

Artificial Intelligence in Career Guidance: Advancing Ethical Practice through Vasudhaiva Kutumbakam

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ABSTRACT

The integration of Artificial Intelligence (AI) into career guidance is transforming the way individuals explore educational pathways, identify occupational opportunities, and make informed career decisions. While AI-driven systems enhance efficiency through data analytics, predictive modelling, and personalized recommendations, their ethical application remains a critical concern. The philosophical principle of *Vasudhaiva Kutumbakam*—the belief that the world is one family—offers a value-based framework for ensuring that AI-supported career guidance promotes inclusivity, fairness, and human welfare. This paper examines how ethical practices rooted in universal human values can guide the design and implementation of AI-enabled career counselling systems. Drawing upon value-oriented education and socially responsible technology use, the study highlights key ethical dimensions including equity of access, transparency in algorithmic decision-making, cultural sensitivity, data privacy, and the promotion of social good. AI tools, when aligned with these ethical principles, can reduce bias, support marginalized learners, and provide guidance tailored to diverse socio-cultural contexts. Furthermore, embedding compassion, empathy, and social responsibility into AI frameworks ensures that career guidance extends beyond employability to include societal contribution and sustainable development. The paper proposes a value-driven AI career counselling approach that integrates technological intelligence with human-centered ethics. Such an approach fosters global citizenship, supports lifelong learning, and empowers individuals to pursue careers that benefit both personal growth and collective well-being. By aligning AI innovations with the ethos of *Vasudhaiva Kutumbakam*, career guidance can evolve into a more equitable, culturally responsive, and ethically grounded practice suited to the needs of an interconnected world.

Keywords: Artificial Intelligence, Career Guidance, Vasudhaiva Kutumbakam, Value-Based Education.

Introduction

In the rapidly evolving landscape of education and employment, career guidance has become an essential component in helping individuals make informed decisions about their professional futures. The growing complexity of the global job market, the emergence of new career pathways, and the need for continuous skill development have increased the demand for effective and accessible career counselling systems. In this context, **Artificial Intelligence (AI)** has emerged as a transformative technology capable of enhancing the efficiency and effectiveness of career guidance services. AI-driven

tools such as recommender systems, predictive analytics, and intelligent chatbots enable the analysis of large datasets related to students' interests, abilities, personality traits, and labour-market trends to provide personalized career recommendations (Mehraj & Baba, 2019). AI-powered career guidance systems have the potential to democratize access to counselling services by providing continuous support to learners regardless of geographical or socio-economic barriers. Through machine learning algorithms and data-driven insights, AI can help students identify suitable educational pathways, recognize skill gaps, and explore emerging career opportunities aligned with their strengths and aspirations (Thakare et al., 2025). Furthermore, intelligent career counselling platforms can integrate psychological assessment tools, labour market analytics, and academic performance data to generate customized guidance that supports informed decision-making. These technological advancements can significantly enhance the reach and scalability of career counselling services, particularly in educational systems with limited human counselling resources (Bhargavi et al., 2025).

Despite its numerous advantages, the integration of AI into career counselling raises significant ethical concerns. Issues such as algorithmic bias, lack of transparency, data privacy risks, and over-reliance on automated systems can potentially undermine the fairness and reliability of AI-based career guidance. For instance, biased datasets used to train machine learning models may lead to discriminatory recommendations that disadvantage certain groups of learners based on gender, socio-economic status, or cultural background (Floridi et al., 2018). Additionally, the sensitive personal data collected by AI counselling platforms requires strong safeguards to ensure confidentiality and responsible data management. Therefore, the implementation of AI in career counselling must be guided by ethical principles that prioritize human dignity, fairness, and social responsibility.

