

## **Abstract**

**Title:** Postural stabilization and balance – theoretical background and definitions (literature review)

**Objectives:** The aim of this theses is to investigate the present situation of theoretical background of postural stabilization and balance and find out the differences between both of these phenomenons. The theses should summarize the current literature including the newest studies. Furthermore, it discusses the most used computerized measurements methods for assessing balance and postural control.

**Methods:** The theses has character of literature review. It is divided into several parts. The beginning introduces the theoretical background. The descriptive and analytical chapter discuss the most used computerized measurement methods for assessing balance and postural control. The discussion summarizes the current situation and results of the theses.

**Results:** The total amount of the 104 studies was found, but only 12 of them met the criteria of the theses. Currently the most used methods for assessing balance and postural control are the computerized dynamic posturography and the visual feedback posturography. In the published studies there were found several differences in the methods of posturography. Even, there was revealed ideological diversity in the authors' opinions and disunity in definitions of the key concepts.

**Keywords:** postural stability, postural stabilization, balance, equilibrium, static stability, dynamic stability, postural control, posturography, equilibrium, posture control, assessment methods of equilibrium, measurement of postural stability, posturography, stabilometry