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# AN EXAMINATION OF THE ROLE OF CREATIVITY IN THE COVID-19 PANDEMIC: A LITERATURE REVIEW

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#### **Abstract:**

COVID-19 has caused several repercussions and changes in many contexts, including the need to adapt to a new reality, confront the crisis, and search for solutions. Considering this perception, the article presents a systematic review of the role of creativity in this period. An in-depth search was performed in Google Scholar, EBISCO, MEDLINE, and APA PsycArticles following the PRISMA guidelines. Upon applying inclusion and exclusion criteria, a total of 143 articles were selected and analyzed by two experts. There was a substantial predominance of empirical studies (47.1%), and studies conducted in educational settings (42.1%). Additionally, more than 11 research contexts were identified, with researchers from 28 areas of knowledge. This plurality reinforces the notion that creativity is a construct of multidisciplinary interest that can act as a protective factor during adverse situations such as those experienced during the pandemic, allowing for adaptation and flexibility in different circumstances.

**Keywords:** coronavirus, creative potential, state of art, health

#### 1. Introduction

In 2020, the spread of the Coronavirus resulted in the COVID-19 pandemic, which led to several changes in the habits of the population (Centers for Disease Control and Prevention, 2020). In consequence, daily life and routine activities were dramatically altered in a short period of time, and individuals were required to mobilize individual and collective resources to adjust to the new conditions (Bhatia, 2020). Creativity was investigated as one of them.

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Since the pandemic is likely to have a profound effect on the mental health of the population, each area of knowledge needs to work together to address the issue (Brooks *et al.*, 2020). Many restrictions have provided researchers from various areas of knowledge with the opportunity to examine the influence of various individual characteristics, traits, and behaviors on the ability to adhere to rules and deal with their consequences (Brosowsky *et al.*, 2022), as well as environmental factors in dealing with such a restrictive environment.

Researchers have examined the impact of the pandemic on an individual level, particularly in relation to the higher prevalence of mental health problems, such as depression, anxiety, stress, insomnia, grief, anger, and fear, as well as the change in routine (Faro *et al.*, 2020). Between individual differences, creativity benefits individuals by coming up with new ways to stay healthy, productive, and resilient (Fiori *et al.*, 2022). Despite the evidence indicating that atypical situations, such as the COVID-19 pandemic, have detrimental effects on mental well-being, researchers have examined how certain psychological characteristics, such as creativity and resilience, may provide protection (Xu *et al.*, 2021).

Throughout this period, individuals and businesses have demonstrated great adaptability and creativity in coping with the current situation. Research into creativity during the COVID-19 has shown that the scenario encouraged everyday creativity and that creative abilities improved people's well-being as a result (Lopez-Persem *et al.*, 2022), including transformations in daily life, family, work, leisure time and educational context (Elisondo, 2022).

The impact of COVID-19 can be visualized in a variety of contexts. For example, at an organizational level, little is known about how the industry has been affected by creativity activities if we are to consider differences across subsectors and countries. In a general way, significant losses and disruptions in many companies impacted economic activity worldwide (Kuckertz & Brändle, 2022). According to Khlystova *et al.* (2022), there are some sectors that have experienced positive effects (such as information, technology, social media, and publishing), but others have seen negative effects (such as museums and libraries). Entrepreneurs throughout the world were forced to confront unexpected changes in their respective fields, trying to meet the new demands, adopt novel infection control measures, and adjust their portfolios (Kuckertz & Brändle, 2022). The global crisis also negatively affected the development and economy of many countries (Zutshi *et al.*, 2021). It was more imperative, than ever before, that solutions to the problems be found during this period.

The education sector was forced to find innovative, fast, creative, and modern solutions to the pandemic impact and closure of learning institutions to achieve a more effective learning process. Many of these institutions began using e-learning (Kutieshat & Farmanesh, 2022). In the COVID-19 context, creativity involves efforts to produce new ideas aiming to benefit the population and solve some problems related to the pandemic, including the use of available resources to develop more effective solutions (Cohen & Cromwell, 2021).

