

RELIABILITY OF DEN BOER'S CRITERIA

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Introduction

The outcome of spinal surgery and other invasive treatments for pain is influenced by a number of psychosocial variables. One evidence-based method of presurgical psychological evaluation was developed by den Boer and colleagues, who employed a systematic review of the literature to identify the variables that research has determined to be most predictive of a poor response to spinal surgery. However, this method has never been standardized, and there has been no prior research on its reliability.

Objectives

The purpose of this study was to assess the test-retest reliability of den Boer's criteria for presurgical risk using the Battery For Health Improvement 2 (BHI-2) norms.

Methods

The BHI-2 was administered twice with a one-week interval to 86 patients in treatment for pain or injury. A standardized method to calculate den Boer's criteria for presurgical risk was used, where the risk score was calculated by employing a cutoff level of one standard deviation above the mean using the BHI 2 patient norms for scales and other variables, producing a score ranging from 0 to 9.

Results

The test-retest reliability of the den Boer score was .957.

Conclusions

Reliable methods are a prerequisite for clinical assessment. The method employed by this study to assess den Boer's criteria produced scores that were highly reliable over a one-week interval. Limitations of this study include the following:

- the reliabilities observed using this method would not apply to other methods of assessing den Boer's criteria, and
- the long-term reliability of this method remains unknown.

Further research is needed to develop standardized methods for the psychological assessment of patients undergoing treatment for chronic pain.

References

1. den Boer JJ, Oostendorp RA, Beems T, Munneke M, Oerlemans M, Evers AW. 2006 A systematic review of bio-psychosocial risk factors for an unfavourable outcome after lumbar disc surgery. *Eur Spine J.* 2006;15(5):527-536.
2. Bruns D, Disorbio JM. *Battery for Health Improvement 2 Manual.* Minneapolis: Pearson; 2003.

Method for Calculating Den Boer Criteria

Criteria	BHI 2 Sign
Depression	Depression T > 59
Anxiety	Anxiety T > 59
Somatization	Somatic Complaints T > 59
Pain	Pain Complaints T > 59
Function	Functional Complaints T > 59
Passive Coping	Symptom Dependency T > 59
Job Dissatisfaction	Job Dissatisfaction T > 59
Time Off Of Work	Days Off Of Work > 1006
Education	Education < High School

