


Exploring the Utility of ChatGPT in Psychology: Applications in Domains of Education, Research, and Practice

Ivanna Shubina

American University of the Middle East, Kuwait,  0000-0003-2409-995X
Corresponding author: Ivanna Shubina (Ivanna.shubina@aum.edu.kw)

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Abstract

The applications of ChatGPT in psychology show its promising potential in education, practice and research when the AI opportunities are discussed and concerns are addressed. This systematic review aims to examine the benefits and limitations in utility of ChatGPT in psychology, based on analysis of recent relevant literature in accordance with the PRISMA guidelines. Analyzed studies allowed for the following findings and conclusions: In psychological education ChatGPT has demonstrated impact by facilitating learning, creating interactive learning environments, supporting assignments, providing support for students in managing their emotional and mental health issues, sharing immediate feedback, and reducing the workload of educators. In the research field ChatGPT was effective in generating hypotheses, collecting and analyzing data, identifying relevant literature, and enhancing knowledge. In psychological practice the ChatGPT demonstrated its impact in increasing awareness of various psychological problems, delivering the opportunity to receive personalized experience and generating treatment strategies. However, we should be aware of the ethical concerns, potential misuse of ChatGPT, the accuracy of generated information, occasional inaccuracies in references, lack of contextual comprehension and low emotional sensitivity in ChatGPT generated responses. Moreover, to enhance ChatGPT practical capabilities it is important to address potential risks, prevent over-reliance on ChatGPT, develop clear educational strategies, ethical guidelines and policies. In summary, the review highlights the potential of ChatGPT in the psychological field, while emphasizing the need for further research on its efficacy, ethical use, and long-term impact in the field. Despite its limitations, ChatGPT holds substantial promise for advancing research efficiency, providing personalized significant support for students, educators, researchers, practitioners and patients.

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Introduction

The integration of ChatGPT into modern life triggered considerable interest in the ChatGPT utility in the domain of psychology providing advanced capabilities and promising opportunities in psychological education, psychological research, and psychological practice. It supports accomplishing various tasks such as personalizing learning, gathering and analyzing data, developing therapeutic strategies and interventions. Overall, ChatGPT has its significant impact on enhancing efficiency of tasks implemented in psychological practice, education and research as well as on creating innovative ideas and solutions within these areas. According to reviewed studies, ChatGPT used in psychological education increases interactive learning (Sarker, 2022; Korteling et al., 2021), offers learners customized support and feedback (McCarthy et al., 2006; Jordan & Mitchell, 2015), and easy access to related and reliable sources of information (Domingos, 2018; OpenAI., 2023). As a result, it establishes a more dedicated attitude and deeper engagement into educational practice and experience (Sarker, 2022; Shubina, 2025). However, over-reliance on AI results in risk of weakening of critical thinking skills among students (McCarthy et al., 2006; Brown et al., 2020), dealing with the ethical issues, academic dishonesty and incorrect or biased information (Jordan & Mitchell, 2015; Brown et al., 2020; Wogu et al., 2017).

Analysis of relevant sources indicated that in psychological research, ChatGPT supports various steps of conducting scientific research, such as gathering and analyzing data, generating hypotheses, and writing literature reviews (Karakose, 2023; Kjell, Kjell, & Schwartz, 2024; Sallam, 2023; Zhou, 2024). Through improving ChatGPT efficiency and decreasing probability of human error the AI potential to facilitate advanced research and knowledge generation noticeably increases. However, academic integrity (Bin-Nashwan et al., 2023; Huallpa, 2023), validation of received information (Hamad et al., 2024), AI transparency and ethical issues (Biswas, 2023; Zielinski et al., 2023; Kitamura, 2023) remain to be significant challenges.

The literature related to a psychological practice indicated that ChatGPT is effective in both mental health support and therapeutic interventions implementation with significant positive effects in psychological help and cognitive-behavioral therapy (CBT) (Anbarasi et al., 2022; Shubina & Dzido, 2025a). AI can be used as an educational tool helping to spread psychological knowledge, awareness about psychological problems (Maunder, 2004) and opportunities for its treatment or enhance learning among students of psychology (Brooks et al., 2020). Opportunities for customized feedback on an individual's progress and high accessibility of AI in psychological treatment are main arguments for utilizing ChatGPT in psychological practice. However, AI-generated responses might have low or limited emotional sensitivity and contextual understanding (Wutz et al., 2023).

Taking into consideration the fact that there is no available research on ChatGPT utility in psychology including education, research, and practice, this systematic review aims to explore the use of ChatGPT in mentioned areas, examining both its potential benefits and limitations. Therefore, the aim of the current review was to examine the future perspectives of ChatGPT in psychology based on the existing research evidence. Moreover, this review presents the spotting of potential concerns and limitations that could be associated with the application of ChatGPT in the aforementioned areas.

Method

Search Strategy and Inclusion Criteria

The current systematic review was conducted according to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines (Moher, Altman, & Tetzlaff, 1996). The analyzed sources included Web of Science and Scopus. The eligibility criteria involved any type of published scientific research or preprints (article, review, communication, editorial, opinion, etc.) addressing ChatGPT that fell under the following categories: (1) psychological practice; (2) psychological education; and (3) scientific research/academic writing. The exclusion criteria included: (1) non-English records; (2) records addressing Chat-GPT in subjects other than those mentioned in the eligibility criteria; and (3) articles from non-academic sources (e.g., newspapers, internet websites, magazines, etc.). The exact Web of Science and Scopus search strategy, which concluded on 1 December 2024, was as follows: (ChatGPT) AND (psychology) AND (education) OR (research) OR (practice), which identified 116 records.

Summary of the Record Screening Approach

The records retrieved following the Web of Science and Scopus searches were imported to EndNote v.20 for Windows, which yielded a total of 116 records. Next, screening of the title/abstract was conducted for each record with the exclusion of duplicate records ($n=7$), followed by the exclusion of records published in languages other than English ($n=4$), records published as not full papers ($n=24$). Additionally, the records that fell outside the scope of the review (records that examined ChatGPT in a context outside health care education, health care practice, or scientific research/academic writing) were excluded ($n = 21$). An additional 24 records were excluded due to my inability to access the full text of these records. Afterward, full screening of the remaining records ($n = 60$) was carried out with the exclusion of an additional 29 records that didn't meet the eligibility criteria of the current review. This yielded a total of 31 records eligible for inclusion in the current review.

