

# IMPACT OF AI ON SELF DIAGNOSIS BEHAVIOR AMONG YOUNG ADULTS

<sup>1</sup>TANYA AGRAWAL  
<sup>1</sup>UNDERGRADUTE STUDENT

<sup>2</sup>SHARRANYA HOTA  
<sup>2</sup>UNDERGRADUATE STUDENT

<sup>3</sup>DR. K GEETHA  
<sup>3</sup>ASSISTANT PROFESSOR AND PCL RESEARCH GUIDE  
<sup>3</sup>DEPARTMENT OF LANGUAGES (ENGLISH)

<sup>1</sup>SCHOOL OF HUMANITIES AND SOCIAL SCIENCES  
<sup>1</sup>JAIN DEEMED TO BE UNIVERSITY  
BENGALURU, KARNATKA

## ABSTRACT

In recent years, many young adults between the ages of 18 and 25 have begun using Artificial Intelligence (AI)-based tools such as chatbots and mental health apps instead of consulting licensed therapists. Platforms like ChatGPT, Woebot, and Wysa are often used when individuals feel stressed, anxious, or emotionally overwhelmed. However, an emerging concern is that these tools are also being used for self-diagnosis, where young people attempt to identify mental health conditions on their own without professional evaluation. This research paper examines whether AI-based therapy tools genuinely support mental health awareness among young adults or unintentionally contribute to mislabelling and over-pathologizing normal emotional experiences. The study is based on a review of existing literature and previously published research. Findings suggest that while AI tools offer benefits such as accessibility, affordability, anonymity, and reduced stigma, they also pose risks including incorrect self-diagnosis, increased health anxiety, and avoidance of professional help. The study highlights the need for responsible use of AI in mental health support and emphasizes that such tools should complement, not replace, professional care.

**Keywords:** *Artificial Intelligence, AI Therapy, Self-Diagnosis, Young Adults, Mental Health Apps, Health Anxiety, Digital Mental Health Act*

## INTRODUCTION

Mental health and technology have generated quite some buzz in today's public health sector as incorporating mental health technology is one of the most widely discussed topics. Over the past decade, AI has grown rapidly and continues to change how people search for, access and process information related to their physical and mental well-being. A major shift we have seen as a result of this transition is that young people, between the ages of 18-25, are much more inclined to seek support through AI-based tools when experiencing emotional distress than ever before. ChatGPT, Woebot and Wysa are three popular examples of over a hundred different digital platforms globally that provide users with the ability to receive immediate, anonymous, and often unlimited support from mental health professionals all over the world, especially when traditional forms of support are not easily accessible.

The benefits of this change cannot be overstated. AI-supported tools have eliminated many of the difficulties that have kept young people from getting help for many years, such as stigma, cost and access by young people who were born into a digital world. Being able to obtain a response to a request for assistance any time and

from the comfort of their own devices without the fear of being judged is a significant development in the democratization of mental health assistance.

However, along with these benefits is a rising concern that has not received enough attention: the way AI tools are used to self-diagnose. There is evidence that many young adults are using these tools not only for their emotional well-being but also to diagnose and label their mental health issues - often without a professional evaluation. A young person may feel extremely anxious during an extended period of stress, and after a short conversation assisted with AI, they may conclude they have Generalized Anxiety Disorder. Similarly, a young person may feel down after a difficult week, and then label themselves as clinically depressed after a few minutes of using an AI tool. While an increase in awareness of mental health issues is a generally positive development, there are significant risks associated with self-diagnosis without oversight, including misdiagnosis, over-pathologizing normal human experiences, and creating further cycles of anxiety related to mental health.

This trend indicates real implications. Those who use AI content to help diagnose their problems could potentially delay or bypass reaching out to licensed professionals, which means their legitimate issues may not get detected or treated. Conversely, those without legitimate issues may self-identify with a diagnostic label, which can alter their sense of who they are as individuals and how they relate to the world around them. Both of these situations create barriers to fulfilling the objective of obtaining good mental health assistance.

The main goal of this paper is to attempt an exploration of the two sides of the coin when it comes to the role of AI in the mental health of young adults. Using the information gleaned from the various studies that have been published on the subject, this paper shall attempt an exploration of the benefits of AI, as well as the possible drawbacks that may come with the self-diagnostic capabilities of AI when it comes to the mental health of young adults. The main question that this particular paper shall attempt to answer is: Does AI, in the form of therapy tools, actually help improve the mental health of young adults, or does it actually contribute to the misclassification of normal emotional states?

The main conclusion that this particular paper shall arrive at is that, while AI is an important tool when it comes to the improvement of the mental health of young adults, it is of the utmost importance that the benefits of AI not be misused as a means of replacing professional care with AI therapy tools.

