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Schizophrenia Research

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Letter to the editor

Social cognition in schizophrenia and bipolar disorder: Just quantitative differences..?

Dear Editor,

We read with great interest the recently published meta-analysis by Bora and Pantelis (2016) comparing facial emotion recognition and theory of mind (ToM) abilities between schizophrenia and bipolar disorder (BD). This study showed that social cognitive impairments were more severe in schizophrenia than in BD, but between-group differences were modest and comparable to those reported for neurocognition, suggesting quantitative rather than discriminatory differences between these disorders (Bora and Pantelis, 2016). However, this meta-analytic approach could be overlooking some social cognitive differences between schizophrenia and BD that could be of clinical and theoretical relevance and should be taken into account when interpreting these results.

First, although almost all studies in schizophrenia described a correlation between ToM and attention/executive function impairments, a review article reported that all studies that explored independent effects using multivariate statistics concurred in showing that ToM and neurocognitive impairments were independent (Pickup, 2008). Conversely, there are few studies exploring the influence of neurocognition on the social cognitive impairments reported in BD. In a study of bipolar patients by our group, neither ToM performance nor recognition of fear facial expression allowed predicting if a subject was a patient or a healthy control when neurocognitive measures were included as covariates (Martino et al., 2011). Similarly, in another recent longitudinal study, differences in social cognitive measures between patients with BD and healthy controls did not remain statistically significant when the effect of neurocognition was controlled for (Ioannidi et al., 2015). The contrast between the two disorders might be more evident when considering the impact of social cognitive abnormalities on functional outcome. In fact, both reviews and meta-analyses have shown that social cognition impairments significantly contribute unique variance to functional outcome beyond that of neurocognitive deficits in schizophrenia (Pinkham and Penn, 2006; Fett et al., 2011). Moreover, it has been proposed that social cognition mediates a significant indirect relationship between neurocognition and functional outcome in this disorder (Schmidt et al., 2012). On the contrary, most of the studies that explored the relationship between deficits in the social cognitive and functional outcomes of BD found negative results (Barrera et al., 2013; Cusi et al., 2012; Van Rheenen and Rossell, 2014). In another study, facial recognition of disgust and fear were found to be related to psychosocial functioning, but these social cognitive variables did not contribute to variance beyond neurocognitive impairments and they were not independent predictors in the final regression model (Martino et al., 2011).

Altogether, while there is abundant evidence that deficits in social cognition are core features of schizophrenia, the primary or secondary nature of these alterations in BD is still a matter of doubt. Likewise, there seem to be marked differences in the impact of social cognition disturbances on the functional outcome of patients with schizophrenia and BD, without the reasons for these differences being known. It is possible to hypothesize that some of these potential differences between schizophrenia and BD could contribute to understanding the dissimilarities in clinical picture and functional outcome seen in these disorders in everyday care practice. Unfortunately, the scope of a meta-analysis does not allow for the possibility of addressing some of these uncertainties. Therefore, we think that further individual studies designed specifically to clarify these issues would be required before concluding that differences in social cognition between patients with schizophrenia and BD are merely quantitative.

Conflict of interest

The authors report no financial or personal relationships, interests, and affiliations relevant to the subject matter of the manuscript.

Contributors

DJM: concept design, drafting of the manuscript. CS, SAS: critical review of the manuscript. All authors have read and approved the final manuscript.

Acknowledgments

This project was partially supported by a fellowship for D. Martino from National Council of Scientific and Technical Research (CONICET), Buenos Aires, Argentina.

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<http://dx.doi.org/10.1016/j.schres.2016.11.023>

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Please cite this article as: Martino, D.J., et al., Social cognition in schizophrenia and bipolar disorder: Just quantitative differences..?, *Schizophr. Res.* (2016), <http://dx.doi.org/10.1016/j.schres.2016.11.023>

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8 October 2016

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