

Methods: This is a cross-sectional observational study that was approved by the Ethics Research Committee and conducted based on previously established recommendations for translation and cultural adaptation processes. The NAPS was translated by two Brazilian translators fluent in English. Afterward, the translations were synthesized and then back-translated into English by two native English speakers fluent in Brazilian Portuguese. Finally, a committee of experts reviewed all the translations and the original version to create the pretest version. The comprehensibility of the items in the pretest version was evaluated in 30 individuals. The pretesting phase included individuals with chronic pain for at least three months of both sexes, aged over 18 years, and reporting pain intensity greater than 3 on an 11-point numeric rating scale. Each participant completed the questionnaire, provided feedback on their comprehension, and proposed adjustments to the instrument. The instrument was deemed acceptable if at least 90% of the participants fully understood all the questions. The data were analyzed using the Statistical Package for the Social Sciences (SPSS) software, version 23.0.

Results: The translation and back-translation process showed no significant discrepancies, ensuring semantic and cultural equivalence. An expert committee made minor adjustments to enhance comprehension while preserving the original meaning. The pretest version was sent to the authors of the original NAPS and was approved without additional suggestions. A total of 30 individuals with chronic pain participated in the study (female: 23, 76.67%; male: 7, 23.33%), with a mean age of 43.97 ± 16.4 years and a body mass index of 28.62 ± 5.49 . The most frequently reported pain region was the trunk (15, 50%), followed by the lower limb (11, 36.67%) and upper limb (4, 13.33%). Pain intensity on the numeric rating scale (6.10 ± 2.2), while pain duration in years was 7.88 ± 9.02 . All items achieved a comprehensibility rate above 90%.

Conclusion: The translation and cultural adaptation of the NAPS into Brazilian Portuguese were considered appropriate.

Implications: This instrument will enable the analysis of behavioral patterns in patients with chronic pain, specifically pacing, and assessing the presence of maladaptive and negative processes related to the condition.

Keywords: Questionnaire translation, Chronic pain, Pacing

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PAIN SELF-EFFICACY IN INDIVIDUALS WITH FROZEN SHOULDER: ASSOCIATIONS WITH PAIN, DISABILITY, PSYCHOLOGICAL FACTORS, AND SLEEP QUALITY

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Background: Pain self-efficacy may influence an individual's ability to manage pain and maintain functionality. Lower self-efficacy levels are linked to greater pain, disability, and poorer outcomes. In a frozen shoulder, persistent pain and restricted movement may be associated with low self-efficacy. Psychological factors (depression, anxiety, kinesiophobia, pain catastrophizing) and sleep disturbances are associated with pain and function in musculoskeletal conditions. Still, their contribution to self-efficacy pain in frozen shoulder remains unclear. Understanding these relationships may improve rehabilitation strategies by addressing psychosocial aspects alongside physical treatment.

Objectives: To analyze the association between pain, disability, psychological factors (anxiety, depression, kinesiophobia, pain catastrophizing), and sleep quality with pain self-efficacy in individuals with frozen shoulder.

Methods: This cross-sectional study was conducted via video calls using Google Meet[®]. Pain self-efficacy was assessed with the Pain Self-Efficacy Questionnaire (PSEQ-10); pain and disability with the Shoulder Pain and Disability Index (SPADI). Anxiety and depression were evaluated with the Hospital Anxiety and Depression Scale (HADS), kinesiophobia with the Tampa Scale for Kinesiophobia-11 (TSK-11), and pain catastrophizing with the Pain Catastrophizing Scale (PCS). Sleep quality was assessed with the Pittsburgh Sleep Quality Index (PSQI). Multiple linear regression examined pain self-efficacy as the dependent variable and pain, disability, anxiety, depression, kinesiophobia, pain catastrophizing, and sleep quality as independent variables.

Results: A total of 96 individuals participated (72 women; mean age = 53.1 ± 10.8 years; BMI = 26.3 ± 4.8 kg/m²), including 57 with primary and 39 with secondary frozen shoulder. Depression, pain, and sleep quality were significantly associated with pain self-efficacy, explaining 34.4% of the variance ($F(3,92) = 17.63$, $p < 0.000$, adjusted $R^2 = 0.344$, RMSE = 10.40). The remaining variables were not significantly associated.

Conclusion: Depression, sleep quality, and pain intensity were associated with pain self-efficacy, accounting for 34.4% of its variance. Higher depression levels, poorer sleep quality, and greater pain intensity were linked to lower self-efficacy. These findings highlight the importance of integrating psychological support and sleep hygiene strategies into frozen shoulder rehabilitation.

Implications: A comprehensive, interdisciplinary approach addressing psychosocial factors and sleep disturbances may enhance pain self-efficacy and treatment outcomes in frozen shoulder. Incorporating psychological interventions and sleep hygiene into rehabilitation programs could improve adherence and effectiveness.

