(Un)designing AI for Mental and Spiritual Wellbeing

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Abstract

With rapid advances in Artificial Intelligence (AI) impacting human health and wellbeing, scholarly discourse should focus *equally* on the prospective opportunities and harms of Human-AI Interaction (HAI) in Computer-Supported Collaborative Work and Social Computing (CSCW). This panel invites critical interdisciplinary discussion around the (un)designing of AI by asking: *how, when, where, and why should AI (not) be involved in sociotechnical systems for mental and spiritual health and wellbeing?* Motivated by functional, technical, and ethical concerns, the panel aims to ensure that: (1) progress in HAI for mental and spiritual health is informed by expertise from the respective clinical disciplines; (2) ethical and responsible design principles lie at the core of research motivations and methodologies; and (3) AI hype can be tempered by caution given its impacts on marginalized and stigmatized groups. A panel of respected experts in mental health, spiritual care, and AI will discuss CSCW topics regarding HAI in contexts of clinical practice (e.g., electronic health records, patient portals, decision-making and referral systems, technology-supported interactions during bedside care or clinical appointments) as well as social contexts beyond the clinic (e.g., social apps, online health communities and social media, and computer-mediated communication in spiritual/religious groups).

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CCS Concepts

• **Human-centered computing → Collaborative and social computing design and evaluation methods**; • **Applied computing → Health care information systems**; **Health informatics**; • **Social and professional topics → Religious orientation**.

Keywords

Health, wellbeing, mental health, spiritual care, artificial intelligence, machine learning, large language models, chatbots, religion, spirituality

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1 Introduction

Our contemporary era is marked by rising epidemics of social isolation [10], mental illness [23], and spiritual crises [26]. To address peoples' health needs, sociotechnical systems are increasingly integrating AI-based techniques. For example, clinical healthcare now involves AI-powered patient care [1], administrative applications [2], medical devices [13], complex therapies [14], and end-of-life care [5]. Outside of clinics, users' self-care and wellbeing can be influenced by AI-powered technologies for practices like prayer [21, 22], meditation [17], discussions in online communities [25], or use of chatbots and large language models (LLMs) [12, 15].

While such AI-driven technologies promise to help people, numerous functional, technical, and ethical considerations should inform how designers do (or do not) incorporate AI while designing systems that impact mental and spiritual wellbeing. CSCW

should remain wary of technosolutionist approaches that assume technology–including AI–will *always* be the right solution [4]. For example, scholars have raised concerns that ramping up technology, robotics, and AI in our lives may diminish the quality of human connections [24], decrease authenticity in our personal and spiritual development [11], and erase or violate marginalized cultures that are underrepresented in training data [18]. In the face of climate crisis, inhumane model training and moderation practices, and the unsustainable depletion of electricity and rare earth minerals, some scholarly calls now emphasize the need for the critical deconstruction or "unmaking" of myopic and shortsighted innovation.

The proposed panel acknowledges both the benefits of AI and the reality of AI harms. We invite critical reflection upon when, why, and how AI may (or may not) be an ethical solution for the mental and spiritual wellbeing of individuals and society. We bring together respected experts from mental health, spiritual care, and technology development to ensure that: (1) progress in AI-based technology for mental and spiritual health is informed by expertise and best practices from their respective clinical disciplines; (2) ethical and responsible design principles lie at the core of research motivations and methodologies; and (3) AI hype can be tempered by caution with respect to its impacts on marginalized and stigmatized groups.

2 Mental Healthcare

Professional mental health providers such as therapists and psychiatrists work with their clients to identify and manage psychological, cognitive, or emotional issues, using techniques like talk therapy, behavioral change, skills training, or prescribing medication. Since there are not enough mental healthcare providers available to meet population-level needs, a large and growing body of work in CSCW has explored sociotechnical mechanisms for mental health support—a trend that continues growing due to pandemic-induced surges toward telehealth, as well as the emergence of LLMs and healthcare chatbots. Yet numerous technical and ethical issues remain. AI can displace human labor and detract from meaningfully addressing wellbeing and social determinants of health [7]. Digital divides and infrastructural constraints continue limiting access to equitable care worldwide [19]. Scholars are also describing and documenting the real harms of LLMs [18].

3 Spiritual Care

Spiritual care professionals such as chaplains, spiritual counselors, and palliative care or hospice nurses do not seek to prescribe to or cure people. Instead, they focus on providing loving presence and connection (sometimes through silent presence, gentle physical touch, or guided questions) so that clients can feel seen and cared for while finding their own answers within. Spiritual care deals with people's needs for: (1) meaning and direction in life; (2) self-worth and belonging to community; and (3) loving and feeling loved [20]. Clinical research has rigorously established the value and importance of addressing these profound spiritual needs [3]. Whereas mental health treats the ***mind***, spiritual care treats the ***spirit*** using distinct sets of goals, methods, and interventions [16]. Even though mental health therapists may occasionally discuss issues related to religion and spirituality with their clients, they are *not* generally considered spiritual care providers. In the USA, providing spiritual care is legally mandated as a standard of patient care since 2006, however, spiritual care is often neglected to the detriment of patient wellbeing and quality of life [6].