In this regard, the ancient Indian philosophical principle of **Vasudhaiva Kutumbakam**, derived from the **Maha Upanishad**, offers a valuable ethical framework for the responsible use of AI in education and career development. The concept, which translates to “the world is one family,” emphasizes universal brotherhood, compassion, and collective well-being. When applied to technological innovations such as AI, this philosophy encourages the development of systems that serve the interests of all individuals and promote inclusive growth. Integrating the values of empathy, equality, and global responsibility into AI-driven career counselling systems can help ensure that technology is used not merely for efficiency but also for the welfare of society as a whole.

Thus, combining AI technologies with the ethical philosophy of *Vasudhaiva Kutumbakam* provides a balanced approach to career guidance that integrates technological innovation with human-centered values. Such an approach encourages the development of AI systems that support equitable access to opportunities, reduce social disparities, and empower individuals to pursue careers that contribute to both personal fulfillment and societal development. In an increasingly interconnected world, this value-driven integration of AI and career counselling can foster ethical practices that align technological advancement with the broader goal of global human welfare.

Concept of *Vasudhaiva Kutumbakam* in Education

The concept of *Vasudhaiva Kutumbakam*, which translates to “the world is one family,” is a profound philosophical idea originating from the **Maha Upanishad** in ancient Indian thought. This principle reflects the belief that all human beings are interconnected and share a common responsibility for the welfare of society. In the field of education, this philosophy promotes values such as universal brotherhood, inclusivity, compassion, and social responsibility. These ideals encourage educational

institutions to cultivate not only intellectual development but also ethical awareness and a sense of global citizenship among learners. Education inspired by the principle of *Vasudhaiva Kutumbakam* emphasizes holistic development and the formation of morally responsible individuals. Rather than focusing solely on academic achievements or economic success, value-based education seeks to nurture empathy, cooperation, and respect for cultural diversity. According to Sharma (2019), the integration of traditional Indian philosophical values in modern education contributes to the development of socially responsible citizens who are capable of addressing global challenges through ethical decision-making. In this perspective, the role of education extends beyond knowledge transmission to fostering moral consciousness and collective well-being.

The concept also supports the idea of inclusive and equitable education. When applied in educational practices, *Vasudhaiva Kutumbakam* encourages equal access to learning opportunities regardless of socio-economic status, cultural background, or geographical location. Educational institutions guided by this philosophy strive to create supportive learning environments where diversity is respected and collaboration is encouraged. Such an approach aligns with the broader goals of sustainable and human-centered education systems. As highlighted by Kumar (2021), value-based educational models grounded in Indian philosophical traditions can strengthen social cohesion and promote harmony in multicultural societies.

In the context of career guidance and counselling, the principle of *Vasudhaiva Kutumbakam* plays an important role in shaping ethical and socially responsible career choices. Career counselling traditionally focuses on helping individuals identify professions that match their interests, skills, and abilities. However, when guided by this philosophical perspective, career counselling also encourages learners to consider the broader impact of their career decisions on society and the environment. Students are motivated to pursue careers that contribute not only to personal success but also to community development and global welfare. This approach promotes the idea that professional achievements should align with humanitarian values and social responsibility.

Furthermore, the philosophy of *Vasudhaiva Kutumbakam* has significant relevance in the modern era of globalization and technological advancement. Educational systems today operate in a highly interconnected world where collaboration across cultures and nations is essential. By embedding the values of universal unity and mutual respect within education, institutions can prepare learners to function effectively in diverse and global environments. These values are particularly important when integrating advanced technologies such as Artificial Intelligence in educational and counselling systems. Ethical frameworks inspired by *Vasudhaiva Kutumbakam* can guide the responsible use of technology to ensure that innovations benefit all sections of society.

Therefore, the concept of *Vasudhaiva Kutumbakam* provides a strong philosophical foundation for value-based education and ethical career development. By promoting inclusivity, compassion, and social responsibility, this principle encourages educational institutions to develop individuals who contribute positively to society. When combined with modern technological tools such as Artificial Intelligence, these values can help create career guidance systems that are not only efficient and personalized but also ethical and socially conscious.

