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Three assessment tools for deliberate self-harm and suicide behavior: evaluation and psychopathological correlates☆

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Abstract

Objective: The aims of this study are to adapt two validated self-report questionnaires of deliberate self-harm and suicidal behavior to German, to investigate their psychometric properties and agreement with clinician-administered ratings, and to examine their psychopathological correlates. **Methods:** The Deliberate Self-Harm Inventory [Gratz KL. Measurement of deliberate self-harm: preliminary data on the deliberate self-harm inventory. *J Psychopathol Behav* 2001;23:253–263] and the Self-Harm Behavior Questionnaire [Guttierez PM, Osman A, Barrios FX, Kopper BA. Development and initial validation of the self-harm behavior questionnaire. *J Pers Assess* 2001;77:475–490] were completed by 361 patients hospitalized for depressive, anxiety, adjustment, somatoform, and/or eating disorders. A clinician-administered rating scale of self-destructive behavior was included. Psychopathological variables were assessed by standardized questionnaires. **Results:** The self-report questionnaires demonstrated good reliability (α=.81–.96, split-half r=.78–.98, test–retest r=.65–.91). Reliability of the clinician-administered ratings was acceptable (interrater κ=.46–.77, test–retest κ=.35–.48). Intraclass correlations (ICC=.68) for all three instruments were satisfactory. Rates of self-harm and associations between self-harm and suicidal behaviors are reported. The findings support the hypotheses of a higher degree of psychiatric symptomatology in patients with self-harm behavior compared to those without. **Conclusion:** The two questionnaire adaptations are reliable and valid self-report scales for the assessment of self-harm and past suicidal behavior.

Keywords: Assessment; Deliberate self-harm behavior; Psychometric evaluation; Questionnaire; Suicidal behavior

Introduction

Deliberate self-harm behavior is frequent in a variety of clinical and nonclinical groups, including psychiatric patients (4.3% to 17%) [1,2], college students (14% to 35%) [3,4], and the general population (4%) [5]. In a general hospital setting, open or disguised forms of self-harm must be expected among patients in all medical disciplines [6,7]. Although deliberate self-harm is a common symptom of borderline personality disorder, it is not specific to that disorder occurring across a variety of disorders, as well as among nonclinical samples [8]. Consequently, self-harm may be studied as a behavioral phenomenon "in its own right" [8].

Deliberate self-harm behavior has been defined as the intentional and direct destruction or alteration of body tissue, resulting in tissue damage [1,4,9,10]. Although many definitions of deliberate self-harm explicitly exclude behaviors with conscious suicidal intent, some researchers have

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argued that intent may not always be reliably measured, as patients may be ambivalent about their intent to die and/or may dissimulate their suicidal intention [11]. Moreover, given the high comorbidity of self-harm and suicidal behaviors, as well as evidence that a history of self-harm increases the risk of suicide [11–14], it may be important to assess for the presence of suicidal behaviors in studies on self-harm [15,16]. To ensure the comparability and replicability of studies on deliberate self-harm, we required standardized assessment instruments. Published approaches range from the use of single self-harm items [8] to more lengthy and elaborate instruments. Although several self-report questionnaires have undergone proper psychometric evaluation [4,15,17,18], German versions have not been available. The aims of our study are (1) to translate empirically supported self-report measures of self-harm into German, (2) to test their psychometric properties in clinical samples, (3) to cross-validate these instruments with each other and with a clinician-administered measure of self-harm, (4) to determine the rates of self-harm in mentally/behaviorally disordered (nonpsychotic) patients, and (5) to examine psychopathological correlates of self-harm.

Hypotheses

Instrument evaluation

A language-adapted instrument should have similar psychometric properties to the original version. We expected to replicate the original questionnaires' dimensional structures and to obtain comparable reliability values. Furthermore, given the past findings of gender differences in rates of suicidal behaviors but not in rates of nonsuicidal deliberate self-harm (for which an absence of gender differences has repeatedly been found), we expected suicidal behaviors to be reported at higher rates among women and deliberate self-harm to be reported at comparable rates among women than men [4,16,17]. Among this sample of psychosomatic patients, we expected to find rates of self-harm at least as high as those observed among psychiatric patients [1,2].

Correlates

Deliberate self-harm behavior has been found to be associated with higher levels of depression, hopelessness, anxiety, hostility, impulsivity, aggression, and narcissistic and paranoid personality traits, as well as lower levels of self-esteem [5,8,19–26]. We expected to replicate those findings in our sample. Moreover, given the evidence of reduced levels of optimism and self-efficacy among patients with overt self-harm (compared to those who concealed their self-harm [27]), we expected to find lower optimism and self-efficacy in patients with self-harm compared to those without. Finally, given that self-harm is considered to be a coping mechanism that functions to alleviate distress, we expected to find heightened levels of perceived stress among self-harming patients.

Methods

Subjects

The sample included 361 consecutive patients hospitalized in the Clinic for Internal Medicine's psychosomatic ward (i.e., patients with mental/behavioral disorders associated with at least one complex of somatic complaints or physical illness[1]). Main clinical diagnoses according to ICD-10 F were depressive disorders (24%), somatoform disorders (20%), adjustment disorders (17%), anxiety disorders (15%), eating disorders (15%), dissociative disorders (3%), and substance abuse/addiction (3%). These diagnoses were given by the attending physician or psychologist according to the guidelines of the ICD-10 following an unstandardized clinical interview. All the diagnoses were supervised by a senior physician. The most frequent somatic codiagnoses were high blood pressure (35%), metabolic diseases (33%), obesity (26%), heart disease (25%), chronic back pain including low back pain (24%), and tinnitus (18%). Mean age was 41.9 years (S.D.=14.9; range, 17–77 years). Two hundred forty-two subjects (67%) were female. Patients who were treated for less than 3 days, were not fluent in German, or could not read or write due to their illness were excluded. Nine patients did not consent to participate. The effective response rate was 88.7%.

Assessment

Two self-report questionnaires on deliberate self-harm behavior were completed by all 361 patients, 38 of whom completed the questionnaires a second time after an interval of 7 to 150 days (mean=68, median=59 days).

For comparison, a clinician-administered rating scale of self-destructive behavior was used with a convenience subsample of 240 patients. For economic and clinical reasons, the sampling schedule followed the rota, which provides that on 3 of 5 weekdays, there is one physician more attending on the ward. The clinicians' contribution was limited to the days with more staff. Most of the patients were assessed at two different points in time (i.e., upon admission and discharge). Specifically, for 104 patients, the same clinician completed the rating form twice. The interval between assessments ranged from 3 to 40 days (median= 8 days). For 97 patients, two clinicians independently completed the rating form.

The Deliberate Self-Harm Inventory (DSHI) [4] is a 17-item questionnaire based on the definition of deliberate self-harm as the deliberate, direct destruction of body tissue without conscious suicidal intent, but results in injury severe enough for tissue damage to occur. This measure assesses

[1] The German term would be "psychosomatic patients." Because there is no exact English translation, we keep to the term that is idiomatic in German.