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Behaviour observation technical system in crol style

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The present study aims to present the behaviour pattern of eight swimmers of national level, of both sexes, during five cycles of the crawl swimming in a context of competition. We used an observational methodology that allows to scientifically explain the temporal relationships and how the behaviours hierarchically connect and define a motor pattern. It was created an ad hoc instrument through format fields, an open system for coding the technical characteristics considered critical for our evaluations, allowing the insertion of new codes whenever they are seen on video. The behaviour pattern of each swimmer is represented by hierarchical structures, or configurations, representing the flow of technical conduct of the hand cycle. Through this analysis we know the most characteristic of the execution of the swimmers and according to the reference biomechanical framework, seek to show the similarities of the movements and their relationship with competitive effectiveness. The creation of a tool for entering data with various characteristics of output of information is essential to optimize the interpretation of temporal patterns. The sequential analysis of the data is done with software Theme 4.0 which detects motor patterns. The reliability and accuracy are guaranteed. The average total agreement by cycle of all observers presents a very good rate of 93.89%, being the lowest value of 90.91% for inter-observers.

The study showed the swimmers have a temporal pattern, which is represented by the stability of the swimming behaviour. The high degree of complexity of the patterns allows to study the technical variations among individuals. The study showed there are swimmers who despite not having the best score in FINA, they have a high stability of the temporal pattern in almost all stages and times of the swim.

Key words: observational methodology, analysis of technical standards, crol style, swimming