Need and Significance of the Study

The rapid transformation of the global workforce and the emergence of new career opportunities have made career decision-making increasingly complex for students and young professionals. Traditional

career counselling methods often rely on manual assessments, aptitude tests, and limited labour-market information, which may not adequately address the dynamic demands of the modern job market. In this context, **Artificial Intelligence (AI)** has emerged as a powerful technological tool capable of transforming career guidance systems through personalized recommendations, predictive analytics, and data-driven insights. AI-based career guidance systems analyse students' academic performance, interests, personality traits, and labour-market trends to provide tailored career suggestions that support informed decision-making (Bhargavi V. et.al. 2025). Furthermore, AI technologies can expand the reach of counselling services by offering digital platforms, chatbots, and virtual career advisors that provide continuous support to learners regardless of geographical or socio-economic barriers (Floridi et al., 2018). This is particularly significant in educational contexts where the availability of trained career counsellors is limited.

Despite these advantages, the integration of AI in career counselling is particularly significant because it improves accessibility and scalability of counselling services. Many educational institutions face a shortage of trained career counsellors, making it difficult to provide individualized guidance to all students. AI-driven systems such as recommender algorithms, machine learning models, and intelligent chatbots can provide continuous and personalized career support, helping learners identify suitable career pathways and develop required skills (Monika D S and Dr. K. Balaji 2025).

In this regards, the philosophical principle of *Vasudhaiva Kutumbakam*, meaning “**the world is one family**,” offers a valuable ethical foundation for guiding the development and implementation of AI-based career counselling systems. This value-based approach emphasizes inclusivity, social responsibility, and collective well-being. Integrating this philosophy into AI-driven career guidance ensures that technological innovations promote equitable access to opportunities and contribute to the welfare of society. Thus, the present study is significant as it explores the intersection of technology, ethics, and human values in the context of career guidance.

Objectives of the Study

1. To examine the role of Artificial Intelligence in enhancing career guidance and counselling systems.
2. To explore the relevance of the philosophy of *Vasudhaiva Kutumbakam* in promoting ethical AI-based career guidance.
3. To propose a value-based framework for integrating AI and ethical principles in career counselling practices.

Research Methodology

The present study adopts a **qualitative and conceptual research design** based on an extensive review of existing literature related to Artificial Intelligence, career counselling, and ethical frameworks in education.

Research Design

A descriptive and analytical approach has been used to examine the role of AI in career guidance and to explore the ethical implications associated with its use.

Data Sources

The study relies on **secondary data** collected from scholarly journals, research papers, conference proc-

eedings, and academic databases such as Google Scholar, Springer, IEEE, Scopus and Web of Science.

Method of Analysis

The collected literature was analyzed using **thematic analysis** to identify major themes related to:

- AI applications in career guidance
- Ethical challenges of AI systems
- Value-based frameworks for responsible AI use

Through comparative analysis of existing studies, the research identifies key patterns, challenges, and opportunities in the integration of AI and ethical principles in career counselling.

Role of Artificial Intelligence in Career Guidance

Artificial Intelligence (AI) has significantly transformed the field of career guidance by introducing advanced technological tools that enhance the efficiency, accessibility, and personalization of counselling services. AI-driven systems use machine learning algorithms, data analytics, and intelligent recommendation systems to help individuals make informed career decisions.

1. Personalized Career Recommendations

AI-based career counselling platforms analyse students' interests, personality traits, academic performance, and aptitude test results to generate personalized career suggestions. These systems use predictive analytics and recommendation algorithms to match individuals with suitable educational and professional pathways, enabling more informed career decision-making (Mehraj & Baba, 2019).

2. Data-Driven Career Decision Making

AI systems can process large volumes of data related to labour-market trends, employment opportunities, and skill requirements. By analysing such data, AI tools provide evidence-based insights that help students understand emerging career fields and industry demands (Holmes, Bialik, & Fadel, 2019).

3. Skill Gap Analysis and Career Planning

Artificial Intelligence can identify gaps between students' existing competencies and the skills required for specific careers. AI-powered platforms recommend training programs, online courses, and skill-development opportunities to help learners prepare for future career opportunities.

