Fear of Movement and Chronic Low Back Pain

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Abstract

Objective: The aim of the study was to examine the psychometric properties of the Czech version of the Tampa Scale for Kinesiophobia (TSK) and its validity for patients with chronic low back pain.

Methods: For a sample of n = 669 patients (64.5% women, average age M = 54.98, SD = 15.19), the following methods were used: TSK, Visual Analogue Scale/Intensity/Unpleasantness (VAS/I/U), Body Mass Index (BMI), Oswestry Disability Index (ODI) Generalized Anxiety Disorder-7 (GAD-7) and Beck Depression Inventory (BDI-II).

Results: A confirmatory factor analysis of the Czech version of TSK was performed. The two-factor 17-item model showed poor agreement of the model and the reverse-scored items had a very low saturation, so they were removed. The two-factor 13-item model showed better agreement of the model with the data than the one-factor model, with a strong correlation between the two factors (r = 0.824). Therefore, the 13 item one factor model TSK-CZ-13 was adopted as the final model (χ2 = 182.633; p <.001; df (64); SRMR = 0.054; RMSEA 90% CI = 0.057 (0.048-0.067); CFI = 0.908; TLI = 0.888). The internal consistency of the method is satisfactory (α = 0.812; ω = 0.804). TSK-CZ-13 correlated weakly with age (r = .105, p = .008), the difference between men M (SD) = 2.404 (.490) and women M (SD) = 2.271 (.470) was small (t (637) = 3.384, p = .001, d = 0.277). Differential validity of TSK-CZ-13 shows positive significant correlations with ODI (rs = .322; p <.01), BMI (rs = .119; p <.01), pain VAS/I (rs =. 322; p <.01), VAS/U (rs = .345; p <.01), GAD-7 (rs = .337; p <.01) and BDI-II (rs = .414; p <.01).

Conclusion: Fear of movement, measured by TSK-CZ-13, shows significant correlations with functional status, anxiety and depression.