

ABSTRACT

Title: The Influence of Anticipation and Reaction Speed on Performance in Karate

Objectives: The aim of this literature review is to describe and analyse the importance of reaction speed and anticipation in karate based on academic literature, to explain their psychophysiological foundations, and to evaluate the possibilities of their development within training and sports practice. Special attention will be given to the latent phase of reaction time, which is often identified in scholarly sources as the main factor slowing down the response, as well as to choice reaction time in the context of specific competitive situations.

Methods: The narrative review was developed through an analysis of Czech and international scientific literature focused on reaction time, anticipation, and their relationship to sports performance. Sources were drawn from the fields of sports psychology, neuroscience, training theory, and biomechanics. Emphasis was placed on identifying up-to-date studies applicable to the conditions of karate.

Results: The findings indicate that choice reaction time and anticipation play a crucial role in karate, and their development can significantly impact athletic performance. The latent phase of the reaction emerges as a critical point causing delays in the overall process. Effective approaches to improvement include specialized training methods aimed at enhancing visual perception, predicting opponents' intentions based on movement cues or contextual information, and developing decision-making skills. The review also highlights various factors influencing reaction time, such as fatigue, stress, level of arousal, age, or sex. Given the limited number of studies focused specifically on karate, further investigation into the effectiveness of individual training methods is recommended.

Keywords: reaction time, anticipation, choice reaction, latent phase, karate, performance