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HOW TO NOT KILL CREATIVITY: A LOOK THROUGH AN
INNOVATION CONSULTANT'S CULTURE

Dissertation submitted to Universidade Católica
Portuguesa to obtain a Master's Degree in Psychology in
Business and Economics

by

Inês Salgueiro Oliveira Quelhas da Cruz

Faculdade de Ciências Humanas & Católica Lisbon School
of Business and Economics

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Under the supervision of Prof^a. Doutora Leonor Santos Almeida

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Abstract

Achieving sustainable growth in one's business appears to be a challenge for many entrepreneurs, since the business environment modern organizations face is characterized by numerous demands that, if not met, will most likely lead to the firm's failure. Ergo, there is an emergence from firms to achieve competitive advantage over other firms. Accordingly, one strategy used is through innovation, thus organizational creativity. However, even though firms recognize the value of creativity, they still fail to understand how to promote it amongst their employees. Therefore, the main purpose of this study is to understand how firms can foster their employees' creative potential, through a case study on an innovation consultant. Using a mixed-methods approach, this study draws inferences from the perspective of both subordinates and leaders on the type of culture embedded in the organization, as well as the cultural elements that promote and hinder creativity. Using a sample of 23 participants, a survey, the TCT-DP and 4 semi-structured interviews were carried out. Results suggest that freedom, communication, feedback, interpersonal relationships, work, resources, risk-taking, mistake handling, motivation, conflict handling, cooperation, decision-making and goal setting promote creativity, whereas mechanistic structures, poorly defined goals, lack of time constraint and lack of support for new ideas and change inhibit creativity.

Keywords: Creativity, Organizational Culture, Mixed-Methods, Case Study, TCT-DP.

Resumo

Alcançar um crescimento sustentável em negócios aparenta ser um desafio para vários empresários, uma vez que o ambiente empresarial que as empresas enfrentam é caracterizado por diversos desafios que podem levar à sua falência. Consequentemente, existe uma urgência por parte das empresas para alcançar uma vantagem competitiva sobre outras empresas. Uma maneira para alcançar tal é através da inovação, portanto criatividade organizacional. No entanto, apesar das empresas reconhecerem o valor da criatividade, continuam a não saber como promovê-la entre os seus empregados. Assim, o principal objetivo deste estudo é compreender como as empresas podem promover a criatividade, através de um estudo de caso de uma consultoria de inovação. Através de uma metodologia mista, este estudo apresenta inferências sobre o tipo de cultura presente na empresa, assim como os respetivos elementos que promovem e inibem a criatividade, da perspectiva dos empregados e líderes. A amostra consiste em 23 participantes, em que lhes foi administrado um questionário, TCT-DP e 4 entrevistas semi-estruturadas. Os resultados sugerem que liberdade, comunicação, feedback, relações interpessoais, trabalho, recursos, tomar riscos, a forma como se lida com os erros e conflitos, motivação, cooperação, poder de decisão e estabelecimento de objetivos promovem criatividade, enquanto estruturas mecanicistas, objetivos mal estabelecidos, falta de tempo e de apoio em ideias novas e mudança inibe a criatividade.

Palavras-Chave: Criatividade, Cultura Organizacional, Metodologia Mista, Estudo de Caso, TCT-DP.

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Introduction

Business is synonymous with risk. That is why, in the first year around 80% of small businesses survive, yet only 50% of these survive by the fifth year, and this percentage decreases even more by the tenth year, with around 33% of businesses surviving (SBA, 2018). The case of Portugal is even more drastic, with 76% of businesses surviving in the first year, and only roughly 54% by the second year (INE, 2019). Creating a new business from scratch is, inevitably, accompanied by numerous challenges (e.g., business plan, customer relationships, credit decisions) that, if not overcome successfully, may lead to the company's failure (Longenecker et al., 2008). Inarguably, this failure will have financial, social and psychological costs that affect all stakeholders, through, for instance, a loss or reduction of personal income; impact on personal and professional relationships; and appearance of negative emotions, such as anger, frustration and shame (Ucbasaran et al., 2013). Besides, small businesses account for 99.9% of all businesses and 32% of known export value, which represent \$473 billion out of \$1 trillion. Research also shows that from 2000 to 2019 in the US alone, small businesses created 10.5 million net new jobs, while large businesses created 5.6 million (SBA, 2020). In view of these numbers, it is possible to understand that new net jobs have been created, yet data also shows that about 1/3 of these companies will not survive by the tenth year. This implies that those jobs created will decrease by the year, as some of those companies will eventually close. Thus, why do small businesses fail, and how can they be successful?

A small business begins with the right idea, yet the path to its success is far from coming up with a new market, technology or benefit for society (i.e., types of ideas that develop into startups) (Longenecker et al., 2008). There are several features that need to be accounted for when starting a new venture, such as defining the target industry, consumer, competition, product/service, marketing, finances (Longenecker et al., 2008; Trimi & Berbegal-Mirabent, 2012). To grow, on the other hand, requires something extra, such as increased product/service quality, cost reduction and/or innovation, all of which are strategies to achieve competitive advantage¹(Porter, 1990). Nevertheless, there is one competitive strategy that stands out above others, *innovation* (Dobni, 2008; Longenecker et

¹ “Competitive strategy involves positioning a business to maximize the value of the capabilities that distinguish it from its competitors” (Porter, 1980, p. 76).

al., 2008). Indeed, innovation appears to be a common theme among researchers when discussing the determinants of a company's successful performance (e.g., Anderson et al., 2014; Kremer et al., 2019; Naranjo-Valencia et al., 2016). This element can assume different forms, including product, marketing and process innovation, which will affect the companies' growth in different manners. Specifically, product innovation can increase companies' market share and enhance product differentiation; marketing innovation can increase demand; and process innovation can increase/decrease process costs and economies of scale and change fixed costs (Anwar, 2018; Porter, 1998). Nonetheless, this vital element for every company would not exist without the presence of creativity, the main focus of this research. And, even though there is contradictory evidence regarding this matter, most researchers agree that there is a strong positive relationship between innovation and creativity (Sarooghi et al., 2014; Sok & O' Cass, 2015).

Creativity refers to the generation of new and useful ideas, whereas innovation is the actual implementation of those ideas (Amabile, 1983; Sarooghi et al., 2014). Same as innovation, creativity too, specifically organizational creativity², has been linked with organization's survival and growth, as it affects innovation and patent production (Hargadon & Bechky, 2006; Zhou & Su, 2010). Therefore, it is not surprising that modern organizations have invested so many resources in identifying promoters and inhibitors of creativity, ideas' contests, techniques for promoting divergent thinking, and external sources (Amabile, 1988; Anderson et al., 2014; Gomes et al., 2016; Kremer et al., 2019). Yet, even though organizations recognize the value of creativity for attaining a higher performance, there is still a lack of knowledge on how to promote creativity within the workplace. Quoting the work by Teresa Amabile, "*How to kill creativity*" (1998, p. 77): "...this isn't because managers have a vendetta against creativity. On the contrary, most believe in the value of new and useful ideas. However, creativity is undermined unintentionally every day in work environments...". Thus, if firms wish to achieve competitive advantage over other firms, they must create conditions that promote creativity, instead of inhibiting it (Tesluk et al., 1997).

Scholars have attempted to identify the factors that enhance creativity, and the evidence suggests a two-fold interaction between individual (e.g., personality traits, self-

² Defined as the generation of new and useful ideas from the employee's integrated work within the organization (Woodman et al., 1993).

motivation, expertise) and environmental factors (e.g., freedom, resources, recognition) (Amabile, 1988; Hargadon & Bechky, 2006; Oldham & Cummings, 1996). At the individual level, intrinsic motivation, as opposed to extrinsic motivation, appears to exert a great influence on creativity (Amabile, 1988, 1996). Intrinsically motivated individuals tend to be more curious, cognitively flexible and willing to take risks (Zhou & Shalley, 2003). All attributes relevant for creative thinking (Amabile, 1988). Besides, task motivation seems to depend strongly on the work environment (i.e., environmental factors) (Amabile, 1988). As such, there is one environmental factor that has been receiving much attention over the past years as having an influence on creativity, *organizational culture* (e.g., Ahmed, 1998; Martins & Martins, 2002). Specifically, an *adhocracy* type of culture, which promotes risk-taking, change and allows flexibility and openness, as opposed to a stable hierarchy, which is characterized by stability, and control (Schepers & Berg, 2007; Tian et al., 2018). Organizations with strong cultural values for creativity display behaviours of proactivity, emotional involvement in work; promote challenge, growth, communication and autonomy; and lastly, a physical space that symbolizes equality (e.g., open plan offices) (Kallio et al., 2015; Martins & Martins, 2002; Tesluk et al., 1997).

Thus, the purpose of this research is to understand the impact of organizational culture on employees' creativity. More specifically, what type of culture is embedded in the organization at hand, which elements of culture are perceived to have an influence on creativity, and the subjective experience of each employee to the organizational culture. Additionally, this study also aims to understand the impact of motivation on creativity.

This study contributes to the literature in different ways. First, it offers theoretical evidence on the influence of organizational culture on creativity, within an innovation consultant. To our knowledge, this appears to be the first of its kind, as no studies were found regarding this matter. Secondly, a survey was developed based on different models of organizational creativity, rather than using a pre-existent one. Thirdly, this study uses a mixed-methods approach, which emphasizes the strengths of both methods, whilst diminishing their weaknesses (Creswell, 2015; Wisdom et al., 2012)

The current study is divided into two chapters: Chapter I addresses the theoretical framework, in which a literature review of the main concepts is presented; Chapter II includes the empirical study, including its relevance, sample, instruments, data collection and analytical procedures, results, discussion, future recommendations and conclusion.

CHAPTER I - Theoretical Framework

Creativity

Achieving sustainable growth in one's business appears to be a challenge for many entrepreneurs. The business environment modern organizations face nowadays is characterized by numerous demands that, if not met, will most likely lead to the firm's failure (Longenecker et al., 2008). Hence, organizations' primary goal among is to achieve competitive advantage (Porter, 1990). One way firms can work to reach this is through innovation, ergo through creativity, since "all innovation begins with creative ideas" (Amabile et al., 1996, p. 1154; Chatzoglou & Chatzoudes, 2018; Longenecker et al., 2008). Indeed, *creativity* and *innovation* are two key concepts when discussing firms' future and long-term survival (Sok & O' Cass, 2015). Thus, it seems relevant to study these notions in an organizational context. Yet, this research shall be focusing solely on creativity.

Despite the numerous attempts to define creativity and innovation, there is still a lack of consensus among researchers on what constitutes each (Anderson et al., 2014). Nevertheless, this study will be using the definition proposed by Amabile (1988, p. 126): "Creativity is the production of novel and useful ideas by an individual or small group of individuals working together (...), (whereas) innovation is the successful implementation of creative ideas in an organization". Within this definition, "ideas" refers to any new product, service, process, policy or procedure that can be implemented in an organization. Besides, this definition places a special emphasis on the words "novel", as ideas must be original and unique to be creative; and "useful", as they must bring value to the company and be aligned with its goals (Amabile, 1988; Cummings & Oldham, 1997).

When generating new and useful ideas, employees are basically providing the firm with new options, i.e., new creative inputs. Inputs that can take the form of, for instance, new products or services to implement in the market. By increasing the number of options one firm has available, employees are also offering it more flexibility to handle external demands, such as production costs or new policies (Amabile, 1997). Therefore, employees play a crucial role when discussing a firm's innovativeness, ergo in achieving competitive advantage.

Indeed, employees represent a major source of innovation for organizations, but is their creative potential limited to their individual differences? Evidence suggests that creativity is a two-way interaction between individual and social factors (Amabile, 1988; Hargadon & Bechky, 2006; Oldham & Cummings, 1996). So, even though some individuals may possess characteristics more favourable to creativity, the context in which they are inserted (e.g., workplace) also has a strong influence on the creative outcome³ (Amabile, 1988; Amabile & Pratt, 2016). Research on this matter started off with Amabile's (1988) seminal work "A model of creativity and innovation in organizations". With the assistance of Gyskiewicz (Amabile & Gyskiewicz, 1987), both scholars interviewed several individuals, from different industries so as to understand the factors behind creativity and innovation within firms. The data collected revealed both individual and environmental characteristics that promote or inhibit creativity, constituting *The Componential Model of Organizational Creativity and Innovation* (Amabile, 1988).

The Dynamic Componential Model of Creativity and Innovation

The model proposed by Amabile (1988), is the oldest theory of creativity and innovation in organizations, and it postulates that both individual and environmental factors can influence the creative outcome. As for the individual factors, it is proposed the following elements: *Domain-relevant skills*, *Creativity-relevant skills*, and *Intrinsic task motivation*. *Domain-relevant skills* are seen as the "raw materials" for creating novel ideas, including factual knowledge, technical skills, and talents related to the area. These personal characteristics can be positive, when the individual has expertise in the area, or negative when the individual is unskilled. *Creativity-relevant skills* refers to a cognitive-perceptual style responsible for assimilating new perspectives on problems, implementing heuristics⁴ for exploring new possibilities and showing resilience in problem-solving. *Intrinsic task motivation*⁵ comprehends the motivational factors behind creative performance. Motivation

³ Amabile and Pratt (2016) use the term "creative outcome", as opposed to "creative process" in order to facilitate its measurement and reach a consensus among researchers.

⁴ Mental shortcuts that allow people to make quick and efficient judgments (Kahneman & Tversky, 1979).