Summary of the Descriptive Search for ChatGPT Benefits and Risks in the Included Records

Each of the included records was searched specifically for the following: (1) type of record (preprint, published research article, review, etc.); (2) the listed benefits/applications of ChatGPT in psychological education, practice, or scientific research; (3) the listed risks/concerns of ChatGPT in psychological education, practice, or scientific research; and (4) the main conclusions and recommendations regarding ChatGPT in psychological education, practice, or scientific research/academic writing. Categorization of the benefits/applications of ChatGPT was as follows:

- (1) educational benefits in psychological education (e.g., psychoeducation, generating educational materials, creating quizzes and interactive simulations, improving clinical reasoning and understanding of complex concepts, providing explanations and case scenarios, improving skills in data analysis, providing information on examinations and results);
- (2) benefits in scientific research (e.g., efficient analysis of large datasets, code generation, literature reviews, data analysis, identifying research gaps, and developing hypotheses);

- (3) benefits in psychological practice (e.g., streamlining workflows, improving documentation, assisting with personalized treatment, patient communication, follow-up recommendations, clinical diagnoses, treatment recommendations, emotional support, goal setting and motivation in mental health contexts, and assisting in decision-making);
- (4) other benefits (e.g. freely available, improve efficiency, provide human-like responses in customer service, content creation for various media, language translation, helps with test preparation, and generates content for learning facilitation).

Categorization of the risks/concerns of ChatGPT was as follows: (1) accuracy and reliability (e.g. inaccurate or incomplete information, falsification of information, lack of up-to-date knowledge, etc.); (2) ethical and legal issues (e.g., risk of bias and discrimination, plagiarism and lack of originality, copyright issues, transparency issues, misleading information, etc.); (3) privacy and security (data privacy and security, cybersecurity vulnerabilities); (4) impact on human skills and abilities (e.g. decline in critical thinking, problem-solving, and creative writing skills, decrease of emotional support and genuine interaction, etc.); (5) impact on professional skills (e.g. risk of declining need for human expertise with, skills in diagnosis and interpretation, etc.).

Results

A total of 116 records were identified and screened, after what a total of 31 records were eligible to be included in the review. The record selection process was based on Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines and is shown below on Figure 1.

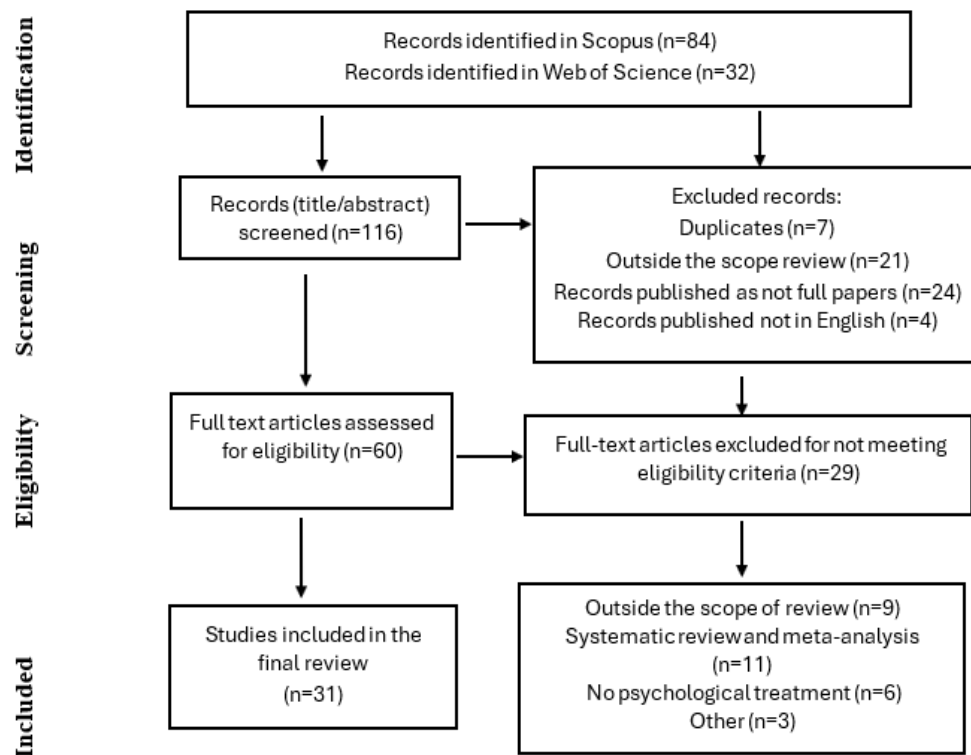


Figure 1. Flowchart of the Record Selection Process based on PRISMA Guidelines

Summary of the ChatGPT Benefits and Limitations/Concerns in Psychological Practice, Research and Education

The analysis included studies regarding ChatGPT utility in psychology are provided in the below tables. Summaries of the main conclusions of the included studies regarding ChatGPT utility in psychological practice are provided in Table 1, in education provided in Table 2, in scientific research presented in Table 3, additional studies within the field included in Table 4.

Table 1. Studies on AI/ChatGPT in Psychological Practice

Authors & Year	Study Aims & Design	Benefits or Applications	Risks, Limitations, or Concerns	Conclusions or Suggestions
Shahsavari & Choudhury, 2023	Cross-sectional survey study examining user intentions to use ChatGPT for self-diagnosis and health-related purposes.	Performance expectancy significantly impacted decision-making ($\beta=.547$) and the intent to use ($\beta=.309$). Risk-reward appraisal also impacted decision-making ($\beta=.245$), and indirectly the intent to use ($\beta=.138$).	N/A	Underscores the salience of performance expectancy, risk-reward appraisal, and decision-making in shaping the intent to use.
Wutz et al., 2023	Integrative review of factors influencing the acceptability, acceptance, and adoption of CAs (conversational agents) in healthcare.	CAs can be used in general healthcare and in relation to COVID-19.	Findings regarding healthcare professionals are difficult to generalize due to limited studies (7 out of 76). Lack of consistent definitions of acceptability, acceptance and adoption made it impossible to differentiate between these three outcomes.	Identified factors that influence the acceptability, acceptance, and adoption of CAs in healthcare from patient and healthcare professional perspectives.
Li & Guenier, 2024	Systematic review of ChatGPT's	Provides high-semantic quality health information	Provision of inaccurate health information, leakage	ChatGPT is not suitable for widespread application in health communication.

