

Enhancement of Executive Functioning Skills: An Additional Tier in the Treatment of Schizophrenia

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Abstract

Schizophrenia is viewed by most as having a neuropsychological component, with deficits primarily occurring in the areas of attention/concentration, memory, and executive functioning. These deficits often contribute to difficulties in everyday living and social functioning. The purpose of this study is to examine the efficacy of cognitive rehabilitation methods, typically utilised by brain injured patients, to improve the executive functioning skills of patients with schizophrenia spectrum disorders. While this pilot study is limited in terms of the sample size, results suggest that the addition of cognitive rehabilitation to the comprehensive treatment of schizophrenia could be beneficial in enhancing daily living skills.

Intervention

The Executive Functions module of Brainwave-R was the intervention used to treat the patients with identified deficits in executive functioning....the application of the cognitive rehabilitation intervention is based on the premise that executive skills dysfunction in patients with schizophrenia spectrum disorders has a neuropsychological basis. Although the aetiological significance of the brain dysfunction in schizophrenia remains unclear, neuropsychological interventions that address areas of impairment may improve the patients problem-solving abilities in real life situations. The Executive Functions Module of Brainwave-R was designed to provide the therapist with specific methods that may lessen patients executive functioning deficits. The module emphasises the establishment of routines, development of well rehearsed strategies, and the acquisition of compensatory techniques through training and homework. The patient is first taught organisation principles and how to apply these strategies to plan making (e.g. taking a bus to an appointment). The patient is taught how to break problems down into smaller parts and how to simplify information so problems can be dealt with more easily. Principles of cognitive flexibility are also taught to the patient. For example, the patient is taught to examine problems from different points of view and to list and order the steps in tasks (e.g. look up transportation company in the phone book, call to obtain bus schedule). The importance of estimating and managing time is emphasised and the patient is taught how to plan or schedule and incorporate time into the planning process. Building further on these executive functioning principles, the patient is taught the importance of

gathering and selecting relevant information about a problem. The final stage of the module emphasises self-awareness and goalsetting. Generalisation of acquired skills is encouraged through practice in different situations and contexts.

Conclusion

The current pilot study had limitations due to the lack of a control group, possible practice effects, and a small sample size. Nonetheless, this preliminary study suggests that a well delineated cognitive rehabilitation approach that addresses executive functioning could demonstrate efficacy. In follow-up interviews with the participants, the patients responded that they felt they could better deal with some of their everyday problems.