⁵ Intrinsic motivation is characterized by a sense of enjoyment, deep interest, curiosity and challenge when performing the task, whereas extrinsic motivation is driven by external factors, such as obtaining rewards (e.g., bonuses) (Amabile, 1997).

itself is considered a key element in the creative outcome since without it the action does not occur:

No amount of skill in the domain or in methods of creative thinking can compensate for a lack of appropriate motivation to perform an activity. But, to some extent, a high degree of proper motivation can make up for a deficiency of domain-relevant skills or creativity-relevant skills. Task motivation makes the difference between what an individual can do and what one will do (Amabile, 1988, p. 133).

Indeed, motivation appears to be fundamental for creativity, not only due to its importance for an action to happen but also because it depends on the work environment. However, motivation itself is not sufficient for creativity⁶. Most studies have highlighted the importance of intrinsic motivation on creativity (e.g., Amabile, 1988; Amabile et al., 1996; Zhou & Bartol, 2010; Hon, 2012), even though some forms of extrinsic motivators can also support it (e.g., reward and recognition) (Amabile et al., 1996; Amabile & Pratt, 2016). Nevertheless, Self-Determination Theory (Deci & Ryan, 1985, 2012) assumes that individuals have the need to feel competent and self-determined when performing a task. Thus, contextual factors that enhance these feelings will increase an individual's intrinsic motivation, and vice-versa (Ryan & Deci, 2000; Hon, 2012). When individuals are autonomously motivated (i.e., intrinsically motivated) they tend to be more cognitively flexible, use heuristics for problem-solving, experience greater ownership and risk-taking, all of which are important for creativity (Amabile, 1988; Amabile et al., 2005; Deci & Ryan, 2000; Shalley et al., 2004). Contrastingly, controlled motivation (i.e., extrinsic motivation) seems to inhibit creativity, as individuals tend to follow the regular ways of thinking and avoid risk-taking (Amabile, 1983):

(...) the intrinsic motivation principle of creativity: People will be most creative when they are primarily intrinsically motivated, by the interest, enjoyment,

⁶ In one of her studies, Amabile (1985 in Amabile, 1988) demonstrated the impact of motivation orientation (intrinsic vs. extrinsic) on creativity, by providing participants with a questionnaire that contained either "intrinsic" or "extrinsic" reasons for performing the task (i.e., writing). She chose individuals who were regularly involved in this type of creative task during their day. The results showed that individuals who received the "extrinsic questionnaire" presented significantly less creativity levels in their writing than those who received the "intrinsic questionnaire".

satisfaction, and challenge of the work itself; this intrinsic motivation can be undermined by extrinsic motivators that lead people to feel externally controlled in their work (Amabile, 1996, p. 1158).

Despite the importance of individual characteristics, such as personality, on creative outcomes, individuals and organizations will not benefit from these characteristics, unless employees are placed in a supportive and non-controlling environment (Cummings & Oldham, 1997; Shalley et al., 2004). Thus, as many researchers have demonstrated, the social environment also influences the level and frequency of creativity (e.g., Amabile et al., 1996; Hon, 2012; Martins & Martins, 2002; Zhou & Su, 2010). Specifically, freedom and autonomy; good project management; resources; cooperation and collaboration; recognition; creativity goals; sufficient time; challenge and pressure (Amabile, 1988; Amabile et al., 1996; Oldham & Cummings, 1996; Shalley, 1991). Therefore, a goal-directed community that is given freedom to achieve its tasks will work in an autonomous and creative way (Judge, Fryxell & Dooley, 1997). Contrastingly, factors such as lack of cooperation; constraint; organizational disinterest; poor project management; criticism; insufficient resources; overemphasis on the status quo and competition tend to inhibit creativity (Amabile, 1988; Shalley et al., 2004).

Interactionist Model of Creative Behavior

Later, Woodman, Sawyer and Griffin (1993) proposed an interactionist model for understanding organizational creativity (i.e., both dispositional and contextual variables will influence creativity). According to these authors, creativity is the product of each person's behaviour in a particular context. Such behaviour is influenced by antecedent conditions, characteristic of every person. They assume that creativity runs on three different levels: Individual, Group and Organization. Respectively, individual creativity is influenced by antecedent conditions, personality, cognitive style, intrinsic motivation and knowledge, all of which will influence group creativity. However, the latter is not limited to the sum of all individuals' creativity. Elements like group diversity, size and problem-solving techniques will define group creativity. In turn, organizational creativity will be influenced by both individual and group creativity, when considering organizational

characteristics, such as culture, resources, rewards, strategy, structure and technology (see attachment 1).

(Insert figure 2 about here)

In view of this evidence, one of the main objectives of this study is to understand which contextual elements contribute to enhancing employees' creativity, specifically which organizational cultural elements. Hence, hereinafter the next section of this theoretical framework shall be dedicated to understanding the influence of Organizational Culture on employees' creativity.

Organizational Culture

Organizational Culture⁷ has been studied from a wide range of perspectives, namely through beliefs and values (Schein, 1985, 1990, 2010; Schneider et al., 1994), norms and expectations (Cooke & Rosseau, 1988; O'Reilly, 1989), rituals (Erhardt, Martin-Rios & Heckscher, 2016), reward systems (Kerr & Slocum, 2005) and stories (Martin, Feldman, Hatch & Sitkin, 1987), all of which run on different levels. Its growing interest began around the late 1940s when Kurt Lewin and colleagues (1939) founded a research centre for studying group dynamics. This centre was later named "*cultural island*" so as to highlight the fact that participants' attitudes during the training setting would change as soon as they returned to the work setting (Bradford, Gibb & Benne in Schein, 1990). In the following years, the field of organizational psychology grew alongside businesses, however, the concept of *organizational culture* only began to gain its relevance when researchers employed it to explain differences in performance between the U.S. and Japanese companies (O'Toole, 1979 in Schein, 1990). Nowadays, companies recognize the value of having a healthy culture, as it appears to be an important driver of its success (Warrick, 2017).

Even though the concept of *organizational culture* emerged not so long ago, the same is not true for *culture*. Indeed, culture has been studied across various fields, namely

⁷ It seems relevant to note that *culture* differs from *climate*, in a sense that the latter is "only a surface manifestation of culture" (Schein, 1990, p. 109) or "the feeling in the air" (Schneider, 1994, p. 18). Even though both constructs focus on shared meanings, climate comprehends the shared perceptions and meanings attributed to policies, practices and procedures; whereas, culture entails the shared values and assumptions (Schneider, Ehrhart & Macey, 2013).

anthropology, political science and sociology, however, no agreement has been reached concerning its definition. To define culture it is necessary to compare it to other aspects or categories of life (e.g., economy and politics); specific fields (e.g., anthropology); or styles of analysis (e.g., functionalism). Notwithstanding, this abstract concept also entails a “concrete and bounded world of beliefs and practices” (Sewell, 2005 in Spiegel, 2005, p. 79). For this study, it will be used the definition of culture proposed by Schein (1990):

(...) (a) a pattern of basic assumptions, (b) invented, discovered, or developed by a given group, (c) as it learns to cope with its problems of external adaptation and internal integration, (d) that has worked well enough to be considered valid and, therefore (e) is to be taught to new members as the (f) correct way to perceive, think, and feel in relation to those problems (Schein, 1990, p. 111).

Culture can be analyzed and manifested through three different levels: *Artifacts*, *Values* and *Assumptions*. In an organizational context, *artifacts* are the visible elements of an organization, such as the dress code, language, layout and products. These elements are observable and can be easily accessed by outsiders, yet they are also the most ambiguous. Organizations may share the same artifacts, yet their meanings may be different (i.e., organizations can be seen as more or less formal, however, the assumptions made from an external perspective can be incorrect). On the other hand, the *values* and *beliefs*, norms and ideologies add information about the causes of such artifacts. They are transmitted by managers but can represent or not the reality. Lastly, the *assumptions* are the perceptions, thoughts, feelings and behaviours the employees act upon the values transmitted to them (Schein, 1990, 2010). Employees interpret and attach meanings to these elements of culture, developing a “social construction of reality” (Cooke & Rosseau, 1988, p. 248), which will be perceived as the organization’s culture (Schneider et al., 1994). Thus, in order to establish a culture of, for instance, innovation, employees have to attribute values of innovation to the company (Chatman et al., 2014; Schneider et al., 1994).

As mentioned above, culture can be analyzed through multiple perspectives, namely norms, which are “socially created standards that help us interpret and evaluate events” (O’Reilly, 1989, p. 12). Like in society, norms also differ among organizations, as some may find it inappropriate to discuss ideas openly, whilst others may encourage their

employees to do so. Through norms, employees can create expectations on how to behave in order to be accepted as a member of the group (Chatman & O'Reilly, 2016). Hence, it is important that managers set clear norms so that their employees understand what is valued within the organization and behave accordingly (O'Reilly, 1989).

For this study, the goal is to understand which cultural elements are necessary for an organization to promote employees' creativity. Throughout the literature, several cultural elements were identified as promoters or inhibitors of creativity. *Freedom* appears to be the most frequently mentioned concept across the papers reviewed (e.g., Amabile, 1988; Judge et al., 1997). Yet, freedom should be given within established boundaries, through goals (i.e., *goal setting*) (Judge et al., 1997). Specifically, creativity goals appear to affect strongly employees' creativity (Shalley, 1991, 1995). Besides, when employees exert control over their work, without being directly supervised, they can take responsibility for it, which in turn will result in greater enthusiasm while performing the task (Ahmed, 1998). Besides, when employees are given authority to make decisions by themselves, they experience greater empowerment which is positively related to intrinsic motivation, hence creativity (Zhang & Bartol, 2010).

Also related to freedom is *decision-making* (Amabile et al., 2004; Gilson & Shalley, 2004), that is to say, to consult with the employees on important decisions. As Kremer and colleagues (2019) proposed, employees who are given voice can assist in improving group decision making and organizational learning, hence creativity. Besides, it allows employees to feel enjoyment and interest in their work, characteristics of intrinsic motivation (Ryan & Deci, 2000). Contrastingly, when employees are not encouraged to participate in decision making, they may fear questioning authority or speaking up at the wrong moment (Burriss, 2012).

Furthermore, creating a "*sense of community*" within the workplace seems to be a key differentiator between highly and slightly innovative firms (Judge et al., 1997, p. 75). This sense of community was identified as a *family feeling*, where employees share a sense of *trust, respect* and *caring* amongst them. Indeed, during his interviews, Martens (2011, p. 74) also mentioned a work environment "almost family like". Hence, we can expect that a culture that promotes these values among coworkers will have higher levels of creativity.

Employees who trust and respect each other are also more likely to understand and handle differences of opinion in a constructive way (i.e., *conflict handling*) (Amabile, 1988; Amabile et al., 1996; Ahmed, 1998; Martins & Terblanche, 2003) and have *open communication* (Martins & Terblanche, 2003). As employees are instigated to handle disagreements constructively (e.g., expose paradoxes and dilemmas) they are also more likely to share their ideas with the group, i.e., openness in communication (Neuman & Wright, 1999). Thus, having a culture that supports open and transparent communication, based on trust, without fear of negative consequences, will more likely attain creativity outcomes (Martins & Terblanche, 2003; Rosso, 2014). Besides, communication is also a key element for team performance (Boies et al., 2015). Nevertheless, open communication should not only be horizontally (i.e., among same level employees), but also vertically (i.e., bottom-up and top-down). Ergo, “an open communication” policy between colleagues and departments should be implemented (Martins & Terblanche, 2003).

Further, a culture that values *cooperation* between teams, by encouraging *knowledge sharing*, either to guide inexperienced or experienced workers, also seems to be associated with higher creativity among employees, as it gives individuals different perspectives on ideas (Chang et al., 2017; Schepers & Berg, 2007). Moreover, firms that encourage *continuous learning* should also expect higher organizational creativity (Martins & Terblanche, 2003; Schein, 1990; Škerlavaj et al., 2010). Such can be achieved by clearing doubts and sharing ideas, and improving knowledge and skills through, for instance, training (Amabile, 1988; Martins & Terblanche, 2003).

Indeed, specific *resources* such as adequate training, moderate amounts of time, information and physical space (i.e., layout) appear to enhance creativity (Amabile, 1988; Kallio et al., 2015; Rosso, 2014; Martens, 2011). Accordingly, when given moderate amounts of time, employees feel some pressure in delivering their tasks, but not so much that they don't deliver them properly (Rosso, 2014). Besides, having access to information from external sources, such as databases, company reports and government records appears to be a frequent prerequisite for creativity (Olszak et al., 2018). Through physical space and its artefacts, employees can experience greater group collaboration by, for instance, sharing knowledge, interacting and making decisions. Specifically, open-plan offices,

common areas for social gatherings and a “unique and playful décor” appear to promote openness, increased flow of ideas and equality⁸ (Kallio et al., 2015; Martens, 2011).

Additionally, organizations that take *pride* in their success due to its workers’ capabilities, also exhibit greater organizational creativity: “When there is a culture of pride, based on high performance in the past, people's feelings of confidence in themselves and others goes up” (Kanter, 1988, p. 105). Such increases individual self-esteem and self-efficacy, group cooperation and risk-taking, all of which contribute to attaining creative outcomes (Bandura, 1986; Ford 1996). Accordingly, companies use formal awards and public recognition as a way to congratulate and applaud their employees’ success. Indeed, *rewards* and *recognition* are important determinants of an organization's culture (Amabile & Pratt, 2016). However, even though these elements act as extrinsic motivators, “they can confirm competence without undermining a sense of self-determination” (i.e., “informational” extrinsic motivators), thus promoting creativity (e.g., rewards in the form of recognition, such as awards) (Amabile & Pratt, 2016, p. 177; Deci & Ryan, 1985). On the other hand, rewards perceived as “controlling” can inhibit creativity (e.g., monetary incentives, such as bonuses) (Amabile & Pratt, 2016).