According to Zhou *et al.* (2023), a review of creativity research and COVID-19 showed that social lockdown caused by the pandemic changed people's lifestyle and stimulated their creativity, increasing it during the lockdown period compared to after it ended. The main topics included different types of creativity involving different groups, how to enhance creativity, how to use it to improve the environment, and how creativity can alleviate psychological difficulties caused by the pandemic. The current paper aims to supplement and update the research developed by the authors, using different electronic databases and including papers published in 2023 and 2024.

#### 2. Literature Review

In the face of increased alone time during COVID-19, everyday creativity can be viewed as an important resource to help people overcome social isolation and express themselves. Studies have indicated the importance of understanding and utilizing everyday creativity as a protective factor (Pauly *et al.*, 2022) as well as cultivating it in society at large (Lopez-Persem, 2022). In this context, the present study was intended to investigate a question raised by Kaufman and Glaveanu (2022): How can creativity assist in overcoming this challenge? A literature review will be conducted to explore how creativity has been studied as an auxiliary characteristic for solving personal and global problems during the pandemic.

The skill of creativity, along with collaboration, critical thinking, and communication, has been hailed as one of the most valuable skills of the 21st century (Nurhajati, 2021). It can be defined as a potential that arises when appropriate conditions and climates are present, which allows individuals to express their creative ideas in a way that results in a new and useful idea that is contextualized within a particular social context (Plucker *et al.*, 2004).

Creativity is regarded as an individual skill, or at least a potential skill, which may manifest in different ways and to different degrees if not inhibited or blocked (Puccio, 2017). Despite its increasing relevance during this period, this construction has evolved over the past 45 years into one of the most widely studied subjects (Hernández-Torrano & Ibrayeva, 2020).

In the context of the pandemic, this characteristic can be extremely valuable in an emotionally charged situation where adaptability and flexibility are required (Karwowski *et al.*, 2021), along with tolerance for ambiguity and willingness to take creative risks (Anderson *et al.*, 2021). Moreover, creativity is directly related to psychological flexibility (Orkibi, 2021), i.e., the capability of adapting to internal and/or external stimuli that require cognitive reconfiguration.

It has been demonstrated that daily creative activities, positive emotional experiences, and health are significantly associated (Elisondo & Melgar, 2020) based upon the hypothesis that daily creative activities contribute to well-being under challenging circumstances, such as those resulting from the current pandemic (Brosowsky *et al.*, 2022). During the COVID-19 pandemic period, the importance and impact of creativity on quality of life was confirmed (Mabic *et al.*, 2021).

As a result of this hypothesis, several recent studies have examined the role of creativity in this pandemic environment, as well as the use of this characteristic in a variety of situations, believing that this trait can positively influence the individual's adaptation (Mercier *et al.*, 2021). Several studies have demonstrated that this characteristic is used to promote wellbeing (Nakano & Wechsler, 2018), facilitate post-traumatic growth (Takeuchi *et al.*, 2021) and increase a sense of belonging (Kaufman & Glaveanu, 2022).

In addition to these positive results, study results highlight creativity as a characteristic that can help people find meaning in their lives, experience pleasure in the present, manage existential concerns regarding death, promote personal growth, and encourage the development of actions that contribute to society in a positive way (Kaufman, 2018). In general, creative individuals tend to cope better with stress than less creative individuals because they perceive stressors as challenges rather than obstacles as a means of adapting better to adverse circumstances (Aznar *et al.*, 2021).

The current study focused on the creativity used in problem-solving to provide an avenue by which individuals can cope and thrive during the crisis caused by the pandemic (Tang *et al.*, 2021). Furthermore, Du *et al.* (2021) suggest that negative experiences can enhance creativity, allowing individuals to generate more ideas, originality, flexibility, and emotional expression. This means that after traumatic experiences, people may exhibit increased creativity (Elisondo & Melgar, 2020). It is important to note that this view is not universal. Researchers have also noted that traumatic experiences, such as the pandemic experienced, can negatively impact cognitive functions, thereby impairing creativity (Zeng *et al.*, 2021).

