



The value of creativity: A scoping review

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ABSTRACT

Growing rhetoric from industry-based white papers and global reports states that creativity is a vital skill for the future of work. However, despite centuries of study and debate, there remains a lack of consensus on the exact nature of the value of creativity. This scoping review followed the PRISMA-ScR guidelines with the objective of reviewing and describing the literature since 1980 to find a consensus description of the value of creativity. This review identifies a three-factor typology comprising extrinsic, instrumental, and intrinsic-inherent value as value construct propositions. The synthesis of the reviewed literature ($N = 86$), including a high Cohen’s Kappa for interrater agreement on the articles ($\kappa = 0.993$), found that the value of creativity is predominantly instrumental and functions as a tool for achieving both extrinsic and intrinsic-inherent outcomes. This review sharpens the understanding of creativity, primarily in the subject matter area of business and workforce, by creating a value-informed basis that may be valuable for practitioners, scholars, and policymakers responsible for bolstering the rationale for a renewed focus on creativity as a vital 21st Century skill. Future research and limitations are discussed.

Introduction

It is now widely accepted that future human endeavours must be *creative* to solve global, wicked problems like climate change, pandemics, inequities, and food security (see [Elia & Margherita, 2018](#); [Fields et al., 2021](#); [Lehtonen et al., 2019](#)). Similarly, discussions of globalization, the digital economy, and the changing nature of work and workplaces cite creativity as an essential response (see [Schwartz et al., 2019](#), for a synopsis). Indeed, creativity is now an accepted part of a global conversation about the *future of work* (Organization for Economic Co-Operation & Development, 2018; World Economic Forum [WEF], 2020a; 2020b; 2020c).

However, despite centuries of study and debate ([Runco & Albert, 2010](#)), there remains a lack of consensus on the exact nature of the *value* of creativity. Recently, scholars have debated including value in the definition of creativity; however, there is issue with these definitions being useful to a variety of stakeholders ([Harrington, 2018](#); [Weisberg, 2015](#)). If creativity is to function as a solution to the challenges of globalization, change, and the future of work, it is vital that stakeholders, including educators, scholars, policymakers, and end-

users understand exactly what value creativity offers. To that end, the following scoping review examines four decades of creativity literature with the goal of finding a consensus description of the *value of creativity*.

Defining creativity

Early literature focused on creativity in a variety of ways: as a *gift from the Gods*, as a matter of *nature* versus *nurture*, as a form of *deviance*, and typically always in a *gendered* (i.e., male) context ([Becker, 2011](#)). Pre-20th-century understandings of creativity also typically lacked rigorous methodology, academic specialization, and the application of experimental techniques ([Becker, 2011](#)). Scholars’ attempts to further develop the understanding of creativity have ebbed and flowed over time. Guildford (1950), driven by a desire to address the role of creativity as a component of human intellect, pioneered the push for a rigorous, evidence-based and modern definition of creativity. Over more than seven decades, psychological creativity research has established that creativity can be understood in terms of four key *facets* or *perspectives*: personal properties (including, for example, personality and motivation); cognitive processes (including convergent and di-

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vergent thinking); environmental factors (for example, organizational climate and culture) and the nature of creative outcomes (for example, solutions or products). Rhodes (1961) is usually credited with this 4Ps model, and each of these lenses has been extensively studied in the years since. Runco and Jaeger (2012) cited a history of authors and concepts, and noted that Stein (1953) and Barron (1955) first discussed usefulness and novelty as essential elements of a creative product. Cummings (1965) and Scott (1965) first explored creativity and factors associated with organizational climate and culture. Crutchfield (1962) did early work on the impact of personal properties such as extrinsic motivation on creativity, while Guilford (1950) first suggested that divergent thinking was an essential, and neglected, cognitive process essential for creativity.

While many scholars seek to understand creativity through the scientific method, it cannot be separated entirely from socio-cultural factors. Florida (2002, 2012) argued that creativity is our society’s most valuable resource, with *creatives* becoming the dominant class in the 21st century. Florida defined the creative class as "scientists, engineers, university professors, poets, novelists, artists, entertainers, actors, designers, and architects" (2012, p. 38). These specialists produce transferrable and useful new forms or designs.

Thanks to Guilford’s (1950) push to understand creativity as a component of human intellect, and to the subsequent decades of rigorous research in educational psychology, creativity now has what is widely accepted as a stable definition. Plucker et al. (2004) defined creativity as "the interaction among aptitude, process, and environment by which an individual or group produces a perceptible product that is both novel and useful" (2004, p. 90). However, while this definition sets out, very clearly, what creativity *is*, the definition still fails to address what creativity *does*, in other words: its value. The current definition still fails to answer the question: *what is the value of creativity?*

The notion of value

Long considered in the context of the individual, *value* focuses on general beliefs and desirable behaviors, often in a hierarchical structure (see Feather, 2003; Schwartz, 1996). Scholars have attempted to define value in a general sense, ranging from clear descriptions such as Braithwaite and Scott’s (1991) definition that value is presumed to capture individual and social aspirations, to attempts to attach value to constructs that fit individual and social worldviews and historical ideologies (see Rohan, 2000). In its simplest form, *value* is how desirable something is, often stated in terms of its usefulness or exchangeability for something worth the cost (Collins, 2016).

