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Automatic stereotyping against people with schizophrenia, schizoaffective and affective disorders

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ABSTRACT

Similar to members of the public, people with mental illness may exhibit general negative automatic prejudice against their own group. However, it is unclear whether more specific negative stereotypes are automatically activated among diagnosed individuals and how such automatic stereotyping may be related to self-reported attitudes and emotional reactions. We therefore studied automatically activated reactions toward mental illness among 85 people with schizophrenia, schizoaffective or affective disorders as well as among 50 members of the general public, using a Lexical Decision Task to measure automatic stereotyping. Deliberately endorsed attitudes and emotional reactions were assessed by self-report. Independent of diagnosis, people with mental illness showed less negative automatic stereotyping than did members of the public. Among members of the public, stronger automatic stereotyping was associated with more self-reported shame about a potential mental illness and more anger toward stigmatized individuals. Reduced automatic stereotyping in the diagnosed group suggests that people with mental illness might not entirely internalize societal stigma. Among members of the public, automatic stereotyping predicted negative emotional reactions to people with mental illness. Initiatives to reduce the impact of public stigma and internalized stigma should take automatic stereotyping and related emotional aspects of stigma into account.

1. Introduction

Stigmatizing attitudes toward people with mental illness are common (Angermeyer and Dietrich, 2006) and remain a burden for the stigmatized individuals as well as a major clinical and public health issue (Corrigan, 2005; Thornicroft, 2006; Hinshaw, 2007). Persons with schizophrenia and other mental illnesses are often exposed to public prejudice, and they may consequently come to internalize negative attitudes about their own group, frequently leading to self-stigma (Brohan et al., 2010). Self-stigma is typically associated with low quality of life (Rüsch et al., 2006), can create enormous pain for persons with mental illness and may undermine vocational functioning (Yanos et al., 2010).

Because overtly negative attitudes towards people with mental illness (and other minorities) have become less acceptable, such biases are often expressed in more indirect, yet nevertheless harmful ways (Bodenhausen and Richeson, 2010). In keeping with the possibility that attitudes can be expressed in quite subtle ways, researchers have become interested in automatically activated versus deliberately endorsed evaluations (Gawronski and Bodenhausen, 2006; Wittenbrink, 2007; Greenwald and Nosek, 2009). In the domain of stigma, this work suggests that negative reactions toward persons with mental illnesses can be activated automatically, potentially outside conscious awareness or control, and can influence a range of subsequent behaviors. Understanding these automatic evaluative processes and how they may differ from more thoughtful, deliberate evaluations is important for several reasons. First, automatic evaluations may be less susceptible to social desirability biases than explicitly reported attitudes; indeed, implicit versus explicit measures of the same attitude diverge more markedly in socially sensitive attitude domains like prejudice and stigma than in less sensitive domains (Nosek, 2007). Furthermore, self-report measures are, by definition, limited to reactions that participants can consciously articulate, yet some kinds of evaluative reactions may be relatively opaque to introspection (Wilson, 2002). Finally, because of these differential sensitivities, automatic versus deliberate responses often independently predict outcome variables, again particularly in the domain of stigma (Greenwald et al., 2009).

Despite strong interest in both mental illness stigma and indirect measures of automatically activated attitudes, little research has brought the two strands together (Stier and Hinshaw, 2007). Two recent studies investigated automatically activated reactions toward mental illness among members of the public in the context of clinical

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care and anti-stigma initiatives (Lincoln et al., 2008; Peris et al., 2008). To our knowledge, however, only the pioneering study of Teachman et al. (2006) investigated such attitudes among people with mental illness. This research revealed that automatically activated reactions to mental illness (relative to physical illness), assessed using the Implicit Association Test (IAT; Greenwald et al., 1998), did not differ between people with mental illness and controls; indeed, implicit attitudes were similarly negative in both groups (Teachman et al., 2006). The authors posited that the absence of group differences in the IAT suggested a lack of protective automatic ingroup bias among diagnosed individuals. Lacking such defenses, people with mental illness presumably internalized the negative societal views to which they were exposed. This account is certainly plausible; however, alternative accounts for equally negative IAT scores in diagnosed and non-diagnosed samples are also worth considering.

One alternate possibility arises from an inherent ambiguity of the IAT. The IAT uses reaction times to measure associations between a target category (e.g., Mental Illness) and an attribute category (e.g., Bad). An IAT using Bad (or a similar global evaluative term, such as "Unpleasant") as an attribute category can therefore be considered an index of automatic prejudice (Greenwald et al., 1998). However, a global evaluative association, as assessed by the IAT, may not necessarily only reflect stereotype-specific negative associations (e.g., that the group is automatically associated with "bad" *because* it is associated with negative intrinsic qualities such as dangerousness, incompetence, etc.). This global evaluative association can also be influenced by associations between a group and non-stigmatizing negative attributes, such as oppression, historical injustice, or suffering (Arkes and Tetlock, 2004; Uhlmann et al., 2006). For the study of mental illness stigma, this suggests that a strong 'Mental Illness-Bad' association, as evinced by the IAT, could indicate that respondents harbor automatic prejudice toward people with mental illness; but it could also reflect that participants associate mental illness with the pain or suffering that often comes with having a mental illness, without automatically activating character-impugning negative stereotypes.

