

Teachers' Perceptions of Creativity Across Cultures: A Systematic Literature Review

Zaina Smare

Department of English Language and Culture, Ibn Zohr University, Agadir, Morocco, [orcid: 0000-0001-9962-9359](https://orcid.org/0000-0001-9962-9359)

ABSTRACT

Creativity has been identified as one of the top three most essential skills of the 21st century. The ability to think creatively is of paramount importance in all countries and nations. However, not every culture perceives creativity and creative people in the same way. Investigating cultural variations in relation to creativity can help clarify the nature of the concept. The resulting insight can then inform the development of more appropriate educational approaches that promote this skill. It is well documented that teachers are important gatekeepers in the development of students' creative potentials. That is why, this article aims to examine how cultural values influence teachers' perceptions of creativity across various cultural contexts, with a specific focus on comparing perceptions between individualistic and communitarian cultures. To achieve this aim, we systematically surveyed the literature and analyzed 47 empirical studies conducted in a wide range of cultural contexts between the years 2010 and 2024. The findings revealed that individualistic cultures relate creativity to originality, independence, risk taking, and freedom, while communitarian cultures tend to focus on the appropriateness of ideas, coopera-

tion among students, and respect of the social norms. Implications of these findings for education and suggestions for further research are discussed.

KEYWORDS:

systematic review, creativity, culture, teachers, perceptions

Article history:

Received: January 29, 2025

Received in revised form: September 1, 2025

Accepted: September 5, 2025

ISSN 2354-0036

DOI: 10.2478/ctra-2025-0010

Corresponding author at:

Zaina Smare

E-MAIL: zaina.smare@edu.uiz.ac.ma; z.smare@uiz.ac.ma

INTRODUCTION

The wish to be creative seems to be universal as creativity is the key to survival and the path to development and prosperity in the 21st century. Human civilization is indebted to individuals' creative ideas. Without creativity, humans would not be able to achieve any progress (Csikszentmihalyi, 1996). Technology, industrial advancements, and people's easy life is the result of creativity. Today, creative thinkers are considered the major force for economic growth (World Economic Forum, 2016, 2018) and thinking creatively is the solution to the unpredictable problems and challenges of the modern world (Duffy, 2006; Falconer et al., 2018; OECD, 2018). However, though there is a universal agreement on the importance of creativity, not all cultures view creativity and creative individuals the same way. Every culture has its own understanding of creativity and its own values and practices of the skill. In other words, each culture and society speak of creativity with various semantics. The widely accepted ideas on creativity, which were formed in the West, can be changed or restricted in various cultural environments (Craft, 2003; Niu & Kaufman, 2013). This is because culture has a tremendous effect on individuals' beliefs and behaviors. Culture shapes behaviors through social norms and pushes people to follow, ignore, or change them (Morris & Leung, 2010). Investigating creativity across cultures can help gain insight into how creativity is conceptualized in different cultural contexts and put into practice this insight into more effective methods for an education that enables students to be creative thinkers.

From an educational perspective, teachers are agents of change. They can develop and create stimulating environments to prepare students for their future and nurture 21st century skills, including creativity. Csikszentmihalyi (1999) argues that teachers are professional doorkeepers who have the power to integrate creativity in the classroom as a valuable skill because they are the implementers of the curriculum (Wyse & Spendlove, 2007). That is why, investigating teachers' perceptions is very significant, as beliefs and understandings of creativity influence teaching practices and teachers' decisions. As Bandura (1997) suggests, actions, decisions, goals, and responses are influenced by perceptions rather than truths. Bandura also argues that perceptions or beliefs represent an individual's interpretation of reality, regardless of whether there is empirical evidence to support that interpretation. A variety of terms was used in the literature to describe such perceptions as beliefs, views, perspectives, conceptions, and implicit theories (Andiliou & Murphy, 2010). In the current review, the term 'perceptions' refers to a certain set of beliefs that teachers have about creativity, traits of creative students, and the teaching practices or environment that promotes the skill.

Many studies have explored teachers' perceptions of creativity, particularly their conceptions of the creative product, their views of the traits of creative students, as well as their perceptions on creativity-fostering learning environments. The current article endeavors to investigate the influence of cultural values on teachers' perceptions of creativity across diverse cultural settings, with a particular emphasis on comparing perceptions between individualistic and communitarian cultures. Through a systematic review of existing research, this study seeks to provide insights into the characteristics

of diversity in teachers' perceptions of creativity within various cultural contexts and contribute to a more profound comprehension of the cultural factors underlying these perceptions.

As far as the definition of creativity is concerned, the standard definition of the skill includes two basic elements: originality and usefulness (Runco & Jaeger, 2012). Originality refers to the production of ideas that are new compared to other currently available ideas, whereas usefulness characterizes ideas that have value (Runco & Jaeger, 2012). Regarding creative individuals, it is inaccurate to describe creativity in people through existence or non-existence (Dilekçi & Karatay, 2023). This is because creativity is present at various levels in everyone. There are four levels of creativity (Beghetto & Kaufman, 2007, 2014; Kaufman & Beghetto, 2009). Figure 1 summarizes the ideas that describe each level.

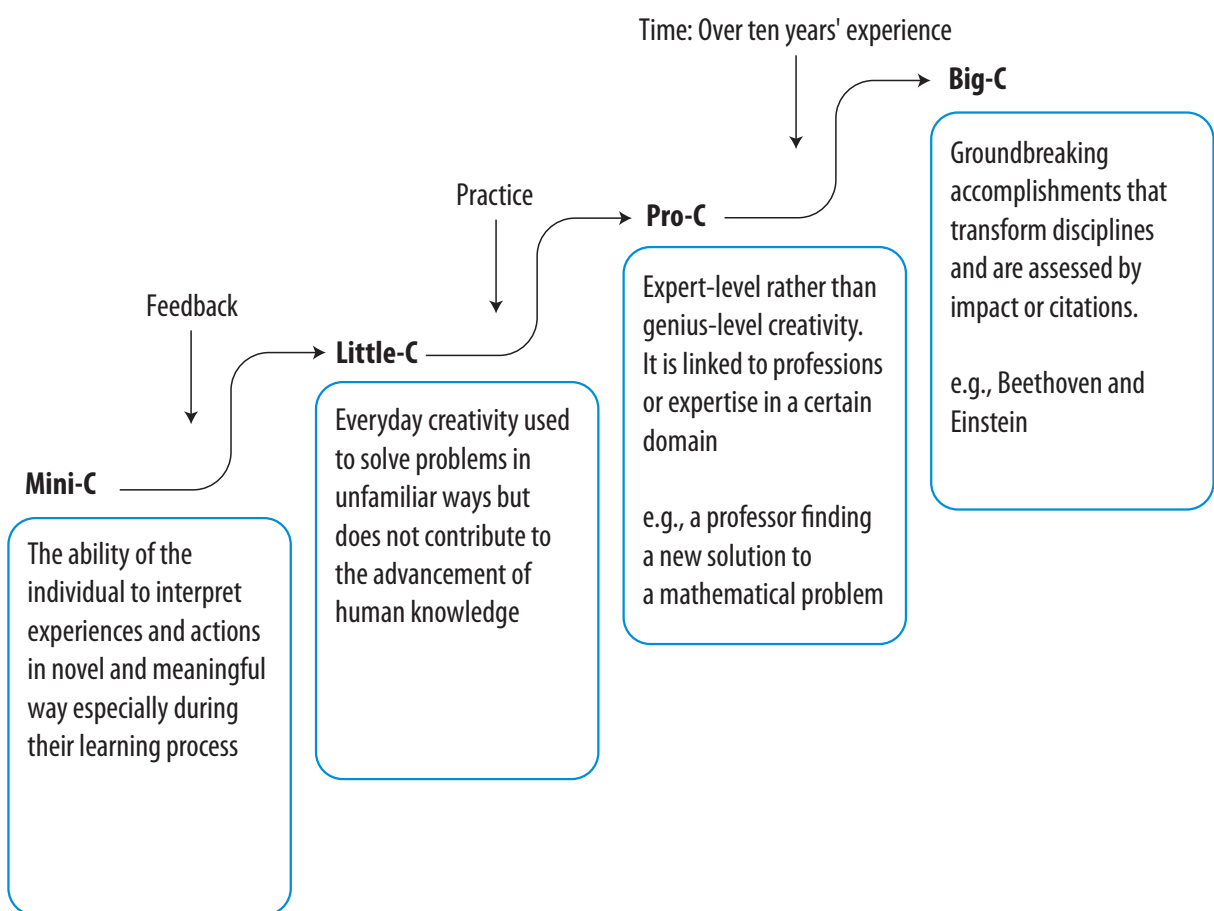


Figure 1. The Four Cs Model of Creativity

Source: Beghetto and Kaufman (2007, 2014); Kaufman and Beghetto (2009)

Little-C and Mini-C creativity are the levels that are related to the learning environment and are considered the basis foundational to reaching higher levels of creative production (Beghetto & Kaufman, 2007; Kaufman & Beghetto, 2009). Other scholars' definitions of creativity generally fall into one of four major categories: creative person, creative product, creative process, and creative press or environment that promotes the skill (Rhodes, 1961). The four Ps framework remains

a centerpiece of the creativity literature. Beyond the four Ps categories, some scholars regard creativity as a complex system that encompasses sociocultural and historical components (Csikszentmihalyi, 1996).

