Implicit Self-Stigma in People With Mental Illness

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Abstract: People with mental illness often internalize negative stereotypes, resulting in self-stigma and low self-esteem (“People with mental illness are bad and therefore I am bad, too”). Despite strong evidence for self-stigma’s negative impact as assessed by self-report measures, it is unclear whether self-stigma operates in an automatic, implicit manner, potentially outside conscious awareness and control. We therefore assessed (i) negative implicit attitudes toward mental illness and (ii) low implicit self-esteem using 2 Brief Implicit Association Tests in 85 people with mental illness. Implicit self-stigma was operationalized as the product of both implicit measures. Explicit self-stigma and quality of life were assessed by self-report. Greater implicit and explicit self-stigma independently predicted lower quality of life after controlling for depressive symptoms, diagnosis, and demographic variables. Our results suggest that implicit self-stigma is a measurable construct and is associated with negative outcomes. Attempts to reduce self-stigma should take implicit processes into account.

Key Words: Self-stigma, Implicit Association Test, attitudes, self-esteem, quality of life, implicit cognition.

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Stigma is a burden on many people with mental illness and a major clinical and public health issue that worsens the course and outcome of mental illness (Corrigan, 2005; Hinshaw, 2007; Thornicroft, 2006). Stigmatized individuals face public discrimination and are targets of negative stereotypes; moreover, they often agree with these stereotypes and apply them to themselves, resulting in low self-esteem (Corrigan and Watson, 2002). This process is referred to as self-stigma and is the focus of the current paper. Self-stigma comprises both a negative attitude toward mental illness and low self-esteem, such that a person who explicitly self-stigmatizes might say “People with mental illness are bad and therefore I am bad, too.” Self-stigma is typically associated with noteworthy negative outcomes such as low quality of life (Link et al., 1997; Ritsher and Phelan, 2004; Rüschi et al., 2005, 2006).

To the best of our knowledge, self-stigma has been studied exclusively using explicit responses to interviews or questionnaires. However, self-report measures may be inadequate in capturing a complete picture of self-stigma, suggesting the need for alternative assessments. The evaluations that people reach after thoughtful deliberation may diverge from their initial, immediate, and more automatic evaluative impulses (Gawronski and Bodenhausen, 2006; Greenwald et al., 2009; Rüschi et al., 2007; Teachman et al., 2006). Like other cognitive processes, we expect self-stigma to operate at both explicit-deliberate and more implicit-automatic levels, possibly outside conscious awareness or control. Studying implicit aspects of self-stigma is important for two reasons. First, people with mental illness may not be able or willing to disclose self-stigma explicitly in self-report measures. For example, individuals with mental illness who exhibit both a negative attitude toward mental illness and low implicit self-esteem may not explicitly indicate their self-stigmatizing attitude in a questionnaire, due to self-presentational strategies or because they are partly unaware of their automatic evaluations. Second, implicit self-stigma may have different emotional or behavioral consequences than explicit self-stigma (Gawronski and Bodenhausen, 2006). For instance, implicit self-stigma may be especially relevant in shaping aspects of social interactions that occur spontaneously and without much conscious deliberation (such as many kinds of nonverbal behavior; Dovidio et al., 1997). If so, it would be important to assess implicit as well as explicit processes to fully grasp self-stigma’s impact on people with mental illness.

Paralleling the elements of explicit self-stigma as measured by self-report (agreement with negative stereotypes and low self-esteem; Corrigan et al., 2006), we conceptualize implicit self-stigma as a combination of (i) a negative implicit attitude toward mental illness and (ii) low implicit self-esteem. We used 2 Brief Implicit Association Tests (BIAT; Sriram and Greenwald, 2009) to measure implicit attitudes toward mental illness and implicit self-esteem. The BIAT is a computer-based task that uses reaction-time measurements in response to written stimuli to determine the relative strength of implicit associations between concepts (e.g., Mental Illness) and attributes (e.g., Bad), based on the notion that quicker processing speeds equate with stronger associations.

Despite strong interest in both mental illness stigma and implicit measures, there is little research that brings the 2 strands together (Stier and Hinshaw, 2007). To the best of our knowledge, only Teachman et al. (2006) have studied implicit attitudes toward mental illness among stigmatized individuals, but they did not examine implicit self-esteem. While Teachman and her coworkers have provided crucial initial evidence that people with mental illness possess implicit negative attitudes toward mental illness, the link between implicit negative attitudes and low implicit self-esteem (i.e., implicit self-stigma) has not been investigated. Other recent work has studied implicit attitudes toward mental illness among members of the public (Lincoln et al., 2008; Peris et al., 2008), but not in people with mental illness. Building on this important work, we aimed to measure implicit self-stigma in people with mental illness. This study examined the hypothesis that implicit self-stigma predicts low quality of life independently of explicit, self-reported self-stigma. We chose a conservative design, controlling for depressive symptoms as well as diagnoses and demographic variables.