Authors & Year	Study Aims & Design	Benefits or Applications	Risks, Limitations, or Concerns	Conclusions or Suggestions
	application in health communication.	and partial disease information, simplifies complex texts, can effectively answer low-risk health questions	of user privacy, provision of incomplete health information. Most studies were conducted in English language context.	Emphasizes the need to consider linguistic/cultural contexts, collaboration, real patient experience, integration with existing healthcare systems, and ethical factors.
Rogasch et al., 2023	Assessed ChatGPT's ability to prepare patients for [18F] FDG PET/CT and explain reports.	Can provide high semantic quality health information.	Provision of inaccurate health information.	N/A
Bushuven et al., 2023	Examined ChatGPT's response to pediatric case questions.	Can effectively provide partial disease information.	Provision of inaccurate health information.	Compared ChatGPT's answers to criteria provided by emergency doctors using SPSS software.
Sallam, 2023	Systematic review of ChatGPT utility in healthcare education, research, and practice.	Streamlining workflow, cost saving, documentation, personalized medicine, and improved health literacy.	Ethical, copyright, transparency and legal issues, risk of bias, plagiarism, lack of originality, inaccurate content, limited knowledge, incorrect citations, cybersecurity issues, and risk of infodemics.	Emphasizes caution when using ChatGPT. ChatGPT does not qualify as an author in scientific articles. An initiative involving all stakeholders is needed to set a code of ethics.

Table 2. Studies on AI/ChatGPT in Education

Authors & Year	Study Aims & Design	Benefits or Applications	Risks, Limitations, or Concerns	Conclusions or Suggestions
Farhi et al., 2023	Cross-sectional study using structured questionnaires to examine student views, concerns, and perceived	N/A	N/A	Adopted measures and scales from preexisting studies. Composite reliability analysis of the constructions

Authors & Year	Study Aims & Design	Benefits or Applications	Risks, Limitations, or Concerns	Conclusions or Suggestions
	ethics of ChatGPT usage.			revealed good reliability.
Belkacem , 2023	Scoping review of prior research on the application of ChatGPT in education and healthcare sectors.	Delivers rapid and personalized services to educators, students, and patients.	Limitations and challenges across several applications. Ethical concerns.	Presents a comprehensive understanding of existing research, and ethical implications. Emphasizes the need to address ethical implications to preserve academic integrity.
Playfoot, Quigley, & Thomas, 2023	Examined the relationship between students' digital academic skills and their attitudes toward using AI for assessment.	N/A	N/A	Coded responses to a "do you use" question. Included factors like digital academic skills, conscientiousness, agreeableness, Machiavellianism, narcissism, and self-esteem.
Sallam, 2023	Systematic review of ChatGPT utility in education.	Improved personalized learning and focus on critical thinking/problem-based learning. Can generate content for learning facilitation.	Ethical, copyright, transparency, and legal issues, risk of bias, plagiarism, inaccurate content, limited knowledge, and incorrect citations.	Emphasizes caution when using ChatGPT. Need for a code of ethics to guide the responsible use of ChatGPT among other LLMs in education and academia.
Kovačević, 2023	Use of ChatGPT in ESP (English for Specific Purposes) teaching.	N/A	N/A	N/A
Shoufan, 2023	Exploring students' perceptions of ChatGPT.	N/A	N/A	Thematic analysis and follow-up survey.

Authors & Year	Study Aims & Design	Benefits or Applications	Risks, Limitations, or Concerns	Conclusions or Suggestions
Joyner, 2023	Explores whether ChatGPT is a partner or pariah in education.	N/A	N/A	N/A
Stokel-Walker, 2023	News explainer about ChatGPT.	Well-organized content with decent references and free to use.	Concerns regarding the effect on human knowledge and ability. The imminent end of conventional educational assessment.	N/A

Table 3. Studies on AI/ChatGPT in Research

Authors & Year	Study Aims & Design	Benefits or Applications	Risks, Limitations, or Concerns	Conclusions or Suggestions
Lecler, Duron, & Soyer, 2023	Explores ChatGPT's potential to help radiologists with writing research articles.	Can help with writing the materials and methods sections and bibliographies.	Responsibility lies with the user to verify accuracy of references and citations. Limited research available in some areas.	ChatGPT can assist in providing bibliographies for a research article.
Uludag, 2024	Explored the association between textual parameters using ChatGPT generated text.	N/A	N/A	Analyzed text using the ChatGPT 3.5 Turbo version. Calculated textual parameters like total words, average sentence length, etc..
Wang et al., 2023	Investigated ChatGPT effectiveness to generate Boolean queries for systematic literature reviews.	Higher precision compared to the current automatic query formulation methods.	Non-suitability for high-recall retrieval, many incorrect MeSH terms.	N/A
Eysenbach, 2023	Role of ChatGPT, generative language models, and artificial	N/A	N/A	Conversation with ChatGPT and call for papers.

Authors & Year	Study Aims & Design	Benefits or Applications	Risks, Limitations, or Concerns	Conclusions or Suggestions
	intelligence in medical education.			
Ivanov & Soliman, 2023	ChatGPT implications for the future of tourism education and research.	N/A	N/A	Game of algorithms.
Arif et al., 2023	The future of medical education and research, is ChatGPT a blessing or a blight in disguise?	N/A	N/A	N/A
Huang & Tan, 2023	Explores the role of ChatGPT in scientific communication.	Helps with writing better scientific review articles.	N/A	N/A
Sallam, 2023a	Systematic review of ChatGPT utility in healthcare research and scientific writing.	Improved scientific writing and enhancing research equity and versatility, efficient analysis of datasets, code generation, literature reviews.	Ethical, copyright, transparency, and legal issues, risk of bias, plagiarism, lack of originality, inaccurate content, limited knowledge, incorrect citations, cybersecurity issues, and risk of infodemics.	Emphasizes caution when using ChatGPT. ChatGPT does not qualify as an author in scientific articles. An initiative involving all stakeholders is needed to set a code of ethics.
Moons & Van Bulck, 2023	Editorial on ChatGPT potential in cardiovascular nursing practice and research.	Can summarize large texts, facilitate the work of researchers.	N/A	N/A
Chen, 2023	Editorial on ChatGPT applications in scientific writing.	Helps to overcome language barriers promoting equity in research.	Ethical concerns (ghostwriting), doubtful accuracy, citation problems.	Embrace this innovation with an open mind, authors should have transparency in methods.

