Psychiatry Research 199 (2012) 65–69

Contents lists available at SciVerse ScienceDirect

Psychiatry Research

journal homepage: www.elsevier.com/locate/psychres

Self-stigma of mental illness scale—short form: Reliability and validity

Patrick W. Corrigan [a,*], Patrick J. Michaels [a], Eduardo Vega [b], Michael Gause [b], Amy C. Watson [c], Nicolas Rüsch [d]

[a] Illinois Institute of Technology, USA
[b] Mental Health Association of San Francisco, USA
[c] University of Illinois at Chicago, USA
[d] Psychiatric University Hospital Zürich, Switzerland

ARTICLE INFO

Article history:
Received 20 December 2011
Received in revised form
26 March 2012
Accepted 12 April 2012

Keywords:
Self-stigma
Reliability
Validity

ABSTRACT

The internalization of public stigma by persons with serious mental illnesses may lead to self-stigma, which harms self-esteem, self-efficacy, and empowerment. Previous research has evaluated a hierarchical model that distinguishes among stereotype awareness, agreement, application to self, and harm to self with the 40-item Self-Stigma of Mental Illness Scale (SSMIS). This study addressed SSMIS critiques (too long, contains offensive items that discourages test completion) by strategically omitting half of the original scale's items. Here we report reliability and validity of the 20-item short form (SSMIS-SF) based on data from three previous studies. Retained items were rated less offensive by a sample of consumers. Results indicated adequate internal consistencies for each subscale. Repeated measures ANOVAs showed subscale means progressively diminished from awareness to harm. In support of its validity, the harm subscale was found to be inversely and significantly related to self-esteem, self-efficacy, empowerment, and hope. After controlling for level of depression, these relationships remained significant with the exception of the relation between empowerment and harm SSMIS-SF subscale. Future research with the SSMIS-SF should evaluate its sensitivity to change and its stability through test-rest reliability.

1. Introduction

Mental Illness stigma exerts egregious effects in many ways (Hinshaw, 2006; Thornicroft, 2006). It may lead to public stigma, the prejudice and discrimination that result from the population endorsing stereotypes about people with mental illness. It may cause self-stigma, the focus of this paper. Self-stigma is the harmful impact that results from internalizing prejudice leading to diminished self-esteem, lower self-efficacy, and a sense of "why try" self-deprecation: why try to get a job, someone like me is not worth it (Markowitz, 1998; Perlick et al., 2001; Corrigan et al., 2009; Livingston and Boyd, 2010). It seems to undermine hope (Rüsch et al., 2009; Brohan et al., 2010) and may be the obverse of personal empowerment (Rüsch et al., 2006b; Yanos et al., 2008). Measures have attempted to assess self-stigma by examining a person's experience of stigma including their perceptions of specific stereotypes of mental illness (Ritsher et al., 2003; Ritsher and Phelan, 2004). Link (1987), for example, developed the Perceived Devaluation-Discrimination Questionnaire (PDDQ) which assessed whether people are aware of or can otherwise recognize the stereotypes of mental illness. Awareness, however, is not sufficient to explain the breadth of self-stigma experience. We previously proposed a four stage model of the process: (1) people must first be aware of the stereotypes about mental illnesses (e.g., the public believes most people with mental illnesses are to blame for their problems), (2) they then may agree with these stereotypes (I think most people with mental illness are to blame for their problems), (3) they apply the stereotypes to themselves (because I have a mental illness, I am to blame for my problems) and (4) they experience harm such as a loss of self-esteem (I currently respect myself less because I am to blame for my problems) (Corrigan and Watson, 2002). One implication of a progressive model is that the most harmful effects of self-stigma per se do not occur until later stages when the person has internalized the stigma. Instruments that accurately and reliably measure the ultimate results of such internalized stigma are crucial tools in the evaluation of programs geared to increase hopefulness and self-efficacy for recovery, as well as those with a specific focus on stigma change.

The Self-Stigma of Mental Illness Scale (SSMIS) was developed with a participatory action research (PAR) model as an assessment of this four stage model. We started with items from Links PDDQ and asked people with serious mental illnesses to generate a comprehensive list of stereotypes they believed currently plague those labeled with psychiatric disorders. Each stereotype was then crafted into items representing awareness, agreement, application, and harm. The 40 item SSMIS has shown strong reliability (Corrigan et al., 2006; Rüsch et al., 2006a; Corrigan et al., 2011) and various

* Correspondence to: Illinois Institute of Technology, College of Psychology, 3424 S State Street, Chicago, IL, USA. Tel.: +1 312 567 6751; fax: +1 312 567 6753.
E-mail address: corrigan@iit.edu (P.W. Corrigan).

