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Effect of intensity control of Bharathanatyam dance training on pulmonary function

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Breathing is one of the critical bodily function which the lungs deliver oxygen to the blood, and expire carbon dioxide out of the body. Dance training can help to strengthen and make this system more efficient. The objective of this study was to examine the effect of intensity control of Bharathanatyam dance training on pulmonary function. To achieve the purpose thirty (N=30) female students were randomly selected from Jaffna, Sri Lanka as subjects and their mean age were between 17 ± 1.3 years. They practiced Bharathanatyam dance 60±10 min / day for 3 days / week over the period of twelve weeks. Ten percent rule was used to increase intensity in every two weeks from sub maximal level. Data were collected on their Forced Vital Capacity (FVC), Forced Expiratory Volume (FEV_1), Peak Expiratory Flow (PEF) by PC based USB Spirometer before and after the training period. The collected data were statistically treated by using paired sample 't' test, 0.01 level of confidence was fixed to test the significance. The results show that, intensity control of Bharathanatyam dance training significantly improves FVC (t: 21.23), FEV_1 (t: 11.83) and PEF (t: 13.14). Furthermore, percentage of improvement shows as FVC (48.16 %), FEV_1 (18.22 %) and PEF (24.17%) respectively. Hence it was concluded that, Bharathanatyam dance training optimistically influence on pulmonary function.

Keywords: Bharathanatyam dance, FEV_1, FVC, PEF

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