Further, a culture that encourages and supports *risk-taking* is also expected to have higher organizational creativity (Amabile, 1988; Nystrom, 1990). Naturally, individuals tend to be risk-averse, as they prefer a certain gain rather than a prospect with the same value (Kahneman & Tversky, 1979). Besides, they usually prefer to stick with their previous decision (i.e., status quo bias) (Samuelson, & Zeckhauser, 1988), instead of challenging the status quo, especially when there is high uncertainty. However, “creative work is uncertain” (Mumford et al., 2002, p. 709), thus individuals ought to expect certain risks attached to it⁹. Nevertheless, organizations that support risk-taking, and show that mistakes are accepted and can be used as a learning experience, should expect higher organizational creativity (Martins & Terblanche, 2003).

⁸ This equality refers to a flat organizational structure, where employees can express their opinions and participate in decision making (Andriopoulos, 2001).

⁹ Firstly, the idea generated may not be viable; Secondly, even if the idea is viable, it is not certain that it can be developed; Lastly, even if the idea is developed, there is no guarantee that it can be implemented (Mumford et al., 2002).

Consequently, a culture that supports risk-taking is a culture that also *supports new ideas and change*. Encouragement of new ideas and change is typical of an adhocracy culture, in which the ultimate goal is to promote innovativeness through adaptability, flexibility and creativity (Cameron & Quinn, 2011; Quinn & Rohrbaugh, 1983). Hence, it is expected that employees whose managers encourage new ideas and change will obtain higher organizational creativity. This is typical of low power distance cultures¹⁰ (i.e., less hierarchical cultures) (Tian et al., 2018), as individuals are more likely to challenge the status quo and pursue ideas autonomously (Shane et al., 1995). Further, firms must focus their **mission** and **vision¹¹ on the future**. Through futurity (i.e., anticipating future opportunities and threats) firms are more likely to achieve competitive advantage (Akman & Yilmaz, 2019; Covey, 1993 in Martins & Terblanche, 2003).

Thus far, the focus has been on developing ideas and their enablers (e.g., freedom), however equally important is *mistake handling* since creative work is inevitably associated with risk, thus the possibility of failing (Mumford et al., 2002). When mistakes are “treated as opportunities to learn and improve, without derision of the individuals involved” (Amabile & Pratt, 2016, p. 168), i.e., higher tolerance for mistakes, employees will experience greater psychological safety¹², which will enhance intrinsic motivation and learning domain-relevant skills, to engage in the creative process once more (Amabile & Pratt, 2016; Martin & Martins, 2002). Besides, when managers present “lessons learned”, as opposed to “mistakes made”, employees perceive them to be approachable and open to new ideas (Kremer et al., 2019). Contrastingly, when mistakes are ignored, covered up or used to punish the *wrongdoer*, employees may avoid taking risks out of fear of reprisal (Rego et al., 2014).

¹⁰ Power distance refers to “the extent to which less powerful members of organizations and institutions accept and expect that power is distributed unequally” (Hofstede & Bond, 1988, p. 10).

¹¹ Mission refers to what the company wants to do “now”, whereas the vision refers to what the company wants to be in the future (Taiwo, Lawal & Agwu, 2016).

¹² Psychological safety refers to the acceptance of failure and to make mistakes (Amabile & Pratt, 2016).

Aims and Objectives

Considering today's dynamic business environment, there is an emergence from companies to achieve a competitive advantage. If businesses wish to thrive and be considered success models, they ought to differentiate themselves from others (Longenecker et al., 2008; Porter, 1998). One strategy to achieve this competitive advantage is through innovation, therefore through its employees' creativity (Anwar, 2018; Sok & O' Cass, 2015). Therefore, the main purpose of this study is to understand how firms can foster their employees' creative potential, specifically through its cultural elements, and offer suggestions for firms to implement such practices.

A company's organizational culture offers employees expectations on how they should behave, in order to be included in the group (Chatman & O'Reilly, 2016). Through its artifacts, beliefs and assumptions, employees can create these expectations to behave accordingly (Schein, 2010). Hence, for this study, we want to understand what is expected from the employees, taking the perspective of both subordinates and managers.

The first objective is to expand knowledge on the existing literature regarding the cultural elements present within a company that can foster creativity. Specifically, using a mixed-methods approach to combine data from both groups (i.e., subordinates and managers), we wish to emphasize the strengths of both methods (Creswell, 2015). Besides, it entails a case study methodology, so as to give an in-depth and detailed description of the artifacts, beliefs and assumptions.

The second objective is to understand the role of motivation in fostering creativity. Scholars have identified the value of this element in creativity, postulating that it comprehends one of three elements necessary for creativity (Amabil, 1988). Hence, we propose the following hypothesis:

H1: Organizational culture will affect employees' creativity levels.

H2: Motivation will affect employees' creativity levels.

CHAPTER II – Empirical Study

Methodology

Study Design

The purpose of this research is to understand if and how the organizational culture's elements influence employees' creativity levels. Therefore, it was implemented a mixed-methods design, which integrates both quantitative and qualitative approaches (Halcomb & Hickman, 2015). Mixed methods research, as the name implies, is characterized by a mix of both quantitative and qualitative data (Halcomb & Hickman, 2015). Hence, this kind of approach integrates both sets of data and emphasizes the strengths from each of them, whilst diminishing their weaknesses (Creswell, 2015; Wisdom et al., 2012):

An approach to research in the social, behavioural, and health sciences in which the investigator gathers both quantitative (close-ended) and qualitative (open-ended) data, integrates the two, and then draws interpretations based on the combined strengths of both sets of data to understand research problems (Creswell, 2015, p. 2).

Additionally, the current study adopts a case study methodology, as it provides an in-depth comprehension, from different perspectives, of the complexity of a certain phenomenon (Simons, 2014). The rationale behind opting for these kinds of approaches lies in the necessity to (1) explore the results found in the quantitative study and (2) deepen the existent knowledge on the relationship between organizational culture and creativity (Halcomb & Hickman, 2015).

To further explore the relationship between organizational culture and creativity, this study incorporates a sequential explanatory design. Specifically, this type of design is characterized by a sequential data collection, that is to say, quantitative and qualitative data are collected separately (Halcomb & Hickman, 2015). Besides, its explanatory nature refers to the order in which the data is collected, primarily quantitative followed by qualitative. In the case at hand, quantitative data was collected and analyzed, however, some results required further explanation. That being so, I began the qualitative phase in order to explain more in-depth the quantitative findings, as Creswell and Clark suggest (2018).

Participants

Data was collected from a sample of 23 employees from the same innovation consultant company. Respondents were recruited by convenience, as I was in contact with the employees from the company in question. Specifically, I completed an internship there, thus maintaining contact with my colleagues.

The present study required all participants to be 18 years or older and to have been working in the company for longer than 3 months. Having the inclusion criteria established, participants consented and completed all measures under analysis after being assured confidentiality.

The sample consisted of 15 (65.2%) females and 8 males (34.8%), with ages ranging between 18 and 54 years old ($M_o = 25-34$, $SD = 0.834$). The majority of respondents were Portuguese (62.5%), followed by Italians (8.7%) and Brazilians (8.7%); Spanish (4.3%); Polish (4.3%); Swedish (4.3%) and Tunisian (4.3%). Besides, a large number of participants defined their marital status as “Single, Not Married” (47.8%), whilst the rest of them defined as either “Living with partner” (26.1%), “Married” (21.7%) or “Divorced” (4.3%). Regarding the participants’ background studies, it is important to note that they come from different areas, such as Business/Finance (30.4%), Design (12.9%), Marketing (17.3%), Psychology (8.7%), Communications (8.7%), Computer Engineering (4.3%), Physics (4.3%), Law (4.3%) and Language (4.3%). Additionally, all respondents completed at least a Bachelor’s degree level, with the majority having also completed a Master’s degree level (69.6%). Lastly, the majority of respondents were from the Marketing team (39.1%), followed by Project Management (21.7%), Talent (8.7%), Client Success (8.7%), Scouting & BI (8.7%) and Experts (8.7%).

(Insert table 1 about here)

Instruments

Survey

A survey was developed in order to obtain participants’ socio-demographic data, as well as their perspective on the company's organizational culture and motivation. Respectively, this survey comprehended two distinct parts in which only the employees, as opposed to the leaders, would have to complete both of them (i.e., sociodemographic and organizational culture and motivation).

The survey incorporates the most frequently mentioned organizational culture elements' throughout the literature, as having an influence on employees' creativity levels, as well as motivation (i.e., intrinsic vs. extrinsic). Therefore, I combined these elements and developed a questionnaire, based on the existent literature (see attachment 4). Overall, the items constituting the survey revealed a good internal consistency ($\alpha = 0.88$).

Freedom was measured with 3 items ("I have the freedom to decide on how I do my job"; "I can make decisions about my work without direct supervision"; "It is basically my own responsibility to decide how my job gets done."), which comprehend the concepts of *Autonomy* (item 1) and *Empowerment* (items 2 and 3). The items were based on a questionnaire used to assess job satisfaction (Michigan Organizational Assessment Package, 1975), using a 5-point Likert type scale (1 = Strongly agree to 5 = Strongly disagree).

Decision Making was measured with 4 items ("I am encouraged to challenge decisions and actions in this organization if I think there is a better way"; "I am encouraged to speak up when I disagree with a decision"; "In my group, everyone's opinion gets listened to"; "Co-workers are afraid to express their real views"). The items were based on a questionnaire used to assess job satisfaction (Michigan Organizational Assessment Package, 1975), using a 5-point Likert type scale (1 = Strongly agree to 5 = Strongly disagree).

Goal Setting was measured with 2 items ("I am given clear goals to achieve"; "My supervisor makes sure his subordinates know what has to be done"). The items were based on a questionnaire used to assess job satisfaction (Michigan Organizational Assessment Package, 1975), using a 5-point Likert type scale (1 = Strongly agree to 5 = Strongly disagree).

Sense of Community was measured using 6 items ("There is trust and mutual respect between management and employees/among employees"; "I feel I am really part of my work team"; "I look forward to being with the members of my team each day"; "The other people in my work team are my friends"; "There is little group spirit in our work team; "Would you describe the relationship with your coworkers as "almost like family"?"). The first 5 items were based on a questionnaire used to assess job satisfaction (Michigan

Organizational Assessment Package, 1975), using a 5-point Likert type scale (1 = Strongly agree to 5 = Strongly disagree) and the 6th item was an open-ended question based on the interviews conducted by Judge and colleagues (1997).

Conflict Handling was measured using 3 items (“Conflict is dealt openly in my work team/organization”; “People in my organization try to avoid conflict at all costs”; “If a conflict arises in my work, the people involved initiate steps to resolve the conflict immediately”). The items were based on a questionnaire used to assess job satisfaction (Michigan Organizational Assessment Package, 1975), using a 5-point Likert type scale (1 = Strongly agree to 5 = Strongly disagree).

Cooperation through knowledge sharing was measured using 4 items (“Inexperienced newcomers are coached by experienced colleagues”; “Experienced colleagues provide constructive feedback on the work of less experienced colleagues”; “My organization values sharing expertise with other members of the team”; “We have an effective environment for collaboration within and between departments”). The items were based on a questionnaire used to assess job satisfaction (Michigan Organizational Assessment Package, 1975), using a 5-point Likert type scale (1 = Strongly agree to 5 = Strongly disagree).

Continuous Learning was measured using 4 items (“Everyone in our organization is involved in learning (training)”; “My organization values continuous learning, by promoting us to keep our knowledge and skills up to date”; “We are encouraged to interact with and within teams in order to learn from each other”; “We are encouraged to learn from members of the organization and clients”). The items were based on the literature review, using a 5-point Likert type scale (1 = Strongly agree to 5 = Strongly disagree) (Martins & Terblanche, 2003; Škerlavaj, Song & Lee, 2010).

Resources was measured using 8 items (“I am given enough time to accomplish my tasks”; “I feel time pressure in doing my job”; “I never seem to have enough time to get everything done”, “I have access to the necessary information to complete my work”; “I have difficulty getting the tools and supplies I need on my job”; “Please choose the option that best describes the physical space of the office: Open plan office, Privates offices, Cubicle office or Departments separated”; “Does your organization have a common space

for social gatherings? If so, please indicate it (e.g., cafeteria)”; “How would you characterize the office décor?”), which comprehend the concepts of Time (items 1, 2, and 3), Information (items 4 and 5) and Office Layout (items 6, 7 and 8). The first 5 items were based on a questionnaire used to assess job satisfaction (Michigan Organizational Assessment Package, 1975), using a 5-point Likert type scale (1 = Strongly agree to 5 = Strongly disagree); the 6th item was based on the literature review, allowing multiple answers; and 7th and 8th items were also based on the literature review, allowing an open answer (Kallio et al., 2015; Martens, 2011).

Pride was measured using 2 items (“My organization believes in its workers’ capabilities”; “My organization takes pride in its workers”). The items were based on the literature review (Kanter, 1988), using a 5-point Likert type scale (1 = Strongly agree to 5 = Strongly disagree).

Reward and Recognition was measured using 2 items (“My work is recognized and valued by my co-workers and superiors”; “In my organization, employees are rewarded through: Bonuses, Salary increases, Perquisites (e.g., club memberships), Promotions, Awards and/ or Professional recognition”). The items were based on the literature, yet 1st item used a 5-point Likert type scale (1 = Strongly agree to 5 = Strongly disagree), whilst the 2nd item allowed multiple answers (Kerr & Slocum, 2005; Martins & Martins, 2002).

Communication was measured using 6 items (“I can be open and honest to my coworkers and managers”; “Disagreements are encouraged in my work unit”; “Differences of opinions about job responsibilities are avoided in my work unit”; “I work in a safe space where I can speak my mind”; “I am not afraid to be criticized by my words”; “My organization values constructive feedback”). The items were based on the literature review, using a 5-point Likert type scale (1 = Strongly agree to 5 = Strongly disagree) (Mone et al., 2011; Norman, Avolio & Luthans, 2010; Vogelgesang & Lester, 2009).