0165-1781/$ - see front matter © 2012 Elsevier Ireland Ltd All rights reserved.
http://dx.doi.org/10.1016/j.psychres.2012.04.009

forms of validity (Corrigan et al., 2006; Rüsch et al., 2006a; Fung et al., 2007; Watson et al., 2007; Fung et al., 2008; Corrigan et al., 2011; Schomerus et al., 2011). Unfortunately, two critiques followed. First, consumers either participating in studies using the measure or reviewing it for subsequent PAR endeavors report individual items to be especially offensive: e.g., people with mental illness are disgusting, below average in intelligence, or dirty and unkempt. One result was research participants who decided not to complete the scale because of its harsh tone. Some program evaluators avoided using the scale as a stigma outcomes measure. Second, a forty item measure often exceeds available assessment time for studies examining self-stigma. Hence, we sought to produce a shorter version of the SSMIS by striking particularly offensive items. This paper reports psychometrics of the short form (SSMIS-SF) by re-examining data from earlier studies that administered the 40-item version of the SSMIS (Corrigan et al., 2006; Rüsch et al., 2006a,b; Corrigan et al., 2011).

2. Methods

2.1. Creation of the self-stigma of mental illness scale short form (SSMIS-SF)

Thirteen consumers of mental health services rated the ten stereotypes that comprise the 40-item SSMIS (hereafter SSMIS-40) items on three dimensions—disrespect, shock, and offense—using a ten point Likert agreement scale (10=highly agree). We summed the three ratings into an overall index representing offensiveness of each item. The five of ten stereotype items rated as least offensive were then selected for the short form: persons with mental illness: are unpredictable, will not recover or get better, are dangerous, are to blame for their problems, and are unable to take care of themselves. Note that these statements may still be perceived insulting but unfortunately that is the nature of stigmatizing ideas. We also determined Pearson product moment correlations representing associations between individual items and total subscale score on the three sets of data described more fully below. There was no difference in means of item-total correlations between those omitted from the short form and the five that remain.

In earlier research, self-stigma progression was assessed using the 40-item Self-Stigma of Mental Illness Scale (SSMIS-40; Corrigan et al., 2006; Watson et al., 2007). The measure is divided into four subscales representing awareness (e.g., "I think the public believes most persons with mental illness are dangerous."), agreement ("I think most persons with mental illness are dangerous."), application ("Because I have a mental illness, I am dangerous."), and harm to self-esteem ("I currently respect myself less because I am dangerous."). The scale has excellent internal consistency and concurrent validity (Corrigan et al., 2006; Rüsch et al., 2006a; Watson et al., 2007). Research participants respond to items using a nine-point agreement scale (9=strongly agree). In the analyses reported herein, scale scores were determined by summing only the five items for each subscale that remained in the short-form, yielding a range of scores between 5 and 45 for each of the four subscales.

2.2. Data from three previous studies

We then sought to examine psychometric qualities of the short form using data sets from three prior studies (Table 1 summarizes demographics across studies). The first study (Corrigan et al., 2006) comprised 71 persons with serious mental illness who were, on average, 44.5 years old (SD=8.5) and 55.0% female. Although frequency of diagnoses comprising serious mental illness was not available, participants included people with schizophrenia, schizoaffective disorder, and bipolar disorder. The sample was 23.3% African American, 70.0% European American, and 6% other including Native and Asian American. Only 1.7% of participants acknowledged Latino ethnicity. In terms of marital status, 41.7% were never married, 6.7% currently married, 48.3% separated or divorced, and 3.3% widowed. We sought to validate the SSMIS-40 in our earlier research (and hence the SSMIS-SF in this paper) using scales reflecting constructs related to self-stigma. The Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1965) was used to measure self-esteem in this sample. This 10-item measure yields a single overall, reliable score that has been widely shown to be valid and is frequently used in psychological research on self-esteem (Torrey et al., 2000). The Sherer and Adams Self-Efficacy Scale (SASES; Sherer and Adams, 1983) was included to assess self-efficacy. Perceived self-efficacy is concerned with people's beliefs in their capabilities to mobilize personal resources that help them to exercise control over events in their life (Bandura, 1989). The SASES comprises 23 items measuring expectation of personal ability to initiate and persist in behavior. We used an overall scale score for this study. Personal empowerment was assessed using the Empowerment Scale (ES; Rogers et al., 1997, 2010). The ES comprised 28 items which research participants responded to on a 4 point agreement scale. The overall ES scale score was used to assess personal empowerment in this study.

