

## UNDERSTANDING THE ROLE OF ChatGPT IN SOCIAL WORK: WHAT WE KNOW AND WHAT WE STILL NEED TO DISCOVER

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### Abstract

Social work has a long history of engagement with technology. A review of the historical development of social work reveals that the first scholarly article addressing the profession's response to technology emerged in February 1970. From the 1970s until the end of the 20th century, social work extensively explored the use of technology in teaching and practice. The initial article on the importance of technology in social work was published by Theron K. Fuller in the "Journal of Social Casework," formerly known as "Families in Society." This article advocated the use of computers in social work practice.

Over the past decades, the world has witnessed tremendous progress in the utilization of artificial intelligence in the field of science. With technological advancements and increased computing capabilities, we are now able to apply artificial intelligence techniques to enhance research and make advancements across various scientific disciplines. One such discipline is social work, and the use of artificial intelligence in social sciences has gained significant importance, offering exciting opportunities to improve research, analysis, and understanding of societies and social behavior.

From this viewpoint, the current article seeks to explore the role of artificial intelligence, specifically ChatGPT, in social work education and practice. It aims to shed light on the challenges that impede the utilization of ChatGPT in social work and provide recommendations to enhance its integration in social work education and practice within the Arab context.

### Keywords

*Social Work, Artificial Intelligence, ChatGPT, Education, Practice, Arab Environment.*

## 1. Introduction

Artificial Intelligence (AI) is revolutionizing the field of social work education, offering fresh avenues for students to acquire knowledge and engage with real-life issues. AI systems, such as machine learning and natural language processing algorithms, have the capability to analyze and interpret social work data, detect patterns and trends, and generate valuable insights to inform both practice and policy. Within the realm of social work education, AI can significantly enhance the learning experience by delivering personalized feedback and adaptive learning resources. AI-powered simulations and scenarios also create a secure and controlled environment for students to cultivate their critical thinking and problem-solving abilities.

ChatGPT was officially launched on November 30, 2023, by OpenAI, marking a significant milestone in the realm of AI technology. As an extraordinarily large language

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model, it is built upon the foundation of the third-generation Generative Pre-trained Transformer (GPT-3) language model. (Moons & Van Bulck, 2023). The introduction of this model has ignited extensive discussions surrounding its applicability in education, learning, and various fields of study, including the field of social work. It has become a subject of intense scrutiny, raising questions about its potential impact on practices, research, and the broader professional landscape.

Overall, AI represents a promising domain for innovation and progress in social work education, equipping students with novel tools and approaches to tackle intricate social problems and enhance the well-being of individuals, families, and communities.

Until now, very few research studies have been published in the social work literature specifically about ChatGPT. A study conducted by Victor et al (2023) explored the potential use of artificial intelligence, specifically ChatGPT, in developing licensure exams for social workers in America. The study revealed the significance of employing the model in exam preparation but emphasized the need for caution when utilizing it (Victor *et al.*, 2023).

The opening statement by Singer et al. (2023) titled "Artificial Intelligence Creates the Message," discussed the pros and cons of ChatGPT in social work education. It provided a range of recommendations regarding the future of social work with artificial intelligence. (Singer *et al.*, 2023) Based on the aforementioned, the current article endeavors to bridge the gap regarding the utilization of artificial intelligence, specifically ChatGPT, in social work education and practice within the Arab context.

## 2. The potential and impact of Artificial Intelligence (AI) in social work education

The technological advancements that humanity is witnessing have impacted all fields of science, professions, and specialties, including social work education, research, and practice. Social work is one of the professions that seek to make the most of these technological advancements. It has benefited from social media networks, various e-learning applications, and attempts to benefit from the rapidly spreading applications of artificial intelligence. Artificial intelligence can activate the process of developing social work education methods by providing new tools and methods for teaching and learning that can benefit both teachers and students alike. Despite the importance of utilizing artificial intelligence applications in social work education and practice, many studies emphasize the importance of adhering to ethical and legal guidelines to ensure that no negative moral effects occur on the elements of professional practice in social work. Theoretical and conceptual research in AI ethics needs to be complemented with empirical research to understand the values and judgments of members of the public, who will be the ultimate recipients of AI-enabled services. Among the studies that emphasized the need for caution when using artificial intelligence applications in providing social services is the study of Sebastian Isbanner et al. (2022). Its results confirmed that theoretical and conceptual research in AI ethics needs to be complemented with empirical research to understand the values and judgments of public members, who will ultimately receive AI-enabled services (Isbanner *et al.*, 2022).