Extrinsic and *Intrinsic* value have been debated throughout history (Rønnow-Rasmussen, 2015). Intrinsic value refers to value for its own sake (Bradley, 2013b). In other words, an object can have intrinsic value "derived from pleasure gained in the mere performance of the activity" (Reeve, 2001, p. 263). Pearson (2020), for example, noted that an object, like a painting, only has *inherent* (i.e., intrinsic) value if it is pleasurable, not if it serves an extrinsic function.

Harold (2005) debated extrinsic value from a moral philosopher’s perspective, concluding that intrinsic value provides a foundation upon which other values (i.e., extrinsic value) can be justified: "If the intrinsic value is no longer valued, or the connection is severed, then the extrinsic value loses its justification" (Harold, 2005, p. 89). Extrinsic value comes from outcomes such as a salary or award, according to Reeve (2001). A salary allows a person to address other motivations. Awards or accolades may help a person get promotions at work, which are extrinsically valuable. Extrinsic value is recursive, per Harold (2005). Harold’s definition says an award or accolade is not extrinsically valuable if it does not lead to promotions. Pearson (2020) reported extrinsic value as different from intrinsic value because it is not essential to creativity; it exists externally to the person or situation it affects.

Instrumental value is the potential to add value by enabling or aiding a process. Bradley (2013a) defined instrumental value as a tool’s useful-

ness. This can be a tool or the knowledge to complete a task. A fishing rod is instrumentally valuable if it can be used to catch fish to eat or sell (Pearson, 2020). Similarly, intangible knowledge (of *how* to use a fishing rod) helps users catch fish to eat or sell. Curry (2011) defined instrumental value as a means to another end (p. 52).

Feather (1995) elaborated on traditional semantic definitions and describes value as:

“abstract structures that involve the beliefs that people hold about desirable ways of behaving or about desirable end states. These beliefs transcend specific objects and situations, and they have a normative, or oughtness, quality about them. They have their source in basic human needs and in societal demands” (p. 1135).

Feather’s definition of value is most useful when viewed through the lens of creativity because both – value and creativity – are abstract, or latent, structures rooted in human needs, expectations, and behavior.

In the following sections, scoping review methods, procedure, and results are synthesized and discussed to provide an overview based on the included evidence of the value of creativity.

Method

Value constructs proposed

As already indicated, *value* has a range of meanings in the wider literature (e.g., Harold, 2005). The authors engaged in an iterative process of testing and discussing examples of stereotypical meanings of value against the creativity literature that resulted in a consistent three-factor typology of *value construct propositions* for creativity literature: (a) Extrinsic; (b) Instrumental, and (c) Intrinsic-Inherent. As a result of assessing the value concepts with synonyms, merging intrinsic and inherent makes sense considering the difficulties in distinguishing between the two due to the interchangeability in the literature and definitions. While some scholars (see Rønnow-Rasmussen, 2015) consider instrumental value to be extrinsic, there are pragmatic differences between the two, as shown in Table 1. Identifying a stable set of value construct propositions moves the discussion of value in creativity from an inductive to a deductive approach by creating an *a priori* protocol for the categorization of any discussion of creativity (see Table 2). The scoping review reported in this paper employed the value construct propositions identified in Table 2.

Scoping review procedure and results

Scoping reviews determine the scope or coverage of a body of literature on a given topic, characterized through the following: informed by an *a priori* protocol, include systematic and exhaustive searching, aim to be transparent and reproducible, include steps to reduce error and increase reliability (for example, using multiple reviewers), and ensure the data be extracted and presented structurally (Arksey & O’Malley, 2005; Munn et al., 2018). They *do not* normally include a critical appraisal or provide recommendations for policymakers (Lockwood et al., 2019). The present review followed best-practice, using the *Preferred Reporting Items for Systematic Reviews and Meta-Analyses Scoping Review* extension (PRISMA-ScR) guidelines (see Tricco et al., 2018).

Inclusion criteria for this review stipulated that articles must contain an explicit value statement, *value construct proposition* (extrinsic, instrumental, intrinsic-inherent), or interpretation of the value of creativity reported in the text. Published, peer-reviewed journal papers, magazine articles, and newspaper articles were included, provided they were published between 1980 and 2021, written in English, and available in full. Quantitative, qualitative, mixed-methods, political, and opinion articles were included to chart any growth in value construct propositions over time and to incorporate a variety of subject matters or reference groups. Gray literature was included as it sheds further light on broader notions of creativity beyond academia.

