Psychometric Properties of the PCS and the PCS-4 in Individuals With Musculoskeletal Pain

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Abstract

BACKGROUND: The factor structure of the Pain Catastrophizing Scale (PCS) has rarely been adequately analyzed (e.g., performing principal component analyses rather than factorial approximations). We aimed to evaluate the psychometric properties of the PCS through a variety of exploratory and confirmatory factorial approaches. METHOD: Three hundred ninety-four Chilean patients with musculoskeletal pain were included (age, M = 49.61, SD = 18.00; 71.57% women). Eight factorial models were proposed to analyze the structure of the data. In addition, validity evidence of the PCS based on relationships with other variables were analyzed considering pain intensity and kinesiophobia. RESULTS: The results suggest a unidimensional structure. Models with more than one dimension exhibited undesirable factor loadings or inadequate indices of fit. Based on these results, a short version of the scale composed of 4 items is proposed (PCS-4). The PCS-4 scores demonstrated high levels of invariance between sex, chronicity, and education groups and also were associated with pain and kinesiophobia. CONCLUSIONS: The results of the PCS-4 Spanish version showed evidence of reliability and validity for adequately measuring pain catastrophizing in Chileans who suffer from musculoskeletal pain. The PCS-4 is a short form that should be explored in future studies (e.g., in other Spanish-speaking populations).