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## DIFFERENCES BETWEEN TWO LEGS IN PLANTAR PRESSURE DISTRIBUTION DURING NORMAL GAIT OF GREEK ADULTS

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**Abstract** The purpose of the current research was the investigation of the differences between the lower limbs in plantar pressure variables during normal gait. The subjects were sixty students of the Department of Physical Education and Sports Science of the Democritus University of Thrace, aged between 19 to 28 ( $X \pm SD$ :  $23.2 \pm 3.19$ ) yr, without any musculoskeletal problems in their lower limbs. Walking was studied at the subjects' natural speeds, which were measured by an electronic system consisted of two photocells and one time-recorder. For the recording of the selected plantar pressure parameters it was used the PEDAR System, which consisted of two insoles with sensitive piezoelectric transducers and software for the analysis of the data. For the detailed analysis of the plantar pressure distribution foot was divided into 10 anatomic areas. Repeated measures analysis of variance was used for the statistical treatment of the data. The results showed significant differences between the two lower limbs in most of the plantar pressure parameters. These findings supported the statement that natural gait is not perfectly symmetrical.

**Key-words:** Biomechanics, Gait, Plantar Pressure, Symmetry

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