Table 1
Dictionary definitions of review concepts with adjectives and synonyms.

Concept	Dictionary Definition	Synonyms
Extrinsic (<i>adjective</i>)	Not an integral or essential part; originating or acting from outside; reasons, forces, or factors that exist outside the person or situation they affect* Not forming part of or belonging to a thing [^]	Adventitious, External, Foreign, Outside
Inherent (<i>adjective</i>)	Existing as an inseparable part; qualities of something that are necessary and natural parts of it* Involved in the constitution or essential character of something; belonging by nature or habit [^]	Constitutive, Essential, Innate, Intrinsic, Natural
Instrumental (<i>adjective</i>)	Serving as a means or influence; relating to, or characterized by an instrument or instruments; someone or something that is instrumental in a process or event helps to make it happen* Serving as a crucial means, agent, or tool; of, relating to, or being a grammatical case or form of expressing means or agency [^]	Active, Essential, Influential, Necessary, Practicality, Usefulness
Intrinsic (<i>adjective</i>)	Essential to the real nature of a thing; and situated within or peculiar to a part; it is valuable or interesting because of its basic nature or character, and not because of its connection with other things* Belonging to the essential nature or constitution of a thing [^]	Constitutive, Essential, Inherent, Innate, Integral, Natural

Note.

* Definitions from Collins (2016, 2020).

[^] Definitions from Merriam-Webster (2020).

Table 2
Literature review definitions of value construct propositions.

Value Construct Proposition	Review Definition
Extrinsic Value	Creativity as an act or outcome that results in rewards, revenue, or recognition that leads to further rewards, revenue or recognition.
Instrumental Value	Creativity as an act that facilitates value through being useful as a tool or the knowledge in which to create or complete tasks.
Intrinsic-Inherent Value	Creativity as an act or outcome is rewarding, motivating, or meaningful to the individual/s involved.

The review was confined to material from January 1980 to September 2021. The decision to review the literature from 1980 was based on the considerable advances in digital technology, population growth, and the advent of the global internet, making the review’s findings relevant for today. The search term used in this review was confined to “value AND creativity” only in titles to control the large volume of possible (and sometimes irrelevant) responses.

The following databases were searched: Business Source Complete (EBSCOhost) (*n* = 58), JSTOR (*n* = 6), PsychINFO (Ovid) (*n* = 32), ProQuest Central (*n* = 350), SAGE (*n* = 63) and Web of Science (*n* = 98) resulting in 607 items that initially met inclusion criteria. A separate Google Scholar advanced search conducted in September 2021 revealed an additional 142 items that initially met inclusion criteria. Between the databases and Google Scholar, there was considerable duplication. Removal of duplicates resulted in 608 eligible full-text articles for further screening. Additional screening removed items if they failed to propose a value of creativity, if they were unavailable in English, and if they were book reviews or theses. This final screening stage excluded a further 493 full-text articles, which did not specifically propose what value could be assigned to creativity, making it difficult to ascertain an outcome and include it in the synthesis. A total of 86 full-text articles are included in this scoping review for synthesis. The full screening process is described in the PRISMA-ScR flowchart (Fig. 1). The 86 articles included in the review are tabulated in supplementary materials (Table 1).

The value of creativity was identified in each eligible article for synthesis (*N* = 86) and assigned one or more value construct propositions. To check the consistency of value construct proposition categorization, a second reviewer repeated the process for a subset of eligible items (*n* = 35; 40%). After discrepancies were discussed and resolved, Cohen’s Kappa (κ) (see Cohen, 1960; Landis & Koch, 1977) was calculated. There was a near-perfect inter-rater agreement, κ = 0.993, suggesting a high level of consistency in the identification of value construct propositions in the items included in this review.

Descriptive results

The items included in this review (*N* = 86) comprised a range of peer-reviewed publications (for instance, book chapters, journal papers:

