The Viability Of Artificial Intelligence In Therapy: A Textual Overview

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Abstract

Artificial Intelligence (AI) holds great importance in the world today. This paper explores the significance of Artificial Intelligence, mainly chatbots, for therapy. The paper also highlights the awareness of people regarding online therapy platforms in India. The primary data source for this research paper was secondary sources such as previously published research papers, articles, reports, etc. The aim of this research is to determine whether Artificial Intelligence is a viable alternative to offline therapy practiced by professional therapists. We find that while most people in India have not used AI platforms for therapy, those who have used them have responded positively. AI is seen as effective in providing therapy due to various reasons such as cost-effectiveness, convenience in accessibility, and flexibility of time.

I. Introduction

Mental health is an important aspect of a person's life that affects their ability to function effectively and perform tasks well. Improvement in this sector is always beneficial, as it helps people worldwide. Artificial Intelligence is growing in importance daily across various fields. In its broadest sense, Artificial Intelligence refers to the intelligence exhibited by machines, particularly computer systems, and it is positively impacting the medical field. AI is improving the medical field through VR, intelligent medical equipment, and more. It is an integral component of health and well-being that underpins our individual and collective abilities to make decisions, build relationships, and shape the world we live in. AI has gradually established a place in the field of mental health. While AI may not play an integral role currently in mental health, there is scope for its growth, and opinions about therapy vary among people.

Chatbots are used for various reasons such as having someone to talk to, ranting about problems, or receiving therapy. Using AI as a method for therapy is relatively cheaper and more cost-efficient than personal therapy. AI has not yet been programmed to understand human emotions or empathize with them, but efforts are being made to achieve this, as many believe incorporating AI in mental health could be useful and improve the field.

The objective of this research is to determine whether Artificial Intelligence is a viable option besides in-person therapy. Understanding the impact of AI therapy, like chatbots in India, is another objective of this research, especially considering that in India, the idea of therapy is not widely accepted, and there is a stigma surrounding it.

II. Literature Review

Many psychologists and researchers have conducted studies on the role of AI in various sectors such as medicine and psychology. Based on these studies, we can conclude that the correlation between AI and psychology has been mostly positive (PubMed, "Artificial Intelligence and Mental Health"). Popular therapy apps such as Wysa and WoeBot have gained popularity since COVID-19. The pandemic made people realize the importance of the online world, and as mental health deteriorated during this time due to isolation, workload, stress, and illness, many turned to online therapy platforms. AI needs to be improved and refined to help in therapy.

While there is limited published data on AI as a therapist in the context of India, there is growing research on the topic. Several materials are available on AI applications in fields like oncology and brain imaging. Bots are being used to treat patients with mental disorders, as they tend to evoke different reactions in these patients. According to the Rehabilitation Council of India (RCI), there are 3,372 clinical psychologists registered as of July 2023. This number is quite low compared to India's massive population, with only 0.75 clinical psychologists per 100,000 people in India (Times of India). This makes access to traditional therapy

extremely low, considering other limitations such as stigma against therapy and economic conditions. This creates a need for online therapy platforms that can be easily accessed across India.

III. Methodology

The research design for this paper is textual analysis. Data has been collected from secondary sources such as academic journals, books, online articles, and published reports. The criteria for selecting literature are as follows:
● Data from or before 2018 has not been included.
● Data is relevant to the topic of research.
● Official sources and published articles were used.
● Data was not restricted to India.
● Data from a variety of sources was taken, read, and compared. Similarities were identified, and conclusions were formed based on this selected data.

IV. Analysis And Discussion

AI in Therapy

Research shows that AI can be programmed to mimic human emotions such as compassion. This should be applied to chatbots to avoid making conversations seem mechanical. The importance of AI and chatbots has grown since COVID-19. The first chatbot designed was ELIZA by Weizenbaum. Now, multiple chatbots and AI tools are available, such as Siri, Alexa, and many more. Apps like Wysa, IWill, and WoeBot have gained users over the past years (Times of India). These apps have been shown to improve users' moods. WoeBot, developed by clinical research psychologist Alison Darcy from Stanford University, asks people to maintain a gratitude journal where they mention things they are thankful for daily. IWill, developed by Shipra Dawar, employs psychologists and freelancers, which differs from how Wysa works. Wysa uses AI chatbots programmed to diagnose issues and act like a therapist. IWill currently has more than 50,000 downloads in India, which, while not a large number, is a step towards increasing chatbot use in the country.

Other therapy apps function through booked and timed sessions, videos, modules, or chatbots simulating conversations between clients and therapists, guiding them in solving their problems. Some apps suggest exercises to manage disorders or symptoms.

Benefits of AI in Therapy

AI is being used to enhance empathetic responses, communication skills, therapeutic interventions, healthcare assessments, and coaching in the medical field. AI has been used in Virtual Reality (VR) to help people. For example, a study conducted by SafeSpace tested a VR intervention for cancer patients that incorporates relaxation and compassionate mind training to enhance well-being. Online AI platforms (chatbots) can be used at any time, unlike traditional therapy, which requires booking appointments. Using chatbots is convenient and accessible at all times. In India, chatbots are one of the most helpful ways to access therapy due to the stigma surrounding traditional therapy. Additionally, the cost-effectiveness of chatbots compared to traditional therapy makes AI essential in the field of therapy (Times of India). People from low-income families cannot afford traditional therapy, but their mental health is also important, which is why therapy bots need to be promoted in India.

Challenges and Ethical Considerations

While AI therapy is a good option for working through problems conveniently, there are limitations. Many people do not use these platforms due to a lack of trust. They are not assured that confidentiality will be maintained for the data they share, and they are unaware of where the data is stored, indicating a lack of transparency. Furthermore, chatbots cannot fully imitate human emotions or develop empathy like humans. They can diagnose the issue but cannot provide the emotional understanding or comfort a traditional therapist offers. As human beings, we understand each other's emotions and behaviors, allowing us to connect on a deeper level. This level of understanding cannot be achieved with chatbots, even after programming improvements. Privacy concerns and the inability to comprehend emotions like a human are some of the limitations of using chatbots for therapy. In India, the lack of knowledge about therapy and chatbots is another limitation, as people are unaware of how these chatbots can help solve their issues.

Comparative Analysis

Traditional therapy carries a stigma, especially in India. As mentioned earlier, there are not many registered clinical psychologists in India, according to the RCI (Times of India). Even if there were, a low percentage of the population would go to therapy to address their problems.
● Traditional therapy has limited access, whereas AI-based therapy does not. It can be accessed from anywhere.

● Traditional therapy is expensive compared to AI-based therapy.
● Traditional therapy does not occur at any time based on clients' needs.
● AI-based therapy does not promise confidentiality or security about shared data, but traditional therapy does.
● Traditional therapy provides a better diagnosis and treatment as it involves human understanding and care, which AI cannot replicate.

V.   Conclusion

The findings of this research are based on secondary sources. We can conclude that AI for therapy is a viable and positive option, especially in India, where therapy carries a stigma. AI-based therapy has both advantages and disadvantages, and it is slowly growing in India. People have started creating more apps, and these apps have gained clients. Although traditional therapy remains the best option for treatment, with a few technical and programming changes, AI can be made better for therapy.

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