 2020b, 2020a). In the time of this pandemic, innovation has become an important resource for the success of organizations in responding to the challenges created by the crisis. To be innovative, they have to put more emphasis on the creativity of their employees (Tang et al., 2021). Studies covering creativity put more emphasis on the creative work behavior of employees (Saunila, 2014). Creative employees can develop new ideas and come up with useful answers to the problems that organizations face during this challenging time. Hence, one important option for organizations to become more creative is to encourage their employees to be creative (Alikaj et al., 2020).

This increasing importance of creative behavior underscores the need to investigate the fundamental factors that foster it (Afsar et al., 2020; Yuan & Woodman, 2010). Several scholars have attempted to determine these factors (Alikaj et al., 2020; Aslam, 2017; Caniëls et al., 2014; Dong et al., 2017; Paek & Sumners, 2019). One of the factors that seems to have an impact on innovation is the employee's creative mindset (Batra & Vohra, 2016; Carnabuci & Diószegi, 2015; Liu et al., 2020; Newman et al., 2018). According to the implicit person theory (Dweck, 2006; Dweck & Leggett, 1988), psychologically trained individuals who believe that their creative abilities and skills can be change, can be described as having a growth creative mindset (Dweck, 1986, 2006, 2012). Work in the field of developmental psychology has found that the belief about the malleability of personality and traits in general affects how people think and what they do. This is also corroborated by the social cognitive theory (Bandura, 1982; Banduran, 1997), which states that people's beliefs influence their cognition processes, efforts and interactions (Blackwell et al., 2007; Levy et al., 2006), which in turn, may enable them to share learning and come up with new ideas.

Despite the concept of creative mindset is relatively ubiquitous and well-studied in education literatures (Choi, 2019a), a very limited number of studies have examined the impact of creativity mindset, on creative behavior for employees within the organizational settings (Karwowski & Brzeski, 2017; O'Connor et al., 2013). Hence, we contribute to social cognitive theory and implicit person theory by expanding the theoretical understanding on how creative mindset may influence employee behaviors like creative behavior. This influence is little explored and developed in the literature (e.g., Jeong et al., 2016). Do employees who feel that creativity is a fixed trait do equally well as those who feel that creativity is learnable?

On top of the employee beliefs, the role of leadership is key in encouraging or discouraging a creative climate (Sarros et al., 2008). A recent concept has emerged in management literature to describe a specific leadership which is supportive of creativity in the organization. This concept is labelled as "leadership encouragement of creativity" (Zhang & Bartol, 2010). To our knowledge, an understanding of the boundary conditions on the creative mindset-creative behavior relationship remains underdeveloped. There is a dearth of knowledge of whether contextual factors at work, such as leadership encouragement of creativity, may accentuate the relationship between employees' creative mindset and their creative behavior. We highlight the significant role that

leader encouragement of creativity might play on this relationship. In particular, we argue that this relationship is more likely to be influenced by the extent to which the leader is encouraging or not. In accordance to the above, we developed a theoretical framework based on both social-cognitive theory and implicit person theory to mitigate the pandemic concerns at hands by improving the creative work behavior of employees in organizations.

## **2 Literature Review**

In this section, we are going to dig deep into the main concepts of our study, i.e., the concept of employee creative behavior and the concept of creative mindset as a potential factor of creative behavior. We will also address the concepts of leadership encouragement of creativity.

### **2.1 Creative Work Behavior**

Researches still have to establish an agreement on the definition of creativity; other than ‘useful’ and ‘new’ properties. In 1953, Stein (1953) described creativity as a process leading to a new output which is desirable to a group or community. Torrance (1963) described creativity as the potential people have to fix the issues using critical thinking and through applying different ways. Creativity was conceptualized by Guilford (1967) as a process by which individuals may develop new ideas in any setting and usefully implement these ideas. As defined by Csikszentmihalyi (1997), creativity is any action, idea or product which alters an existing domain into a new domain. In general, the idea of creativity revolves around the presentation of ideas or products by employees working in the organization that should be a) novel and original and b) helpful and relevant. They considered new if they are novel to the organization and helpful if they add value to it (Joo et al., 2013; Shalley et al., 2004).

Literature on creativity has been studied in several scholarly fields such as sociology, psychology, management, education and science (Runco, 2003). However, in our study we focus on the literature of creativity in the domain of management and organizational context. Numerous definitions of creativity focus on the work setting. For example, individual creativity is defined by (Woodman et al., 1993) as an individual who is working in a complicated social structure and having the primary production of novel ideas, products, or process which add a societal benefit. Similarly, Zhou and George (2001) conceptualized creativity as a production of new and valuable ideas, products, services, or processes by individuals working together in a complex social system. However, Pope (2005) claimed that creativity is something novel when it meets the criteria of being useful and valuable to different shareholders in the organization. Kim et al. (2010) conceptualized creativity in the workplace as an act by employees to develop new ideas or try new ways regularly in order to reach their objectives.

Since creativity has been conceptualized by several researchers with different ways, the definition that is introduced by Zhou & George (2001) illustrate the meaning of employee creativity within the fields of the corporate environment. Hence, the researcher decided to adopt this definition that best matches the objective of this study.

Researchers disagree about whether creativity is a talent or skill. Several studies that have been conducted in the period between 1950s and 1960s have suggested that creativity to be a skill rather than a talent and that creative individuals are often creative not because that have a certain talent, but for their approach toward life and work (Amabile & Pillemer, 2012). Rather than allowing themselves to react in traditional ways they usually train themselves, react to new challenges and take risk to try new things (Sternberg, 2012).

