Abstract:

Aquired brain injury is still a current topic and a serious problem nowadays. After a treatment, a lot of consequences appear which cause a long-term inability to work and invalidation of many people. One of the serious problems is a disorder of cognitive functions which disables people to get back to a normal life. One of the options how to affect the cognitive functions impairment is a system called CogniPlus.

Theoretical part of this work presents aquired brain injury, its dividing, basic classification and the consequences. Furthermore, this work dedicates to rehabilitation of cognitive functions using both computers and conventional methods. It also shows the work of the occupational therapist and the possibility of cognitive function testing.

The aim of the research is to find out if CogniPlus cognitive function training is more effective than the conventional pencil-paper method. 20 people were tested in this study. Unfortunately, one of them had to quit due to health problems. The experimental and the control group had a therapy once or twice a week. All the participants went through Addenbrooke cognitive test and through a questionnaire of cognitive mistakes at the beginning and at the end of the testing.

The experimental group showed a significant improvement in the global score ACE and in the memory subscore. Statistically important improvement occurred in three questions in the questionnaire of cognitive mistakes

Compared to the expectations there was an improvement in three indicators of the control group: in the global score ACE, the memory and the visual-spatial abilities. However, there was no statistically significant improvement in the questionnaire of cognitive mistakes. There was a statistically important deterioration in one question after rehabilitation.

This work shows that it is truly important to train cognitive functions, aim the therapy for one specific patient and in the optimal case combine the conventional method with the computer training, and vice versa.