METHODS

Participants

Eighty-five persons with mental illness were recruited at mental health service centers in the Chicago area as part of a
larger study on mental illness stigma (Rüschi et al., 2009a, 2009b, 2009c, 2009e, 2010a, 2010b). An eighth grade reading level as assessed by the Wide Range Achievement Test (Wilkinson and Robertson, 2006) was required for the BIATs, which used written stimuli. Physical disability was an exclusion criterion to avoid confounds in the BIATs that used physical disability as a comparison category for mental illness. All participants gave written informed consent after being fully informed about the study procedures. The study was approved by the institutional review boards of the Illinois Institute of Technology and collaborating organizations. Participants were, on average, about 45 years old (M = 44.8, SD = 9.7), had a mean of 13.5 years of education (SD = 2.3), and were 68% male. More than half (58%) were African American, about a third (34%) were Caucasian, while a few reported Hispanic or Latino (5%), and mixed or other ethnicities (4%). Axis I diagnoses were made using the Mini-International Neuropsychiatric Interview (Sheehan et al., 1998) based on DSM-IV criteria. Twenty-three (27%) participants had schizophrenia, 22 (26%) schizoaffective disorder, 30 (35%) bipolar I or II disorder, and 10 (12%) participants had recurrent unipolar major depressive disorder. In addition, in the entire sample, 33 (39%) participants had comorbid current alcohol or substance-related abuse or dependence.

Self-Report Measures

Self-stigma implies that people with mental illness are not only aware of public stereotypes, but also agree with them and apply them to themselves, resulting in low self-esteem. We measured self-stigma using the 10-item self-esteem decrement subscale of Corrigan’s Self-Stigma in Mental Illness Scale (Corrigan et al., 2006, Rüschi et al., 2006; Cronbach alpha = 0.88). Items are rated from 1 to 9, with higher scores indicating more self-stigma. Following an introductory sentence (“We would like to know how these attitudes currently affect your self-esteem or how much you respect yourself”), items include statements such as “I currently respect myself less because I cannot be trusted” and “I currently respect myself less because I am unpredictable.”

Low quality of life as a consequence of self-stigma was assessed using the 17-item subjective component of Lehman’s (1988) Quality of Life Interview, which has been used extensively in people with serious mental illness. Higher scores indicate better quality of life (Cronbach alpha = 0.91). Depressive symptoms were measured using the 20-item Center for Epidemiologic Studies Depression Scale (Radloff, 1977), with higher scores representing higher levels of depression (Cronbach alpha = 0.92).

Implicit Measures

We used a computer-based reaction-time measure, the Brief Implicit Association Test (SRIRAM and Greenwald, 2009), to assess implicit self-stigma; this shorter version of the standard Implicit Association Test (IAT; Greenwald et al., 1998) was selected because we expected that more participants would complete the less extensive version of the task. It was recently used to measure implicit attitudes toward psychiatric medication among the same participants (Rüschi et al., 2009d). The logic of the task is that written stimuli are classified more quickly during one block when the target and attribute category pairing (e.g., Mental Illness–Bad in one BIAT, or Not Me–Good in the other BIAT) matches respondents’ automatic associations with the target categories versus during the other block when the target and attribute category pairing is mismatched (e.g., Mental Illness–Good in one BIAT, or Me–Good in the other BIAT).

Therefore, a participant with a negative implicit attitude toward mental illness is expected to respond more quickly during the block when the categories Mental Illness–Bad are paired (relative to the Mental Illness–Good pairing in the other block of the same BIAT). Likewise, a person with low implicit self-esteem will respond more quickly when Not Me–Good categories are paired (as compared with the Me–Good pairing in the other block). By comparing reaction times between both blocks within each BIAT, the 2 BIATs yield measures of implicit evaluative associations with mental illness and of implicit self-esteem, respectively.

During the BIATs, participants classified a series of words that appeared on the screen into superordinate categories by pressing either a left-hand or a right-hand key on the keyboard. As described below, each BIAT contained 4 categories, and 4 written stimuli belonged to each of these 4 categories. In 2 BIATs measuring the association between Mental Illness and Good, the target categories were “Mental Illness” versus “Physical Disability,” and the attribute categories were “Good” versus “Bad.” For the BIAT measuring implicit self-esteem, the target categories were “Me” versus “Not Me,” and the attribute categories were again “Good” versus “Bad.” Unlike the standard IAT, in the BIAT one of the 4 categories is never shown on the screen and is therefore a nonfocal category (Physical Disability in the first, Bad in the second BIAT).

