

Effects of Bharatanatyam Tatta Adavus on Lower Limb Muscle Strength

WSG Sewwandi¹ and HACS Hapuarachchi¹

¹*Department of Sports Sciences and Physical Education, Faculty of Applied Sciences,
Sabaragamuwa University of Sri Lanka*

**geethshayasewwandi96@gmail.com*

Dancing is a part of human culture, and foot drills are exceptional among the dancing skills. The interdisciplinary art form known as Bharatanatyam, which mixes dance, rhythm, and expression, was created in the second century in the South Indian state of Tamil Nadu. The dancers practice leg exercises to achieve their perfect Bharatanatyam Araimandi posture. This study aimed to determine a better method to improve lower limb muscle strength of novice female students aged from 14 to 16 through Bharatanatyam Tatta Adavus and specific exercises. This study used a quasi-experimental research design under the quantitative research method. Thirty female students who had never taken part in sports or dance were picked at random. Thereafter, they were divided into three groups each with 10 students as the dancing group, the particular exercises group, and the control group. Moreover, a different 6-week intervention program was applied to each treatment group (group 1: dance and group 2: specific exercises) except the control group. The handheld dynamometer machine was used to measure lower limb muscle strength at the pretest, midtest, and posttest. The two-way mixed ANOVA repeated measurement analysis method and the Bonferroni pairwise comparison procedures were applied to test the effect of the training program and compare the group levels and the time with a 95% confidence level. The results revealed that the dancing training group significantly improved their lower limb muscle strength ($p=0.030$) over time. However, the specialized exercise group ($p=0.757$) and the control group ($p=0.860$) have not significantly improved their lower limb muscle strength. In conclusion, female novices' lower limb muscles strength can be intensified with the Bharatanatyam Tatta Adavus.

Keywords: ANOVA, Dancing Skills, Novice Female Students, Araimandi Posture