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Oponent:

Title of bachelor thesis: Evaluation results of a stabilometric examination using 3D scenes: Objective evaluation of the training of patients with brain damage using stabilometry

Abstract:

This bachelor thesis points at the problems with postural stability of the patients after the brain injury and the possibilities of its measurement and affection by the 3D scenes. It tries to sum up the fundamental information, propose an effective therapy and other possibilities of using 3D scenes.

3D scenes were used in this thesis which affects the postural stability of the patients and the Wii Balance board which was used to monitor the selected parameters of the patient's stability. All data were recorded by a PC.

A group of 15 healthy individuals and 2 patients after the brain injury underwent the measurement. The results of the patients were compared to the results of the healthy individuals and the differences were pointed out. Afterwards, the two patients were participating in the training of stability using 3D scenes for 12 weeks, during that their stability parameters were recorded using a PC. All data were graphically processed and presented in the form of case reports after the training.

Key words:

Postural stability, stabilometric examination, brain damage, virtual reality, 3D scenes, stabilometric platform Wii Balance Board