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## Does similarity promote social interaction in schizophrenia?

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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

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