However, other scholars perceive creativity as a talent and that it is more likely to be something you are born with. According to them, a creative person can become a pure genius if you give him the right conditions and support. Furthermore, the talent approach continued to lead the creativity literature for years without looking at environmental or situational factor that may potentially offer understanding to individual creativity behavior (Amabile, 1983).

## **2.2 Creative Mindset**

According to Dweck (2006), mindsets are the beliefs or assumptions that people hold about the plasticity of their abilities. Mindset as a concept is based in the individual implicit theory, which includes incremental implicit theory and entity implicit theory. Incremental implicit theory is known as a “growth mindset”, “acquired skill”, or “malleable traits”. It reflects the underlying belief of the individuals in the malleability of basic personal abilities and characteristics. Growth mindset is exemplified by statements including “Everyone, no matter who they are, can significantly change their basic characteristics” and “No matter what kind of person someone is, they can always change very much” (Dweck, 2006).

As opposed to incremental implicit theory, entity implicit theory which is known as a “fixed mindset” or “inherent capacity” (Dweck, 2006), embodies the belief that human basic traits such as abilities and intelligence are static and unchangeable (Yeager & Dweck, 2012). Fixed mindset is demonstrated by statements which stress the limits and weaknesses on the scope for individuals to grow. Examples of those statements include “You can’t teach an old dog new trick” and “Everyone is a certain kind of person, and there is not much that can be done to really change that” (Dweck, 2006).

Although mindsets occur on a continuum between the fixed and growth prototypes, Claro et al. (2016) have proven that that mindset is a state of mind and not a fixed trait. Everyone is a hybrid of fixed and growth mindset, and this mix evolves constantly with practice (Claro et al., 2016). In other words, people may hold a fixed mindset or growth mindset about their abilities in some specific areas (Burnette et al., 2013). There is no "pure" growth mindset that we need to consider to achieve the advantages we are looking for. For example, an individual may have a fixed mindset about working with difficult clients and a growth mindset about his quantitative abilities. In addition to that, research on social cognitive theory also reveals that some people could have evolving mindsets (Lyons & Bandura, 2018).

Based on the implicit person theory developed by Dweck and her colleagues (Dweck, 2006; Hong et al., 1997), a new concept of mindset has been introduced, which called creative

mindset. Creative mindsets are defined as people's implicit assumptions about the perceived source and nature of creativity (Karwowski, 2014; Karwowski & Brzeski, 2017). Like the concept of mindset, there are two types of creative mindset; namely growth creative mindset and fixed creative mindset. Growth creative mindset is related to growth mindset and it is characterized by the belief that creative abilities and qualities can be developed through efforts and hard work, while fixed creative mindset is related with fixed mindset and it is based on the belief that creativity and creative skills are fixed based on one's inherent nature, and there is no much one can do to improve (Karwowski, 2014).

The importance of creative mindset as a distinct construct different from mindset for two main reasons. First, considering the distinction between intelligence and creativity, perceptions hold by people about their creativity differ from those of their intelligence (Sternberg & O'Hara, 1999), and hence, the assessment of both constructs have to be distinguished in order to obtain an accurate evaluation. Some studies (e.g., Karwowski, 2014; O'Connor et al., 2013; Puente-Díaz & Cavazos-Arroyo, 2017) have supported the validity of creative mindset and its relation to the theory of mindset. It has been demonstrated that intelligence did not predict creative problem solving, a growth creative mindset did. Second, scholars have discovered that the belief that individual are born creative is negative to their ability to develop their creative outcomes (e.g., Karwowski, 2014; O'Connor et al., 2013).

In sum, with this review, we propose that creative mindset may be central to an employee creativity in the work settings. Thus, in the next section we provide theoretical arguments for how creative behaviors of an employee may be affected by his/her creative mindset. Further to that, the role of leader encouragement of creativity has been demonstrated as a critical variable to encourage people to exchange their knowledge (Shamim et al., 2019; Zia, 2020), with will in turn, encourage them to create (Yu et al., 2013). Hence, we will test if the role of leader encouragement for creativity moderates this relationship.

### **3 Theory and Hypotheses**

In this section, and as stated earlier, we are describing the theoretical backgrounds for our research, i.e., social cognitive theory and individual implicit theory. These theories act as the theoretical basement of the subsequent hypotheses of our study.

#### **3.1 Social Cognitive Theory**

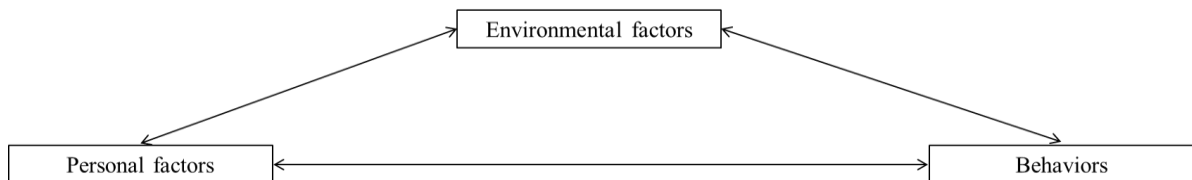
As previously stated, social cognitive theory is one of the theoretical basements of our study. It acts as a metatheory which links behavior to personal factors and environmental factors and is a widely accepted model for validating individual behavior (Compeau & Higgins, 1995). Creative mindset (personal factor) can be related to creative work behavior (behavior) within the context of Covid-19 pandemic and its effects on employees (environment). Prior to establishing social cognitive theory, Bandura & McClelland (1977) formed the social learning theory that explained the critical role of social context in a learning environment (Bandura & McClelland, 1977). Later on, Bandura (1986) incorporate motivational and cognitive mechanisms to the theory.