It is possible, however, to directly assess automatic stereotyping. The Lexical Decision Task (LDT), which focuses on the speed with which respondents can identify particular letter strings as valid words, is one measure of automatic stereotyping (Wittenbrink et al., 2001). Of particular interest is the question of whether prior activation of a particular concept (such as "mental illness") facilitates the identification of stereotypically-associated words (e.g., "dangerous"). By examining the ability of a given concept to facilitate recognition of both stereotypic negative words and equally negative but non-stereotypic words (e.g., "greedy"), it is possible to use the LDT to distinguish the degree to which specific stereotypic concepts versus global negative reactions are activated. LDT scores are not contaminated by associations with non-stigmatizing negative associations (e.g., suffering) that could influence more global evaluative measures such as IAT prejudice scores. We expected that automatic stereotyping as assessed by the LDT would capture specific stereotypical associations with mental illness (e.g., danger) that may be prominent among members of the general public. However, whether automatic stereotyping would be observed among diagnosed individuals is a more open question. If it is indeed true that people with mental illness internalize the views of society at large, then perhaps they too will engage in automatic stereotyping. However, it may also be the case that the automatic negativity associated with mental illness in the minds of diagnosed individuals is driven more by non-stereotypic negative associations (e.g., pain, suffering, etc.) and that they are less susceptible, on average, to the expression of automatic stereotypes. The current study employed an LDT to assess the possibility of differential automatic stereotyping across groups.

It is important to examine the stigma processes that are linked to automatic stereotyping. Emotional aspects of stigma have long been neglected (Link et al., 2002, 2004). Appraisal models of emotion (Smith and Ellsworth, 1985) assert that cognitively assessed attributes of a target or situation give rise to ensuing emotional reactions. From this perspective, automatic stereotypes could play an important role in triggering emotional reactions to stigmatized individuals. Anger is a typical emotional reaction to people with mental illness that can lead to increased social distance (Angermeyer and Matschinger, 2003), coercion and reluctance to help (Corrigan et al., 2003). Shame, a central emotion in response to stigma in general (Schmader and Lickel, 2006; Hinshaw, 2007) and widespread among people with mental illness (Rüsch et al., 2007), can be an obstacle to help-seeking (Schomerus et al., 2009) and is associated with self-stigma and more dysfunctional reactions to stigma (Birchwood et al., 2007; Rüsch et al., 2006, 2009a). The current study examined self-reported emotional correlates of automatically activated stereotypes and deliberately endorsed beliefs, both among members of the public and stigmatized individuals, focusing on anger and shame as two key emotions.

Our study was designed to examine two questions. First, will individuals with schizophrenia, schizoaffective or affective disorders exhibit less automatic negative stereotyping as assessed by the LDT than members of the general public? Second, is automatic stereotyping related to self-reported emotional reactions toward mental illness, such as anger and shame?

2. Methods

2.1. Participants

We recruited 85 persons with mental illness (see Table 1 for demographic characteristics) from outpatient mental health service centers in Chicago as part of a larger study on mental illness stigma (Rüsch et al., 2009a,b,c,d,e, 2010a,b,c,d; Corrigan et al., 2010). 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%) subjects had comorbid current alcohol- or substance-related abuse or dependence. On average, participants with mental illness were first diagnosed about 15 years ago ($M = 14.9$, S.D. = 10.2) and had been hospitalized in psychiatric institutions about nine times ($M = 9.2$, S.D. = 13.1). We also recruited 50 members of the public, matched for age, gender and ethnicity to the diagnosed group (Table 1) and screened for any life-time or current axis I disorder. An eighth grade reading level as assessed by the Wide Range Achievement Test (Wilkinson and Robertson, 2006) was required. All participants gave written consent after being fully informed about study procedures. The study was approved by the institutional review boards of the Illinois Institute of Technology and collaborating organizations.

2.2. Automatic stereotyping measure

The LDT was designed following the work of Wittenbrink et al. (Wittenbrink et al., 1997, 2001; Wittenbrink, 2007). During the task, category primes ('crazy' or 'sane') were subliminally presented, followed by target items that consisted of words or non-words. The respondents' task was to quickly decide whether the target item was an actual word. In line with the extensive literature on conceptual priming effects (e.g., Neely, 1977), the logic underlying the task is that the stronger the mental association between the prime (e.g., 'crazy') and target items (e.g., 'dangerous'), the quicker a participant will respond. We chose the 'crazy'-prime as a vernacular term that is likely to activate typical associations that occur in naturalistic contexts. We used three primes in this study ('crazy', 'sane', and 'XXXXX' as a neutral prime) and four types of target items (Appendix 1: 12 adjectives reflecting negative stereotypes about mental illness; 12 general, non-stereotypical negative adjectives; 12 positive adjectives unrelated to mental illness; and 16 non-words). To obtain our target items, we first selected 12

Table 1
Demographic variables across groups.

	Persons with mental illness ($n = 85$)	Members of the general public ($n = 50$)	T or χ^2 [a]	p
Age (years; M, SD)	44.8 (9.7)	45.0 (8.1)	0.11	0.91
Gender (% female)	32%	30%	0.05	0.83
Ethnicity (% African-American/ Caucasian/Hispanic/Other or Mixed)	58/34/5/4	60/32/6/2	0.42	0.94

[a] Comparisons are χ^2 tests for proportions, or t-Tests for means across each row (two-sided).