



Habilitación de funciones frontales básicas en cardiópatas congénitos a través de LEGO Education [

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text (article)

Analítica

Congenital heart diseases are considered to be an anomaly which alter the irrigation and the adequate exchange of oxygenation to the main veins and arteries. They can have neurodevelopmental consequences that could translate into psychomotor retardation, learning deficits, academic difficulties, and social integration problems. Cognitive empowerment based on the mechanics and robotics principles of LEGO Education is proposed to improve cognitive disorders. In this study, the objective was to measure the effect of an intervention program, based on the use of assembly and robotic programming with LEGO Education, upon basic frontal functions as a first approach to a proposed model in congenital heart disease patients who have undergone cardiovascular surgery. This was a case-series study, in which a girl and two boys with congenital heart disease with RACHS 2 and 3, completed the treatment. BANFE-2 subscales and the neuropsychological questionnaire of frontal damage were applied before and after the treatment; as well as a scale to measure the level of performance per intervention, through all the eight sessions. The BANFE-2 scale showed changes in the means of frontal functions, from mild-moderate damage and normal to high normal, mainly in working memory and verbal fluency. In this first approach, LEGO Education method proved to be a useful tool for the neuropsychological empowerment of these patients

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