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Research Article

Possibilities Of The Application Of Artificial Intelligence In Psychological Support And Psychotherapy

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ABSTRACT

This work analyzes the possibilities, advantages, and areas of practical application of artificial intelligence (AI) technologies in the process of providing psychological assistance to the individual and psychotherapy. Modern AI systems - chatbots, emotional analysis algorithms, behavioral forecasting models, and therapeutic applications - perform such tasks as supporting the psychological counseling process, analyzing client data, early detection of symptoms of stress and depression, and improving the quality of counseling.

KEYWORDS

Artificial intelligence, psychological state, emotional analysis, facial expression, voice analysis, information and communication technologies, telecommunications, software, artificial intelligence, information and communication technologies, telecommunications, software, artificial intelligence.

INTRODUCTION

In modern society, mental health issues are rising to the level of a global problem. A sharp increase in the flow of information, social pressure, economic changes, and increased stress factors have a direct impact on a person's psychological state. At the same time, the shortage of qualified psychologists and psychotherapists, stereotypes in society about receiving help, and economic restrictions complicate access to quality psychological services. In these conditions, the development of artificial

intelligence (AI) technologies creates new opportunities in the fields of psychology and psychotherapy.

AI-based systems - emotional state detection algorithms, virtual therapists, psychological chatbots, behavioral monitoring programs - are becoming an effective tool for early detection of mental disorders, supporting the counseling process, and forming an approach that meets the individual needs of the individual. These technologies are part of the psychotherapy process.

METHOD

I. Fundamentals of the penetration of artificial intelligence into the process of psychological assistance.

1. Possibilities of AI in psychological diagnostics. Artificial intelligence algorithms are distinguished by the ability to analyze large amounts of data in a short time. In the psychodiagnostic process, AI can perform the following functions: Emotional analysis - identifying stress, anxiety, depression, aggression through human speech, facial expressions, voice timbre, and writing style. Automatic processing of test results - rapid analysis of test results such as MMPI, Big Five, Beck, HAM-A.

Calculation of the psychological risk index - determination of the level of suicide risk, severe anxiety, fatigue syndrome, and burnout. Behavioral monitoring - detection of psychological rhythm disorders through integration with smartphones, fitness trackers, and sleep monitoring systems. These methods increase diagnostic accuracy, save the psychologist's time, and help reduce subjective errors.

II. Artificial intelligence in the process of psychotherapy.

Forecasting the effectiveness of therapy.

- These opportunities strengthen the individual approach of the psychotherapist and improve the quality of therapy.

3. AI systems combined with cognitive-behavioral therapy (CBT). CBT is considered the most convenient type of psychotherapy for AI. Algorithms: identifying irrational statements, analyzing negative thinking patterns, suggesting appropriate answers and exercises, observing the user's changes over time. As a result, self-management skills are formed in the individual.

4. Exposure therapy and VR technologies.

Virtual reality (VR) is widely used in the treatment of fears and phobias using AI: altitude, enclosed space, public speaking, flight, spider phobia, post-traumatic stress syndrome (PTSD). AI creates realistic scenarios and gradually prepares the client for a "meeting" with the source of the phobia.

III. Social, pedagogical, and ethical aspects of the application of artificial intelligence.

1. Privacy and data security. Processing psychological data is a very delicate process. In AI systems: strict adherence to requirements such as the protection of personal data not being transferred to third parties and data encryption is mandatory.

2. Ethical problems AI can never fully replace a psychologist. Main problems: lack of human empathy and emotional support algorithmic errors

in diagnostics probability of giving incorrect recommendations who should bear responsibility. Therefore, AI should be viewed not as a complete replacement of the psychotherapist, but as an additional auxiliary tool.

3. Strengthening the role of the psychologist. AI: reduces the psychologist's workload, automates the documentation and monitoring process, and directs the therapist's attention to emotional work with the client. As a result, the collaboration of AI and the psychotherapist creates a more effective model.

4. Company.

CONCLUSION

The introduction of artificial intelligence into the processes of psychological support and psychotherapy has become an important stage of the modern mental health system. The study shows that AI is an effective tool that increases the accuracy of psychological diagnostics, supports the therapy process, monitors the client's emotional state, and strengthens the individual approach. Technologies such as virtual therapists, emotional analysis algorithms, CBT-based programs, and VR-therapy allow for the early detection of mental problems and disorders, prompt approaches to them, and increasing the psychological stability of the individual. At the same time, the ethical, social, and legal aspects of the application of AI also require special attention. Limitations such as confidentiality, data security, the possibility of incorrect recommendations, and incomplete provision of human empathy indicate the need for the controlled use of AI technologies in cooperation with a specialist.

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