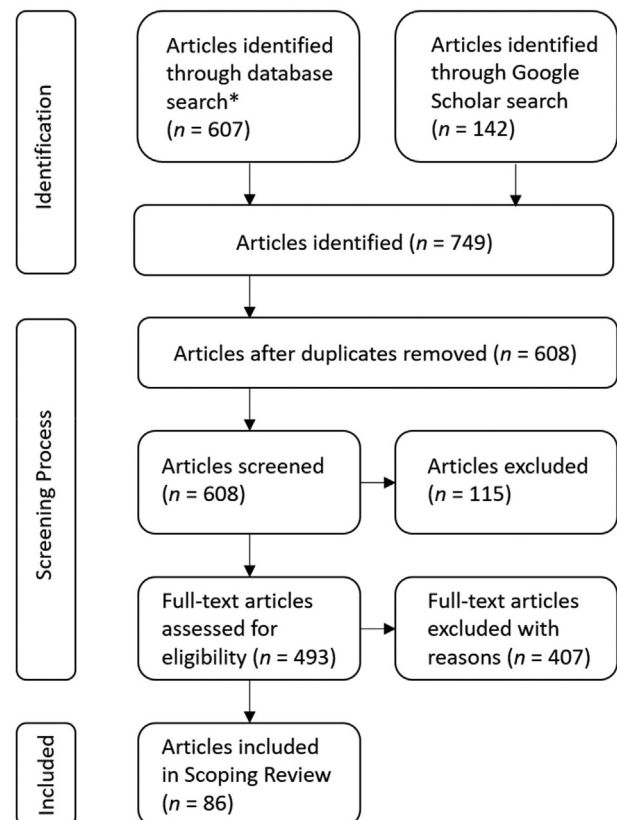


Fig. 1. Scoping review flow chart
Note. *EBSCOhost, JSTOR, PsychINFO, ProQuest Central, SAGE, Web of Science.

45.34%) and newspaper articles (print and digital: 37.20%), all of which have increased steadily since the year 2000. Items included address both empirical studies, and opinion pieces, while approximately half (*n* = 43) originated from North America, with those remaining from

Africa ($n = 2$), Asia ($n = 7$), Europe ($n = 26$), and Oceania ($n = 8$). Subject matter areas ranged from the Arts ($n = 9$), Business and Workforce ($n = 38$), Economy ($n = 4$), Education ($n = 4$), Philosophy ($n = 4$), and Society ($n = 10$). See Table 2 and Fig. 1 for a summary in supplementary materials. Finally, all three value construct propositions were represented across the items reviewed and the subject matter areas, as presented in Figure 2 in supplementary materials.

The value of creativity: results by value construct proposition with synthesized articles

Extrinsic value of creativity

The extrinsic value of creativity in the articles manifested as processes or products that increased the financial outcomes for the internal and external stakeholders involved. This value can be categorized into two overarching themes. First, several authors proposed creativity as valuable in the form of macro-economic worth, primarily through the lens of *arts and culture* as part of tertiary industries (Foster, 2009; Rafalowicz, 2009; Strength of the arts has tangible value... 2002; UK Government, 2005). Secondly, many authors (Miles, 1983; Lewis-Huntstiger, 2017; Zeng et al., 2010) reported on the economic benefit of tapping into problem-solving to produce novel outcomes with unexpected economic benefits, commonly described as a reduction in downtime costs, effective product, or service creation.

The extrinsic value derived from tourists attracted to museums, historical repositories, and cultural marketplaces is less overtly beneficial to a country’s gross domestic product than other primary industries (for example, commodity exports). Rumbold (2010) wrote about Shakespeare institutions in the United Kingdom, and reported that they represent cultural economic value for locals and tourists. Pearson (2020) questioned the value of malevolent creativity, and noted that museums, such as the London Dungeon, abound with macabre and malevolent creations that attract many tourists, contribute to the economy. Cultural capital is often demonstrated through creative cities that provide space and attach an identity as *culturally creative*, with some places leaning into their historical cultures that attract tourists to experience culture and creativity through designers, performing artists, and community spaces (Dabinett, 2004; Strength of the arts has tangible value..., 2002). For example, Codignola (2016) wrote that Milan must mark itself as a creative stronghold of cultural capital, particularly of their renowned fashion designers. Likewise, Nanjira (2017) shared that Kenya’s creativity was stifled for a time but had blossomed into a marketplace that offers its take on all matters of products and services, including music and fashion. Kenya’s new embrace of its creative culture is attractive to tourists who wish to experience authentic Kenyan culture and not just “a performance for an external gaze with the obligatory lion and elephant in the background” (Nanjira, 2017, p. 3).

While creativity is important to the economy, creativity and the arts are difficult to quantify (Foster, 2009). However, metrics attempting to quantify the revenue-based value of creativity are emerging, such as the ‘Extra Share of Voice’ (ESOV), calculated using points through the IPA-databank. This UK-based advertising consultancy provides other services, research, and insights. Field (2011) reported that the more creative marketing campaigns generated more points per ESOV point, identifying creativity as a critical driver of effectiveness in advertising and marketing. Another article reported on measuring the bottom-line of creativity, utilizing the Award Creativity Score from the Cannes Lions Awards for Advertising (Brodherson et al., 2017), proposing a measurable link between creativity and businesses. Several authors reported that investing in arts and culture through grants, spaces, or welfare schemes (Brownstein, 2015; Naughton, 2017; Street, 2008) provided an economic return that supports artists in creating products or performances they are remunerated for, flowing on in unexpected extrinsic returns. For example, a graphical redesign of a council’s tangible tax bill

led to more payments being paid on time, resulting in fewer reminders and dissatisfied customers (Dowdy, 2006).

