

Artificial Intelligence-Based Counseling for Improving Self-Understanding Through Self Diagnose of Generation Z

Andiniasmin Difebrian, Dizha Zasqi Ananda Prameswari, Mira Mareta

andiniasmin192@gmail.com

State Islamic University of Mataram

Abstract

This research is motivated by an increase in adolescents who self-diagnose and have a negative impact on their mental health. Self-diagnosis of mental health can cause problems such as reading the wrong diagnosis, mishandling, undetected disorders, and misperceptions of mental illness. This study aims to discover how AI-based counseling improves self-understanding through self-diagnosis of Generation Z. This study uses a descriptive qualitative research method with five high school adolescents as subjects who have self-diagnosed their health or mental health to help improve their understanding of self-diagnosis. Implementation of this research using purposive sampling technique in taking research samples. Based on the results of the study, it shows that 1) some adolescents who carry out self-diagnosis feel that their mental health is disturbed as the consequence hinders daily life, 2) they experience excessive anxiety when carrying out an activity and often feel afraid when the self-diagnosis they made become a reality, and 3) feel pressured that the results of the diagnosis are not necessarily correct, but the mental disorders they feel as a result of self-diagnosis cannot be avoided. This research also shows that, in dealing with such phenomenon of self-diagnosis, Generation Z youth need to develop critical skills in evaluating the information they find online. Utilizing AI in counseling can help increase self-understanding about self-diagnosis and adolescent mental health.

Keywords: Artificial Intelligence (AI), Self-understanding, Self-Diagnosis, Generation Z.

INTRODUCTION

Today's accelerating advancements in Science and Technology have altered how adolescents perceive mental health (Tyas, Alfianto, & Rahmawati, 2022: 30). Artificial intelligence, commonly referred to as AI, has gained significant popularity among individuals belonging to Generation Z. The acquisition of online mental health exams can be readily facilitated by artificial intelligence (AI) technology. Consequently, adolescents have a keen interest in mental health, which is readily accessible through internet platforms such as websites and widely disseminated on popular social media platforms like TikTok, Instagram, Facebook, and others (Singarimbun & Nazriani, 2023: 1). This phenomenon has led to a rise in self-diagnosis among adolescents. The counselling profession is experiencing a growing use of artificial intelligence (AI). Hence, the utilization of AI in the field of counseling presents an interesting strategy for comprehending the individual's psyche, particularly within the context of self-assessment.

Self-diagnosis refers to individuals diagnosing themselves with a mental disorder or illness exclusively relying on their knowledge and experience without seeking assistance from a qualified

authority such as a healthcare professional. Before the arrival of the Internet, individuals would often engage in self-diagnosis by comparing their symptoms with the experiences of others (Annury, dkk., tt: 481). Many adolescents encounter symptoms of stress or depression, including an elevated susceptibility to suicide, although they often delay seeking assistance. Negative societal attitudes towards individuals with mental problems account for this phenomenon (Rudianto, 2022: 60).

This topic selection is motivated by the growing prevalence of self-diagnosis among adolescents and its detrimental effects on their mental well-being. Self-diagnosing mental health conditions can result in several issues, including incorrect diagnoses, inappropriate treatment, undetected disorders, and misconceptions about mental illness. The objective of this study was to enhance self-understanding among adolescents through self-diagnosis. One of the primary contributing causes to this situation is the presence of websites that offer tests yielding inaccurate and questionable outcomes. The inclination of self-diagnosis is observed to be on the rise, particularly among adolescents who engage extensively with social media platforms.

Consequently, the researchers conducted this study in order to investigate the efficacy of AI-based counseling in enhancing self-understanding via self-diagnosis. The challenges faced by Generation Z require the availability of counseling services to assist them in overcoming their difficulties, hence discouraging the inclination to rely on artificial intelligence for self-diagnosis. Counselors may utilize technological advancements, such as AI, in their counseling practices, particularly concerning aiding counselees in their self-assessment and self-diagnostic processes. The consideration of self-understanding in relation to self-diagnosis is a crucial aspect to be taken into account when drawing conclusions about identifying unpleasant emotions and disorders experienced by the individual seeking counseling.

This assertion is supported by empirical evidence, as numerous instances have been documented wherein many adolescents engage in self-diagnosis of various disorders, including but not limited to panic attacks, obsessive-compulsive disorder (OCD), eating disorders, emotional disorders, stress-related conditions, and depression. One illustrative instance involves an adolescent who self-diagnosed himself with depression after conducting an inquiry into the symptoms associated with his fluctuating emotional state. Subsequently, he proceeded to explore information relating to these symptoms and asserted his state of being afflicted with depression. The influence of mental health self-diagnosis, whether deliberate or unintentional, significantly affects an individual's life by potentially leading to an incorrect interpretation of mental diseases due to the possibility of misreading diagnostic information.

