

Abstract

Title: Comparison of reaction times between combat sport athletes competing in matches and technical patterns.

Objectives: The main goal of this bachelor thesis is to compare the simple reaction times between two disciplines (sports fighting and technical patterns) in Taekwondo (WT, ITF) and Karate (JKA, ČSKe).

Methods: To collect the data, we used a purpose-built questionnaire containing questions about basic demographic information, martial art and its discipline, length of experience, achieved technical level, and self-rated reaction speed. We measured reaction times using a purpose-built test through PsychoPy3 and the Pavlovia platform. The entire participation took place on-line and was mainly distributed through advertisements on social media and contacting associations of the studied sports. A total of 112 people took part in the study.

Results: We found no statistically significant differences in mean reaction times between the sports fighting and technical patterns. Further, reaction times were statistically significantly negatively associated with the length of experience and age.

Keywords: reaction time, visual signal, combat sports, on-line