Risk-Taking was measured using 3 items (“I am encouraged to take risks and experiment new ideas”; “While performing my tasks, I almost never am sure what is going to happen, and unexpected things frequently happen”; “Please choose the option that best describes your organization: My organization is dynamic and entrepreneurial. People are willing to stick out their necks and take risks or My organization is very formal and

structural. Bureaucratic procedures generally govern what people do”). The items were based on the literature review, using a 5-point Likert type scale (1 = Strongly agree to 5 = Strongly disagree), with the exception of the last item which was a dichotomous question (Tian et al., 2018; Zhou & Shalley, 2003).

Support for new ideas and change was measured using 5 items (“I am encouraged to develop new solutions for problems”; “I am encouraged to undertake new ideas for my work”; “My company values stability over change”; “My company has an orientation towards the future”). The items were based on the literature review, using a 5-point Likert type scale (1 = Strongly agree to 5 = Strongly disagree) (Akman & Yilmaz, 2019; Cameron & Quinn, 2011; Tian et al., 2018).

Mistake Handling was measured using 1 item (“Please choose the option that best describes your organization: In my organization mistakes are ignored, In my organization mistakes are covered up, In my organization mistakes are used to punish the wrongdoer or In my organization mistakes are used as a learning opportunity”). The item was based on the literature review, using a multiple choice type of question (Amabile & Pratt, 2016; Martins & Terblanche, 2003).

Motivation was measured using 10 items (“I enjoy trying to solve complex problems”; “I want my work to provide me with opportunities for increasing my knowledge and skills”; “Curiosity is the driving force behind much of what I do”; “What matters most to me is enjoying what I do”; “No matter what the outcome of a project, I am satisfied if I feel I gained a new experience”; “I am strongly motivated by the money I can earn”; “It is really important for me to get the recognition from others”; “I often think about salary and promotions”; “I’m concerned about how other people are going to react to my ideas”; “I’m less concerned with what work I do than what I get for it”), which comprehend both Intrinsic (items 1 to 5) and Extrinsic Motivation (items 6 to 10). The items were retrieved from the Work Preference Inventory, developed by Amabile and colleagues (1994), using a multiple choice type of question.

Test for Creative Thinking – Drawing Production (TCT-DP)

The TCT-DP is an instrument presented by Urban and Jellen (1996), that consists of a paper and pencil test, in which participants must produce drawings in an A4 size test sheet.

The sheet consists of a 16 cm X 16 cm square frame drawn on it, as well as six fragments, in which five are within the frame and one is outside of it. Specifically, the fragments are described as follows: 1) a semi-circle, 2) a point, 3) a large right angle, 4) a curved line, 5) a broken line, and 6) a small open square outside the frame. The test is composed of two forms, Form A and Form B, however only Form A was administered to participants. Form A and B are identical, but Form B is rotated by 180 degrees compared to Form A. It has a maximum duration of 15 minutes, yet participants are not informed of this.

As for the instructions, the participants are told the following:

In front of you is an incomplete drawing. The artist who started it was interrupted before he or she actually knew what should become of it. You are asked to continue with this incomplete drawing. You are allowed to draw whatever you wish! You can't draw anything wrong. Everything you put on the paper is correct" (Urban & Jellen, 1996, p. 14).

The drawing production is evaluated according to 14 criteria:

1. Continuations (Cn): Any use, continuation, or extension of the six figural fragments.
2. Completion (Cm): Any additions, completions, complements, supplements made to the used, continued, or extended figural fragments.
3. New elements (Ne): Any new figure, symbol, or element.
4. Connections made with a line (Cl) between one figural fragment or figure and another.
5. Connections made to produce a theme (Cth): Any figure contributing to a compositional theme or "gestalt".
6. Boundary breaking that is fragment dependent (Bfd): Any use, continuation, or extension of the "small open square" located outside the square frame.
7. Boundary breaking that is fragment independent (Bfi).
8. Perspective (Pe): Any breaking away from two-dimensionality.
9. Humour and affectivity (Hu): Any drawing that elicits a humorous response, shows affection, emotion, or strong expressive power.
10. Unconventionality A (Uca): Any manipulation of the material.
11. Unconventionality B (Ucb): Any surrealistic, fictional and/or abstract elements or drawings.

12. Unconventionality C (Ucc): Any usage of symbols or signs.
13. Unconventionality D (Ucd): Usage of non-stereotypical, unconventional figures.
14. Speed (Sp): A breakdown of points, beyond a certain score limit, according to the time spent on the drawing production.

Each of the criteria is scored from 0 - 6 points in the first nine categories and “*Speed*”, and from 0 - 3 in the “*Unconventionality*” categories. Hence, the final test score ranges from 0 – 72 points, and can be classified into seven groups: A) Far below average; B) Below average; C) Average ; D) Above average; E) Far above average; F) Extremely high above average; and G) Phenomenal (Urban & Jellen, 1996).

Regarding the instrument’s reliability, the authors reported inter-rater reliability correlation coefficients between .88 and .97 (Urban & Jellen, 1996). As for inter-item reliability, the authors do not present any data, yet Cropley and Cropley (2005) show that the TCT-DP has been showing a Cronbach's alpha coefficient between .73 and .77. As for the test’s validity, the authors note the difficulty in determining it, since there is not another test to compare it with (Urban & Jellen, 1996). Nevertheless, Almeida, Nogueira and Lima (2018) developed a study to analyze the latent structure of the TCT-DP for Portuguese workers using a confirmatory factor analysis, thus strengthening construct validity. They obtained a two-factor solution, factor 1 - related to the unconventional way of thinking - and factor 2 - related to the more conventional way of thinking - with acceptable fit indices near the values recommended in the literature.

The rationale behind using the TCT-DP to assess creativity was fourfold. Firstly, this instrument’s scoring is based on several mental processes thought to be associated with creativity, such as fluency, flexibility, curiosity, originality and risk-taking (see attachment 5) (Sola et al., 2017). Secondly, it is versatile, as it can be used to study individuals from different age, socioeconomic, cultural and intellectual groups. Besides, it can be used in different contexts, such as educational, psychological counselling, professional training and economically (Urban & Jellen, 2010). Thirdly, the test has a more holistic and Gestalt-oriented approach, compared to more traditional tests, such as the Test for Divergent Thinking (TDT) (Urban, 2004). Fourthly, the test demonstrates internal and construct validity (Cropley & Cropley, 2000). As a result, several authors have established a direct correlation between high TCT-DP scores and high levels of actual creativity (Cropley & Cropley, 2000).

Semi-structured interviews

To further explore the relationship between organizational culture and employees' creativity, 4 in-depth semi-structured interviews were conducted with the company's team leaders (see attachment 6). This kind of technique gives the researcher more freedom to explore certain angles perceived as important by the interviewee, as opposed to structured interviews. Besides, the interviewer is deemed as a *knowledge-producing participant*, rather than simply an individual following an interview guide. Compared to unstructured interviews, this method allows the interviewer to follow the direction he/she perceives to be relevant, avoiding potential digressing from the topic (Brinkmann & Kvale, 2009).

This type of interview can be defined as "...an interview with the purpose of obtaining descriptions of the life world of the interviewee in order to interpret the meaning of the described phenomena" (Brinkmann & Kvale, 2009, p. 124). In other words, they serve the purpose of producing knowledge, through the interviewee's descriptions of certain phenomena, which later shall be interpreted by the researcher (Brinkmann & Kvale, 2009). Semi-structured interviews allow a talk to occur between the interviewer and the interviewee, and to humans talking is natural, as "human beings are conversational creatures who live a dialogical life" (Brinkmann, 2014, p. 278).

Data Collection Procedures

A group of employees from an innovation consultant were asked to participate in a study investigating the relationship between organizational culture and creativity. Given the current design of this study, both quantitative and qualitative data were collected. Nonetheless, prior to the data collection, I reached out to the person in charge of the Human Resources (HR) department via email, informing them about my study. In this email, I explained the study goals' and procedure. Following this contact, the email was forwarded to the employees¹³.

Quantitative Study

Regarding the quantitative study, participants were asked to fill an online questionnaire, as well as a creativity test (TCT-DP). Participants were informed that their

¹³ Note that this first email solely included information on the quantitative study, given that up until that moment it was not necessary to complement the findings with qualitative data.

participation in the study was totally voluntary and may terminate their participation at any moment; and the data was confidential, as none of the information provided would identify them. Besides, they were also informed of the inclusion criteria, to be more than 18 years old and to have been in the company for 3 or more months (see attachment 7). A pre-testing procedure was carried out in order to assess the survey's face and content validity. Specifically, a group of experts, as well as laypeople, undertook the survey before participants.

The online questionnaire was available through a link attached in the email and it was divided into two sections. The first section included sociodemographic questions and it was targeted at all employees (subordinates and leaders) who wished to participate in the study; whereas the second part included organizational culture and motivation questions, and was targeted at the subordinates and not the leaders. After giving consent, participants completed the online survey, and wrote their emails in the end, so that they could be contacted to carry out the second phase (TCT-DP). Subsequently, the data was exported to SPSS (version 23.0.0.0.) and analyzed.

As for the creativity test, the TCT-DP was administered to all employees who gave consent. Participants were contacted via email, in order to schedule a time that would be suitable for both of us and to ask whether they could print the test sheet or if I had to send it by mail. Due to COVID-19, the meetings were held online through Google Meets, except for one meeting which was held in a quiet café. The meetings had a maximum duration of 20 minutes, and the average completion time was around 8 minutes.

Qualitative Study

With respect to the qualitative study, 4 semi-structured interviews were held with the team's leaders. These team leaders were contacted via email to participate in another phase of the study. They were informed that, even though this phase was not part of the original study, the quantitative findings required their participation. Once again, I scheduled online meetings with each participant and held the interviews through Google Meets. Prior to each interview, participants were asked to give consent to record the interview. After giving consent, 4 interviews were conducted, with an average time of 30 minutes. The interviews were recorded on a smartphone and later transcribed and coded using NVivo (version 20.5.0.).

Analytical Procedures

Quantitative Study

Descriptive statistics were carried out in order to describe the sociodemographic characteristics of participants, the cultural elements of the company and employees' motivation. Further, to determine the differences between gender and job level groups, an independent sample t-test was performed, and one-way ANOVA to determine differences between age groups, level of education groups, nationality groups and department groups. The assumption of normality was evaluated using histograms and found tenable for all groups, as well as the assumption of homogeneity of variances. Additionally, a one-sample t-test was performed to examine the differences between the employees' creativity and the Portuguese population.

Qualitative Study

To analyze the qualitative data gathered from the semi-structured interviews, a deductive approach was adopted. Accordingly, this type of approach draws initial codes from the existing literature on the topic (Bradley, Curry & Devers, 2007). As such, previous codes were discussed in the theoretical framework, so as to provide a "start list" for analysing the interviews (Bradley, Curry & Devers, 2007, p. 1763). From that "start list", using NVivo, codes were attributed to the data transcriptions. Subsequently, themes emerged (e.g., creativity enablers and inhibitors) from coding and can be found in the section "Results".

Results

Quantitative Study

Descriptive statistics were performed on all independent variables. The results reveal an overall satisfaction with the cultural elements of the company at hand. Specifically, most participants perceive to be given freedom to perform their tasks ($M=1.82$; $SD=0.60$ ¹⁴); decision making power to propose new ideas ($M=0.52$, $SD=0.57$); cooperation through knowledge sharing with coworkers ($M=1.97$, $SD=0.8$); a sense of pride by the organization in its workers' capabilities ($M=1.94$, $SD=0.75$); rewards ($M=1.30$, $SD=0.21$); support of new ideas and change ($M=1.12$, $SD=0.43$); and mistakes handled constructively ($M=1.12$, $SD=0.22$). Further, employees somewhat agree to be given clear goals ($M=2.24$, $SD=1.06$); a sense of community ($M=2.15$, $SD=0.51$); disagreements to be handled constructively ($M=2.53$, $SD=0.50$); continuous learning ($M=2.43$, $SD=1.07$); enough time to accomplish tasks ($M=2.59$, $SD=0.62$); enough information to accomplish tasks ($M=2.47$, $SD=0.82$); get recognition ($M=2.06$; $SD=0.51$); open and honest communication ($M=2.16$; $SD=0.51$); and encouragement for risk-taking ($M=2.62$, $SD=0.65$). As for motivation, employees seem to be both intrinsically ($M=1.34$, $SD=0.21$) and extrinsically motivated ($M=1.64$; $SD=0.26$) (see attachment 8).

Mean differences between Gender, Age, Education Level, Nationality, Job Level and Departments were performed for the TCT-DP. Specifically, the test for independent samples was used for Gender and Job Level, whereas one-way ANOVA tests were used for Age, Education Level, Nationality and Departments. The results reveal no statistically significant differences between Gender, Job Level, Age, Education Level, Nationality nor Departments (see attachment 9).

The mean of scores of the TCT-DP was 41.57, with a standard deviation of 11.208. When compared to the Portuguese population ($M_{woman}=19.3$, $SD=9.83$; $M_{men}=18.1$, $SD=8.57$), the sample of the study displayed higher creativity, for both women ($M=43.93$, $SD=9.91$) and men ($M=37.13$, $SD=12.80$). Besides, the results of the one-sample t-test reveal a significant difference between both groups ($Sig=0.000$) (see attachment 10). Examples of drawing productions, with respective scores can be found in attachments (see attachment 11).

¹⁴ M=Mean; SD= Standard Deviation.