In an attempt to understand different human phenomena, social cognitive theory influenced a vast and wide range of research practices in the areas of social psychology, education and organizational management. This includes academic success, career decisions, setting goals, selecting a healthier lifestyle, nutrition behavior, motivation, organizational citizenship behavior, employee engagement and job performance (Anderson et al., 2007; Hmieleski & Baron, 2009; Lent et al., 1994; Lorente et al., 2014; McCormick & Martinko, 2004; Zhao & Zhou, 2020). Three elements of social cognitive theory have been focused on in the area of organisation, including the improvement of people's cognitive, social and behavioral skills by creating people's confidence in their capacity to use their strengths and increase their motivation (Bandura, 1988; Wood & Bandura, 1989).

In the social cognitive theory model, personal factors/cognitions, personal behaviors and environmental influences act as interacting determinants impacting each other (see Figure 1) (Bandura, 1986; Wood & Bandura, 1989). Because of this triadic dynamic causation, human behaviors are affected and guided by variations of individual personal factors as well as the influence of related environmental context (Bandura, 1986, 2001; Banduran, 1997).

Social cognitive theory has introduced some human competencies like symbolizing, forethought, vicarious learning, self-efficacy, self-regulatory, and self-reflective competencies, positing that these competencies play a crucial role in human development and functioning (Bandura, 1986). In accordance with this theory, the concept of mindset (Dweck, 1986) plays the role of a significant personal factor to impact employee behavior. Creative mindset relates to a type of self-efficacy and personal beliefs, and beliefs influence behaviors, and both beliefs and behaviors are shaped by environmental impacts.

The aforementioned literature review indicates that an explanation of the employee's motivation of fostering a creative work behavior is to be provided, with the exploration of what nature of environmental facilitators may influence this behavior.



**Figure 1: Social Cognitive Theory Model**

### 3.2 Implicit Person Theory

Dweck & Leggett (1988) implicit person theory is based on the social cognitive perspective. The key concept of this theory is known as mindset (Dweck, 2006). According to Dweck (2006), mindset is among the most crucial factor of learning that facilitate personal and professional development. Mindset refers to beliefs and assumptions individuals hold about their



plasticity of traits (e.g., personality, abilities, talent, intelligence). Such beliefs and assumptions significantly affect their behaviors, motivation and responses to their everyday affairs (Blackwell et al., 2007; Dweck, 2006).

Mindset theory is a mental framework that often applied in many areas. Its interpersonal implications have been revealed in field of learning and education (e.g., Claro et al., 2016; David S. Yeager et al., 2019), social psychology (Schroder et al., 2017), and organizational context (Canning et al., 2020; Keating & Heslin, 2015; Zeng et al., 2019). According to this theory, people may have a different sense of their universe as a result of their mindset (Daniel & Dweck, 2006). Individuals acting with a fixed mindset will perceive their own intellect, skill and abilities as a constant indicator. They want to be intelligent and smart all the time and avoid feeling dumb at all costs, and that drives their attitudes and actions (Yeager & Dweck, 2012). As a result, it is anticipated that people with a fixed mindset would keep away from activities that might indicate an area of deficiency during difficult times, particularly after setbacks (Yeager & Dweck, 2012). The assumption that abilities are unchangeable also prompts those with a fixed to react helplessly to major challenges. During the pandemic crisis, which is characterized by a high level of uncertainty and the need to learn new ways of creative working and communication, one can assume that fixed creative mindset employees will have a hard time to adapt and to accept the situation creatively. Moreover, fixed creative mindset people tend to treat effort as futile (Karwowski, 2014; Mueller & Dweck, 1998), and ignore feedback that may be beneficial (Heslin & VandeWalle, 2005). They also judge people easily for their wrongdoings, and their connections with others can be strained.

On the other hand, individuals with a growth mindset view life as a journey where becoming better every day through learning and practice is the goal (Dweck & Leggett, 1988). Those people enjoy learning and are prepared to work hard. They even battle to improve and grow to new levels (Yeager & Dweck, 2012). Subsequently, when people have a growth creative mindset, they welcome setbacks and failures. They experience them as chances to progress and tend to embrace them as crucial for mastering creative tasks. Essentially because they assign failure to a lack of efforts rather than a lack of creative skill (Karwowski, 2014). They appreciate corrective feedback that may help them to improve their creative abilities. They believe people can get more creative if they work at it.

One can assume that growth creative mindset individuals face the pandemic crisis with an increased positive attitude than their fixed creative mindset counterparts. Puente-Díaz & Cavazos-Arroyo (2017) showed that a growth creative mindset increased the likelihood of creative achievement and generating creative solutions. Thus, at the professional level, growth creative mindset employees might increase their likelihood to disseminating creative work behavior despite the crisis context.

More recent studies have broadened the concept of mindset as a situational state (Burnette et al., 2013; Claro et al., 2016; Lyons & Bandura, 2018). This implies that creative mindset can be learned and that people could have evolving mindsets (Karwowski & Brzeski, 2017; Lyons & Bandura, 2018). All these findings suggest that external interventions, like leadership, can

potentially impact the relationship between creative mindset. The study by Owusu-Manu et al. (2020) showed consistent results with this hypothesis.

