

Worksheet 1: *The Influence of Artificial Intelligence in Promoting Youth Fitness and Preventing Mental Health Issues in Teenagers*

Article	Research Question	Methods	Key Findings	Strengths/ Weaknesses	Relevance to My Research
Mansfield, K. L., Ghai, S., Hakman, T., Ballou, N., Vuorre, M., & Przybylski, A. K. (2025). From social media to artificial intelligence: improving research on digital harms in youth. <i>The Lancet Child & Adolescent Health</i>. https://www.sciencedaily.com/releases/2025/01/250121210522.htm	How can research methodologies be improved to assess the impact of artificial intelligence on youth mental health?	The study provides a critical analysis of existing research approaches and proposes a comprehensive framework for investigating AI's effects on young people's mental well-being.	The authors highlight the necessity for robust, longitudinal studies and interdisciplinary collaboration to understand AI's impact on youth mental health accurately.	Strengths: Offers a detailed framework for future research; emphasizes the importance of methodological rigor. Weaknesses: Lacks empirical data; primarily focuses on theoretical aspects.	This article provides a foundational framework that can guide the methodological design of studies exploring AI's influence on teenage mental health.

Graham, S., Depp, C., Lee, E. E., Nebeker, C., Tu, X., Kim, H. C., & Jeste, D. V. (2019). Artificial intelligence for mental health and mental illnesses: an overview. <i>Current Psychiatry Reports</i>, 21(11), 116. https://link.springer.com/article/10.1007/s11920-019-1094-0	What are the current applications and implications of artificial intelligence in mental health care?	The authors conducted a comprehensive review of AI technologies utilized in mental health diagnostics, treatment planning, and patient monitoring.	AI has the potential to enhance mental health services through improved diagnostic accuracy and personalized treatment plans. However, ethical considerations and the need for human oversight remain critical.	Strengths: Provides a broad overview of AI applications in mental health; discusses both technological benefits and ethical challenges. Weaknesses: Does not specifically focus on adolescent populations or physical fitness aspects.	The insights into AI's role in mental health care can inform the development of AI-driven interventions aimed at preventing mental health issues in teenagers.
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Przybylski, A. K., & Vuorre, M. (2025). Recommendations for studying the impact of AI on young people's mental health. <i>ScienceDaily.</i> https://www.sciencedaily.com/releases/2025/01/250121210522.htm	What strategies can be employed to effectively study the impact of AI on youth mental health?	The authors propose a set of recommendations based on a critical evaluation of existing literature and research methodologies.	Emphasizes the importance of longitudinal studies, ethical considerations, and the inclusion of diverse populations in research to accurately assess AI's impact on youth mental health.	Strengths: Provides actionable recommendations for future research; highlights the need for ethical frameworks. Weaknesses: Lacks empirical data; focuses on research methodologies rather than direct applications. contexts.	The recommendations can guide the ethical and methodological aspects of researching AI's influence on promoting youth fitness and mental health.
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University of Texas at Austin. (2020). Can AI support youth mental health? <i>UT News</i>. https://news.utexas.edu/2020/02/11/can-ai-support-youth-mental-health/	How can artificial intelligence be utilized to support mental health among young people?	The article discusses ongoing research projects exploring AI applications in mental health support, including AI-driven chatbots and monitoring systems.	AI technologies, such as chatbots, can provide accessible mental health support to adolescents, offering immediate assistance and bridging gaps in traditional mental health services.	Strengths: Highlights practical applications of AI in providing mental health support; discusses accessibility benefits. Weaknesses: Limited empirical data; focuses primarily on mental health without addressing physical fitness.	Demonstrates how AI can be leveraged to offer mental health support to teenagers, informing potential interventions in my study.
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Technology Networks. (2022). Harnessing AI as a wellness tool for teenagers' mental health. <i>Technology Networks Neuroscience News</i>. https://www.technologynetworks.com/neuroscience/blog/harnessing-ai-as-a-wellness-tool-for-teenagers-mental-health-363069	What are the potential benefits and challenges of using AI-powered tools to support teenagers' mental health?	The article explores the development and implementation of AI-driven platforms designed to assist teenagers in managing their mental well-being.	AI-powered tools, such as personalized virtual companions, can offer continuous support and coping strategies for teenagers, enhancing their ability to manage mental health challenges.	Strengths: Discusses innovative AI applications tailored for teenagers; highlights user engagement and accessibility. Weaknesses: Focuses on mental health without addressing physical fitness; limited discussion on long-term efficacy.	Provides examples of AI applications that could be adapted to promote both mental health and physical fitness among teenagers.
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Worksheet 2: Synthesising Literature

- **Activity:** Group similar articles by themes and fill in the table below.

Theme	Key Studies	Findings	Gaps Identified
Evaluating and enhancing research methodologies to assess the impact of artificial intelligence on youth mental health.	• Analysis of existing literature on digital harms associated with AI applications among youth. • Examination of methodological approaches in current research on AI's impact on adolescent mental health.	• Current research methodologies lack robustness and consistency, leading to inconclusive results. • There is a critical need for longitudinal studies and interdisciplinary collaboration to accurately assess AI's effects on youth mental health.	• Insufficient longitudinal data tracking the long-term impact of AI on adolescent mental health. • Lack of standardized research frameworks to study AI-related digital harms in youth populations.
Exploring the applications and implications of artificial intelligence in mental health care.	• Review of AI technologies in mental health diagnostics and treatment planning. • Analysis of AI-driven patient monitoring systems and their effectiveness.	• AI has the potential to enhance mental health services through improved diagnostic accuracy and personalized treatment plans. • Ethical considerations, such as data privacy and the need for human oversight, are paramount in implementing AI solutions.	• Limited research focusing on AI applications specifically for adolescent populations. • Need for empirical studies evaluating the integration of AI in promoting physical fitness alongside mental health.
Providing strategic recommendations for researching AI's impact on youth mental health.	• Critical evaluation of existing literature on AI's effects on young people's mental health. • Development of a comprehensive framework for future research methodologies.	• Emphasis on the importance of longitudinal studies to capture the dynamic nature of AI's impact. • Advocacy for ethical frameworks and the inclusion of diverse populations in	• A dearth of studies employing longitudinal designs to assess long-term effects. • Underrepresentation of diverse demographic groups in existing research, limiting the applicability of findings.

Theme	Key Studies	Findings	Gaps Identified
		research to ensure generalizability.	
Investigating the potential of artificial intelligence to support mental health among young people.	• Exploration of AI-driven chatbots designed to provide mental health support to adolescents. • Assessment of AI monitoring systems for early detection of mental health issues.	• AI technologies, such as chatbots, can offer immediate and accessible mental health support, bridging gaps in traditional services. • These tools can provide coping strategies and emotional assistance, particularly in underserved communities.	• Limited empirical evidence on the long-term effectiveness of AI interventions in youth mental health. • Need for research on integrating physical fitness promotion within AI-driven mental health support systems.
Exploring the use of AI-powered tools to enhance mental health and wellness among teenagers.	• Development and implementation of AI-driven platforms offering personalized mental health support. • Evaluation of user engagement and effectiveness of AI virtual companions in providing continuous support.	• AI-powered tools can deliver personalized coping strategies and mental health resources, improving adolescents' ability to manage challenges. • These platforms offer continuous support, which is crucial for early intervention and prevention.	• Scarcity of studies examining the integration of physical fitness promotion within AI mental health tools. • Need for research on the long-term user engagement and sustained effectiveness of AI interventions in adolescent populations.