Qualitative Study

Mission and Vision

During the interviews, respondents were asked about their company's mission and vision statements. The rationale behind these questions was to understand if there was alignment between the actual statements and what the employees understood to be the mission and vision. Overall, respondents shared the same beliefs regarding the organization's mission and vision statements. Hence, the company clearly communicated its goals and plans for the future. As for the mission statement, respondents agreed that it is “to enable innovations, so great ideas, to become bigger than they would otherwise” and “create impact in clients, startups and in society as a whole, through collaboration, and obviously innovation, which is our core business”. This collaboration refers to acting as a mediator between “the agility and speed of startups to innovate and find new solutions and the robustness of a large corporation that, in a more impactful way, can put things in the market and maximize the impact”.

Concerning the vision, there was a broad consensus that “expanding internationality and achieving (new) markets” was a top priority for the future. As a corporation, they wish to be “more global” so that they expand their impactful collaboration to other markets. Hence, to be recognized as an “international collaborative innovation consultant”.

Organizational Culture

In order to understand the type of culture embedded in the organization, respondents were asked to describe it using their own words. The most frequently mentioned words used were “informal”, “familiar”, “open” and “freedom”. One respondent described it as a “big bowl of energy” and “that although the company's 10 years old there is still a lot of start-up vibe of openness to come up with new ideas”. Besides, another highlighted the space for experimenting, thus the space for taking risks: “The (organization), because it is an innovation consultant, gives us a wide space to test things (...) and gives freedom to implement the things I want (...) (it) believes a lot in new models and allows us to test”.

Further, respondents also described culture through its values, mentioning that they identify with them: “I truly believe in them, I really like them”, and deeply believe that

they are “visible in the culture”. There is a strong emphasis on the way culture is lived, claiming that leadership sends a “very clear message” to its employees that they should act according to the company's values. Nevertheless, this work of “living the values” is also “very natural, and (...) the leaders give the example, but (...) it's (not) just that”. Indeed, leadership plays an important role when it comes to fostering values, but the work it's not merely top-down. The human resources (HR) department also plays a key role in coming up with ideas to promote the values. For instance, once a month the employees have to nominate the people who best lived one value. So, with 5 values, there will be 5 people nominated. Besides, one respondent believes that the way culture is lived is very natural: “I did not participate in the definition of these values, but when I entered, I felt it was something really lived/(...) when these values were thought, it was all in a team. It was all very organic”.

Creativity Enablers

Freedom

Probably the most frequently mentioned element was “Freedom”, and this applies, not only to when participants were being directly asked which elements they considered to enhance creativity, but also when they were talking freely regarding other matters. From their perspective, freedom can be two-fold, concerning people and tasks. In other words, “give freedom to people to be who they are”, but also “give freedom to people to do”.

As for giving people the freedom to be who they are, respondents agree that individual differences should be respected and celebrated. Through the value “distinctify”, the company expects its employees to show their distinctive self, i.e., their individual differences: “...respect what is individual from every person and also try to maximize that in the role each person plays”. Thus, they believe in making a fit between each person's competencies and the role played in the company. Besides, this brings more value to projects, as their characteristics are being optimized.

Regarding freedom in terms of the task, respondents believe that it is important to allow freedom for people to do what they believe in: “if people don't have that freedom of being able to work, and being able to do what they believe in, I think it is really difficult to have a creative team”. Hence, when people are given space to experiment and test their ideas, positive outcomes arise. Or if they don't “Move forward. Didn't work? Redo and

bring another solution”. Nevertheless, freedom can also concern where they work and their schedule, so giving the flexibility to work from home or office and to make their own schedule. Lastly, they also believe it is important to give freedom to experiment with other roles within the company, so if the employee wishes to experiment in another area, this company will grant freedom to do so. By doing this, it is also helping in personal development.

Interpersonal Relationships

According to the respondents, workplace relationships are guided by trust, honesty¹⁵ and caring. Specifically, this sense of trust translates to both work-related and personal issues. One interviewee mentions that she has proven to her subordinates that they can trust her “whether it's a topic they vent about or something I need to deliver that impacts their work”. Further, another interviewee mentions that through trust, peers can see each other as a whole, thus understanding how they feel: “...we know each other’s realities, and there are things we all go through, some good and bad moments, where we see our colleagues as a whole, so I have total trust in sharing personal things and I know that if I need it, my manager will be the first person to tell me to take a day off”, thus also demonstrating a sense of caring from the manager’s side. Besides, they also believe in the importance of promoting mental health within an organizational context, not only for the benefit of the employee but also the company, since when they feel at their best, they will also be more productive and more creative: “A person who is going through a personal crisis (...) won't have enough energy to deal with work, so I think creativity will decrease since people don't feel good”.

Lastly, these relationships are also informal, relaxed and close. Some interviewees even mention friendships, with boundaries. So, even though they are really close and feel they can trust each other to share personal and work issues, there are still some boundaries.

Communication & Feedback

Inevitably, by trusting each other, there is also more openness to be honest. Hence, there is a general agreement that these relationships are characterized by honest communication. Specifically, one manager refers that she has one-on-one conversations

¹⁵ Discussed in the following section “Communication & Feedback”.

with her subordinates, where she asks whether they feel good in the role they play or if they wished to change positions or even company. By doing this, she wants to understand if there is an alignment between the company and the employee's goals. So, in case there isn't, she knows that he/she "is not totally motivated, (so) will never deliver me a good work". Despite this mix of feelings, she wants the best for the company and employees. Besides, there is also a wide "openness to share ideas", and availability from managers and partners to listen and consider those ideas:

"...any person in the company, whoever she is, can pick up the phone and call the CEO: Hey John¹⁶, I have an idea, can I exchange some ideas with you?, and it will be really welcomed, and I think that... each one feeling they can contribute, and it is not that thing of: I can't talk to the CEO, he doesn't even know who I am. I think that is a big openness, and I think people get motivated by that".

Feedback is also an important part of this company's culture, as they have meetings common to all departments. The meetings can be one-on-one, between the manager and his/her subordinate, in order to "check-in" with the team (once a week); one-on-one, for performance reviews (every 6 months); inside departments, to discuss ongoing projects and feedback on current issues (once a week); and with the entire team, to update on ongoing projects and celebrate achievements (once a week); and to share company's revenue, future objectives and elect the employees with values (every month). The data from the interviews confirms the results obtained through the survey, where employees, overall, consider having open and honest interactions, as well as feedback sessions.

Visibility

Also mentioned is giving visibility to employees. This includes not only new ideas but also problems that require immediate attention. When employees have the confirmation that they were heard and noticed by leaders, it prevents gossip within the company. As one respondent highlighted: "When you don't see any action happening to resolve the problem you already mentioned three times, you won't be going to your boss anymore to try to solve it, you will speak to your colleagues, and then that will turn into gossip: It's wrong, it's always wrong". Thus, one way of avoiding this type of situation is to communicate clearly the topics that are being developed and acted upon.

¹⁶ John is an alias for the real name of the CEO.

Risk-Taking & Mistake Handling

Risk-taking was defined as a “space to experiment”, where employees should feel that failing is accepted since it is associated with risk: “it’s promoting the space to experiment, but also to being able to fail” or as another respondent mentioned, “there has to be openness to fail (...) to understand that this is not the path, so I am going to take a step back and do like this, experiment like this”. Further, when asked about the environmental characteristics beneficial for creativity, one respondent mentioned the importance of learning from mistakes: “one where there is a big openness to share ideas, no fear about being wrong and where you know mistakes are allowed and also even celebrated from times to times, and where there is an openness from leaders in sharing their own mistakes”. Such demonstrates the importance of failing without fear and how this should be visible in a company.

Work

Regarding the work performed by employees, the respondents approached three topics: work complexity, work type and work meaningfulness. Accordingly, work complexity ought to be “rather too difficult than too easy, because then you have to be creative and find ways of how to solve it”. Further, another respondent mentioned work type, claiming that, independent of the task, there is always space to be creative. Specifically, she believes that, for instance, when the task is more administrative, people distinguish themselves, even more, when they attain creative outputs. Lastly, they also believe work meaningfulness promotes creativity since when people believe their work has an impact on society, their motivation will increase.

Resources

Another frequently mentioned cultural element was the availability of resources, in specific tools (e.g., reports, data, programs), human capital, time and physical space. Nevertheless, there was one element that stood out among others, time. From the interviewee’s perspective, time is seen as a positive restriction to the creative outcome. For instance, one respondent mentioned that giving a time frame to complete a task, “you have 5 months to do this”, is much more beneficial when given none. When people don't feel time pressure, they don't go through with any ideas. However, when they have a certain

restriction, they “commit to the task, and when you commit it helps”. As for the remaining resources, data collected from the survey revealed that employees consider having the necessary information and time available to them. Besides, the physical space of the office was defined as an open-plan design, with access to common areas, such as a balcony and kitchen. Additionally, the office’s decoration was described as “informal”, “minimalist”, “modern”, “friendly”, “loose” and “creative”.

Motivation

As for motivation, there is a general agreement among the respondents that it does influence creativity. When employees feel good in their work context, they are also more motivated to perform tasks: “The work culture is a motivation source because if you work with friends, in a familiar and pleasant environment, it's totally different than being in an environment that you don't like or don't feel comfortable” and “Creativity has to come from a place where you feel good. You feel mentally relaxed (...) you feel comfortable”. Therefore, we can notice a relationship between creativity and motivation.

Further, respondents also mentioned the importance of intrinsic and extrinsic motivation, even though they did not make a distinction between them. Particularly, intrinsic motivation was defined as doing things out of passion, as well as working on impactful projects:

“I believe that everything you put your heart into, you do better than when you put your head (...) I believe passion is a great fuel, for creativity, for doing a job well done (...) when people are really rational, when they're working merely from their head (...) have never put a bit of passion, a bit of care (...) they don't question anything and do everything without thinking/ So I think passion is the missing piece, and passion comes with all the elements¹⁷ we talked about before”.

As for extrinsic motivation, rewards and recognition were discussed during the interviews. Accordingly, respondents mentioned the importance of having monetary rewards, such as bonuses to increase employees ' motivation, even though they couldn't put it into practice due to COVID-19. Besides, they also believe recognizing one’s good work and achievements, through, for instance, weekly meetings with the entire company or individual syncs, demonstrates an increase in employees’ motivation: “...we have

¹⁷ These elements refer to the cultural elements mentioned throughout the interview, by the respondent.

recognized good achievements. You also do that in individual syncs that happened. I always do that if I heard something good from someplace or if I know there was a good result, you try to lift that up”. Additionally, the company also elects the employees that best represented the values. So, if the value is “distinctify”, they will elect the person that best employed this value, hence recognizing his/her good performance.

Overall, data from the survey demonstrate that employees are similarly intrinsically and extrinsically motivated.

Conflict Handling, Cooperation, Decision Making and Goal Setting

Not so frequently mentioned are the concepts of conflict handling, cooperation, decision making and goal setting. Yet, this does not diminish their value in terms of enhancing organizational creativity. Specifically, when disagreements are solved constructively, through feedback, people have “more space to be who they are (...) and bring their competencies, or their individual differences to projects”. Further, cooperation also seems to be a relevant element of this company's culture, in terms of trying to understand the peers' needs, thus how they can help each other. Moreover, decision making was also a topic discussed, when asking for future suggestions for the company. Specifically, one respondent suggested that there should be a group of employees, aside from managers, involved in the company's decisions. Given their experience in other industries, creative potential, and ideas, she believes they could bring great value to the company. Nonetheless, these moments would be carefully chosen, as some decisions would not require their participation: “Important people in the team that really contribute a lot, despite their level or role in the company”. Lastly, setting goals was also seen as an important contributor to creativity, since when people have defined goals, they know what they wish to achieve. Contrastingly, when people don't have a focus, they don't know what to achieve. Hence, they can't think of new ways to achieve something.

Creativity Inhibitors

Lack of Freedom

Participants consider that a lack of freedom hinders creativity. They believe that when employees have a limited work scope or are expected to work “within a certain work-frame”, thus not being able to explore other options on how to perform the task, their

creative output will be lower. Besides, when people are formatted to act in a certain way “that will decrease diversity within the company, diversity of thought and diversity of competencies”. Therefore, not allowing freedom to perform the task nor to be their true self, will hinder creativity.

Mistake Handling

Opposite to celebrating mistakes and using them as learning opportunities is punishing the employees for their “failures”: “When the approach is punitive, I think that will hinder creativity. For someone to be creative, sometimes there will be failures, sometimes there will be successes. Failing is also important, and learning from it, instead of punishing”.

Interpersonal Relationships

As for interpersonal relationships, the respondents believe that when colleagues are distant, do not trust each other nor feel comfortable in sharing personal or work-related issues, creativity will decrease. Such is true for relationships between people of the same level or from different levels: “When there are really closed relationships, with no proximity between people, either inside the team or with leadership, it can be a block to creativity”.

Others

Respondents also mentioned the following creativity inhibitors: bureaucracy, hierarchical structures, poorly defined goals, lack of time constraint and lack of support for new ideas.

Discussion

Creativity, through its relation to innovation, is seen as a major contributor to organizations' survival and growth (Zhou & Su, 2010). Therefore, there is an emergence of studying this phenomenon, in specific how to promote creativity within an organizational context. Lately, there is one topic in the creativity literature that has been receiving much attention from scholars and managers, organizational culture (Schneider, Ehrhart & Macey, 2013). Accordingly, scholars and managers are interested in understanding which cultural elements contribute to enhancing employees' creativity. The present study offers evidence on the major contributors to creativity, as well as its inhibitors.

Overall, participants displayed high creativity levels, when compared to the Portuguese population (Almeida, Nogueira & Lima, 2018). Even though some participants had other nationalities, no differences were found between Portuguese and foreign groups. Besides, as individuals have close levels of education (i.e., bachelor's and master's degrees), as well as age, no differences were found for both. As for gender, according to Almeida and Nogueira (2010), we should have expected differences between males and females, yet we did not confirm this. Further, team leaders and subordinates showed similar creativity levels, which may confirm the evidence that suggests creative leaders influence organizational creativity (Mathisen, Einarsen & Mykletun, 2012).