## REVIEW OF LITERATURE

1. Shabsavar and Choudhury (2023), in their study *User Intentions to Use ChatGPT for Self-Diagnosis and Health-Related Purposes*, conducted a cross-sectional survey involving general users of ChatGPT across various age groups and health literacy level. The research hypothesis was that the convenience and accessibility of AI platforms and their perceived trustworthiness were key determinants of the intentions of the general population of ChatGPT users regarding the use of the platform for self-diagnosis and health-related concerns. The hypothesis was proved true as the findings of the research work confirmed that a considerable percentage of the respondents had shown high intentions of relying on the ChatGPT platform as a means of conducting a health identification process in lieu of consulting a medical professional. It was concluded that despite the high accessibility advantages of AI platforms such as ChatGPT, their unsupervised use for the purpose of self-diagnosis is fraught with a number of risks.

2. Ćirković (2020), in the study *Evaluation of Four Artificial Intelligence-Assisted Self-Diagnosis Apps on Three Diagnoses: Two-Year Follow-Up Study*, evaluated four AI-based self-diagnosis apps -Ada, Babylon, Symptomate, and Your.MD -across three medical conditions over two years. The study hypothesized that these apps would demonstrate reliable diagnostic accuracy as preliminary tools. The hypothesis was not fully proven, as results showed significant inconsistency in accuracy across all four apps. The study concluded that AI self-diagnosis tools remain unreliable for consistent clinical use and cannot substitute professional medical evaluation.

3. You and Gui (2020), in their study titled “Self-Diagnosis through AI-Enabled Chatbot-Based Symptom Checkers: User Experiences and Design Considerations,” aimed to explore the actual user experiences in using AI-enabled chatbot-based symptom checkers, using qualitative data from a diverse group of general users who have already used such technology for self-diagnosis. The study aimed to prove the hypothesis that user experiences in using AI chatbot-based symptom checkers are affected both by the design of the technology and the user’s health-seeking behaviors. This hypothesis was proven, and the study found that user experiences in using such technology indeed over-relied on the results shown by the technology, even going so far as to use the results as a final diagnosis despite the technology’s intended use.

4. In the study titled "Use of Generative AI for Mental Health Advice Among US Adolescents and Young Adults," McBain et al. (2025) carried out a nationally representative cross-sectional survey of US adolescents and young adults aged 13 to 25 to investigate the prevalence and nature of the use of generative AI for mental health advice. The hypothesis of the study was that a considerable number of adolescents and young adults in the US were already using generative AI for mental health advice, either in addition to or instead of professional advice. The hypothesis was proved, and the results of the study showed that 13.1% of the respondents used generative AI for mental health advice, although this increased significantly to 22.2% for those aged 18-21, and the majority found it helpful. It was concluded that generative AI has emerged as a notable and common source of mental health advice for young adults, and researchers and policymakers should investigate the quality and safety of this trend.
5. In the study "I Believe That AI Will Recognize the Problem Before It Happens": Qualitative Study Exploring Young Adults' Perceptions of AI in Mental Health Care, Petersson et al. (2025) carried out a qualitative study among young adults aged 18-30 years to investigate their attitudes, expectations, and perceptions towards the use of AI in mental health care settings. The study was guided by a hypothesis that young adults have a positive but cautious perception of the use of AI in mental health care, particularly in early detection and diagnosis. The hypothesis was confirmed, whereby young adults showed immense confidence in the ability of AI to detect mental health issues before they occur, albeit with a sense of trepidation over data privacy, lack of empathy, and overdependence on technology. In conclusion, the study showed that young adults are receptive to mental health care through AI, but a line must be drawn between AI-assisted self-monitoring and clinical responsibility, thus a need to investigate the possibility of incorporating AI in the mental health care of young adults.
6. The study conducted by Jungmann et al. (2019), titled "Accuracy of a Chatbot (Ada) in the Diagnosis of Mental Disorders: Comparative Case Study With Lay and Expert Users," aimed to investigate the diagnostic accuracy of the AI-powered chatbot "Ada" in terms of a set of standardized case scenarios involving mental disorders, while comparing the diagnostic accuracy between lay and expert users. The study's hypothesis was based on the assumption that the AI-powered chatbot "Ada" would display acceptable diagnostic accuracy in terms of mental disorders when used by both lay and expert users. However, the hypothesis did not turn out to be completely accurate, as the study's findings indicated the diagnostic accuracy of the chatbot "Ada" in terms of mental disorders, as it displayed the capability to identify the primary diagnosis in only 67% of adult cases and 44% of childhood cases, while significant differences were found between the diagnostic accuracy of the chatbot when used by lay and expert users.
7. In study "An Overview of Chatbot-Based Mobile Mental Health Apps: Insights From App Description and User Reviews," Haque and Rubya (2023) sought to explore a sample of chatbot-based mental health apps by studying both official app descriptions and user reviews on major app stores for apps intended for common mental health concerns such as anxiety, depression, and stress. The researchers were guided by a hypothesis stating that there is a significant variation in chatbot-based mental health apps in terms of their features, effectiveness, and user satisfaction. The hypothesis was supported by the study's results, as it was found that there is a significant inconsistency among chatbot-based mental health apps in terms of their therapeutic approach and effectiveness. The results also showed that user reviews pointed to concerns regarding emotional dependency on chatbots, privacy concerns, and frustration with the app's failure to respond appropriately to crisis situations. The researchers were able to conclude their study by stating that there is a significant gap in safety standards, clinical validation, and user guidance with regards to chatbot-based mental health apps, emphasizing the need for a stronger regulatory framework for mental health apps.
8. In study titled "Enhancing Mental Health with Artificial Intelligence: Current Trends and Future Prospects," Olawade et al. (2024) used a narrative review design with a total of 92 eligible studies retrieved from four different databases: PubMed, IEEE Xplore, PsycINFO, and Google Scholar. The study hypothesized that AI has a transformative potential for mental health but at the same time brings along ethical concerns. The hypothesis was proved true as AI showed its effectiveness in early detection, personalized treatments, and virtual therapy. The study showed that AI has a promising potential for increasing access to mental health care.