In the business domain, the ability to engage in creative problem-solving resulted in less downtime, using fewer resources, and enhanced staff performance (Fernald, 1987; Lewis-Huntsinger, 2017; Miles, 1983), contributing an overall improvement to the bottom-line (Cookson, 1997). Novel products and services increased business by understanding and capitalizing on the growing consumer market. During the 2000s, the restaurant industry found that being creative with food and menus led to both an increase in customers and returning patronage (Parseghian, 2002; Perkins, 2005). The global financial crisis of 2008 forced many individuals and businesses to re-invent their products and services, not least in the financial services industry. Banks turned to incremental innovation by adopting new approaches for trust-building with customers, such as being ‘unbank like’ through the provision of free credit score reports or ‘pay-it-forward’ kindness campaigns to support charities or local individuals (Newman, 2010).

Since intrinsic-inherent and extrinsic values often coincide, it can be challenging to separate the two. Extrinsic value is derived from consumers’ perceptions of a product. Im et al. (2015) found that the consumers’ perceived ‘coolness’ of a product makes it sell. The research identified that for consumers to value a new product, it must be *meaningful*, but if novel, it must be deemed *cool*. Adding value through increasing the meaningfulness and effectiveness of a product is enhanced by involving internal stakeholders in the creative problem-solving process, as exemplified by Zeng and colleagues’ (2010) co-design process in ergonomics. Designing ergonomically suitable hardware and software that includes engaging consumers in design collaboration is a creative approach to design, providing a holistic product that is utilitarian and pleasurable for the product-user, resulting in effective products to market. The positive economic outcomes from this have continued into the 2010s, with other researchers (Thomas & Canning, 2015) examining industrial design entrepreneurs and the benefits of engaging consumers as co-designers in their product-service models. The literature found that governments and organizations recognize the extrinsic value in recruiting creative people as they produce more creative outcomes, resulting in revenue (Samuel & Kanji, 2020; Unlocking the Value of Creative Individuals in UK Innovation Projects..., 2019). Moving forward, researchers have identified economic value in growing sectors of lifestyle and health care. Gallistl (2020) noted that involving older people in creative pursuits in later life can create economic value through the individuals displaying and selling their creative products.

The extrinsic value of creativity reveals a recursive loop that continuously circles back to the value in creating a product or service that leads to revenue and allows various stakeholders access to intrinsic-inherent and instrumental value constructs or other extrinsic rewards. These articles reveal that investing in creativity leads to extrinsic outcomes, often resulting in economic benefits, thus, a return on investment.

Instrumental value of creativity

The instrumental value of creativity proposed is presented as processes that facilitate desired outcomes for the internal and external stakeholders involved. Most of the articles included in the entire review propose the instrumental value of creativity (71%), with the greater part of these articles offering the instrumental value of creativity as a cognitive or social process that, if tapped into, can be used as a tool to solve problems or create new products or services.

Much of the instrumental value of creativity exists in the business and workplace literature reviewed. Through the revision of the articles, it is evident that several authors find creativity valuable for promoting psychosocially safe workplaces, with some reporting an added benefit of increasing innovation. Fernald (1987) reviewed the literature on creativity in workplaces, finding that workplaces that facilitate creativity by improving management styles, combined with entire workplace creativity training, can change individual beliefs or abilities. Belief changes

contribute to business success by keeping up with or surpassing the competition and avoiding stagnation. After Fernald’s article, there was little on the instrumental value of creativity in workplaces until the mid-2000s, when the instrumental value of creativity in making safer workplaces once again appeared. Robinson (2008) discussed cultivating safe workplaces with meetings and workshops to promote appropriate risk-taking for idea generation, thereby increasing innovation by encouraging all employees to participate, irrespective of their rank and role (Bundale, 2009).

Poulton (2006, p. 2) added to this thread by sharing that in their workplace people were told to “check your egos at the door because the only hero in this room is the idea”. Hillier (2008) reported on certified management accountants performing creativity in practice, although, some of those found in accounting are not suitable; specifically, nefarious accounting and investments such as those found in the ‘Our Made Canada’ credit case or the Enron debacle. However, creativity is instrumental to innovation and good leadership, often benefiting every function of an organization. Hillier (2008, p. 27) argued that as accountants, they “must learn how to unlock creativity to drive value, ethically.” In this vein, Valentine et al. (2011) reported that corporate ethical values coupled with group creativity provide positive workplaces with increased job satisfaction and decreased turnover intention.

