

HRI Reading Group

@ Instituto Superior Técnico

Meeting #4 (23 Mar 2018)

Welcome!

Paper

Robot nonverbal behavior improves task performance in difficult collaborations

Admoni, H., Weng, T., Hayes, B. and Scassellati, B.

(2016) The 11th ACM/IEEE International Conference on Human Robot Interaction.

Approach taken in the paper

Pros

- The Behaviour Model provides a flexible interface for different situations/configurations of the task
- Suitable measures

Cons

- They should have reported the average outputs of their model (for each possible behaviours) during the user study
- The paper does not report any validation of the memorization load levels nor the number of participants per condition
- Statistical analysis lacks of SD's and normality tests; borderline significance on $p < 0.1$
- The title could be less assertive

Can NVB overcome limitations of VB?

YES:

- constrained by scenario, task, environment (e.g. listening, speaking, others)
- Persuasion
- Secret (implicit) signals
- Some NVB are universal
- When there is no common verbal language
- They might convey information faster than verbal
- Share emotions

NO:

- Some embodiments are limited (less DOF)
- Clear and unambiguous
- They require shared context/knowledge about the behaviours

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~~Meeting #5 (23 Mar 2018)~~

Holiday!

Meeting #5 (6 Apr 2018)

**Who is bringing the
refreshment next week?**

HRT Reading Group

@ Institute Superior Medicine

Meeting #5 (6 Apr 2018)