

Abstract

Abstract of thesis entitled:

The Impact of Delusional Thinking Activation on Working Memory in Schizophrenia

Working memory (WM) deficits are consistently observed in patients with psychotic disorders. Negative affect have been shown to play a crucial role in delusional experiences, wherein negative affect doesn't arise merely as a consequence but contributes to the maintenances of delusions. It have been proposed to maintain delusional beliefs through hindering the ability to re-evaluate evidence against for and against delusions. The current study aimed to explore the impact of delusional thinking and negative emotions on WM performance. A total of 51 patients diagnosed with non-affective schizophrenia spectrum disorder had undergone a series of N-Back tasks under neutral, delusion and negative emotion induced interference conditions across three WM loading factors (0-back, 1-back, and 2-back). The results showed significant main effects of induced interference condition and WM loading on N-Back task performance. Specifically, the negative emotion and delusion conditions exhibited higher accuracy and shorter response times compared to neutral conditions in 1-back and 2-back. There were no significant differences shown between the negative emotion and delusion conditions across all three WM loads. Moreover, the demographics and clinical correlations with WM performance revealed significant negative associations with age and general psychopathology symptoms in our patient sample. The unexpected finding suggest that delusional thinking may have indirect effects (via negative emotion) on WM performance. However, these results should be interpreted with caution and will require future replication in order to clarify the contribution of delusional experiences on the underlying mechanism of negative emotions on the maintenance of delusion.

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