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**Proceedings of the Annual Meeting of the Cognitive Science Society** 

#### Title

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#### Permalink

https://escholarship.org/uc/item/5tq875nj

#### Journal

Proceedings of the Annual Meeting of the Cognitive Science Society, 45(45)

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## **Publication Date**

2023

Peer reviewed

#### How do People Perceive Collaborative Conversational Agents?

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#### Abstract

As society embraces technology to support collaboration anywhere and at anytime, there is a growing opportunity for artificial agents to support such collaboration. However, little seems known about how such agents impact the behavioural performance of human teams. To answer this, we devised a Wizard of Oz study where teams of 3 participants located and corralled targets into a containment area in a virtual desert environment. The Wizard played the role of an artificial intelligent operator who had a map view showing the location of participants, targets and the containment area, and could verbally communicate this information. The Wizard operated under two conditions: they could solely use the map view to decide what responses to utter (non-responsive interaction) or could also listen to participant queries (responsive interaction). The results revealed that participant performance was unaffected by responsive interaction condition, despite having a significantly more favourable perception of a responsive agent.

In M. Goldwater, F. K. Anggoro, B. K. Hayes, & D. C. Ong (Eds.), *Proceedings of the 45th Annual Conference of the Cognitive Science Society*. ©2023 The Author(s). This work is licensed under a Creative Commons Attribution 4.0 International License (CC BY).