

Results: The group with higher cardiorespiratory conditioning showed better performance in the reaction time of the incongruent condition after performing the HIIT Tabata protocol ($p=0.0458$, $g=-0.451$, 95.0%CI -0.822, -0.0689). However, the same effect was not observed in the group of children with lower cardiorespiratory fitness ($p=0.339$ -0.213 [95.0%CI -0.57, 0.357]). No significant differences were found in the congruent condition of the inhibitory control test. The progressive HIIT protocol did not change the RT.

Conclusion: Our findings corroborate some previous findings that suggest that children with greater cardiorespiratory fitness respond more efficiently to an acute HIIT session by showing better inhibitory control.

Implications: This study shows that HIIT Tabata can help improve inhibitory control in children with good cardiorespiratory fitness, being an easily accessible and short-term strategy that can be included in the routine of schools.

Keywords: Inhibitory Control, Children, Cardiorespiratory fitness

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

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MEASUREMENT PROPERTY TEST OF THE INSTRUMENT OCCUPATIONAL COGNITIVE FAILURES QUESTIONNAIRE (OCFQ)

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Background: Cognitive failure can be understood as mental lapses that occur during the execution of a simple task. These failures can occur in different contexts, such as, for example, in occupational activities, in university students, in everyday life or in any other non-occupational context. The Occupational Cognitive Failures Questionnaire (OCFQ) is a measurement instrument that helps to understand cognitive failures in workers. However, the OCFQ was originally developed in English, requiring cross-cultural adaptation and testing of measurement properties to assess whether the adapted questionnaire can be used with the same confidence as the original questionnaire.

Objectives: This study aims to test the measurement properties of the Occupational Cognitive Failures Questionnaire, translated, and adapted into Brazilian Portuguese. This is an observational, cross-sectional study.

Methods: The study population consisted of workers of both sexes, aged between 18 and 60 years.; and minimum working time on the task of three months. Workers with self-reported cognitive impairment (due to neurological diseases, mental disorders, dependence on alcohol and other drugs, depression) were excluded from the study. Participants were recruited by sharing the questionnaire through the UFSB e-mail, and digital media platforms such as Facebook and Instagram. For data collection, the following questionnaires were used: Sociodemographic Questionnaire; Prospective and Retrospective Memory Questionnaire – PRMQ; Occupational Cognitive Failures Questionnaire - OCFQ, were made available online through the Google Forms platform. The measurement

properties were sociodemographic data; reproducibility; internal consistency; and ceiling and floor effect.

Results: The sample consisted of 113 workers, of whom 13 were excluded for not meeting the requested criteria, mostly female workers with an average age of 29.4 years who perform office activities. Internal consistency was calculated using Cronbach's alpha index, with an adequate value of 0.84. The construct validity of the OCFQ and PRMQ instruments obtained Pearson's Correlation Coefficient value $r=0.5$. The reproducibility evaluates the reliability tested with an intraclass correlation coefficient (ICC), consistency coefficient (ICCConsistency) with a value of 0.84, and agreement coefficient (ICCAgreement) of 0.1, showing a substantial reliability, and the agreement analyzed through the standard error of measurement (EPM) by the measurement (S.E. mean), with a value of 1.3%. No ceiling and floor effect was found.

Conclusion: We concluded that when testing the measurement properties of the Occupational Cognitive Failures Questionnaire instrument, in the translated and adapted version for Brazilian-Portuguese, it showed good results in terms of content validity, internal consistency, reproducibility, and construct validity.

Implications: Testing the measurement properties of the OCFQ questionnaire and its results makes it possible for professionals who work in occupational environments to use it, with the aim of detecting cognitive deficits in the workplace, to enable preventive actions for the worker, as well as greater safety in the work environment.

Keywords: Cognitive failures, Measurement Property Test, Workplace

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

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Ethics committee approval: This research project was submitted to the Ethics Committee and Research Involving Human Beings of the Federal University of Southern Bahia (UFSB), whose approval number is 40398820.4.0000.8467.

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PREVALENCE OF FALLS IN OLDER ADULTS: INTRINSIC, EXTRINSIC AND BEHAVIORAL ASPECTS

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Background: Falls in older adults are the result of a complex interaction between intrinsic, extrinsic, and behavioral factors. Although it is difficult to separate these factors, some studies indicate that environmental risk factors are present in approximately 40% of falls, but there is still a gap in these real factors.

Objectives: To verify the association between environmental risk factors for falls in older adult Brazilians.

Methods: Prospective cohort study, being one of the arms of a larger study "Prevalence of falls in the older adults: Intrinsic, extrinsic and behavioral factors". The study aimed to follow up with 400 patients, both sexes, aged over 60 years and from different regions of Brazil, who had access to the online questionnaire through a link and agreed to participate in the research. The questionnaire had items related to environmental factors in older adults falls. The environmental assessment was carried out using the Home

Fast Brazil self-application instrument. An analysis was performed with the Shapiro-Wilk test, which showed that the data were non-parametric, and thus the data were presented descriptively by the median and interquartile range and the environmental data with nominal variables. significance level $p < 0.05$ was adopted.