As far as previous relevant systematic reviews are concerned, to the best of our knowledge, articles that examine teachers' perceptions of creativity across cultures are nearly non-existent. Available studies (Andiliou & Murphy, 2010; Bereczki & Kárpáti, 2018; Mullet, Willerson, Lamb, et al., 2016) are reviews of teachers' perceptions of creativity in general. The researchers did not analyze the findings in reference to culture, particularly in the context of individualistic and communitarian cultures. A well-known study that explored the relationship between creativity and culture is that of Morris and Leung (2010). The authors used the approach 'East' *versus* 'West' to analyze five research papers on Eastern and Western creativity and analyzed the parallels that emerged from them. The results indicated that the social norms in the West encourage originality and those in the East prioritize usefulness (Morris & Leung, 2010).

It is worth noting that several individual studies have also explored this topic. A study conducted by Hong and Kang (2010) investigated perceptions of creativity in science education among secondary science teachers from South Korea and the United States. The findings indicated that South Korean teachers placed more emphasis on ethics and providing thinking opportunities, whereas U.S. teachers emphasized environmental and emotional support. Another study explored the impact of bilingualism on creativity in both nonmathematical and mathematical problem solving among preschool-aged children. Results suggested that early bilingualism and some form of bilingual education positively influence children's general and mathematical creativity, with differences more pronounced between bilingual children from a bilingual kindergarten and monolingual children (Leikin, 2012).

Creativity research suggests that the study of creative thinking resembles the ancient parable of the blind men and the elephant (Lubart & Sternberg, 1998). Several blind men, who have never seen an elephant before, try to imagine what it looks like by feeling one part of a large animal such as the side or the tusk. This resulted in getting inaccurate descriptions based on that one part and thus disagreement among the men. Putting together all their results could lead to some truth about the elephant but not the whole truth. This is due to the existence of various sorts of elephants (e.g., the Asian elephant and the African elephant) and the changing shape of elephants over their life span. The same applies to creativity research. There is universal truth about creative thinking, but there are multiple realities constructed by people and their own understanding of reality. This parable reflects how perceptions of creativity are shaped by cultural perspectives, each offering a valid, yet partial view.

The "East *versus* West" approach was not adopted in this study, as it overlooks certain cultural dimensions and does not account for the internal diversity within each region (Yong et al., 2020). For instance, the American culture does not contain the same cultural aspects as the French one and the same applies to the Chinese culture compared to the Indian one, for instance (see Hofstede et al., 2010). Instead, a cultural framework was adopted, as these frameworks serve as

tools to understand and analyze the values, beliefs, norms, and behaviors that shape societies and individuals within them. One way these frameworks manifest themselves is through distinctions between individualistic and communitarian societies. According to Trompenaars (1993), in individualistic cultures, the individual is prioritized over a group, and personal achievement is important. There is also focus on personal freedom, self-development, and individual rights. In contrast, communitarian cultures emphasize group welfare, shared responsibility, and social harmony, with the group or community taking precedence over the individual. Hofstede's (2010) framework classifies countries as individualistic or collectivist. In individualistic cultures, personal goals, autonomy, and independence are prioritized, with decisions being made based on individual attitudes rather than group norms. On the other hand, collectivist cultures emphasize group goals, social harmony, and interdependence, with individuals valuing relationships and conforming to group expectations. Schwartz's (2004) framework discusses the notions of autonomy and embeddedness. In autonomy cultures, individuals are seen as independent and are encouraged to express their own ideas and emotions, whether through intellectual exploration or personal enjoyment. In contrast, embedded cultures see people as part of a larger group, finding meaning through relationships and shared traditions, with a focus on maintaining social harmony and order. The tightness–looseness framework by Gelfand et al. (2006) classifies cultures based on the strength of social norms and tolerance for deviation from those norms. Tight cultures have strong, clear norms and low tolerance for deviation, while loose cultures have weaker norms and greater permissiveness. The cultural values outlined in these frameworks may shape how creativity is perceived, including beliefs about characteristics of creative products, traits of creative individuals, and conditions that support creativity, especially in educational settings.

Trompenaars' (1993) cultural framework is particularly useful for this study as it provides a structured way to examine how cultural values shape teachers' perceptions of creativity. By focusing on the Individualism vs. Communitarianism dimension, a study can classify countries based on whether they prioritize individual autonomy and self-expression or collective responsibility and group cohesion. This distinction is crucial when exploring perceptions of creativity, which may be valued differently depending on whether a culture emphasizes personal creativity or alignment with group norms. To classify countries into individualistic and communitarian cultures, we used the website CultureXplore (<https://tthconsulting.com/resources/culture-explore/>), developed by Trompenaars Hampden-Turner (1993), which helps analyze cultural differences using the 7 Dimensions of Culture. For this study, we utilized the website's data to classify countries as either individualistic or communitarian based on their level of individualism. It is worth noting that Trompenaars employs the term 'communitarian' to denote what is more commonly referred to as 'collectivist' cultures. To ensure coherence with his framework, we consistently use 'communitarian' throughout the article.

The following question guides this systematic review:

To what extent do teachers' perceptions of creativity vary across cultures, particularly across individualistic and communitarian cultures?

To explore this question, Figure 2 presents an adapted framework used to examine teachers' perceptions of creativity across cultures.

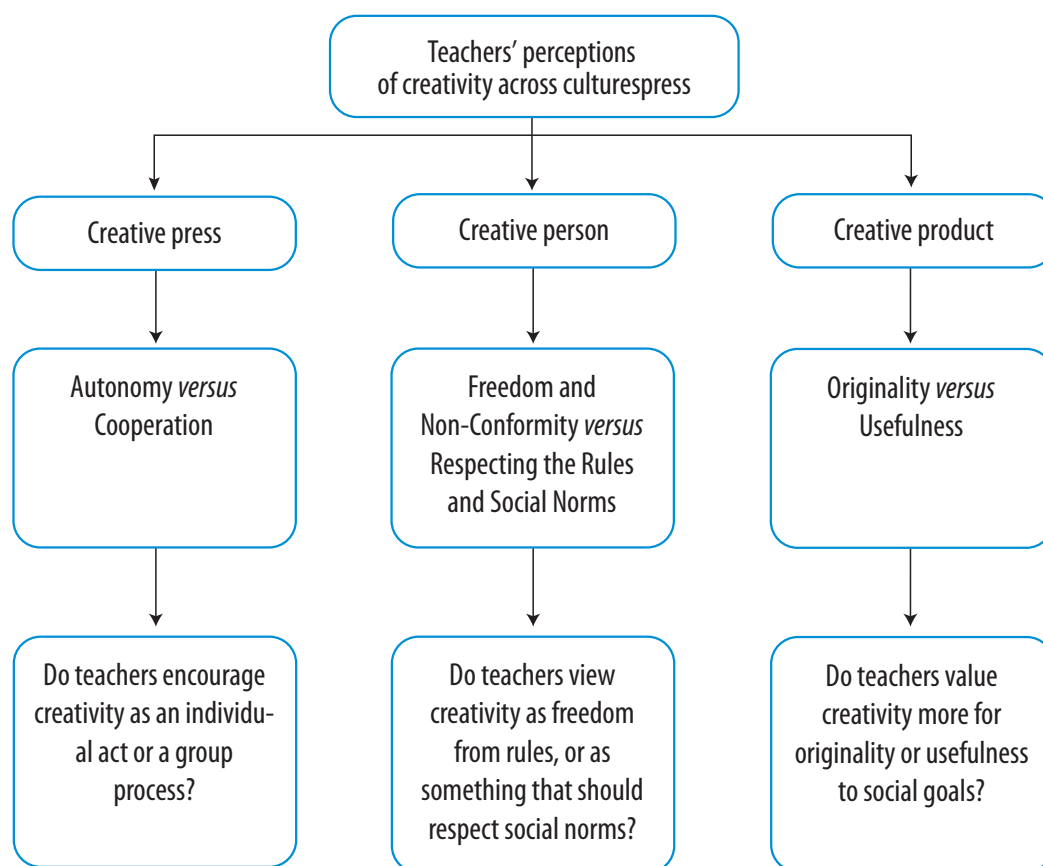


Figure 2. Adapted Framework used to Explore Teachers' Perceptions of Creativity across Culture

In the following parts of this paper, we present a detailed description of data collection and analysis procedures for the current review along with the results and a discussion of the findings.