Here are some potential ways artificial intelligence could impact social work education:

- **Personalized Learning:** AI can be used to provide personalized learning experiences for social work students based on their learning styles, preferences,

and performance. AI-powered systems can analyze student data and adapt the learning content to meet individual needs, helping students learn independently.

- **Enhanced Practice Skills:** AI-powered simulations can help social work students develop their practice skills by providing safe and controlled environments to practice working with clients. These simulations can help students gain experience and confidence before working with real clients.
- **Evidence-Based Practice:** AI can be used to help social work instructors analyze huge amounts of information and data and identify patterns and trends that can inform evidence-based social work practice. This can help instructors make more informed decisions and interventions, improving social work students' outcomes.
- **Predictive Analytics:** AI can be used to analyze student data and predict which students are at risk of dropping out or failing. This information can help educators provide targeted interventions and support to students who need it most, ultimately improving retention rates and graduation rates.
- **Ethical Practice:** AI can be used to teach social work students about ethical practice by providing case studies and scenarios that require ethical decision-making. This may help students develop critical thinking skills and ethical awareness, leading to better outcomes for clients and communities.

Overall, AI has the potential to revolutionize social work education by providing new tools and approaches for teaching and learning and ultimately improving outcomes for graduates. However, it is important to ensure that AI is used ethically and responsibly and that it's integrated to enhance social work education and development rather than replace it.

### 3. The potential hazards of implementing artificial intelligence in the field of social work education

Despite the multiple benefits of using artificial intelligence in education, it has many negative effects. It can result in increasing machine control over humans, meaning that the teacher becomes a mere executor of the machine's instructions and directives, which can ultimately lead to a decrease in their potential and abilities, a lower level of motivation, and the loss of the most important features of being human, as God has given us the mind to employ and benefit from it. Relying on the use of artificial intelligence applications by students can lead to the acquisition of negative qualities, such as dependence on these applications in completing homework assignments, presenting research ideas, and graduation projects. All of this can result in teachers' evaluations of students' work being subjective and not reflecting their true abilities, as students rely on AI-powered products to deceive their teachers. Therefore, we recommend the importance of expanding the study of the negative effects of these applications to mitigate their risks on the educational process as a whole (teachers, students, curricula, and study plans). Previous studies have confirmed the negative risks associated with using artificial intelligence applications in education. Some of these risks can be cited as examples. According to a recent survey by the EdWeek Research Center, nearly half of educators believe that artificial intelligence (AI) will have a negative or very negative impact on teaching and learning in the next five years (EdWeek, 2023). Additionally, a report by Brown University highlights the risks of deliberate misuse of AI, including the spread of misinformation or the manipulation of public opinion (Brown University, 2021). Implementing AI in education also presents challenges, such as the need for basic

technological infrastructure and teachers' need to learn new digital skills to use AI meaningfully (UNESCO, 2023). While AI has the potential to transform education and reduce the cost of learning, if not properly managed, it can lead to a loss of human connection and personalized attention for students (Rafferty, 2023).

#### 4. Using ChatGPT in social work practice

In recent years, there has been rapid progress in artificial intelligence (AI), which has led to the development of powerful tools such as generative AI and large language models. Generative AI can generate new content such as text, images or music based on learned patterns from existing data. Large language models, like OpenAI's GPT series, are a type of generative AI. As these models have improved, they are now able to produce coherent, contextually appropriate, and even imaginative outputs (Alencar *et al.*, 2020).

Generative AI tools are becoming increasingly important in different fields such as business, medicine, and law. While AI is still a relatively new concept in social work, it is important for social workers to start considering how they can use this tool to improve their practices. This is a great time for social workers to be proactive and explore the potential benefits of AI. Some applications of large language models in the many fields of social work are with different clients, program administration, policy analysis, program evaluation, and community organization.

In various fields of social work, AI-based virtual therapy assistants can provide clients with support and guidance in the period between therapy sessions or when a social worker is not immediately available, which can be a valuable resource. These assistants employ natural language processing to simulate conversations with clients, offering them empathy and guidance as needed (Smith *et al.*, 2022).

In program administration, AI can play a significant role in improving program administration within social work organizations by generating text using raw data and existing templates.

