

Abstract:

This Master's dissertation is focused on the computer-assisted cognitive rehabilitation of persons who have undergone brain injury. Its theoretical component deals with the issue of the restoration of cognitive functions, with an emphasis on computer programs that are commonly used in current practice. It also provides a brief characterization of brain damage, and seeks to provide a description of the faculties most often disrupted – namely memory and concentration.

A related, empirical component aims to evaluate the effectiveness of a two-month memory and attention training period entailing the use of the program HAPPYneuron Brain Jogging, for stroke patients and for those who have undergone traumatic brain injury. Its effectiveness is investigated by means of comparisons between experimental and control groups of test performance results as well as of responses to subjective questionnaires.

Keywords:

computer-assisted rehabilitation, memory, concentration, traumatic brain injury, stroke