METHODS

Data Collection

Our search for studies on teachers' perceptions of creativity encompassed the domain of education, including kindergarten, primary, secondary, and higher education and included all school subjects. Figure 3 summarizes procedures for conducting the review.

The PRISMA-S (Preferred Reporting Items for Systematic Reviews and Meta-Analyses literature search extension) guidelines, as outlined by Rethlefsen et al. (2021), were followed to ensure comprehensive and transparent reporting of the literature search strategy. For information sources and methods, a range of electronic databases was consulted, including ERIC (Education Resources Information Center), Scopus, Web of Science, ProQuest, ScienceDirect, Springer Link, Taylor & Francis, and JSTOR, in addition to the Google Scholar web search engine. To access full texts of non-open

access articles, respective authors were contacted directly. Furthermore, reference lists of all included articles were reviewed to identify additional relevant studies through backward citation searching. Key journals specializing in creativity research, such as *Creativity Research Journal*, *Creativity. Theories—Research—Applications*, *Journal of Creative Behavior*, *Thinking Skills and Creativity*, and *Psychology of Aesthetics, Creativity, and the Arts*, were also searched.

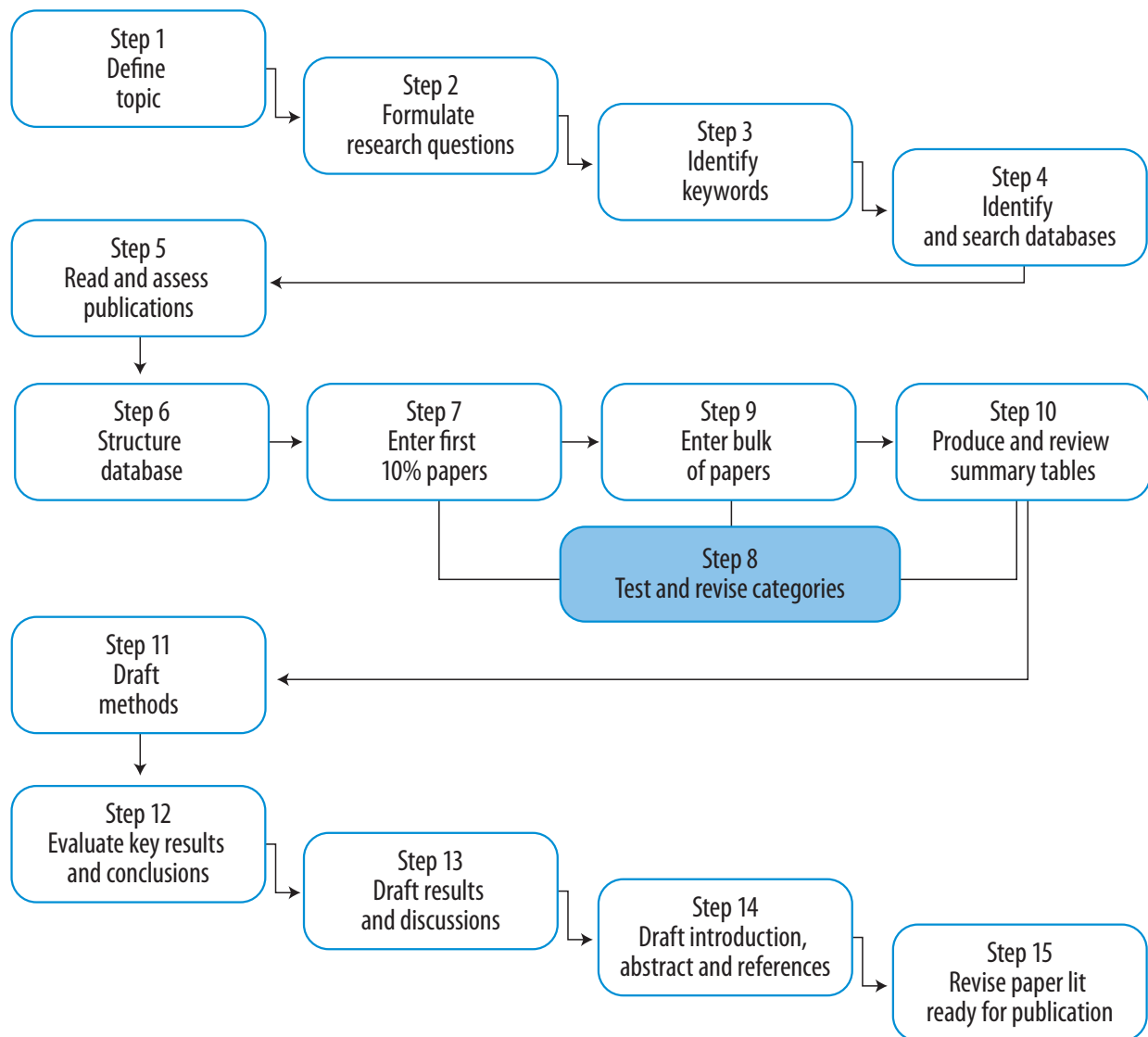


Figure 3. Steps of Conducting the Review of Literature

Source: Pickering and Byrne (2014)

For search strategies, a Boolean combination of keywords was used to identify relevant studies: (Teachers) AND ('perceptions' OR 'beliefs' OR 'conceptions' OR 'views' OR 'implicit theories') AND ('creativity' OR 'creative thinking') AND ('creative students' OR 'creative product' OR 'creative environment'). This search string was applied across all selected databases to ensure consistency in retrieving studies aligned with the focus of the review. Several criteria were specified to limit the

list of studies identified in the initial database search. Specifically, only empirical studies examining teachers' perceptions of creativity were included. Eligible studies were required to be published in peer-reviewed academic journals or as doctoral dissertations and written in English. The time frame for the literature search was limited to publications from 2010 to 2024. The review includes studies focusing on both pre-service and in-service teachers. Figure 3 shows PRISMA flow diagram of study selection process.

