Impact Factor (QJIF): 8.38 E-ISSN: 2583-7206, P-ISSN: 3049-2432

International Journal of All Subject Research

Received: 02/December/2025 **IJASR:** 2026; 5(1):26-33 **Accepted:** 16/January/2026

Creativity across Paradigms: Traits, Socio-Cultural Theories and Their Complementarity

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Abstract

Creativity remains a contested construct in psychology, with trait-based approaches emphasizing measurable individual differences and socio-cultural theories situating creativity in cultural and historical contexts. This duality reflects psychology's broader struggle to reconcile the individual with the collective, the measurable with the interpretive. This paper reviews and compares trait and socio-cultural traditions, examining their strengths, limitations, and points of convergence, and advances a theoretical synthesis that positions creativity as both dispositional and contextual. A narrative review approach was employed, focusing on seminal contributions to trait psychology (e.g., Guilford, Torrance, Feist) and socio-cultural perspectives (e.g., Vygotsky, Csikszentmihalyi, Glăveanu), alongside recent meta-analyses and cross-cultural studies. The review emphasizes theoretical relevance rather than exhaustive coverage. Trait research demonstrates consistent links between creativity, divergent thinking, openness, intelligence, and intrinsic motivation, offering methodological rigor but risking reductionism. Socio-cultural models highlight cultural validation, distributed creativity, and cross-cultural variation, expanding scope but facing challenges of replicability and individual agency. Comparative analysis shows their complementarity: traits provide the potential for novelty, while socio-cultural systems shape recognition and transmission.

Keywords: Creativity, Trait Theory, Socio-Cultural Theory, Individual Differences, Cultural Context.

1. Introduction

Creativity has long occupied a paradoxical position within psychology and the social sciences. It is simultaneously celebrated as a cornerstone of human progress and contested as an elusive construct that resists precise definition (Runco & Jaeger, 2012). From the arts and sciences to education and organizational innovation, creativity is often described as the driving force of cultural and technological advancement (Sawyer, 2012). Yet, despite its prominence, scholarly consensus on how creativity should be conceptualized, measured, and cultivated remains fragmented. Central to this fragmentation is the divide between traits-based theories, which emphasize individual differences in personality and cognition, and socio-cultural theories, which locate creativity within collective practices, cultural systems, and historical traditions.

The traits tradition has its origins in late nineteenth and early twentieth-century differential psychology, when Francis Galton (1869) pioneered the measurement of hereditary genius and Charles Spearman (1904) introduced psychometric approaches to human ability. Creativity research gained traction with J. P. Guilford's (1950) presidential address to the American Psychological Association, which called for systematic scientific inquiry into creativity as a neglected domain of psychology. Guilford's emphasis on divergent thinking as the cognitive basis of creativity shaped a generation of empirical work, most prominently the Torrance Tests of Creative Thinking (Torrance, 1966). These psychometric measures provided a foundation for later research linking creativity to stable personality traits, particularly the Big Five factor of Openness to Experience, as well as to intelligence, motivation, and other dispositional characteristics (Feist, 1998; Silvia *et al*., 2009).

In contrast, socio-cultural theories of creativity emerge from the Vygotskian tradition, emphasizing the social genesis of higher mental functions and the role of cultural tools in human development (Vygotsky, 1994). Rather than treating creativity as a solitary trait, socio-cultural perspectives see it as a distributed and dialogical process: ideas are shaped, validated, and transmitted through social interactions, institutions, and symbolic traditions. Mihaly Csikszentmihalyi's (1988, 1999) systems model advanced this view by conceptualizing creativity as an interaction among the individual, the domain (symbolic knowledge structures), and the field (gatekeepers and evaluators). More recently, theorists such as Vlad Glăveanu (2014) have deepened the socio-cultural paradigm, emphasizing participatory, relational, and communal aspects of creativity. Evolutionary approaches

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extend this further by likening creative ideas to cultural "mutations" subject to variation, selection, and retention (Simonton, 1999, 2010).

