

questionnaire (Domains: Gynecological consultation; Consciousness of the genito-urinary tract; Social activity; Habits of life; Self-perception; Sexual activity; Female anatomical knowledge). In the data analysis were calculated, according to the distribution of normality of the sample, the means and standard deviation of the variables and compared the groups with and without dysmenorrhea as a function of self-perceived PF with the t test for independent samples. Data were analyzed using the *Statistic Program for Social Science* (version 23) considering the significance level of 5%.

**Results:** Participated in this study 69 young adult nulliparous women with a mean age of  $21.86 \pm 3.16$  years, mean schooling of  $13.62 \pm 4.72$  and 82.6% were attending higher education in health courses. The prevalence of dysmenorrhea was 65.21% (n=45) and most had regular menstrual flow. The level of pain of dysmenorrhea was low presenting average in VAS of  $3.59 \pm 3.16$  points. By the analysis of the domains and total score of the scale of self-perception of the PA it was verified that the majority of the sample presented a moderate level of perception. There was no statistically significant difference between the groups with and without dysmenorrhea in relation to the perception of PFM, however the group with dysmenorrhea had lower values. There was no correlation between the presence of dysmenorrhea and the domains of self-perception of PF.

**Conclusion:** Dysmenorrhea is prevalent among young nulliparous women and did not interfere with the perception of PF.

**Implications:** In scientific terms, it is worrisome to recognize that women who attend health courses have only a moderate level of perception of PF but also that although there was no statistical significance, if the sample was increased probably the symptom dysmenorrhea can interfere in functional terms of PF and alter their self-perception. In clinical terms, this study supports the importance of considering the perception of women in relation to their PF and can collaborate in therapeutic clinical practice.

**Keywords:** Women's health, Dysmenorrhea, Pelvic floor

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## DORSIFLEXION RANGE OF MOTION (ROM) AND SHANK-FOREFOOT ALIGNMENT ARE ASSOCIATED WITH THE PERFORMANCE OF THE MODIFIED STAR EXCURSION BALANCE TEST

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**Background:** The modified Star Excursion Balance Test (mSEBT) is a valid, low-cost, and easily implemented screening tool in clinical practice recommended for assessing dynamic postural control in athletes. Previous studies evidenced that poorer performance on

the mSEBT predicts an increased risk of injury in several sports. The performance of the mSEBT depends on the contribution of various body segments and constructs of physical function to reach maximum distance in the anterior, posteromedial, and posterolateral directions. Understanding the relationship between mSEBT performance, distal and proximal factors in the kinetic chain and other constructs of physical function in soccer athletes can contribute to a more assertive assessment in clinical practice, since soccer athletes with dynamic balance deficient are more likely to sustain a lower limb injury.

**Objective:** To verify if hip and foot/ankle musculoskeletal factors predicts the performance of the modified Star Excursion Balance Test (mSEBT) in male youth soccer athletes.

**Methods:** In this cross-sectional study, 108 athletes ( $18.04 \pm 0.14$  years,  $72.86 \pm 0.76$  kg,  $1.78 \pm 0.7$  m) in categories Under-17 and Under-20 from a professional soccer club in Brazil were assessed during the preseason assessment. The assessment included the following tests: shank-forefoot alignment (SFA), passive hip IR ROM, hamstring flexibility (HF), dorsiflexion range of motion (ROM), Single Leg Hamstring Bridge (SLHB), and the performance of the modified Star Excursion Balance Test (mSEBT). Multiple linear regression analysis was performed to identify if the foot/ankle musculoskeletal factors could explain the performance of the mSEBT.

**Results:** Regression analyses revealed that shank-forefoot alignment and ankle dorsiflexion ROM predicted the performance of the mSEBT ( $P < 0.05$ ). In model 1, SFA explained 9% of the mSEBT performance ( $F = 10.19$ ;  $r = 0.3$ ;  $r^2 = 0.9$ ;  $p = 0.002$ ). The inclusion of the ankle dorsiflexion ROM in model 2 explained 16% of the total variance of the mSEBT ( $F = 8.54$ ;  $r = 0.4$ ;  $r^2 = 0.16$ ;  $p = 0.004$ ).

**Conclusion:** The ankle dorsiflexion ROM and shank-forefoot alignment explained 16% of the performance of the mSEBT in male youth soccer athletes. These results suggest that the ankle dorsiflexion ROM and shank-forefoot alignment contribute to test performance and the physiotherapist must assess these factors.

**Implications:** The results of this study suggest that considering the influence of distal musculoskeletal factors of the kinetic chain on dynamic postural control and the association of the ankle dorsiflexion ROM and the shank-forefoot alignment with the performance of the mSEBT in youth soccer athletes. Athletes with a lower performance in the test should be assessed to verify the shank-forefoot alignment and the ankle dorsiflexion ROM. In addition, the improvement of the ankle mobility can be considered a good intervention in the implementation of prevention programs.

**Keywords:** Postural control, Assessment, Kinetic chain

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## ANALYSIS OF RELIABILITY, VALIDITY, RESPONSIVENESS AND MEASUREMENT ERROR OF THE COMPREHENSIVE MOTOR COORDINATION SCALE IN INDIVIDUALS WITH NEUROLOGICAL DISORDERS

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