4. AI Chatbots and Virtual Career Counsellors

AI chatbots and virtual assistants provide continuous support by answering career-related questions, offering information about academic programs, and guiding students through the career planning process. These systems provide accessible counselling support, especially in regions where professional career counsellors are limited (Thakare et al., 2025).

5. Enhanced Accessibility to Career Guidance

AI-based counselling systems provide digital platforms that allow students from diverse geographical and socio-economic backgrounds to access career guidance services anytime and anywhere. This increases the reach and inclusivity of career counselling programs.

6. Integration with Psychological Assessment Tools

AI systems can integrate psychological assessment methods such as aptitude tests, personality assessments, and interest inventories to evaluate individuals' strengths and preferences. These assessments help generate accurate career recommendations based on scientific evaluation methods.

7. Ethical and Value-Based Career Guidance

When combined with ethical frameworks such as the philosophy of *Vasudhaiva Kutumbakam*, originating from the Maha Upanishad, AI can promote socially responsible career counselling. This approach encourages students to consider not only personal success but also the broader impact of their career choices on society and global welfare.

Overall, Artificial Intelligence enhances the effectiveness of career guidance by providing personalized insights, improving accessibility, and supporting evidence-based decision-making. However, the ethical use of AI remains essential to ensure fairness, transparency, and inclusivity in career counselling practices.

Ethical Considerations in AI-Based Career Counselling

The integration of Artificial Intelligence (AI) into career counselling has created new opportunities for personalized guidance and data-driven decision-making. However, the increasing reliance on AI systems also raises several ethical concerns that must be addressed to ensure responsible and fair use of technology. Ethical considerations are essential to protect individuals' rights, maintain trust in AI systems, and ensure that technological innovations promote inclusive and socially responsible career guidance.

1. Data Privacy and Confidentiality

AI-based career counselling systems collect large amounts of personal data, including students' academic records, personality assessments, interests, and behavioral patterns. Protecting the privacy and confidentiality of such sensitive information is crucial. Institutions must implement secure data management practices and follow ethical guidelines to prevent unauthorized access or misuse of personal information.

2. Algorithmic Bias and Fairness

AI systems rely on datasets to generate recommendations. If these datasets contain historical or social biases, AI algorithms may produce discriminatory outcomes that favour certain groups while disadvantaging others. Ensuring fairness in algorithm design and data selection is essential to prevent unequal career opportunities.

3. Transparency and Explainability

One major ethical concern in AI systems is the lack of transparency in how recommendations are generated. Students and counsellors should be able to understand the reasoning behind AI-generated career suggestions. Transparent algorithms and explainable AI models help build trust and allow users to evaluate the reliability of the system.

4. Informed Consent and User Awareness

Students using AI-based counselling platforms must be fully informed about how their data will be collected, processed, and used. Ethical practices require obtaining informed consent from users and ensuring that they understand the role of AI in the counselling process.

5. Accountability and Responsibility

When AI systems provide career recommendations, it is important to establish accountability for the outcomes of these recommendations. Educational institutions and technology developers must take responsibility for ensuring that AI tools operate ethically and accurately.

6. Accessibility and Equity

AI-based career counselling should be designed to benefit students from diverse socio-economic backgr-

ounds. Ensuring equitable access to AI technologies is essential to avoid widening the digital divide and to promote inclusive career development opportunities.

7. Alignment with Human Values and Social Responsibility

Ethical AI systems should align with universal human values such as fairness, compassion, and social responsibility. The philosophy of *Vasudhaiva Kutumbakam*, derived from the Maha Upanishad, emphasizes the idea that all people belong to one global family. Integrating this value-based perspective into AI-driven career counselling encourages the development of systems that support the welfare of all individuals and promote socially responsible career choices.

