

Effects of Aerobic Dance Circuit Training Programme on Blood Pressure Variables of Obese Female College Students in Oyo State, Nigeria

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Abstract : The blood pressure fitness of female college students has been implicated in sedentary lifestyles. This study was designed to determine the effects of the Aerobic Dance Circuit Training Programme (ADCT) on blood pressure variables (Diastolic Blood Pressure (DBP) and Systolic Blood Pressure (SBP)). Participants' Pretest-Posttest control group quasi-experimental design using a 2x2x4 factorial matrix was adopted, while one (1) research question and two (2) research hypotheses were formulated. Seventy (70) untrained obese students-volunteers age 21.10 ± 2.46 years were purposively selected from Oyo town, Nigeria; Emmanuel Alayande College of Education (experimental group and Federal College of Education (special) control group. The participants' BMI, weight (kg), height (m), systolic bp(mmHg), and diastolic bp (mmHg) were measured before and completion of ADCT. Data collected were analysed using a pie chart, graph, percentage, mean, frequency, and standard deviation, while a t-test was used to analyse the stated hypotheses set at the critical level of 0.05. There were significant mean differences in baseline and post-treatment values of blood pressure variables in terms of SBP among the experimental group 136.49mmHg and 131.66mmHg; control group 130.82mmHg and 130.56mmHg (crit-t=2.00, cal.t=3.02, df=69, $p < .0$, the hypothesis was rejected; while DBP experimental group 88.65mmHg and 82.21mmHg; control group 69.91mmHg and 72.66mmHg (crit-t=2.00, cal.t=1.437, df=69, $p > .05$) in which the hypothesis was accepted). It was revealed from the findings that participants' SBP decrease from week 4 to week 12 of ADCT indicated an effective reduction in blood pressure variables of obese female students. Therefore, the study confirmed that the use of ADCT is safe and effective in the management of blood pressure for the healthy benefit of obesity.

Keywords : aerobic dance circuit training, fitness lifestyles, obese college female students, systolic blood pressure, diastolic blood pressure

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