In policy analysis, AI can help social workers synthesize and evaluate policy documents more efficiently, identify gaps and opportunities in existing policies, and suggest evidence-based solutions and best practices for policy development.

In program evaluation, large language models can assist social workers in analyzing program data more efficiently and generating insights that may take time to be apparent (Sinha *et al.*, 2021).

Finally, AI can play a significant role in supporting community-organizing efforts by helping social workers create targeted, engaging, and culturally sensitive messages.

Social work has a wide expanse of practice locations. Our professional ecosystem ranges from individuals (micro practice) to work in government and policy (macro practice), and everything in between.

The use of AI in social work operates at three different levels: micro, mezzo, and macro. At the micro level, AI-powered virtual therapy assistants, such as personalized on-demand virtual counselors, provide interventions and support to clients. These virtual assistants simulate a conversation with the client and adapt to their individual needs and preferences over time (Kemp & Rasbridge, 2021; Martini & Hayes, 2020).

At the mezzo level, it can help to enhance the effectiveness of interventions aimed at improving the well-being of groups of people, such as families, peer groups, and support groups. The best uses of AI with this level are group facilitation and virtual support. In-group facilitation, AI can be used to support group facilitation by providing real-time insights on group dynamics and identifying potential areas of conflict. This can

help social workers to facilitate more effective and productive group discussions and activities. AI can also provide virtual support to group members, such as chatbots or virtual assistants that can offer support and guidance on specific issues. This can help group members to feel more connected and supported, even when they are not able to meet in person (Coombs & Garry, 2021).

AI can be used at a macro level in social work to improve the quality and effectiveness of social services. One way AI can be used is by analyzing large amounts of data to identify patterns and trends in social issues. This analysis can help social workers to better understand the causes of these issues and problems and create better strategies for addressing them. Also, AI can be used is by automating routine administrative tasks such as data entry, scheduling, and record-keeping, allowing social workers to dedicate more time to complex tasks like advocacy, counseling, and case management. Finally, AI can also be used to develop predictive models that can help social workers anticipate and prevent social problems before they occur (O'Rourke & Treacy, 2020);

## 5. Barriers of using ChatGPT in social work

The use of ChatGPT by social work students and social workers undoubtedly delivers various benefits, as it helps strengthen professional education, acquire practice skills, and develop the capabilities of social workers to deal with community problems and help their clients (Villasenor, 2023; Kovačević, 2023). However, academic literature indicates that some users, including social workers, face some difficulties and challenges when using artificial intelligence (AI) Apps. These difficulties and challenges can be classified into Applications-related challenges and user-related challenges.

### **In relation to the challenges of ChatGPT, the following should be noted:**

1. The inability of AI Apps to understand and analyze the nature of human social relations and their degree of complexity, and to evaluate complex human feelings and emotions and their role in creating problems. This results in the exclusion or lack of use of emotional aspects in problem-solving processes, which may negatively affect the outcomes when dealing with human problems. Hence, users may find it difficult to rely on the results provided by ChatGPT when dealing with the emotional aspects of clients (Alsamhan, 2023).
2. Although ChatGPT is marked by a wide availability of data, the results it provides may be inaccurate in certain cases, or errors may occur due to the App design, which is noted in the Arabic version of the App. These errors may be attributed to the insufficiency of the data provided to the App because of the differences in terms of the local community's culture and social reality (Balmer, 2023).
3. Social work students and social workers cannot mainly rely on the data provided by the App at times, as they are considered culturally biased data adopted by the AI developers or may provide wrong solutions and information that lead to unfair, inaccurate or biased results and outputs in favor of liberal perceptions (McGee, 2023). Palmer indicates that the programming and design of ChatGPT are closely linked to the social, cultural, economic, and political context of Western societies, and reflect the values, priorities, and orientations of AI developers, and therefore the data models provided to users in some societies will not be objective or neutral (Balmer, 2023).