Influence of Mission and Vision on Creativity

Organizations that have their mission and vision clearly communicated, understood, and shared by the employees perform better than organizations that fail to do so (Bart, Bontis & Taggar, 2004). Accordingly, organizations with a mission and vision focused on the future, and broadly understood by employees should also expect higher organizational creativity (Martins & Martins). From the data gathered it is possible to notice a pattern of shared meanings concerning the mission and vision. Respectively, respondents believe that making an impact on the project's stakeholders through collaborative innovation is the major objective of the firm (i.e., mission). Besides, they demonstrate a vision towards the future, as they wish to expand to other markets, thus anticipating future opportunities. Such data reveals that the company clearly communicated its goals for the present and the future, as well as in showing its futurity (Akeem et al., 2016; Akman & Yilmaz, 2019).

Influence of Freedom on Creativity

Data from the survey reveals that, overall, employees sense that they are given the freedom to decide on how to do their jobs, as well as the responsibility to carry out the tasks. Besides, they also believe they can make decisions about their work without the direct supervision of their managers. The leaders' interviewed confirmed this evidence, claiming that employees should be given space to experiment and do what they believe in, to achieve creative outcomes. Accordingly, an organization that gives its employees freedom to experiment and test new ideas, has a higher creative potential than organizations that fail to do so (Arad, Hanson & Schneider, 1997). Additionally, by taking on responsibility, employees feel greater enthusiasm while performing the task (Ahmed, 1998), which in turn increases intrinsic motivation, thus creativity (Amabile & Pratt, 2016; Ryan & Deci, 2000).

During the interviews, respondents also mentioned freedom to be one's individual self, that is, to respect employees' individual differences. They believe that when people show their "distinctive self" they can bring more value to projects, as opposed to when employees are conformed to act in a certain way: "Perhaps the teacher who can best foster creativity is the teacher who values individuality and who respects the individuality of her students" (Kapfer, 1971, p. 246). Thus, even though the contexts are different, we can also apply this notion to organizations. This is also in line with the study conducted by Janssen and Huang (2008), where they demonstrate that appreciating one's individuality by, for instance, highlighting unique characteristics, can enhance creativity.

The Influence of Interpersonal Relationships on Creativity

Interpersonal relationships characterized by trust and caring seem to guide day-to-day interactions among employees. Defined as a "sense of community" in the theoretical framework (Judge, Fryxell & Dooley, 1997), the respondents described the relationships as friendships, with some mentioning "almost family like". Accordingly, they believe such relationships contribute to enhancing employees' creativity. In particular, during the interviews, trust was separated into *trust between employees* and *trust in management*. Respectively, studies by Brettel and colleagues (2014) show that high levels of trust between employees may lead to higher internal collaboration and knowledge exchange,

which increases creativity by giving employees new perspectives on problems (Chang, Liao & Wu, 2017; Schepers & Berg, 2007); whereas trust in management can heighten employees' affective commitment, thus enhancing creativity (Jaiswal & Dhar, 2017; Yang & Mossholder, 2010).

Similarly, caring can also contribute to creativity. According to Organizational Support Theory, employees form a perception about the extent to which firms value and care about their well-being (i.e., Perceived Organizational Support) (Eisenberger, Shanock & Wen, 2020). When employees perceive their organization to be supportive, there is increased affective commitment, work engagement and trust (Eisenberger, Shanock & Wen, 2020), all of which contribute to creativity (Brettel et al., 2014; Jaiswal & Dhar, 2017; Zhou & Hoever, 2014).

The Influence of Communication on Creativity

Throughout the interviews, respondents frequently mentioned the concept of "Openness", yet most times it was employed differently (e.g., openness to come up with new ideas, to share ideas, to listen to ideas, to take risks and to fail). In this section, our intention is to explore, in specific, the openness to share and listen to ideas. From the data gathered, we can conclude that the company values sharing ideas and open and honest communications, without fear of reprisal for "poor or unworkable ideas" (Vogelgesang & Lester, 2009, p. 256). Through trust instilled by the manager, as well as transparency employees feel that they can share their ideas openly (Norman, Avolio & Luthans, 2010; Vogelgesang & Lester, 2009).

When employees share new ideas with the company, they are also offering it new inputs, thus new opportunities to grow (Amabile, 1997). Therefore, managers must also have an openness to listen to their subordinates' ideas. Besides, as they recognize their thoughts, they are also increasing their employees' self-efficacy (Cheung & Wong, 2011), hence increasing their intrinsic motivation (Amabile & Pratt, 2016; Bandura, 1986). This is typical of transformational leadership, where leaders tend to be honest in their communications, open to and appreciative of their subordinates' ideas (Cheung & Wong, 2011). As such, cultures that promote open and honest communication, as well as give

visibility to their employees, have a higher innovative potential (Vogelgesang & Lester, 2009).

Additionally, employees also revealed that feedback was a major element in this company's culture. Through common meetings with all departments, employees have sessions where they receive and give feedback to managers. This element, when given constructively, can have positive effects on employee engagement (Mone et al., 2011), hence creativity. According to Cummings and Oldham (1997), firms must provide opportunities to voice concerns and give constructive feedback to employees, in order to benefit from their creative potential.

Influence of Work on Creativity

From the data gathered, work meaningfulness and work complexity appear to affect employees' creativity. Respectively, meaningfulness refers to the amount of significance something represents for an individual (Pratt & Ashforth, 2003). Such significance can be achieved through different pathways, such as perceived impact, as described in the interviews. When individuals feel they are making a difference, either in their organization, colleagues, or society, they are more likely to perceive their work as meaningful. By feeling to have a positive influence on others, their self-efficacy increases (Rosso, Dekas & Wrzesniewski, 2010). Hence, by increasing self-efficacy, employees' intrinsic motivation will also increase (Bandura, 1986). Lastly, work complexity, in specific having challenging work is also associated with higher creativity, as it provides employees space to explore their creative potential (Amabile, 1988; Cumming & Oldham, 1997).

Influence of Resources on Creativity

Indeed, having resources, such as tools (e.g., reports), human capital, physical space and time constraints seem to enhance creativity. Yet, physical space and time constraints were the most frequently mentioned cultural elements. Accordingly, through physical space, in specific, an open-plan design, employees experience an increased flow of ideas, equality and collaboration (Kallio et al., 2015; Martens, 2011; Kruiyen & Genugten, 2017). Besides, the office décor was characterized as “creative”, “loose”, “minimalist” and “friendly”, which can symbolize a sense of freedom and encourage

experimentation (Kallio et al., 2015). For instance, Google, a successful company, integrates areas with flexible working spaces (e.g., hot-desking system, individual workspaces, formal and informal conference rooms), spaces for collaboration (e.g., huddle rooms) and even lounges (e.g., cafes) (Aghayouf & Farivarsadri, 2021). The company at hand, also has flexible working spaces, including a hot-desking system and individual workspaces; spaces for collaboration and lounge (i.e., cafeteria and balcony). Further, having a time constraint, specifically moderate amounts of time pressure also appears to enhance creativity (Baer & Oldham, 2006). When individuals are given too much time, they might lose focus (Rosso, 2014), yet when individuals are under extreme time pressure and have unrealistic expectations for productivity, they can't meet the demands, thus decreasing creativity (Amabile, 1997). Nevertheless, this is a complex topic, since finding the right amount of time pressure differs among individuals, as well as the environmental characteristics that moderate this relationship (Baer & Oldham, 2006; Rosso, 2014).

Influence of Risk-Taking & Mistake Handling on Creativity

Creative work is inevitably associated with risk (Anderson et al., 2014), thus it seems important that companies promote risk-taking among their employees if they wish to achieve creative outcomes. For the company at hand, they believe in giving “space to experiment”, or in other words, allowing an “openness to take risks”. When employees are encouraged to engage in risk-taking behaviours, they are more likely to be creative (Martins & Terblanche, 2003). However, risk-taking behaviours involve failing, hence mistakes. Nevertheless, the way mistakes are handled seems to exert more influence on organizational creativity, than the mistake itself. When employees feel they have space to fail without fear, they sense greater psychological safety, which in turn will increase their intrinsic motivation, thus creativity (Amabile & Pratt, 2016). Besides, when mistakes are used as learning opportunities, instead of punishments, employees are more likely to engage in risk-taking (Martins & Terblanche, 2003; Rego et al., 2014).

Influence of Motivation on Creativity

According to the Componential theory of individual creativity, creative outcomes are the product of Expertise, Domain-relevant skills and Task Motivation (Amabile, 1988).

Nevertheless, task motivation appears to be the differentiator factor in attaining creative outcomes (Amabile, 1997). Even though both expertise and domain-relevant skills determine what an individual can achieve, task motivation will determine if the individual actually achieves it. In other words, even if the individual possesses the necessary skills for creativity, he/she might still not be motivated to put these skills into practice (Zhou & Su, 2010). Hence, if there is no task motivation, there is no action (Amabile, 1997). In fact, several authors have highlighted the importance of this component for creativity, in specific intrinsic motivation (e.g., Amabile, 1988; Hon, 2012). Intrinsically motivated individuals engage in a task because they consider it to be satisfying and pleasurable. As such, when individuals perceive the task to be more enjoyable, they are more likely to achieve creative outcomes (Amabile et al., 1996). Nevertheless, some forms of extrinsic motivation can also enhance creativity (e.g., rewards and recognition) (Amabile et al., 1996). Therefore, authors believe that the degree of autonomy one is granted, from fully autonomous motivation to fully controlled motivation, determines the quality of the motivation¹⁸ (Ryan & Deci, 2000). As individuals have the need to feel autonomous, - freedom of choice to engage in activities - activities that allow them to fulfil this necessity, will more likely promote creative outcomes (Liu, Chen & Yao, 2011; Ryan & Deci, 2000). Accordingly, there was one extrinsic motivator mentioned as influencing creativity, recognition. Indeed, several authors have highlighted its influence on creativity, as it does not diminish autonomy (e.g., Amabile & Pratt, 2016). Contrastingly, there was one extrinsic motivator mentioned that goes against the studies reviewed, as it exerts control over the individual, bonuses (Amabile & Pratt, 2016). And, even though this company does not have this method of motivation implemented, they intend to do so. Further, one respondent also mentioned the importance of passion in performing one's work. Accordingly, studies by Liu and colleagues (2011) show that this element mediates the relationship between autonomous motivation and individual creativity. They believe "harmonious passion", as described in the study, "is the conduit through which organizational context cultivates individual creativity" (Liu, Chen & Yao, 2011, p. 12). Hence, we can postulate that hypothesis 2 was accepted, hence motivation does affect employees' creativity levels.

¹⁸ Motivation can differ in degree of autonomy: Intrinsic, integrated extrinsic, identified extrinsic, introjected extrinsic, and externally regulated motivation (Ryan & Deci, 2000).

Influence of Conflict Handling, Cooperation, Decision Making and Goal Setting on Creativity

Conflict can be two-fold: relationship conflict, awareness of interpersonal incompatibilities, or task conflict, awareness of incompatibilities concerning a group task (Jehn & Mannix, 2001). In both situations, it can be detrimental to creativity, yet when individuals resolve it constructively, by undertaking their peers' perspectives, it can actually enhance creativity (Hoever et al., 2012). In the same vein, cooperation also gives employees new perspectives or ideas on problems, thus increasing creativity (Chang, Liao & Wu, 2017; Schepers & Berg, 2007). Further, as one respondent suggested, employees should be able to participate in the organization's decisions. Accordingly, employees who are given voice can increase group decision making and organizational learning, as well as feel enjoyment and interest in their work (Kremer et al., 2019; Ryan & Deci, 2000). Lastly, setting goals also seems to enhance creativity. Yet, goals should not be perceived as pressure, otherwise, creativity will decrease (Shalley, 1991, 1995; Shalley, Zhou & Oldham, 2004).

Influence of Mechanistic Structures, Poorly Defined Goals, Lack of Time Constraint and Lack of Support for New Ideas on Creativity

Mechanistic structures, as opposed to organic ones, tend to place a higher emphasis on hierarchies and bureaucracies. Such hinders creativity, as there are more obstacles, long decision chains, formal reportings, less freedom and participation is not encouraged (Ahmed, 1998). Therefore, there is also dismissal for new ideas, as these types of organizations are more resistant to change (Ahmed, 1998). Further, poorly defined goals, as well as lack of time constraints also hinder creativity, as individuals are given too much freedom and may lose focus (Rosso, 2014; Zhou & Hoever, 2014).

Taken together all the evidence presented above, we conclude that hypothesis 1 was also accepted, and in fact, organizational culture does affect employees' creativity levels.

Limitations & Future Research

The findings of this study need to be weighed in light of several limitations. Firstly, by using a case study approach there is a higher difficulty in generalizing findings, as well as subjectivity from both the participants and researcher (Simons, 2014). Further, even though using a mixed-methods approach can bring several advantages to the study, such as reduced bias, compensating weaknesses of one method through the strengths of the other and complementary of findings, it also requires greater expertise from the researcher in combining both methods, as well as an underlying difficulty in comparing results (Creswell & Clark, 2018). Accordingly, being an inexperienced researcher is also another limitation, as it diminishes rigour of data, not only in data collection, (e.g., interviewing), but also in data analysis. Nevertheless, we believe the advantages of using a mixed-methods methodology outweigh the disadvantages. Additionally, using interviews as a data collection method offers insights into the phenomena that, otherwise, would not be possible to retrieve using other techniques, such as questionnaires or observations (Alshenqeeti, 2014). Yet, they are also time-consuming and subject to bias (Alshenqeeti, 2014). Besides, these interviews were held online, which may decrease conversational “flow” due to a delay between questions and answers, as well as in social cues, such as body language and expressions (Hewson, 2014). Lastly, the sample size should have been higher, since it prevented obtaining quantitative inferential findings.

