

Journal of Trust Studies (JOTS)



Call for papers: Special issue on Human-AI Trust Relation

Inviting Submissions to the Special Issue Call on Human-AI Trust Relations: exploring competence and vulnerability

Guest Editors:

Ijeoma Okpanum, Lecturer, University of Aberdeen Business School, University of Aberdeen-South China Normal University (SCNU) Joint Institute, UK

Kingsley Obi Omeihe, Senior Lecturer, Transformative Enterprise Research Group, School of Business and Creative Industries, University of the West of Scotland, UK

Isaac Oduro Amoako, Associate Professor, School of Management, Canadian University, Dubai, UAE

Ibiyemi Omeihe, Lecturer, Transformative Enterprise Research Group, School of Business and Creative Industries, University of the West of Scotland, UK

How to cite this article

Okpanum, I., Omeihe, K. O., Amoako, I. O., & Omeihe, I. (2024). Inviting Submissions to the Special Issue Call on Human-AI Trust Relations: exploring competence and vulnerability. *Journal of Trust Studies*. https://digitalization.site/index.php/jots

Call for papers

<u>Inviting Submissions to the Special Issue Human-AI Trust Relations: exploring competence and vulnerability (Deadline 31 January 2025)</u>

There is continuing interest in how artificial intelligence (AI) is being integrated into various aspects of society, including healthcare, finance, education, and public safety. Some studies have explored the impact of AI on big data analytics in humanitarian relief operations (Dubey et al., 2022) and human trust in AI (Glikson & Woolley, 2020), with leadership implications (Watson et al., 2021) and its potential disruption within developing economies (Okpanum and Omeihe, 2024). Others have focused on how AI holds much promise for enabling the international community, governments, and civil society to predict and prevent human insecurity (Roff, 2017), its role in revolutionising healthcare (Perry, 2016), and its impact on labour markets, including its adoption and implications (Acemoglu et al., 2021).

Yet, as AI becomes more ubiquitous, its widespread acceptance hinges significantly on the trust that stakeholders place in it. Trust—whether in human interactions, between humans and AI systems, or among human AI users—is increasingly essential and is fundamentally based on positive expectations. Many of the existing literature on trust in AI remain somewhat abstract and lacking information on the specific vulnerabilities that different stakeholders face. This makes it challenging to use evidence-based data to make informed decisions and practices related to AI (Ye et al., 2020). As a result, it is clear that the pace and scope of such research, in part, demand a widening of perspectives surrounding distrust and suspicion in relation to artificial intelligence.

In this special issue, we adopt Mayer et al.'s (1995) influential definition of trust as the willingness of a party to be vulnerable to the actions of another party based on the notion that an action would be performed without any form of monitoring. This definition of trust aligns with those of Rousseau et al. (1998) and Gambetta (1988), particularly concerning vulnerability. Being vulnerable suggests exposure to loss, as trust involves being open to risks (Omeihe, 2022; 2023). Our conceptualisation focuses on the notion that vulnerability is a precondition to trust; the 'willingness to be vulnerable' (Mayer et al., 1995, p. 172) and the 'intention to accept vulnerability' (Rousseau et al., 1998), which together reflect the optimistic expectations of the trustor.

In this context, suggesting that scholarly interest in trust in AI requires attention to imagination more importantly allows us to focus on the existence of three components: (1) vulnerability, (2) uncertainty, and (3) expectations. We challenge scholars to approach the issue of vulnerability regarding AI as the poetics of trust reveals that trust should not be taken for granted (Lewicki & Bunker, 1985; Omeihe, 2023; Omeihe & Omeihe, 2024). In other words, trust is associated with ability, benevolence, and integrity and, as such, must not be jeopardised. We underscore that distrust—the dark side of trust—stems from an increased awareness of uncertainty and vulnerability, often triggered by previous negative experiences. In this sense, the notion that trust is a 'leap of faith' becomes central to its essence (Luhmann, 1979; Möllering, 2006).

More promising is the fact that a focus on trust allows us to address many of the scepticisms around AI, including its misuse, the low trust in the consolidation of power associated with the monopoly of resources for economic gain, and societal uncertainty regarding AI's capabilities and potential harm. Since trust gives attention to various dimensions, such as competence, predictability, and vulnerability, we turn our attention here to how the dimensions of trust in human and technology contexts share similarities (e.g., risks, vulnerability, promising outcomes). We are particularly interested in how individuals often exhibit a bias towards new technologies, leading to specific assumptions about their capabilities and functionality.

What does all this mean for this special issue?

As we have pointed out, we look forward to papers that can tackle many of the issues we have raised above regarding trust in artificial intelligence. This resonates with our emphasis on competence and vulnerability. For this special issue, we are curious to see how scholarly interests can explore the dynamics of trust relations between humans and AI systems, focusing on competence and vulnerability. For us, competence refers to AI systems' ability to perform tasks accurately and efficiently, while vulnerability refers to the potential for harm or failure that AI systems may pose (Glikson & Woolley, 2020). Understanding these dynamics of trust relations is essential to ensure that humans can rely on AI systems with confidence and that AI systems can operate safely and effectively.

With this special issue, we seek submissions that consider how we can investigate and theorise about trust in artificial intelligence as a process of enhancing our understanding. We aim to update our collective knowledge capacity by exploring and creating new perspectives on the trust formation process. For instance, while trust in humans is likely to increase with frequent interactions, trust in AI can decrease over time due to errors, unwanted features, and malfunctions.

