

Journal of Management Information Systems

Special Section: Information Technology to Foster Mental Health

Guest Editors

- Corey Angst (cangst@nd.edu), University of Notre Dame
- Alan Dennis (ardennis@iu.edu), Indiana University
- Elena Karahanna (ekarah@uga.edu) The University of Georgia
- Gondy Leroy (gondyleroy@arizona.edu), University of Arizona

Background:

Mental health issues such as depression, anxiety, and others are a growing epidemic facing modern society. The Mental Health America society estimated that nearly a fifth of the adult US population suffered a mental illness in 2019-2020 and that 94% of these individuals did not receive any treatment [6]. Information Technology (IT) such as wearables, digital pills, cope notes, VR, and others have been proposed and used to help address the growing mental health crisis. However, the understanding of the design, development, adoption, use, and impact of such technologies for diagnosing and treating mental health illnesses remains nascent. Information Systems (IS) scholars are starting to study various aspects of mental health, including occupational stress [1,3,5,8], distress [2,7], and diagnosable mental health disorders [4,9]. However, significant areas of opportunity remain for developing and evaluating digital technologies that could help identify or tackle anxiety disorders (e.g., generalized anxiety disorder, panic, social anxiety), mood disorders (e.g., depression, bipolar disorder), and addiction (e.g., substance abuse, chemical dependence).

This Special Section seeks to expand research related to IT for mental health and spearhead an ongoing research agenda related to this subject in the IS discipline. We are specifically seeking contributions that improve our understanding of how IT could be leveraged to *identify mental health conditions and improve* mental health. We encourage a wide range of content, including theory, qualitative and quantitative approaches, and design science for mental health for this Special Section. Example topics within the scope of this special section include, but are not limited to:

- Impact of IT designed to prevent, diagnose, and treat mental health issues
- Design, development, and evaluation of new artifacts for identifying mental health conditions from social media
- Improving mental health with Metaverse-related technologies
- Internet of Medical Things (IoMT) and related sensor signal analysis-based approaches for identifying depressive behaviors
- AI systems to identify individuals in mental duress
- AI systems to recommend mental health interventions
- Automated identification of mental health progression
- Mental health intervention program development and deployment
- Adoption of mental health IT
- New theories around IT use and deployment for mental health

- Role of IT in improving mental health services
- Human-AI interfaces to support mental health decision-making processes
- IT for improving mental health for specific demographics or socioeconomic status
- Bias in IT for mental health

Irrespective of the topic, the focus on how IT is being used or developed to identify mental health conditions or improve mental health should be evident (IT is a central theme of the paper). Research that examines the negative impacts of technology (e.g., antecedents to technostress) do not fit the theme. We welcome research that uses or employs various types of methods and analysis, including:

- Qualitative methods, including interviews and observations
- Quantitative methods, including experiments and surveys
- Archival and observational research methods
- Mixed methods research
- Design science research
- Artificial Intelligence (AI)-enabled analytics methods, including machine learning, deep learning, text mining, and network science

Timeline:

Authors should submit a two-page extended abstract to the Guest Editors prior to submission to assess the fit of their paper with the special section. The abstract should clearly present the research question, theory, method and expected contribution. Authors are encouraged to submit prior to the deadline and papers will be processed as they are received. The editorial timeline will proceed as follows:

- **Expression of Interest:** March 1, 2023 (two-page abstract, single spaced, 12 point font)
- **Initial Submission Due:** July 31, 2023
- **Notification of First Round Decision:** November 30, 2023
- **1st Resubmission Due:** March 30, 2024
- **Notification of Second Round Decision:** June 30, 2024
- **2nd Resubmission Due:** September 30, 2024
- **Final Decision:** December 30, 2024

Submission Information

Please see: <https://kelley.iu.edu/ardennis/jmis-si>

References:

1. Califf, C.B., Sarker, S., and Sarker, S. The bright and dark sides of technostress: A mixed-methods study involving healthcare IT. *MIS Quarterly*, 44, 2 (June 2020), 809–856.
2. Chau, M., Li, T.M.H., Wong, P.W.C., Xu, J.J., Yip, P.S.F., and Chen, H. Finding people with emotional distress in online social media: A design combining machine learning and rule-based classification. *MIS Quarterly*, 44, 2 (June 2020), 933–955.
3. Cram, W.A., Wiener, M., Tarafdar, M., and Benlian, A. Examining the Impact of Algorithmic Control on Uber Drivers' Technostress. *Journal of Management Information Systems*, 39, 2 (April 2022), 426–453.

4. James, T.L., Lowry, P.B., Wallace, L., and Warkentin, M. The Effect of Belongingness on Obsessive-Compulsive Disorder in the Use of Online Social Networks. *Journal of Management Information Systems*, 34, 2 (April 2017), 560–596.
5. Pirkkalainen, H., Salo, M., Tarafdar, M., and Makkonen, M. Deliberate or Instinctive? Proactive and Reactive Coping for Technostress. *Journal of Management Information Systems*, 36, 4 (October 2019), 1179–1212.
6. Reinert, M., Fritze, D., and Nguyen, T. *The State of Mental Health in America 2023*. Mental Health America, 2022.
7. Spohrer, K., Fallon, M., Hoehle, H., and Heinzl, A. Designing Effective Mobile Health Apps: Does Combining Behavior Change Techniques Really Create Synergies? *Journal of Management Information Systems*, 38, 2 (April 2021), 517–545.
8. Windeler, J.B., Maruping, L., and Venkatesh, V. Technical Systems Development Risk Factors: The Role of Empowering Leadership in Lowering Developers' Stress. *Information Systems Research*, 28, 4 (December 2017), 775–796.
9. Xie, J., Zhang, Z., Liu, X., and Zeng, D. Unveiling the Hidden Truth of Drug Addiction: A Social Media Approach Using Similarity Network-Based Deep Learning. *Journal of Management Information Systems*, 38, 1 (January 2021), 166–195.