RESEARCH METHOD

The research methodology employed in this study was qualitative-descriptive in nature. This study does not provide particular indicators that demonstrate and clarify the potential of AI-based counseling to enhance self-understanding through self-diagnosis. The research will employ indicators that involve assessing whether the outcomes of self-diagnosis are predominantly positive

or negative in the subjects' lives. The study employed a purposive sampling strategy to choose the research sample. The sample was collected taking into account the following considerations: (1) the participants in this study are senior high school students, (2) ranging in age from 16 to 18 years, and (3) who have engaged in self-diagnosis. The study's sample consisted of five individuals with prior self-diagnosis experience. The outcomes derived from the responses provided by the interviews will indicate their comprehension of the utilization of artificial intelligence in self-assessing their personal well-being, including both physical and mental aspects.

RESULTS AND DISCUSSION

Artificial intelligence (AI) is a computer science discipline focused on developing computers or systems capable of emulating, interpreting, and acquiring knowledge similar to humans. AI encompasses the creation of algorithms and computational models that empower machines to comprehend and analyze data, make judgments, address challenges, and execute tasks that typically necessitate human intellect (Tjahyanti, dkk., 2022: 16). The terminology 'artificial intelligence' may potentially create a misconception by implying the capacity of computers to exhibit intelligence comparable to that of humans (Anggraini, Nafi, Erickson, dkk., 2020: 64). Regarding the components encompassed under the category of AI in everyday life, notable examples include virtual assistants such as Siri on the iPhone and Google Assistant, social media platforms like TikTok, Instagram, and Facebook, and search engines like Browser and Google.

The contemporary generation Z adolescents have commendable proficiency in problem-solving and possess a wealth of information and experiential insights. Acquiring knowledge through the process of learning facilitates problem-solving in several aspects of life, as an increased store of knowledge enhances one's ability to address and resolve challenges. Nevertheless, adolescents possess the cognitive capacity to evaluate, rationalize, and derive inferences based on their acquired information and expertise (Lubis, 2021: 1-2). One advantageous characteristic of Generation Z is their inherent inclination towards curiosity. Individuals do not require explicit instruction when confronted with diverse, sophisticated technologies, as they possess the innate ability to autonomously acquire the necessary skills and knowledge to effectively navigate and utilize those technologies in response to the presented symptoms. One drawback is that Generation Z tends to be impatient, often seeking instant solutions to problems due to their reliance on social media platforms for communication and interaction, characterized by their speed and practicality (Handayani, tt: 56-57). Consequently, the frequency of self-diagnosis is on the rise among adolescents, particularly those who are highly engaged in social media platforms.

In light of this phenomenon, it is advisable within the counseling process to incorporate the utilization of artificial intelligence to enhance self-understanding among Generation Z by providing knowledge regarding self-diagnosis. This study aims to strengthen the capacity to identify the challenges encountered by adolescents belonging to Generation Z through an analysis of their AI-driven search behavior. By identifying these issues, Generation Z engages in self-diagnosis, thereby utilizing a valuable tool to enhance their comprehension of their self-concept (Rilantinawati,

Siahaan & Purwana, 2020: 7-8). The utilization of self-diagnosis among Generation Z adolescents has the potential to improve their understanding of self-concept and facilitate self-improvement. This is achieved by obtaining feedback from artificial intelligence (AI) platforms, allowing individuals to get insights into their focus areas. Consequently, this approach aids in preventing the recurrence of similar errors in subsequent challenges.

In her 2022 study titled "The Phenomenon of Self-Diagnosis in the Era of the COVID-19 Pandemic and its Impact on Mental Health," Imas Maskanah asserts that self-diagnosis can be utilized to identify both physical and mental health illnesses experienced by individuals. During the course of the pandemic, the participants of this survey engaged in self-diagnosis of various health issues, including but not limited to sleeplessness, bipolar disorder, typhoid fever, personal anguish, and COVID-19. Respondents' self-diagnosis was driven by factors such as curiosity regarding their symptoms, confusion, stress, and difficulty managing negative emotions. Hence, participants sought information about their complaints and compared them to symptoms associated with a specific health condition. Most participants indicated that they accessed health information via the Internet. According to a 2021 survey conducted by Change.org, more individuals are presently accessing health services through online platforms than seeking consultations with psychologists or doctors at hospitals (Maskanah, 2022: 6).