## THEORETICAL FRAMEWORK

1. Technology Acceptance Model (TAM) - Davis (1989) - According to the Technology Acceptance Model, people tend to adapt and use technology depending on two main aspects: perceived usefulness and perceived ease of use. In line with this study, it can be noted that technology acceptance theory explains why

young adults between 18 and 25 years are increasingly attracted to AI-based mental health tools such as ChatGPT, Woebot, and Wysa. The technology acceptance theory explains why people are increasingly attracted to AI-based tools compared to therapy. The theory also explains why people are increasingly relying on AI-based tools for self-diagnosis, as they are perceived as useful for self-diagnosis.

2. Health Belief Model (HBM) - Rosenstock (1966) - The Health Belief Model argues that human health-related behaviors result from a combination of their perceived susceptibility to a health condition, perceived severity of a health condition, perceived benefits of taking health actions, and perceived barriers to health care. Such a model is useful in explaining self-diagnosis behaviors of young adults. For example, if a young adult feels emotionally unwell and perceives that the barriers to health care, such as cost and stigma, are too high, they may resort to AI for a quick self-diagnosis. Such a model explains the role of AI in self-diagnosis, which acts as a replacement for health care. It does so when the benefits of using AI for self-diagnosis outweigh the risks of misdiagnosis.
3. Social Comparison Theory - Festinger (1954) - According to the Social Comparison Theory, a person judges their opinions, skills, and situations in relation to others. In the digital age, this theory has evolved and is now implemented in the online environment, where young adults have access to mental health content on social media sites. For instance, when a young adult reads about the symptoms of anxiety and depression online and compares their emotional state with the content, especially after interacting with an AI chatbot, they might conclude that they have the same condition. This theory explains the impact of AI tools and social media on the self-diagnosis behavior of young adults, where they compare their emotional state with the symptoms of mental health disorders and over-identify with the condition.
4. Uses and Gratifications Theory - Katz, Blumler & Gurevitch (1974)- The Uses and Gratifications Theory implies the concept of people as "active consumers of the media and technology, seeking out the tools which can meet their needs for information seeking, entertainment, identity, and other social and psychological needs." In the context of this study, the young adults' engagement with AI mental health tools can be seen as an "active seeking out" of the tools, which meet their needs for instant gratification, validation, anonymity, and sense of control over their health. The Uses and Gratifications theory can be seen as useful in understanding the young adults' preference for AI self-diagnosis tools over seeking professional advice, as the instant gratification they receive from the AI tools meets their informational and emotional needs, even if the information they receive from the tools is not reliable.
5. Labelling Theory - Scheff (1966) - The Labelling Theory, which was created as a theory of deviance and social behaviour, implies that when an individual is labelled, this can significantly impact their self-identity and subsequent behaviour. In the context of AI and mental health self-diagnosis, this theory can be seen as highly relevant. When a young adult interacts with an AI chatbot and the AI provides a diagnostic result, such as the possibility of generalized anxiety disorder, depression, or ADHD, the label or diagnosis, whether verified or not, can become part of the individual's self-identity. The individual can change their behaviour based on this label and possibly avoid seeking professional help, as they now know their answer. Labelling Theory can be seen as the theory that provides the most insight into the possible effects of AI and mental health self-diagnosis, especially the possibility of over-pathologizing emotional experiences.

