

$r=-0.580$ ($p=0.902$). There were no significant results. Conclusion: Isokinetic measures 6 months after ACLR were not associated with psychological readiness as measured by the ACL-RSI Return to Sport Scale (ACL-RSI) and subjective function as measured by the International Knee Documentation Committee (IKDC). This may be related to the sample size, subjectivity of the ACL-RSI and IKDC scores. Implications: The results provide information that self-reported outcome scores can be used as an additional screening tool in conjunction with isokinetic variables to help promote better recovery and resumption of activities.

Conclusion: Isokinetic measures 6 months after ACLR were not associated with psychological readiness as measured by the ACL-RSI Return to Sport Scale (ACL-RSI) and subjective function as measured by the International Knee Documentation Committee (IKDC). This may be related to the sample size, subjectivity of the ACL-RSI and IKDC scores.

Implications: The results provide information that self-reported outcome scores can be used as an additional screening tool in conjunction with isokinetic variables to help promote better recovery and resumption of activities.

Keywords: Anterior Cruciate Ligament Reconstruction, Knee, Questionnaire

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EFFECTS OF DIFFERENT SERIES PROGRESSIONS ON FUNCTIONAL DISABILITY IN PEOPLE WITH NON-SPECIFIC CHRONIC LOW BACK PAIN

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Background: Non-specific chronic low back pain (NSCLBP) is a significant public health problem, with increasing prevalence and incidence over the years. Physical exercise is recommended as the first-line treatment, with traditional resistance training widely used for strength and muscle hypertrophy development. The total training volume can be classified as low, medium, or high, directly influencing neuromuscular adaptations. Although evidence suggests that a higher number of sets results in greater adaptations, there are still gaps regarding the minimum necessary dose to optimize strength and hypertrophy gains, especially in individuals with musculoskeletal disorders such as NSCLBP. Furthermore, the ideal prescription of load, intensity, and recovery for this population remains a challenge.

Objectives: This study aims to analyze the influence of series volume progression (2, 4, and 6 sets) every two weeks on functional capacity, muscle power, and body composition in people with NSCLBP.

Methods: This is a randomized clinical trial lasting 12 weeks. The first two weeks will be dedicated to initial assessments and familiarization with the exercises, followed by eight weeks of intervention and, finally, two weeks for final evaluations. Functional capacity will be measured using the Roland-Morris Questionnaire, while muscle power will be assessed through the countermovement jump

(CMJ). Lower and upper limb strength will be measured using isokinetic dynamometry, trunk strength through functional tests, and body composition through densitometry (DEXA). The training protocol will include exercises such as stiff-leg deadlift, conventional deadlift, and half-squat, with a progressive increase in the number of sets throughout the intervention. The sample will include individuals of both sexes, aged between 18 and 40 years, with an NSCLBP diagnosis for at least 12 weeks. A total of 33 individuals (11 per group) are expected to participate in the study. The study will be conducted following ethical guidelines and submitted to the Research Ethics Committee.

Results: It is anticipated that all participants will show a reduction in disability associated with NSCLBP, with greater benefits in the groups performing a lower volume of sets.

Conclusion: It is hypothesized that the low- and medium-volume groups will perform better in functional capacity and physical tests compared to the high-volume group, considering guidelines that suggest excessive volumes may not be ideal for this population.

Implications: The study's findings are expected to contribute to the development of safe and effective training progression strategies for individuals with NSCLBP, providing scientific support for designing specific programs for this population.

Keywords: Low Back Pain, Disability, Strength Volume, Training Volume, Exercise

Conflict of interest: The authors declare no conflict of interest.

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ACUTE EFFECTS OF 2MM INFRACAPITAL INSOLES ON BODY CENTER OF PRESSURE, VERTICAL JUMP AND GLUTEUS MEDIUS STRENGTH – RANDOMIZED CLINICAL TRIAL

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Background: Dynamic knee valgus is a common biomechanical alteration, particularly in women, and is often associated with hip muscle weakness, especially in the gluteus medius (GM), which plays a key role in controlling knee alignment. In this context, insoles have been proposed as an intervention to modify lower limb biomechanics. However, there is limited evidence on their effect on dynamic valgus correction, gluteus medius strength, and center of pressure (CoP) distribution. This study investigates whether a 2 mm infracapital insole can improve knee alignment, muscle strength, and CoP in adult women with dynamic knee valgus.

Objectives: The primary objective of this study was to evaluate whether a 2 mm infracapital insole corrects dynamic knee valgus in adult women. Secondary objectives were to evaluate whether the use of this insole influences GM strength and alters CoP distribution, contributing to improved neuromuscular control and postural stability.

Methods: This randomized, triple-blind clinical trial included adult female participants with dynamic knee valgus. Subjects were randomly assigned to an intervention group (using a 2 mm infracapital insole) or a control group (using a flat insole). Motion analysis was conducted to assess changes in knee valgus angles, and GM force analysis was performed using an isometric dynamometer. Additionally, a force platform was used to assess CoP displacement, postural