To summarize, research has shown that a) employees can learn to move their creative mindset from fixed to growth (Paek & Sumners, 2019; Puente-Díaz & Cavazos-Arroyo, 2017), and b) leadership can impact the likelihood of this learning to happen (Kouzes & Posner, 2019). Therefore, although this study focuses specifically at the employee level, the role of leadership seems to be a significant variable in the human mechanism between creative mindset and creative work behavior. Specifically, leadership encouragement of creativity that appears as an appropriate leadership style for our study purpose.

Our study applies social cognitive theory (Bandura, 1986) and implicit person theory (Dweck, 1986, 2006; Karwowski, 2014) to build a theoretical model aiming at understanding how creative mindset could impact creative work behaviors both in the midst of a crisis and beyond. The proposed research model is presented in Figure 2.

### **3.3 The Impact of Mindset on Creative Work Behavior**

Based on social cognitive theory (Bandura, 1986; Banduran, 1997), an individual behavior is affected by his personal perceptions as well as the related environmental influences. In this sense, growth creative mindset is supported to be empowering the creative behavior of the employees. According to mindset theory (Dweck, 2006; Karwowski, 2014), the assumptions held by individuals about the natural existence of creative abilities and the changeable-fixed nature of them can form their self-beliefs towards creativity, resulting in a fixed or growth creative mindset. These mindsets, in turn, may function as indicators by which people can interpret the world around them (Karwowski, 2014). Implicit understanding of these abilities could lead people to achieve creatively their tasks (Beghetto & Karwowski, 2017). However, if they have a wrong understanding of that, particularly if they believe that creative thinking is difficult to reach, then the person's ability to acquire new creative thinking abilities is likely to suffer (Hass et al., 2017). Hence, it is critical to pay more attention on people's state of mind in developing their creative abilities as it is a crucial factor in fostering their creative behavior (Choi, 2019b).

Employees endorse a growth creative mindset believe that creativity is trainable and can be taught in the same way that other psychological traits may be taught. Previous research dedicated to intelligence revealed that people with a growth mindset have a great possibility to perceive setbacks and failures as an opportunity to grow (Burnette et al., 2013; Dweck, 1986, 2006). Even if they are troubled, they keep working on problems until they come up with useful ideas and solutions (Dweck, 2006). As a result of their insistence on making efforts, they are able to increase their creative skills and competences (Dweck, 1986; Intasao & Hao, 2018). In addition, employees with a growth creative mindset are more likely to participate in creativity training, activities, or hobbies, leading to support the organizational creativity and innovation, thus supporting the organization during crisis periods and high uncertainty contexts as the Covid-19 pandemic one.

Compared to those with a growth creative mindset, an employee having a fixed creative mindset believes that trait is fixed and a person has a certain number of basic creative qualities (Dweck, 1986; Karwowski, 2014). Previous research on intelligence revealed that entity theorists may not even attempt a difficult activity due to a fear of failure (Haimovitz et al., 2011). Due to that, it could be argued that employees with entity beliefs toward creativity view failure as a risk, and this discourages them from participating in risky activities (Haimovitz et al., 2011). Creative mindset researchers expect that people with fixed creative mindsets will avoid tasks that are perceived as novel, complex, or creative. Therefore, fixed creative mindset may reduce the possibility of participation in creative solutions for problem-solving tasks (Martin, 2015). In line with that, we hypothesized the following:

Hypothesis 1. (a) Growth creative mindset will be positively related to creative work behavior.

Hypothesis 1. (b) Fixed creative mindset will be negatively related to creative work behavior.

### **3.4 The Moderating Impact of Leadership Encouragement of Creativity**

There is a need for leaders who are able to create a creative environment in the workplace, especially during times of crisis such as the Covid-19 pandemic. According to social cognitive theory, proxy agents can affect the beliefs and behaviors of people (Bandura, 2001). Leadership is an example of proxy agents and thus it may influence the relationship between an employee's mindset and creative behavior. From the implicit person theory standpoint, many scholars have shown that mindset is more likely to be seen as a state rather than a trait with the potential to evolve in response to contextual environmental stimuli (Burnette et al., 2013; Claro et al., 2016; Lyons & Bandura, 2018).

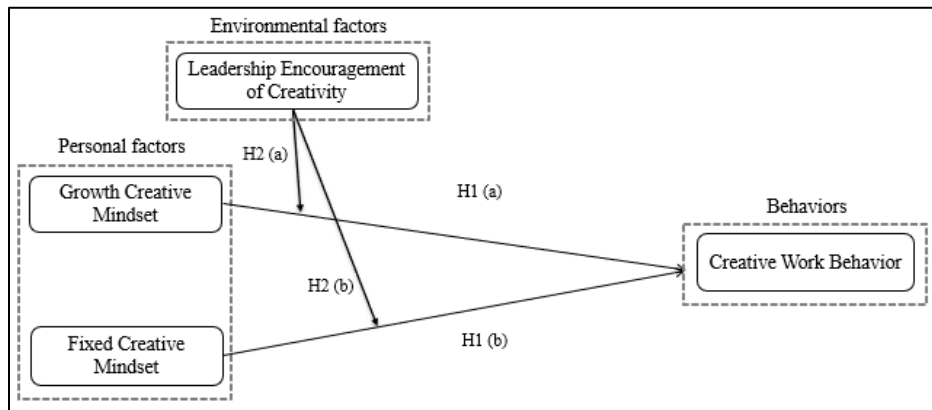
The cultural component of a leader encouragement of creativity entails that manager should understand how to develop an organizational culture that promotes employees' creativity in order to meet the goals of the organization. This culture of support aims to help employees focus on new approaches and strategies that sustain their creativity. All members of an organization can benefit when leaders successfully devote their time and energy to encourage creativity. For instance, they can encourage them to try different solution and take risks to try new techniques in their job (Cheng & Yang, 2019; X. Zhang & Bartol, 2010). They should also recognize the ones who come up with creative ideas, products or services.