Keywords: Frozen shoulder, biopsychosocial model, depression

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THE BRAZILIAN VERSION OF THE ACTIVITY MANAGEMENT INVENTORY FOR PAIN: TRANSLATION AND CULTURAL ADAPTATION

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Background: Musculoskeletal chronic pain is a common condition that can limit daily and professional activities. Individuals with chronic pain may exhibit distinct activity-related behavior patterns. The Activity Management Inventory for Pain (AMI-P) is a 20-item instrument that evaluates behaviors related to rest, alternating and planned activities, as well as goals such as pain reduction, increased activity, and energy conservation. Although used in clinical and research contexts, the questionnaire has not yet been translated, adapted, or validated for the Brazilian population. A culturally adapted version of this instrument could provide a more accurate assessment of chronic pain.

Objectives: To translate and adapt the AMI-P questionnaire into Brazilian Portuguese.

Methods: This is a cross-sectional study that followed the recommendations of Beaton et al., 2000. This study was approved by the Ethics Research Committee. The original version of the AMI-P was translated into Portuguese by two Brazilian translators fluent in English. Subsequently, the translations were synthesized and then back translated into English by two native English speakers. Finally, a panel of experts reviewed all the translations and compared them with the original version to formulate the pretest version. The comprehensibility of the items in the pretest version was evaluated in 30 individuals. The pretesting phase included individuals of both sexes, aged over 18 years, with musculoskeletal low back chronic pain for at least 3 months and an intensity greater than 3 on the 11-point numerical pain scale. Each participant responded to the questionnaire, reported their understanding, and suggested modifications to the instrument. The instrument was considered acceptable if 90% of participants understood all the questions. All statistical analyses were conducted using Excel™ software (Microsoft, version 2019).

Results: The translation and back-translation processes showed no major discrepancies between versions, confirming semantic and conceptual alignment with the original instrument. The expert committee carefully reviewed the pretest version and made minor refinements to improve clarity while preserving the original intent. This version was then submitted to the authors of the original AMI-P, who recommended adjustments to the terms "social activities," "be better able to complete the task," "get more done," "too," "the most," and "predefined time" to ensure greater conceptual consistency with the original scale. Thirty patients participated in the pre-testing phase, with a mean age of 36.3 ± 17.35 years, body mass index of 25.78 ± 4.58 kg/m² and 19 (63, 33%) were women. The majority of participants (73.33%, n = 22) had a higher education level. The participants demonstrated a 90% level of understanding of all items of AMI-P, meeting the established criterion for adequate comprehensibility.

Conclusion: The Brazilian Portuguese version of the AMI-P was considered adequate and clear.

Implications: The Portuguese version of the AMI-P will be an important tool for the assessment of musculoskeletal chronic pain in Brazil. The assessment of the measurement properties is still necessary.

Keywords: Assessment instrument, Chronic pain, Physical activity

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DOES KINESIOPHOBIA INFLUENCE JUMP LANDING KINEMATICS IN WOMEN WITH PATELLOFEMORAL PAIN?

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Methods: Women aged 18 to 30 years with complaints of PFP participated in this study. Initially, anamnesis was performed, followed by the application of the Tampa Scale of Kinesiophobia. Subsequently, kinematic evaluation of the lower limb was conducted. Reflective markers were positioned on the dominant lower limb at the following anatomical points: anterior superior iliac spine, acromion, greater trochanter of the femur, center of the patella, lateral malleolus, and head of the fifth metatarsal. Volunteers were instructed to step onto a 30 cm box and perform a jump, landing on the ground using only the affected lower limb. The test was performed three times, and the following angles were calculated: hip flexion, pelvic tilt, knee flexion, knee valgus, and ankle dorsiflexion. For statistical analysis, Pearson's correlation test was used, with a significance level of $p < 0.05$.

Results: Knee flexion angles ($p = 0.008$, $r = 0.806$), ankle dorsiflexion ($p = 0.015$, $r = 0.517$), and pelvic tilt ($p = 0.043$, $r = 0.436$) during single-leg jump landing were associated with kinesiophobia levels in women with PFP.

Conclusion: Kinesiophobia alters movement patterns during single-leg jump landing, such that higher levels of kinesiophobia lead to the adoption of biomechanical adjustments in landing kinematics, which may result in greater joint overload.

Implications: This study demonstrated that kinesiophobia levels are related to altered movement patterns during activities that impose high patellofemoral loads. The reduction in knee flexion angle observed in women with PFP and kinesiophobia may represent an attempt to maintain joint stability and reduce pain during movement execution, considering that pain intensifies at greater flexion angles. However, landing from a jump with a stiffer knee, greater pelvic tilt, and reduced ankle mobility may decrease impact absorption and have deleterious effects on the joint in the medium and long term. Therefore, rehabilitation programs for PFP should include patient education strategies aimed at reducing kinesiophobia alongside resistance exercises to achieve more effective outcomes.

Keywords: Biomechanical Phenomena, Quality of Life, Patellofemoral Pain Syndrome

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CONDITIONED PAIN MODULATION AND DISABILITY IN PATIENTS AFTER TRAUMATIC MUSCULOSKELETAL INJURIES IN THE UPPER LIMB

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