

The influence of multimedia on the learning of volleyball techniques

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Abstract

Background. An important preoccupation of specialists in the topic of education and training is, even today, making learning more efficient. Even if there are numerous methods for rapid learning, the problem of learning remains an open subject and it produces a lot of interest, due to the fact that it is circumscribed in the concept of interdisciplinarity.

Aims. This article plans to assess the effects of using a software, based on multimedia technology, aimed at optimising learning in the field of motor activities, through actual images presented in a movie.

Methods. Students were divided into two groups. Members of both groups played volleyball, in numerically equal teams, chosen randomly. The first experimental group (n = 15 F and n = 15 B) had their tasks presented to them through a film, as well as the classic learning method. The second control group (n = 15 F and n = 15 B) only followed the classic learning method.

The actions that the sportsmen of the two groups (male and female) had to learn consisted of a series of motor movements, contained in a complex series of technical procedures. ANOVA mixed was used in the assessment of results, for the type 2x2 analysis of variance in the SPSS 17.0 software, and the student test for independent and pair samples was also used.

Results. The data obtained in order to assess the time difference compared to the execution of each model demonstrated a very significant level for both groups, which supported their homogeneity. With regard to the number of elements memorized, the differences are significant only for the experimental group (male and female) which demonstrates the influence of the means of presentation through media of the tasks to be learned.

Conclusions. The fact that the indicator reflecting the time difference in comparison to the model execution recorded insignificant results between the comparisons of the two groups is proof of a good capacity of motor expression. Still, the fact that the data concerning the capacity to retain information is strongly significant only for the experimental group confirms our hypothesis that the presentation of the actions via multimedia technology favors the memorisation of movement.

Keywords: multimedia, mental practice, imagery, motor memory, practice, volley.