Table 1
Comparable demographic characteristics reported in each sample.

	Corrigan et al. (2006)	Rüsch et al. (2006a,b)		Corrigan et al. (2011)
		BPD	SP	
No. of sample	71	60	30	85
Age (Mean)	44.5	27.8	35.1	44.8
Female (%)	55	100	100	32

Note: BPD=Borderline Personality Disorder; SP=Social Phobia.

One concern in studying the self-stigma of mental illness is distinguishing specific effects on self-esteem from the depression (compared to other psychiatric symptoms) frequently experienced in this population. Hence, we administered the UCLA Extended Version of the Brief Psychiatric Rating Scale to measure depression symptoms (Ventura et al., 1993; Mueser et al., 1997). Raters administering the BPRS were trained to criterion levels of inter-rater reliability (ICC > .80) in our lab. The depression factor score of the scale was used in analyses.

The second sample (Rüsch et al., 2006a,b) comprised 60 women meeting DSM-IV criteria for with borderline personality disorder and 30 women diagnosed with social phobia who were, on average 27.8 years old (SD=6.9) and 35.1 years old (SD=11.9). This study was conducted in Freiburg, Germany and all participants were native German speakers. Average education was 10.5 years (SD=1.5) for women with borderline personality disorder and 11.9 years (SD=1.7) for those with social phobia. This study used the RSES, SASES, and ES to assess self-esteem, self-efficacy, and empowerment, respectively. Awareness of stereotypes was independently assessed using the 12-item Perceived Devaluation-Discrimination Questionnaire (PDDQ; Link et al., 1989; Perlick et al., 2001). PDDQ items are rated on a six-point scale. The scale has excellent psychometric properties and has been shown to predict deterioration in self-esteem and increased depression (Link et al., 1997). Depression was measured for this sample using the 20-item Center for Epidemiologic Studies Depression Scale (CESD; Radloff, 1977) with higher scores representing higher levels of depression. The CESD had been previously used in Germany with good psychometrics. The other scales were translated and back-translated by two bilingual investigators prior to the study, with disparate items across translations reconciled by the two investigators.

The third sample (Corrigan et al., 2011) comprised eighty-five persons with the following diagnoses: 27% with schizophrenia, 26% schizoaffective disorder, 35% bipolar disorder, and 12% recurrent unipolar major depressive disorder. They had mean age of 44.8 years old (SD=9.7), mean of 13.5 years of education (SD=2.3), and were 68% male. More than half (58%) were African American and about a third (34%) European American, while a few reported Latino (5%), and mixed or other ethnicities (4%). They completed the RSES, PDDQ, and CESD. In addition, they were administered the Internalized Stigma of Mental Illness Scale (ISMIS), a measure of Ritsher's model of self-stigma that contains 29 Likert items rated on a four-point agreement scale (4=strongly agree). The ISMIS has five subscales: alienation, stereotype endorsement, discrimination experience, social withdrawal, and stigma resistance (Ritsher et al., 2003; Ritsher and Phelan, 2004). The first four of the five factors have good test–retest reliability and internal consistency and hence were used in the study. A single overall score of these four scales was determined from the sum of these scales. Finally, hope was assessed using the Beck Hopelessness Scale (BHS; Beck et al., 1974; Steed, 2001). It is a 20-item scale that represents life expectations. The overall scale score ranged from 20 to 100; for this study, the higher the BHS score, the lower the hope. The instrument has shown excellent reliability and construct validity (McMillan et al., 2007).

3. Results

Table 2 summarizes descriptive statistics and internal consistencies for the short form scales for the three data sets. First we consider the progressive model as trickle-down in nature. Specifically, endorsing items related to applying a stereotype to one's self must be preceded by higher scores in agreeing with the stereotype which must, in turn, be preceded by awareness of the stereotype. The assumption is partially supported in means of the four factors across the four samples. The bottom row of Table 2 summarizes oneway within subject ANOVAs across SSMIS subscales for the three groups of data and were highly significant with eta^2 ranging from 0.56 to 0.79. As per Cohen (1992), these