The coexistence of these traditions reflects deeper epistemological and ontological tensions in psychology. Traits-based theories assume that creativity is fundamentally an individual attribute, measurable through psychometric tools and explainable in terms of relatively stable personality and cognitive dispositions. Socio-cultural theories, by contrast, posit that creativity is an emergent property of cultural systems, irreducible to the psychology of isolated individuals. These divergent assumptions not only shape research methodologies and statistical analysis of individual differences versus qualitative case studies of cultural practices, but also lead to different criteria for what counts as creativity. In trait theory, creativity is defined by novelty and usefulness as expressed by an individual's capacity; in socio-cultural theory, it is defined by communal recognition, historical situatedness, and cultural transmission (Glăveanu, 2010).

This divide also has practical implications. Educational interventions inspired by trait theory often focus on enhancing divergent thinking, openness, and intrinsic motivation in students (Runco, 2014). By contrast, socio-cultural approaches emphasize collaborative learning environments, dialogical engagement, and cultivating creative communities (Sawyer, 2017). Organizational studies similarly diverge: trait approaches examine personality predictors of workplace creativity, while socio-cultural approaches examine organizational culture, leadership practices, and team dynamics (Paulus & Nijstad, 2019). Understanding these traditions is thus not merely a theoretical exercise but also essential for shaping how creativity is fostered in schools, workplaces, and societies.

The present review aims to critically examine these two dominant traditions traits theories and socio-cultural theories of creativity by situating them within their historical contexts, outlining their empirical contributions, and analysing their respective strengths and limitations. In taking this approach, the review does not attempt to resolve the divide between trait and socio-cultural theories but rather to map the terrain of their contributions and critiques. By illuminating both the empirical rigor of trait-based research and the contextual depth of socio-cultural perspectives, the review underscores the complexity of creativity as a construct that resists reduction to any single paradigm. Creativity, as the literature demonstrates, is at once psychological and cultural, individual and collective an ambiguity that explains both its centrality and its contested nature within the human sciences.

2. Method

This article employs a narrative review approach to examine two major paradigms in creativity research: the traits-based tradition and the socio-cultural perspective. A narrative review was chosen because the objective is not to quantify findings across studies but to trace conceptual developments, highlight influential contributions, and evaluate theoretical strengths and limitations. Sources were identified through targeted searches of databases such as PsycINFO, Scopus, and Google Scholar, using keywords including creativity, trait theory, personality, socio-cultural, Vygotsky, Csikszentmihalyi, and distributed creativity. Seminal works by Guilford, Torrance, Barron, Csikszentmihalyi, Vygotsky, and Glăveanu were prioritized, along with recent meta-analyses and reviews (e.g., Feist, 1998; Runco & Acar, 2012; Sawyer, 2012). Selection was guided by theoretical relevance and influence within the field, rather than exhaustive coverage of all creativity research traditions. The review is therefore integrative and conceptual, aimed at clarifying the complementarity of trait and socio-cultural approaches rather than producing a systematic synthesis of all available evidence.

3. Results

3.1. Traits Theories of Creativity

The scientific study of creativity in psychology began in earnest through the lens of traits. This orientation was neither accidental nor peripheral: it grew directly from the rise of psychometrics and differential psychology, which sought to quantify human differences and isolate stable psychological properties. Long before "creativity" became a popular research construct, Francis Galton (1869) had argued in *Hereditary Genius* that extraordinary achievement, whether in art, science, or politics, was rooted in heritable endowment. For Galton, creative genius was a matter of natural variation distributed across the population, subject to the same statistical laws as height or weight. His early forays into measuring mental imagery, reaction times, and talent foreshadowed the later conviction that creativity was an individual trait open to empirical study.

The psychometric revolution of the early twentieth century solidified this conviction. Charles Spearman's (1904) development of factor analysis and the introduction of the construct of general intelligence (*g*) transformed the study of individual differences. While Spearman himself did not address creativity, his statistical innovations established the methodological infrastructure on which later creativity tests would be built. The assumption that psychological phenomena could be decomposed into measurable factors became foundational, shaping how creativity would be conceptualized for decades: as something latent in individuals, identifiable through cognitive or personality profiles, and comparable across populations.