4 Panel Structure & Technical Requirements

The panel will be held in-person at CSCW 2024. All but one panelist will be in-person. Therefore, technical requirements include: a room with a projector; a Zoom link for our virtual panelist, including auto-captioning to improve accessibility; three microphones, one each for the moderator, panelists, audience questions. The panel will begin with a concise presentation (approx. 5-10 minutes) to introduce the panel's goals and briefly overview current trends in HAI and CSCW related to mental and spiritual healthcare. Using an audience Q&A tool such as Slido, the moderator will encourage audience members to interactively submit questions throughout the discussion. The moderator will then deliver prepared questions asking panelists to: introduce their background training and current research areas; discuss their disciplinary perspectives on state-of-the-art HAI topics; and describe the most pressing opportunities for needed HAI development *versus* ways in which current efforts in HAI development may be problematic, misplaced, or unethical. HAI topics will be focused on contexts of clinical practice (e.g., electronic health records, patient portals, decision-making and referral systems, and technology-supported interactions during bedside care or clinical appointments) as well as social contexts beyond the clinic (e.g., social apps, online health communities and social media, and computer-mediated communication in spiritual/religious groups). To ensure an engaging experience, the moderator will intersperse questions from the audience with prepared questions and offer opportunities for attendees to ask questions using the microphone.

5 Panelists

To create an enriching and in-depth discussion, four diverse panelists have been selected to balance across **areas of expertise** (including artificial intelligence, mental healthcare, spiritual care, and online safety), background training (HCI design research to applied clinical training), and **stage of career** (early to advanced career). All panelists plan to attend CSCW 2024 in-person, except for Rev. George Handzo who will attend the panel via Zoom[1]:

Munmun De Choudhury, PhD (munmund.net): Dr. De Choudhury is an Associate Professor at Georgia Tech's School of Interactive Computing, renowned worldwide for her contributions to computational social science, HCI, and digital mental health. She has advanced computational techniques for early detection and intervention in mental health and explored social media's impact on mental well-being. Dr. De Choudhury has received numerous awards and honors, including induction into the SIGCHI Academy and the 2023 SIGCHI Societal Impact Award.

[1]We have several contingency plans if Zoom fails. First, we will **pre-record** concise video responses to several prepared questions that Rev. George Handzo is best suited to address, given his extensive expertise in spiritual care. If the internet is unstable during the conference, we will sound-check a conventional **phone call** (and hold the phone near a microphone) prior to the start of the panel. If reception or audio quality is poor, then we will resort to playing back pre-recorded videos for the appropriate questions. Finally, if AV completely fails and videos cannot be played, then Dr. Estelle Smith will leverage her prior improv training to perform an engaging reading of the recording transcripts, printed on paper in advance.

Rev. George F. Handzo, BCC (healthcarechaplaincy.org): Rev. Handzo is the Director of Health Services Research and Quality at HealthCare Chaplaincy Network and a leading authority on professional healthcare chaplaincy. With over 25 years of experience, he has authored 150+ chapters and articles on spiritual care and lectures regularly at major medical institutions. Rev. Handzo has received prestigious awards for his contributions, including the Anton Boisen Professional Service award from the Association of Professional Chaplains, of which he is a past president.

Diana Freed, PhD (dfreed.me): Dr. Freed is an Assistant Professor at Brown University, leading the Sociotechnical Systems and Wellbeing Research Lab. Her research focuses on technology and society, emphasizing security, privacy, and digital well-being for vulnerable populations. Dr. Freed holds degrees from Cornell, Columbia, and Harvard, including post-graduate clinical training in psychotherapy and mental illness. She has been recognized with multiple ACM paper awards and the Advocate of New York City Award to end domestic and gender-based violence.

C. Estelle Smith, PhD (estellesmithphd.com): Dr. Smith is an Assistant Professor in Computer Science at the Colorado School of Mines, cultivating interdisciplinary research at the intersection of professional spiritual care, human-computer interaction, and online community governance. In addition to community-engaged research partnerships with platforms like CaringBridge, Wikimedia Foundation, and Reddit, Dr. Smith is now collaborating with national chaplaincy and spiritual care organizations to expand evidence-based spiritual care delivery through sociotechnical mechanisms. Dr. Smith's work has been recognized with multiple ACM paper awards.

6 Panel Moderator

Jingjin Li, PhD (jingjinli.com): Dr. Li is a research fellow at AImpower.org. Her research focuses on technology for mindfulness and mental wellbeing, AI for empowerment, and inclusive videoconferencing. Her PhD at Cornell University focused on understanding and designing everyday mindfulness technologies beyond meditation for mental wellbeing through working with mindfulness practitioners and utilizing first-person research methods.

7 Conclusion

To curtail the harms of techno-solutionism, designers can make thoughtful decisions of when to use or *not* to use AI [4], while turning to communal ways of rethinking normative technological relations [8, 9]. The proposed panel brings together experts in mental health, spiritual care, and AI design to provide perspective and guidance for CSCW in its pursuit of sociotechnical systems for good health, wellbeing, and digital safety.

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