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Clinical Study

Can brief measures effectively screen for pain and somatic malingering? Examination of the Modified Somatic Perception Questionnaire and Pain Disability Index

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Abstract

BACKGROUND CONTEXT: Recent rise in fraudulent disability claims in the United States has resulted in psychologists being increasingly called upon to use psychological tests to determine whether disability claims based on psychological or somatic/pain complaints are legitimate.
PURPOSE: To examine two brief measures, Modified Somatic Perception Questionnaire (MSPQ) and the Pain Disability Index (PDI), and their ability to screen for malingering in relation to the Bianchini et al. criteria for malingered pain-related disability published in *The Spine Journal* (2005).
STUDY DESIGN: Examined brief self-report measures between litigating and nonlitigating pain samples.
PATIENT SAMPLE: We compared 144 disability litigants, predominantly presenting a history of musculoskeletal injuries with psychiatric overlay, with 167 nonlitigating pain patients who were predominantly in treatment for chronic back pain issues and other musculoskeletal conditions.
OUTCOME MEASURES: Modified Somatic Perception Questionnaire, Pain Disability Index, Minnesota Multiphasic Personality Inventory-2 Restructured Form, Test of Memory Malingering, Letter Memory Test, Victoria Symptom Validity Test, Structured Interview of Reported Symptoms-second edition, Structured Clinical Interview for Diagnostic and Statistical Manual of Mental Disorders somatoform disorders module.
METHODS: We examined a sample of 144 individuals undergoing compensation-seeking evaluations in relation to 167 nonlitigating pain patients.
RESULTS: Group differences on both the MSPQ and PDI were calculated, as well as sensitivities, specificities, and positive and negative predictive powers for both measures at selected cutoffs.
CONCLUSIONS: The results suggest that both the MSPQ and PDI are useful to screen for pain malingering in forensic evaluations, especially the MSPQ, which performed the best in differentiating between the groups.

Keywords: Malingering; Somatic; Pain; MPRD; PDI; MSPQ

Introduction

The United States has recently seen a record number of disability recipients [1], and an increase in disability fraud, resulting in an estimated cost of 25 billion dollars for the United States between 2005 and 2009 [2]. In 2012, over 28% of existing disability claims were related to musculoskeletal/connective tissue problem and foot, ankle, and hand disorders [3]. Those tasked with evaluating disability

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claims must determine whether claims based on medical and psychiatric symptoms are legitimate. The task is complicated by the nature of disability determination that is often reliant on patient self-report of internal experiences (eg, emotional dysfunction, pain) without objective, verifiable data. Given the financial incentives associated with a disability award, it is necessary to examine the legitimacy of symptom complaints before determining disability status. The purpose of the present study is to examine the utility of two brief psychological measures, specifically the Pain Disability Index (PDI) [4] and the Modified Somatic Perception Questionnaire (MSPQ) [5] in screening for feigned somatic and pain symptoms.

The Diagnostic and Statistical Manual of Mental Disorders (DSM) [6,7] defines malingering as the intentional production of false or grossly exaggerated physical or psychological symptoms, motivated by external, secondary gain. However, the manual does little with regard to aiding in the assessment of malingering, providing little information in terms of its clinical presentation or associated features. Moreover, the DSM does not provide any specific criteria for diagnosing or classifying malingering, instead listing situations where malingering may be present (eg, medicolegal evaluations). The International Classification of Disease-ninth edition-clinical modifications [8] has a V-code (V65.2, person feigning illness) for malingering that is similar to the DSM-IV-text revision (TR)/DSM-5 classification of malingering and also lacks specific criteria for classifying the condition. Rogers and Bender [9] discussed how malingering can occur across various domains of functioning: psychological/psychiatric, cognitive, and somatic/physical. In light of how functioning (and conversely dysfunction) presents differentially across these domains, the assessment of symptom feigning must be multifaceted.

Malingering in the physical domain is particularly difficult to assess given differential diagnoses of other DSM-IV-TR/DSM-5 conditions, most notably the DSM-IV-TR somatoform disorders (eg, pain disorder, somatization disorder) and DSM-5 somatic symptom and related disorders (eg, somatic symptom disorder) that also involve the presentation of noncredible somatic symptoms [10].

Pain disorder is particularly relevant to the present study because the criteria for malingered pain-related disability (MPRD) are primarily associated with pain symptoms [11]. The DSM-IV-TR [6] characterized pain disorder as the presence of pain in one or more anatomical sites, coupled with psychological factors that influence the onset of the pain, causing significant distress or impairment in social, occupational, or other important areas of functioning (DSM-IV-TR pain disorder was replaced with somatic symptom disorder with predominant pain specifier in the DSM-5 to be more useful to primary care and other medical clinicians). Differentiating malingered pain and pain disorder/somatic symptom disorder with predominant pain requires examining whether the presented symptoms are intentional or conscious, and whether there is an external incentive [11]. This is difficult because of the current DSM conceptualization for malingering that is bereft of specific criteria.

Malingered pain is highly prevalent in civil litigation settings [12]. Greve et al. [12] recently found that malingered pain occurs in 20% to 50% of chronic pain patients where financial incentive is present. According to Mittenberg et al. [13], neuropsychologists estimate that the base rates of malingering and symptom exaggeration range from 8% of medical cases to 29% of personal injury and 30% of disability cases. This issue contributes to the increasing burden on our country's economy and health-care system, making it imperative to examine the ability of instruments and measures to detect symptom feigning consistent with malingering.

Malingering criteria

Several researchers have proposed criteria-based methods to aid in diagnosing specific types of malingering. Slick et al. [14] developed diagnostic criteria that are commonly used to assess malingered neurocognitive dysfunction (MND). Bianchini et al. [11] developed another set of criteria to specifically aid in the assessment of MPRD, published in *The Spine Journal* that were based on the MND criteria. The MND and MPRD criteria both conceptualize malingering as occurring in a dimensional fashion (ie, possible, probable, and definite malingering) depending on the extent of supporting evidence as determined by various criteria. These criteria include the presence of a substantial external incentive and evidence from observation, physical examination, neuropsychological testing (including symptom validity tests [SVT]), and self-report measures.

Since their development, several studies have examined the utility of the MPRD classification systems in both medical and forensic settings [15–18]. Wygant et al. [16] reported on the utility of the Minnesota multiphasic personality inventory-2 restructured form (MMPI-2-RF) validity scales in capturing malingering in a sample of personal injury and disability claimants classified with the MPRD criteria. Other studies have examined the classification accuracy of various malingering measures using the MPRD criteria to classify their malingering groups [12,15,17,18]. The MMPI-2 validity scales have shown good sensitivity (SENS) (>50%) in differentiating nonmalingering pain patients from malingering pain patients and simulated malingering college students with less than 10% false-positive rates [17]. Greve et al. [18] found that the Reliable Digit Span [19], a validated response bias indicator of feigned impairment embedded in the Wechsler Intelligence Scales, was able to differentiate between college students who were instructed to simulate MPRD from college students who were not instructed to malinger pain. Regarding prevalence, Greve et al. [12] used the MPRD