# Reliability/Validity of the Self-Stigma of Mental Illness Scale (SSMIS) Amy E. Sickel, Ph.D., Jason D. Seacat, Ph.D., & Nina A. Nabors, Ph.D.

## **Abstract**

Most individuals diagnosed with mental illness are mild-moderate in severity. Research on the Self-Stigma of Mental Illness Scale (SSMIS) has traditionally focused on stigma associated with severely mentally ill individuals using clinical samples, leaving the psychometric properties of the SSMIS questionable when used with less severely ill individuals. Data from a non-clinical sample of 423 adults indicates the SSMIS scales are reliable. Correlations between the SSMIS scales and mental health scales provide convergent validity for the SSMIS. Findings suggest the SSMIS scales are reliable and valid when used within this population and suggest future directions for mental health stigma (MHS) model building in non-clinical populations.

#### **Problem**

The SSMIS has been used to assess the extent to which individuals recognize MHS, endorse that stigma definition, apply that stigma definition to self and subsequently find the stigma to be harmful (Corrigan, Watson, & Barr, 2006). This measure was initially tested on a clinical population with individuals having serious mental illness (Corrigan, Watson, & Barr, 2006; Corrigan, Rafacz, & Rusch, 2011). The problem is the lack of literature on the psychometric properties of the SSMIS when used with mild-moderately mentally ill individuals sampled from non-clinical populations.

# Purpose

The Purpose of this study was to quantitatively test the reliability and validity of the SSMIS when applied to mild-moderately mentally ill individuals sampled from a non-clinical population.

#### **Relevant Literature**

MHS is a social cognitive process in which public perceptions about what it means to have a mental illness are cognitively perceived and interpreted by the individual having a mental illness who then applies those stereotypes to him/herself (Corrigan, 2004; Goffman, 1963; Corrigan & Kleinlein, 2005; Pescosolido, Olafsdottir, Martin, & Long, 2008). MHS is increasingly recognized for its detrimental impact on a wide array of human needs (Maslow, 1943) including employment (Ngui, Khasakhala, Ndetei, & Roberts, 2010), housing (Peterson, et al., 2006), relationships with others (Boyd, Katz, Link, & Phelan, 2010) including caregivers (Wallace, 2012), physical health (Bahm & Forchuk, 2008), mental health (Verhaeghe, Bracke, & Christiaens, 2010) and mental health treatment seeking (Mojtabai, et al. (2011) and self-perception (Watson, Corrigan, Larson, & Sells, 2007).

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## **Relevant Literature Continued**

The SSMIS is a measure of MHS which has been utilized predominantly with clinical populations having severe mental illness (Corrigan, Watson, & Barr, 2006; Corrigan, Rafacz, & Rusch, 2011). Given the increasing number of individuals reporting mild-moderate mental illness (Kessler, Chiu, Demler & Walters, 2005), it is important to assess the psychometric qualities of this measure using a sample of less severely ill individuals from a non-clinical population.

### **Research Questions**

- 1) Is the SSMIS a reliable measure using a sample of less severe mentally ill individuals from a non-clinical population?
- 2) Does the SSMIS demonstrate convergent validity relative to commonly used scales assessing mental health with a non-clinical population?

#### **Procedures**

The current analyses are part of a larger study on MHS and are therefore a secondary analysis. Prior to commencing, the larger study was reviewed and approved by the Institutional Review Board of a large online university. A total of 423 adults aged 24-45 were recruited through an online research participation pool. Interested participants provided informed consent and completed an online survey that assessed relevant demographic variables, general self-efficacy, self-esteem, depression, anxiety, and MHS. The entire survey took approximately 45-60 minutes to complete. Following survey completion, all participants were thanked for their time and provided with information regarding mental health services.

# **Data Analysis**

- 1) Descriptive analyses including means, standard deviations, and frequencies were run (Tables 1 and 2, attached).
- 2) Cronbach's alphas were computed on the five SSMIS scales (4 subscales plus overall stigma scale; here and in Table 3 attached).
- 3) Zero order correlations were run to test for potential confounds identified a priori of demographic variables, stigma variables and mental health variables of general self-efficacy, self-esteem, depression, and anxiety (Table 4, attached).
- 4) Partial correlations controlling for demographic variables found significant at the bivariate level were run between stigma and mental health variables (here and in Table 5 attached).

# **Main Findings**

Due to space constraints, only data for the direct tests of the two main research questions are presented here. All analyses are presented via Tables in handout.

#### 1) Cronbach's Alphas

Stereotype Awareness/(SSMIS1)
Stereotype Agreement/(SSMIS2)
Stereotype Application to Self/(SSMIS3)
Stereotype Harm to Self/(SSMIS4)
Total Stigma

2) Partial Correlations between Stigma, General Self-Efficacy, Self-Esteem, Depression, and Anxiety Variables Controlling for Gender, Age, Race/Ethnicity, Employment, Income, and Military Status

	GSE	RSE	BDI	BAI
SSMIS1	052	105**	.196***	.195***
SSMIS2	025	035	.047	.066
SSMIS3	123**	274***	.230***	.201***
SSMIS4	061	171***	.102**	.123**
SSMIS Total	103**	231***	.232***	.235***

*Note:* \*\*p<.05. \*\*\*p<.01.

## Limitations

The problem identified was the lack of literature on the psychometric properties of the SSMIS within mild-moderately mentally ill individuals sampled from non-clinical populations (Corrigan, Watson, & Barr, 2006; Corrigan, Rafacz, & Rusch, 2011). The current analysis was part of a larger study testing a model examining MHS and physical/mental health. As such, these findings are considered preliminary. Second, these data were obtained through online survey format so we are therefore assuming participants were accurate and honest in their self-reporting. Last, because this study utilized a convenience sample, these findings are generalizable only to the extent that subsequent samples reflect parameters indicated in the current sample.

## Conclusions

- 1) The internal consistencies of the five tested SSMIS scales were high, indicating that for this sample, the SSMIS to be reliable in terms of internal consistency, higher than reported alphas (Corrigan, Watson, & Barr, 2006).
- 2) The partial correlations provide support for the convergent validity of SSMIS1, SSMIS3, SSMIS4 and the SSMIS Total scales. These overall findings are consistent with existing literature (Corrigan, Watson, & Barr, 2006) indicating MHS to be associated with decreased general self-efficacy and self-esteem along with increased depression and anxiety.
- 3) Also consistent with existing research (Corrigan, Watson, & Barr, 2006), the SSMIS2/Stereotype Agreement scale did not relate to any of the four mental health measures, suggesting additional research on how stigma agreement may differ conceptually in samples of mild-moderately mentally ill individuals using non-clinical populations.
- 4) These correlations provide insight to factors critical to MHS thereby suggesting future directions for MHS model building.

# Social Change Implications

- •The results will contribute to existing psychometric data on the reliability/validity of the SSMIS.
- •Findings suggest the SSMIS is reliable and valid when used in samples of mild-moderately mentally ill individuals using non-clinical populations.
- •Using a sample of diverse adults fosters the generalizability of the results to several different populations based on age, ethnicity, and socioeconomic status.
- •These findings may also serve to inform future theory development.

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