Table 1. Result of Subject Interview

No	Subject	Interview Result
1	AY (17 years)	AI has the potential to assist individuals in recognizing themselves from the outside. The effectiveness of AI-based diagnoses is less effective because AI algorithms rely heavily on users' Internet preferences, habits, and behavior. According to the individual's perspective, the utilization of AI does not offer any apparent benefits due to the increased levels of concern it creates. The individual expresses a sense of fear and unease regarding the potential implications of AI-generated outcomes, which they perceive as a personal threat. This results in a state of cognitive distraction and deterioration of her daily functioning, characterized by diminished focus and increased anxiety. Additionally, they exhibit a greater level of comfort when engaging in conversations with artificial intelligence than direct human interaction, as she holds concerns that humans may possess scepticism towards their own experiences. Moreover, they frequently have financial limitations when seeking medical consultation.
2	CK (17 years)	The individual has employed methods involving AI to get insights into their own mental well-being, particularly when experiencing personal distress. Upon conducting an inquiry utilizing artificial intelligence, it was determined that the individual had symptoms consistent with panic attacks, obsessive-compulsive disorder (OCD), and an eating disorder. These diagnoses are typically made

		when individuals have symptoms of depression and anxiety. The prevailing belief was that AI lacked any apparent advantages or drawbacks. Engaging in talk with AI brings more comfort than direct human interaction. This is attributed to AI's perception of safety and its ability to listen attentively to individuals despite its limited capacity to offer helpful responses.
3	NR (16 years)	According to the individual, AI is defined as a robot or a form of artificial intelligence. However, humans possess superior intelligence as they possess the capability to create and develop AI technologies. The individual previously employed AI to identify his identity based on a personality assessment and ascertain the symptoms he experienced. However, the outcomes generated by the AI system exhibited a 50% concordance rate with his self-perception.
4	DV (18 years)	The individual utilizes AI to enhance daily activities and gain insights into their personality using the MBTI test. AI is user-friendly, only requiring inputting desired information, yielding immediate results. The individual self-diagnosed themselves with depression based on the outcomes provided by an AI system. The person experienced similar symptoms as those described by AI. According to her, AI's initial signs or symptoms can aid the diagnosis. The individual experienced distress and anxiety regarding possibly the diagnosis aligning with artificial intelligence. The individual engages in self-diagnosis when experiencing symptoms of depression, accompanied by various difficulties and a sense of confusion.
5	HT (18 years)	The individual has employed AI to validate the accuracy of his subjective experiences, particularly concerning phenomena such as stress or other psychological problems. In the event of uncertainty regarding the accuracy of the AI response, the individual will seek clarification from their closest friend. The individual intends to employ AI in instances where he experiences unexpected problems and seeks to identify symptoms associated with an illness.

The data acquired by researchers concerning the issue are as follows: Many adolescents engage in self-diagnosis after consulting references retrieved by AI. The practicality of utilizing artificial intelligence enables individuals to obtain answers when seeking health-related information swiftly. AI is employed to gather information about individuals' health status relatively accurately. Based on the conclusive findings, certain adolescents who engage in self-diagnosis report experiencing negative consequences. These include disturbances in their mental well-being, which impede their daily lives, increased anxiety during activities, and a persistent fear of the accuracy of their self-diagnoses. Additionally, they express feelings of depression stemming from the realization that the outcomes of their self-diagnoses may not necessarily align with reality. Yet, the mental disorders they perceive as a result of self-diagnosis remain unavoidable (Maskanah, tt: 6).

Based on the discussion as mentioned above, researchers claim that augmenting adolescents' awareness of mental health has both positive and negative consequences. One positive outcome is the increased concern among individuals towards the mental well-being of their acquaintances. Nevertheless, the increased consciousness among adolescents also engenders an adverse impact: their inclination to search for mental health material online without adequately examining the credibility of the sources, leading to self-diagnosis. Self-diagnosis refers to the process by which an individual notices the presence of a disorder or inner problem by independently observing and interpreting symptoms without seeking guidance or consultation from a trained medical professional. In the process of self-diagnosis, individuals may modify their behavior or characteristics in response to the exhibited symptoms. The Internet has been found to have four distinct consequences on individuals who engage in self-diagnosis:

1. Cognitive effect: Engaging in self-diagnosis may lead to cognitive confusion over one's disease. Furthermore, it might also impact their self-perception of the issues they are experiencing. Individuals may have feelings of abnormality or perceive themselves as having a severe medical condition, resulting in emotional discomfort and a perception of despair.
2. Emotional effect: Self-diagnosis can result in both physical and mental pain for individuals. Individuals may experience concerns over the potential difficulties they may encounter in the future, encompassing possible effects on their academic and daily activities.
3. Behavior effect: Often, self-diagnosis may cause difficulties adapting to social interaction with others.
4. Positive effect: The association of self-diagnosis with negativity is not always expected. Conversely, individuals may get specific academic benefits and experience an increased level of motivation to acquire knowledge regarding their symptoms and potential risks through the act of comparing them with those of others. This approach has the potential to be effective in facilitating learning and fostering a memorable experience. Furthermore, the front of self-diagnosing can promote an enhanced feeling of empathy among individuals, leading to increased instances of encouragement and support being offered to one another (Meizara, dkk., 2022: 20).