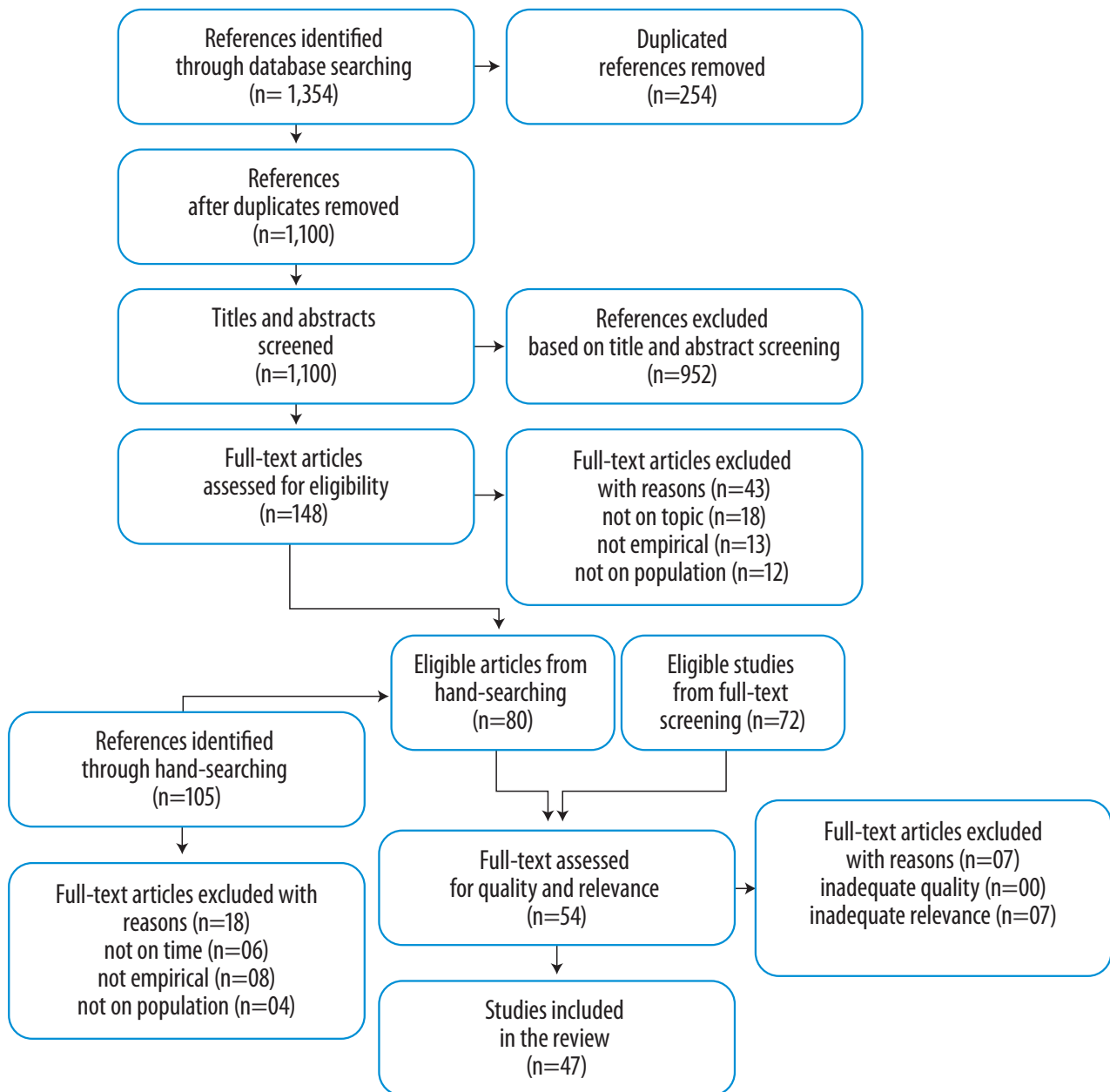


Figure 4. PRISMA Flow Diagram of Study for the Systematic Review

Analysis of the findings of qualitative data from the studies was mainly built upon the theoretical framework constructed by Braun and Clarke (2006), for thematic analysis. This framework allows to approach data both inductively and deductively. A thematic analysis process consists of six phases. Figure 5 illustrates the six phases of thematic analysis as proposed by Braun and Clarke (2006).

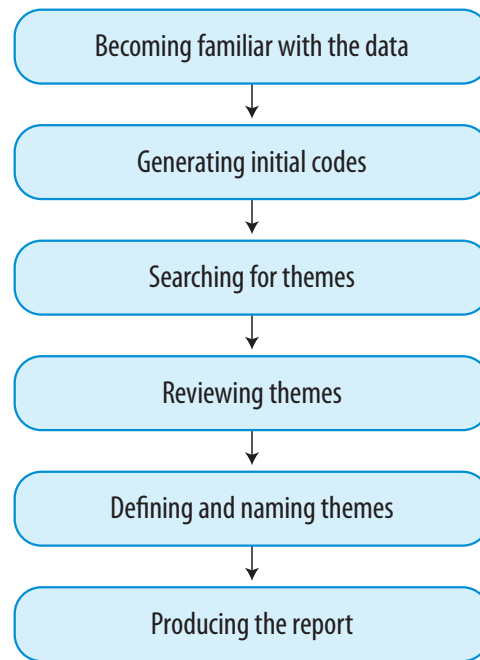


Figure 5. The Six phases of Thematic Analysis as Suggested by Braun and Clarke

Source: Branu and Clarke (2006)

The findings part of the selected studies was analyzed quantitatively and qualitatively to get a more precise understanding of how creativity is perceived in individualistic and communitarian cultures. This was done by giving frequency counts of certain codes and themes. Data were organized by means of filing a table using Microsoft Word (MS). During our reading of the documents, we highlighted relevant codes and themes and made notes in the margins. Table 1 below is an example of how the studies were categorized according to the coding scheme.

Table 1. Example of the Coding Scheme of the Selected Studies for the Analysis of the Major Relevant Findings

Author	Country	Type of culture	Major findings
(Wiles, 2017)	Taiwan	Communitarian	In the process-focused approach, creativity was defined from the inside, from the perspective of the person involved and in which personal agency, inclusion, and collaboration were emphasized.
(Bereczki, 2019)	Hungary	Individualistic	Creativity includes both originality and appropriateness. It necessitates personal traits; namely, curiosity, knowledge, hard work, risk taking, and intrinsic motivation. Willingness to take risks was another important characteristic highlighted by teachers as needed for creativity.
(Vedenpää & Lonka, 2014)	Finland	Individualistic	The participants' emphasis was on the creative process, not creative product. Creativity was perceived as individual (76%), as there were indications of collaboration only in two participants' definitions of creativity (3%). Participants typically recognized a correlation between learning and creativity

Author	Country	Type of culture	Major findings
(Alsahou, 2015)	Kuwait	Communitarian	Teachers viewed creativity as something original, imaginative, useful, and as a potential possessed by all individuals. The majority of teachers expressed their belief in cooperative learning as a teaching method for nurturing creativity
(Bryant, 2014)	Australia	Individualistic	Teachers who expressed more expansive perspectives of creative value perceived and endorsed “creativity” as ownership of learning/development or autonomous and authentic being. The concept of creativity appeared to draw participants’ attention to “novelty” or “non-repetitiveness” within external and internal worlds.
(Gralewski, 2016)	Poland	Individualistic	The teachers, who were the subject of the analysis, perceived creativity as creative potential, that is, ability to think independently, to generate new and original solutions to various tasks and problems, as well as creative activity oriented towards everyday innovation. They did not put much emphasis on merit, sense, or usefulness of products created by students.
(Kampylis, 2010)	Greece	Communitarian	Nearly all the participants stated that teamwork and collaborative learning enhance collaborative creativity which, according to them, is more important than individual creativity.
(Kyritsi & Davis, 2021)	Scotland	Individualistic	The data presented in this paper illustrate that important elements of teachers’ approaches that nurtured children’s creativity included supporting children’s autonomy, encouraging risk taking, and fostering children’s ownership of learning.
(Newton & Beverton, 2012)	UK	Individualistic	Teachers identified attributes of the subjects that made them more creative. Many focused on the pupils (61.4%), giving opportunity for freedom or autonomy (12.1%); originality (21.6%); direct experience (9.6%); open-ended activity (13.3%); and, interaction and communication (4.8%).

Most studies in this review meet criteria of the CASP Checklist (Long et al., 2020). They clearly state their research aims, use appropriate qualitative methodologies, and align their research design with these aims. Theoretical foundations are coherent and recruitment strategies are suitable. Data collection methods address the research issues and ethical considerations are properly handled. Data analysis is rigorous and findings are clearly presented, contributing valuable insights to the field.

DATA ANALYSIS

Assigned codes included teachers’ perceptions of ‘creativity,’ ‘traits of creative students,’ and characteristics of ‘creativity fostering environment’. After listing the codes, we proceeded to identify patterns and organize them into themes accordingly. Additional analysis involved synthesis and quantitative analysis. For instance, we counted the number of studies that originated in individualistic and communitarian cultures. We also reported frequencies for each of the codes and themes from each type of culture. Statistical analyses were carried out using Excel and Statistical Package for Social Science (SPSS 22).

To examine whether there was a statistically significant association between cultural orientation and how creativity is thematically conceptualized, a Chi-Square test of independence was conducted. The dataset was first organized in Excel and then exported to SPSS for analysis. The independent variable was cultural orientation, categorized as either individualistic or communitarian cultures. The dependent variable was the dominant theme used to describe creativity, coded into key thematic categories: freedom and non-conformity vs. conformity to social norms, autonomy vs. cooperation, and originality vs. usefulness. Studies that did not clearly indicate a thematic emphasis were coded as missing values (99) and excluded from statistical analysis. We then evaluated strength of the association between cultural orientation (X_j) and thematic conceptualizations of creativity (Y_i) using Cramer's V, which provided a measure of the effect size for the Chi-Square test.

To ensure reliability and minimize researcher bias, an external auditor with qualitative research expertise independently reviewed the data and themes. Inter-coder agreement was established by cross-checking codes, with Miles and Huberman (1994) recommending at least 80% consistency. Reliability was measured using Cohen's kappa, which showed 88.07% agreement, indicating excellent inter-rater reliability. The researcher and auditor compared codes, discussed interpretations, and reached consensus on themes.

