

PSYCHOLOGICAL SCIENCES

CREATIVITY AS A PHENOMENON: PSYCHOLOGICAL APPROACHES AND AN ANALYSIS OF WEISBERG'S THEORY

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Abstract

The psychology of creativity is one of the important branches of psychology that studies an individual's ability to generate new ideas, approach existing problems in unconventional ways, and produce original outcomes. In the modern era, creativity is no longer confined to the field of art; it also plays a crucial role in science, education, technology, and all aspects of everyday life. For this reason, the psychology of creativity has become a broad subject of investigation from both theoretical and practical perspectives. Creativity is one of the most complex and multifaceted forms of human activity.

This process is not limited to the generation of new ideas; it also encompasses the application and implementation of those ideas. The psychology of creativity examines various factors that influence creative performance, including individual characteristics, motivation, environmental conditions, and cognitive processes. The main aim of this article is to provide a comprehensive analysis of the nature of creativity, its major theoretical approaches, research methods, and practical significance.

Keywords: creativity, psychology, approach, ideas, methods, cognitive

Introduction - Creativity has long been regarded as one of the most complex and fascinating aspects of human cognition. It plays a central role in scientific discovery, artistic expression, technological advancement, and everyday problem-solving. Despite its significance, defining and explaining creativity has remained a challenge across disciplines such as psychology, education, and cognitive science. Traditionally, creativity was associated with exceptional individuals and mysterious processes of inspiration. However, contemporary psychological research increasingly conceptualizes creativity as a cognitive and developmental phenomenon grounded in ordinary mental processes.

This paper explores creativity as a psychological construct by examining major theoretical approaches and providing an in-depth analysis of the perspective proposed by Robert W. Weisberg. Weisberg's theory challenges traditional assumptions about creativity by emphasizing the role of normal cognitive processes, knowledge accumulation, and gradual development rather than sudden insight or innate genius. By integrating classical theories with Weisberg's framework, this article aims to provide a comprehensive and critical understanding of creativity as both a universal and learnable human capacity.

Creativity is commonly defined as the ability to produce ideas, solutions, or products that are both novel and valuable. This dual criterion originality and usefulness has become widely accepted in psychological literature. Creativity is not limited to artistic or scientific domains; it is also evident in everyday activities such as teaching, communication, and problem-solving.

From a psychological standpoint, creativity involves several cognitive processes, including divergent thinking, associative thinking, problem restructuring, and analogical reasoning. It also incorporates affective

and motivational components such as curiosity, intrinsic motivation, and openness to experience. Therefore, creativity is best understood as a multidimensional construct that integrates cognitive, emotional, and environmental factors.

Major Psychological Approaches to Creativity:

1. Psychoanalytic Approach - The psychoanalytic perspective, rooted in the work of Sigmund Freud, views creativity as an expression of unconscious desires and internal conflicts. According to this view, creative activity allows individuals to channel repressed emotions into socially acceptable forms. Artistic and literary creativity, in particular, is often interpreted as symbolic expression. While this approach provides insight into the emotional and symbolic aspects of creativity, it has been criticized for its lack of empirical support and overemphasis on pathology. It tends to portray creativity as a byproduct of psychological tension rather than a constructive cognitive process.

2. Humanistic Approach - Humanistic psychologists such as Abraham Maslow and Carl Rogers emphasize creativity as a natural expression of self-actualization. According to this perspective, creativity emerges when individuals realize their full potential and experience psychological freedom. Maslow identified creativity as a characteristic of self-actualized individuals, while Rogers highlighted the importance of a supportive environment that fosters openness and intrinsic motivation. In this view, creativity is not limited to a select few but is a universal human potential. This approach has had a strong influence on educational practices, encouraging the development of learner-centered environments that promote exploration and self-expression.

3. Cognitive Approach - The cognitive approach focuses on the mental processes underlying creative thinking. Researchers in this tradition study how individuals generate, manipulate, and evaluate ideas.