Engaging in self-diagnosis through the Internet entails numerous hazardous dangers. First, it is important to note that the information acquired from the Internet frequently lacks accuracy. The information may cause unnecessary distress and apprehension (Meizara, dkk., 2022: 21-22). Second, the Internet lacks the ability to distinguish between information originating from experts and non-experts. Although there is abundant material pertaining to treatment, it is important to note that not all of this information originates from sources deemed reliable. Moreover, the Internet can potentially impact an individual's mental well-being. Sometimes, the Internet may validate severe mental problems as "normal". Although the presence of a mental condition should not make ashamed of it, it is imperative that it is not disregarded. Diagnosing and treating mental problems by trained professionals is of the utmost significance (Meizara, dkk., tt: 22). When

engaging in self-diagnosis, it is crucial to consider the potential hazards involved and consistently seek guidance from a licensed medical professional or competent healthcare expert.

CONCLUSION

Counseling activities should aim to enhance Generation Z adolescents' comprehension of self-diagnosis. The utilization of AI can enhance adolescents' self-awareness and facilitate more precise identification of mental health concerns. It is important to note that self-diagnosis should not replace seeking advice from a qualified medical professional. Generation Z adolescents must cultivate critical skills for evaluating online information in response to the rising incidence of self-diagnosis. Furthermore, it is imperative to implement strategies that promote the mental well-being of adolescents. These strategies should encompass open communication, comprehensive mental health education, and support from their social surroundings. For the same reason, utilizing AI in adolescent counseling has the potential to enhance adolescents' self-awareness, self-diagnosis, and overall mental well-being. AI can effectively deliver reliable and valuable information, aiding adolescents in accessing trustworthy resources. Adolescents should prioritize seeking guidance from qualified counselors or mental health professionals while recognizing human interaction's significance.

LITERATURE

- Anggraini, Dian. Muchammad Nafi. Johan Erickson, et al. (2020). "Kecerdasan Buatan (AI) dan Nilai *Co-Creation* dalam Penjualan B2B (*Business-To-Business*)" *Jurnal Sistem Informasi, Teknologi Informasi, dan Edukasi Sistem Informasi*, Vol. 1, No. 2, 64.
- Annury, Ulul Albab, et al. (2022). "Dampak *Self-Diagnose* Pada Kondisi Mental Health Mahasiswa Universitas Negeri Surabaya". *Seminar Nasional Ilmu Sosial. Universitas Negeri Surabaya*. Vol.1.
- Eva Meizara, et al. (2022). "Psikoedukasi *Self-Diagnose*: Kenali Gangguan Anda Sebelum Menjudge Diri Sendiri" *Jurnal Hasil Pengabdian Masyarakat*. Vol. 3 No. 1.
- Handayani, Iin. (2019). "Konsep Bimbingan dan Konseling Pribadi-Sosial dalam Perkembangan Positive Mental Attitude Generasi Z". *Nalar: Jurnal Peradaban dan Pemikiran Islam*, Vol. 3, No. 1.
- Lubis, M. Sobron Yamin. (2021) "Implementasi *Artificial Intelligence* Pada *System* Manufaktur Terpadu". (Semnastek UISU) ISBN : 978-623-7297-39-0.
- Maskanah Imas. (2022). "Fenomena *Self-Diagnose* di Era Pandemi COVID-19 dan Dampaknya Terhadap Kesehatan Mental" *Journal of Psychological Students*. Vol. 1 No. 1.
- Rilantinawati, Vina. Parsaoran Siahaan. dan Unang Purwana. (2020). "*Self-Diagnosis* Sebagai Upaya Untuk Mendukung Pemahaman Konsep Peserta Didik Kelas X Pada Materi Momentum dan Impuls". *WaPFI*, Vol. 5 No. 2.
- Rudianto, Zalfa Nuraeni. (2022). "Pengetahuan generasi Z Tentang Literasi Kesehatan dan Kesadaran Mental di Masa Pandemi". Vol. 11, No. 1.
- Singarimbun, Febby Natasya Br. dan Dina Nazriani. (2023) "Fenomena *Self-Diagnose* Pada generasi Z" (Universitas Sumatra Utara).

- Tjahyanti, Ary Sri. et al. (2022). “Peran *artificial Intelligence* (AI) untuk Mendukung Pembelajaran di Masa Pandemi COVID-19”. *Jurnal Komputer dan Teknologi Sains*. Vol. 1 No.1.
- Tyas, Maria Yustina Suprihatining. Ahmad Guntur Alfianto. dan Wenny Rahmawati. (2022) “Gambaran Kesehatan Jiwa Pada Generasi Z”. *Jurnal Kesehatan Hesti Wira Sakti*. Vol. 10 No.1.