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Background: Understanding the interaction between musculoskeletal variables is essential for identifying dysfunction, preventing injuries, and improving athletic performance. Ankle dorsiflexion and hip function are crucial for dynamic activities such as jumping. Although the Hop Test is widely used to assess functional capacity, the interaction between these variables and their impact on performance remains underexplored. In this context, asymmetry between the lower limbs can compromise performance and increase the risk of injuries, making it essential to identify and correct these discrepancies to enhance performance and prevent musculoskeletal deficiencies.

Objectives: To investigate the correlation of ankle and hip joints mobility and strength asymmetry with the performance of Hop Test in physically active individuals. The study aims to understand how these variables are related with functional capacity and physical performance in activities that require jumping and stability in physically active individuals.

Methods: This is a cross-sectional study using data from the Physiotherapy Assessment Tool (PHAST) database. The sample consisted of 200 physically active individuals (124 men, 76 women, 97% with right lower limb dominance), aged 18-56 years (mean = 35.01; SD = 8.71), with an average height of 172.8cm and weight of 72.84kg. Participants underwent the following clinical measurements: passive hip internal rotation (IR) ROM, ankle dorsiflexion ROM, hip extensor and abductors repetition test, and the single Hop Test. Pearson's correlation coefficient and linear regression analysis were performed to examine the associations between asymmetry scores, musculoskeletal variables, and hop test performance, with a significance level set at $p < 0.05$.

Results: Greater asymmetry was observed in ankle dorsiflexion ROM ($> 10\%$) in 42.5% of individuals, in hip extensors repetition test ($> 10\%$) in 51.5% of volunteers, and in hip abduction repetition test ($> 10\%$) in 60% of the sample. Regarding single Hop Test performance, an asymmetry greater than 10% was observed in 27.5% of participants. Although correlations were weak, they were statistically significant for hip extensors function ($r = 0.18$ and $p = 0.009$ on the dominant side [DS]; and $r = 0.19$ and $p = 0.005$ on the non-dominant side [NDS]) and dorsiflexion ROM ($r = 0.19$ and $p = 0.006$ on the DS; and $r = 0.19$ and $p = 0.004$ on the NDS) when compared to Hop Test performance.

Conclusion: The observed correlations and asymmetries suggest that hip extensors function and dorsiflexion ROM have a significant, albeit weak, relationship with single Hop Test performance. Additionally, asymmetries in variables related to the hip abduction repetition test, hip extensors repetition test and ankle dorsiflexion ROM indicate potential areas for future studies focusing on interventions that could be explored to improve symmetry and physical performance, particularly in activities involving jumping and joint stability.

Implications: The results of this study highlight the importance of understanding the contribution of hip variables and the ankle/foot complex to Hop Test performance, as well as to injury prevention and functional capacity improvement. These findings emphasize the need to address dysfunctions and asymmetries by implementing strategies to prevent injuries and optimize physical performance, especially in activities that require jumping and joint stability.

Keywords: Stability, Functional Performance, Injury risk

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PHYSICAL ACTIVITY LEVEL AMONG HEALTHY ADULT WOMEN AND MEN: AGREEMENT BETWEEN SELF-PERCEPTION AND IPAQ-SF

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Background: Sedentary behavior is highly prevalent worldwide and is associated with a wide range of chronic diseases and premature mortality. It can be identified through self-reporting by individuals or specific physical activity questionnaires, such as the International Physical Activity Questionnaire - Short Form (IPAQ-SF). Although it is a validated instrument, your results depend on the accurate reporting of activities performed in the past week, which may be a confounding factor at the time of application.

Objectives: To analyze the agreement between self-reported sedentary behavior and the IPAQ-SF in healthy adult men and women.

Methods: This is a cross-sectional observational study comprising 204 healthy individuals aged between 18 and 59 years. Initially, all participants were asked about their self-perception of physical activity level, classifying themselves as sedentary or physically active. Subsequently, they completed the International Physical Activity Questionnaire - Short Form (IPAQ-SF), in which they reported the intensity, duration, and frequency of physical activities performed in the last week. Based on the IPAQ-SF responses, individuals were categorized into five groups: (1) very active, (2) active, (3) irregularly active A, (4) irregularly active B, and (5) sedentary. Cohen's Kappa coefficient was used to quantify the level of agreement between self-reporting and IPAQ-SF classifications. The analysis was stratified by sex, and the significance level was set at $p < 0.05$.

Results: A total of 204 volunteers participated in the study, of whom 56% were women (35.4 ± 12.5 years, 67.5 ± 13.0 kg, and 1.63 ± 0.06 m) and 44% were men (33.1 ± 12.0 years, 82.3 ± 14.8 kg, and 1.77 ± 0.07 m). Based on self-perception, 31% of men and 43% of women considered themselves sedentary. However, only 7.14% of men and 10.2% of women were classified as sedentary by the IPAQ-SF, indicating low agreement between the methods. Among men who self-identified as sedentary, 21.42% were classified as irregularly active B, 14.28% as irregularly active A, 35.71% as active, and 7.14% as very active according to the IPAQ-SF. Among women, 28.57% were classified as irregularly active B, 16.32% as irregularly active A, 28.57% as active, and 16.32% as very active.

Conclusion: There is low agreement between self-reported sedentary behavior and the classification obtained through the International Physical Activity Questionnaire - Short Form (IPAQ-SF) in healthy adults.

Implications: Many individuals who considered themselves sedentary were classified by the questionnaire as physically active at different levels, indicating a discrepancy between subjective perception and objective criteria for assessing physical activity. These differences may be related to individual interpretations of the concept of sedentary behavior or inaccurate recall of physical activity practices when completing the questionnaire.

Keywords: Behavior sedentary, Exercise, Activities, Physical

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