## RESEARCH GAP

- No study exclusively focuses on AI self-diagnosis behaviour in the 18–25 age group specifically
- Existing research tracks how many young adults use AI for mental health but not what happens after-whether it helps, harms, or delays real care
- The long-term psychological impact of internalizing an AI-generated mental health label on young adults remains completely unmeasured
- Mislabelling of normal emotions through AI interactions has never been studied as a standalone concern, it only appears as a side note in broader studies

## OBJECTIVES

- Examine why young adults use AI for self-diagnosis
- Identify risks of AI-driven self-diagnosis
- Highlight ethical concerns and need for regulation

## METHODOLOGY

This research is based on a secondary research design, which means that rather than conducting the research on the subject at hand using surveys, interviews, or experiments, this research is based on the published literature that is already available on the subject of interest. This type of research was selected as the most appropriate research approach for this particular research because the main aim of this research was to explore the subject of interest in the context of what has already been observed and concluded in the subject areas of digital mental health, artificial intelligence, and health behaviours among young adults. The subject of AI and self-diagnosis is a relatively new subject of interest with limited research on the subject; therefore, conducting a review and critical analysis of the subject allows a broader understanding of the subject compared to a limited research approach.

For the collection of relevant literature, a number of academic databases and online platforms were searched, including PubMed, PubMed Central, JMIR Publications, ScienceDirect, and Google Scholar. These platforms were chosen for the search of relevant literature as they are reliable and contain the most recent and credible information in the domain of medicine, psychology, and human-computer interaction, which are of direct relevance to this study. The search for literature for this study was conducted by using relevant keywords and keyword combinations such as AI and mental health, self-diagnosis and chatbots, young adults and mental health apps, AI therapy tools, health anxiety and AI, and digital mental health self-diagnosis. The keywords were modified and refined accordingly in order to ensure that the results were not too broad or generic in nature and were relevant to the main themes of the paper. After the initial search, the sources were examined to assess their suitability for this study. It was not the case where every result from the search would be utilized. Rather, the process of selecting the most suitable sources was followed. The sources were deemed suitable if they were published in peer-reviewed academic journals or research platforms, if they discussed the use of AI tools in the context of mental health support or diagnosis, if the research targeted the young adult or general adult population, and if the research was conducted between 2019 and 2025. This period was selected because it would ensure that the most current developments in AI technology and its use in mental health support or diagnosis are reflected in the literature, as this technology is rapidly changing and older literature might not reflect the current reality. Once the final list of sources was determined, each study was reviewed and analysed separately. For each study, special emphasis was placed on the sample used in the study, the methodology used by the original authors, the findings, and the conclusions made. These were then used in the creation of the Review of Related Literature section of the current paper, where each study is reviewed in relation to the current study's topic, the relationship between the use of AI and self-diagnosis behaviour among young adults. After the analysis of each study, a thematic synthesis was made. This is where the findings of each study were reviewed and grouped in relation to the themes and patterns found in each study. Some of the themes found in the reviewed studies include the use and adoption of AI in mental health, the accuracy and reliability of the use of AI in self-diagnosis, the overuse and mislabelling of mental health conditions, and the ethics and regulations in the use of AI in mental health scenarios. These themes helped in the creation of a more meaningful and logical discussion of the findings and in drawing conclusions based on the research question in the current study.

## FINDINGS

The review of existing literature on the impact of AI-based tools on self-diagnosis behavior among young adults has shown a consistent set of patterns and outcomes from the selected literature. The findings of this paper are grouped under four key themes, which emerged from the thematic synthesis of the reviewed sources.

### Theme 1: Growing Adoption of AI Tools for Mental Health Among Young Adults

One of the most striking aspects of the literature reviewed is the marked rate at which young adults are increasingly turning to AI-based tools for mental health support and guidance. The most compelling study on this issue is provided by McBain et al. (2025), who conducted a nationally representative survey and found that 13.1% of adolescents and young adults in the US reported using generative AI for mental health advice. This rate is seen to increase significantly for young adults aged 18-21 years, at 22.2%. The overwhelming majority of young adults who used AI-based tools for mental health advice found it to be helpful, indicating a positive experience with AI-based tools for mental health support.

Petersson et al. (2025) further supported this discovery by conducting a qualitative study that found that, indeed, young adults have a genuinely optimistic attitude towards AI's role in mental health care. For example,

the participants in their study had a high level of confidence in AI's capacity to detect mental health problems early on. Many of them even believed that AI had the capacity to detect problems before they even fully manifested. It is important to point out that this high level of trust in AI by young adults is a crucial discovery because it shows that, for this particular demographic, the distinction between using AI as a supportive tool and using AI as a tool of authority is no longer a distinct concept.