FINDINGS AND DISCUSSION

The systematic review involved 27 countries from all continents. Participants involved in the studies under review were practitioners or pre-service teachers of kindergarten through university, with diverse degrees of professional experience. All selected studies and their citations are presented in Table 2 below.

Table 2. A list of the Selected Studies for Review

Study	Country
(Vedenpää & Lonka, 2014)	Finland
(Bolden et al., 2010), (Newton & Beverton, 2012), (Kokotsaki, 2011), (Price, 2018)	United Kingdom
(Bereczki, 2019)	Hungary
(Rubenstein et al., 2018), (Henriksen & Mishra, 2015), (Aish, 2014), (Katz-Buonincontro et al., 2020), (Alhusaini et al., 2014), (Reedy, 2020), (Adams, 2013) (Puryear & Lamb, 2024)	United States
(Ibrayeva et al., 2022)	Kazakhstan
(Gralewski, 2019), (Gralewski, 2016)	Poland
(Kyritsi & Davis, 2021)	Scotland
(Wang et al., 2018), (Hua & Yang, 2024), (Li, 2016)	China
(Alkhars, 2013), (Alsahou, 2015)	Kuwait

Study	Country
(Zbainos & Anastasopoulou, 2012), (Makris et al., 2021), (Kampylis, 2010), (Daskolia et al., 2012), (Konstantinidou et al., 2013)	Greece
(Sungurtekin, 2021), (Akkanat & Gökdere, 2015), (Gucyeter & Camci, 2020), (Ucus, 2017) (Sali & Özbay Özdemir, 2023)	Turkey
(Khan, 2012), (Shaheen, 2011)	Pakistan
(Tan & Majid, 2011)	Singapore
(Lee & Park, 2021), (So & Hu, 2019), (Azamalah & Kang, 2023)	South Korea
(Morais & Azevedo, 2011)	Portugal
(Kasirer & Shnitzer-Meirovich, 2021)	Israel
(Smare & Elfatihi, 2022)	Morocco
(Hamada & Hana, 2017)	Algeria
(Wiles, 2017)	Taiwan
(Bryant, 2014)	Australia
(Michaelidou & Pitri, 2022), (Panaoura & Panaoura, 2014)	Cyprus
(Rios-Atehortua et al., 2024)	Columbia
(Mateos-Moreno & Garcia-Perals, 2024)	Spain
(Azamalah & Kang, 2023)	Ghana
(Azamalah & Kang, 2023)	Cameroon
(Azamalah & Kang, 2023)	Rwanda
(Azamalah & Kang, 2023)	Tanzania

As can be seen in Figure 6 below, studies related to teachers' perceptions of creativity originated in various parts of the world. Most research on teachers' perceptions of creativity comes from United States ($n = 8$), Greece ($n = 5$), Turkey ($n = 5$), and United Kingdom ($n = 4$). In other systematic reviews with relevant but different foci, the United States is also ranked at the top (Andiliou & Murphy, 2010; Bereczki & Kárpáti, 2018; Mullet et al., 2016).

Regarding the number of publications each year from 2010 to 2024, 2014 had the highest number of publications: five. The most recent years, 2021 and 2024, followed closely with four publications each. In contrast, 2010, 2016, and 2023 had the fewest publications, with only two each, potentially reflecting limited research activity or available data during those years.

Figure 7 below illustrates the level of individualism in the countries where the selected studies were conducted, drawing on Trompenaars' (1993) cultural dimensions framework.

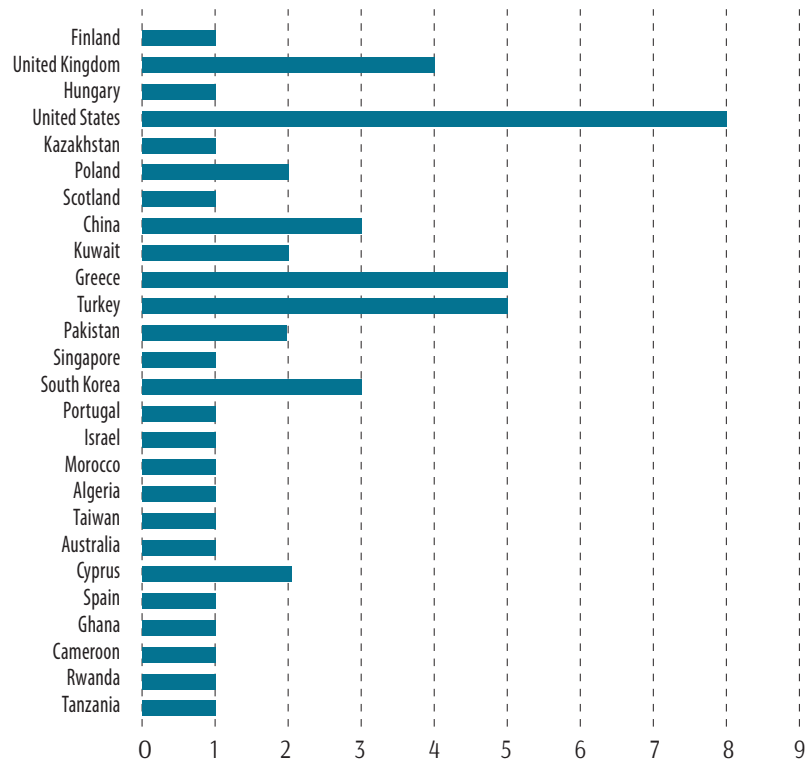


Figure 6. Distribution of the Selected Studies by Country

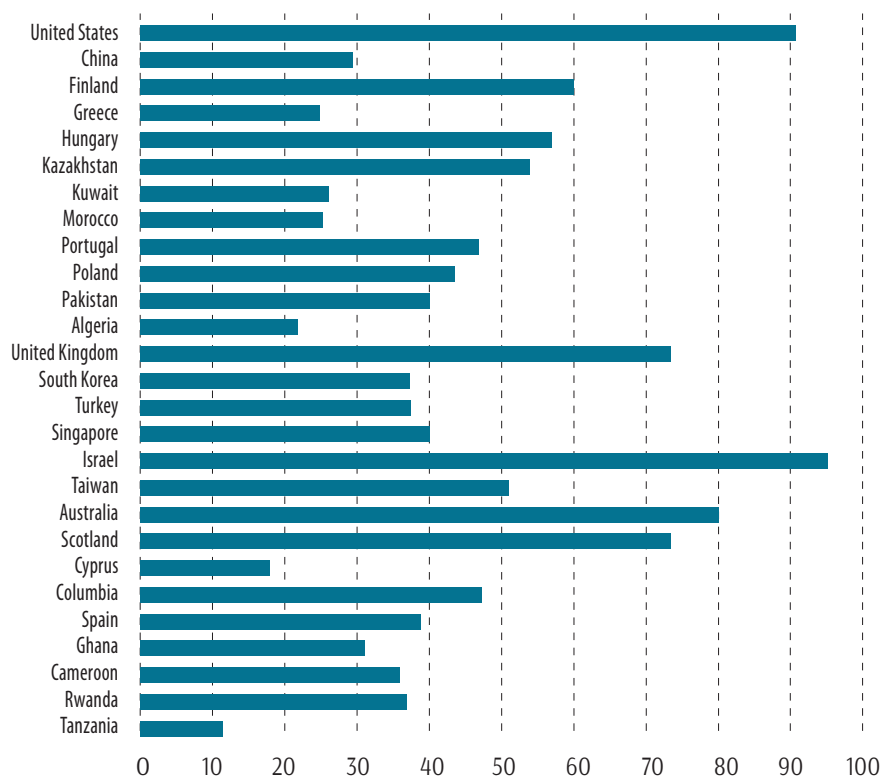


Figure 7. Level of Individualism in Countries where Selected Studies were Conducted, Based on Trompenaars' Cultural Dimensions

Figure 8 below displays distribution of studies included in the present systematic review, categorized by cultural orientation. A greater number of studies ($n = 29$) was conducted in communitarian contexts compared to individualistic contexts ($n = 8$). This suggests a potentially stronger research emphasis or accessibility of data in communitarian settings.

