ANNALS OF RESEARCH IN SPORT AND PHYSICAL ACTIVITY

Training with different pacesetters

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2 • TREINO DESPORTIVO/SPORT TRAINING

TRAINING WITH DIFFERENT PACESETTERS

INTRODUCTION

Literature showed how training, when synchronized with music, apart from providing a psychological stimulus, can also improve performance itself. The presence of background music might have the potential to enhance results and the benefits of physical activity. The main aims of this study were to assess the effectiveness of exercise routines which make use of different types of pacesetters, as well as to compare energy expenditure during training with acoustic (music) or visual cues (sequence of different images).

METHODS

The study group consisted of 4 apparently healthy male subjects, ranging from 23 - 35 years of age, all of whom regularly engaged in sports activities. These subjects were asked to pay attention to the pacesetter, depending on the specific trial, whilst exercising for 20 minutes on the arm crank ergometer.

Three experimental conditions were taken into consideration: Training with Music; Training with a Video, with no Audio showing an exercise carried out by another subject; and Training, as above, with a video and no audio, together with a series of rhythmic images. Energy expenditure was evaluated by means of an open-circuit oxygen uptake measurement system (K4 Cosmed, Italy).

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RESULTS

Findings from this Pilot study seems to suggest that training with visual pacesetters requires less energy expenditure with respect to Music one. However, when comparing the two trials with videos, energy consumption was lower (about 9%) when observing a series of images, as opposed to the athlete who was carrying out the same exercise that he was doing himself.

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CONCLUSIONS

Being in a digital and micro technological era, a hypothesis could be set up whereby, in the future, one could invent a pair of glasses where one of the lenses highlights the path one is following, whilst the other shows a series of images, projected at various frequencies to indicate the correct rhythm of the technical movement.