Shahsavari and Choudhury's (2023) study also found that a significant number of users had a high intention to use ChatGPT for self-diagnosis purposes, and this was largely attributed to the fact that using this tool was convenient and immediately accessible and that users found this tool trustworthy. All of this shows that, indeed, the adoption of AI for mental health purposes by young adults is no longer a niche practice but a widespread and growing trend.

## Theme 2: Inaccuracy and Unreliability of AI-Based Self-Diagnosis

Although the use of AI tools for the intended purposes of mental health is common, the literature reviewed consistently expresses critical concerns regarding the accuracy and reliability of AI-based diagnoses for mental health. Jungmann et al. (2019) conducted a study in which it was observed that the AI chatbot Ada correctly identified the main diagnosis in

67% of adults and 44% of childhood cases, which is far from being clinically acceptable. This shows that a large number of people relying on AI tools for self-diagnosis are likely to be provided with incorrect or incomplete information regarding their diagnosis, which may have negative consequences for their mental health, including increased levels of anxiety. This concern has been reinforced by Ćirković (2020), whose study conducted a two-year evaluation of four AI-based self-diagnosis tools, namely Ada, Babylon, Symptomate, and Your.MD, in relation to three different medical conditions. The results showed a wide range of inconsistencies in the accuracy of diagnosis provided by the four tools, none of which performed well in all three conditions. This is of particular concern in relation to mental health, as symptoms of different mental health conditions may overlap, and inaccurate diagnosis may have a profound psychological impact on the individual.

You and Gui (2020) have also made a significant contribution to this theme by highlighting the behavioural aspect of AI-based symptom checkers, which, it was determined, were likely to be regarded by users as definitive and authoritative diagnoses, regardless of the tool's limitations and any disclaimers made by the tool itself. This has a significant impact on the risk of inaccuracy, as users of the tool are unlikely to seek a second opinion or professional verification of the diagnosis, as they would already have what they believed to be a reliable diagnosis provided by the AI tool itself.

## Theme 3: Risks of Over-Reliance, Mislabelling, and Avoidance of Professional Help

The literature reviewed also points out the fact that the risks associated with the use of AI tools in self-diagnosis are not limited to the accuracy of the results but also involve other factors, such as the behavioural and mental impacts, which can adversely affect the mental health of young adults. Haque and Rubya, in their study based on the analysis of chatbot-based mental health apps, observed the following: The most recurring concern among the users of the mental health apps based on the chatbot AI tools was the emotional over-reliance on the tools, and the fact that the users developed a kind of attachment towards the chatbot platforms, which led to feelings of guilt when the app failed to meet the emotional needs of the users.

The risk of mislabelling is, of course, strongly related to this over-reliance. When a young adult is provided by the AI program with a suggestion that they may have a particular mental health condition, they will, according to Labelling Theory, likely internalize this label and start to identify with it as part of their self-concept. Olawade et al. (2024) identified this particular risk within their review, although they did so as part of a wider discussion. They pointed to the fact that, because of its lack of human empathy and its inability to take full account of individual complexities, AI is simply not suitable as a tool for making diagnoses. They pointed to the fact that over-pathologizing normal emotional experiences, such as stress or sadness, is a real but underappreciated risk of unsupervised AI.

Moreover, a point made by McBain et al. (2025) concerning the increasing tendency to rely on AI tools for mental health advice is that an important question to be posed here is whether young adults are opting to forego professional consultations in favor of AI tools, which might be a worrying sign of the tendency to avoid professional help altogether. The worrying nature of this avoidance of professional help cannot be overstated,

as individuals with actual health needs might be going untreated under the false assumption of an AI-generated self-assessment.

#### Theme 4: Ethical Concerns and the Need for Regulatory Frameworks

A fourth theme that was consistently represented in the literature relates to the ethical considerations surrounding the use of AI technology in mental health, as well as the need to strengthen the regulation of its application. Olawade et al. (2024) identified the following three most pressing ethical considerations for the application of AI technology in mental health: privacy, data security, and the need to preserve the human element in therapy. The aforementioned authors' review of the literature indicates that, in particular, young adults from minority groups may be most vulnerable to receiving inaccurate mental health information from AI technology, as the latter has primarily been trained to reflect the views of a particular demographic group. Petersson et al. (2025) reiterated these concerns by stating that While young adults are positive and enthusiastic about AI in mental health care, at the same time, they expressed concerns regarding data privacy, a lack of empathy in AI-based interaction, and becoming technology-dependent for their emotional support. The concerns expressed by young adults themselves indicate their awareness of the limitations of AI tools, despite their frequent use. Shahsavari and Choudhury (2023) have suggested a need for stronger user awareness campaigns regarding AI tools, as well as effective information campaigns on the limitations of AI tools when used for health-related issues. Similarly, Olawade et al. (2024) have stressed that for the ethical and effective implementation of AI tools in mental health care services, there is a need for effective regulations and a collaborative approach among technology developers, mental health care professionals, and policymakers. Otherwise, the increasing trend of young adults relying on AI tools for self-diagnosis is likely to continue unabated with potentially disastrous consequences for their mental health.