A decisive moment came when J. P. Guilford (1950), in his landmark presidential address to the American Psychological Association, chastised psychology for neglecting creativity. He argued that psychology had devoted immense energy to studying intelligence and memory but had left the study of imaginative processes largely untouched. Guilford's contribution was not only rhetorical but conceptual: he proposed divergent thinking as the cognitive core of creativity. Unlike convergent thinking, which seeks a single correct solution, divergent thinking generates multiple possibilities for open-ended problems. This distinction, embedded in Guilford's broader Structure of Intellect model, provided researchers with a concrete, testable construct. It inaugurated a generation of empirical studies where creativity was equated with fluency, flexibility, originality, and elaboration: the measurable outputs of divergent thinking tasks (Runco & Acar, 2012).

Building on Guilford, E. Paul Torrance (1966) operationalized these ideas in the Torrance Tests of Creative Thinking (TTCT), which quickly became the most widely used creativity assessment worldwide. The TTCT's figural and verbal tasks drawing unusual pictures from basic shapes, generating multiple uses for common objects were designed to capture creative potential across age groups. Decades of research followed, establishing large normative databases and making the TTCT the de facto standard for identifying creative talent in schools (Kim, 2006). Although widely

criticized for its limited ecological validity and weak predictive power for long-term achievement, the TTCT embodied the psychometric ambition of the trait tradition: creativity could be tested, scored, and compared, much like intelligence or personality.

The integration of creativity with personality psychology marked the next major development. Frank Barron and Donald MacKinnon, working in the 1950s and 1960s at the Institute of Personality Assessment and Research in Berkeley, conducted extensive studies of writers, architects, and scientists, concluding that creative individuals tended to share traits such as independence, openness to inner experience, tolerance for ambiguity, and resistance to conformity (Barron & Harrington, 1981). This qualitative insight later found quantitative confirmation in the Big Five model of personality. Across numerous studies, Openness to Experience emerged as the single most consistent predictor of creativity, with correlations ranging from moderate to strong (Feist, 1998; McCrae, 1987). Openness, which encompasses imagination, aesthetic sensitivity, curiosity, and a preference for novelty, aligns closely with the qualities long associated with creative thinkers. Subsequent work refined these findings: the aesthetic and fantasy facets of Openness are particularly predictive of artistic creativity, while the ideas and intellect facets predict scientific and technical innovation (Silvia *et al*., 2009).

Other Big Five traits show weaker and more domain-dependent associations. Extraversion is linked to creative performance in collaborative and expressive domains such as acting or public speaking (King *et al*., 1996). Neuroticism, paradoxically, sometimes correlates with artistic creativity, reflecting the emotional intensity and sensitivity of many artists (Martindale, 1999). Conscientiousness, by contrast, often shows a negative association with creativity, though curvilinear effects are sometimes observed too much order suppresses innovation, but some structure can enable sustained productivity (Feist, 1999). These findings highlight the richness of trait research: it not only identifies creativity's primary personality correlate but also nuances the relationship between personality and domain-specific expression.

The relationship between creativity and intelligence has been another focal point. Early studies suggested that while intelligence and creativity were positively correlated, the relationship weakened at higher IQ levels. This gave rise to the threshold hypothesis, which proposed that a certain level of intelligence often cited as an IQ of 120 was necessary for creativity, but beyond that, additional intelligence offered little advantage (Barron, 1969). Recent research complicates this view. Using advanced statistical techniques, Jauk, Benedek, Dunst, and Neubauer (2013) found empirical support for a breakpoint in the intelligence–creativity relationship, but they emphasized that the threshold varied depending on the domain and the measures used. Scientific creativity appears to require higher levels of intelligence than artistic creativity, which relies more heavily on personality and motivational traits (Silvia, 2015). This evidence underscores the multidimensional nature of creativity: intelligence provides cognitive resources, but personality and motivation direct those resources toward novelty.

Motivational and affective traits have further enriched the trait framework. Teresa Amabile's (1983, 1996) componential model of creativity argued that intrinsic motivation driven by interest, enjoyment, or personal challenge is a critical factor enabling creative performance. Her experimental studies showed that when individuals are motivated by external rewards or evaluation pressure, creative output declines. Conversely, intrinsic engagement enhances originality and problem solving. Subsequent research confirmed this pattern across educational and organizational contexts, making motivation a central component of trait theories (Amabile, 1996). Alongside motivation, affective traits such as tolerance for ambiguity, risk-taking propensity, and resilience have been shown to predict creativity, particularly in challenging or uncertain environments (Zenasni, Besançon, & Lubart, 2008). These findings extend trait psychology beyond static personality to encompass dynamic dispositions that shape the conditions under which creativity flourishes.