In contrast, leaders can build barriers and obstacles to employees by adapting inappropriate behaviors that discourage them to create (Tu et al., 2019). Leaders can prevent employees from bringing unique perspectives into creative processes. Further, they may diminish perseverance, motivation, risk taking and learning as main keys to creativity. Because of this, employees will be less likely to overcome their fear of failure when taking risk (Politis, 2005). Instead, they will avoid new experiments to avoid the unfavourable feedback and criticism received from their leader. This, in turn, can reduce their enthusiasm for generating new ideas (C.-R. Li et al., 2018). As a result, they fall back on their efforts in the face of setbacks and hard times. Such employees and leaders

are less expected to meet the demands and challenges of today’s organizations. Employees with a fixed creative mindset, tend to avoid challenging situations that they might not be able to handle. However, they might be expected to react positively to such situations when they have leaders who encourage them and place them in contexts where they can gain skills. With a more encouraging leader, they may share ideas about their ability to create new things beyond their own expectations. Hence, the link between a fixed creative mindset and creative behavior may weaken when leaders support creative work. Hence, the following are hypothesized:

Hypothesis 2. (a) Leadership encouragement of creativity moderates the positive relationship between growth creative mindset and creative work behavior; such that the relationship is stronger when leaders encourage employees.

Hypothesis 2. (b) Leadership encouragement of creativity moderates the negative relationship between fixed creative mindset and creative work behavior; such that the relationship is weaker when leaders discourage employees.



**Figure 2:** The Research Model

## 4 Theoretical Contributions

Our study contributes to the literature in several ways. First, most of the studies which examined the relationship between creative mindset and individual outcomes were carried out in psychology settings. Creative mindset is still under-researched in the organizational literature (S. J. Han & Stieha, 2020). Puente-Díaz & Cavazos-Arroyo (2017) suggested that there is a need to enrich the organizational literature with the concept of creative mindset. Second, we contribute to social cognitive theory and implicit person theory by expanding the theoretical understanding on how creative mindset may influence employee behaviors like creative behavior. This influence is little explored and developed in the literature (e.g., Jeong et al., 2016). Third, an understanding of the boundary conditions on the creative mindset-creative behavior relationship remains underdeveloped. There is a dearth of knowledge of whether contextual factors at work, such as

leadership encouragement of creativity, may accentuate the relationship between employees' creative mindset and their creative behavior. We highlight the significant role that leader encouragement of creativity might play on this relationship. In particular, we argue that this relationship is more likely to be influenced by the extent to which the leader is encouraging or not.

Given this discussion and responding to the scholarly calls to advance the literature of creativity, our study aims at investigating the impact of growth creative mindset and fixed creative mindset of employees on their creative behaviors via the moderating role of leader encouragement of creativity.

## **5 Implications for Managerial Practice**

Even though this study focuses on the exploration of how employees' creative mindset may influence their creative behavior, we recognize that creative mindset is an important determinant of many organizational performance outcomes (S. J. Han & Stieha, 2020) and accordingly, should be seriously considered by the organizations. As such, we propose the following implications to provide practical insights for organizations and practitioners looking to compete and sustain their competitive advantage through enhancing the creative behaviors of their employees.

First, one significant implication is that short and easy-to-use psychometric assessments of creative mindset are helpful to companies to recognize the degree of growth and fixed creative mindset of jobseekers during the recruiting process. Thus, managers and supervisors should consciously decide how to deploy these employees within the organization. They may for example, delegate knowledge-intensive and creativity dependent positions to people with a growth creative mindset. Employees with a growth creative mindset are able to generate new ideas and solutions for the challenges and issues they are facing during this era of technological change.

Second, mindset can be viewed as a personal psychological state that can be developed through human resources management and leadership practices (see e.g., Schaufeli & Bakker, 2004). Management and leadership could undertake actions and conduct interventions to develop the mindset of employees into a growth creative mindset direction that could inspire their behavior towards creative practices (Heslin et al., 2005; Keating & Heslin, 2015; Puente-Díaz & Cavazos-Arroyo, 2017). These interventions may include training employees on how they can produce specific outcomes instead of concentrating on their inner creative skills (Keating & Heslin, 2015). In her book: "Self-Theories", Dweck (2000) suggested processes and methods to help people building a growth mindset. Examples include conducting specific training and learning actions or practicing feedback and criticism to increase self-knowledge. She proposed the using of feedback in a constructive way so that people would not feel dumb but rather work on finding different approaches to succeed (Dweck, 2000).

Third, our study suggest that leader encouragement of creativity strengthens the relationship between creative growth mindset and creative behavior. Moreover, it suggests that leaders can create the conditions to encourage employees with a fixed creative mindset to successfully engage in creative activities, which will motivate them to boost their creative

performance. In essence, organizations may consider their managerial leadership styles and match them with employees in such a way as to reap the greatest benefits from them to the company.

Hence, the study may suggest that organizations should employ and value leaders who are best qualified to promote creative behavior. Organizations with encouraging leaders of creativity are better trained for contributing to the active discovery of new ideas. In this perspective, these ideas can be converted and integrated successfully to create new creative results that contribute to firm innovativeness and competitiveness (Bryant, 2003; Donate & de Pablo, 2015; Zia, 2020).