Results: 405 individuals were evaluated, 39.5% ($n=160$) ($p < 0.446$) characterized as fallers, so the sample of fallers consisted of 39% ($n=113$) female ($p < 0.882$), an aged median of 67 (63-73) years. It was observed that falls have a higher incidence with tripping 100% ($n=67$) ($p < 0.01$), slipping 100% ($n=43$) ($p < 0.01$), loss of balance 100% ($n=37$) ($p < 0.01$), acute pain 100% ($n=2$) ($p < 0.01$), leg weakness 100% ($n=2$) ($p < 0.01$), dizziness 100% ($n=4$) ($p < 0.01$), knees buckled 100% ($n=5$) ($p < 0.01$). Of the individuals who reported falls, the reasons were 45.83% ($n=88$) due to the bathroom being slippery when wet ($p < 0.03$), even if they had adaptations in their home such as a toilet of adequate size 38.15% ($n=145$) ($p < 0.04$) and grab bar in the bathroom in 47.91% ($n=46$) ($p < 0.04$).

Conclusion: We found that the incidence of falls was due to the bathroom being slippery due to the wet floor and that most have adaptations in their homes due to the fear of falling. This makes us reflect that even with adaptations, it gives a false sense of security. **Implications:** With the knowledge of environmental risk factors such as wet bathrooms, it is necessary to supervise the hygiene of these older adults.

Keywords: Falls, Older Adults, Environmental Factors

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

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Ethics committee approval: Ethics and Research Committee of the Hospital das Clínicas of the Faculty of Medicine of the University of São Paulo with opinion number 4.488.029 (CAAE - 38840720.4.0000.0068).

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ASSOCIATION BETWEEN SLEEP QUALITY AND MUSCULOSKELETAL PAIN IN HEALTH WORKERS – CROSS-SECTIONAL STUDY

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Background: Sleep is necessary for maintaining health and well-being. Work in the health area is organized in a shift system, which can interfere with workers' s circadian cycle, making them more susceptible to physical fatigue and musculoskeletal pain.

Objectives: To verify if there is an association between sleep quality and the number of regions with musculoskeletal pain in health workers linked to the Unified Health System (SUS).

Methods: A total of 125 health workers from different occupations who are part of the HEROES cohort were evaluated. Sleep quality was assessed by the Pittsburgh Sleep Quality Index (PSQI), considering the total score (ranging from zero to 21 points). The number of sites with musculoskeletal pain was assessed using the Nordic Musculoskeletal Symptoms Questionnaire (NMQ), ranging from zero to nine sites with pain. The factors age, gender, marital status, education, use of medication, tobacco, workplace, and hours worked were extracted from the sociodemographic questionnaire. Linear regression analysis was performed in the SPSS program with a significance level of 5%.

Results: The sample consisted of woman (83.2%), hospital workers (48.8) with a workload of more than 30 hours per week (71.2%). Linear regression analysis showed that sleep quality is associated with musculoskeletal pain ($R^2 = 24.04\%$; $p = 0.000$; $CI = 1.05 - 2.90$). With each increase of one point in the PQSI, there is an increase of 0.22 in the number of sites with musculoskeletal pain; that is, the worse the quality of sleep (bad sleepers), the greater the probability of the worker reporting musculoskeletal pain in more than one region.

Conclusion: Sleep quality was associated with the number of sites of pain in healthcare workers.

Implications: The findings of study show that it is necessary to return actions to care for the quality of sleep-in health workers, as well as to rethink the organization of health work, with a view to enabling shift alternation or other worker protection measures.

Keywords: Physiotherapy, Nursing, Ergonomics

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

Acknowledgment: Not applicable.

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COMPARISON OF DIAGNOSTIC CRITERIA FOR SARCOPENIA IN OLDER PEOPLE: CROSS-SECTIONAL STUDY

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Background: Sarcopenia has been subject of study for some years, been defined by some international consensuses. A lack of pattern in ways to assess the syndrome, with a great variability of methods and cutoff points, used to make harder the data compilation in systematic reviews, with meta-analyses, and even in the clinical practice.

Objective: to compare the methods for evaluating sarcopenia in older people, demonstrating the relationship of each test with its peers for the same criteria diagnostic.

Methods: Cross-sectional study, where older people were assessed for: muscle strength, by handgrip and isokinetic dynamometers; body composition, by BIA, skinfolds, mid-arm and calf circumferences; physical performance by six-minute walk test, TUG and SPPB. The qualitative variables were expressed in absolute and relative frequency, the quantitative were presented in mean+SD, median and IQR. The correlations were assessed by Spearman's Correlation Coefficient, accepted as low when $r > 0,1$; moderate when $r > 0,3$, and high when $r > 0,5$. The p-value $< 0,05$ was adopted as significant.

Results: 78.31% were women, the average age was 67,85 +5,27 years. In strength assessments was found moderate correlation between Handgrip and quadriceps PT, and high with hamstrings PT. PT assessments showed high relation between them. SMM showed a high correlation with FFM, and a low correlation with CC and MAC. FFM showed high correlation with all body composition assessments. In physical performance, UGS had moderate correlation with SPPB and high with TUG. TUG showed low correlation with SPPB. UGS.

Conclusion: For strength, handgrip showed the best correlation, even needing more prospective studies. The chair stand test did not show relationship with other techniques, and it may be because of