Authors & Year	Study Aims & Design	Benefits or Applications	Risks, Limitations, or Concerns	Conclusions or Suggestions
Huallpa, 2023	Exploring the ethical considerations of using ChatGPT in university education.	N/A	N/A	N/A

Table 4. Additional Studies on AI/ChatGPT

Authors & Year	Study Aims & Design	Benefits or Applications	Risks, Limitations, or Concerns	Conclusions or Suggestions
Ghanadian, Nejadgholi, & Osman, 2024	Developed synthetic data for suicidal ideation detection using LLMs.	N/A	N/A	Evaluated the effectiveness of synthetic data. Trained classifiers with real-world, synthetic, and augmented datasets. Generated binary and four-class datasets.
Gilson, 2023	Examined the performance of ChatGPT on USMLE (United States Medical Licensing Examination) sample questions.	N/A	N/A	Data was obtained from publicly available USMLE sample question sets. Question indices, raw inputs, and raw AI outputs are available in supplementary data.
Sallam, 2023	Described ChatGPT content generated in response to prompts crafted to elucidate the pros and cons of ChatGPT use in medical, dental, pharmacy and public health education.	N/A	N/A	Assessment of ChatGPT content was done by a panel of experts involved in medical, dental, pharmacy and public health education. Generated prompts based on a panel discussion.
Boucher et al., 2021	Discusses recommendations of the World Association of Medical Editors about the use of	Produces texts with formal structure and eloquent vocabulary.	Can violate copyright laws. Can generate conflicts of a	Chatbots cannot be cited as authors. Authors should be transparent about chatbot use. Authors are responsible for the

Authors & Year	Study Aims & Design	Benefits or Applications	Risks, Limitations, or Concerns	Conclusions or Suggestions
	ChatGPT or chatbots in scientific publications.		medical-legal and scientific credibility nature.	accuracy of content generated by chatbots. Editors need tools to detect AI-generated content.
Mohammad et al., 2023	Scoping review on ChatGPT in medical education.	Automated scoring, teaching assistance, personalized learning, research assistance, quick access to information, generating case scenarios and exam questions, content creation for learning facilitation, and language translation.	N/A	The primary applications of ChatGPT in medical education include automated scoring, teaching assistance, personalized learning, research assistance, quick access to information, generating case scenarios and exam questions, content creation for learning facilitation, and language translation.

Considering the data presented in the tables above, a few key conclusions should be listed. The analyzed sources explored ChatGPT and other AI for diverse applications across psychological practice, education, and research, including personalized learning, data analysis, content creation, and literature review. Among the most significant benefits enhanced efficiency, personalized learning, improved access to information, and assistance in research were mentioned in analyzed studies. Including inaccurate content, bias, ethical issues, plagiarism, and the potential for misuse of ChatGPT were indicated as the most significant risks of its use. Therefore, there is a need to be cautious while adopting AI, especially in domains like psychology (clinical psychology), where accuracy is crucial for individual well-being. Authors of analyzed papers emphasized the importance of establishment of clear ethical guidelines, transparency, and human oversight to ensure the responsible use of AI and ChatGPT in psychological education, practice and research. Moreover, further research is needed to understand the potential of AI and mitigate its risks deeper.

Characteristics of the Included Records

A summary of the record types included in the current review is shown in Figure 2. The majority of records included were preprints ($n = 27$). This indicates that a significant amount of research is being shared before formal peer review. The next most common type of publications are editorials or letters ($n=20$). Research articles also constitute a substantial portion of included records ($n=15$). Overall, the variety of document types suggests a broad

range of points of views, from formal research to more informal communications and preliminary findings. This is useful in examining a rapidly evolving field of study where different kinds of information are relevant.

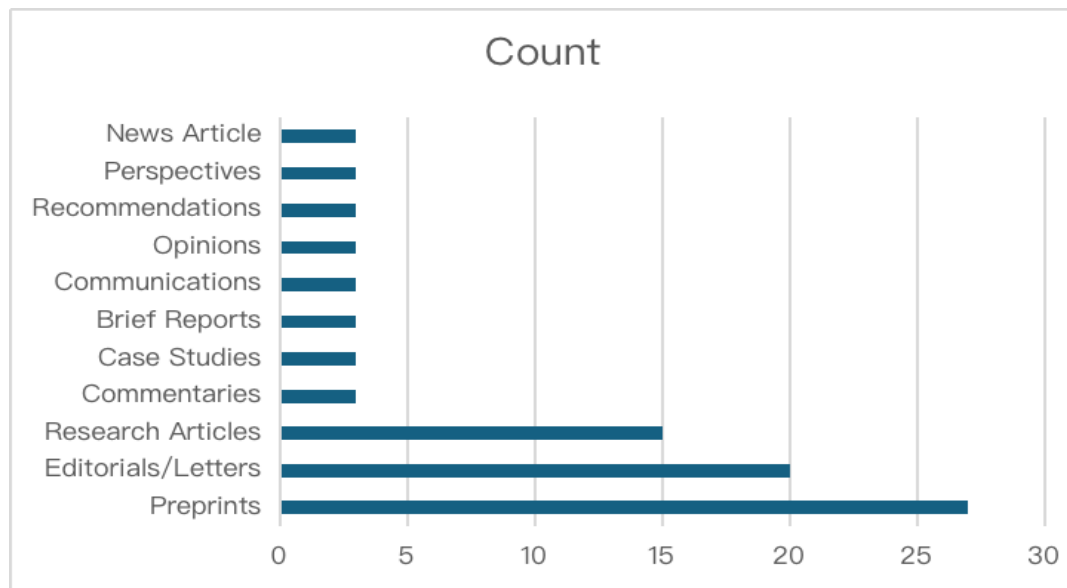


Figure 2. Summary of the Types of Included Records (n=31)

Benefits and Possible Applications of ChatGPT in Psychology: Education, Practice, and Research according to various categories

The included in current review studies discussed the benefits and opportunities of using ChatGPT in the psychological field. Figure 3 presents the total mentions of benefits in various domains, including academia, research, practice and other.