- **Divergent thinking:** generating multiple possible solutions
- **Convergent thinking:** selecting the most appropriate solution
- **Problem restructuring:** redefining problems to find new solutions
- **Analogical reasoning:** applying knowledge from one domain to another

Cognitive theories emphasize that creativity is not a mysterious process but a set of identifiable and trainable skills. This perspective laid the groundwork for modern creativity research and assessment. The cognitive approach to creativity represents one of the most influential and empirically grounded perspectives in modern psychology. It conceptualizes creativity not as a mysterious or purely intuitive phenomenon, but as a set of mental processes that can be observed, analyzed, and developed. Researchers within this framework investigate how individuals generate ideas, transform knowledge, solve problems, and evaluate possible solutions. From this perspective, creativity is deeply embedded in everyday thinking and relies on general cognitive functions such as memory, attention, and reasoning.

At the core of the cognitive approach is the assumption that creative thinking involves both the generation of novel possibilities and the evaluation of their usefulness. These processes are typically described through several key components: divergent thinking, convergent thinking, problem restructuring, and analogical reasoning.

Divergent Thinking - Divergent thinking refers to the ability to generate multiple, varied, and original ideas in response to an open-ended problem. It is often considered a primary indicator of creative potential. This type of thinking is characterized by:

- Fluency (number of ideas produced)
- Flexibility (variety of idea categories)
- Originality (uniqueness of ideas)
- Elaboration (level of detail)

Convergent Thinking - Convergent thinking, in contrast, involves selecting the most appropriate, effective, or feasible solution from a set of alternatives. It requires logical reasoning, critical evaluation, and decision-making. While divergent thinking generates options, convergent thinking narrows them down.

Problem Restructuring - Problem restructuring involves redefining or reframing a problem in order to discover new and more effective solutions. Often, individuals fail to solve problems because they are constrained by initial assumptions or fixed perspectives. By changing how a problem is perceived, entirely new solution paths can emerge.

Analogical Reasoning - Analogical reasoning involves applying knowledge or solutions from one domain to another. It allows individuals to draw connections between seemingly unrelated concepts and transfer insights across contexts. This process is fundamental to many creative breakthroughs.

Cognitive Theories and the Nature of Creativity - Cognitive theories fundamentally challenge the idea that creativity is a rare or mysterious gift. Instead,

they propose that creativity consists of identifiable, teachable, and improvable skills. These include:

- Generating multiple ideas (divergent thinking)
- Evaluating and selecting solutions (convergent thinking)
- Reframing problems (problem restructuring)
- Making connections across domains (analogical reasoning)

From this perspective, creativity is not limited to artists or geniuses; it is a universal human capacity that can be developed through practice, education, and experience. **Implications for Education and Practice** - The cognitive approach has had a profound impact on educational systems and professional practices. It suggests that creativity can be fostered by:

- Encouraging open-ended questions
- Promoting brainstorming activities
- Teaching problem-solving strategies
- Providing opportunities for interdisciplinary learning

A teacher might ask students to design a sustainable city. This task requires:

- Divergent thinking (generating ideas)
- Convergent thinking (choosing feasible solutions)
- Problem restructuring (rethinking urban challenges)
- Analogical reasoning (learning from existing cities or ecosystems)

The cognitive approach provides a comprehensive and practical framework for understanding creativity. By focusing on mental processes such as divergent and convergent thinking, problem restructuring, and analogical reasoning, it explains how creative ideas are generated and refined. Most importantly, it demonstrates that creativity is not an elusive or innate talent but a set of cognitive skills that can be systematically developed and applied across domains.

4. Sociocultural Approach - The sociocultural perspective highlights the role of environment, culture, and social interaction in creativity. Creativity is not seen as an isolated individual trait but as a product of interaction between individuals and their context.

Factors influencing creativity include:

- Educational systems
- Cultural values
- Social support
- Access to resources

This approach emphasizes that what is considered “creative” varies across cultures and historical periods. It also underscores the importance of collaboration and shared knowledge in creative production.

The Weisberg Perspective on Creativity - Robert W. Weisberg offers a distinctive and influential perspective on creativity, particularly through his work *Creativity: Understanding Innovation* (2006). Contrary to traditional views that associate creativity with sudden insight or exceptional talent, Weisberg argues that creativity arises from ordinary cognitive processes.

1. Creativity as Ordinary Thinking - One of Weisberg’s central claims is that creativity does not require special mental mechanisms. Instead, it relies on

the same cognitive processes used in everyday thinking, such as memory retrieval, problem-solving, and logical reasoning [Runco, M. A, 2007].

