Abstract

This thesis deals with the effect of cognitive training using virtual reality in a healthy aging population. It describes the manifestations of aging in the field of cognitive functions and presents the concept of cognitive training and its various variants. It presents virtual reality and its use in cognitive training. The main goal of this work is to determine the effectiveness of cognitive training using virtual reality in healthy seniors. The second aim is to compare the effectiveness of cognitive training using virtual reality with a control group training without virtual reality. The effect of cognitive training was solved by comparing the participants' cognitive performance before and after the training. The comparison of the effectiveness of the two approaches was realized by comparing the differences in the cognitive performance of the participants before and after the training for both groups. This thesis found a difference between cognitive level before and after virtual reality training in the area of long-term non-verbal memory, but with a low effect size. No significant difference was found in the comparison of the effectiveness of the two types of training. The result of the investigation indicates that cognitive training in this form does not affect the cognitive level of the participants. However, the study worked with a very limited sample. Further research is needed to map and compare effectiveness.

Key words: cognitive training; virtual reality; healthy seniors; cognitive assesment