

THE ROLE OF ARTIFICIAL INTELEGENCE AS A TOOL TO HELP COUNSELORS IN IMPROVING MENTAL HEALTH

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Abstract

In an era where technology continues to develop rapidly, the role of Artificial Intelligence (AI) is increasingly significant in various aspects of human life, including in the field of guidance and counseling, especially in the field of mental health. AI helps individuals reach their full learning potential. As part of computer science, AI aims to create machines (computers) that can do work like humans, even better. The use of AI in healthcare improves mental well-being and provides a way to bridge gaps in mental health and other health services. Mental health counseling involves interactions between counselors and individuals experiencing mental health problems, with a variety of therapeutic approaches to help them. AI developments have had a significant impact in this field, particularly through chatbot therapy which allows individuals to interact with AI chatbots to obtain help and advice regarding mental health issues. This research is motivated by the use of AI in student guidance and counseling. AI is a system that continues to develop in having intelligence similar to or even more than humans, which can be used in guidance and counseling services in schools. This research aims to explore how to use AI to increase the effectiveness, accessibility and responsibility of guidance and counseling services for students. One example of using AI is through Guidance and Counseling Chatbots. The research method used is a literature study, which reveals that many guidance and counseling students have adopted the use of AI in educational contexts. AI has great potential to improve the efficiency and effectiveness of education systems, with various types of AI that can be used, such as Canva, Google Meet, Zoom, Mozilla Firefox and ChatGPT. However, it is important to pay attention to academic ethics so that educational goals can be achieved well.

Keywords: AI (Artificial intelligence) ; improve mental health

1. Introduction

Artificial Intelligence (AI) is a broad field of computer science that utilizes computer-based machines to accomplish advanced tasks. AI can now be accessed via the internet to search for information, health resources and social support in the field of mental health. The impact has been felt in sleep disorders, dependence on technology, and other mental health problems.

Health professionals, such as mental health specialists, informatics nurses, and engineers, need to collaborate to apply AI technology in clinical practice. In mental health counseling, counselors use a variety of therapeutic approaches and techniques to help individuals experiencing mental health problems. The development of AI has had a significant impact in this field, opening up new opportunities for innovation and effectiveness in mental health services. According to (Park & Lee, 2012) dependence on the internet and technology can cause behavioral disorders, such as obsession with the internet, anxiety when not using digital devices, and loss of control over technology use. Their study showed that the more often someone uses technology, the more likely they are to experience mental health problems. (Park, Lee & Kim, 2012) According to Hanurawan, mental health is a mental state or psychological condition that shows a person's ability to make adjustments or solve problems to problems that exist within oneself and problems that exist in the external environment. himself.

According to previous research by Maulana & Gumelar, (2013) in the context of mental health, AI technology can help identify mental health disorders in a person, decisions taken by AI



technology are not always appropriate and can affect human well-being. Therefore, counselors should study the impact of the use of AI technology on human decision making and provide recommendations for its ethical and fair use. Counselors can have a negative impact on human mental health and behavior.

According to previous research by Hisan & Amri,(2022), in the context of mental health, there is initial evidence that AI can reduce mental health symptoms. Currently, technology offers alternative ways to treat mental illnesses such as depression, for example through mobile applications, virtual reality or chatbots.

According to previous research by Taruklimbong & Sihotang,(2023), this is reflected in the length of time people invest in using digital tools such as smartphones, laptops and tablets. Dependence on this technology has the potential to affect mental health, including causing symptoms of anxiety, restlessness and sleep disorders.

The aim of this research is to have a significant impact in the field of mental health by utilizing AI to provide assistance anytime and anywhere. For example, chatbot therapy allows individuals to interact with AI to get help with mental health issues. With this research, individuals can get support without having to face a counselor directly, overcoming barriers such as distance, cost, or social stigma. AI-based mental health support can provide easier, faster and more personalized access for individuals who need help dealing with mental health problems.

2. Method

In this research, researchers applied library research methods. This method is carried out systematically to collect, process and conclude data using certain techniques to answer the problems researched through relevant literature (Khitbah, 2011). Library research utilizes various sources of information such as documents, books, magazines, history, etc. that are available in libraries (Sari, 2021)

The data collection method used is the documentation method. Documentation techniques involve searching and collecting data from various sources such as notes, books, articles, journals, and others. Data analysis was carried out using content analysis techniques, which include analysis from various theoretical sources, using several data analysis techniques, and involving collaboration between researchers in interpreting research results.

3. Results and Discussion

Artificial Intelligence (AI) is a part of computer science which aims to develop machines (computers) to be able to perform tasks as well as or even better than humans (Andri Kristanto, 2004). Via the internet, AI can be used routinely to search for information, health resources, and get social support in the field of mental health. The application of AI in these services not only improves mental health and well-being, but also helps address gaps in mental health services and other health areas(Lindhiem et al., 2020)

AI or artificial intelligence is also a branch of computer science which aims to create computer machines that can operate like humans. AI technology has been applied in various aspects of daily life, including in the medical field which focuses on mental health management. Mental health refers to an individual's condition which includes self-acceptance, a realistic assessment of oneself, the ability to overcome life's challenges, and achieve happiness.(Burhanuddin, 1999) It emphasizes an individual's adaptability to oneself, the environment, and the surrounding community.