Integrating Vasudhaiva Kutumbakam with AI Career Counselling

The integration of Artificial Intelligence (AI) into career counselling offers innovative ways to support students in making informed career decisions. However, the ethical use of such technologies must be guided by human values that promote inclusivity, fairness, and social responsibility. The philosophical principle of *Vasudhaiva Kutumbakam*, which originates from the **Maha Upanishad**, emphasizes the idea that “the world is one family.” When applied to AI-based career counselling, this philosophy encourages the development of guidance systems that prioritize collective well-being and equitable opportunities for all individuals. The following points elaborate how this principle can be integrated into AI-driven career counselling practices.

1. Promoting Inclusive Career Opportunities

AI systems guided by the principle of *Vasudhaiva Kutumbakam* should ensure that career guidance services are accessible to students from diverse socio-economic and cultural backgrounds. Inclusive AI systems can help reduce inequalities in access to career information and counselling services.

2. Encouraging Global Citizenship in Career Choices

Career counselling supported by AI can incorporate global perspectives, encouraging students to consider careers that contribute to international cooperation, sustainability, and societal development. This aligns with the universal outlook emphasized by *Vasudhaiva Kutumbakam*.

3. Ethical Decision-Making in Career Guidance

AI-driven counselling systems should integrate ethical frameworks that promote fairness, transparency, and accountability in career recommendations. Ethical AI ensures that career guidance remains socially responsible and respectful of human dignity.

4. Supporting Socially Responsible Career Paths

The integration of this philosophy encourages students to select careers that contribute to community welfare and societal progress rather than focusing solely on individual success.

5. Reducing Bias in AI Algorithms

To align with the universal values of equality and unity, AI systems must be designed to minimize biases in datasets and algorithms. Ensuring fairness in AI recommendations supports equal opportunities for all learners.

6. Enhancing Human–AI Collaboration

AI should function as a supportive tool that assists career counsellors rather than replacing them. Human counsellors provide empathy, contextual understanding, and moral guidance, which complement AI’s analytical capabilities.

7. Encouraging Value-Based Education

Integrating *Vasudhaiva Kutumbakam* into AI career counselling promotes value-based education, where

students are guided to consider ethical, social, and environmental impacts when selecting career paths.

8. Promoting Cultural Sensitivity in Career Guidance

AI systems designed with cultural awareness can respect the diverse traditions, languages, and social contexts of students. Such systems ensure that career recommendations are relevant and culturally appropriate.

9. Strengthening Equity in Educational and Career Access

By analysing educational opportunities and labour-market trends, AI systems can guide students toward resources and training programs that help them overcome barriers to career development.

10. Fostering Sustainable and Human-Centered Career Development

The integration of *Vasudhaiva Kutumbakam* encourages a broader perspective of career success that includes social responsibility, environmental sustainability, and collective well-being. AI systems guided by these values can promote careers that contribute positively to society and the global community.

In this regards, integrating the philosophy of *Vasudhaiva Kutumbakam* with AI-driven career counselling creates a balanced framework that combines technological innovation with ethical human values. Such an approach ensures that AI technologies not only enhance career guidance efficiency but also promote fairness, inclusivity, and global welfare.

Findings

The present study explored the role of Artificial Intelligence (AI) in career guidance and examined how ethical principles inspired by *Vasudhaiva Kutumbakam* can contribute to responsible and inclusive career counselling practices. Based on the analysis of existing literature and conceptual perspectives, several key findings emerged regarding the effectiveness, opportunities, and ethical considerations of AI-driven career counselling.

1. Artificial Intelligence significantly enhances the effectiveness of career guidance systems.

The study found that AI-based career counselling platforms improve the quality and efficiency of career guidance by utilizing data analytics, machine learning algorithms, and recommender systems. These technologies analyse students' interests, academic performance, personality traits, and labour-market data to generate personalized career recommendations. Such systems help individuals make informed decisions regarding educational and occupational pathways. AI-driven platforms also support real-time guidance and continuous feedback, which enhances the accessibility and effectiveness of counselling services (Holmes et al., 2019; Sampson et al., 2015).

