



# Developing swimming skills in adults using applied swimming techniques

P.D. Artegov<sup>1</sup>

<sup>1</sup>Perm State Humanitarian Pedagogical University, Perm

UDC 797.2

Received by the editorial office on 20.11.2025

**Keywords:** *swimming, swimming lessons, adults, fear of water, motor skills, practical swimming techniques.*

**Introduction.** The ability to swim is essential for ensuring safety in the water. Swimming promotes good health and helps develop endurance and coordination. Traditional swimming instruction methods, designed for a long-term mastery of basic swimming skills, do not always meet the needs of adult learners seeking quick and high-quality results. The fast pace of life and lack of free time call for intensifying the process of teaching adults to swim.

The application of the applied swimming method involves integrating elements of swimming techniques from various styles into a unified training structure, which allows for more effective adaptation of the methodology to the individual psychophysical characteristics of the participants and accelerates the process of adaptation to the aquatic environment [1].

**Objective of the study** is to experimentally demonstrate the effectiveness of the applied swimming method as a means of accelerating the development of basic technical skills in adult learners.

Methods and structure of the study. The study included women aged 20-44 (n=33) who studied the applied swimming method at the XFit 'Zhemchuzhina' and 'Record' pools (Perm) in 2025. The experimental group EG-1 (n=19) included participants with a fear of water and functional changes in the musculoskeletal system; EG-2 (n=14) included participants without a fear of water but with no swimming experience.

The process of mastering the applied swimming technique was implemented through the sequential study of basic elements, comprising the following stages: 1. Development of breathing skills: practicing the "inhalation-exhalation" cycle with the face submerged in water; 2. Improving leg technique: performing breaststroke and backstroke leg movements under various conditions: using a floating support, in a non-supported position, while holding one's breath, and in coordination with the breathing rhythm (inhaling and exhaling into the water); 3. Improving arm technique: performing stroke movements using the front crawl, back crawl, and breaststroke in similar variable conditions: with a floating support, in a non-supported position, while holding one's breath, and in coordination with the breathing cycle.

The following classification of applied swimming techniques was used in the study: 1) Breaststroke (brass arms, crawl legs) – mixed limb movements: arm strokes are per-

formed in accordance with the breaststroke technique, while alternating leg movements follow the elements of the crawl; 2) Back crawl with arms fixed at the hips, performing alternating arm strokes from a starting position in which the upper limbs are positioned along the torso; 3) Back crawl with a roll onto the back – performing a cycle of movements followed by a roll onto the back to inhale.

When teaching applied swimming techniques, the subjects' preferences were taken into account: swimming without goggles or avoiding contact between the face and water; the desire to master a specific swimming technique or its technical element. Thanks to this, it was possible to reduce the training time to 10 sessions, as the subjects performed what they were best at and what corresponded to their swimming needs.

**Results of the study and discussion.** Following 10 sessions, for subjects in the EG-1 group, who mastered the 'breaststroke arms-freestyle legs' technique, the time to cover a 25-meter distance was  $66 \pm 2.8$  seconds (number of errors  $2.1 \pm 0.3$ ), and the Cooper test result was  $166 \pm 8.3$  meters; 'front crawl with roll to back' – 25 m –  $57.5 \pm 2.1$  sec ( $1.8 \pm 0.3$  errors) and  $220 \pm 9.3$  m in the Cooper test; 'backstroke with arms fixed at the hips' – results shown:  $62.8 \pm 1.5$  sec ( $1.6 \pm 0.2$  errors) and  $175 \pm 7.9$  m, respectively; in EG-2, the number of errors in the 50-meter swimming technique was  $2.2 \pm 0.2$ , and the result in the Cooper test was  $137.0 \pm 7.02$  m.

**Conclusions.** The results of the experiment confirmed the effectiveness of applied methods for teaching swimming to adult learners. In EG-1, the use of an individually differentiated approach in teaching adults ensured the development of swimming skills and psychological confidence. In EG-2, statistically significant positive changes were observed after the sessions in both endurance levels (Cooper test) and swimming technique quality.

## References

1. Mushtay K.A., Snigur M.E., Zasyapkina O.A., Eliseeva T.A. *Prikladnye sposoby plavaniya dlya formirovaniya zhiznenno-neobkhodimykh umeniy i navykov. Uchebno-metodicheskoe posobie po distsipline «Elektivnye distsipliny po fizicheskoy kulture i sportu: Sportivno-ozdorovitel'naya podgotovka».* Surgut: Surgutskiy gosudarstvennyy pedagogicheskiy universitet 2025. 89 p.

Информация для связи с автором:  
pyoter.artegov@yandex.ru