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Letter to the Editor

Oxytocin and empathy to pain in schizophrenia: a reply

In their recent Letter in the Journal, Abed & Abbas (2014) view our findings pertaining to the differential effect of oxytocin (OT) on the perception of empathy to pain experienced by outgroup members in patients with schizophrenia *v.* healthy controls (Abu-Akel *et al.* 2014) as supportive evidence for their 'Outgroup Intolerance Hypothesis' (Abed & Abbas, 2011), which argues that an imbalanced ingroup-outgroup dynamics enhances the risk for schizophrenia. The relevance of our results to the 'Outgroup Intolerance Hypothesis' underscores the importance and promise of the Group-Dynamics Paradigm (GDP) to OT research in schizophrenia. This is particularly important in light of increasing support for the use of OT as a therapeutic agent for schizophrenia, which is motivated by evidence showing that OT can improve symptomatology and socio-cognitive abilities (Feifel, 2012). However, these findings were obtained in paradigms that are insensitive to cultural/group differences, which raise concerns about the possibility of reporting results that are spurious, or at least of limited generalizability. These concerns are warranted given ample evidence for the impact of cultural differences on schizophrenic symptomatology, prognosis and recovery (Koelkebeck & Wilhelm, 2014) and the development of socio-cognitive abilities (Shahaeian *et al.* 2011).

The importance of the GDP to schizophrenia research is demonstrated in a rare study showing that the *other-race effect* (where remembering and recognizing emotions of faces from a different race or ethnicity incurs a processing cost) is preserved in patients with schizophrenia (Pinkham *et al.* 2008). This led the authors to raise concern over the validity of hitherto findings pertaining to face-processing abilities in schizophrenia. By extension, we argue that a fuller evaluation of the benefits of OT to patients with schizophrenia would ultimately need to be assessed within the framework of the GDP, particularly given the strong effects of OT on group dynamics. This is in agreement with the view of Abed and Abbas whereby the association of oxytocinergic abnormalities with the pathology of schizophrenia might be mediated by its actions on moderating group dynamics.

Investigating the inter-play of OT, group dynamics and the emergence of schizophrenia, can be informative both in detecting factors conferring risk for schizophrenia as

well as in identifying protective measures, just as would be predicted by the 'Outgroup Intolerance Hypothesis'.

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Declaration of Interest

None.

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