Throughout all four themes, the reviewed literature consistently points to a dual reality: AI tools do, in fact, provide a number of genuine advantages in terms of accessibility, affordability, and lack of stigma, which make mental health support more reachable for young adults who might otherwise not have access to it at all. At the same time, however, these tools have a number of risks in terms of self-diagnosis, including inaccuracy, emotional reliance, misapplication of clinical definitions for normal experience, and avoidance of professional help. The evidence consistently points to a reality in which AI tools, as they currently are, are not sufficiently reliable or ethically capable of being a tool for diagnosis and in which the role of AI tools in mental health support needs to be defined and communicated to users.

## DISCUSSION

After going through all the research papers included in the list for this paper, the general picture that comes out is not so surprising, but it is definitely worth talking about. It is worth noting that AI mental health tools are actually useful, but the current trend among young adults when it comes to using these tools for self-diagnosis is a concern that cannot be taken lightly.

### Young Adults Are Using AI Because They Have No Better Option-

Before anything else, it is important to acknowledge why young adults are using AI tools in the first place. It is not because they do not want real help. It is because real help is out of their league. Therapy is expensive, the waiting lists are long, and there is still a degree of stigma surrounding mental health care in the community. When McBain et al. (2025) reported that more than one in five young adults aged 18 to 21 years old were using generative AI tools for mental health advice, this figure cannot be taken as a mere trend in the use of AI tools. It must be taken as a reflection of the inaccessibility of professional mental health care in the country for this age group.

This paper believes that any discussion of AI self-diagnosis must begin with this premise – because it is foolish to try and discourage the use of AI tools among young adults without understanding the reason behind their use of AI tools in the first place.

### The Problem With How Confident AI Sounds-

Perhaps the most striking trend to emerge in the literature, though, is not so much that the AIs are sometimes wrong, but that they are rarely treated as though they might, in fact, be wrong. Your own work, You & Gui (2020), demonstrated that users were accepting the results provided by the AIs, treating them as a final answer,

which is a problem in itself. There is a lot of confidence in an AI chatbot's answer, a lot of finality to it, a lot of "this is what we've figured out." A human therapist might say "Let us explore this more." A computer will just tell you. And yet, in Jungmann et al. (2019) demonstrating that Ada was only 67% accurate in providing the correct primary diagnosis to adults, the problem is not so much that they are wrong, but that users are likely leaving the interaction feeling confident in something that is, in fact, wrong.

#### Normal Feelings Are Being Labelled as Disorders-

This is perhaps the issue that this paper feels most strongly about. There is a lot that a young adult is going through, and this is completely normal. It is a part of life, and especially a part of being a young adult in a world that is genuinely hard to navigate. However, when this is explained to a chatbot, the response is packaged in a manner that describes a certain anxiety disorder or depression. However, when a young adult begins to view their situation in this manner, it is difficult to move beyond this. Olawade et al. (2024) pointed out that this is because AI does not have the human judgment to make a distinction between a person going through a difficult phase and a person going through a clinical condition. However, this is perhaps one of the most underrated risks of AI self-diagnosis, and this is a problem that deserves a lot more discussion.

#### Getting an AI Answer Can Stop People From Getting Real Help-

Another concern that was evident from the literature is that getting an answer from an AI can, in fact, prevent people from getting real help. The person might feel as though they have their answer already. They have their diagnosis. They have their tips for dealing with their situation. They feel as though they have gotten information. They might not feel as though they need to go any further. Haque and Rubya found in their study, published in 2023, that there were people who had their outcomes worsened by an app designed to provide help through a chatbot, as it did not meet their expectations for emotional satisfaction. This is clearly a situation where there is a relationship between a young adult and an AI, but it is by no means a simple relationship.

This paper considers this a backhanded way in which people are being hurt. The person appears to be fine on the surface. They have done something to help their mental health. The problem is, however, that there is a chance their need is being completely unmet as a result of getting an answer from an AI.

#### What This Paper Believes Needs to Change-

From everything this paper has reviewed thus far, this paper would believe that there are three things that need to change. First of all, these AI tools must communicate their limits clearly and honestly – not in the fine print of a website, but in the moment when the person is actually using them to make health decisions. Second, these tools must be designed in such a way that they encourage the person using them to seek professional help, not discourage them from doing so. Every time a person uses a self-diagnosis tool, they must be encouraged in a meaningful way to seek professional help. Third - and this is the most important point, while these AI tools must improve, the other half of the equation is making professional mental health care actually accessible to young adults because as long as it is not, these AI tools will step in and fill the gap, whether we want them to or not.