According to this view:

- Creative individuals are not fundamentally different from others
- Creativity is accessible to everyone
- Differences in creative output are due to experience and effort rather than innate ability

This perspective democratizes creativity and challenges the myth of the “creative genius.”

2. The Role of Knowledge - Weisberg emphasizes that creativity is deeply dependent on domain-specific knowledge. Individuals who possess extensive knowledge in a particular field are more likely to generate innovative ideas because they can: [Weisberg, R. W, 2006]

- Recognize patterns and gaps
- Combine existing concepts in novel ways
- Build upon prior work effectively

This idea contradicts the belief that creativity requires “thinking outside the box” in the sense of ignoring existing knowledge. Instead, Weisberg argues that the “box” itself knowledge is essential for creativity.

3. Incremental Development - Another key element of Weisberg’s theory is the notion that creativity develops gradually rather than through sudden breakthroughs. He critiques the concept of “insight” as an instantaneous and mysterious process, suggesting that it is often the result of continuous effort and gradual refinement.

Creative achievements, therefore, are:

- The product of sustained work
- Built upon previous ideas
- Developed through iterative processes

Historical examples, such as scientific discoveries and artistic masterpieces, often reveal a long trajectory of development rather than a single moment of inspiration.

4. Rejection of the “Eureka” Myth - Weisberg challenges the popular notion of the “Eureka moment,” arguing that it oversimplifies the creative process. While sudden insights may occur, they are typically preceded by extensive preparation and unconscious processing. By deconstructing this myth, Weisberg provides a more realistic and scientifically grounded understanding of creativity.

Comparison with Other Theories - Weisberg’s approach aligns closely with cognitive theories but differs in its strong emphasis on the continuity between ordinary and creative thinking. Unlike psychoanalytic theories, it does not rely on unconscious drives. Unlike humanistic theories, it does not prioritize self-actualization or emotional expression as primary drivers.

Compared to sociocultural theories, Weisberg places greater emphasis on individual cognition rather than environmental factors, although he does not deny their importance [Sternberg, R. J, 1999]

Criticism of Weisberg’s Theory - Despite its strengths, Weisberg’s theory has been subject to criticism:

1. Underestimation of Emotion and Motivation

Critics argue that creativity is not purely cognitive and that emotions play a significant role in creative processes.

2. Limited Explanation of Radical Creativity

Some forms of creativity involve highly original and transformative ideas that may not be easily explained by incremental processes.

3. Neglect of Environmental Factors

While focusing on cognition, Weisberg may underemphasize the influence of social and cultural contexts.

Nevertheless, his theory remains highly influential due to its empirical grounding and practical implications [Amabile, T. M.1996].

Implications for Education and Practice - Weisberg’s perspective has important implications for education:

- Creativity can be taught and developed
- Emphasis should be placed on knowledge acquisition
- Practice and persistence are essential
- Students should engage in problem-solving activities

Educational systems should move away from viewing creativity as an innate talent and instead foster it through structured learning and supportive environments.

Conclusion - Creativity is a multifaceted psychological phenomenon that encompasses cognitive, emotional, and social dimensions. While traditional theories often portray creativity as mysterious or exclusive, contemporary approaches particularly the perspective of Robert Weisberg offer a more grounded and accessible understanding.

Weisberg’s theory redefines creativity as an extension of ordinary thinking processes, emphasizing knowledge, effort, and gradual development.

This perspective not only demystifies creativity but also highlights its potential as a universal human capacity. Understanding creativity through such frameworks has profound implications for education, innovation, and personal development. By recognizing that creativity is not a rare gift but a skill that can be cultivated, individuals and societies can better harness their creative potential in an increasingly complex and dynamic world.

References:

1. Weisberg, R. W. (2006). *Creativity: Understanding Innovation*. Wiley.
2. Sternberg, R. J. (1999). *Handbook of Creativity*. Cambridge University Press.
3. Runco, M. A. (2007). *Creativity: Theories and Themes*. Elsevier.
4. Csikszentmihalyi, M. (1996). *Creativity: Flow and the Psychology of Discovery and Invention*. HarperCollins.
5. Amabile, T. M. (1996). *Creativity in Context*. Westview Press.
6. Guilford, J. P. (1967). *The Nature of Human Intelligence*. McGraw-Hill.