

ABSTRACT

- Title:** The impact of the exclusion of the visual analyzer on the swimmer's ability to swim straight while doing the crawl
- Goals:** The goal of this work is to determine the impact of the exclusion of the visual analyzer on one's ability to swim straight while doing the crawl; to find and analyze the angle of the deviation from the set central line, if any, using measurable variables; to find the critical spots in the fulfillment of a set movement assignment where the swimmer deviated from his straight swimming direction, to make a qualitative analysis of these spots in relation to the individually optimal technique, and to propose potential corrections of the time and space of movements of the upper limbs work and the body.
- Methods:** A qualitative analysis with a manual measurement of the deviation from the straight direction of swimming per constant distance. Analysis of a video-recording to find the critical points in the crawl technique. Questionnaire to deal with participants' upper limbs laterality.
- Results:** We managed to determine some causes of the deviation from the straight swimming direction without visual control. The achieved results proved that breathing was an important aspect when doing the crawl having influence on the ability to swim straight: The impact of laterality on the resulting direction of swimming seemed to us less important than the position of the head when breathing in. The smallest average angle of deviation was found in swimmers whose swimming technique was marked by good coordination and a great degree of movement routinization. The average deviation from the straight swimming direction in swimmers with a visual impairment was smaller. A thorough analysis of the vide-recording showed that setting off in the wrong direction at the start and making the first swimming movements were other causes of deviation.
- Key words:** Movement routinization, dominant limb, crawl, upper limb laterality, swimmer suffering from a visual impairment, swimming technique, movement concept, swimming straight, side preference, angle of deviation, visual control of movement.