UC Merced

Proceedings of the Annual Meeting of the Cognitive Science Society

Title

"Feels Like I've Known You Forever": Empathy and Self-Awareness in Human Open-Domain Dialogs

Permalink

Journal

Authors

Lee, Yoon Kyung
Cho, Won Ik
Bae, Seoyeon
et al.

Publication Date

2022

Copyright Information

Peer reviewed

"Feels Like I've Known You Forever": Empathy and Self-Awareness in Human Open-Domain Dialogs

Yoon Kyung Lee
Seoul National University, Seoul, Korea, Republic of

Won Ik Cho
Seoul National University, Seoul, Korea, Republic of

Seoyeon Bae
Seoul National University, Seoul, Korea, Republic of

Hyunwoo Choi
Smilegate AI, Seoul, Korea, Republic of

Jisang Park
Seoul National University, Seoul, Korea, Republic of

Nam Soo Kim
Seoul National University, Seoul, Korea, Republic of

Sowon Hahn
Seoul National University, Seoul, Korea, Republic of

Abstract

As conversational agents become more human-like, people expect them to be engaging as well. However, developing agents that comprehend human desires and generate appropriate responses, continues to be a challenge. We, therefore, collected 2,300 human open-domain dialogs with self-labeled psychological variables such as empathy, connectedness, respect, and friendliness. We found that participants who talk coherently and disclose self-relevant information were engaging partners. Also, we found that various empathetic responses were critical for sincere interaction: agreement, perspective-taking, referring to someone as adorable, and asking questions. When comparing the most and least engaging dialogs, linguistic cues and length of sentences denoted different extents of perceived empathy and sincerity by the partner. Also, we found that a large language model, GPT-3, makes small talks in one shot, but it cannot generate many empathic expressions or sustain a lengthy conversation. We propose a new approach for enhancing conversational agents' social and engaging characteristics.