Available online at www.sciencedirect.com

ScienceDirect

Comprehensive Psychiatry 72 (2017) 56–65

COMPREHENSIVE PSYCHIATRY

www.elsevier.com/locate/comppsych

Measuring attitudes towards suicide: Preliminary evaluation of an attitude towards suicide scale

Jan Christopher Cwik[a,*], Benedikt Till[b], Angela Bieda[a], Simon E. Blackwell[a,c], Carolin Walter[a], Tobias Teismann[a]

[a]*Mental Health Research and Treatment Center, Department of Psychology, Ruhr-Universität Bochum, Germany*
[b]*Suicide Research Unit, Institute of Social Medicine, Center for Public Health, Medical University of Vienna, Austria*
[c]*MRC Cognition and Brain Sciences Unit, Cambridge, UK*

Abstract

Objectives: Our study aimed to validate a previously published scale assessing attitudes towards suicide. Factor structure, convergent and discriminant validity, and predictive validity were investigated.
Method: Adult German participants (N = 503; mean age = 24.74 years; age range = 18–67 years) anonymously completed a set of questionnaires. An exploratory factor analysis was conducted, and incongruous items were deleted. Subsequently, scale properties of the reduced scale and its construct validity were analyzed. A confirmatory factor analysis was then conducted in an independent sample (N = 266; mean age = 28.77 years; age range = 18–88 years) to further confirm the factor structure of the questionnaire.
Results: Parallel analysis indicated a three-factor solution, which was also supported by confirmatory factor analysis: right to commit suicide, interpersonal gesture and resilience. The subscales demonstrated acceptable construct and discriminant validity. Cronbach's α for the subscales ranged from 0.67 to 0.83, explaining 49.70% of the total variance.
Conclusions: Positive attitudes towards suicide proved to be predictive of suicide risk status, providing preliminary evidence for the utility of the scale. Future studies aiming to reproduce the factor structure in a more heterogeneous sample are warranted.

1. Introduction

Suicide and suicide-related behaviors are widely acknowledged to be highly significant public health problems [1]. Understanding attitudes towards suicide may be useful in suicide prevention or in providing interventions to suicidal individuals. There is evidence that individuals with a more accepting view of suicide exhibit higher levels of suicidal ideation and are more likely to have attempted suicide in the past [2–4]. Gibb, Andover, and Beach [5] found attitudes towards suicide to account for variance in suicidal ideation that was not explained by levels of depressive symptoms or hopelessness. Furthermore, the authors demonstrated that levels of hopelessness and depressive symptoms were only related to suicide ideation among men with relatively positive attitudes towards suicide. The authors concluded that some individuals view suicide as an acceptable option under certain circumstances whereas others do not view it as acceptable under any circumstance. Therefore, knowledge about an individual's attitude towards suicide could provide important information regarding risk for suicide. Yet, attitudes towards suicide are not only important in an individual clinical context, but also on a broader public level. For example, Skruibus and colleagues [6] found that regional differences in suicide rates and suicide prevention policies are reflected in politicians' attitudes. This is particularly interesting, given that politicians are in a position to put suicide on the political agenda and to allocate the necessary resources to implement suicide prevention strategies.

All authors have agreed to authorship.

The study was approved by the ethics committee of the Faculty of Psychology at the Ruhr-Universität Bochum.

The study was not funded by any granting agency. There has been no prior publication.

* Corresponding author at: Mental Health Research and Treatment Center, Dept. Clinical Psychology and Psychotherapy, Ruhr-Universität Bochum, Massenbergstraße 11, 44787 Bochum, Germany. Tel.: +49 234 32 21503; fax: +49 234 32 14369.

E-mail address: jan.cwik@rub.de (J.C. Cwik).

http://dx.doi.org/10.1016/j.comppsych.2016.09.008
0010-440X/

However, as the study was correlational, the direction of influence – for example whether politicians' attitudes influence suicide prevention policies and suicide rates or vice versa – remains unknown.