The research is focused primarily on the role of creativity in crisis and disaster situations, which is crucial in the current pandemic context due to the constant need to adapt to crises (Nakano, 2020), to find solutions to challenges, and to transform personal experiences. In times of social isolation and a complex, unique, and uncertain environment, creativity can play an important role in enhancing learning, motivating innovative projects, expanding the re-signification and exploration of alternatives, as well as identifying potentialities (Elisondo *et al.*, 2021).

Considering the above, the present study will contribute to the development of a new way of living that will be configured after this pandemic based on the development of creativity as an individual characteristic through an analysis of how creativity has been researched in the context of the health crisis. In this study, we examine, through a literature review, how creativity was studied during the COVID-19 pandemic.

#### 3. Method

To describe, appraise and synthesize the research on the role of creativity in the emerging COVID-19 pandemic, a systematic literature review was chosen. This review was carried out in accordance with the Preferred Items for Systematic Review and Meta Analysis (PRISMA) statement (Moher *et al.*, 2009). According to this model, the following steps were performed: (1) defining relevant studies and establishing inclusion/exclusion

criteria; (2) developing the search strategy; (3) identifying potential studies through searching and screening; (4) describing and appraising included studies; (5) analyzing and synthesizing findings. Below, we describe these steps in more detail.

For this study, we searched for articles in the electronic databases Google Scholar, EBISCO, MEDLINE, and APA PsycArticles. To identify articles whose theme was creativity during the COVID-19 pandemic, we searched for articles with this theme.

# 3.1 Eligibility criteria and search strategy

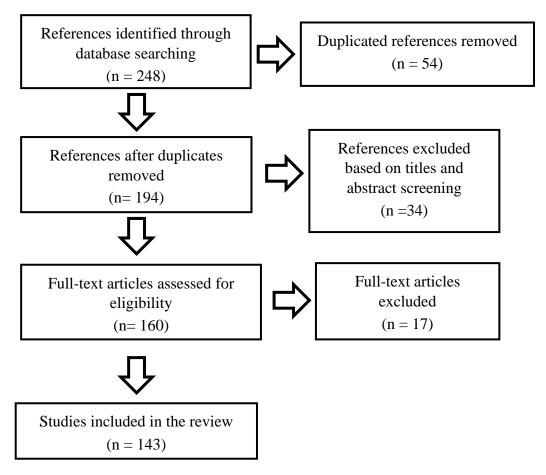
A review of the electronic databases was conducted by two independent individuals in April 2024 utilizing the following search terms: "creativity and covid"; "creativity and covid-19"; "creativity and coronavirus". The year filter was not added to the search due to the recent outbreak of the COVID-19 pandemic. As a result, the search returned 284 results. Duplicate articles (n = 54) were removed, and the remaining articles were divided between two researcher experts in the field of psychology and experience in creativity thematic. They screened the articles individually according to the inclusion criteria for preselection.

# 3.2 Study selection

A major criterion for eligibility was the presentation of articles demonstrating creativity in relation to the COVID-19 pandemic, the availability of the full text, published in a peer-reviewed journal, and the language of publication in Portuguese, English, and Spanish. A few publications were excluded from the study, including theses and dissertations, works not available in full, citations, articles that did not directly address the theme of creativity in pandemics, duplicate articles within databases, book chapters, and conference presentations.

The search in Google Scholar was conducted between the years 2019 to 2024 and was ordered by relevance. It is important to note that the search is limited to 1000 results within this database. After result number 930, the articles no longer related to the topic since only one of the terms appeared in isolation (covid or creativity). Nevertheless, the titles were read until the end. Based on the title of each article, 149 were selected. As a next step, the abstracts were read to screen the articles for relevance.

A selection of studies that fit the focus of this systematic review was made, and they were separated for verification of eligibility, inclusion, and analysis criteria. As a result of the selection process, 94 studies met the criteria and were selected. Figure 1 shows the flow diagram of the methodological approach taken.