2. AI facilitates data-driven and personalized career decision-making.

Another major finding is that AI tools enable personalized career planning by identifying individual strengths, skill gaps, and future employment opportunities. Through predictive analytics and intelligent matching systems, AI can recommend relevant training programs and skill-development pathways that align with emerging industry demands. This contributes to improved career readiness and employability among students and job seekers (Luckin et al., 2016).

3. Ethical concerns remain a critical issue in AI-based career counselling systems.

Despite the advantages of AI technologies, the study identified several ethical challenges such as algorithmic bias, lack of transparency in decision-making processes, and potential risks related to data privacy and security. These issues may lead to unfair or discriminatory career recommendations if AI systems are not designed and monitored carefully. Therefore, ethical governance and responsible AI

practices are essential to ensure fairness and reliability in AI-driven counselling platforms (Floridi et al., 2018).

4. The philosophy of Vasudhaiva Kutumbakam provides a strong ethical foundation for AI-Based career guidance.

The study also found that integrating the Indian philosophical principle of Vasudhaiva Kutumbakam—which emphasizes universal brotherhood and collective well-being—can help address ethical challenges in AI systems. This value-based perspective encourages the development of inclusive and socially responsible career guidance frameworks that promote equal opportunities for individuals from diverse socio-economic and cultural backgrounds (Sharma, 2019).

5. A value-based AI framework supports human-centered career counselling practices.

The findings suggest that the most effective model of AI-based career counselling is one that combines technological capabilities with human ethical values. AI should function as a supportive tool that assists counsellors in analysing data and providing recommendations, while human counsellors continue to play a crucial role in offering empathy, contextual understanding, and ethical guidance. This collaborative approach ensures that career counselling remains learner-centered and aligned with broader societal welfare.

Overall, the findings suggest that Artificial Intelligence has the potential to transform career guidance by providing personalized, accessible, and data-informed counselling services. However, the successful implementation of AI in this field requires strong ethical frameworks, transparent systems, and value-based approaches inspired by principles such as *Vasudhaiva Kutumbakam*. Such integration can ensure that technological advancements contribute not only to individual career development but also to social harmony and global welfare.

Conclusion

Artificial Intelligence has the potential to revolutionize career counselling by providing personalized guidance, improved accessibility, and data-driven insights. AI-powered tools such as intelligent recommender systems, predictive analytics, and adaptive learning platforms can analyze large volumes of educational, psychological, and labor-market data to provide tailored career recommendations for individuals. These technological advancements enable counsellors to support students and job seekers in identifying their strengths, interests, and competencies, thereby facilitating more informed career decision-making. However, the ethical implications of AI technologies require careful consideration to ensure that these systems serve the broader interests of society. By integrating the value-based philosophy of *Vasudhaiva Kutumbakam*, AI-enabled career guidance can promote inclusivity, compassion, and social responsibility. Such an approach ensures that technological advancements contribute not only to individual career success but also to the collective welfare of humanity. In the future, combining ethical AI frameworks with human-centred counselling practices will be essential for building sustainable and equitable career development systems.

References

1. Herath and P. Dissanayake, “New Frontiers in Computer-Assisted Career Guidance,” *Journal of Information Technology Education: Research*, vol. 23, pp. 89– 108, 2024.
2. A. B. A. K. Abdulhadi, “Implementing a Web-Based Career Counseling and Guidance System for High School Students,” *International Journal of Engineering Research & Technology (IJERT)*, vol.