BIAT data with more than 30% errors were excluded from analyses (Teachman and Woody, 2003), leaving 78 participants with both valid Mental Illness–Good and valid Me–Good BIATs. We used the following written stimuli (in parentheses), 4 for each category: Mental Illness (mentally disturbed, mental illness, mentally unbalanced, mentally ill), Physical Disability (physically impaired, physical disability, physically handicapped), Me (me, my, mine, myself), Not Me (not me, they, them), Good (wonderful, good, nice, excellent), and Bad (bad, terrible, nasty, horrible). The order of BIATs and of blocks within each BIAT was counterbalanced across participants. BIAT scores were calculated using the improved scoring algorithm, resulting in a z-score (Greenwald et al., 2003). More positive values represent a stronger association between Mental Illness and Good or between Me and Good, respectively. Before calculating the implicit self-stigma score as the product term of the 2 BIAT scores (“Mental Illness–Good” BIAT by “Me–Good” BIAT), both scores were z-standardized and a constant of 5 was added so that all scores were greater than zero. The product term scores were reversed such that higher scores represent higher levels of implicit self-stigma. Implicit self-stigma was operationalized as the product of both BIAT scores (i.e., a negative implicit attitude toward mental illness and low implicit self-esteem) because either one, in the absence of the other, would not represent implicit self-stigma.

RESULTS

To examine our hypothesis that implicit and explicit self-stigma independently predict lower quality of life, we calculated linear regressions on quality of life with explicit and implicit self-stigma scores as predictor variables (Table 1). Lower levels of explicit as well as implicit self-stigma independently predicted higher quality of life, explaining nearly a third of the variance. The 2 predictor variables were unrelated (r = 0.02, p = 0.86).

Because depressive symptoms are typically related to both quality of life and self-stigma (Rüschi et al., 2006), we repeated the regression controlling for depressive symptoms. As expected, more depressive symptoms predicted lower quality of life, but both self-stigma variables remained independently significant predictors. Finally, in a third regression we also controlled for diagnoses (schizophrenia/schizoaffective disorder vs. bipolar disorder/unipolar depression; and presence vs. absence of a current substance-related disorder as dummy-coded variables) and demographic variables (Table 1). Diagnoses or demographic variables were not associated with quality of life, and explicit and implicit self-stigma remained significant predictors, with the last regression explaining nearly half of quality of life’s variance. Repeating the last
regression with schizophrenia, schizoaffective, bipolar, and unipolar depressive disorder as separate independent variables (dummy-coded as present vs. absent, instead of one summary variable as in Table 1) results were unchanged, that is, implicit and explicit self-stigma remained significant predictors of quality of life, but diagnoses were nonsignificant.

**DISCUSSION**

Our results suggest that implicit self-stigma can be measured in people with mental illness as the product of a negative implicit attitude toward mental illness and low implicit self-esteem. Implicit self-stigma predicted poor quality of life independently of explicit self-stigma, even after controlling for depressive symptoms. Because including diagnoses and demographic variables as predictors did not change our results, the findings seem to apply to people with mental illness in general, independent of their individual diagnosis and demographic characteristics. Further, the fact that implicit and explicit self-stigma measures were unrelated indicates that they reflect distinct aspects of self-stigma and should be assessed separately.

These results may have implications for interventions designed to reduce self-stigma, which recently have attracted increasing attention in therapeutic group (Knight et al., 2006; MacInnes and Wassel, 2006), peer-support (Clay et al., 2005) and individual settings using narrative approaches (Lysaker et al., 2007). If a person with mental illness is not able or willing to disclose implicit aspects of self-stigma, this can pose challenges for consumers and clinicians alike. Both cognitive-behavioral and psychodynamic approaches might therefore want to address implicit self-stigma, these could be referred to as cognitive schemata or unconscious processes in the respective conceptual frameworks.

Limitations of our study need to be considered. First, our data are cross-sectional and therefore cannot determine causality; future studies should assess the association of self-stigma with other outcomes and stigma-related behaviors over time. Second, our conclusions are limited to persons who participate in outpatient services; future studies should investigate the association of implicit self-stigma with attitudes toward treatment, service use, insight, and diagnoses not investigated in our study (e.g., personality disorders). Third, while implicit self-stigma as operationalized in this study includes the 2 key components of negative implicit attitudes and low implicit self-esteem and was associated with quality of life independently of depressive symptoms and diagnoses, we cannot rule out the possibility that other factors influence implicit attitudes and self-esteem, with low self-esteem being independent of attitudes and self-stigma. Therefore, future work could experimentally manipulate implicit attitudes (e.g., Olson and Fazio, 2001) and implicit self-esteem (e.g., Dijksterhuis, 2004), assessing situational self-stigma and its consequences. Finally, variants of the BIAT design (such as Bad versus Not Me as the nonfocal category in a BIAT measuring implicit self-esteem) and their impact on measures of implicit self-stigma should be examined. Despite these limitations, we present initial evidence that self-stigma operates at implicit as well as explicit levels and that both components are independently associated with reduced quality of life. Interventions to counteract self-stigma’s impact could benefit from addressing implicit processes.

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**REFERENCES**