**Figure 1:** PRISMA Flow diagram of study selection for the systematic review.

The studies were examined to understand how creativity was studied during the pandemic according to the publication year, the type of study, the research context, the instruments used, the analyzed constructs, and the researchers' areas of expertise. The results of the analysis are presented below, separated according to the criteria used.

#### 4. Results and Discussion

As a first step, we examined the publication year to determine how science was adapting to the pandemic context. As a result, we observed that 23 articles were published in 2020, the year of the emergence of the pandemic, which corresponds to 16% of the articles reviewed. It was found that 64 articles had been identified in 2021 (44,7%), seven more publications in 2022 (4,8%), 35 papers were published in 2023 (24,4%), and 14 articles were selected in 2024 (9,8%). Even though the pandemic situation posed several challenges to researchers, these statistics indicate that investigations into creativity did not become paralyzed. Similar results were related by Zhou *et al.* (2023), indicating that attention to creativity during the outbreak of the pandemic was initially increasing and, after 2021, has stabilized. According to them, despite the growing literature volume, the growth rate has slowed, and the topic's development has stabilized.

The number of research indicated that, despite the difficulties that the world faced in adapting to this new, unprecedented reality, a limited number of research studies were expected, which did not take place (Karwowski *et al.*, 2021). This interest in the subject is reasonable given that creativity is associated with the ability to thrive and grow after trauma (Kaufman, 2018) and is seen as a skill that can assist individuals in maintaining meaning following traumatic experiences.

Analyzing the type of research conducted during the pandemic, empirical studies accounted for 47.2% of the selected articles, followed by theoretical (31.4%, focusing on how creativity can contribute to the successful management of the pandemic in terms of perspectives, possibilities, challenges, fundamentals, recovery, stimulation, meaning, crisis management, and intervention).

In addition, experience reports (9.52%), literature review (6.33%, about how creativity could be used as a tool to promote health, well-being, academic performance, and professional excellence during a pandemic) and a case study (5.27%) were identified. In several theoretical texts, the experience of previous events marked by outbreaks of infectious diseases, such as the Spanish flu and Ebola, was used as a comparison point with the current situation. An additional group of empirical papers included action research (n = 2), experience reports (n = 8), case studies (n = 4), and studies with broader samples with a cross-sectional nature (n = 49). Considering the unpredictability of the pandemic, only one comparative study was available until the time of the search. Self-reported professional creativity was assessed before and during the lockdown in 1266 French individuals. The results indicated a significant increase during lockdown related to everyday creativity, more than professional creativity (Mercier *et al.*, 2021).

Despite the pandemic and the need for social isolation, empirical studies were presented in greater numbers of data collected after the pandemic. In support of the hypothesis elaborated for this data, it is possible that the exceptionality of the global health crisis has prompted scientists from different fields to investigate and record how creativity is applied and perceived as an important resource with potential positive outcomes in the face of this adverse and challenging situation (Kaufman, 2018).

Several of the results supported Beghetto's (2021) argumentation. The author suggests that although times of crisis can be a source of concern and anxiety, they can also be viewed as opportunities for creative expression and creative outcomes. In this way, researchers gained a better understanding of how the pandemic affected creativity from the perspective of the population in various settings. An examination was conducted to determine the areas in which creativity had been studied. In the analyzed articles, 23 different research contexts were identified.

Several research funding announcements have appeared over the course of the last two years, which may have sparked an interest in research within a variety of fields of knowledge.

Approximately 42.1% of the articles reviewed in this review were related to education. Many of these studies examined teachers' creativity or applied creativity to remote teaching, the joint use of digital technologies to promote learning, and the use of teachers' creativity as a teaching methodology. There was evidence of creativity as a key

resource for organizing classes and materials at different levels of education (Livy *et al.*, 2022). To accomplish this, teachers were required to adopt a different teaching process compared to the traditional one, for which they were unprepared (Nakano *et al.*, 2021). According to Guiamalon *et al.* (2022), the Covid pandemic has forced educators to reevaluate their teaching and learning practices, trying to adapt to the new normal. In addition to adapting educational models for remote teaching, teachers also needed to adapt teaching methods that were not typically used in conventional classrooms (Ferri *et al.*, 2020). In the literature review conducted by Zhou *et al.* (2023), most studies was concentrated on educational subjects.

