Effect of Rhythmic Activities on Selected Physiological and Physical Fitness Profile on Puberties

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Modern dance emerged in the 20th century as a liberating departure from classical ballet, offering artistic expression and innovation. Fitness in dance incorporates body composition, cardiorespiratory efficiency, and muscular strength. Dancers view fitness as vital for enhancing performance and expression. This research examined the impact of rhythmic activities on physiological parameters and physical fitness in pubertal individuals. The study was conducted through an eight-week training program, meticulously designed to investigate the impact of rhythmic activities on the subjects' physiological and physical fitness aspects. To ensure unbiased representation, a stratified random sampling method was employed to select thirty subjects (13 males and 17 females) from Galahitiyawa Central College, Ganemulla, Sri Lanka by using one group pre-test and post-test research design. Physiological data included resting pulse rate, blood pressure, vital capacity and physical fitness variables such as speed, agility, flexibility, abdominal muscle and core strength, aerobic fitness and upper body strength. Participants engaged in selected recreational basic classic ballet exercise drills three times a week for eight weeks, with each exercise session lasting 60 minutes. Data was analyzed using paired t-test from Minitab 18 software. The results revealed a significant positive effect of rhythmic activities on vital capacity, speed & agility, flexibility, abdominal muscle & core strength, aerobic fitness, and upper-body strength ($p<0.05$). Conversely, the study did not identify any significant effect on the pulse rate, systolic blood pressure, and diastolic blood pressure ($p>0.05$). Overall, this research supports the benefits of rhythmic activity for enhancing dance-related fitness when repeated consistently.

Keywords: Aerobic Fitness, Ballet, Ballet Exercise, Physical Fitness, Rhythmic Activity