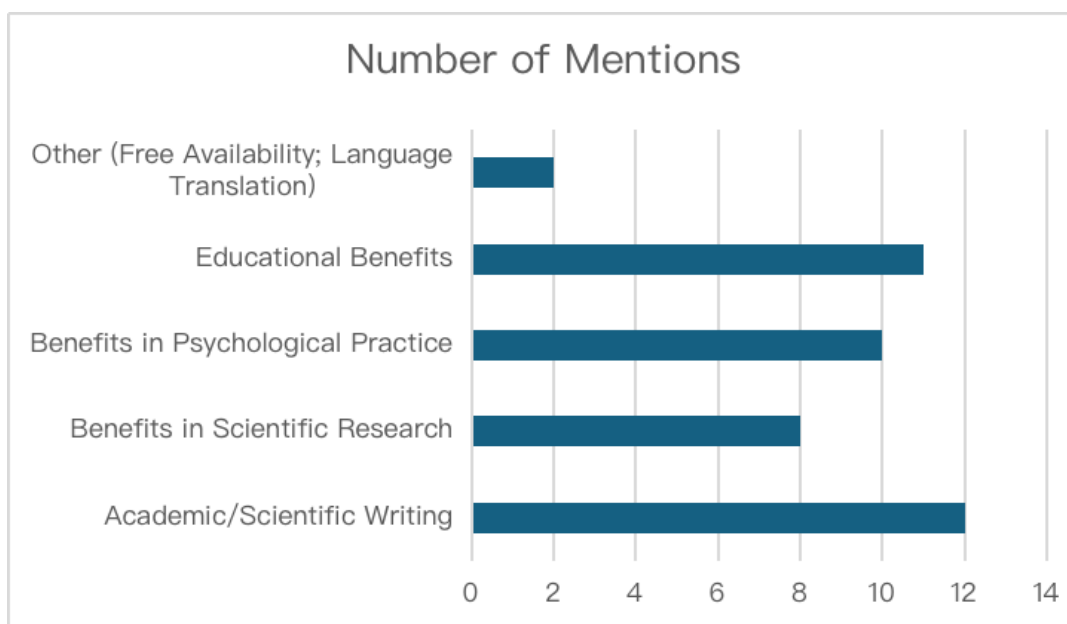


Figure 3. Summary of Benefits/Applications of ChatGPT in Psychology

The benefits of ChatGPT were more often cited in academic writing /scientific research in 12 records (38%). Examples of mentions included generating text, summarizing long documents, literature overviews, etc. The second context was educational benefits with 11 records, (35%). Examples of mentions included personalized learning, understanding complex concepts, interactive educational environment, etc. The benefits in the psychological field with 10 records (32%). Examples of mentions included psychoeducation, self-assessment, enhancing communication, support for healthcare professionals, etc. The benefits in research were listed in 8 records (25%). Examples included efficient analysis of large datasets, experimental design, and data comparison. Free availability and language translation were mentioned as an application in 2 records (6%).

Figure 4 presents the total mentions of the most often discussed benefits of utilizing ChatGPT in the psychological field in various domains, including academia, research, practice and others.

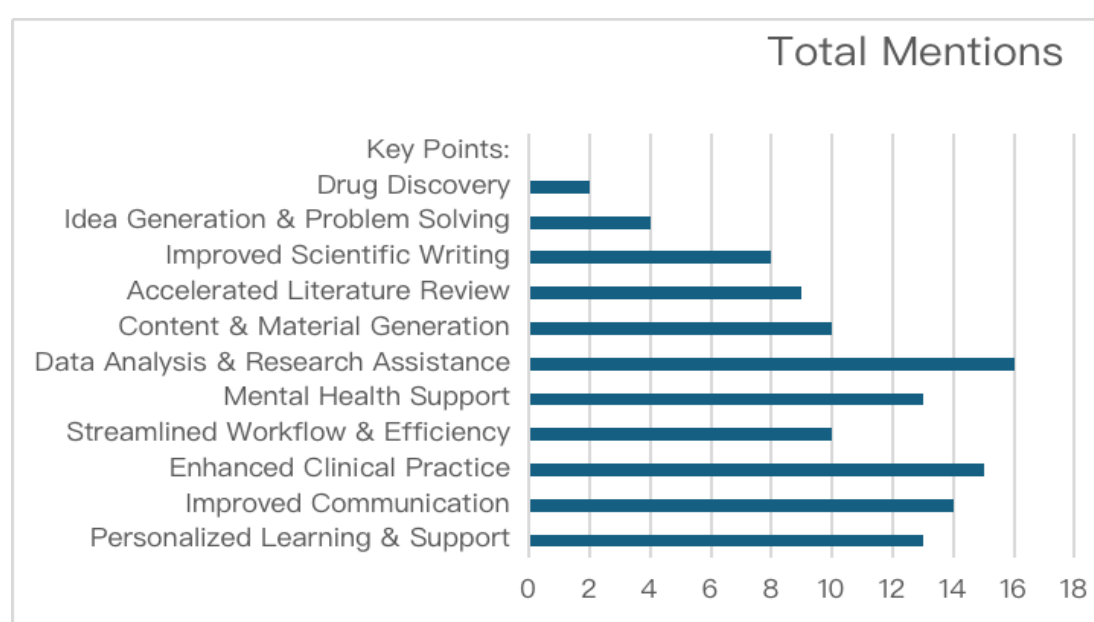


Figure 4. Summary of Benefits/Applications of ChatGPT in Psychology

The most significant benefit of ChatGPT was data analysis and research assistance (n=16) showing ChatGPT's strength in analyzing large datasets and providing research insights. The second strong benefit mentioned in included studies is enhanced clinical practice (n=15) in terms of using ChatGPT for improving diagnostics, personalized treatment, and therapeutic processes. The improved communication received 14 mentions relating to improving academic writing and educational approaches. Followed by mental health support (n=13) and personalized learning and support (n=13) reflecting ChatGPT's ability to provide access to mental health services and its potential to customize learning experiences. The benefit of content and material generation (n=10) and streamlined workflow and efficiency (n=10) indicated the potential of ChatGPT to create educational materials, automate tasks and improve documentation. The application of ChatGPT allows for accelerated literature review (n=9) since it has an ability to quickly synthesize information from multiple sources. Utilizing ChatGPT allows to improve scientific writing (n=8) in terms of grammar, spelling, and style of scientific papers. The least mentioned benefit was idea generation and problem solving (n=4) indicating ChatGPT potential in brainstorming new approaches. Drug discovery was mentioned two times only.

Table 5 presents consolidated findings on applications and benefits of using ChatGPT in psychology based on analysis of included sources across the three domains: education, practice, research and total mentions score.

