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Letter to the Editor

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Dear Editor,

We read the article recently published by Sedgwick et al. (2017) with great interest. The authors used a prepulse inhibition (PPI) paradigm to compare the sensorimotor gating characteristics of violent men with diagnoses of both psychosis and dissocial personality disorder, violent men with psychosis alone, dissocial personality disorder alone, and healthy non-violent male controls. Interestingly, the results showed evidence for a ‘double dose’ of deficit, with the comorbid group showing the greatest impairment compared with the psychosis alone and healthy control groups. These results are important in highlighting considerable heterogeneity among violent men with psychosis. In addition, these results are also of interest when considered in a broader framework of the effects of co-occurring disorders on different outcome variables.

The findings of Sedgwick et al. are striking in light of recent work that has examined the effects of co-occurring psychopathy and schizophrenia on social cognitive abilities. Psychopathy refers to a disorder of personality that is characterised by interpersonal, affective, lifestyle and antisocial personality features. In a recent article, we showed that increasing psychopathy scores in a schizophrenia patient sample were associated with a decline in metacognitive abilities (Abu-Akel et al., 2015). However, this relationship changed from a negative to a positive one for patients scoring within the range of the cut-off point for diagnosing psychopathy. Thus, schizophrenia patients with clinically elevated levels of psychopathic tendencies appeared to show relatively intact metacognitive abilities. Similar results have also been reported in a non-clinical sample during a higher order theory of mind (ToM) task (Gillespie et al., 2017). In this study psychopathic traits indexing a lack of empathy and interpersonal manipulation were associated with more cognitive
ToM errors among participants reporting no/few positive psychotic experiences. However, for participants reporting more positive psychotic experiences, increasing psychopathic traits were associated with fewer cognitive ToM errors (Gillespie et al., 2017). Taken together, these findings suggest that across the schizophrenia spectra – including clinically diagnosed schizophrenia, and non-clinically elevated positive psychotic experiences – increasing psychopathic traits are associated with improved social-cognitive abilities.

These results are supported by a recent scanning study where patients with schizophrenia in the absence of antisocial personality pathology showed reduced affective ToM compared with healthy controls (Schiffer et al., 2017). In contrast, two groups of violent offenders with antisocial personality pathology, both with and without schizophrenia, showed a level of performance that was similar to the healthy controls (Schiffer et al., 2017). The findings reviewed here raise the tantalizing possibility that a ‘double dose’ of psychosis and antisocial personality pathology is not always associated with greater impairment. Further, these results may have implications for understanding increased rates of instrumental or goal directed aggression among individuals with schizophrenia. Thus, we have hypothesized that better abilities for understanding and mentalizing about others intentions, beliefs, thoughts, feelings, and desires may be associated with an increased ability to manipulate others and extort them for personal gain (Abu-Akel et al., 2015; Gillespie et al., 2017).

To summarize, unlike findings in relation to PPI reported by Sedgwick et al. (2017), co-occurring traits of two different disorders are not always associated with a ‘double dose’ of deficit. Indeed, the findings reviewed here from behavioural and neuroimaging experiments suggest that the co-occurrence of psychopathic
tendencies and positive psychotic experiences are associated with benefits in mentalizing about others. Moreover, further evidence for a ‘double dose’ benefit has also been demonstrated in a series of studies examining the effects of co-occurring autism traits and positive psychotic experiences on the suppression of salient distractors (Abu-Akel et al., 2017a), and on social functioning (Shi et al., 2017) in the general population. This was also demonstrated for social functioning in Bipolar Disorder I (Abu-Akel et al., 2017b), for brain activation during social judgements in adults with autism and schizotypal personality disorder (Stanfield et al., 2017), and for attentional set shifting and social pragmatic skills in children with comorbid autism and schizotypal disorder (Abu-Akel et al., 2017c). Although it is unclear whether the pattern of results reported by Sedgwick et al. may have benefits for social-cognitive functioning in clinical samples, a reduced ability to gate environmental inputs may be associated with greater attentional allocation toward more subtle, or less salient social cues. Such hypotheses are worthy of future investigation. Finally, the findings reported by Sedgwick et al. and others reviewed here underscore the importance of the simultaneous assessment of different dimensions within clinical settings.
References


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