AI technology has influenced many aspects of human life, including in the field of guidance and counseling. Counselor itself is a science that studies human behavior and the mental processes involved in it. As a science related to humans, counselors must understand the impact of developments in AI technology on mental health and human behavior. AI technology can affect various aspects of human behavior and mental health, such as sleep disorders, dependence on technology, and other mental health problems (Zhang et al., 2021)

In the context of mental health, AI technology can help identify mental health disorders in a person. One example is a chatbot that can help individuals with mental health problems, such as depression and anxiety (Ghozali & Mustafa, 2019). These chatbots use natural language processing technology to communicate with individuals and provide psychological support. However, the use of AI technology can also cause mental health problems in humans. For example, dependence on AI technology can cause sleep disorders and anxiety in humans (Baloğlu et al., 2018)

In the current digital era, the internet and social media have become an important part of human life. In 2019, approximately 71% of Golab's population accessed the internet and 45% of the global population used social media. The development of AI technology in social media, such as content personalization, can influence human behavior, especially mental health.

In facing these challenges, counselors play an important role in the era of artificial intelligence or AI. As a science that studies human behavior and the mental processes involved in it, counselors can provide a better understanding of how AI technology influences human behavior and reinforces existing biases. With this understanding, counselors can provide appropriate solutions and strategies to overcome problems that arise, such as reducing the influence of personalized content on social media and reducing bias in decision making (BURHAN, 2022)

AI technology can also have a negative impact on human mental health. For example, when humans rely too much on AI technology to make decisions or complete tasks, this can cause dependency and lead to mental health problems such as anxiety and depression. In dealing with the negative impact of AI on human mental health, the role of counselors becomes increasingly important. As a science that studies human behavior and the mental processes involved in it, counselors can help understand how AI technology can affect human mental health and behavior

Even though AI technology has a big impact on human mental health, this does not mean that AI always has a negative impact, the application of AI in the health and counseling fields has provided great benefits for human mental health. AI can help diagnose mental health disorders more quickly and accurately, as well as build clients in the therapy process with chatbots or online counseling applications. For example, chatbots equipped with AI technology can help clients with symptoms of depression and anxiety. This chatbot can evaluate the client's condition and provide advice according to individual needs. Apart from that, online counseling applications have also developed rapidly and can help patients who have difficulty accessing mental health services directly.

With this understanding, counselors can develop interventions and strategies that can help reduce human dependence on AI technology. Counselors can also help develop AI algorithms that do not reinforce existing biases and discrimination in society. Apart from that,

counseling can also help strengthen awareness of the importance of mental health in developing the application of AI technology.

In this increasingly advanced AI era, counselors are faced with big challenges to remain relevant and useful to society. These challenges include data security and privacy, the role of humans in AI development, and the impact of AI on human mental health.

First, the challenges of data security and privacy are very crucial in the development of AI in the field of guidance and counseling. Data generated from the use of AI in guidance and counseling can contain sensitive information such as mental health history, sexual preferences, or even financial information. Therefore, strict policies are needed to protect data privacy so that it is not misused by irresponsible parties.

Second, the client's role in AI development is also important. In the development of AI in the field of guidance and counseling, clients must remain the center of attention. AI users in counseling cannot replace the role of humans as therapists or researchers, but must be a tool to obtain more accurate and effective data.

Third, the impact of AI on human health is also a challenge that must be overcome. Although AI can provide convenience and speed in diagnosing and treating mental health disorders, it can lead to dependence on technology and reduce direct social interaction. Therefore, appropriate policies and approaches are needed in the use of AI for mental health so that it does not interfere with clients' social interactions.

The challenges faced by counselors in this era of artificial intelligence or AI are indeed very large, but that does not mean they cannot be overcome. With the right policies and approaches, as well as maintaining the client's role as a human being in general as the center of attention, counselors can make useful contributions to society. Therefore, there is a need for collaboration between counselors and the development of AI technology to achieve the same goal, namely improving human welfare and mental health.

The role of AI in mental health is set to revolutionize the way we diagnose, treat and support people with mental health problems. AI mental health applications provide better insight into the causes of mental problems, enabling more effective prevention strategies and solutions. As AI continues to develop, it will find its place in transforming mental health care. AI is also a revolutionary force in overcoming mental health challenges in mental health. As society continues to recognize the importance of mental health, the need for new and successful solutions is increasing.

By harnessing the power of AI for mental health services, the world can evolve to better address existing challenges. These technological advances have the potential to democratize mental health services, ensuring that individuals around the world have access to timely support and resources, even when facing a shortage of mental health professionals.

