



Neural correlates of self-other confusion after social interaction

Introduction

interactions real-time require Social rapid, integration information performative and application of dynamic social information, which⁴⁰ be especially difficult for patients with³⁰ can schizophrenia. Their difficulty processing social₂₀ $-\frac{1}{20}$ information could lie in challenges extracting the information or in updating their actions to accommodate the new information, resulting in ⁰ behaviors that may appear rigid or inappropriate. Disruptions may be reflected in neural processes. This study examined the effects of social interaction on the self-identities of patients with schizophrenia compared to a cohort of matched controls.

Methods

	N total (N females)	Age	IQ	Education	Estimated SES	Construal total N (N females)
Controls	17 (4)	33.2	107	13.5	29,444	11(2) IND; 6(2) COLL
	17 (4)	36.4	92	12.6	18,055	9(2) IND;8(2) COLL
Patients	Average	SAPS	SANS	CDS	HAS	
	clinical scores	8.0	9.5	5.3	9.4	

Participants: Right-handed native English-speakers who were born and raised in Canada and had normal or corrected vision. They were matched by age, gender, years of education, and parents' country of birth.



The impressionable social self of schizophrenia

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Associated with processing the emotions others and personally relevant

context

Associated with semantic and emotional

Discussion

Controls suppress social values when interacting with the stranger whereas patients with schizophrenia augment the opposite values, simultaneously holding two sets of social values. They display evidence of atypical social flexibility on both performative and neural measures, resulting in confusion between self and other. Patients appear to correctly extract social information, as evidenced by their modified responses on the SVS Scale. However, they integrate the information atypically.

> Disruptions to activity in the dmPFC, PCC, ACC, PHG, and STG appear to correspond with their behavioral conflation of self and other. Generally higher activity is interpreted as increased workload while lower activity may indicated disruptions. Accordingly, the paired, reduced PCC and ACC activity in patients may reflect the entanglement of the self. These findings neurobehavioral distinct suggest differences during social learning in patients with schizophrenia.



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