PSYCHOLOGICAL MECHANISMS OF PERSONALITY CREATIVITY DEVELOPMENT IN THE CONTEXT OF DIGITAL TRANSFORMATION

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Annotatsiya: Ushbu maqolada raqamli transformatsiya va sun'iy intellekt texnologiyalarining ta'lim muhitiga faol integratsiyalashuvi sharoitida shaxs ijodkorligini rivojlantirishning psixologik mexanizmlari o'rganiladi. Divergent tafakkur, ichki motivatsiya, refleksiya va kognitiv moslashuvchanlik ijodiy faoliyatning tizim tashkil etuvchi elementlari sifatida tahlil qilinadi. O'qituvchi va o'quvchining psixologik salomatligi kontekstida ijodiy potentsialning sun'iy intellekt bilan o'zaro ta'siri muammosi ko'rib chiqiladi.

Kalit so'zlar: ijodkorlik, psixologik mexanizmlar, sun'iy intellekt, divergent tafakkur, kognitiv moslashuvchanlik, motivatsiya, raqamli transformatsiya.

Аннотация: В статье исследуются психологические механизмы развития творческих способностей личности в условиях активной цифровой трансформации и интеграции технологий искусственного интеллекта в образовательную среду. Дивергентное мышление, внутренняя мотивация, рефлексия и когнитивная гибкость анализируются как системообразующие элементы творческой деятельности. Рассматривается проблема взаимодействия творческого потенциала личности с ИИ в контексте психологического благополучия педагога и обучающегося.

Ключевые слова: творческие способности, психологические механизмы, искусственный интеллект, дивергентное мышление, когнитивная гибкость, мотивация, цифровая трансформация.

Abstract: This article investigates the psychological mechanisms underlying the development of personality creativity in the context of active digital transformation and the integration of artificial intelligence technologies into the educational environment. Divergent thinking, intrinsic motivation, reflection, and cognitive flexibility are analyzed as system-forming elements of creative activity. The paper addresses the interaction between human creative potential and AI in terms of the psychological well-being of both educators and students.

Keywords: creativity, psychological mechanisms, artificial intelligence, divergent thinking, cognitive flexibility, motivation, digital transformation.

INTRODUCTION.

The rapid proliferation of artificial intelligence tools in educational settings has fundamentally altered the landscape within which human creativity operates. AI systems capable of generating text, images, and complex analytical outputs challenge educators and psychologists alike to reassess the nature, value, and developmental pathways of human creative potential. For psychologists working in educational contexts, understanding the mechanisms through which creativity is cultivated — and potentially threatened — by digital transformation has become a matter of urgent professional relevance [1].

The present study is grounded in the author's broader doctoral research into the psychological mechanisms of personality creativity development. Its central premise is that while AI technologies introduce both new resources and new risks for creative activity, the core psychological mechanisms underlying human creativity remain irreducibly human — and therefore constitute a primary target for educational intervention. This paper aims to systematize these mechanisms and examine how the digital environment affects their functioning, with particular attention to implications for the psychological well-being of educators.

LITERATURE REVIEW AND METHODOLOGY.

The psychological study of creativity has a rich theoretical heritage. J. Guilford's foundational distinction between divergent and convergent thinking established divergent thinking — the capacity to generate multiple original responses to a single prompt — as the cornerstone of creative cognition [2]. Subsequent researchers expanded this framework: T. Amabile's componential model introduced the critical role of intrinsic motivation [3], while L. Vygotsky's cultural-historical approach emphasized the social and reflective dimensions of creative development [4].

More recent scholarship has begun to examine how digital environments and AI technologies interact with these classical mechanisms. Research indicates a complex, bidirectional relationship: digital tools can serve as scaffolding for creative ideation, yet excessive reliance on AI-generated outputs may attenuate the cognitive effort that underlies genuine creative growth [5]. The concept of psychological safety — the belief that one's ideas will not be rejected or ridiculed — emerges as a crucial mediating variable in this relationship [6].

