

POSTER PRESENTATIONS

PP1

The Immediate Effect of Active and Passive Stretching on Hamstring Flexibility using Active Knee Extension Test

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ABSTRACT

Background and Objectives: There is alarming high rate of hamstring tightness among students due to prolonged sitting hours and lack of physical activity. Various techniques are available for addressing hamstring tightness, including both active and passive stretching. However, studies on the immediate effects of both active and passive stretching on hamstring flexibility among students remains limited. Therefore, this study aimed to investigate the immediate effects of active and passive stretching on hamstring flexibility among undergraduate physiotherapy students in a private university. **Methods:** A two period crossover study design was conducted involving 38 undergraduate physiotherapy students (20 males, 18 females; mean age \pm SD = 22.05 \pm 1.30 years) using convenience sampling technique. Hamstring flexibility was assessed using an active knee extension test (AKET) before and immediately after both active and passive stretching. The data were analysed using independent t-test. **Results:** There was a significant difference ($p < 0.001$) between the mean AKET before and after both active stretching and passive stretching ($p = 0.05$). **Conclusion:** Both active and passive stretching exercises demonstrated effectiveness in improving hamstring flexibility, suggesting that they are valuable immediate interventions for addressing hamstring tightness.

Keywords: Active stretching; Passive stretching; Hamstring flexibility; Active knee extension test

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