



< Back to results | 1 of 1

[Download](#)
[Print](#)
[Save to PDF](#)
[Add to List](#)
[Create bibliography](#)
International Journal of Humanoid Robotics • 2025 • Article number 2550002**Document type**

Article

Source type

Journal

ISSN

02198436

DOI

10.1142/S0219843625500021

View more

Social Robots as Decision-Making Companions: Exploring the Impact of Social Cues on Human Responses

[Ghazali, Aimi Shazwani^a](#) ; [Hafizalshah, Hariz^a](#) ; [Sidek, Shahrul Naim^a](#) ;

[Yusof, Hazlina Md^a](#) ; [Ham, Jaap^b](#)

Save all to author list

^a Department of Mechatronics Engineering, International Islamic University Malaysia, Gombak, 53100, Malaysia^b Industrial Engineering and Innovation Sciences, Eindhoven University of Technology, Eindhoven, Netherlands

Full text options Export

Abstract

Author keywords

Indexed keywords

SciVal Topics

Abstract

Making decisions, particularly ones fraught with ambiguity, inherently induces stress, which is a recognized contributor to long-term mental health issues. In high-stakes or uncertain environments, stress can significantly impair decision quality and well-being. Social robots offer a promising solution by potentially providing companionship and cognitive assistance in such scenarios. This study investigates the influence of verbal social cues used by social robots on human responses. In a laboratory setting, 60 participants interacted with the Alpha Mini robot, a programmable social agent, for 30 min. The robot offered advice using combinations of controlling language (high versus low) and social praise (absent versus present) in a between-subject design setup while playing a decision-making computer game. Post-interaction, social responses were measured using questionnaires. Results revealed strong, positive correlations between participants' enjoyment of interacting with the robot and their intention to use it again in the future, as well as their liking and trust in the robot's advice. These correlations were statistically significant ($p < 0.01$) and suggest that positive user experiences can translate into continued engagement.

Cited by 0 documents

Inform me when this document is cited in Scopus:

[Set citation alert >](#)**Related documents**[The social medium is the message](#)

Groom, V. , Nass, C. , Srinivasan, V.
(2010) *Aaai Fall Symposium Technical Report*

A preliminary exploration of implications of the media equation on IR systems

Saito, H.
(2012) *6th International Conference on Soft Computing and Intelligent Systems and 13th International Symposium on Advanced Intelligence Systems Scis Isis 2012*

The Dorian Gray Refutation
Bartneck, C.
(2023) *Behavioral and Brain Sciences*

View all related documents based on references

Find more related documents in Scopus based on:

Authors > Keywords >

Positive responses were observed regardless of the specific social cues employed. To design effective human-robot interactions (HRI), multiple social cues should be integrated using high controlling language for clarity and direction paired with social praise to soften the tone in order to enhance trust, enjoyment, and effectiveness. Future work might enhance the current findings by integrating physiological data into the measures used to assess emotional responses to the robot and its cues. Additionally, expanding participant demographics and incorporating longitudinal studies could further validate and extend these results. © 2025 World Scientific Publishing Company.

Author keywords

controlling language; decision-making game; social praise; social responses; Social robots

Indexed keywords

SciVal Topics

References (62)

View in search results format >

☐ All

Export

Print

E-mail

Save to PDF

Create bibliography

☐ 1

Richter, I., Gabe-Thomas, E., Queirós, A.M., Sheppard, S.R.J., Pahl, S.

Advancing the potential impact of future scenarios by integrating psychological principles

(2023) *Environmental Science and Policy*, 140, pp. 68-79. Cited 11 times.
<https://www.sciencedirect.com/journal/environmental-science-and-policy>
doi: 10.1016/j.envsci.2022.11.015

View at Publisher

☐ 2

Siam, A.I., Gamel, S.A., Talaat, F.M.

Automatic stress detection in car drivers based on non-invasive physiological signals using machine learning techniques

(2023) *Neural Computing and Applications*, 35 (17), pp. 12891-12904. Cited 56 times.
<https://www.springer.com/journal/521>
doi: 10.1007/s00521-023-08428-w

View at Publisher

☐ 3

Howarth, E.J., O'Connor, D.B., Panagioti, M., Hodkinson, A., Wilding, S., Johnson, J.

Are stressful life events prospectively associated with increased suicidal ideation and behaviour? A systematic review and meta-analysis

(2020) *Journal of Affective Disorders*, 266, pp. 731-742. Cited 91 times.
www.elsevier.com/locate/jad
doi: 10.1016/j.jad.2020.01.171

View at Publisher