The influx of digitalization and globalization has led to new demands for understanding the world and preparing for the future of work, which is evident in the education literature. The premise of these articles has grown with increasing educational demands over time. Most articles reported that teaching and facilitating individuals from primary school to higher education to think creatively provides them with an instrument for their cognitive toolboxes. Divergent thinking helps to solve problems and may improve communication (Massetti, 1996; Wells, 1999). Hannon et al. (2004) conducted a qualitative study on a new university course called *Critical Thinking* that encouraged business school students to engage in individual and team experiential tasks to develop creative thinking. Their study found that students felt safe making mistakes and learning from one another. These actions all have the potential utility to improve individual and community well-being.

Sandri (2013) provided a critical perspective on why creativity is left out of higher education, noting that education is a formally taught process. Some ideas are intrinsic to the tasks at hand, however, Sandri (2013) further asserted that type of approach fails to capture the full potential of creativity, which can be used on various topics, in this case, sustainability. Research by Roelofs and Nieuwehnhuis (2016) reported that the usefulness of new concepts is the critical element to success, implying that creativity has the power to bring in the changes that will result in future learning opportunities and methods. Two articles from Asia identified the instrumental value of creativity in education as crucial for preparing students for the uncertain future of work (Yahya, 2017). Even in domains well-placed for the future of work, educators are accepting that along with technical skills, there is a need to focus on soft-skills [sic] and develop life skills and strategies to deal with daily life to keep in step with society (Chandandee, 2018).

As is evidenced by the vast cross-over of articles that identified instrumental value with one or both other value constructs proposed, it is challenging to separate instrumental value from the extrinsic or intrinsic-inherent value in creativity. For example, Naughton (2017) reported that creativity as a vocation produces useful outcomes, with the creative process allowing the artist to enact their thoughts and ideas. Naughton’s sentiment is akin to Haslam’s (2013) and Nanjira’s (2017) findings that creativity can function as community or social identity but also be a valuable instrument for attracting customers, retaining workers, and stimulating business (Martin & Florida, 2009; Okpara, 2007; Rafalowicz, 2009; UK Government, 2005). There is instrumental value in creative tasks that lead to critical thinking as a process and when tasked with achieving a successful design or problem solution (Braga, 2016; Wharton, 2012). Indeed, some creative outputs are utilitarian tools or products that can be sold or be used to reach

the desired outcome (Fig, 1985; Pearson, 2020), yet Im et al. (2015) suggested that the success of the outcome is due to the creativity of the designers and marketers as instruments in creating value.

While the same thinking process occurs, problem-solving and product creation produce different outcomes. From this standpoint, the value of creativity is instrumental, with the instrument being utilized as a cognitive tool to solve problems – both practical and social – or as a tool to create products and services. Educators and employers can foster and facilitate creative activity in their classrooms or workplaces to help people and teams feel safe when engaging in creative problem-solving and critical thinking while simultaneously feeling safe to share ideas. Including this intangible instrument can often lead to positive social outcomes and innovation.

Intrinsic-Inherent value of creativity

The articles examined in the review claim the intrinsic-inherent value of creativity in four areas: positive workplace environments, enhancement of skills, social and cultural identity, and individual meaning and motivation.

Most articles that identify the intrinsic-inherent value of creativity exemplified it as positive workplace outcomes and predominantly emanated from the business and workforce subject matter. This value concept became apparent in the 1990s with a focus on how creativity can contribute to employees feeling happy and thriving, with an increase in employee workplace commitment (Livingstone et al., 1997; Paper, 1997; Petzinger, 1999). These findings continued with the scope extending to other psychosocial aspects, including employees feeling motivated to complete their work in safe places and teams where it is acceptable to promote ideas, follow self-direction and curiosity, and fail forward by learning from mistakes (Chiu et al., 2018; Paper, 1997; Poulton, 2006; Rice, 2005). The intrinsic-inherent value of safe psychosocial workplaces is similar to the instrumental value proposed above. However, the intrinsic-inherent value is derived from utilizing knowledge and workplace policies to feel safe and creative.

One early article reported the intrinsic-inherent value of creativity for students finding that it is related to intellectual stimulation (Sharma, 1981). Articles from the late 1990s highlight the value of creativity in education as intrinsically-inherently rewarding to school children by allowing curiosity and exploration and increasing student potential (Dowling, 2001; Wells, 1999). The past two decades have seen an influx of mandatory creative education in primary schools, with some apparent incongruence between policymakers and practical applications. For example, Morris (2008) reported on schools in the UK providing a standard five hours per week for children to experience ‘high culture’, which nods to the value of creativity in education. However, funding restricted it to a few hours a week and therefore fails to present the value of creativity as a common thread throughout the educative curricula.