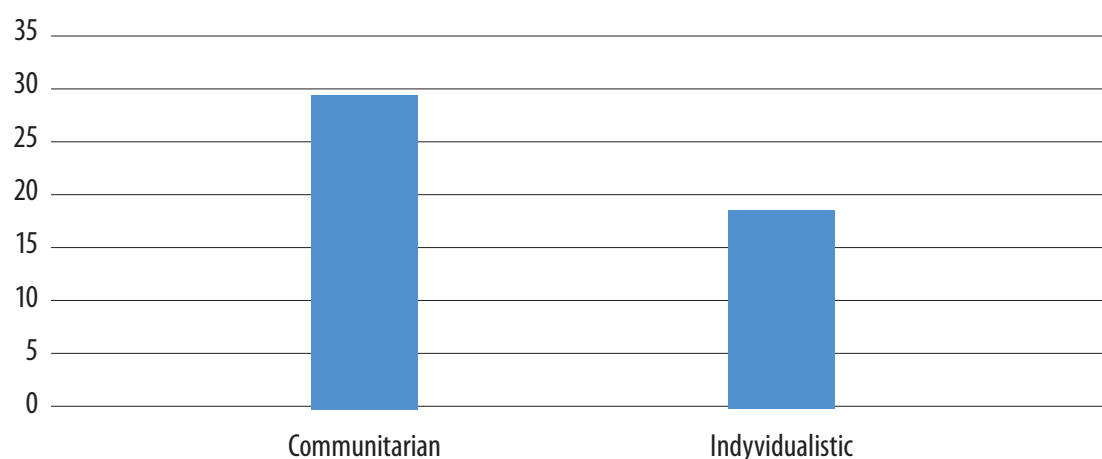


Figure 8. Number of Studies Examining Teachers' perceptions of Creativity by Cultural Context (Individualistic vs. Communitarian)

INFLUENCE OF CULTURE ON TEACHERS' PERCEPTIONS OF CREATIVITY

Several studies included in this review explicitly acknowledge the influence of cultural values on teachers' perceptions of creativity. In many of these studies, the authors identify cultural factors as key influences on how teachers conceptualize and respond to creativity. Alkhars (2013) noted that creativity is a culture-related and context-bound phenomenon rather than a universal construct. The author also emphasized the subjective nature of the topic, further supporting the idea that perceptions of creativity are shaped by cultural and contextual understandings. Similarly, Akkanat and Gökdere (2015) noted that Turkish culture tends to discourage expressive behaviors in both children and adults. Alsahou (2015) pointed out that although teacher education programs in Kuwait included Western theories of creativity, cultural context still influenced how such concepts as originality and usefulness were interpreted. In the Chinese context, Hua and Yang (2024) linked teachers' low self-efficacy to cultural values emphasizing humility, which discouraged them from viewing themselves as creative individuals. This cultural influence shaped their belief that creativity is a rare trait possessed by others, rather than something they themselves could foster. Wang et al., (2018) also highlighted the impact of culture on creativity, noting that in China, the emphasis on conformity and obedience within the educational system may limit students' creative expression. So and Hu (2019) found that while Korean teachers' understanding of creativity somewhat aligns with Western concepts, it is also influenced and reshaped by Korea's unique sociocultural context.

Key factors include impact of Confucian values and emphasis on the social dimensions of Creativity. Katz-Buonincontro et al., (2020) also indicated that American teachers adopted an individualistic approach and emphasized personal growth over social or moral aspects of creativity, reflecting a Western cultural perspective. Kyritsi and Davis (2021) argued that an educational focus rooted in individualism and centered on personal performance can hinder creativity by overlooking diversity, equity, and collaboration. Wiles (2017) pointed out that the differing construal of the self, with Western cultures emphasizing independence and Eastern cultures valuing harmonious interdependence, may influence creativity (Wiles, 2017). Bryant (2014) also noted that cross-cultural differences in experience could lead to variations in how creativity is defined. Many researchers have used frameworks that incorporate cultural aspects to explore beliefs about creativity. Alhusaini et al. (2014) conceptualized creativity as a social construct, using Schramm's communication model (1954) to frame creativity as a process shaped by the cultural backgrounds of both creators and receivers. Daskolia et al. (2012) adopted a theoretical framework based on the assumption that creative thinking is a "socio-cultural construct," meaning that it is understood in diverse ways across different contexts, settings, and cultures. Daskolia et al., (2012) and Kampylis (2010) both mentioned that their conclusions are specific to the Greek educational and socio-cultural context, implying that culture has a significant impact on perceptions of creativity.

Some studies show that culture and training may not play a role in shaping teachers' creative thinking. In the Colombian context – despite the country's communitarian orientation – teachers did not emphasize the social or ethical dimensions of creativity, which are often valued in other communitarian cultures (Rios-Atehortua et al., 2024). The researchers found that pre-service science teachers lacked professional preparation to support creativity, largely due to the absence of targeted training in their education programs (Rios-Atehortua et al., 2024). This study presents an interesting exception, as neither the communitarian cultural context nor the reported training appeared to significantly shape teachers' perceptions of creativity. This suggests that other factors may have played a stronger role in influencing their views. In the study of Mateos-Moreno and Garcia-Perals (2024), study participants largely defined creativity in terms of having a "personal imprint" and utility, which reflects a more performance-oriented view of creativity. This emphasis aligns with traditional conceptions of creativity in performance-based disciplines like music, where usefulness – such as effectiveness or functionality of a performance – often takes precedence over the creative process itself. This emphasis on performance creativity suggests that disciplinary norms may also shape teachers' perceptions, independently of cultural or training influences.

The findings center on the results of the Chi-Square analysis, which highlight the differing perceptions of creativity emphasized within each cultural orientation. Specifically, the results reveal how teachers in individualistic *versus* communitarian cultures tend to prioritize certain aspects of creativity – such as autonomy *versus* cooperation, freedom *versus* conformity to norms, and originality *versus* usefulness. In addition to the statistical results, the review includes a qualitative analysis of the studies that emphasized each perception, followed by a discussion of these themes in relation to existing creativity research.

Autonomy versus Cooperation

The Chi-Square test indicated that there was a significant association between cultural orientation and teachers' perceptions of creativity in relation to autonomy and cooperation, $\chi^2(1, N = 33) = 22.393$, $p < .001$. Table 3 below shows this very association.

Table 3. Chi-Square Analysis of Cultural Orientation and Teacher Support for autonomy versus cooperation in Creativity

Chi-Square Tests					
	Value	Df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	22.393a	1	<.001		
Continuity Correctionb	18.997	1	<.001		
Likelihood Ratio	27.462	1	<.001		
Fisher's Exact Test				<.001	<.001
N of Valid Cases	33				

a. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 4.67.

b. Computed only for a 2x2 table.

Cramér's V was .824, $p < .001$, suggesting a very strong relationship between cultural orientation and perceptions of creativity. See Table 4 below for explanation.

Table 4. Cramér's V Analysis of Cultural Orientation and Teacher Support for autonomy versus in Creativity

Symmetric Measures			
		Value	Approximate Significance
Nominal by Nominal	Phi	-.824	<.001
	Cramer's V	.824	<.001
N of Valid Cases		33	

Findings of the studies conducted on perceptions of creativity in individualistic countries indicated that teachers believe autonomy and independence are important for creativity (Bereczki, 2019; Bolden et al., 2010; Bryant, 2014; Ibrayeva et al., 2022; Katz-Buonincontro et al., 2020; Kokotsaki, 2011; Kyritsi, 2021; Newton & Beverton, 2012; Price, 2018; Reedy, 2020; Vedenpää & Lonka, 2014). Collaboration received the lowest percentages in these studies. The few teachers who mentioned the importance of collaboration in Price's study (2018) were quick to point out they were not happy to give up autonomy and that collaboration should not produce uniformity. Some of the studies such as Kyritsi and Davis (2021) and Vedenpää and Lonka (2014) conducted in individualistic countries indicated that one of the barriers to the development of creativity relates to paying too much at-

tention to individualism and neglecting practices that nurture creativity, especially collaboration. However, studies on perceptions of creativity in communitarian cultures revealed that most teachers put emphasis on interaction and cooperative work (Alkhars, 2013; Alsahou, 2015; Azamalah & Kang, 2023; Daskolia et al., 2012; Hua & Yang, 2024; Kampylis, 2010; Khan, 2012; Konstantinidou et al., 2013; Lee & Park, 2021; Li, 2016; Makris et al., 2021; Mateos-Moreno & Garcia-Perals, 2024; Morris & Azevedo, 2011; Shaheen, 2011; Sungurtekin, 2021; Ucus, 2017; Wang et al., 2018; Wiles, 2017; Zbainos & Anastasopoulou, 2012). Generally, teachers in individualistic cultures often emphasized autonomy as a foundation for creativity, describing students who are independent, self-directed, and intrinsically motivated. Creative thinking was seen as rooted in personal expression, risk taking, and freedom to make choices without excessive external control. Autonomy for them allows students to explore ideas authentically and take ownership of their creative processes. In contrast, teachers in communitarian contexts highlighted cooperation as essential to creativity, focusing on collaboration, shared responsibility, and group harmony. Creativity was framed as a social endeavor, where students learn from one another, contribute to group efforts, and value empathy and communication. Working together was seen as a way to generate new ideas and strengthen communal bonds.