Table 5. Benefits/Applications of ChatGPT in Psychology: Education, Practice, and Research

Benefit	Education	Practice	Research	Total
	Mentions	Mentions	Mentions	Mentions
Personalized Learning & Support	6	2	5	13
Improved Communication	4	1	9	14
Enhanced Clinical Practice	1	11	3	15
Streamlined Workflow & Efficiency	0	6	4	10
Mental Health Support	1	10	2	13
Data Analysis & Research Assistance	0	1	15	16
Content & Material Generation	5	1	4	10
Accelerated Literature Review	2	0	7	9
Improved Scientific Writing	1	0	7	8
Idea Generation & Problem Solving	1	0	3	4
Drug Discovery	0	0	2	2

Considering the data presented in the table above, data analysis and research assistance are the most significant benefit in the research field (n=15). Followed by enhanced clinical practice (n=15) with prevalence in practice (n=11). The improved communication (n=14) and personalized learning support (n=13) are benefits mentioned in all domains with higher prevalence in the research field (n=9, n=5 respectively) and education (n=4, n=6 respectively). Mental health support (n=13), streamlined workflow and efficiency (n=10) are benefits of using ChatGPT discussed in studies in all areas, with particular emphasis in context of practice (n=10 and n=6 respectively). The benefit of content and material generation (n=10) occurred across all domains with prevalence in education (n=5) and research (n=4). All the other benefits were mainly mentioned in research and educational context with visible prevalence in the research field.

Risks and Concerns related to ChatGPT in Psychology: Education, Practice, and Research

Table 6 presents consolidated data on risks and concerns associated with using ChatGPT in psychology across academia, practice, research, and total score based on analysis of included sources. Considering the data presented in a table above, ethical concerns (n=31) are significant risks across all domains but are most prevalent in education (n=14). Followed by concern of inaccurate or unreliable information (n=30) significant in all domains with slight difference in records. Over-reliance and decreased critical thinking (n=22) is a concern discussed in studies related to all areas, with particular emphasis in educational context (n=11). The concern related to transparency and accountability (n=20) is mentioned in all domains with a slight prevalence in research (n=8). The risks related to data privacy and security (n=17) are significant in all domains with prevalence in practice (n=8). The other risks and concerns received a score of 10 mentioned and below without indicating relatedness to a specific domain.

Table 6. Risks and Concerns related to ChatGPT in Psychology: Education, Practice, and Research

Risk/Concern	Education	Practice	Research	Total
	Mentions	Mentions	Mentions	Mentions
Inaccurate or Unreliable Information	11	9	10	30
Ethical Issues (Bias, Plagiarism, Misuse)	15	7	12	31
Lack of Transparency & Accountability	7	5	8	20
Data Privacy & Security Risks	5	8	4	17
Over-Reliance & Reduced Critical Thinking	11	6	5	22
Misinterpretation of Context & Emotions	2	3	2	7
Limited or Outdated Knowledge	3	2	4	9
Hallucination (Fabricated Content)	4	3	3	10
Poor Referencing and Citation Issues	4	3	3	10
Dependence on AI-generated Content	1	0	1	2
Unclear Responsibility	0	2	0	2

Discussion

The studies on the use of ChatGPT in psychology delivered data allowing us to discuss novel perspectives to using AI in contemporary research, academia and practice. Analysis presented in this study allows us to identify and discuss the benefits, risks, limitations and future perspectives of ChatGPT utility in psychology. Therefore, this review study with a multidisciplinary approach, distinguished the following categories of findings based on available current literature.

Benefits and Risks of Using ChatGPT in Education

ChatGPT can provide rapid access to information and a wide variety of learning resources, broadening students' learning opportunities. It has the potential to incorporate AI into education as a supportive tool for both students and educators (Amini et al., 2023; Sallam et al., 2023). It can assist in generating educational materials (Sallam et al., 2023) and course development (Atlas, 2023), such as realistic and variable clinical quizzes, flashcards, and interactive simulations, customized clinical cases and vignettes (Sallam, 2023; Joyner, 2023). ChatGPT can also generate step-by-step instructions, provide helpful visual aids, create engaging learning materials and offer feedback on student techniques (Sallam et al., 2023; Kovačević, 2023; Gilson et al., 2023).

ChatGPT can personalize educational learning (content and assessments) to individual student needs, expectations and learning styles (Amini et al., 2023; Ivanov & Soliman, 2023; Eysenbach, 2023). It can generate personalized quiz questions based on a student's learning progress, recommend additional resources based on knowledge gaps, and adapt explanations to match a student's preferred learning style (Sallam et al., 2023; Benoit, 2023). It also provides customized study materials, practice questions, and learning strategies (Farhi et al., 2023 et al., 2023). Using ChatGPT in education can lead to more engaging and effective learning experiences, such as improving critical thinking and problem-based learning (Amini et al., 2023; Shoufan, 2023), and enhancing communication

skills (Sallam et al., 2023; Halaweh, 2023). ChatGPT can be used for creating up-to-date textbooks and study guides (Atlas, 2023).

On the other hand, utilizing ChatGPT in education might consider few concerns. First of all, using data generated by ChatGPT might have a risk of manipulation (Hamad et al., 2024), bias and discrimination (Shams et al., 2023), or misinformation (De Angelis et al., 2023). It may also have limited ability to recognize bias or errors. ChatGPT may provide incorrect or falsified information and generate inaccurate content that is not based on reality.

This can lead to spreading misinformation and confuse students in understanding basic concepts and being unable to recognize bias or errors (Hamad et al., 2024; De Angelis et al., 2023). Educators and students should be aware of ethical concerns, academic dishonesty, and the potential for cheating and plagiarism (Bin-Nashwan et al., 2023; Huallpa, 2023; Rahman et al., 2023). Moreover, concerns about the validity and originality of student work should be raised. Furthermore, over-reliance on technology might decrease critical thinking and creativity among students and educators and lose the ability to create original ideas (Hamad et al., 2024). It may also damage the fundamental objectives of education. Considering that psychology requires personal and emotional interactions skills, using ChatGPT creates a risk of neglecting them (Wutz et al., 2023). Moreover, relying on ChatGPT may not have the same level of nuance as a human expert (Hamad et al., 2024).

Benefits and Risks of Using ChatGPT in Research

ChatGPT offers significant support in research processes, demonstrating its positive impact on every stage of research (Aljanabi et al., 2023). It can scan and synthesize large amounts of existing literature classifying it by provided criteria (e.g. key themes, gaps in knowledge, and potential research directions). ChatGPT can contribute to the generation of new ideas and brainstorming and exploring different avenues for investigation resulting in the formulation of research hypotheses. This can assist researchers to efficiently generate queries for systematic reviews (Rahman et al., 2023) and assist in the code generation (Aljanabi et al., 2023) in various programming languages, which can be used in data analysis and experimental design. The other group of benefits is generating synthetic data for training machine learning models, and comparison between existing data (Rahman and Watanobe, 2023).