A total of 29.1% of the articles addressed creativity in the workplace. This shows an interest in the ways in which businesses have dealt with the economic crisis. Generally, the studies focused on how creativity, in conjunction with resilience, innovation, leadership, crisis management, and worker well-being, might help companies recover from post-pandemic crises. The emergence of COVID-19 presented new challenges to employees, employers, teams, and organizations (Newman & Ford, 2021). The scenario demanded risk management, simultaneously developing and applying fast solutions related to workers, workplaces, and work practices (Kniffin *et al.*, 2020). The COVID-19 pandemic brought new ways of doing business, changing how organizations operate, including their ability to face new challenges and the development of crisis management plans (Ancillo *et al.*, 2021). In this case, the revised studies indicated that creativity played an important role.

There was also research in the health context (3.19%), demonstrating creativity as a skill that may be helpful in coping with death and disorders caused by the pandemic, such as psychological stress, anxiety, and depression. In this context, studies reported the absence of knowledge among adults to about taking care of themselves and the others. Furthermore, the complex, contradictory, and false information associated with this area contributed to its difficulties (Paakkari & Okan, 2020). The idea of using creativity in this context can lead to simple and practical solutions, such as washing hands and maintaining physical distance, that are easy to understand.

Additionally, there were research areas in the arts, economics, and social sciences (2,13%) as well as communication, fashion, and religion (1,06%). Some examples of creativity application in social sciences and communication include the perception that times of crisis call for creative solutions, to make sense of the current situation, to cope with, and to learn its lessons (Glaveanu & Laurent, 2021). According to the authors, social media was a privileged space for creative ideas during the pandemic. The Internet provides an inexpensive, convenient, and easily accessible way for people to express their experiences, anxieties, and advice about how to avoid infection (Stratton, 2021). For example, musical parodies were used as a public service announcement explaining to people how to keep safe.

The next step was to examine the field of knowledge in which the authors had affiliations with their respective institutions. The authors' institutional links were considered in this analysis, and those who did not provide this information were considered "not informed". A total of 391 authors were located. Of these, 59 (21.6%) were

unable to identify the area of action that was linked. Among the authors, their work was distributed among 28 different fields. Aside from articles with multiple authors from the same field, there were several multidisciplinary articles that provided a broader perspective on the importance of creativity. Because all occurrences were counted in these cases, the percentage is greater than the total number of studies. A summary of the results is provided in Table 1.

**Table 1:** Author's areas of knowledge

Area	Percentage for each area
Education	36.5
Psychology	25.9
Business / Management	10.5
Administration	7.7
Economy	3.7
Engineering	2.3
Natural Sciences / Life Sciences	1.6
Design / Medicine / Social Sciences	1.1
Arts / Science and Technology / Geography / Environment Science / Tourism / Communication / Computer Science / Neuroscience	.75
Dance / Law / Nursing / Marketing / Geography / Music / Political Science / Philosophy	.40

In this study, the plurality of knowledge areas observed can be attributed to the interdisciplinary perspective of this construct. Oliveira *et al.* (2016) have already noted that creativity has a substantial impact on a wide range of spheres (social, educational, and professional), so it has become a subject of research by researchers from a wide range of disciplines. It is understandable, especially since the COVID-19 pandemic has had an unexpected impact on millions of people around the world and requires adaptation in a variety of situations (Berg *et al.*, 2020).