The methodology of this study is conceptual-analytical. A systematic review of theoretical and empirical literature from the fields of creativity psychology, educational psychology, and AI ethics was conducted. Sources were selected from peer-reviewed databases (PsycINFO, ERIC, Scopus) covering the period 2000–2025, with a focus on studies examining creativity in digitally transformed educational contexts.

RESULTS.

The analysis identifies four core psychological mechanisms of creativity development, each differentially affected by digital transformation:

1. Divergent Thinking. Digital saturation — characterized by information overload and algorithmically curated content feeds — tends to promote associative, surface-level thinking at the expense of deeper divergent elaboration. Educational environments that deliberately create

unplugged, open-ended problem spaces appear to counteract this tendency, preserving and strengthening divergent cognitive processes.

2. Intrinsic Motivation. Self-determination theory posits that creativity flourishes under conditions of autonomy, competence, and relatedness [3]. The introduction of AI tools can undermine autonomy when students offload generative effort to algorithms, yet can support competence when used as feedback instruments. The critical pedagogical challenge lies in designing AI integration that preserves rather than displaces intrinsic motivation.

3. Reflection. In an AI-mediated environment, reflective capacity becomes doubly important: it enables learners to evaluate machine-generated outputs critically and to identify the gap between algorithmic production and authentic personal meaning-making. Reflective practice, when systematically embedded in the curriculum, functions as a protective factor for creative autonomy.

4. Cognitive Flexibility. The capacity to shift between conceptual frameworks, tolerate ambiguity, and reconceptualize problems represents perhaps the most distinctively human cognitive asset in the AI era. Cognitive flexibility underpins the educator's ability to adapt creatively to rapidly changing technological conditions — a capacity directly linked to professional well-being and resistance to burnout.

DISCUSSION.

The findings carry significant implications for educator well-being in the context of digital transformation. Teachers who lack confidence in their creative capacities relative to AI systems report higher levels of professional anxiety and self-efficacy erosion — a pattern consistent with the displacement anxiety documented in other professions undergoing automation [6]. Conversely, educators who frame AI as a creative partner rather than a competitor demonstrate greater psychological flexibility and professional satisfaction.

This reframing is not spontaneous; it requires deliberate cultivation through professional development programmes that integrate psychological self-awareness, creative practice, and AI literacy. The institution of psychologically safe professional learning communities — spaces where educators can experiment, fail, and reflect without fear of evaluation — emerges as a key structural intervention.

CONCLUSION.

This paper has argued that the psychological mechanisms of personality creativity — divergent thinking, intrinsic motivation, reflection, and cognitive flexibility — constitute the irreducible core of human creative potential in the age of AI. Far from rendering these mechanisms obsolete, digital transformation intensifies the need for their systematic development in educational practice. For educators themselves, cultivating these capacities is not merely a professional competency but a psychological resource for well-being and sustainable professional longevity.

Future empirical research should examine the differential effects of specific AI tool types on each of the four mechanisms identified, with longitudinal designs capable of capturing

developmental trajectories across educational levels. The integration of psychometric creativity measures with indicators of educator psychological well-being represents a particularly promising research direction.

REFERENCES:

1. Bogoyavlenskaya, D. B. (2002). Psikhologiya tvorcheskikh sposobnostey [Psychology of creative abilities]. Akademiya.
2. Guilford, J. P. (1967). The nature of human intelligence. McGraw-Hill.
3. Deci, E. L., & Ryan, R. M. (1985). Intrinsic motivation and self-determination in human behavior. Plenum.
4. Vygotsky, L. S. (1978). Mind in society: The development of higher psychological processes. Harvard University Press.
5. Amabile, T. M. (1996). Creativity in context. Westview Press.
6. Edmondson, A. C. (2019). The fearless organization: Creating psychological safety in the workplace for learning, innovation, and growth. Wiley.