

## Motricidade

ISSN: 1646-107X

motricidade.hmf@gmail.com

Desafio Singular - Unipessoal, Lda

Portugal

Louro, H.; Cardoso, J.; Silva, A.; Anguera, M.T.; Oliveira, C.; Campaniço, J.

Quality analysis of the instrument: Observing system performance in butterfly technique

Motricidade, vol. 5, núm. 3, 2009, p. 93

Desafio Singular - Unipessoal, Lda

Vila Real, Portugal

Available in: http://www.redalyc.org/articulo.oa?id=273020560062



Complete issue

More information about this article

Journal's homepage in redalyc.org



## Quality analysis of the instrument: Observing system performance in butterfly technique

H. Louro 1,2, J. Cardoso 2,3,4, A. Silva 2, M.T. Anguera 3,4, C. Oliveira 2, J. Campaniço<sup>2,3</sup>

- 1 Sports Sciences School of Rio Maior, Polytechnic Institute of Santarém, Portugal
- 2 Universidade de Trás-os-Montes e Alto Douro, Vila Real, Portugal
- 3 Centro de Investigação em Desporto, Saúde e Desenvolvimento Humano, CIDESD, Vila Real, Portugal
- 4 Universidade de Barcelona. Project: Avances tecnologicos y metodologicos en la automatizacion de estudios observacionales en deporte. Ministerio Educación (psi2008-01179)

The aim of this study was to create an instrument trained for collecting information for the analysis of technical stability in swimming. This instrument is used to make a proper record of the behaviour observed during the implementation of the gesture cycle technique in butterfly. In this context, the analysis focused on a key requirement, which is the validity and reliability of the instrument.

The instrument consists of a set of Field Formats, based on biomechanical models of the Swim, and follows the appropriate structure from the observational methodology, with particular attention to evidence that adding four taxonomic criteria in the form of alphanumeric codes information is critical to describe behaviours that define the art of butterfly.

Perform the analysis of the quality of the instrument down the Kappa index, using the software-GSEQ SDIS, based on the records of six trained observers, and to study the accuracy through experts.

The results of the Kappa index vary between 0.94 and 0.96 to ensure accuracy and objectivity when describing behaviour with this technical instrument. In conclusion we consider that, given the high correlation between the values of the six expert observers, the instrument is suitable for observing the behaviour of technical butterfly swimmers in the state of context, thereby ensuring their construct validity.

Key words: observational methodology, reliability, technical analysis, butterfly