Meta-analyses have consolidated these results. Feist's (1998) meta-analysis, encompassing studies of scientific and artistic creativity, confirmed that Openness to Experience, independence, and non-conformity consistently distinguish creative individuals. Later reviews reaffirmed Openness as the strongest trait predictor, while also emphasizing the role of divergent thinking and intrinsic motivation (Puryear, Kettler, & Rinn, 2017). Runco and Acar (2012) found that divergent thinking tests, despite their limitations, reliably correlate with real-world creative achievement. Kim (2006), in a critical review of the TTCT, acknowledged the test's shortcomings but also highlighted its enduring value as a research tool. Together, these meta-analyses provide strong empirical grounding for the trait tradition, demonstrating that creativity is systematically related to identifiable psychological profiles.

Yet the trait tradition has never been free from criticism. One recurring concern is reductionism: by operationalizing creativity as divergent thinking scores or personality correlations, the tradition risks neglecting the broader cultural and contextual dimensions of creativity. As Plucker and Renzulli (1999) argued, a student who generates many original ideas in a test setting may not necessarily produce culturally valued innovations. This problem points to a gap between *creative potential* as measured by psychometrics and *creative achievement* as recognized in society. Another critique concerns ecological validity. Laboratory tests may capture idea fluency, but they often fail to predict long-term creative accomplishment or to account for the role of collaboration, culture, and history (Baer, 2011). Finally, the trait tradition faces cultural limitations. Most studies have been conducted in Western contexts, assuming universality in constructs like Openness to Experience. Cross-cultural research shows that these constructs may not have the same meaning or predictive power in non-Western societies (Lubart, 2010).

These criticisms reveal the limitations of treating creativity purely as a trait. They also foreshadowed the emergence of socio-cultural theories, which redirect attention to the collective and contextual dimensions of creativity. Still, the empirical strength of the trait tradition remains undeniable. It has identified consistent predictors: openness, divergent thinking, above-average intelligence, intrinsic motivation, and tolerance for ambiguity and demonstrated that creativity is not arbitrary but systematically related to measurable psychological differences. In doing so, it established creativity as a legitimate subject of scientific inquiry and provided the empirical foundation on which alternative paradigms would build.

In retrospect, the trait tradition's legacy is twofold. On one hand, it gave psychology the tools to measure creativity, linking it with broader theories of personality and cognition and anchoring it in empirical data. On the other hand, by reducing creativity to individual differences, it invited

critiques that ultimately enriched the field. The socio-cultural paradigm would emerge not as a rejection but as a corrective, addressing the contexts and histories the trait approach had largely bracketed. Yet the enduring relevance of trait research lies in its demonstration that creativity, however socially situated, begins with identifiable psychological dispositions. It is these dispositions that provide the raw materials from which culture, institutions, and history construct the phenomenon we call creativity.

3.2. Socio-Cultural Theories of Creativity

The socio-cultural tradition offers a fundamental reorientation of creativity research by shifting attention away from the individual as the locus of novelty and toward the cultural systems that make novelty meaningful. While the trait tradition grounds creativity in psychometrics and personality, socio-cultural approaches emphasize history, institutions, and collective practice. This perspective traces back to Lev Vygotsky's cultural-historical psychology, which framed imagination as a social function rooted in shared tools and signs. Vygotsky (1994) argued that even the most original inventions are recombinations of socially inherited elements, making creativity inherently dialogical. Unlike the trait view of creativity as an inner resource, Vygotsky saw it as a transformation of cultural material through interaction. His insight that higher mental processes, including creative imagination, are socially mediated became the intellectual foundation for later socio-cultural theories.

