Neurocognition and Self-efficacy in the prediction of Psychosocial Functioning in Schizophrenia

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Introduction

In the last years, a significant effort has been devoted to the precise determination of specific neurocognitive constructs, able to be predictors of distinct domains of psychosocial functioning. In the determination of the predictors of functional outcomes, few studies analyzed how neurocognition and self-efficacy can, together, influence the level of functioning of schizophrenic persons.

Purpose

The purpose of this study was to identify differential neurocognitive predictors of distinct dimensions of psychosocial functioning, and to analyze the additional contribution of self-efficacy as a possible predictor.

Methods

Sample consisted of 37 individuals diagnosed with schizophrenia, assessed with a battery of neurocognitive tests (WCST, WAIS-III selected subtests, Stroop Test, Rey Complex Figure Test, d2 Attention Test, IA Test). For the assessment of self-efficacy, we used the General Self-efficacy Scale (Pais-Ribeiro, 1995). Using the Life Skills Profile-VP (Rocha et al. 2006) we examined the psychosocial functioning of the participants. We performed multiple regression analysis in order to determine significant neurocognitive predictors of psychosocial functioning (using the stepwise method) and to check if self-efficacy operate also as a predictor (enter method).

Neurocognitive parameter's: > Attention

- ► Visual-spatial organization and memory
- ➤ Working memory

Speed processing Verbal Skills

- Verbal Skills
 Social sequencing skills
- Arithmetic's and logical reasoning
- ➤ Executive functions
- ➤ General Intellectual ability

Psychosocial Functioning: The Life Skills Profile comprises 39 items, which measure the following broad dimensions:

- ➤ Self-care
- ► Non-turbulence
- Social contact
- Communication
- ➤ Responsibility

Results and Discussion

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Initial predictive models explained 17% to 67% of the variance in the different domains of psychosocial functioning. Significant neurocognitive predictors were for Self-care: working memory, attention and speed of processing; for Social contact: logical reasoning and visual-spatial memory; for Communication: working memory and speed processing; and for Responsibility: working memory alone. We didn't found any significant predictor of the non-turbulence behaviors. When self-efficacy was included, neurocognitive variables remained significant predictors. Self-efficacy was only found as a predictor of Self-care and Social Contact. The new models explained 71% and 41% of the variance in Self-care and Social Contact. These results suggests that the promotion of psychosocial functioning (excluding the prevention of violent and turbulent behaviors), should include interventions to improve cognitive skills and to develop a more positive perception of self-efficacy.

References

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