

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/280597270>

Does similarity promote social interaction in schizophrenia?

Conference Paper · July 2015

CITATIONS

0

READS

156

16 authors, including:



Raffard Stéphane

Paul Valéry University, Montpellier 3

107 PUBLICATIONS 999 CITATIONS

SEE PROFILE



Didier Stricker

Technische Universität Kaiserslautern

210 PUBLICATIONS 2,358 CITATIONS

SEE PROFILE



Krasimira Tsaneva-Atanasova

University of Exeter

161 PUBLICATIONS 1,258 CITATIONS

SEE PROFILE



Benoit Bardy

Université de Montpellier

231 PUBLICATIONS 3,255 CITATIONS

SEE PROFILE

Some of the authors of this publication are also working on these related projects:



Trauma, dissociation, maladaptive schemas and auditory hallucinations [View project](#)



AlterEgo [View project](#)

All content following this page was uploaded by [Mathieu Gueugnon](#) on 03 August 2015.

The user has requested enhancement of the downloaded file.

Does similarity promote social interaction in schizophrenia?

L. Marin,¹ R.N. Salesse,¹ C. Bortolon,² M. Gueugnon,¹ Z. Zhao,¹ S. Raffard,² D. Capdevielle,² R.C. Schmidt,³ N. Schmitz,⁴ J. Henriques,⁴ D. Stricker,⁴ M. Di Bernardo,⁵ K. Tsaneva-Atanasova,⁶ P. Slowinski,⁶ C. Zhai,⁵ & B.G. Bardy¹

¹Movement To Health Laboratory, EuroMov, University of Montpellier, France, ²University Department of Adult Psychiatry, Montpellier Hospital, France; ³Department of Psychology, College of the Holy Cross, Worcester, Massachusetts, USA; ⁴Augmented Vision, DFKI GmbH, Kaiserslautern, Germany; ⁵University of Bristol, UK; ⁶University of Exeter, UK

Schizophrenia is often characterized by nonverbal communication deficits that directly impact patients' everyday life and often induce stigmatization. Although clinicians have developed several interventions and training sessions for these patients, paradoxically, these interventions are not focused on social motor interaction. The goal of this presentation is to propose lines of inquiry that could enhance socio motor competences in schizophrenia based on the concept of similarity. In several fields, two similar systems exchanging information tend to synchronize together. For instance, in social psychology, social exchanges were increased when two people unintentionally mimicked each other (Chartrand & Bargh, 1999); in physics, two oscillators moving at the same frequency synchronize to each other as long as they are in contact (Von Holst, 1973). Several other examples could be found showing that similarity promotes synchronization. In such a context, we propose that using similar avatars (that look and behave like the participants) in a joint-action task should enhance social interactions.

In this presentation, we will compare patients suffering from schizophrenia to healthy participants facing an avatar similar or dissimilar to them during several exposures. Participants' task was to horizontally move in synchrony a handle attached on a string at the shoulder height while facing the avatar.

The main results showed that although all participants were always more synchronized with a similar avatar than with a dissimilar one, after some exposures to the dissimilar avatar, patients increased their motor coordination performance.

From a clinical perspective, our results highlight two potential therapeutic pathways: first, similarity could be used in protocols requiring high level of interaction from patients, second, dissimilarity could be envisaged in protocols involving social interaction learning. These findings are of particular interest to any rehabilitation protocols in schizophrenia in particular but also in psychiatry in general

References

- Chartrand, T. L., & Bargh, J. A. (1999). The chameleon effect: The perception-behavior link and social interaction. *Journal of Personality and Social Psychology*, 76, 893-910.
- von Holst, E. (1937/1973). On the nature of order in the central nervous system. In E. von Holst (Ed.), *The behavioral physiology of animals and man: selected papers Volume 1* (pp. 3-33). Miami: Miami university press.

Acknowledgements. This study was funded by the European Project of AlterEgo (Grant#600610 / FP7).