Mihaly Csikszentmihalyi's systems model of creativity represents the most influential elaboration of this perspective. According to the model, creativity emerges from the interplay of three elements: the individual, who produces a novel variation; the domain, which consists of symbolic systems such as mathematics or music; and the field, made up of gatekeepers who evaluate and legitimate new contributions (Csikszentmihalyi, 1999). This model highlights that creativity is not only about generating ideas but also about their evaluation and incorporation into cultural systems. For example, Jackson Pollock's abstract expressionism did not become "creative" in a cultural sense until critics, galleries, and audiences recognized it as a legitimate transformation of the domain of painting. The analytical strength of this model lies in reframing creativity as a systemic phenomenon: novelty is necessary but not sufficient without institutional recognition. Critics, however, note that the model risks overemphasizing the power of gatekeepers and thereby conflating creativity with cultural capital (Becker, 1982; Sawyer, 2012). Nonetheless, the systems model has proven fertile in education, organizational psychology, and cultural history because it links individual innovation to broader structures of validation.

Vlad Glăveanu's sociocultural psychology of creativity advances the field further by insisting that creativity is distributed rather than located in any one individual. Glăveanu (2010, 2014) argues that traditional psychology clings to a "romantic" myth of solitary genius, ignoring how creative outcomes emerge from the coordination of people, artifacts, and practices. His distributed creativity framework emphasizes that innovation is co-constructed through dialogue and participation. Examples such as film-making, scientific collaboration, or online creative communities show that creative products cannot be attributed to a single mind but to a network of interdependent actors (Glăveanu & Tanggaard, 2014). This approach is analytically valuable because it expands creativity beyond personal traits, but it has been criticized for dissolving individual agency into collective processes (Sawyer, 2012). The tension here is emblematic of the socio-cultural paradigm: it gains explanatory richness at the level of systems but risks explanatory vagueness at the level of individual mechanisms.

Evolutionary and memetic theories add yet another layer by framing creativity as cultural evolution. Dean Keith Simonton (1999, 2010) proposed that creative thought follows a Darwinian process of "blind variation and selective retention." In this model, the creative individual generates multiple variants, and cultural environments select which survive. Richard Dawkins' (1976) notion of "memes" extended this metaphor, treating ideas as replicators competing for survival in cultural ecologies. While compelling, these analogies are often more heuristic than explanatory. Liane Gabora (2013) has argued that cultural change is not Darwinian but Lamarckian, since ideas can be intentionally modified and transmitted rather than blindly selected. What these debates illustrate is the socio-cultural paradigm's commitment to historicizing creativity as a process of cultural inheritance and transformation. Yet they also expose its empirical weakness: variation and selection are difficult to operationalize, and evolutionary metaphors can obscure the intentional, meaning-laden character of human creativity (Boyd & Richerson, 2005).

The socio-cultural tradition's attention to cross-cultural differences highlights its distinctive contribution. Research has consistently shown that creativity is not a universally defined construct but is evaluated through cultural lenses. Niu and Sternberg (2006) demonstrate that Western societies emphasize originality and self-expression, whereas East Asian societies stress usefulness, social harmony, and moral value. Lubart (2010) expands this into a comparative typology of "faces of creativity," identifying the Western focus on genius, the Eastern focus on moral and social good, the Southern focus on spirituality, and the Northern focus on technological innovation. These findings are not merely descriptive but analytically disruptive: they challenge the universality of trait constructs such as Openness to Experience and call into question whether psychometric measures capture what non-Western societies mean by creativity. They also reveal methodological dilemmas: is creativity a culturally relative construct, or can universal elements be identified beneath cultural variation? Socio-cultural theorists argue for the former, while trait theorists typically argue for the latter, making cross-cultural studies one of the key battlegrounds between the paradigms.

Applications of socio-cultural theories in education and organizations provide concrete demonstrations of their strengths and weaknesses. In education, socio-cultural models inform collaborative and project-based learning, where creativity is fostered not by isolated exercises in divergent thinking but by dialogical engagement with peers and cultural artifacts (Sawyer, 2017). This approach highlights the pedagogical value of participation, but it also exposes the difficulty of assessing creativity in ways that are not biased toward Western individualistic criteria (Glăveanu, 2014). In organizations, socio-cultural research underscores how climates of innovation depend less on identifying "creative personalities" and more on shaping institutional structures that enable idea-sharing, reduce fear of failure, and balance evaluation with exploration (Paulus & Nijstad, 2019). Yet this applied work also demonstrates a recurrent criticism: socio-cultural approaches excel at diagnosing contexts but are less precise in predicting individual contributions. Their

explanatory power is maximized at the collective level but often leaves unanswered why some individuals, despite similar cultural conditions, consistently generate more novel ideas than others.