## References

- Alikaj, A., Ning, W., & Wu, B. (2020). Proactive personality and creative behavior: Examining the role of thriving at work and high-involvement HR practices. *Journal of Business and Psychology*, 1–13.
- Amabile, T. M. (1983). The social psychology of creativity: A componential conceptualization. *Journal of Personality and Social Psychology*, 45(2), 357.
- Amabile, T. M., & Pillemer, J. (2012). Perspectives on the social psychology of creativity. *The Journal of Creative Behavior*, 46(1), 3–15.
- Anderson, E. S., Winett, R. A., & Wojcik, J. R. (2007). Self-regulation, self-efficacy, outcome expectations, and social support: Social cognitive theory and nutrition behavior. *Annals of Behavioral Medicine*, 34(3), 304–312.
- Aslam, S. (2017). Psychological empowerment on creativity among employees of IT sector: The mediating role of creative process engagement and intrinsic motivation. *Canadian Social Science*, 13(6), 11–34.
- Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist*, 37(2), 122.
- Bandura, A. (1986). Social foundations of thought and action. *Englewood Cliffs, NJ, 1986*, 23–28.
- Bandura, A. (1988). Organisational applications of social cognitive theory. *Australian Journal of Management*, 13(2), 275–302.
- Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology*, 52(1), 1–26.
- Bandura, A., & McClelland, D. C. (1977). *Social learning theory* (Vol. 1). Englewood cliffs Prentice Hall.
- Banduran, A. (1997). *Self-efficacy: The Exercise of Control*. New York. NY: *Worth Publishers*.
- Barzilay, R., Moore, T. M., Greenberg, D. M., DiDomenico, G. E., Brown, L. A., White, L. K., Gur, R. C., & Gur, R. E. (2020). Resilience, COVID-19-related stress, anxiety and depression during the pandemic in a large population enriched for healthcare providers. *Translational Psychiatry*, 10(1), 1–8.
- Batra, S., & Vohra, N. (2016). Exploring the linkages of cognitive style and individual innovativeness. *Management Research Review*.
- Beghetto, R. A., & Karwowski, M. (2017). Toward untangling creative self-beliefs. In *The creative self* (pp. 3–22). Elsevier.

- Blackwell, L. S., Trzesniewski, K. H., & Dweck, C. S. (2007). Implicit theories of intelligence predict achievement across an adolescent transition: A longitudinal study and an intervention. *Child Development, 78*(1), 246–263.
- Burnette, J. L., O’Boyle, E. H., VanEpps, E. M., Pollack, J. M., & Finkel, E. J. (2013). Mind-sets matter: A meta-analytic review of implicit theories and self-regulation. *Psychological Bulletin, 139*(3), 655.
- Caniëls, M. C., De Stobbeleir, K., & De Clippeleer, I. (2014). The antecedents of creativity revisited: A process perspective. *Creativity and Innovation Management, 23*(2), 96–110.
- Canning, E. A., Murphy, M. C., Emerson, K. T., Chatman, J. A., Dweck, C. S., & Kray, L. J. (2020). Cultures of genius at work: Organizational mindsets predict cultural norms, trust, and commitment. *Personality and Social Psychology Bulletin, 46*(4), 626–642.
- Carnabuci, G., & Diószegi, B. (2015). Social networks, cognitive style, and innovative performance: A contingency perspective. *Academy of Management Journal, 58*(3), 881–905.
- Cheng, C., Cao, L., Zhong, H., He, Y., & Qian, J. (2019). The Influence of Leader Encouragement of Creativity on Innovation Speed: Findings from SEM and fsQCA. *Sustainability, 11*(9), 2693.
- Choi, J. (2019a). *The Creative Mindset In Design Education*.
- Choi, J. (2019b). How Creative Mindset Is Involved in Positive Emotions and Attitude that Affects Creative Design Process. *International Conference on Applied Human Factors and Ergonomics, 3–12*.
- Claro, S., Paunesku, D., & Dweck, C. S. (2016). Growth mindset tempers the effects of poverty on academic achievement. *Proceedings of the National Academy of Sciences, 113*(31), 8664–8668.
- Compeau, D. R., & Higgins, C. A. (1995). Computer self-efficacy: Development of a measure and initial test. *MIS Quarterly, 189–211*.
- Csikszentmihalyi, M. (1997). Flow and the psychology of discovery and invention. *HarperPerennial, New York, 39*.
- Daniel, & Dweck, C. S. (2006). Finding" meaning" in psychology: A lay theories approach to self-regulation, social perception, and social development. *American Psychologist, 61*(3), 192.
- Dirani, K. M., Abadi, M., Alizadeh, A., Barhate, B., Garza, R. C., Gunasekara, N., Ibrahim, G., & Majzun, Z. (2020). Leadership competencies and the essential role of human resource development in times of crisis: A response to Covid-19 pandemic. *Human Resource Development International, 23*(4), 380–394.
- Dong, Y., Bartol, K. M., Zhang, Z.-X., & Li, C. (2017). Enhancing employee creativity via individual skill development and team knowledge sharing: Influences of dual-focused transformational leadership. *Journal of Organizational Behavior, 38*(3), 439–458.
- Dweck. (1986). Motivational processes affecting learning. *American Psychologist, 41*(10), 1040.
- Dweck. (2006). *Mindset: The new psychology of success. Random House Incorporated*.
- Dweck. (2012). Mindsets and human nature: Promoting change in the Middle East, the schoolyard, the racial divide, and willpower. *American Psychologist, 67*(8), 614.
- Dweck, & Leggett, E. L. (1988). A social-cognitive approach to motivation and personality. *Psychological Review, 95*(2), 256.