For future research, we recommend using a larger sample to perform regression analysis between organizational culture’s elements and creativity, as well as understand if motivation mediates the relationship between these two factors. It would also be interesting to compare the results with a big corporate, to understand cultural and creative differences. Further, this study should also be extended to other countries, in order to achieve more generalized results.

Conclusion

Small businesses have a high likelihood of failing (INE, 2019; SBA, 2018), hence they must achieve competitive advantage over other firms in order to survive (Porter, 1990). One way firms can achieve this is through innovation, hence organizational creativity (Longenecker et al., 2008; Sok & O’Cass, 2015). Yet, firms fail to understand how to promote creativity amongst their employees (Amabile, 1998). Therefore, the present study sheds light on the cultural elements that promote and hinder creativity, through a case study on an innovation consultant.

Overall, respondents appear to be satisfied with their organization’s culture, describing it as an adhocratic type of culture, which promotes risk-taking and change, and where the ultimate goal is to promote innovativeness through adaptability, flexibility and creativity (Cameron & Quinn, 2011; Quinn & Rohrbaugh, 1983; Tian et al., 2018). Hence, we expect that organizations with such culture have higher creativity. Indeed, the organization at hand displayed higher creativity levels, when compared to other Portuguese firms (Almeida, Nogueira & Lima, 2018). Such raises several implications for both the literature and organizations. Specifically, this study contributed to expanding existent knowledge on organizational creativity, through an innovation consultant’s perspective, as well as suggested a new survey based on different models of organizational creativity. Besides, it raises practical implications for firms, in a sense that it gathered the cultural elements that may enhance or hinder creativity. Therefore, firms can understand “how to not kill creativity”.

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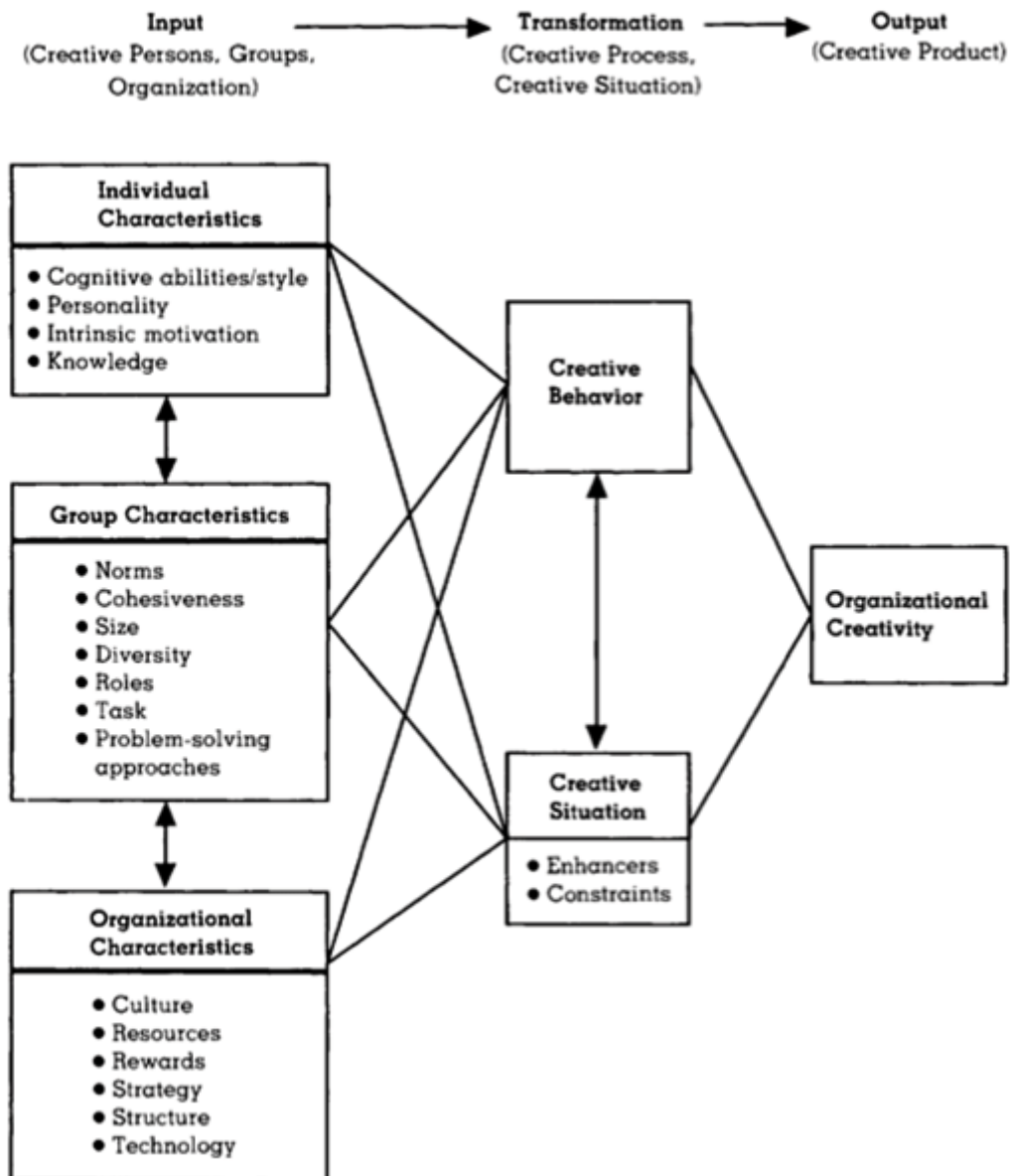
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ATTACHMENTS

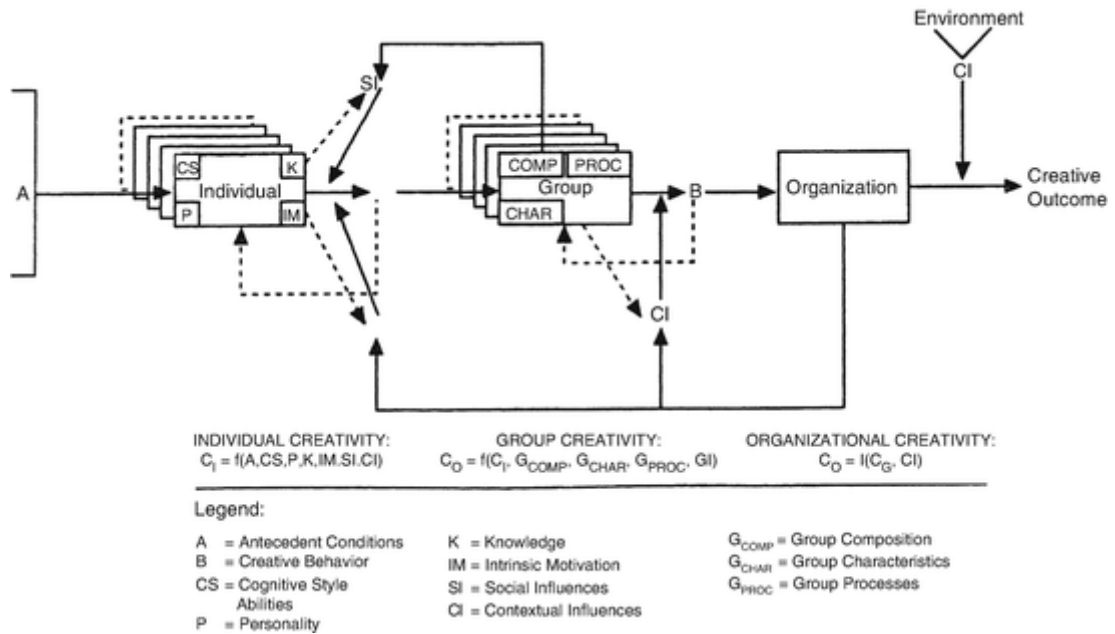
Attachment 1.

Figure 1. Conceptual links among creative persons, processes, situations and products (Woodman, Sawyer & Griffin, 1993).



Attachment 2.

Figure 2. Interactionist Model of Creative Behaviour (Woodman, Sawyer & Griffin, 1993).



Attachment 3.**Table 1. Characterization of participants (N=23)**

Variables	Categorization	Values
Gender	Female	15 (65.2%)
	Male	8 (34.8%)
Age	18 – 24	4 (17.4%)
	25 – 34	13 (56.5%)
	35 – 44	4 (17.4%)
	45 – 54	2 (8.7%)
Marital Status	Single, Not Married	11 (47.8%)
	Married	5 (21.7%)
	Living with Partner	6 (26.1%)
	Divorced	1 (4.3%)
Nationality	Portuguese	15 (65.2%)
	Italian	2 (8.7%)
	Brazilian	2 (8.7%)
	Spanish	1 (4.3%)
	Polish	1 (4.3%)
	Swedish	1 (4.3%)
	Tunisian	1 (4.3%)
Education	Bachelor's Degree	7 (30.4%)
	Master's Degree	16 (69.6%)
Background Area	Business/Finance	7 (30.4%)
	Marketing	4 (17.3%)
	Design	3 (12.9%)
	Psychology	2 (8.7%)
	Communications	2 (8.7%)
	Computer Eng.	1 (4.3%)
	Physics	1 (4.3%)
	Law	1 (4.3%)

Department	Marketing	9 (39.1%)
	Project Management	5 (21.7%)
	Talent	2 (8.7%)
	Client Success	2 (8.7%)
	Experts	2 (8.7%)
	Scouting & BI	2 (8.7%)

Attachment 4.

Survey: Sociodemographic data

Gender:

- Male
- Female
- Other

Age:

- Under 18
- 18-24
- 25-34
- 35-44
- 45-54
- 55-64
- 65-74
- 75-84
- 85 or older

Marital Status:

- Single, Not Married
- Married
- Living with Partner
- Divorced
- Widowed
- Prefer not to answer

Nationality:

- Highest Education Level:
- Secondary School
- Bachelor's Degree
- Master's Degree

Doctorate Degree

Area of Study:

How long have you been working at the company? (please specify the unit of time: e.g. 1 month; 1 year)

How long have you been in the present job? (please specify the unit of time: e.g. 1 month; 1 year)

Are you a Team leader, CEO or COO?

Yes

No

What is your department inside the company?

Survey: Organizational Culture

Section 1.

Please read each statement carefully and indicate to what extent you agree or disagree.

	Strongly agree (1)	(2)	(3)	(4)	Strongly disagree (5)
I have the freedom to decide on how I do my job.					
I can make decisions about my work without direct supervision.					
It is basically my own responsibility to decide how my job gets done.					
I am encouraged to challenge decisions and actions in this organization if I think there is a better way.					
I am encouraged to speak up when I disagree with a decision.					
In my group, everyone's opinion gets listened to.					

Co-workers are afraid to express their real views.

I am encouraged to take risks and experiment new ideas.

While performing my tasks, I am almost never sure what is going to happen, and unexpected things frequently happen.

Please choose the option that best describes your organization:

- My organization is dynamic and entrepreneurial. People are willing to stick out their necks and take risks.
- My organization is very formal and structural. Bureaucratic procedures generally govern what people do.

Please read each statement carefully and indicate to what extent you agree or disagree.

	Strongly agree (1)	(2)	(3)	(4)	Strongly disagree (5)
I am encouraged to develop new solutions for problems.					
I am encouraged to undertake new ideas for my work.					
My company values stability over change.					
My company has an orientation towards the future.					
I am given clear goals to achieve.					
My supervisor makes sure his subordinates know what has to be done.					

Section 2.

Please read each statement carefully and indicate to what extent you agree or disagree.

	Strongly agree (1)	(2)	(3)	(4)	Strongly disagree (5)
There is trust and mutual respect between management and employees and among employees.					
I feel like I am really part of my work team.					
I look forward to being with the members of my team each day.					
The other people in my work team are my friends.					
There is little group spirit in our work team.					

Would you describe the relationship with your coworkers as “almost like family”? (If so, please give a brief description of why you feel that way).

- Yes, _____
- No

Please read each statement carefully and indicate to what extent you agree or disagree.

	Strongly agree (1)	(2)	(3)	(4)	Strongly disagree (5)
Conflict is dealt openly in my work team/organization.					
People in my organization try to avoid conflict at all costs.					

If conflict arises in my work, the people involved initiate steps to resolve the conflict immediately.

I can be open and honest to my coworkers and managers.

Disagreements are encouraged in my work unit.

Differences of opinions about job responsibilities are avoided in my work unit.

I work in a safe space where I can speak my mind.

I am not afraid to be criticized for my words.

My organization values constructive feedback.

Section 3.

Please read each statement carefully and indicate to what extent you agree or disagree.

	Strongly agree (1)	(2)	(3)	(4)	Strongly disagree (5)
Inexperienced newcomers are coached by experienced colleagues.					
Experienced colleagues provide constructive feedback on the work of less experienced colleagues.					
My organization values sharing expertise with other members of the team.					
We have an effective environment for collaboration within and between departments.					

Everyone in our organization is involved in learning (training).

My organization values continuous learning, by promoting us to keep our knowledge and skills up to date.

We are encouraged to interact with and within teams in order to learn from each other.

We are encouraged to learn from members of the organization and clients.

My organization believes in its workers' capabilities.

My organization takes pride in its workers.

My work is recognized and valued by my co-workers and superiors.

In my organization, employees are rewarded through:

- Bonuses
- Salary increases
- Perquisites (e.g., club memberships)
- Promotions
- Awards
- Professional recognition

Section 4.

Please read each statement carefully and indicate to what extent you agree or disagree.

