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The Local Dancing Repertoire as Variation Factor of Cardiovascular Responses in Middle Age People

Pitsi A., Smilios I., Serbezis V., Goulimaris D., Tokmakidis S.

D.P.E.S.S., Democritus University of Thrace

Abstract

The purpose of the study was to determine the differences between Greek regions in the physiological responses of local traditional dances, in middle aged men and women. Eight men (age: 46.5 ± 4.4 yrs.) and 8 women (age: 45.1 ± 3.4 yrs.), who had been dancing for the last five years, performed, in random order, dances from Epirus, Thessaly, Central Macedonia, Pontus, Thrace, Aegean, Peloponnesus, and Crete. Heart rate was monitored (Polar Electro, Finland) during the dances and oxygen consumption (Oxycon Champion, Minjnhardt, Netherlands) was measured immediately after their termination. Oxygen consumption and heart rate differed ($p < 0.05$) between regions and ranged from $13,95 \pm 3,72$ to $22,36 \pm 3,04$ ml/kg/min and from $112,65 \pm 11,08$ to $142,25 \pm 11,25$ b/min, respectively, with no difference observed between men and women. Based on oxygen consumption and heart rate the regions were classified into a moderate intensity group (Epirus, Thessaly, Pontus, Peloponnesus; 40-45% of VO_{2max} and 61-65% of HR_{max}) and a high intensity group (Thrace, Aegean, Central Macedonia, Crete; 60-64% of VO_{2max} and 72-78% of HR_{max}). Therefore, using dances of high intensity and from different regions, various dance programs can be created to improve aerobic conditioning while at the same time people remain enthused and motivated.

Key words: local music and dance repertoire, heart rate, oxygen consumption