CODING STRATEGIES IN VERBAL MEMORY AND SOCIAL COGNITION IMPAIRMENT IN RECENT ONSET PSYCHOSIS

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Introduction

Neuropsychological deficits are associated with impaired social cognition performance (Ochoa et al., 2017). In particular, verbal learning and memory are associated with cognitive insight (Lepage et al., 2008) and theory of mind (Sjøli et al., 2020). The coding phase of short-term memory allows us to store and retrieve information to be used in multiple areas such as making decisions or answering questions (Cascella et al., 2021). The findings indicate lower scores in semantic coding strategies (SCS) than in serial clustering in schizophrenia (Ranikko et al., 2012; Stain et al., 2012) and poor discrimination in recognition tasks in people with prodromal symptoms of psychosis (Allen et al., 2011).

Objective

The aim of this study was to investigate the relationship between coding strategies and several social cognition domains in recent onset psychosis.

Material and methods

A cross-sectional study in psychosis of recent onset (N = 192) used completed measures of verbal memory (TAVEC) and different social cognition functioning tasks (BCIS, IPSAQ). A Pearson's correlation (two-tailed) was used for correlation analyses using IBM SPSS Statistics v.25.

Results

Low scores in SCS were significantly correlated with self-certainty attitude subscale (CA) on BCIS (r = -0.173, p = 0.021). SCS efficiency had a significant slight positive correlation with score on externalizing attributional bias (EB) of IPSAQ (r = 0.188, p = 0.034).

TABLE 1. Demographic and clinical variables

_ Variable		Patients (N=192)
Age in years, median (SD)		27.93 (7.3)
Sex, n (% female)		62 (32.3%)
PANSS scores, median (SD)		N= 190
	Positive symptoms Negative symptoms General symptoms	13.95 (5.8) 15.07 (6.2) 29.34 (8.5)
TAVEC, Semantic Coding Strategies median (SD)		N=183
	SCS Learning A SCS Learning B SCS Short term SCS Long term	43.16 (18.7) 44.19 (6.7) 42.07 (8.6) 40.43 (9.2)

TABLE 2. Social cognition functioning tasks

BCIS	BCIS		Pearson, P	
	Self-certainty attitude subscale Self-reflectiveness subscale Composite index	15.45 (4.9) 8.27 (3.3) 7.82 (6.6)	r = -0.023, p =0.763 r = -0.173, p = 0.021 r = 0.053, p = 0.482	
IPSAQ				
	externalizing attributional bias personalizing attributional bias	0.80 (3.7) 2.5 (14.6)	r = 0.188, p = 0.0345 r = 0.117, p = 0.190	

Conclusions

Our results suggest that SCS are associated with specific deficits in social cognition present in psychosis: the greater tendency to certainty about one's own beliefs and judgments (CA) and to making fewer external attributions to negative than positive events (EB). The analyses show the probable relationship of these concepts, which could belong to the same integrate construct in initial phases of cognitive processing (metacognitions). Future studies are required to evaluate the predictive power of the SCS in social cognition performance. Memory rehabilitation could improve the kind of attributions and judgment in psychosis in order to achieve better social functioning.

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