- Guan, Y., Deng, H., & Zhou, X. (2020). *Understanding the impact of the COVID-19 pandemic on career development: Insights from cultural psychology*. Elsevier.
- Guilford, J. P. (1967). Creativity: Yesterday, today and tomorrow. *The Journal of Creative Behavior*, 1(1), 3–14.
- Haimovitz, K., Wormington, S. V., & Corpus, J. H. (2011). Dangerous mindsets: How beliefs about intelligence predict motivational change. *Learning and Individual Differences*, 21(6), 747–752.
- Han, S. J., & Stieha, V. (2020). Growth mindset for human resource development: A scoping review of the literature with recommended interventions. *Human Resource Development Review*, 19(3), 309–331.
- Hass, R. W., Reiter-Palmon, R., & Katz-Buonincontro, J. (2017). Are implicit theories of creativity domain specific? Evidence and implications. In *The Creative Self* (pp. 219–234). Elsevier.
- Heslin, P. A., & VandeWalle, D. (2005). Self-regulation derailed: Implicit person theories and feedback-seeking. *Annual Meeting of the Society for Industrial/Organizational Psychology, Los Angeles, CA*.
- Hmieleski, K. M., & Baron, R. A. (2009). Entrepreneurs' optimism and new venture performance: A social cognitive perspective. *Academy of Management Journal*, 52(3), 473–488.
- Hong, Y., Chiu, C., Dweck, C. S., & Sacks, R. (1997). Implicit theories and evaluative processes in person cognition. *Journal of Experimental Social Psychology*, 33(3), 296–323.
- Hüther, G. (2016). Brainwash—Innovation starts in the mind. *Developing Leaders*, 23.
- Iivari, N., Sharma, S., & Ventä-Olkkonen, L. (2020). Digital transformation of everyday life – How COVID-19 pandemic transformed the basic education of the young generation and why information management research should care? *International Journal of Information Management*, 55, 102183. <https://doi.org/10.1016/j.ijinfomgt.2020.102183>
- Intasao, N., & Hao, N. (2018). Beliefs about creativity influence creative performance: The mediation effects of flexibility and positive affect. *Frontiers in Psychology*, 9, 1810.
- Joo, B.-K., McLean, G. N., & Yang, B. (2013). Creativity and human resource development: An integrative literature review and a conceptual framework for future research. *Human Resource Development Review*, 12(4), 390–421.
- Karwowski, M. (2014). Creative mindsets: Measurement, correlates, consequences. *Psychology of Aesthetics, Creativity, and the Arts*, 8(1), 62.
- Karwowski, M., & Brzeski, A. (2017). Creative mindsets: Prospects and challenges. In *The creative self* (pp. 367–383). Elsevier.
- Keating, L. A., & Heslin, P. A. (2015). The potential role of mindsets in unleashing employee engagement. *Human Resource Management Review*, 25(4), 329–341. <https://doi.org/10.1016/j.hrmr.2015.01.008>
- Kim, T.-Y., Hon, A. H., & Lee, D.-R. (2010). Proactive personality and employee creativity: The effects of job creativity requirement and supervisor support for creativity. *Creativity Research Journal*, 22(1), 37–45.
- Lee, S. M., & Trimi, S. (2020). Convergence innovation in the digital age and in the COVID-19 pandemic crisis. *Journal of Business Research*, 123, 14–22.
- Lent, R. W., Brown, S. D., & Hackett, G. (1994). Toward a unifying social cognitive theory of career and academic interest, choice, and performance. *Journal of Vocational Behavior*, 45(1), 79–122.



- Levy, S. R., Chiu, C., & Hong, Y. (2006). Lay theories and intergroup relations. *Group Processes & Intergroup Relations*, 9(1), 5–24.
- Liu, Y., Xu, S., & Zhang, B. (2020). Thriving at work: How a paradox mindset influences innovative work behavior. *The Journal of Applied Behavioral Science*, 56(3), 347–366.
- Lorente, L., Salanova, M., Martínez, I. M., & Vera, M. (2014). How personal resources predict work engagement and self-rated performance among construction workers: A social cognitive perspective. *International Journal of Psychology*, 49(3), 200–207.
- Lyons, P., & Bandura, R. (2018). The intersection of mindsets and self-regulated learning. *Development and Learning in Organizations: An International Journal*.
- Martin, A. J. (2015). Implicit theories about intelligence and growth (personal best) goals: Exploring reciprocal relationships. *British Journal of Educational Psychology*, 85(2), 207–223.
- Mccormick, M. J., & Martinko, M. J. (2004). Identifying leader social cognitions: Integrating the causal reasoning perspective into social cognitive theory. *Journal of Leadership & Organizational Studies*, 10(4), 2–11.
- Mueller, C. M., & Dweck, C. S. (1998). Praise for intelligence can undermine children's motivation and performance. *Journal of Personality and Social Psychology*, 75(1), 33.
- Newman, A., Tse, H. H. M., Schwarz, G., & Nielsen, I. (2018). The effects of employees' creative self-efficacy on innovative behavior: The role of entrepreneurial leadership. *Journal of Business Research*, 89, 1–9. <https://doi.org/10.1016/j.jbusres.2018.04.001>
- O'Connor, A. J., Nemeth, C. J., & Akutsu, S. (2013). Consequences of beliefs about the malleability of creativity. *Creativity Research Journal*, 25(2), 155–162.
- Organization, W. H. (2020a). *Mental health and psychosocial considerations during the COVID-19 outbreak*. Retrieved 13 April, 2020.
- Organization, W. H. (2020b). *Physical and mental health key to resilience during COVID-19 pandemic*.
- Owusu-Manu, D.-G., Debrah, C., Amissah, L., Edwards, D. J., & Chileshe, N. (2020). Exploring the linkages between project managers' mindset behaviour and project leadership style in the Ghanaian construction industry. *Engineering, Construction and Architectural Management*.
- Paek, S. H., & Sumners, S. E. (2019). The indirect effect of teachers' creative mindsets on teaching creativity. *The Journal of Creative Behavior*, 53(3), 298–311.
- Pope, R. (2005). *Creativity: Theory, history, practice*. Routledge.
- Puente-Díaz, R., & Cavazos-Arroyo, J. (2017). The influence of creative mindsets on achievement goals, enjoyment, creative self-efficacy and performance among business students. *Thinking Skills and Creativity*, 24, 1–11.
- Runco, M. A. (2003). *Critical creative processes*. Hampton Press.
- Sarros, J. C., Cooper, B. K., & Santora, J. C. (2008). Building a climate for innovation through transformational leadership and organizational culture. *Journal of Leadership & Organizational Studies*, 15(2), 145–158.
- Saunila, M. (2014). Innovation capability for SME success: Perspectives of financial and operational performance. *Journal of Advances in Management Research*, 11(2), 163–175. <https://doi.org/10.1108/JAMR-11-2013-0063>