What health counselors can do in mental health using AI artificial intelligence is to diagnose and treat mental health problems. AI can be used to detect and diagnose mental health, provide personalized interventions and monitor the progress of patients or clients. Using AI virtual tools can be designed to support and guide people with mental health problems.

4. Conclusion

What health counselors can do in mental health using AI artificial intelligence is to diagnose and treat mental health problems. AI can be used to detect and diagnose mental health, provide personalized interventions and monitor the progress of patients or clients. Using AI virtual traps can be designed to support and guide people with mental health problems.

Mental health is a condition where a person does not experience feelings of guilt towards himself, has a realistic estimate of himself and can accept his shortcomings or weaknesses, the ability to face problems in his life, and have happiness in his life. Mental health is the ability a person has to adapt to himself, other people, society or his environment.

AI or artificial intelligence is a part of computer science that studies how to create machines (computers) that can do work like and as well as humans do, even better than humans do. Artificial intelligence (AI) via the internet can be used every day to search for information, search for health resources and obtain social support in the field of mental health.

The application of AI in mental health provides an example of how technology is changing the landscape of mental health services, improving prevention and treatment approaches. By harnessing the potential of AI, mental health professionals and individuals are equipped with innovative tools to address the complexities of mental wellbeing.

The use of AI to provide services improves mental health, improves well-being, and is a great way to bridge gaps in mental health services and other types of health services. Along with the development of Artificial Intelligence technology, several technology companies have implemented this technology in several services or applications and provide facilities such as predicting individual risk, therapy for depression, and emergency responding.

From the previous discussion, it can be concluded that. There are already many guidance and counseling students who apply AI. AI has great potential to improve the efficiency and effectiveness of education systems. Several types of AI that can be used in education include Canva, Google Meet, Zoom, Mozilla Firefox, ChatGPT, etc. Academic ethics are very important to pay attention to and adhere to in the world of education, so that the goals of education can be achieved. The use of AI can be utilized in the world of education to improve the interactive and fun educational process. But we must remain alert to the negative impacts of using AI if it is not used wisely, such as violations of plagiarism and academic ethics. Apart from that, it can reduce the student's critical, creative and innovative attitude. Given the negative impacts of using AI, lecturers must prepare strict regulations in handling the negative impacts of using AI. It is hoped that with the existence of regulations and rules in understanding academic ethics, pupils and students can develop knowledge by utilizing AI according to needs, can develop reasoning, creative and innovative powers for the progress of the nation and state.

References

- Baloğlu, M., Özteke Kozan, H. İ., & Kesici, Ş. (2018). Gender differences in and the relationships between social anxiety and problematic internet use: Canonical analysis. *Journal of Medical Internet Research*, 20(1), e33.
- BURHAN, D. R. (2022). *Gerakan Serikat Pekerja Media dan Industri Kreatif untuk Demokrasi (Sindikasi) dalam Menuntut Aspek Kesehatan Mental pada Peraturan Menteri Ketenagakerjaan (Permenaker) No. 5 Tahun 2018 Tentang Keselamatan dan Kesehatan Kerja (K3) di Lingkungan Kerja*. Universitas Jenderal Soedirman.
- Burhanuddin, Y. (1999). *Kesehatan mental*. Bandung: Pustaka Setia.

- Ghozali, M. S., & Mustafa, M. B. (2019). Pembuatan pendeteksi obyek dengan metode you only look once (YOLO) untuk automated teller machine (ATM). *Majalah Ilmiah UNIKOM*, 17(1), 69–76.
- Hisan, U. K., & Amri, M. M. (2022). Peran Chatbot dalam Menangani Masalah Kesehatan Mental selama Pandemi COVID-19: Tinjauan Mini. *Bincang Sains Dan Teknologi*, 1(01), 1–11.
- Lindhiem, O., Vaughn-Coaxum, R. A., Harris, J. L., & Kolko, D. J. (2020). A Computer Adaptive Test (CAT) for knowledge of parent management skills: Prototype development and preliminary psychometrics. *Journal of Family Psychology*, 34(6), 752.
- Maulana, H., & Gumelar, G. (2013). Psychology of communication and persuasion. *Jakarta: Academy*.
- Park, N., & Lee, H. (2012). Social implications of smartphone use: Korean college students' smartphone use and psychological well-being. *Cyberpsychology, Behavior, and Social Networking*, 15(9), 491–497.
- Sari, R. K. (2021). Penelitian Kepustakaan Dalam Penelitian Pengembangan Pendidikan Bahasa Indonesia. *Jurnal Borneo Humaniora*, 4(2), 60–69.
- Taruklimbong, E. S. W., & Sihotang, H. (2023). Peluang dan Tantangan Penggunaan AI (Artificial Intelligence) dalam Pembelajaran Kimia. *Jurnal Pendidikan Tambusai*, 7(3), 26745–26757.
- Zhang, J., Zhao, T., & Liu, Y. (2021). Depressed Patients Intelligent Recognition in Smart Home Environment. *Journal of Medical Imaging and Health Informatics*, 11(2), 353–359.