Research advocates both cooperation and autonomy when developing creativity. Therefore, it is important for teachers to strike a balance between encouraging collaboration and fostering autonomy in the classroom. Creative ideas are the result of interaction with others' ideas and the outcome of support from others, such as family members, friends, or individuals of the same field (Wilson, 2009). John-Steiner (2000) points out that even such great creative thinkers as Simone de Beauvoir and Jean-Paul Sartre, or Marie Curie and Picasso worked cooperatively and learned from each other. Research findings also revealed that incorporation of cooperative work increases creativity and boosts creative ideas among students (Ibán et al., 2020; Kim & Song, 2012; Marashi & Khatami, 2017; Segundo-Marcos et al., 2023; Siew & Sombuling, 2017). Learners do not come to class with the same background of experiences and knowledge. Hence, working collaboratively allows students to learn from each other's experiences and knowledge in order to make connections between their knowledge and that of others (Robbie & Warren, 2019). When students collaborate, they have the opportunity to exchange ideas, new perspectives, and insights with others.

Encouraging autonomy is also essential for the development of creativity. Research findings show that autonomy has a positive effect on creative behavior (Çekmeceliolu & Günsel, 2011). Autonomy increases perceived self-determination, thereby fostering intrinsic motivation and ultimately stimulating creativity (Zhou, 1998). Teachers, especially in communitarian countries, need to be aware that autonomy and independence allow learners to express their unique ideas, develop their creative expressions and have a chance to be active and responsible participants in their learning process. Thus, teachers have to acknowledge the importance of encouraging both cooperation and autonomy when developing their learners' ability to think creatively.

Freedom and Non-Conformity *versus* Respecting the Rules and Social Norms

Results of the Chi-Square test indicated a statistically significant association between cultural orientation and teachers' endorsement of freedom and non-conformity *versus* respecting rules and social norms, $\chi^2(3, N=30) = 16.84, p < .001$. Table 5 below shows this association.

Table 5. Chi-Square Analysis of Cultural Orientation and Teacher Support for Freedom in Creativity

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	16.843a	3	<.001
Likelihood Ratio	23.109	3	<.001
N of Valid Cases	30		

a. 6 cells (75,0%) have expected count less than 5. The minimum expected count is 1.30.

The Cramér's V analysis revealed a strong and statistically significant association between cultural orientation and teacher support for freedom in creativity, with a value of 0.749 ($p < .001$). See Table 6 below for details.

Table 6. Cramér's V Analysis of Cultural Orientation and Teacher Support for Freedom in Creativity

Symmetric Measures			
		Value	Approximate Significance
Nominal by Nominal	Phi	.749	<.001
	Cramer's V	.749	<.001
N of Valid Cases		30	

Studies in individualistic countries showed that teachers relate creativity to freedom and risk taking (Aish, 2014; Bereczki, 2019; Bolden et al., 2010; Henriksen & Mishra, 2015; Katz-Buonincontro et al., 2020; Kyritsi, 2018, 2021; Newton & Bevertson, 2012; Price, 2018; Puryear & Lamb, 2024; Reedy, 2020). In communitarian countries, however, setting rules and respecting norms are prioritized over risk taking (Akkanat & Gökdere, 2015; Azamalah & Kang, 2023; Gucyeter & Camci, 2020; Khan, 2012; Konstantinidou et al., 2013; Li, 2016; Mateos-Moreno & Garcia-Perals, 2024; Morais & Azevedo, 2011; Shaheen, 2011; (Smare & Elfatihi, 2022); So & Hu, 2019; Tan & Majid, 2011; Wang et al., 2018). In Morais and Azevedo's (2011) study, the majority of teachers disagree or neither agree nor disagree that non-acceptance of rules is important in the creative behavior of students because of their belief of the association between creativity and disobedience, which consequently leads to the need for setting rules by teachers. Having students setting rules, a characteristic that reflects their autonomy, is also not accepted in communitarian cultures. In the study of Konstantinidou et al, (2013) only one

out of ten teachers supported having students set their own rules. Going against conventions as a definition of creativity in the studies of Shaheen (2011) and (Smare & Elfatih, 2022) was rated lowest, because students are expected to follow existing rules and regulations. In the study of Li (2016), less than half of the participants encouraged their students to be open to new ideas. In fact, openness was considered by these teachers as an unfavorable characteristic for a good thinker, because to them it meant that the person is easily distracted and lacks their own thinking (Li, 2016). In Khan's study, none of the teachers used risk taking to describe creativity (Khan, 2012). Similarly, in Akannat and Gökdere's (2015), participants did not mention risk taking as a trait of creative individuals. The same result was found in the study of Gucyeter & Camci (2020), where very few teachers mentioned risk taking as a characteristic of creative students.

Regarding freedom in relation to creativity, research revealed that individuals who are given freedom and choice show significantly higher levels of creativity than those who are not free and do not have a choice (Amabile & Gitomer, 1984; Amabile & Grysiewicz, 1987). Research also indicated that creative thinkers are risk-takers (Kaufman & Sternberg, 2019). Herrmann defines creativity as the ability to take risk and seize upon chance (Herrmann, 1996). Risk taking allows individuals to explore their potential, pursue their passions, and promote self-actualization. Risk taking also enables to have diverse thoughts and perspectives which result in more creative solutions to every day challenges. Regarding rules in relation to creativity, Baucus et al. (2008) point out that organizations which allow or enable employees to break the rules are more creative because rules limit creative behavior. Breaking rules allows individuals to decide on key ethical issues for themselves with questions such as: which rules can be broken? In which conditions and who can break them? (Kampylis & Valtanen, 2010). Furthermore, as there is benevolent creativity that aims at producing ideas that are original and useful, there is malevolent creativity which involves producing ideas that intend to harm others. That is to say, creativity also has a dark side (Cropley et al., 2010). Malevolent creativity is described as creativity that is deliberately planned to damage others; crime being but one example (Cropley et al., 2014). This kind of creativity is used for destructive ends. Therefore, there should always be encouragement of wisdom in combination with developing creativity (Sternberg, 2010).

In the educational context, students need to learn to break rules in respect with ethics and social norms. Claxton et al., (2008) assert that students need to exercise creativity in a responsible way, socially and ecologically speaking. There should be a balance between taking risks and respecting the norms so as to ensure that creativity does not intend to harm others or violate ethical standards. In the classroom, learners need to understand that freedom exists within the context of respecting the freedoms and rights of others and that calculated risks and respecting the ethical norms help realize both individual and societal growth.

Originality versus usefulness

The analysis revealed a statistically significant association between cultural context and the perception of creativity, $\chi^2(2, N = 34) = 14.30, p < .001$, as evidenced in Table 7 below.

Table 7: Chi-Square Analysis of Cultural Orientation and Teacher Support for originality *versus* usefulness in Creativity

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	14.295a	2	<.001
Likelihood Ratio	16.210	2	<.001
N of Valid Cases	34		

a. 4 cells (66,7%) have expected count less than 5. The minimum expected count is 1,65.

Cramér's V yielded a value of .648, indicating a strong association between the variables ($p < .001$). Table 8 below shows this association.

