ABSTRACT

The diploma thesis deals with the short-term effect of a smartphone usage on selective visual attention. The aim of this work was to examine whether there is a change in active selective visual attention after a single exposure to smartphone. The second objective was to find out if the sports organizations somehow restrict the use of mobile phones prior to the athletes' performance. The theoretical part of the thesis summarizes the development in attention research and findings of recent studies, concerning smartphone effects and attention.

Methodology: For the assessment of changes in attention the d2 Attention Test was used. The first testing was performed after using a smartphone for 10 minutes, the following testing was done without prior phone usage. Representatives of Prague sports organizations were contacted to answer questions regarding the mobile phone restriction in their club.

Results: Results show better concentration performance when testing without prior smartphone usage. The concentration performance after the smartphone usage is in the range of 83% - 95% of the concentration performance without prior exposition to the smartphone (with the 95% confidence interval). Additionally, there was no statistically significant difference observed between the first two rows and the rest of the test. 85 representatives of 66 Prague sports organizations were contacted. Restrictions on the mobile phones usage during training were recorded in 42 cases, during competitions in 32 cases and in strictly delimited interval before these events in only 6 cases.

Conclusion: A statistically significant effect of the smartphone usage on selective visual attention was found. On the contrary, the maximum of this negative effect was not demonstrated in the interval of the first 40 seconds. Sports organizations partially restrict the use of mobile phones, but the restrictions are not consistent.

KEYWORDS

Attention, selective visual attention, d2 test, smartphone, sport.