ISSN(O): 2320-5407 | ISSN(P): 3107-4928

International Journal of Advanced Research

Publisher's Name: Jana Publication and Research LLP

www.journalijar.com

REVIEWER'S REPORT

Manuscript No.: IJAR-58057

Title: The Role of Robot Personality in Enhancing Human Trust, Engagement, and Task Efficiency in Human-Robot Interaction.

Recommendation:
Accept as it is .....
Accept after minor revision yes
Accept after major revision .....
Do not accept (*Reasons below*).....

Rating	Excel.	Good	Fair	Poor
Originality		yes		
Techn. Quality		yes		
Clarity		yes		
Significance		yes		

Reviewer'sID: JPR- Dr. Bharti Bisht

Detailed Reviewer'sReport

The manuscript entitled *"The Role of Robot Personality in Enhancing Human Trust, Engagement, and Task Efficiency in Human-Robot Interaction"* addresses a timely and increasingly important topic within the fields of Human–Robot Interaction (HRI), Artificial Intelligence, and collaborative robotics. As robots become more integrated into healthcare, education, workplaces, and service industries, understanding how robot personality influences human attitudes and behaviors is both academically relevant and practically significant. The manuscript highlights the role of robot personality traits in fostering trust, improving user engagement, and enhancing task performance, while also acknowledging ethical and technical challenges associated with human–robot collaboration. The topic is highly relevant to current developments in intelligent systems and human-centered technology design.

The abstract provides a clear overview of the study and presents the main concepts in an accessible manner. However, several aspects require improvement to strengthen the scientific contribution and academic rigor of the manuscript. First, the abstract does not clearly specify the research methodology employed. It is unclear whether the study is based on a systematic literature review, empirical investigation, experimental design, survey research, or conceptual analysis. The methodology should be explicitly described, including data sources, sample characteristics, analytical techniques, and research procedures. Second, the manuscript would benefit from a stronger theoretical foundation by incorporating established theories related to trust formation, social cognition, media equation theory, anthropomorphism, social presence theory, and technology acceptance. These frameworks would provide a stronger basis for explaining how and why robot personality affects human behavior.

Third, the concept of "robot personality" should be more clearly operationalized. The manuscript should specify which personality dimensions are being examined (e.g., friendliness, empathy, extroversion, competence, reliability, or warmth) and how these characteristics influence trust, engagement, and task efficiency. Fourth, the discussion should differentiate between application contexts, as the impact of robot personality may vary significantly across healthcare, education, industrial settings, and customer service environments. The manuscript should also address cultural, demographic, and individual differences that may influence user perceptions of robot personality.

Furthermore, the section on ethical concerns should be expanded to include issues such as transparency, algorithmic bias, emotional manipulation, privacy, data security, and user dependency on social robots.

ISSN(O): 2320-5407 | ISSN(P): 3107-4928

International Journal of Advanced Research

Publisher's Name: Jana Publication and Research LLP

www.journalijar.com

REVIEWER'S REPORT

The practical implications for robot designers, software developers, policymakers, and organizations implementing robotic systems should be discussed in greater detail. If the study includes empirical findings, the authors should present statistical evidence and explain the significance of the reported outcomes. If it is a literature-based study, the review methodology and inclusion criteria should be clearly outlined to enhance transparency and reproducibility.

The manuscript would also benefit from a dedicated limitations section and recommendations for future research, particularly regarding long-term human–robot relationships, adaptive robot personalities, and the integration of generative AI technologies in social robots. Minor revisions related to language consistency, keyword formatting, and citation style are also recommended.

Overall, the manuscript addresses an important and rapidly evolving research area with substantial practical relevance. It has the potential to contribute meaningfully to the Human–Robot Interaction literature; however, **moderate revisions** are recommended to strengthen the theoretical grounding, methodological clarity, analytical depth, and practical implications before publication.