- Schroder, H. S., Yalch, M. M., Dawood, S., Callahan, C. P., Donnellan, M. B., & Moser, J. S. (2017). Growth mindset of anxiety buffers the link between stressful life events and psychological distress and coping strategies. *Personality and Individual Differences, 110*, 23–26.
- Shalley, C. E., Zhou, J., & Oldham, G. R. (2004). The effects of personal and contextual characteristics on creativity: Where should we go from here? *Journal of Management, 30*(6), 933–958.
- Shamim, S., Cang, S., & Yu, H. (2019). Impact of knowledge oriented leadership on knowledge management behaviour through employee work attitudes. *The International Journal of Human Resource Management, 30*(16), 2387–2417.
- Shanker, R., Bhanugopan, R., Van der Heijden, B. I., & Farrell, M. (2017). Organizational climate for innovation and organizational performance: The mediating effect of innovative work behavior. *Journal of Vocational Behavior, 100*, 67–77.
- Stahl, G., & Caligiuri, P. (2005). The relationship between expatriate coping strategies and expatriate adjustment. *Journal of Applied Psychology, 90*(4), 603–616.
- Stein, M. I. (1953). Creativity and culture. *The Journal of Psychology, 36*(2), 311–322.
- Sternberg, R. J. (2012). The assessment of creativity: An investment-based approach. *Creativity Research Journal, 24*(1), 3–12.
- Sternberg, R. J., & O’Hara, L. A. (1999). *Creativity and intelligence*.
- Tang, M., Hofreiter, S., Reiter-Palmon, R., Bai, X., & Murugavel, V. (2021). Creativity as a Means to Well-Being in Times of COVID-19 Pandemic: Results of a Cross-Cultural Study. *Frontiers in Psychology, 12*, 265.
- Torrance, E. P. (1963). Adventuring in creativity. *Childhood Education, 40*(2), 79–87.
- Wood, R., & Bandura, A. (1989). Social cognitive theory of organizational management. *Academy of Management Review, 14*(3), 361–384.
- Woodman, R. W., Sawyer, J. E., & Griffin, R. W. (1993). Toward a theory of organizational creativity. *Academy of Management Review, 18*(2), 293–321.
- Yeager, D. S., Hanselman, P., Walton, G. M., Murray, J. S., Crosnoe, R., Muller, C., Tipton, E., Schneider, B., Hulleman, C. S., & Hinojosa, C. P. (2019). A national experiment reveals where a growth mindset improves achievement. *Nature, 573*(7774), 364–369.
- Yeager, & Dweck, C. S. (2012). Mindsets that promote resilience: When students believe that personal characteristics can be developed. *Educational Psychologist, 47*(4), 302–314.
- Yu, C., Yu, T.-F., & Yu, C.-C. (2013). Knowledge sharing, organizational climate, and innovative behavior: A cross-level analysis of effects. *Social Behavior and Personality: An International Journal, 41*(1), 143–156.
- Zeng, G., Chen, X., Cheung, H. Y., & Peng, K. (2019). Teachers’ growth mindset and work engagement in the Chinese educational context: Well-being and perseverance of effort as mediators. *Frontiers in Psychology, 10*, 839.
- Zhang, X., & Bartol, K. M. (2010). Linking empowering leadership and employee creativity: The influence of psychological empowerment, intrinsic motivation, and creative process engagement. *Academy of Management Journal, 53*(1), 107–128.
- Zhao, H., & Zhou, Q. (2020). Socially responsible human resource management and hotel employee organizational citizenship behavior for the environment: A social cognitive perspective. *International Journal of Hospitality Management, 102749*.

- Zhou, J., & George, J. M. (2001). When job dissatisfaction leads to creativity: Encouraging the expression of voice. *Academy of Management Journal*, 44(4), 682–696.
- Zia, N. U. (2020). Knowledge-oriented leadership, knowledge management behaviour and innovation performance in project-based SMEs. The moderating role of goal orientations. *Journal of Knowledge Management*.