It is generally agreed that creativity is an important tool for improving educational processes (Monteiro, 2021), economy and managing crises (Mujanah *et al.*, 2022) and cultural responses to conflict situations (Mattson *et al.*, 2021). Often, the integration of different areas of knowledge occurs at the boundary between specialties and disciplines, allowing the advancement of aspects that cross the boundaries of each area of knowledge separately. Zhou *et al.* (2023) argue that the topic of COVID-19 and creativity is an interdisciplinary research focus, especially in education and psychology fields, but also including economy, management, art, and medicine, for example.

During the period of the pandemic, an analysis revealed that creativity was examined along with several other constructs: 43 different were present in the analyzed studies (Table 2). It is noteworthy that creativity was examined from both a positive and a negative perspective. The presence of a significantly larger number of positive constructs was noticed, including, as examples, resilience, well-being, coping, empowerment, humor, innovation, leadership, and life satisfaction, among others. The common association between creativity and positive constructs has just been asserted by Cui *et al.* (2020).

**Table 2:** Constructs related to creativity

Construct	Percentage (for
	each construct)
Resilience / stress	8.63
Anxiety / innovation / well-being	6.51
Depression / rumination	4.38
Affect / leadership/ personality / loneliness / coping / mental health	2.15
Emotional appeal / self-efficacy / psychological empowerment / collectivism /	
learning / humor / mindfulness / divergent thinking / perceived risk / perceived	
value / employee development / communication / social support / job crafting /	1.41
work exhaustion / social connection / growth / productivity / interpersonal trust /	1.41
risk-taking / life satisfaction / metacognition / self-efficacy / focus / quality of life /	
organizational climate / academic achievement / academic retention/ job	
satisfaction / self-confidence	

Included as one of Positive Psychology's constructs, few examples of the positive outcomes include the recognition of creativity's importance for a complete and healthy development of the individual (Wechsler, 2008), its effect on positive mental health (Oliveira *et al.*, 2016), its ability to act as a facilitator of overcoming obstacles imposed by the environment, and its role in enhancing awareness of autonomy, motivation, and self-organization (Kupers *et al.*, 2019). A positive aspect of this skill is that it provides the opportunity to consider alternative options and plans, resulting in less rigidity and greater flexibility, promoting positive mental health and well-being (Browne *et al.*, 2022).

Nevertheless, negative aspects of creativity are also assessed and include stress, anxiety, depression, rumination, work exhaustion, academic retention and loneliness. The findings of this study are consistent with those reported in the scientific literature. The evidence suggests that creativity may be capable of reducing the impact of depression and other psychological disorders (D'Anselmo *et al.*, 2021). Creativity was investigated as a valuable tool to assist in coping with daily stresses, emergencies, and crises. In another view, psychopathology may enhance creativity under certain circumstances (Xu *et al.*, 2021), acting as a support ability to deal with ambiguity, uncertainty, and the possibility of failure, which are common challenges during this pandemic period (Carlsson, 2002).

A variety of collection methods were used to measure creativity. They included questionnaires (n = 37), interviews (n = 23), observation (n = 9), online survey (n = 5) and other diverse resources (reflective diary, images, videos, creative task, educational lessons) and 21 different standardized instruments (Table 3). Individual self-reports, surveys, and interviews were also highlighted by Villanova and Pina e Cunha (2020) as common methods of measuring creativity.

Table 3: Standardized Instruments to Assess Creativity

Test	Author	F
Advertising Creativity Scale	Haberland and Dacin (1992)	1
Alternative Use Test	Guilford (1967)	2
Creative Activity and Accomplishment Checklist	Runco <i>et al.</i> (1987)	1
Creative Process Engagement Scale	Zhang and Bartol (2010)	1
Creative Self-Efficacy	Beghetto (2006)	2
Creative Self-Efficacy in Teaching Scale	Rubenstein et al. (2013)	2
Creativity Competencies Inventory for Individuals	Epstein et al. (2013)	1
Creativity Personality Scale		1
Creativity Scale	Baer and Oldham (2006)	1
Emotional Creativity Inventory	Averill (1999)	1
Employee Creativity	Liu and Shi (2009)	1
Employee Creativity Scale	Zhou and George (2001)	2
Incremental Creativity Scale	Madjar et al. (2011)	1
Kaufman Domains of Creativity Scale	Kaufman (2012)	1
Perceived Creative Growth Scale	Forgeard (2013)	1
Remotes Associates Test	Mednick and Mednick (1967)	1
Runco Ideational Behavior Scale	Runco <i>et al.</i> (2014)	4
Scale of Creative Performance	Janssen (2001)	1
Scale of Radical Creativity	Madjar et al. (2011)	1
Scientific Creativity Test Scale	Hu and Adei (2002)	2
Torrance Tests of Creative Thinking	Torrance (1966)	1