On the other hand, human trust in AI systems might increase after repeated interactions, depending on the task or domain involved. For instance, humans may be more likely to trust AI systems in tasks that include data analysis or decision-making than in tasks that require emotional intelligence or creativity. This also suggests that contextual or situational factors could affect human-AI trust relations. Tackling questions like these invites conceptual and empirical papers that showcase the complexities in understanding trust constructs, especially in the age of AI.

On this basis, we are delighted to extend an invitation for submissions to be featured in the Journal of Trust Studies. Special issues play a unique role in the journal, allowing for the exploration of underrepresented themes that may not receive adequate coverage in regular issues. We are particularly interested in receiving high-quality submissions that address pertinent issues concerning human-AI trust relations and the vulnerabilities that arise from these interactions:

- What is the role of perceived competence in shaping trust in AI systems?
- What is the role of vulnerability on human trust in AI systems?
- How does AI redefine the way we view trust?

- How does the human-AI trust develop, and what type of trust is required across contexts?
- Is the human-AI trust formation process like the human-human trust process?
- Are there trust-building strategies for enhancing human-AI interactions?
- Are there cultural and societal factors influencing trust in AI technologies?
- Does cognitive biases and emotional responses affect trust in AI systems?
- Are there factors that can be effective in the human-AI trust-building process?
- Are there comparative similarities or differences in trust-building mechanisms in different cultural contexts?

Additionally, the special issue welcomes contributions that explore:

- The role of technology and virtual interactions in shaping trust dynamics across cultures, particularly how AI influences these dynamics.
- The impact of political, economic, and social factors on trust perceptions in AI systems and their applications.
- Strategies for fostering trust in multicultural and diverse organisational settings, with a focus on integrating AI technologies.
- The influence of historical contexts on contemporary trust dynamics involving AI.
- Comparative analysis of trust-building mechanisms in different cultural contexts, emphasising the role of AI and technology.

Deadline and Submission Guidelines

Authors are invited to submit their manuscripts for the Special Issue of the Journal of Trust Studies. The submission window is from August 20, 2024, to January 31, 2025. Please send all special issue submissions to Ijeoma.okpanum@abdn.ac.uk and jots@digitalization.site with the subject line 'Special Issue for Journal of Trust Studies.'

All submissions will undergo the journal's double-blinded review process. After the initial round of reviews, a paper development workshop is scheduled for late 2024. The workshop aims to offer authors further insights into their manuscripts following revisions based on the initial reviews and feedback. It's important to note that presenting an author's work is neither a requirement nor a guarantee of the paper's final acceptance. This process aims to enhance and refine the potential value of the contribution.

If you have any questions or require further information, please direct your inquiries to Ijeoma Okpanum, the special issue editor at the University of Aberdeen (ijeoma.okpanum@abdn.ac.uk).

Selected References

- Amoako I.O. (2018). Trust, institutions and managing entrepreneurial relationships in Africa: An SME perspective. Springer.
- Amoako I.O. & Matlay H. (2015). Norms and trust–shaping relationships among food exporting SMEs in Ghana. International Journal of Entrepreneurship and Innovation 16(3): 123–134.
- Dzindolet, M. T., Peterson, S. A., Pomranky, R. A., Pierce, L. G., & Beck, H. P. (2003). The role of trust in automation reliance. *International Journal of Human-Computer Studies*, 58(6), 697–718.
- Glikson, E., & Woolley, A. W. (2020). Human trust in artificial intelligence: Review of empirical research. *Academy of Management Annals*, 14(2), 627–660.
- Hoff, K. A., & Bashir, M. (2015). Trust in automation: Integrating empirical evidence on factors that influence trust. *Human Factors*, 57(3), 407–434.
- Lee, J. D., & See, K. A. (2004). Trust in automation: Designing for appropriate reliance. *Human Factors*, 46(1), 50-80.
- Madhavan, P., & Wiegmann, D. A. (2007). Similarities and differences between human–human and human–automation trust: an integrative review. *Theoretical Issues in Ergonomics Science*, 8(4), 277-301.
- Marsh, S., & Dibben, M. R. (2003). The role of trust in information science and technology. Annual Review of Information Science and Technology (ARIST), 37, 465-98.
- Möllering, G. (2006). Trust: Reason, Routine, Reflexivity. Amsterdam: Elsevier.
- Okpanum, I., & Omeihe, K. O. (2024). Artificial intelligence in Nigeria: how ready are we? Business Day. https://businessday.ng/opinion/article/artificial-intelligence-in-nigeria-how-ready-are-we/
- Okpanum, I. (2022). Religion and trust: Employees' attributions of CEO's religious convictions. In the African Context of Business and Society, Omeihe, K and Harrison, C. (Ed.). Emerald Publishing, pp. 13 30. DOI1108/9781801178525
- Omeihe K.O. (2022). The Strength of trust, social norms and entrepreneurship for trade networks: Evidence from Nigerian trader—owned enterprises. In The African Context of Business and Society (pp. 165–188). Emerald Publishing Limited.
- Omeihe, K. O. (2023). Trust and Market Institutions in Africa: Exploring the Role of Trust-Building in African Entrepreneurship. (Palgrave Studies of Entrepreneurship in Africa). Palgrave Macmillan Cham. https://link.springer.com/book/9783031062155
- Omeihe, K.O., & Omeihe, I. (2024). The social regulation of inter-SME relations: Norms shaping SMEs relationships in Nigeria. *International Journal of Entrepreneurship and Innovation*.
- Ullman, D., & Malle, B. F. (2017, March). Human-robot trust: Just a button press away. In *Proceedings* of the companion of the 2017 ACM/IEEE international conference on human-robot interaction (pp. 309-310).
- Ye, T., Lei, J., Zhang, J., & Wang, Y. (2020). Review of the research on trust in artificial intelligence. *IEEE Access*, 8, 101234-101250.