According to the analyzed in current study data, ChatGPT offers significant support in drafting, revising, and editing scientific articles by improving the overall quality of scientific research, academic writing, communicating results, and data readability (Lecler, Duron, and Soyer, 2023; Kasneci et al., 2023). It can also assist in tasks such as translation (Jiao et al, 2023), proofreading (Lecler, Duron, & Soyer, 2023), grammar and spelling corrections (Lecler, Duron, & Soyer, 2023; Kitamura, 2023). An additional significant benefit of using ChatGPT is saving valuable time for researchers by automating various tasks, such as literature review (Stokel-Walker, 2023; van Dis et al., 2023), academic writing (Lecler, Duron, & Soyer, 2023; van Dis et al., 2023), and data coding (Aljanabi et al., 2023; Lund & Wang, 2023; van Dis et al., 2023). Additionally, ChatGPT promotes equity and diversity in research by addressing language barriers and making scientific literature more accessible to a wider audience (Kitamura, 2023).

According to some studies, ChatGPT helps to eliminate human error in data analysis and interpretation (Burger et al., 2023) and can be used to analyze large datasets (Rahman et al., 2023; Jiao et al., 2023; van Dis et al., 2023). It also supports the finding of research theory (Rahman & Watanobe, 2023) and can assist in error identification (Kitamura, 2023; Jiao et al., 2023). According to the analyzed studies, there are significant limitations to using ChatGPT in psychological research. First, the quality of empirical and theoretical studies depends on the information and data used at every step of conducting research. Therefore, using inaccurate, superficial, or incorrect data might dramatically decrease the quality of research output (Kitamura, 2023; Zielinski et al., 2023; van Dis et al., 2023).

Similar to the educational domain, ChatGPT can result in violating ethical standards, including plagiarism, lack of originality and transparency, while relying on the content generated by ChatGPT (Biswas, 2023; Zielinski et al., 2023; Kitamura, 2023; van Dis et al., 2023). According to some studies, ChatGPT sources are limited, therefore, some of the most recent or significant discoveries might be missing, creating another gap in conducted research (Zielinski et al., 2023). Moreover, the knowledge of ChatGPT is limited to the period prior to 2021 based on the datasets used in its training (Zielinski et al., 2023). The other risk is related to the weak domain expertise. ChatGPT lacks the deep domain knowledge and contextual understanding that human experts possess, particularly in specialized fields, which makes the research based on ChatGPT content shallow (Biswas, 2023). On the other hand, ChatGPT may deliver excessive content that does not precisely meet the needs of researchers, increasing their workload (Zielinski et al., 2023). The other concern is related to referencing in the study. Some studies indicated that ChatGPT can provide inaccurate citations, insufficient references, or even generate references to non-existent sources, which decreases the possibility to verify used information in research (Zielinski et al., 2023; van Dis et al., 2023).

Benefits and Risks of Using ChatGPT in Psychological Practice

The included into current review studies mentioned significant benefits of using ChatGPT in psychological practice (AlAnezi, 2024), providing mental health support (Cascella et al., 2023; Shubina & Dzido, 2025) and making mental health services more available and accessible (AlAnezi, 2024; Blyler & Seligman, 2024). One of the most influential applications of ChatGPT is providing psychoeducation related to mental health disorders, their impacts and opportunities for treatment (Blyler & Seligman, 2024; Wutz et al., 2023; Sallam, 2023). It also can be used as a supportive tool in managing various symptoms of mental illnesses, (e.g. stress) (Blyler and Seligman, 2024; Wutz et al., 2023) and establishing interactive psychotherapeutic exercises (AlAnezi, 2024; Blyler and Seligman, 2024). Clients or patients can significantly improve their knowledge about mental health issues, risk groups, symptoms, etc. (Ayre et al., 2023; Shubina & Dzido, 2025a). Moreover, ChatGPT provides an opportunity to learn about the meaning of concepts related to mental health and clinical psychology (Boucher et al., 2021; Gu et al., 2023; Hollis et al., 2015; Quin, & Redmond, 2005). Furthermore, ChatGPT can be used by clients as a self-assessment tool, allowing them to set goals and monitor their progress (AlAnezi, 2024).

For practitioners in the psychological field ChatGPT can assist with making a diagnosis and decision related to the treatment, improving communication and engagement between clients and practitioners (AlAnezi, 2024;

Shahsavari, & Choudhury, 2023), and developing personalized approach (Wutz et al., 2023). Moreover, ChatGPT provides the opportunity to deliver personalized advice reflecting specific needs and expectations of clients (AlAnezi, 2024), with consideration of gender and age groups (Blyler & Seligman, 2024). Some studies indicated the beneficial potential of ChatGPT for emotional support (Blyler and Seligman, 2024; Wutz et al., 2023), mental support and empathy (AlAnezi, 2024).

According to some studies, ChatGPT shows its promising impact in psychotherapy (Chandra, Joshi & Bhagwat, 2023), providing personalized support to clients with anxiety, stress, and depression (Blyler & Seligman, 2024; Anbarasi et al., 2022; Le & Cayrat, 2024). Moreover, it helps to adjust cognitive-behavioral therapy (CBT) to various age groups and genders increasing accessibility and personalized support (Blyler & Seligman, 2024). Furthermore, It can offer personalized CBT interventions (e.g. narrative therapy, interactive and targeted homework, or self-reflection exercises (Blyler & Seligman, 2024). ChatGPT can also provide guidance, inspire self-awareness, and track progress for both individuals and therapists (Blyler & Seligman, 2024; Chandra, Joshi & Bhagwat, 2023).

Discussing the concerns or risks related to using ChatGPT in psychological practice, the most significant seems to be the lack of empathy and humanistic approach (Alanezi, 2024; Li & Guenier, 2024;). Consequently, ChatGPT cannot substitute human specialists in mental health, demonstrating lack of care, emotional understanding, and ability to create trust or build rapport that are considered as essential components of effective psychological treatment (Alanezi, 2024; Brown et al., 2020). This lack of human touch and emotional connection can lead to a poor understanding of emotional nuances and shallow therapeutic relationships, negatively impacting overall therapeutic outcomes (Alanezi, 2024; Li & Guenier, 2024). Moreover, ChatGPT may exhibit minimal, or lack of the interactivity required in psychological therapeutic conditions, where up-to-date conversation built on dialogue is crucial (Alanezi, 2024; Li & Guenier, 2024). In addition, ChatGPT may not be effective in analyzing more complex cases (e.g. co-occurring mental disorders) and providing the relevant personalized support (Li & Guenier, 2024).