- 10, no. 5, pp. 421–425, 2023.
3. L. Zhang and Y. Wang, “Design of College Students’ Career Planning Guidance System Based on B/S Three-Tier Architecture,”
 4. Journal of Physics: Conference Series, vol. 1998, no. 1, 2021
 5. A. Sharma, P. Jain, and S. Gupta, “Career Compass: An AI- Powered Career Guidance System Based on Interests, Skills, and Soft Skill Profiling,” TechRxiv, 2023.
 6. A. Ghosh, R. Dey, and S. Majumdar, “C3-IoC: An AI-Based Career Guidance System,” International Journal of Artificial Intelligence in Education, vol. 34, no. 2, pp. 223–237, 2023.
 7. P. Li and X. Zhao, “Design of Career Counselling Information System (CCIS) Integrating Labour Market Data,” Education and Information Technologies, Springer, vol. 29, no. 4, 2024.
 8. H. Al-Mashaqbeh, “A Systematic Study of the Literature on Career Guidance and Decision Support Systems,” Journal of Learning for Development, vol. 10, no. 3, pp. 195–208, 2023.
 9. V. Das and R. Reddy, “Unlocking Futures: A Natural Language Driven Career Prediction System,” arXiv preprint, arXiv:2405.18139, 2024.
 10. H. Liu, J. Tang, and J. Han, “JobComposer: Career Path Optimization via Utility Learning from Online Professional Network Data,” arXiv preprint, arXiv:1809.01062, 2023.
 11. A. A. Khan et al., “Replication package for the paper: AI ethics: An empirical study of principles and challenges,” Accessed: Jun. 26, 2022, doi: 10.5281/zenodo.7303430.
 12. M. A. Akbar, A. A. Khan, S. Mahmood, and A. Mishra, “SRCMIMM: The software requirements change management and implementation maturity model in the domain of global software development industry,” Inf. Technol. Manage., pp. 1–25, Apr. 2022., doi: 10.1007/s10799-022-00364-w.
 13. L. Munn, “The uselessness of AI ethics,” AI Ethics, pp. 1–9, Aug. 2022, doi: 10.1007/s43681-022-00209-w.
 14. J. Morley, L. Floridi, L. Kinsey, and A. Elhalal, “From what to how: An initial review of publicly available AI ethics tools, methods and research to translate principles into practices,” Sci. Eng. Ethics, vol. 26, no. 4, pp. 2141–2168, Aug. 2020.
 15. V. Vakkuri, K.-K. Kemell, J. Tolvanen, M. Jantunen, E. Halme, and P. Abrahamsson, “How do software companies deal with artificial intelligence ethics? A gap analysis,” in Proc. Int. Conf. Eval. Assessment Softw. Eng., Jun. 2022, pp. 100–109.
 16. Balamurugan, G., Sevak, S., Gurung, K., Vijayarani, M., Balamurugan, G., & Vijayarani, M. (2024). Mental Health Issues Among School Children and Adolescents in India: A Systematic Review. Cureus, 16(5).
 17. Yang, R., Nair, S. V., Ke, Y., D’Agostino, D., Liu, M., Ning, Y., & Liu, N. (2024). Disparities in clinical studies of AI enabled applications from a global perspective. NPJ Digital Medicine, 7(1), 209.
 18. Haber, Y., Levkovich, I., Hadar-Shoval, D., Elyoseph, Z.: The Artificial Third: A Broad View of the Effects of Introducing Generative Artificial Intelligence on Psychotherapy. JMIR Mental Health 11(1), e54781 (May 2024).
 19. Kieslinger, K., Nierobisch, K.: Wenn der Chatbot weiß, wo es lang geht – Ethische Fragen und mögliche Kriterien zum Einsatz von KI-gestützten Beratungssettings. Zeitschrift für Weiterbildungsforschung 47(1), 99–121 (Apr 2024)
 20. Maples, B., Cerit, M., Vishwanath, A., Pea, R.: Loneliness and suicide mitigation for students using GPT3-enabled chatbots. npj Mental Health Research 3(1), 4 (Jan 2024)

21. Ni, Y., Jia, F.: A Scoping Review of AI-Driven Digital Interventions in Mental Health Care: Mapping Applications Across Screening, Support, Monitoring, Prevention, and Clinical Education. *Healthcare* 13(10), 1205 (May 2025)
22. Radanliev, P.: AI Ethics: Integrating Transparency, Fairness, and Privacy in AI Development. *Applied Artificial Intelligence* 39(1), 2463722 (Dec 2025)