Call for Papers

"Psychology and Artificial Intelligence: Transformations, Challenges, and Ethical Perspectives"

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The growing intersection between psychology and artificial intelligence (AI) has profoundly transformed how we understand, analyze, and intervene in human behavior. Beyond facilitating psychological assessment, diagnosis, and intervention processes, AI advances fundamental psychological knowledge by enabling in-depth studies of cognitive, emotional, and relational phenomena. Moreover, AI's ability to collect, analyze, and interpret vast amounts of data – often continuously and in real time – expands possibilities for developing more robust theoretical models, innovative methodologies, and effective professional practices. As highlighted by Bartlett et al. (2023), these capabilities offer unprecedented opportunities for modeling decision-making processes and refining psychological theories.

Synthetic Data and Counterfactual Scenarios

One significant development is the use of synthetic data, which allows for the creation of realistic artificial datasets while safeguarding participant privacy (Mori et al., 2024). This approach supports complex analyses, rigorous simulations, and comprehensive systematic reviews and meta-analyses. Synthetic data also facilitates counterfactual scenario creation, enabling the simulation of hypothetical realities or outcomes that are otherwise inaccessible through traditional research methods. This expands both the analytical and experimental possibilities in psychology, providing new avenues for theoretical exploration and professional training.

AI and Decision-Making in Psychology

AI is increasingly recognized as a valuable tool for supporting decision-making processes in clinical, educational, organizational, and public health settings. By integrating diverse sources of information—empirical data, expert knowledge, and predictive analytics—AI allows for more informed, coherent, and adaptive decisions tailored to individual and community needs. For instance, Fokkema et al. (2022) emphasize how AI can assist in identifying personalized and context-specific interventions, enhancing the precision and effectiveness of psychological care. This dimension is particularly significant given the growing complexity of mental health challenges and the diversity of populations served by psychologists.

AI in Psychological Assessment and Intervention

AI's impact extends to psychological evaluation and therapeutic practices, offering innovative tools like virtual counseling platforms, conversational agents, and algorithms that detect emotional disturbances. These technologies enable personalized and adaptive interventions while enhancing therapeutic alliance and quality of care. For example, synthetic agents and virtual assistants can simulate therapeutic or educational interactions, promoting emotional regulation, social skill development, and self-management. AI-driven virtual tutors and personalized assistants can be particularly beneficial for populations with specific needs, such as children or older adults.

Ethics, Professional Standards, and Regulation

The integration of AI into psychology raises significant ethical and professional challenges. Issues such as privacy, data security, algorithmic bias, transparency, and equitable

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access to services require careful consideration. Psychologists must adhere to ethical principles when using AI, ensuring that technology serves human welfare and respects individual autonomy. These ethical dilemmas are further complicated by global disparities in access to mental health services and technology, as well as cultural variability in how psychological care is delivered and perceived.

The Need for Interdisciplinary Collaboration

The challenges and opportunities posed by AI call for a rigorous and interdisciplinary dialogue. Psychologists, data scientists, engineers, policymakers, and community representatives must work together to integrate ethical, conceptual, methodological, and applied dimensions of AI into psychology. This collaboration can help ensure that emerging technologies support human well-being, reduce inequalities, and promote a more just and sustainable digital future. As Rauthmann (2020) notes, the multidisciplinary nature of AI's integration into psychology underscores its potential to reshape how we understand human behavior and societal dynamics.

Call for Research and Critical Reflection

This evolving landscape invites the scientific community to critically examine the interface between psychology and AI. Key questions include:

1. **Fundamental Research and Synthetic Data**: How can AI support fundamental psychological research? In what ways does the use of synthetic data enable the exploration of theoretical scenarios, enhance empirical rigor, protect privacy, and facilitate broader and more precise systematic reviews and meta-analyses?
2. **Decision-Making and Clinical Support**: How can AI inform professional decision-making in clinical, educational, or organizational contexts, aiding in the identification of effective, personalized, and context-specific interventions? What are the ethical limits, responsibilities, and potentials of this integration?
3. **Technological Tools and Impact**: A critical analysis of available technological tools is necessary (e.g., virtual counseling platforms, conversational agents, emotion detection algorithms) and their impact on the therapeutic relationship, care quality, and personalization of psychological interventions. What is the impact of synthetic agents and personalized virtual assistants in psychological and educational practice, such as using AI models to create avatars that simulate therapeutic or educational interactions, promoting self-regulation, emotional training, and the development of social skills? This may also include studies on the applicability of these systems in creating virtual tutors for populations with specific needs, such as children or the elderly.
4. **Ethical Standards and Regulation**: What ethical and normative principles should guide the use of AI in psychology? How can privacy, security, verifiability, responsibility and equity in service access be ensured? What role should regulatory entities and professional associations play in defining norms and guidelines? It is essential to expand the discussion on ethics to include the creation of AI-assisted decision-making simulations, promoting transparency and explainability in the models used to predict outcomes or suggest interventions while minimizing algorithmic bias and maximizing equity in generated recommendations.
5. **Interdisciplinary Cooperation**: How can collaboration between psychologists, engineers, data scientists, legal experts, and other professionals enhance innovation, improve service quality, and ensure the integration of diverse perspectives, safeguarding the central value of mental health and social well-being?
6. **Conceptual and Social Impacts**: How does AI change our understanding of human behavior, cognition, emotion, development, and social dynamics? What are the implications for the general population, considering cultural diversity, access inequalities, and the need to ensure that technology genuinely serves people rather than reinforcing market-driven logics or narrow interests?
7. **Applications in Professional Contexts**: How can AI improve the use of AI in specific areas of psychological intervention (e.g., clinical and health, education and vocational guidance, organizational and community settings), highlighting examples of best practices as well as processes and tools that improve service quality and effectiveness?
8. **Counterfactual Scenarios and Advanced Simulations**: How can synthetic data and AI can be used to create counterfactual scenarios and simulations of hypothetical realities? These simulations enable hypothesis testing and outcome analysis in contexts that would be inaccessible or ethically problematic in the real world. The creation of such scenarios can aid in developing new psychological theories and models and in training professionals through interactive simulated environments that support decision-making and skill development.

9. **Education and Digital Literacy**: How should psychologists and students be trained in AI and digital tools to enhance their skills and adapt to emerging challenges? Address training programs that include the creation of synthetic agents and virtual assistants, highlighting the role of these tools in strengthening active and adaptive learning. Additionally, suggest strategies for integrating AI-related disciplines into academic curricula, aligning them with evidence-based practices and ethical principles.
10. **Delegation of Competencies**: As AI systems increasingly automate tasks that were traditionally performed by psychologists, how can we delineate which responsibilities may be delegated to AI, and which must remain under human supervision to safeguard ethical and therapeutic integrity? Under what circumstances is the involvement of a human professional indispensable, and how might we establish regulatory and ethical frameworks to guide this delegation of competencies?
11. **Alignment with Human Values**: What mechanisms or frameworks ensure that AI models remain compatible with core human values, thus averting potentially harmful autonomous exploration in realms that clash with shared ethical, moral, and cultural standards? How can we embed safeguards—such as transparency, accountability, and oversight protocols—to maintain trust in AI-driven systems and protect individuals' rights and well-being?

Submission Deadline

Authors are invited to submit their manuscript by the final deadline:

September 1, 2025

Because *European Psychologist* privileges review, integrative articles, and which are of relevance for the European context and particularly for the 350,000 psychologists represented by the 37 associations members of the European Federation of Psychologists' Association (EFPA), manuscripts should take a broad, synthesizing view within the interface between psychology and technology, including directions for further research and developments in the field. All manuscripts will be peer-reviewed and should be prepared in accordance with the journal guidelines.

Submissions should be submitted exclusively via the online submission system

https://www.editorialmanager.com/ep

Manuscript Preparation

Original articles should not exceed 7,500 words including abstract, references, figures, and tables, but may be allowed more space on a case-by-case basis. Manuscripts should be prepared in accordance with the journal's author guidelines available on the journal's website at https://www.hogrefe.com/j/ep

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- the editorial office at **europeanpsychologist@hogrefe.com**, or
- the Special Issue Editor: Miguel Ricou, **mricou@med.up.pt**

Should you have any technical queries regarding the online submission system, please contact

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Only papers that have not previously appeared in or are currently under consideration for another publication can be considered for publication. Manuscripts are subject to peer review and may be returned to authors for revision.

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