



## The effect of attentional focus of supra-postural task on learning of postural control: gender moderator role

### Poster Presentation

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### Abstract

**Introduction:** The focus of attention is one of the psychological interventions that can effectively improve motor performance and learning, such as postural control and supra-postural task (Wulf, 2013) as well as there is evidence of superior focus ability in the male gender during learning (Tahmasebi borojeni & Shahbazi, 2009). Therefore, the purpose of the present study was to investigate the effectiveness of the focus of attention's instructions of supra-postural task on learning of postural control in girls and boys from 9 to 12 years old.

**Methods:** In this study, 90 participants (45 boys and 45 girls) were randomly assigned into three groups of girls and boys (n=15): external focus, internal focus, and control groups. The task of the present study was supra-postural, which means participants performed the stork balance test still while holding a bar with their hands. The participants maintained their postural control using the focus instructions of the supra-postural task. The focus instructions included attention on the bar (the external focus), attention to their hands (the internal focus), and no focus instructions (control). The study included a pre-test, 4-days acquisition, retention test, and transfer test. Participants performed the supra-postural task three times in each session, and the researcher recorded their best time.

**Results:** The results showed better postural control learning in the external focus group of girls than the internal focus and control groups ( $p < 0/05$ ). But in boys, both external and internal focus groups showed superior postural control learning than the control group ( $p < 0/05$ ).

**Conclusion:** These findings revealed the gender moderator role on the effects focus of attention. Also, this study support using attention's instructions as an effective strategy to improve learning in children. Therefore, coaches in the sports field and physical education teachers in schools could benefit from the focus of attention to improving children's motor learning.

### Keywords

Focus of Attention; Gender; Learning; Postural control; Supra-postural Task

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