Critiques of the socio-cultural paradigm generally converge on three points. First, its reliance on metaphor, historical case studies, and ethnography makes it less precise than trait-based approaches. Concepts such as "domain" and "field" are powerful descriptively but difficult to quantify (Csikszentmihalyi, 1999; Sawyer, 2012). Second, it risks reducing individual agency to cultural determination, leaving the psychology of idea generation underspecified. Third, its relativistic orientation, while valuable in exposing cultural variation, complicates the search for universal criteria of creativity (Runco & Jaeger, 2012). These critiques highlight the trade-offs at the heart of socio-cultural theories: they expand the explanatory horizon but dilute predictive rigor.

In summary, socio-cultural theories transform the study of creativity by situating it in the interplay of culture, institutions, and history. From Vygotsky's insistence that imagination is socially mediated, through Csikszentmihalyi's systemic model of domain and field, to Glăveanu's distributed creativity and Simonton's evolutionary analogies, the socio-cultural paradigm insists that creativity is relational and collective. Its greatest strength lies in illuminating how recognition, transmission, and cultural validation determine whether novelty becomes creativity. Yet its greatest limitation lies in the under-specification of individual mechanisms and the risk of relativism. This makes socio-cultural theories indispensable for balancing the reductionism of trait approaches, but not sufficient as a standalone explanation. Creativity, as the socio-cultural tradition makes clear, is always more than what resides in an individual mind: it is the negotiation of novelty within communities, histories, and cultural systems.

4. Discussion

4.1. Comparative and Integrative Perspectives

The comparison between traits-based and socio-cultural theories of creativity reveals not only divergent emphases but also deeper philosophical differences in how creativity itself is conceptualized. The traits tradition is rooted in the psychometric and differential psychology movement of the twentieth century, where the assumption was that psychological constructs such as intelligence or creativity can be meaningfully decomposed into measurable, relatively stable attributes of the individual (Guilford, 1950; Torrance, 1966). In this view, creativity is an internal capacity, reflected in traits such as Openness to Experience, divergent thinking ability, and intrinsic motivation (Feist, 1998; Silvia *et al*., 2009). Socio-cultural theory, by contrast, builds on cultural-historical psychology and social constructivism, where creativity is framed as an emergent, relational process dependent on cultural mediation, institutional validation, and historical situatedness (Vygotsky, 1994; Csikszentmihalyi, 1999; Glăveanu, 2014). These opposing ontologies one locating creativity in the measurable traits of individuals, the other locating it in the distributed processes of culture establish the tension that defines the field.

Epistemologically, the two traditions employ markedly different methods. Trait theorists rely primarily on psychometrics, longitudinal studies, and statistical modeling to uncover replicable patterns of association between personality, cognition, and creativity (McCrae, 1987; Runco & Acar, 2012). Socio-cultural theorists, by contrast, turn to historical analysis, ethnography, and theoretical models to capture the embeddedness of creative processes in domains and fields (Becker, 1982; Sawyer, 2012). Csikszentmihalyi's systems model, for example, has been widely applied to case studies of artistic, scientific, and organizational creativity, but operationalizing its components for large-scale quantitative research has proven difficult (Csikszentmihalyi, 1999). Similarly, Glăveanu's distributed creativity framework has been most persuasive in studies of collaborative art and participatory practices, but less so in laboratory settings where psychometric paradigms dominate (Glăveanu & Tanggaard, 2014). The methodological divergence thus reflects not only different research priorities but different assumptions about what counts as legitimate evidence in the science of creativity.

Despite these differences, convergences are evident. Even within the trait tradition, researchers recognize that high Openness, intelligence, or divergent thinking does not guarantee creative achievement. The translation of potential into recognized creative output depends on contextual and cultural conditions (Plucker & Renzulli, 1999; Baer, 2011). Conversely, socio-cultural theorists acknowledge that cultural systems alone cannot generate novelty without individuals capable of producing it. Csikszentmihalyi (1999) explicitly acknowledges the role of the individual as the generator of variations in symbolic domains, while Glăveanu (2010) insists that distributed creativity still requires psychological resources such as imagination and problem solving. In this sense, both traditions implicitly concede that creativity is simultaneously individual and collective, personal and social.