Table 8. Cramér's V Analysis of Cultural Orientation and Teacher Support originality *versus* usefulness in Creativity

Symmetric Measures			
		Value	Approximate Significance
Nominal by Nominal	Phi	.648	<.001
	Cramer's V	.648	<.001
N of Valid Cases		34	

Regarding characteristics of a creative product, studies conducted in individualistic countries revealed that teachers put emphasis on originality (Adams, 2013; Aish, 2014; Alhusaini et al., 2014; Bolden et al., 2010; Katz-Buonincontro et al., 2020; Kokotsaki, 2011; Newton & Beverton, 2012; Puryear & Lamb, 2024; Reedy, 2020; Rubenstein et al., 2018). Nevertheless, the majority of studies conducted in communitarian countries revealed that teachers perceive creativity as consisting of both originality and usefulness (Akkanat & Gökdere, 2015; Alkhars, 2013; Alsahou, 2015; Azamalah & Kang, 2023; Daskolia et al., 2012; Gucyeter & Camci, 2020; Hamada & Hana, 2017; Hua & Yang, 2024; Kampylis, 2010; Khan, 2012; Konstantinidou et al., 2013; Lee & Park, 2021; Mateos-Moreno & Garcia-Perals, 2024; Michaelidou & Pitri, 2022; Morais & Azevedo, 2011; Sali & Özbay Özdemir, 2023; So & Hu, 2019; Zbainos & Anastasopoulou, 2012). Encouraging both originality and usefulness of ideas is essential. Communitarian cultures can benefit from encouraging production of original ideas in a sense that they allow individuals to think outside the box and get away from social conventions, restrictions, and assumptions (Hanson, 2015). Individuals also learn to appreciate different perspectives and explore alternative ideas to solve complex problems. Furthermore, thinking creatively and producing original ideas involves thinking critically, which leads to fostering this skill especially in students. Andiliou and Murphy (2010) describe creative thinking as a type of higher order thinking that requires students to produce ideas, critically evaluate them, and decide about their effectiveness and appropriateness. In addition to that, individuals, including students, can develop their sense of identity and gain self confidence in expressing themselves and their original ideas (Collard &

Looney, 2014). Similarly, considering usefulness and appropriateness of new ideas is equally as important. Emphasizing appropriateness helps students consider the social context and the impact of their ideas on others. They learn to fit their ideas to the norms and expectations of the community as a whole. Students also learn to take into consideration the needs and the perspectives of others. They learn to align their original ideas with societal norms and values and consequently gain recognition and support for their creativity. Creativity impacts society in various ways. That is why, individuals need to evaluate and assess the impact of their ideas according to ethical considerations and social values. This helps prevent the dark side of creativity that harms others.

Training, Policy, and the Complex Contexts Shaping Teachers' Creativity Perceptions

This review emphasizes the role of cultural values in shaping teachers' perceptions of creativity. However, it is also important to consider other influential factors, such as educational policy and/or teacher training. Several studies demonstrate that these elements can independently or interactively shape how creativity is understood and promoted in educational contexts.

Although cultural norms strongly influence perceptions of creativity, many studies indicate that teacher education and training also play a crucial role. Several studies indicated that teachers lacked adequate training on how to effectively promote creativity in their students (Gralewski, 2016; Hamada & Hana, 2017; Hua & Yang, 2024; Kampylis, 2010; Konstantinidou et al., 2013; Li, 2016), and many researchers emphasized the need for training and professional development in this area (Bereczki, 2019; Bolden et al., 2010; Bryant, 2014; Gucyeter & Camci, 2020; Hamada & Hana, 2017; Sungurtekin, 2021; Zbainos & Anastasopoulou, 2012). Where training was implemented, the results varied. Azamalah and Kang (2023) found that although only half of Korean and African teachers received formal training in teaching for creativity, cultural factors influenced their perceptions. Korean teachers emphasized ethicality, while African teachers focused less on originality, highlighting the role of cultural context in shaping views of creativity beyond formal training. Adams (2013) found that despite participating in a Lesson Study program designed to support creativity, teachers in both experimental and control groups shared similar views, suggesting that cultural context may play a role, more than training did, in shaping perceptions of creativity. Aish (2014) found that while half of the teachers felt well trained to foster creativity, a greater number exhibited a consistent understanding of creativity. Alsahou (2015) found that although teacher education programs in Kuwait introduced Western theories of creativity, cultural background influenced how such concepts as originality and usefulness were interpreted. Azamalah and Kang (2023) found that while only half of the teachers received formal training in teaching creativity, they still shared similar views of creativity, with Korean teachers emphasizing ethicality and African teachers placing less importance on originality, reflecting the influence of culture on their perceptions. Wiles (2017) highlights the impact of training on creativity development in Taiwan, where programs have been introduced to support both pre-service and in-service teachers. However, despite these efforts, traditional teaching methods persist.

Kasirer and Shnitzer-Meirovich (2021) found that specialized training in special education encourages creative pedagogical practices, with special education teachers valuing traits like independence, non-conformity, and openness to ambiguity, unlike general teachers who favored structure and conformity – highlighting how training type shapes creativity perceptions. Konstantinidou et al. (2013) found that teachers with training had a broader and more inclusive understanding of creativity compared to those without such training. This suggests that it may not simply be the presence of training that matters, but rather the quality, depth, and contextual relevance of the training provided. Kokotsaki (2011) highlights how absence of clear definitions or guidance in Greek educational documents has contributed to teachers' limited understanding of creativity. In contrast, the British system places greater emphasis on the meaning and application of creativity in formal curricula. This suggests that national education policies and curricular support play a key role in shaping how teachers perceive and promote creativity in the classroom.

CONCLUSION

This systematic review explored the impact of culture on teachers' perceptions of creativity. The findings revealed that culture may influence how creativity is conceptualized and nurtured by teachers. Creativity is interpreted and viewed differently in individualistic and communitarian cultures, including how a creative product or idea, traits of creative individuals, and characteristics of creativity-fostering environment are described. Teachers from individualistic cultures tend to prioritize autonomy, independence, freedom, risk taking, and originality, whereas teachers from communitarian cultures put emphasis on cooperation, community welfare, networking with others, and respecting norms and appropriateness of ideas. All these perspectives are equally as important to the development of creativity according to research; hence, excluding any of them may have a negative consequence on the development of students' ability to think creatively. Therefore, teachers need to be aware of the benefits of each perspective and value on the development of a skill and also the effects of culture on their perceptions of the skill. Knowledge about the impact of culture on perceptions of creativity can be put into practice in an education that enables students to think creatively. This systematic review can inform not only teachers, but also policy makers and textbook designers to adapt their practices and curricula to their culture and promote students' creativity.

RECOMMENDATIONS FOR EDUCATIONAL POLICY AND PRACTICE

As illustrated by this systematic review, some studies suggest that teachers' perceptions of creativity may not always align with the dominant cultural values of their context, particularly when they receive appropriate training, as shown in the studies by Kasirer and Shnitzer-Meirovich (2021)

and Konstantinidou et al. (2013). Therefore, educational policymakers should prioritize preparation of both pre-service and in-service teachers to effectively foster creativity in students, in line with current creativity research. Teacher preparation should not only focus on the general principles of fostering creativity but also incorporate the cultural dynamics of teachers' specific educational contexts. For instance, pre-service teacher education programs could include courses on creativity across cultures, while in-service teachers might benefit from targeted workshops or online training courses on culturally responsive strategies for nurturing creativity. This approach would ensure that teachers are equipped with the knowledge and skills to cultivate creativity in ways that resonate with their students' cultural frameworks. Furthermore, teachers should also be encouraged to engage in reflective practice, particularly regarding how their own cultural values shape their understanding and promotion of creativity. This can be achieved through workshops, peer discussions, or action research projects that allow teachers to explore how cultural influences impact their teaching styles and their students' creative outputs. By promoting a culture of reflective practice, educators can continuously refine their teaching methods and better support creative development of all students, regardless of their cultural background. Policymakers should also encourage development of educational policies that reflect a holistic view of creativity—one that acknowledges both the individual and the collective dimensions of creative expression. This could be reflected not only in school curricula, but also in assessment rubrics that value originality and usefulness, and in classroom-level activities, such as collaborative projects where students practice balancing autonomy and cooperation.

RECOMMENDATIONS FOR FURTHER RESEARCH

Future research may focus on conducting longitudinal studies to investigate how such factors as professional development and training programs may change teachers' perceptions of creativity and minimize negative influence of culture on the development of creativity in students. Research may also explore how culture influences teachers' actual practices in the classroom and the strategies they use to develop creativity in students. This kind of research can highlight the connection among teachers' perceptions, cultural factors, and their practices in the classroom. Research may also target investigation of strategies that aim at developing creativity in different cultural contexts. Such research may shed light on approaches and strategies that adapt to cultural values and contexts. These research suggestions can help gain knowledge on teachers' perceptions of creativity across cultures and provide insight for teachers, policy makers, and textbook designers to promote creativity in various cultural and educational contexts.

LIMITATIONS OF THE STUDY

We acknowledge several limitations in this review. First, creativity is a dynamic, culturally situated concept, and our findings may be influenced by such contextual factors as participants' training and educational backgrounds. Second, our inclusion criteria limited the review to articles published in English, which may have led to excluding relevant research published in other languages. Third, restricting our search to studies published between 2010 and 2024, while capturing recent perspectives, may have overlooked valuable antecedent research. Finally, despite our comprehensive search strategy, it remains possible that some relevant studies were unintentionally missed.

Declarations

Funding: This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

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