Social justice in designing AI Chatbots for people with disabilities

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Abstract: Artificial Intelligence has been supplemental to address some of the multiplex issues surrounding people with disabilities (PWDs) even prior to the emergence of ChatGPT. ChatGPT, however, opened the gateways to the chatbot renaissance era of advancing AI use, especially in the educational realm, but with continuous debates on its ethical, health, and legal implications. ChatGPT and other genAI are integrated into assistive and healthcare technologies for personalized accessibility support for people with disabilities. A transformative, ethical, and inclusive design of AI technologies for people with disabilities are crucial for techno designers. Hence, anchoring a social justice lens on AI in designing technologies expands the welfare of people with disabilities.

Keywords: AI, Assistive technologies, ChatGPT, GenAI, People with Disabilities

Despite the rise of AI use in developing countries, educational gaps, health disparities, and technological inequity pervade within the educational and social milieu. People with disabilities have utilized assistive or health technologies but they are still vulnerable to such social disequilibrium (Campado et al., 2023; Toquero, 2021). In today's AI renaissance era, ChatGPT's purpose is magnified on the opposite end of the spectrum as beneficial or detrimental to the welfare of people with disabilities. Debates persist in academia and health industries relative to the ethical consequences of AI use with ChatGPT's OpenAI possibly facing legal action. Nevertheless, AI has paved the way for people with disabilities to access health and social support.

The use of ChatGPT or other chatbots in designing assistive or healthcare technology for PWDs can provide personalized accessibility support. Through ChatGPT, PWDs can generate health content, leverage health and educational communications, and access assistance for real-time feedback. ChatGPT may be promising, but it also has limitations since there are multiple forms of disabilities that require personalized technological interventions. Nonetheless, ChatGPT serves as one of those significant breakthroughs that can also be incorporated as a language component of different functionalities of assistive or healthcare technologies.

Authors (Bozkurt et al., 2023) from more than 20 countries used speculative methodology to foresee how AI could potentially change the future for good or evil. A significant empirical gap exists on the impact of ChatGPT and generative AI relative to the health outcomes of PWDs. Moreover, health professionals have an indispensable responsibility to fortify inclusivity by empowering people with disabilities (Samuel et al., 2018). Beyond focusing on functional, occupational, and personal recovery, they must intensify their role in upholding the rights of people with disabilities (PWD). A truly civilized society empowers every individual to realize their full potential.

Since AI use is inevitable and UNESCO calls for the intensification of sustainable development goals, an AI ethical framework based on the national or local context is crucial in shaping an inclusive AI culture. Likewise, campaigning for the health and educational rights of PWDs is not just about fairness because of the existing overarching struggles in the social structures. Rather, it is a question of social justice due to structural inequalities that can happen with unjust designs of AI (Bennett & Keyes, 2020). Hence, AI ethics and social justice lens should be of utmost priority in designing healthcare and assistive technologies incorporating artificial intelligence. ChatGPT can solidify a precedent for just how the renaissance of AI chatbots will contribute to either the inclusion or oppression of people with disabilities in the near future.

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