

## **Abstract**

Cerebrovascular accidents (CVA) represent an important health problem and training of cognitive functions after CVA is an important part of the rehabilitation process. The main objective of this bachelor thesis was the development and evaluation of a cognitive training program for adult patients after CVA using published literature. The main working hypothesis was that the program improves cognitive function both objectively and subjectively. The program's frequency was three times a week with an intensity of 30 minutes and duration of four weeks. In addition, it included independent practice sessions on weekends. Objective evaluation was performed using four short cognitive assessments ("*Pětičárový test obrazcové produkce*" [ČAPR], "*Pětibodový test obrazcové produkce*" [BOPR], Montreal Cognitive Assessment [MoCA], Saint Louis University Mental Status [SLUMS]). Subjective evaluation was performed by the patient using three questionnaires for memory, thinking ability and executive functions. Using specific criteria, two patients were recruited to complete the program and evaluation upon entering and leaving the program. After completion, ČAPR, BOPR and SLUMS scores improved in both patients. However, MoCA scores and subjective evaluation of cognitive function did not change. The main result of this bachelor thesis is the development of a training program consisting of 54 training units plus 30 exercises for the weekends. The proposed program proved feasible and patients' reaction to it was positive. Results among the three trained cognitive domains (memory, thinking ability and executive functions) improved in both patients, but not uniformly.

**Key words:** cognitive function, cognitive training, cerebrovascular accident, occupational therapy