Attempts to integrate the two perspectives have been made, often by conceptualizing creativity as a multi-level phenomenon. Baer and Kaufman's Amusement Park Theory (2005) provides one such effort, suggesting that general entry-level traits such as intelligence and motivation establish a baseline, while domain-specific skills and cultural validation determine whether creativity is realized. Similarly, research on team and organizational creativity demonstrates how personality traits interact with group processes and institutional climates to produce innovation. For instance, individuals high in Openness to Experience contribute more effectively to team creativity, but only when group norms support risk-taking and collaborative exchange (Paulus & Nijstad, 2019). These integrative approaches reinforce the view that traits and socio-cultural processes are not mutually exclusive but interdependent, shaping creativity at different stages and levels of analysis.

Cross-cultural studies further highlight the need for integration. Trait research has long assumed the universality of constructs such as Openness to Experience or divergent thinking. However, comparative research demonstrates that different societies emphasize different criteria for what counts as creativity: Western cultures prioritize originality and personal expression, while Eastern cultures emphasize usefulness, moral goodness, and harmony with social norms (Niu & Sternberg, 2006). Lubart (2010) extends this by identifying "faces" of creativity in different regions, from the Western focus on individual genius to the Eastern focus on social value and the Southern emphasis on spirituality. These findings challenge the universality of psychometric constructs, yet socio-cultural theories alone cannot explain why, within the same culture, some individuals are consistently more creative than others. Here, trait approaches supply the missing dimension, offering an account of individual differences that operate within broader cultural frameworks. Together, they suggest that creativity must be

understood both as a universal human capacity and as a culturally specific achievement.

The traditions also diverge in how they conceptualize temporality. Trait theories tend to treat creativity as relatively stable over time, reflecting enduring personality and cognitive structures (Silvia, 2015). Socio-cultural theories, however, emphasize dynamism and historical contingency, tracing how ideas evolve, are selected, and are transmitted across generations (Simonton, 1999; Gabora, 2013). Simonton's blind-variation and selective-retention model frames creativity as a process analogous to cultural evolution, where ideas undergo differential survival depending on cultural selection. Trait theories, in contrast, are often static, focusing on the enduring predictors of creative potential rather than its historical development. Integration in this area could mean conceptualizing traits as providing the stable substrate, while socio-cultural processes explain the evolution and accumulation of creativity across history.

Yet not all divergences can be bridged. A persistent tension lies in the criteria for creativity itself. Trait theories define creativity primarily in terms of novelty and usefulness, operationalized through measurable indicators such as divergent thinking scores or expert ratings (Runco & Jaeger, 2012). Socio-cultural theories insist that creativity cannot be defined solely by the qualities of a product but must also include its recognition by a relevant cultural field (Csikszentmihalyi, 1999; Glăveanu, 2014). An idea unrecognized by its community, no matter how original, does not count as creative within this framework. This difference reflects irreconcilable philosophical commitments: one treats creativity as intrinsic to the product or the individual, while the other treats it as extrinsic and socially conferred.

Evaluation offers another point of divergence. Trait researchers often assume that creativity can be assessed objectively, through standardized tests or independent expert judgments (Kim, 2006). Socio-cultural theorists counter that evaluation is always embedded within structures of power, ideology, and tradition, where gatekeepers determine what is celebrated and what is ignored (Becker, 1982; Sawyer, 2012). What counts as original or valuable is inseparable from institutional context, which means that creativity cannot be assessed in a vacuum. This critical edge aligns socio-cultural theory more closely with sociology and cultural studies, sometimes at the expense of psychology's empirical priorities. Bridging this gap requires acknowledging that evaluation is both subjective and systematic, shaped by cultural forces but still amenable to empirical study.

Despite these irreducible differences, the field increasingly acknowledges the necessity of pluralism. Interdisciplinary research demonstrates the value of combining methods: neuroscience studies examine both individual brain network dynamics and collaborative interactions (Beaty *et al*., 2016); educational programs integrate divergent thinking exercises with group-based projects (Sawyer, 2017); and organizational studies measure both dispositional traits and cultural climates (Paulus & Nijstad, 2019). These efforts suggest that creativity is best understood as a multi-layered construct, requiring simultaneous attention to traits, processes, and contexts. Rather than collapsing one tradition into the other, the field benefits from sustaining a dialogue between them, where each provides checks and correctives to the other's blind spots.