AI mental health tools aren't the enemy, and this paper isn't advocating for young adults to stop using them. What this paper is advocating for is for them to use them better, create them better, and regulate them better. What this paper is advocating for is for young adults to get the accurate help they need, and unfortunately, too many of them are currently settling for a confident answer from a computer when what they really need is access to a human to help them correctly

## IMPLICATIONS

1. Implications for Young Adults - The most immediate implication of this study has to do with young adults themselves. While it is reasonable for young adults to turn to AI tools for emotional support, it is not reasonable for them to take the AI tool as a diagnostic authority. Young adults should be aware that, no matter what the AI tool may say, it is not a diagnosis. Young adults should be aware that, even if they feel stressed, sad, or anxious, it does not necessarily mean anything is wrong, and an AI tool is simply not qualified to diagnose anything in any case. The implication here is simple: use AI tools as a starting point, not a final answer, and try to see a professional when possible.

2. **Implications for Mental Health Professionals** - For therapists, counsellors, and mental health workers, this study has important implications. For instance, it is important for therapists to ask their clients, especially young people, whether they have been interacting with AI tools for self-evaluation. For many young people who seek therapy, it is possible that they have already acquired a self-definition from an AI session. This self-definition might influence their narrative of their experiences and their perceived need for assistance. The therapists need to be ready to critically question their clients' self-definition, where necessary, and distinguish between what they have been told by an AI tool and what is actually going on.
3. **Implications for AI Developers and Tech Companies** - For developers and technology companies, it is important to note that their role is not limited to creating an engaging and accessible experience. The results of this paper indicate that current AI-based mental health tools are not developed with adequate transparency regarding their limitations. There is a need for developers to create reminders on their tools regarding their limitations as a non-diagnostic tool and to create a path for users to seek help rather than giving an answer and terminating the session.
4. **Implications for Policymakers and Institutions** - On a broader scale, what this study suggests is that policymakers and institutions need to develop stronger regulations for AI mental health tools, as currently, these tools are in a space where the level of accuracy, safety, and ethical considerations required of these tools is significantly lower than it would be for any other type of medical tool or software. This paper, however, would suggest that it is not only necessary for policymakers and institutions to develop stronger regulations for AI tools, but it is also necessary for policymakers and institutions to develop solutions for making professional mental health services more affordable and accessible for young adults, as until that happens, AI tools will continue to fill the space.

## LIMITATIONS

The most basic limitation of this research lies in the fact that the entire research is based on secondary research. The research presented in this paper is based only on secondary research, which means that the conclusions drawn in this research are dependent only upon the quality, scope, and objectiveness of the research that has already been conducted. The research that was conducted in the past might have its own limitations, which are naturally included in this research as well. The most important research, which would have included the actual young adults' experiences with AI self-diagnosis, cannot be included in secondary research.

A second limitation is related to the demographic aspect of the studies that were reviewed. Although this specific paper is focused on young adults in the 18 to 25 age range, the studies that were selected did not specifically target this demographic. In fact, the majority of the studies selected a wide age range, and the experience of an 18-year-old first-time mental health patient could vary significantly from an older adult. Furthermore, the majority of the studies selected were performed in a Western culture, specifically in the United States, which could mean that the experience of a young adult in other areas of the world could vary significantly.

Lastly, the speed at which AI technology is advancing is a challenge for any research in this field, as it is possible that some of the tools investigated in the reviewed literature may have already been greatly improved since their publication, which means that some of the information presented may no longer be relevant in the current context of AI tools. Most importantly, however, none of the reviewed literature measured the long-term psychological effects of AI-assisted self-diagnosis in young adults, which is arguably the most important question in this field and one that needs to be answered by future primary research in the area.

## SCOPE FOR FUTURE RESEARCH

The current study investigates how artificial intelligence systems impact young adults between 18 and 25 years old by changing their mental health status and self-diagnosis practices. The research evidence from cross-sectional studies and qualitative research and case study comparisons and narrative review studies provides a complex picture which shows opposing results.

The results show that AI-powered mental health solutions provide better treatment access to young people who experience major obstacles when they try to receive standard mental health services. The research by McBain et al. (2025) and Olawade et al. (2024) and Haque and Rubya (2023) shows that young adults use these tools in high numbers while they perceive their benefits. AI platforms offer users anonymous and instant access to free services which help them overcome three major obstacles that prevent young people from getting assistance: stigma, cost, and geographic inaccessibility.

