028/15). The group control consists of animals that were not submitted to partial injury of the Achilles tendon (TC) and four other groups that were submitted to partial injury of the TC and subdivided by the time of tissue collection, namely: 3.1428 and 55 days after the injury. the muscle gastrocnemius was collected and used for the analysis of gene expression, zymography, and morphology. The CTwas collected only to prove the presence of the lesion.
Results: The tendon injury generated a decrease in the expression of genes Vegf, Smad3, Egr and Akt 3 days in skeletal muscle. As well as increased gene expression, Col3a1, Ctgf, Timp- 2 and Bgn. All when compared to the control group. In the period of 14 days after partial injury of the Achilles tendon, a decrease in the Mstn and Smad3 gene content was verified. On the other hand, there was an increase in the expression levels of the Akt and Vegf genes. In the period of 28 days after the injury, there was an increase in the levels of expression of the genes Tgf-b, Vegf, Mstn, Pax7 and Myod1. With the decrease of Smad3 expression, Akt. Finally, 55 days after partial Achilles tendon injury, the Akt, P70s6k, Pax7, Mstn and Atrogin-1 genes showed an increase in their expression. While the levels of Smad3, Timp-2 showed a decrease. As for the zymography analysis of MMP-2 activity in the gastrocnemius muscle, it was demonstrated that MMP-2 pro increased in the 28D and 55D groups when compared to the control group. For morphological analyses, only the 55D group showed an increase in cross-sectional area and diameter.
Conclusion: The project is in the phase of discussing the results, but the partial injury of the Achilles tendon in rats probably affected the homeostasis of the skeletal muscle, disturbing signaling/degradation pathways, in addition to impacting the remodeling process through the communication of the muscular extracellular matrix with the tendon.
Implications: The findings of this study have the potential to improve the understanding of the underlying effects of the muscle-tendon relationship and may provide valuable information for the development of targeted therapies aimed at improving the recovery and rehabilitation of muscle and tendon injuries. Furthermore, the results of this study may help to identify new therapeutic targets and biomarkers for the diagnosis and monitoring of muscle and tendon injuries, allowing for a more personalized and effective treatment.
Keywords: Injury, Muscle-tendon interaction, Remodeling

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SEDENTARY BEHAVIOR AND PHYSICAL ACTIVITY LEVEL OF OLDER ADULTS DURING AND AFTER THE RESTRICTIVE MEASURES OF THE COVID-19 PANDEMIC

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Background: The COVID-19 pandemic has actively impacted the lifestyle of older adults, interrupting their participation in exercise programs (EP) and consequently increasing sedentary behavior (SB) and decreasing physical activity (PA). However, the flexibilization of the pandemic's restrictive measures is expect that the older adults will return to adopting an active lifestyle.
Objectives: To compare the SB and PA level of older adults during and after the restrictive measures of the COVID-19 pandemic.
Methods: This is an observational and longitudinal study. Older adults ($\geq$60 years old), with preserved ambulation and participants in the multicomponent EP (3x50min during the week) before the COVID-19 pandemic were included. The participants were evaluated 18 months (T1= during the restrictive measures of the pandemic) and 24 months (T2= after the restrictive measures of the pandemic) after the interruption of the EP. SB and PA level were evaluated by the ActivPAL3^{TM} micro accelerometer. SB variables were daily SB time, % of SB time during the day, daily sitting time, number of sedentary bouts $>$ 30min and time spent in sedentary bouts $>$ 30min. The PA level was described by the number of steps per day. To evaluate the effect of time in the SB variables and the PA level, a generalized linear mixed model analysis was used. Time was considered a fixed effect and participants a random factor. Results are presented in estimated marginal means and standard error. Statistical analysis was performed using the JAMOVI software (version 2.3.18) and a significance level of $p < 0.05$ was adopted.
Results: Seventeen older adults were included (75.8 $\pm$ 7.47 years, 76.5% female). No statistically significant differences were observed in the time spent in SB (T1= 8.49 h and T2= 8.85 h, X^2= 1.99, Dif= 0.356, p= 0.158), % of time in SB (T1= 55.9 % and T2= 56.3%, X^2= 0.06, Dif= 0.382, p= 0.793), sitting time (T1= 8.06 h and T2= 7.87 h, X^2= 0.324, Dif= -0.191, p = 0.569), number of sedentary bouts $>$ 30min (T1= 3.85 and T2= 4.14, X^2= 0.941, Dif= 0.293, p= 0.332), time spent in sedentary bouts $>$ 30min (T1= 4.23 h and T2= 3.90 h, X^2= 0.998, Dif= -0.332, p= 0.318) and in the PA level (T1= 9521 steps and T2= 9862 steps, X^2= 0.653, Dif= 341, p= 0.419) of older adults after the flexibilization of the restrictive measures of the COVID-19 pandemic.
Conclusion: No significant changes were observed in the SB and PA level of older adults who participated in an EP after the flexibilization of restrictive measures of the COVID-19 pandemic.
Implications: The findings of this study demonstrate that despite the flexibilization of restrictive measures of the COVID-19 pandemic, the older adults continue to have high rates of SB, demonstrating the need to implement public policies that reduce SB and encourage the practice of PA.
Keywords: Aged, Sedentary Behavior, COVID-19

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RELATIONSHIP BETWEEN SEDENTARY BEHAVIOR, PHYSICAL ACTIVITY LEVEL AND PHYSICAL FUNCTION OF OLDER ADULTS DURING THE COVID-19 PANDEMIC: CROSS-SECTIONAL STUDY