Some of the concerns regarding using ChatGPT are related to ethics and data security, especially when dealing with sensitive patient information (Alanezi, 2024; Li & Guenier, 2024; Sallam, 2023). There is also a risk of bias, discrimination content or misusing some clinical information (Li & Guenier, 2024; Sallam, 2023; Alanezi, 2024). In addition, ChatGPT can provide incomplete, inaccurate or out-dated information for clients, which can cause serious consequences in making decisions about psychological treatment or self-care (Alanezi, 2023; Li & Guenier, 2024; Sallam, 2023).

Strengths and Limitations

This multidisciplinary study presents the first overview of benefits and risks of using ChatGPT in psychological practice, education, and research. One of the strengths of the current study is following PRISMA guidelines to ensure a comprehensive and structured approach to the review of sources published in Web of Science and Scopus indexed journals which ensures that a wide range of relevant articles are considered. The study clearly categorized

the benefits and risks of ChatGPT in the three main domains of psychology: education, practice, and research, making it easier to understand the specific impacts of ChatGPT in each domain and included different types of publications. The key benefits and key risks are also summarized in tables, making the information easily accessible and readable. The current study identifies directions for future research, including the long-term impact of ChatGPT, the need for ethical guidelines, and the human role in AI verification.

However, there are some limitations in this study worth mentioning. First, it is a limited scope of included sources (English language records only, Web of Science and Scopus databases only), which could exclude other relevant studies from analysis. The inclusion into review of a significant number of preprints may influence the reliability of the conclusions. The study has a reviewing character, and this might limit the generalization opportunities, since there might be differences across specific psychological subfields, which modify use of ChatGPT. Consequently, in future study researchers should focus on exploring the ways of how the lack of context where ChatGPT is used can impact various applications in the psychological field, including ethical implications.

Future Studies

Future research in education should focus on the impact of personalized learning experiences provided by ChatGPT and their effects on student achievements (Sallam et al., 2023). Studies on the ways of integrating ChatGPT into educational programs combining it with other effective educational tools (Rahman, & Watanobe, 2023; Vargas-Murillo, de la Asuncion & Guevara-Soto, 2023), as well as research on ethical considerations, such as academic dishonesty and the effect of AI on critical thinking is essential (Wogu et al., 2017). Furthermore, future studies should examine the correlation between various ways of training educators for utilizing ChatGPT and its effectiveness (Atlas, 2023; Gu et al., 2023).

In the domain of research, future studies should explore the potential and reliability of ChatGPT in relation to scientific writing improvement (Javaid et al., 2023), using ChatGPT as supportive tool in data analysis, overcoming language barriers (Chen, 2023), and addressing concerns about accuracy and transparency (Aljanabi, 2023). The establishment of ethical guidelines for ChatGPT use in research (Huallpa, 2023) and focus on the long-term impact of ChatGPT on the research process seems to be a significant future research direction. Additionally, future studies should also consider the use of human role in verification of AI generated content.

In psychological practice future research should investigate the use of ChatGPT for self-diagnosis (Shahsavari, & Choudhury, 2023), its potential in mental health support (Boucher et al., 2021), and interpersonal health communication (AlAnezi, 2024). Moreover, some studies should search for ways of decreasing risk of violating data privacy and security (Sallam et al., 2023), and ways of decreasing the limitations of ChatGPT in complex situations.

Conclusions

Special attention to AI resulted in a rapidly increased number of studies on the role of ChatGPT in various research

fields, indicating the importance for updated reviews. The current review study focused on exploration of the use of ChatGPT, its meaningful potential and significant concerns in the psychological domain across education, research and practice. The analysis of 31 selected studies reveals ChatGPT's potential to enhance learning, support research tasks, and improve mental health support, but also highlights significant concerns such as inaccuracies, ethical issues, and overreliance on AI. The review emphasizes the need for ethical guidelines and further research to fully understand ChatGPT's long-term impact and mitigate potential harms. The significant benefits include personalized learning, efficient data analysis, and improved communication, etc. Conversely, risks include misinformation, bias, reduction in critical thinking skills, and weak emotional support etc. Considering the concerns and risks mentioned in this review, there is a need for an interdisciplinary approach to ensure ChatGPT effectively empowers the psychological field in all domains including education, research and practice.

The content, perspective and quality of studies on ChatGPT can vary, which may influence the generalization of the results. For instance, in the research field, ChatGPT can provide a great support in improving literature reviews, academic writing, data analysis, but it can also raise ethical concerns and deliver inaccurate or biased information. ChatGPT enhances the research process and manages language barriers, however, it can deliver limited or shallow data for analysis. Academic honesty and transparency should be one of the more important values among researchers.

Using ChatGPT in psychological practice delivers significant benefits, such as improving psychoeducation, self-monitoring, and client-practitioner communication. However, it brings risks to keeping data private, building trust or rapport and it shows difficulty with establishing emotional connection and human interaction. It does not capture the full range of emotion, context, and idiosyncrasy that shape personal narrative.

In the domain of education, ChatGPT can be a supportive tool to make learning personalized, to generate educational materials, but there are also concerns of plagiarism and overreliance on technology. It can deliver great learning experiences but can reduce critical thinking and creativity. Therefore, to regulate ethical concerns, it is important to establish the relevant ethical guidelines to regulate the use of ChatGPT in education. In addition, the ChatGPT data is not always accurate and reasonable and depends on the quality of the available information. It is essential to examine the long-term effects of ChatGPT in all domains with special emphasis on the risks and ethical implications of its usage.

The review enables us to conclude that ChatGPT has significant potential to improve work efficiency, enhance access to information, personalize learning, and assist in research within the field of psychology. It also indicates the need to be cautious while using ChatGPT since there is a risk of bias, inaccurate content, plagiarism, etc. The current review study highlights the importance of clear ethical guidelines and transparency, in order to ensure the responsible use of ChatGPT in psychology. Few areas for future research such as the impact of personalized learning, ethical considerations, data privacy, and the long-term effects of ChatGPT on education, research and clinical practice have been identified in this study. In summary, the current study provides a first comprehensive overview of the current literature on ChatGPT in psychology, providing significant benefits of its application and important concerns. However, additional studies will allow us to address the limitations identified by this study

and to fully understand the implications of this technology in the field.

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