Effect of Carrying Style on Posture Score in Adolescents with Musculoskeletal Pain

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ABSTRACT

Although the weight of bag is the primary risk factor for poor posture, the carrying style should be another risk factor. The Reedco's posture score (RPS) is an alternative tool in clinical setting to evaluate posture changes. The purpose of this study was to investigate posture in adolescents who had musculoskeletal pain with and without carrying backpacks using the RPS. This study was a single-factor design for repeated measures. The participants were assessed for their posture in three different conditions: carrying no backpacks, carrying backpacks with one strap, and carrying backpacks with two straps, using the RPS. The results showed a statistically significant decrease in the RPS between with and without backpacks (P<0.001). In addition, the RPS with one strap had decreased statistically significant postural alignment score when compared to the RPS with two straps (P=0.017). The prevention or intervention program should include not only the load of the backpack but also the carrying style.

Keywords: Symmetrical carrying, Asymmetrical carrying, Reedco's posture score