Numerous measures have been developed to assess creativity, grouped in four different types or areas: creative process, creative person, creative product, and creative environment (Plucker  $et\ al.$ , 2019). Among the instruments used in the papers analyzed, the majority part can be classified as a measure of creative person (personality traits or creative achievements) based on self-assessment through scales (n=24). This data is according to Said-Metwaly  $et\ al.$  (2017), whose review indicated that self-report questionnaires are intensely used to enquire about personality traits related to creativity. The fact that scales can be applied remotely and, therefore, within the conditions imposed by social isolation may explain the situation observed in the review conducted here. Furthermore, this type of instrument can be corrected in a computerized manner, in contrast with creative performance tasks, which usually require face-to-face application and individual correction. The advantages include ease of use, standardized administration and scoring procedures (Said-Metwaly  $et\ al.$ , 2017).

Only two studies assessed creativity by alternative use test despite the literature demonstrating that the alternative uses task and remote associates test has commonly applied as a measure of creative potential (Cortes *et al.*, 2019) and divergent thinking (Reiter-Palmon *et al.*, 2019). Performance tests were used in four studies (Alternative Use Test, Remotes Associate Test, and Torrance Tests of Creative Thinking).

Tests, questionnaires, and especially scales were used to evaluate the other constructs evaluated along with creativity (Table 4). They included different contexts like educational (n = 2), organizational (n = 2), and social aspects (n = 3).

# **Table 4:** Instruments to Assess Other Constructs

Construct	Instrument	Frequency
Educational aspects	- Cuestionário para el Estudio de la Competencia Digital del	1
Laucational aspects	Alumnado de Educación Superior	1
	- Vocational Preference Inventory	1
Emotional aspects	- Emotional Appeal Scale	1
Emotional aspects	- Three-item Loneliness Scale	1
		1
	- Cognitive Emotion Regulation Questionnaire	2
	- Negative Affect Scale	1
	- Positive and Negative Affect Scale	
	- Mindful Attention and Awareness Scale	1
	- Positive Affect	1
	- Death Reflection Scale	1
	- Scale Task Conflict	1
	- Narcolepsy Severity Scale	1
	- State-Trait Anxiety Inventory	1
	- Spielberger State-trait Anxiety Inventory	1
	- Loneliness Scale	1
	- Preference for Solitude Scale	1
Individual aspects	- Impact of Event Scale-Revised	1
	- Psychological Empowerment	1
	- Parenting Dimensions Questionnaire	1
	- Self-Efficacy Scale	2
	- Posttraumatic Growth Inventory	1
	- Flourishing Scale	1
	- Psychological Resilience Scale	1
	- Questionnaire of Adolescent Emotional Resilience	1
	- Deliberate Rumination Inventory	1
	- Event-Related Rumination Inventory	1
	- Ahvaz Psychological Hardiness Scale	1
	- Personal Initiative Scale	1
	- Connor-Davidson Resilience Scale	1
	- Self-Confidence Scale	1
	- Leisure Activities Inventory	1
	- Leisure Motivations Inventory	1
Organizational	- Organizational Ethical Climate Scale	1
context	- Empowering Leadership	1
	- Team-Level Deviance Scale	1
	- Leader-member Exchange Scale	1
	- Ethical Leadership Scale	2
	- Job Satisfaction Scale	1
	- Ethical Climate Scale	1
	- Adaptative Performance Scale	1
	- Employee Exhaustion	1
	- Employee-organization Relationship Scale	1
	- Work-life Enrichment	1
	- Multifactor Scale Leadership Questionnaire	1
Personality	- Beck Depression Inventory	1
1 Cloolidity	- Self-reported Depression Scale	1
	- 10-Item Personality Inventory	2
	- Big Five Inventory	2
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	- Neo-Pi 3	1
	- International Personality Item Pool	1
Physical aspects	- Tightness Scale	1
Self-perception	- Perceived Impact of Coronavirus Disease	1
	- Perceived Value Scale	1
	- Perceived Risk Scale	1
	- Scale of Perceived Threats of Terrorism	1
	- Perceived Work Uncertainty Brought	1
Social aspects	- Connectedness Social Scale	1
	- Preference for Solitude Scale	1
	- Scale of Collectivistic Orientation	1
	- Social Support Scale	1
	- Multidimensional Scale of Perceived Social Support	1