Strongly agree (1)	(2)	(3)	(4)	Strongly disagree (5)
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I am given enough time to accomplish my tasks.

I feel time pressure in doing my job.

I never seem to have enough time to get everything done.

I have access to the necessary information to complete my work.

I have difficulty getting the tools and supplies I need on my job.

Please choose the option that best describes the physical space of the office.

- Open plan office
- Private offices
- Cubicle offices
- Departments separated
- Other _____

Does your organization have a common space for social gatherings?

If so, please indicate it (e.g. cafeteria).

- Yes _____
- No

How would you characterize the office décor?

Section 5.

Please choose the statements that best describe you.

- I enjoy trying to solve complex problems.
- No matter what the outcome of a project, I am satisfied if I feel I gained a new experience.

- I often think about salary and promotions.
- What matters most to me is enjoying what I do.
- It is really important for me to get recognition from others.
- I'm concerned about how other people are going to react to my ideas.
- Curiosity is the driving force behind much of what I do.
- I want my work to provide me with opportunities for increasing my knowledge and skills.
- I am strongly motivated by the money I can earn.
- I'm less concerned with what work I do than what I get for it.

Attachment 5

Table 2. Links and definitions for TCT-DP measures (Sola et al., 2017)

TCT-DP Variables	TCT-DP Variables	Elements Linked to Research	General Definition
Cn	Continuations	Fluency	Ability to generate many ideas
Cm	Completions	Elaboration	Ability to add to ideas to improve them
Cl	Connections made with Lines	Flexibility	Ability to generate different types of ideas or ideas from multiple perspectives
Pe	Perspective	Elaboration	Ability to add to ideas to improve them
Uca	Unconventionality A	Curiosity	Need to explore and understand the known and unknown
Ne	New Elements	Originality	Ability to generate novel ideas

Ucb	Unconventionality B	Originality	Ability to generate novel ideas
Ucd	Unconventionality C	Originality	Ability to generate novel ideas
Cth	Connections made to produce a Theme	Synthesis	Ability to coalesce multiple ideas into one
Bfd	Boundary Breaking Fragment Dependent	Detectability	Ability to detect changes, cues and patterns within problem
Hu	Humor	Sensitivity	Capacity for emotional transference
Ucc	Unconventionality C	Passion	Ability to express concepts important to the individual
Bfi	Boundary Breaking Fragment Independent	Risk	Ability to take action in the face of the unknown

Attachment 6.

Semi-structured Interview.

Can you describe the company's culture?

What about the company's mission, meaning the goal for today?

What about the company's vision, meaning the plans for the future?

What are the company's core values?

Do you believe these values influence employees' behaviour? If so, in what manner?

If you had to describe the company's culture in 3 words, which ones would you choose?

Which are the characteristics of a work environment that you consider to promote creativity?

Which are the characteristics of a work environment that you consider inhibit creativity?

Which factors are present in your work environment that promote creativity?

Which factors are present in your work environment that inhibit creativity?

In what way do you believe "Motivated employees are more creative"?

In what way does your company motivate its employees? Is there a specific method? If it was up to you, which method would you choose?

In what way do you motivate your employees?

How would you describe the relationship with your coworkers?

What suggestions of organizational practices would you make for promoting creativity?

Attachment 7.

Informed Consent.

Dear participant,

My name is Inês Cruz, and I am conducting a study to complete the level of a Master's degree, at Universidade Católica Portuguesa. This questionnaire was designed to collect data regarding different elements of Organizational Culture. The results of this survey will contribute to understanding the impact of organizational culture on employee creativity.

Your participation is voluntary, you can choose to either participate or not, and if you wish to participate you may terminate at any time. It is also confidential, so none of the information provided will identify you by name. To complete the survey you must be at least 18 years old and be an employee at beta-i for more than 3 months.

This questionnaire will take no longer than 7 minutes to complete.

If you have any questions, do not hesitate to contact me: inessoqcruz@gmail.com.

By consenting to participate in this study, you agree that you have read the above mentioned information:

- I agree
- I do not agree

Attachment 8.***Table 3. Descriptive Statistics for Independent Variables***

	Mean	Std. Deviation	Minimum	Maximum
Freedom	1.82	0.60	1.00	2.67
Decision Making	1.50	0.57	1.00	3.25
Goal Setting	2.24	1.06	1.00	4.00
Sense of Community	2.15	0.51	1.33	3.50
Conflict Handling	2.53	0.50	1.33	3.33
Cooperation through Knowledge Sharing	1.97	0.80	1.00	3.50
Continuous Learning	2.43	1.07	1.00	5.00
Time	2.59	0.62	1.33	3.67
Info	2.47	0.82	1.50	4.00
Pride	1.94	0.75	1.00	3.50
Reward	1.30	0.21	1.00	1.83
Recognition	2.06	0.90	1.00	4.00
Communication	2.16	0.51	1.33	3.50
Risk-Taking	2.62	0.65	1.50	3.50
Support new ideas and change	1.88	0.43	1.25	3.00
Mistake Handling	1.12	0.22	1.00	1.50
Intrinsic Motivation	1.34	0.21	1.00	1.80
Extrinsic Motivation	1.64	0.26	1.20	2.00

Attachment 9.

Table 4. Mean Differences regarding Gender

Gender	Mean	Sig.	t
Male	37.13	0.330	1.419
Female	43.93	0.330	1.419

Table 5. Mean Differences regarding Age

Age	Mean	Sig.	F
18-24 Years old	42.00	0.951	0.114
25-34 Years old	41.46	0.951	0.114
35-44 Years old	43.50	0.951	0.114
45-54 Years old	37.50	0.951	0.114

Table 6. Mean Differences regarding Education Level

Education Level	Mean	Sig.	F
Bachelors	41.29	0.939	0.006
Masters	41.69	0.939	0.006

Table 7. Mean Differences regarding Nationality

Nationality	Mean	Sig.	F
Portuguese	38.33	0.371	1.168
Italian	48.50	0.371	1.168
Brazilian	49.00	0.371	1.168
Spanish	57.00	0.371	1.168
Polish	46.00	0.371	1.168
Swedish	52.00	0.371	1.168
Tunisian	31.00	0.371	1.168

Table 8. Mean Differences regarding Departments

Department	Mean	Sig.	F
Talent	34.00	0.679	0.630
Project Manager	42.80	0.679	0.630
Client Success	49.00	0.679	0.630
Marketing	39.11	0.679	0.630
Scouting & BI	49.50	0.679	0.630
Experts	37.50	0.679	0.630

Table 9. Mean Differences regarding Job Level

Job Level	Mean	Sig.	t
Leader	42.67	0.560	0.274
Subordinate	41.18	0.560	0.274

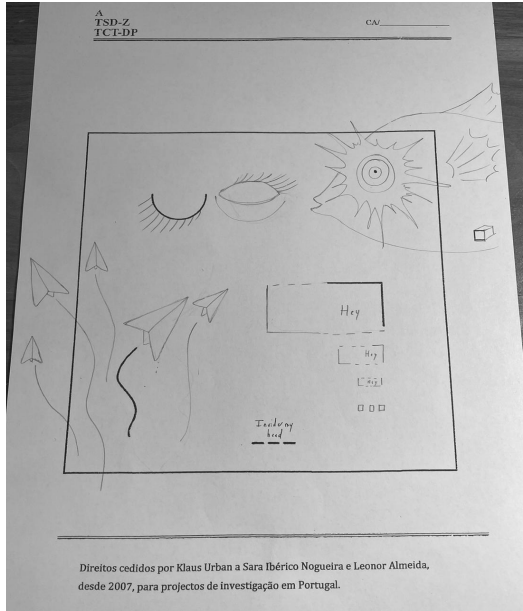
Attachment 10.

Table 10. Mean Differences between Participants' and Portuguese workers' Creativity levels (Almeida, Nogueira and Lima, 2018).

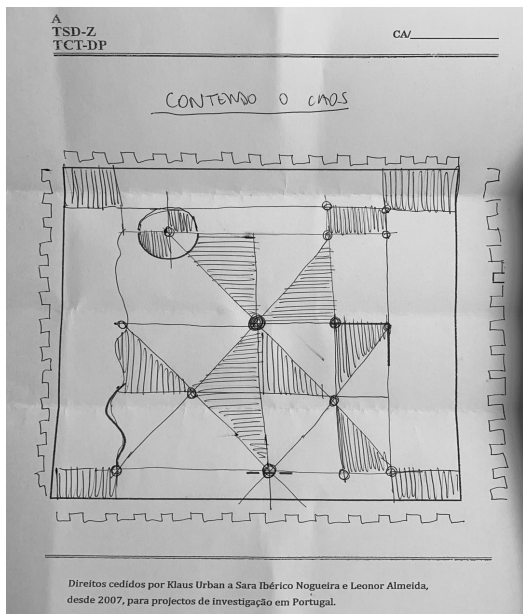
	Gender	Mean	Sig.	Std. Deviation
TCT-DP study	Male	37.13	0.000	12.80
	Female	43.93	0.000	9.91
TCT-DP Portuguese population	Male	18.1	0.000	8.57
	Female	19.3	0.000	9.83

Attachment 11.

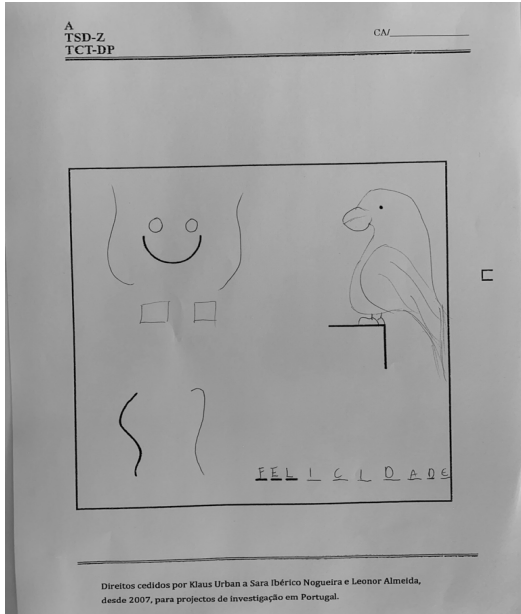
TCT-DP drawing productions, with respective scores.



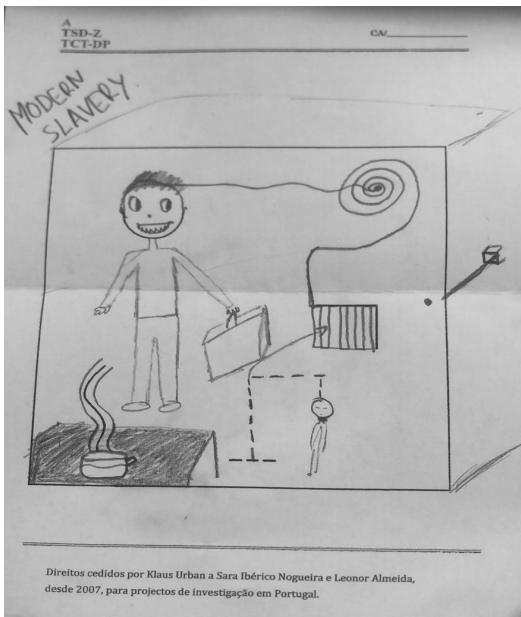
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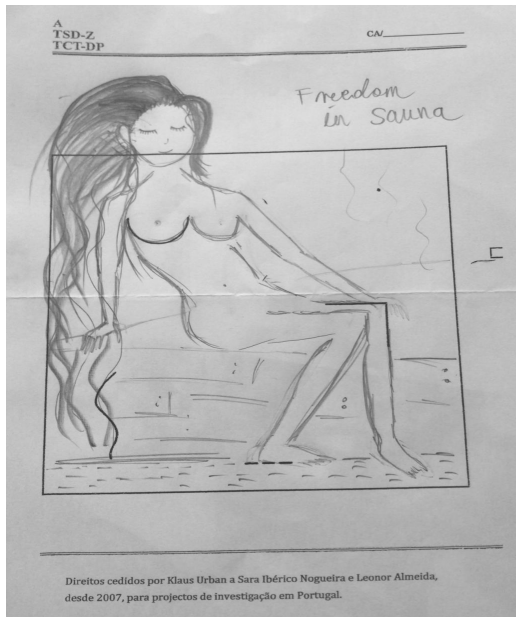
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 Uc,d=1



Cn=5
Cm=3
Ne=0
Cl=1
Cth=0
Bfd=0
Bfi=0
Pe=1
Hu=0
Uc,a=0
Uc,b=0
Uc,c=3
Uc,d=0



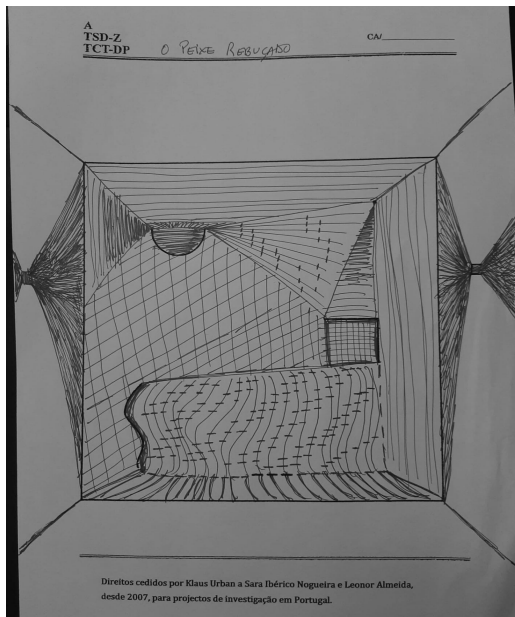
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Cn=6
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 Ne=4
 Cl=6
 Cth=6
 Bfd=6
 Bfi=6
 Pe=4
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