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Background: Studies already showed that the practice of physical activity (PA) is an important factor in the physical function (PF) of older adults, as well as the sedentary behavior (SB) can be negatively influence. The COVID-19 pandemic and the need for restrictive measures, the older adults had to interrupt their participation in exercise programs (EP) and consequently adopted a more restricted lifestyle.
Objectives: To evaluate the relationship between SB, PA level and PF of older adults during the COVID-19 pandemic.
Methods: This is a cross-sectional study. Older adults (≥60 years), with preserved ambulation and participants in a multicomponent EP (3x50min during the week) were included. Participants were evaluated 18 months after PE interruption due to the COVID-19 pandemic. The ActivPAL3^{TM} micro accelerometer was used to assess the time spent in SB and the PA level. The PF comprised handgrip strength, assessed by the Lafayette® hydraulic dynamometer (model J00105); lower limb strength, assessed by the 30-second sit-to-stand test (30STS); and functional mobility, assessed by the Timed Up and Go (TUG) test. Data normality was assessed using the Shapiro-Wilk test. The relationship between SB, PA level and PF data were analyzed using Pearson's correlation test. The Simple Linear Regression model was used for to verify the effect of time spent in SB and PA level in the PF variables that showed statistically significant correlations. Statistical analysis was performed using the IBM® SPSS Software (version 26.0) and a significance level of $p<0.05$ was adopted.
Results: Forty-two older adults were included (73.86 ± 6.78 years, 88.10% female), with 477.03 ± 122.77 minutes per day spent in SB and the total of 7593.95 ± 3257.23 steps per day. The handgrip strength was 24.50 ± 6.41 kgf, they presented the total of 11.31 ± 2.67 repetitions in the 30STS and performed the TUG in 10.02 ± 2.27 seconds. Correlations were found between PA level and lower limb strength (r= 0.38, $p<0.05$), handgrip strength (r= 0.40, $p<0.01$) and functional mobility (r= -0.42, $p<0.01$). In the simple linear regression analysis, it was observed that the PA level was able to explain 15.6% of the handgrip strength (R2= 0.156, F= 7.41, p= 0.010), 14.2% of the performance in the 30STS (R2= 0.142, F= 6.60, p= 0.014) and 17.9% of the performance in the TUG test (R2= 0.179, F= 8.72, p= 0.005).
Conclusion: The PA level was related to the PF of older adults after the interruption of PE during the COVID-19 pandemic. In addition, the findings suggest that the PA level may be an important predictor of PF in older adults.
Implications: The findings of this study highlight the need to implement public policies that increase the practice of PA in older adults, especially in critical situations, such as the COVID-19 pandemic.
Keywords: Aged, Physical Function, COVID-19

Conflict of interest: The authors declare no conflict of interest.
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NORMATIVE DATA FOR THE SINGLE LEG HAMSTRING BRIDGE TEST IN MALE FOOTBALL PLAYERS

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Background: Hamstring muscle (HM) injuries are one of the most common injuries in soccer, accounting for up to 13% of all injuries in this sport. The single leg hamstring bridge (SLHB) test has been one of the clinical tests used to assess hamstring muscle function in athletes. It has been used as a marker of progress in rehabilitation and as a criterion for returning to sport. Therefore, the SLHB is presented as a measure with an important role in the prevention and treatment of IQS injuries. The SLHB is a test proposed by Freckleton et al. (2013) for clinical evaluation of the functional capacity of the HM in a practical way, with low cost and better applicability compared to isokinetic dynamometry. The test requires only one evaluator and a 60 cm high box and can be performed in different environments within the sporting context. It also proved to be a reliable test (intra-examiner intraclass correlation coefficient (ICC) = 0.77-0.89, inter-examiner ICC = 0.89-0.91). Its main outcome measure is given by the number of valid repetitions performed by the athlete until fatigue. Australian football players who performed worse on the preseason SLHB had a higher risk of injury to the HM during the season, with uninjured athletes achieving scores ≥ 26 repetitions on the test.
Objectives: The main objective of this study was to establish normative data for the SLHB and to investigate the association of the results of this test with the history of hamstring injuries in professional male soccer players.
Methods: This is a cross-sectional observational study. In this study, professional male soccer players from Cruzeiro Esporte Clube (CEC) aged between 15 and 40 years were submitted to the SLHB. Mean comparison tests (T-test or Mann-Whitney) will be performed to compare the SLHB result between groups with and without a history of IQS injury.
Preliminary Results: The athletes of the under-17 category of the CEC with an average age of 15.29±0.46, average mass of 67.6±6.05 and average height of 177.73±7.12 made an average of 14 .75±3.46 repetitions in the right lower limb and 14.89±3.6 in the left in the SLHB test. No athlete had a history of HM injury in the previous season.
Conclusion: Based on the preliminary results, it is concluded that under-17 men's soccer players have an average of repetitions in the SLHB lower than the non-injured Australian soccer players.
Implications: Athletes will benefit from access to qualified data on hamstring muscle function. This may enable the planning of more specific preventive programs based on normative data from the SLHB test for the soccer population.
Keywords: Hamstring function, Soccer, Normative Data

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THE INFLUENCE OF AFFORDANCES FROM HOME ENVIRONMENT ON THE PERFORMANCE OF INFANTS FROM THREE TO 10 MONTHS OLD: A LONGITUDINAL STUDY

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