In this comparative light, traits theories stand out for their empirical rigor, predictive clarity, and ability to map the psychological correlates of creativity. Socio-cultural theories excel in contextual richness, cultural sensitivity, and historical scope. Their intersection points where psychological potential meets cultural recognition are among the most productive areas of research today. The future of creativity studies may therefore rest not on resolving the tension between these traditions but on maintaining it, as a reminder that creativity is a phenomenon too complex to be captured at a single level of analysis. It is simultaneously personal and social, measurable and interpretive, stable and dynamic. In holding these perspectives together, the field can more fully appreciate the multifaceted character of creativity and advance toward a richer, more nuanced science of human innovation.

5. Conclusion

Creativity research has long been shaped by the divide between traits-based and socio-cultural approaches. The trait tradition, grounded in psychometrics, links creativity to divergent thinking, openness, intelligence, and motivation (Feist, 1998; McCrae, 1987; Silvia *et al*., 2009). Its rigor offers predictive clarity, showing creativity's ties to measurable individual differences. Yet this precision narrows the phenomenon, risking reduction of creativity to psychometric variance while neglecting cultural, historical, and social influences (Plucker & Renzulli, 1999; Lubart, 2010).

Socio-cultural theories arose to address trait theory's limits, from Vygotsky's cultural-historical view to Csikszentmihalyi's systems model and Glăveanu's distributed creativity (Vygotsky, 1994; Csikszentmihalyi, 1999; Glăveanu, 2014). They emphasize that creativity requires recognition, validation, and cultural transmission, extending inquiry beyond Western individualism to highlight cultural variation (Niu & Sternberg, 2006; Lubart, 2010). Yet these perspectives face challenges: often grounded in case studies and analogies rather than controlled testing, they raise questions about replicability and predictive power (Sawyer, 2012), while risking neglect of the individual dispositions that initiate novelty.

The contrast between trait and socio-cultural traditions reflects psychology's broader effort to reconcile the individual with the collective, the measurable with the interpretive. Creative potential arises from cognitive, motivational, and dispositional traits, yet its realization depends on cultural systems of evaluation and transmission (Amabile, 1996; Csikszentmihalyi, 1999). Integrative models, such as Baer and Kaufman's (2005) Amusement Park Theory, highlight how intelligence and motivation provide entry conditions, while expertise and cultural validation shape outcomes. Cross-cultural research further underscores this duality: while trait studies assume universal constructs like Openness to Experience, cultures differ in valuing originality, harmony, or moral significance (Niu & Sternberg, 2006). Socio-cultural models capture these variations but still rely on traits to explain individual differences. Ultimately, some divergences remain irreducible. Rather than seeking a forced synthesis, creativity research may advance through pluralistic dialogue, treating traits' rigor and socio-cultural depth as complementary perspectives (Glăveanu, 2010; Sawyer, 2012). Creativity research reflects psychology's struggle to balance individual traits with cultural context. Traits provide the potential, but realization depends on cultural validation and transmission (Amabile, 1996; Csikszentmihalyi, 1999). Cross-cultural studies show differing criteria for creativity, underscoring that traits' rigor and socio-cultural depth are best viewed as complementary rather than competing (Glăveanu, 2010; Sawyer, 2012).

6. Limitations

As a narrative review, this paper is limited by its selective scope. The analysis focuses primarily on trait-based and socio-cultural paradigms, which, while dominant, do not encompass the full diversity of creativity research. Other perspectives, such as neuroscientific, developmental, or evolutionary models, are mentioned only indirectly. The reliance on influential and widely cited works may also bias the synthesis toward Western academic traditions, despite the inclusion of cross-cultural studies where relevant. Finally, the absence of systematic review methods means the conclusions drawn are interpretive rather than quantitative. These limitations, however, are consistent with the paper's theoretical aim: to provide a conceptual synthesis rather than a statistical meta-analysis.

Declaration of Conflicting Interests: The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article

Funding: The authors received no financial support for the research, authorship, or publication of this article.

Ethical Considerations: This article does not contain any studies with human or animal participants.

Data Availability Statement: Data sharing not applicable to this article as no datasets were generated or analyzed during the current study.

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