Additionally, the instruments evaluated different dimensions: emotional (n = 14), individual aspects (n = 16), personality (n = 6), physical aspects (n = 1), self-perception (n = 16) and educational aspects (n = 16). This scenario was also reported by Villanova and Pina e Cunha (2020) following a systematic literature review that everyday creativity has been associated with various constructs, such as motivation, emotions, personality traits, psychological well-being, and innovation. Studies about COVID-19 and creativity have shown that this skill can effectively address the new challenges due to the impact of the pandemic on people's lives, work, economy, and social sphere, highlighting the importance of creativity in responding to emergencies and negative situations (Zhou et al., 2023).

## 5. Recommendations

Like the results presented by Elisondo (2022a) in a systematic review of everyday creativity in times of COVID-19, the papers analyzed highlighted the importance of creativity to help people adapt to the new situation, promoting individual psycho-social well-being, adaptation, and growth (Keisari *et al.*, 2023). The rise of creative solutions across multiple domains (Lee *et al.*, 2023) demands flexibility, adaptability, and creativity for solving problems and for the creation of new practices and projects (Elisondo, 2022b).

This knowledge can contribute to public policies reinforcing the importance of creativity as a tool to find meaning in times of adverse contexts like the COVID-19 pandemic (Beghetto, 2021; Kapoor & Kaufman, 2020). The revised studies support the idea that creativity is an important potential that can promote psychological adjustment, optimal functioning, well-being, coping, and resilience in times of crisis (Elisondo, 2022a).

#### 6. Conclusion

A scenario of uncertainty has been introduced into the world by the COVID-19 pandemic, requiring new reconfigurations, adaptations, and flexibility in all spheres of human activity. In this never-before-experienced situation, creativity served as a fundamental

means of coping, allowing the population to adapt to the new reality of restrictions and limitations.

Considering the enormous potential of human beings, creativity stands out as a fundamental skill that can be applied to a wide range of circumstances. This versatility of creativity can be observed in the fact that its investigation occurs simultaneously in different contexts, areas of knowledge, and from multiple perspectives.

The findings of the revision should be read in the light of some limitations. The selection of databases used, and the search process might have resulted in the exclusion of literature that could bring additional information about the topic investigated. This decision excludes, for example, research published in books and results presented at conferences. We also cannot discount the possibility that the keywords selected may not have allowed us to locate other articles that were left out.

According to this review, some suggestions for future studies include the analysis of primary results, the description of the sample used, and the psychometric properties of the instruments used to assess creativity. In conclusion, we were able to confirm that creativity is a construct of positive psychology that has the potential to improve well-being in a wide range of contexts, including adverse situations such as the COVID-19 pandemic.

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#### **Conflict of Interest Statement**

The authors declare that there is no conflict of interest in the publication of the article and that both acted in all stages of its writing.

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# Tatiana de Cassia Nakano, Janaina Chnaider AN EXAMINATION OF THE ROLE OF CREATIVITY IN THE COVID-19 PANDEMIC: A LITERATURE REVIEW

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