The improvement of the reaction time to visual stimuli through attention training

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Abstract

Background. The performance capacity of the individual has reached maximum values in the physical and technical components'area, the difference being made, as it would appear, in the process of training and competitions, by the psychological side in which attention is synonymous with the tip of the iceberg of the human psyche. If small errors are allowed in other fields of activity, in the field of performance sports "losing quick adaptive reactions" can lead to catastrophe.

Aims. We pursued this approach to improving the extent of attention, through a specially designed program, which influenced the optimization of reaction time.

Methods. The test of the reaction time from the PSITEST Cabinet was used, computer-assisted in the Psihovest laboratory. This software offers information concerning the basic reactivity level, by measuring in 1/100 s the motor reaction to visual stimuli. The stimulus is applied individually or collectively (4 posts maximum), for a duration of 10 minutes. In assessing the results we used the student test (t) for independent and pair samples and the ANOVA mixed for the type 2 x 2 analysis of variance.

Results. Data from the experimental group for the two moments of assessment indicates an obvious improvement in response time. The fact that the control group saw an improvement in this indicator, though not so obvious, leads us to accept the existence of other ways to optimize response time.

Conclusions. Response time can be improved not just through methods aimed at optimizing attention (it is really much broader, as it is in our case). We believe that there are other specific ways that lead to similar results.

Keywords: speed, reaction time, visual stimulus, volleyball, attention training.