The concept of creativity in education has shifted over the last decade, with more primary and high school education incorporating creativity into curricula. Middleton and Curwood (2020) investigated teachers’ perceptions of the value of creative learning in a new English course syllabus in New South Wales, Australia. The authors acknowledged the pressure to teach to the high-stakes former demands of the high school certification, leaving little room for fostering creativity, despite teachers’ belief in its value. Nevertheless, this study revealed that teachers were optimistic about the transition to incorporating creativity into the new syllabus.

Higher education also features in this value construct proposition. Some authors noted that academic pursuits stifle creativity through the logically-linear methods instilled, noting the value of being able to think abstractly, imaginatively, and symbolically to return to one’s once creative roots (Goeltzenleuchter et al., 2019; Sandri, 2013). Perhaps not currently embraced by all higher education institutions, more degree programs include creativity as part of their education.

Green et al. (2016) conducted a qualitative study investigating feedback from educators of medical students where students enrolled in one class of their medical degrees that focused on creativity and divergent thinking such as creative writing, drawing, comic creation, films, or performance to allow them to experience an education that was not strictly evidence- and exam-based. The educators reported that the students benefited from these classes by feeling less pressure to perform, the “opportunity to be bad at something” (Green et al., 2016, p. 479), and facilitated their concepts and approaches to problem-solving and creativity as practitioners.

Social and cultural identity was presented as an intrinsic-inherent value of creativity in the social and economic subject matter areas. Authors reported on the intrinsic rewards for individuals and communities by recapturing their cultural value, particularly regarding geographical location and reputations (see Codignola, 2016; Foster, 2009; Nanjira, 2017; Rumbold, 2010). Rafalowicz (2009) found that investing in creativity allowed artists to express themselves, which is intrinsically-inherently rewarding, and influenced their communities by sharing their stories. Gallistl (2020) considered the global challenge of suitably engaging the aging populations as having benefits beyond health and well-being. Using a qualitative approach, Gallistl (2020) reported that fostering creativity in older people is personally beneficial as they are rewarded through the involvement and appreciation of their creative pursuits. Additionally, the value extends to the community by providing opportunities for others to view the creations or performances and appreciate the creativity for themselves.

Several articles were found to have individual perceptions of the value of creativity. The intrinsic-inherent value of creativity is essential to the individual who desires to perform a creative act and is an end to itself (Kasof et al., 2007). The findings from the Kasof et al. (2007) study align with much of the art subject matter that reports the creative act as being valuable to the creator, with the literature included acknowledging a dual intrinsic-inherent value that extends to the observer or consumer (Anonymous, 2008; Smith, 1998; Street, 2008; Naughton, 2017; Negus & Pickering, 2004). Philosophically, the research reveals that while creative acts can be intrinsically-inherently fulfilling for the creator by enhancing self-hood, these acts can produce outputs that inspire others (Negus and Pickering, 2004) and foster introspection that shifts concepts of material gains to aesthetics and humanist gains (Ambrose, 2006). Pearson (2020) reported that the intrinsic-inherent value of malevolent creativity is in the eye of the creator. Malevolently creative acts provide individuals and society with intrinsic-inherent value through the desire to acquire knowledge and learn from the past by stimulating inquiry “not just into the cases of the event and what could be done to prevent its reoccurrence, but also inquiry in a more general sense” (Pearson, 2020, p. 17).

The intrinsic-inherent value of creativity presented appears to manifest as valuable to the individual, with a shared perception of the value of creativity within localized communities such as workplaces or broader communities such as societies. Creativity, if fostered, provides individual meaning, motivation, and satisfaction, as well as a method to create and contribute to external phenomena such as making others feel, think, and learn.

Discussion

This review aimed to find a consensus description of the value of creativity, and the proposed value constructs were utilized to categorize the different types of value. Within the various subject matters, the value constructs feature, suggesting that they are universally applicable irrespective of the discipline proposing the value. Despite their universality, the value constructs identified in this review remain different but rarely exist in isolation, with evidence of a cross-over of values in the literature examined. Considering the value constructs proposed, it is plausible that the overlap occurs due to the creative process. For example, the intrinsic-inherent value of engaging in creativity leads to an

instrumental method for problem-solving, which can result in extrinsic value through the creation of a novel solution. In other words, individuals can enjoy the creative process, increase their competency in enacting creativity, and occasionally obtain a tangible or profitable outcome. The overlap of value constructs exists in many articles; however, when isolated from one another, the differences between extrinsic, instrumental, and intrinsic-inherent value are discernible – as shown in the high Kappa inter-rater score. For example, respectively, the extrinsic value of creativity alone is financially or tangibly rewarding; the instrumental value of creativity is a means to either extrinsic or intrinsic-inherent ends; the intrinsic-inherent value of creativity is the meaning derived from the creative activity or output. Whether it be a process or product, every outcome of creativity falls under one or more of the value-construct propositions. These findings lead to the conclusion of multifaceted elements of creativity, with an overarching result that the primary value construct attributed to creativity is its instrumentality.

