

28th ECSS Anniversary Congress, Paris/France, 4-7 July 2023

A video-based training to improve surfers intuitive decision making in competition: a mixed-method pilot study

BERTET, E., VACHER, P., BOSSARD, C.

Université de Bretagne Occidentale

INTRODUCTION:

Surfers' performance in competition is evaluated while they are riding a wave, even though they spend far more time paddling, sitting or lying on their boards (Mendez-Villanueva et al., 2006). Athletes spend the majority of their time understanding their environment and making decisions, such as which wave to ride or which maneuver to use. Given the increasing demands of performance in sports situations (Klingner et al., 2022), how to develop decision making is an important research issue. The aim of this pilot study was to explore the effects of video-based training on intuitive decision-making during competition.

METHODS:

Five athletes (2 females and 3 males) from a national surfing center participated in a 4-week video training intervention, including 3 sessions per week. A video based training session consisted of watching 5 waves of international surfers, frozen at a point that was considered appropriate for making a decision. Based on the study of Klatt et al. (2019), the athletes were then asked to (1) name outloud, (2) write down the first decision they think and (3) write down as many additional appropriate solutions that they can think of how to continue the sequence by imagining they were the athlete on the screen. Over the 4 weeks, quantitative data was collected: the responses of each athlete in each session as well as the responses of the coaches, in order to evaluate the accuracy of the decisions made by the athlete. To assess potential changes in the participants intuitive decision-making, a qualitative analysis was conducted during real competitions before and after the video-based training.

RESULTS:

During video-based training, repeated measures ANOVAs show an increase in the accuracy of all decisions and especially the first one (from 75% to 84.1%). The video-based training seems to have contrasting effects on decisions in real competition: significant inter-individual differences in accuracy and decision processes.

CONCLUSION:

This pilot-study highlights the potential impact of video-based training on intuitive decision-making of surfers, which should in future take into account practice variability and familiarity with the competition venue.

Keywords : intuitive decision-making, video-based training, performance, surfing

Klatt, S., Noël, B., Musculus, L., Werner, K., Laborde, S., Lopes, M. C., Greco, P. J., Memmert, D., & Raab, M. (2019). Creative and Intuitive Decision-Making Processes : A Comparison of Brazilian and German Soccer Coaches and Players. *Research Quarterly for Exercise and Sport*, 90(4), 651-665.

Klingner, F. C., Klingner, F. P., & Elferink-Gemser, M. T. (2022). Riding to the top—A systematic review on multidimensional performance indicators in surfing. *International Journal of Sports Science & Coaching*, 17(3), 655-682.

Mendez-Villanueva, A., Bishop, D., & Hamer, P. (2006). Activity profile of world-class professional surfers during competition: A case study. *The Journal of Strength & Conditioning Research*, 20(3), 477-482.

Topic: Sport Technology

Presentation Oral

European Database of Sport Science (EDSS)

Supported by SporTools GmbH



35092