4. Other difficulties are related to the transparency and clarity of the decision-making process of AI Apps, which is a complex process to understand and explain. As a result, it is difficult for social workers to explain how a particular decision is made or why it was specifically reached for clients or beneficiaries of a particular service, while no mechanism or method through which professional practices based on AI can be discussed or reviewed is provided, which is fundamental for the direct interaction of students and social workers (Alsamhan, 2023).
5. ChatGPT also lacks accurate information in relation to some disciplines, (including social work), a shortcoming which requires in-depth knowledge, information, and extensive field experience (Montti, 2023).
6. The use of AI Apps may limit the diversity of cultural industries, and lead to labor market disruption, marginalization and deepening inequality between those who use modern technology and those who do not (Azoulay, 2018).
7. As a user of the Arabic version of ChatGPT, I can notice further shortcomings, the most salient of which is the huge difference between the Arabic and English versions in terms of the availability of data, as well as the solutions it provides in the field of social work.
8. Some students and social workers lack the requisite skills to use ChatGPT, such as mastering computer skills and understanding its operations, ways of browsing the Internet, using web-based tools, and knowledge of machine learning (Kovačević, 2023).
9. Lack of training to use AI Apps, for ChatGPT requires considerable resources and training over a relatively long period of time; however, the outcomes may still be imprecise (Balmer, 2023).
10. Some professionals and students (including social work students) generally do not opt for using ChatGPT because they believe that AI Apps do not help them but rather are not in their favor, as they may lead to unemployment and layoffs, which is an ethical problem (Dilhac, 2018).
11. Social workers and students do not opt for using ChatGPT, believing that this would be possibly at the expense of their human rights, leading to the acquisition of information by private or public institutions, and imposing censorship on humans (Dilhac, 2018).
12. Some users (including students and social workers) believe that ChatGPT would turn them into automated robots that violate the standards of honor and honesty (Villasenor, 2023).

### **Incorporation ChatGPT in Social Work Education and Practice: Areas Requiring Future Research**

Despite the importance of integrating artificial intelligence (AI) technologies and languages into social work, there are still numerous issues that require exploration and further study in this regard. Some of these points include:

- We need scientific studies that establish evidence-based practices, demonstrating the feasibility of employing ChatGPT in various domains of social work.
- Additionally, it is necessary to test the capability of ChatGPT in professional practice processes such as assessment, professional intervention planning, intervention implementation, monitoring, evaluation, and termination. This can only be achieved through conducting more studies in this area.

- It is important for social work academic departments to expedite training students in their coursework on how to utilize ChatGPT to assist in the learning process.
- Faculty members in social work disciplines should be trained on how to integrate this type of technology into the teaching and learning process.
- Academic institutions in universities should use scientific plagiarism detection tools to monitor unethical usage of ChatGPT.
- There is a need for numerous studies to demonstrate the importance of integrating artificial intelligence in professional practices of social work.
- It is essential to have a dedicated section in the social work code of ethics directly addressing the integration of ChatGPT in education, practice, and research in social work.

## **6. Implication for social work**

There is no doubt that we are on the verge of a new and completely different turning point regarding the integration of technology and artificial intelligence in social work education and practice. This requires all of us to move forward in integrating these AI-related technologies into social work education and practice. Undoubtedly, we will encounter numerous challenges mentioned in this paper, but there are also suggestions and recommendations that can help facilitate this integration. Among the proposed solutions to encourage the use of AI in general and ChatGPT are as follows:

- Encourage professionals working to provide social, humanitarian and health services to use modern technologies, such as AI, including ChatGPT, build confidence in the use of smart technologies, and demonstrate their benefits (Hilty *et al.*, 2019).
- Address ethical concerns and considerations about the use of ChatGPT, such as potential biases and privacy concerns, and the impact of the use of this technology on functionality and the confidentiality of client's information.
- Demonstrate the benefits of using ChatGPT in social work education and practice, such as its ability to provide information, simplify tasks for social workers, and improve communication with clients.
- Provide training and support to social workers and students in academic institutions on using ChatGPT effectively, which may help reduce their concerns, or mistrust about the use of this technology (Ligon *et al.*, 2019).
- On my part, as a practitioner and academic in the field of social work, I focus on improving English and computer skills, supporting the use of AI technologies in education and practice, and supporting the Arabic version of ChatGPT.

## **7. Conclusion**

This research paper attempts to bridge the gap in social work research related to the integration of ChatGPT in social work education and practice. The paper highlights the incorporation of artificial intelligence in social work education and practice, as well as the challenges that may hinder researchers, students, and academics from utilizing ChatGPT in social work. The paper provides a set of recommendations aimed at enhancing the use of ChatGPT in social work and emphasizes the need for further studies on the risks and benefits of integrating artificial intelligence in various professional fields of social work practice.

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