A recent article from the education literature provides a context for applying the findings derived from this review. Current discussions of creativity in applied settings, such as the shifting focus on school curricula incorporating creativity, shows it is possible to note the three overlapping value constructs. For example, Patston et al. (2021) analyzed school curricula descriptions of creativity, providing evidence of a disparity of definitions, imperatives, and *how* educators can include creativity-supporting practices in their areas of expertise. The essence of their findings is that teaching creativity can tap into students’ intrinsic motivation, should result in a tangible (extrinsic) outcome for the students, and provides detail on educating students on the value of the ideation process – instrumental to the extrinsic outcome. The value of the creative process is like any other cognitive tool – it acts as an instrument to enact a task. Instrumental value is the foundation for all other values of creativity, augmenting and enabling the extrinsic and intrinsic-inherent value of engaging in creativity.

Adhering to the PRISMA-ScR guidelines, the current review findings are based exclusively on the articles included in the synthesis and within the search terms presented. Challenges arose through ambiguity; with one of the articles included in the synthesis (see Goeltzenleuchter et al., 2019) only mentioning the word ‘value’ once - in the title. There are works available that provide updates and insights by experts into all elements of creativity, including the value of creativity, for example, the encyclopedia reference works edited by Runco and Pritzker (1999; 2011, 2020). Further examination of the broader literature reveals that scholars have previously identified some of the value constructs proposed; however, their articles did not meet the search criteria for the present review. For example, Zeng et al. (2012) found that creativity requires both instrumental and hedonistic aspects in website development through divergent and convergent thinking. In a similar digital theme, Choi and Behm-Morawitz (2020) attempted to understand young people’s motivation and creativity through social media production, finding intrinsic motivation correlated more with creativity due to internal processing; however, extrinsic motivation increased young people’s creativity.

Earlier, Rubenson and Runco (1992) modelled intrinsic and extrinsic notions with an economic paradigm of creativity, relating it to *human capital*. More broadly, Cropley and Oppert (2020) argued that while creativity is a form of human capital and serves as a vital input to problem-solving processes providing economic value, it is more than a commodity and, therefore, more than an extrinsic outcome. Finally, further supporting the findings from this review, Gaut (2018) authored work on the value of creativity, arguing points of intrinsic and conditional value, although this work lacks the rigor obtained in the present scoping review. Nevertheless, Gaut concluded by acknowledging the *instrumental* value of creativity as an exercise for producing valuable things (2018, p. 137). Considering these ideas in conjunction with this review’s findings, expansions on this research could yield further results if keywords, synonyms, and value derivatives are included, such as ‘valuable’ in titles, and only include peer-reviewed works.

Further research is required to better understand the value of creativity, specifically in the future of work paradigm. Many firms that enact systems with creative processes to produce outcomes create intellectual property, protecting their processes and outcomes through limitations on publicly available information. The authors recognize this review limitation and suggest that the deviation between what is researched and studied and what is claimed to be required in the future of work needs to be more thoroughly investigated. While not specifically targeted in this review, the value of creativity is primarily addressed in articles under the subject matter area of business and workforce. The virtuous cycle of creativity, psychosocial safety, and ancillary outcomes at work requires further investigation. While some literature supports the notion of creativity being valuable to education, both policymakers and educators need support and opportunities to learn and implement the instrumental and intrinsic-inherent value creativity can bring to the classroom to prepare students for the future of work (Middleton & Curwood, 2020; Patston et al., 2021).

Finally, encouraging further research, specific extensions on this review could include literature from languages other than English and investigate the concept experienced further afield from western cultured demographics and locations. Future research should apply the value construct propositions to old or new theories of creativity.

Through this review, the value of creativity is empirically identified as an instrument to reach other valuable outcomes, thus formulating a platform for practitioners, policymakers, and stakeholders as a crucial first step in supporting their arguments for investing in creativity. Clear, cohesive interdisciplinary comprehension of the value that creativity brings to various facets of life is required for every stakeholder, not least in the future of work. Due to the ubiquity of instrumental value in the literature reviewed, it is proposed that the value of creativity is predominantly instrumental.

Data availability statement

Due to this being a review, all the articles are either cited and referenced or noted in the supplementary table material. The articles included in the synthesis and the assessments that support the findings of this study are available in the supplementary material of this article.

Declaration of Competing Interests

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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Supplementary materials

Supplementary material associated with this article can be found, in the online version, at doi:10.1016/j.yjoc.2023.100059.

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