Scales assessing attitudes towards suicide that are used in clinical settings and epidemiologic studies require adequate validity, reliability and high feasibility. Various instruments have been developed to measure attitudes towards suicide [7]: the most widely used is the Suicide Opinion Questionnaire [SOQ; 8], that comprises 100 items assessing different attitude domains (e.g., right to die, cry for help, sign of mental illness, religious evil) as well as knowledge about suicide. Various study groups have tried to identify interpretable subscales of the SOQ with factor or content analysis, but there is no consensus. Different researchers advocate a 15-factor-model, an eight-factor-model, a five-factor model or a two-factor structure [9]. Moreover, the different factor models have failed to be reproducible in subsequent studies [10] and in most studies internal consistencies were rather low (Cronbach's $\alpha < 0.70$) [7]. The absence of evidence for structural validity obstructs a reliable interpretation of the scores. Furthermore, the SOQ consists of too many items for use in clinical settings or large survey studies. Another frequently used measure, the Attitudes Towards Suicide Scale [ATTS; 11] was developed under the influence of the SOQ. It comprises 34 items loading on ten different factors (e.g., suicide as a right, incomprehensibility, non-communication). Significant associations between attitudes assessed with the ATTS and respondents' suicidal behavior have been found. Still, internal consistency was low for the instrument as a whole, and for some factors it was exceptionally low. Salander Renberg and Jacobsen [11] suspect that the ATTS is "measuring a too broad area of attitudes toward suicide". Given this background, further efforts in establishing a valid and reliable instrument to assess attitudes towards suicide are warranted.

In a study investigating media influence on attitudes towards suicide, Biblarz, Brown, Biblarz, Pilgrim, and Baldree [12] developed a 20-item self-report measure assessing cognitions concerning suicide. Half of the items of the scale were stated objectively (e.g., "Everyone has the right to commit suicide") and half were stated subjectively (e.g., "Even if I could not be with the person I love, I would not consider suicide"). The scale showed good re-retest reliability over a two-week interval ($r_{tt} = 0.80$, $p \leq 0.001$) and was sensitive to track changes due to an experimental manipulation. However, Biblarz et al. [12] did not report on internal consistency and factor structure of their scale. Till and colleagues [13] translated the scale into German and used it in a study on suicide portrayals in fictional films. They reported a rather low internal consistency of the scale ($\alpha = 0.65$). However, a thorough validation of the questionnaire has not been conducted so far. Therefore, the current study aims to examine the factor structure, reliability and construct validity of the German version of Cognitions Concerning Suicide Scale (CCSS) by Biblarz et al. [12]. In a first study, we used an exploratory approach in conducting the factor analysis based on a lack of previous exploration of the measure and no clear delineation of subscales. In a second study, we used the results of the exploratory factor analysis (EFA) to perform a confirmatory factor analysis (CFA) in order to further confirm the factor structure of the questionnaire.

2. Study 1: Exploratory factor analysis

2.1. Methods

2.1.1. Participants and procedure

Data for the present analyses were collected in two separate studies. The first study was an investigation of suicidal behavior in female students ($N = 258$) at the Ruhr-Universität Bochum and took place from January 2014 to April 2015. The second study was carried out by using an online survey questionnaire that was composed with SoSci Survey [14] and made available to participants ($N = 245$) on www.soscisurvey.com from September until December 2015. The latter study was open to women and men.

Participants in both studies were recruited via personal contact and postings on the noticeboards of the Ruhr-Universität Bochum as well as in relevant groups in the social media. Additionally, they were approached and informed that this was a study for which they could receive course credit via their participation. In both studies, persons who were interested in participation received a link to the online survey. The online survey was completed anonymously and participants could only proceed to the next questionnaire once all questions had been answered.

Prior to the assessments, the participants were informed about the purpose of the study, the voluntary nature of their participation, data storage, and security. Participants received information about the topic of the study and were informed that that the questionnaire could potentially be distressing for some people. People currently suffering from depressive mood or suicidal ideation were advised not to participate. In both studies, participants provided their informed consent, and after further reminder about confidentiality, they were provided with the link to the survey questionnaire. The ethics committee of the Ruhr-Universität Bochum approved both studies.

2.1.2. Measures

Cognitions Concerning Suicide Scale [CCSS; 12]. The CCSS is a 20-item self-report measure to assess attitudes towards suicide. The 20 items are answered on a six-point Likert scale ranging from "0 = *I disagree*" to "5 = *I agree*". The German version of the CCSS was developed by means of a translation-back-translation procedure according to relevant guidelines for the translation of psychometric instruments [15]. One member of the research group (BT)