The dangers that come with using AI technology for self-diagnosis without professional guidance have been documented through research which shows that these dangers should not be ignored. The research by Ćirković (2020) and Jungmann et al. (2019) proves that AI diagnostic tools show variable performance because they fail to provide dependable results when applied to mental health disorders that present their symptoms in complex and situational ways. Shahsavar and Choudhury (2023) developed evidence which showed that many users plan to replace their professional evaluations with AI technology. You and Gui (2020) demonstrated that users demonstrate excessive dependence on AI system results because they understand initial evaluations as complete assessments. People use this pattern to present their typical emotional reactions to grief and stress and temporary sadness as abnormal psychological states. The use of clinical labels creates a real danger that people will view ordinary human behavior as an illness. The research by Petersson and colleagues from 2025 discovered that young adults believe AI can diagnose mental health disorders yet they doubt its ability to show understanding and safeguard personal information and people will become too reliant on it. The literature shows that artificial intelligence functions as a tool which creates both positive and negative effects depending on its operational methods and regulatory practices and its implementation in various healthcare systems. The use of artificial intelligence in mental health treatment provides young adults with genuine advantages that can improve their access to services.

The implementation of artificial intelligence systems for mental health support requires organizations to establish precise limits that separate those systems from actual clinical evaluations. The use of AI systems to replace human mental health treatment will create a situation in which patients receive diagnostic labels but they miss out on effective therapeutic treatment. The paper proves that AI should function as a connector between users and professional treatment services which should function as the main goal of users.

## CONCLUSION

The present paper examined how artificial intelligence technology works in two different ways to affect how young adults between 18 and 25 years old diagnose their mental health conditions. The research collected through various methods which involved cross-sectional surveys and qualitative research and comparative case studies and narrative reviews created a complete but conflicting understanding of the subject matter.

AI-based mental health tools which use artificial intelligence technology have developed into vital resources that help young people who face treatment obstacles because these tools provide them with essential mental health assistance. The studies conducted by McBain et al. OLawade et al. Haque and Rubya show that young adults use these platforms which provide them with perceived advantages. Young people now access mental health services because AI platforms offer them anonymous instant help at no cost which overcomes the three major obstacles that prevented them from seeking assistance.

People who use AI-powered tools to diagnose themselves without professional supervision face serious dangers that must not be overlooked. AI diagnostic systems show unreliable results for mental health assessments because they fail to handle the disorder's complex symptom manifestations. Shahsavar and Choudhury established that most users see AI as their primary diagnostic method instead of using it to assist with professional assessment. You and Gui proved that users tend to rely too much on AI outputs because they consider first assessments to be final diagnoses. People display this behavior when they experience normal emotional responses which include grief and stress and minor sadness that lasts only a short time.

## REFERENCES

1. Ćirković, A. (2020). Evaluation of four artificial intelligence–assisted self-diagnosis apps on three diagnoses: Two-year follow-up study. *Journal of Medical Internet Research*, 22(12), e18097. <https://doi.org/10.2196/18097>
2. Haque, M. D. R., & Rubya, S. (2023). An overview of chatbot-based mobile mental health apps: Insights from app description and user reviews. *JMIR mHealth and uHealth*, 11, e44838. <https://doi.org/10.2196/44838>
3. Jungmann, S. M., Klan, T., Kuhn, S., & Jungmann, F. (2019). Accuracy of a chatbot (Ada) in the diagnosis of mental disorders: Comparative case study with lay and expert users. *JMIR Formative Research*, 3(4), e13863. <https://doi.org/10.2196/13863>
4. Use of generative AI for mental health advice among US adolescents and young adults. *JAMA Network Open*, 8(11), e2542281. <https://doi.org/10.1001/jamanetworkopen.2025.42281>
5. Olawade, D. B., Wada, O. Z., Odetayo, A., David-Olawade, A. C., Asaolu, F., & Eberhardt, J. (2024). Enhancing mental health with artificial intelligence: Current trends and future prospects. *Journal of Medicine, Surgery, and Public Health*, 3, 100099. <https://doi.org/10.1016/j.glmedi.2024.100099>
6. Petersson, L., Ahlborg, M., & Häggström Westberg, K. (2025). "I believe that AI will recognize the problem before it happens": Qualitative study exploring young adults' perceptions of AI in mental health care. *JMIR Mental Health*, 12, e76973. <https://doi.org/10.2196/76973>
7. Shahsavari, Y., & Choudhury, A. (2023). User intentions to use ChatGPT for self-diagnosis and health-related purposes: Cross-sectional survey study. *JMIR Human Factors*, 10, e47564. <https://doi.org/10.2196/47564>
8. You, Y., & Gui, X. (2021). Self-diagnosis through AI-enabled chatbot-based symptom checkers: User experiences and design considerations. *AMIA Annual Symposium Proceedings*, 2020, 1354-1363. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8075525/>

### Copyright & License:

© Authors retain the copyright of this article. This work is published under the Creative Commons Attribution 4.0 International License (CC BY 4.0), permitting unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.