

## **ABSTRACT**

The Bachelor's thesis deals with the issue of high heels in competitive dancing. The goal was to determine the percentage of flat feet in competitive dancers and focus on the influence of BMI. The research engaged 48 competitive dancers and consisted of a questionnaire survey and feet measuring with a strain gauge plate – FootScan® (RSscan International, Belgium). Dancers were from the dance club Hes. Overall there were 26 female and 22 male participants. The age ranged from 18 to 30 years with at least 3 months of dance experience. The average age of all female participants in the group (N=26) was  $22.38 \pm 2.97$  years and of the male participants in the group (N=22) was  $24.14 \pm 3.58$  years. The average height for women was  $1.62 \pm 0.126$  m and for men  $1.8 \pm 0.064$  m. The average weight was found to be  $58.85 \pm 4.79$  kg for women and  $73.27 \pm 11.96$  kg for men. Out of that, 25 % focus on Standard dancing, 8 % on Latin dancing, and 67 % on Ballroom dancing, which means they are competing in both disciplines. On average, women train for 7,7 hours a week, and men for 8,9 hours a week. The queried women have been dancing for an average of 4,8 years and men for 5,3 years. Of the 48 dancers, 73 % were flat-footed, 10 % were high-footed, and 13% had normal feet. Two participants could not be placed in any group as they had one flat foot and one high foot. Compared to the general population, dancers have a much higher percentage of flat feet. The influence of BMI has been confirmed only in women. The higher the BMI, the lower the average pressure into the plate, calculated per kilogram of body weight. In men, the statistics did not confirm any influence of BMI.

## **KEYWORDS**

heels; plantar pressures; dance; deformities of feet