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The public stigma of mental illness means a difference between you and me

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ABSTRACT

Social desirability can influence reports of stigma change in that subscribing to stigmatizing attitudes might pose a threat to personal beliefs of open-mindedness, while endorsing difference might not be as troubling. A measure is needed that assesses stigma change but is less susceptible to desirability effects. This study examined the psychometrics of various assessments of perceived difference from a person with mental illness. A total of 460 participants were recruited online using Amazon's Mechanical Turk. Four measures of difference, the Likert Scale of Difference, Semantic Differential: Similar-Different Scale, Semantic Differential: Mental Illness versus Other Illness scale, and Cause of Perceived Difference Scale were compared to measures of stereotypes, affirming attitudes, and care seeking. A vignette describing a person with mental illness anchored the Difference Scale and a measure of stereotype. Results showed that measures of difference yielded significantly higher endorsements than measures of stereotypes; the Semantic Differential Scale: Similar-Different was endorsed at a higher rate than other difference scales. Difference scores were positively related to stereotypes and inversely related to affirming attitudes. Difference was also found to influence empowerment separate from, and in addition to stereotype. These results suggest a new domain as an efficient and sensitive measure of stigma change.

1. Introduction

Public stigma has egregious effects on the lives of people with mental illness leading to significant barriers to the individual's pursuit of vocational, housing, and healthcare goals (Sartorius and Schulze, 2005; Callard et al., 2012). Many social scientists have described stigma as prejudice and discrimination; stereotypic beliefs that lead power groups – employers, landlords, and healthcare providers – to restrict opportunities of people labeled with mental illness (Link and Phelan, 2001). In addition, stigma might stop people with mental illness from seeking out care. Called label avoidance, people in distress avoid mental health treatment thereby escaping the stigmatizing label that accompanies it (Corrigan et al., 2014a). One model of prejudice and discrimination, based on attribution theory, has been widely tested to describe the stigmatizing experience of people with mental illness (Corrigan, 2000). The model rests on two empirically supported paths (Corrigan et al., 2003; Pingani et al., 2012; Roe et al., 2012): (1) beliefs that people are responsible for their mental illness lead to anger and an unwillingness to help. (2) beliefs that people with mental illness are dangerous lead to fear, desire to stay apart from this group, and calls for coercive treatment and institutionalization. A measure of this model, the Attribution Questionnaire (long and short forms), has been shown to be reliable, valid, and sensitive to the effects of stigma change programs (Corrigan et al., 2002; Brown, 2008; Pinto et al., 2012).

Stigma, however, is more than endorsing disrespectful beliefs; labeled persons are placed into categories different from the majority resulting in separation of "us" from "them" (Link and Phelan, 2001). In some ways, this might be considered the "content-less" belief; there is no substantive attribution for separateness, only the assertion that people with mental illness are different from me. The Opinion about Mental Illness (OMI) scale, used for more than 50 years to document aspects of stigma, included an item on difference: "A heart patient has just one thing wrong with him while a mentally ill person is completely different from other patients" (Cohen and Struening, 1962). A subsequent review of the assessment literature on mental illness stigma uncovered 16 quantitative studies that included some measurement of cognitive separating (social labels imply difference between us and them), but separation was assessed only by one or two items per scale (Link et al., 2004). These studies did not include psychometrics on any assessment of difference per se. We conducted an additional review of the social science literature and

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only found one paper measuring difference as a social construct; this however, was an assessment of the appreciation of human similarities and difference in general (Miville et al., 1999).

Stigma measurement might be diminished by social desirability (Stier and Hinshaw, 2007; Corrigan and Shapiro, 2010); i.e., people underreport endorsement of stigmatizing beliefs in order to avoid perceptions of being bigoted and lacking open-mindedness. This is problematic when conducting outcome assessments of anti-stigma interventions. Floor effects on stigma measures that result from social desirability restrict the range of possible benefits after participating in anti-stigma programs. Viewing someone as different may be less threatening to personal beliefs of open-mindedness. Hence, in addition to offering another way to understand the prejudice of mental illness, measures of "difference" may provide a more sensitive assessment of anti-stigma interventions. Stigmatizing beliefs and stereotypes have been assessed using varied psychometric strategies including Likert scales and semantic differentials with the object of difference being me, most other people, or people with other kinds of illness (Link et al., 2004; Corrigan and Shapiro, 2010). The purpose of this study is to test the psychometrics of various assessments of difference. We expect to show research participants are more likely to endorse items on these differentness scales than stigmatizing beliefs as measured on the Attribution Questionnaire. We also expect the differentness scales to be significantly associated with other measures of stigma.

2. Methods

Stigma is often assessed by presenting a vignette of a person with serious mental illness. Our difference measures used a vignette that has been tested and validated in research on the Attribution Questionnaire (Corrigan et al., 2002):

> "Harry is a 30 year old single man with schizophrenia. Sometimes he hears voices and becomes upset. He lives alone in an apartment and works as a clerk at a large law firm. He has been hospitalized six times because of his illness."

Several measures of difference were constructed reflecting methodologically varied perspectives of assessing psychological constructs like stigma. Scales were either Likert-format or semantic differential. Likert scales are interval measures from low to high on a construct; e.g., "Do you agree? Harry is dangerous." In stigma research, the low to high distinction might evoke social desirability by artificially deflating endorsement of stereotypes. Semantic differentials require research participants to contrast polar ends of a construct: safe, dangerous. The low-high bias is less obvious, perhaps yielding diminished social desirability. Scales also differed in terms of referent: To whom was Harry compared to determine whether he was different: me, most other people, or people with other illnesses?

Three measures were constructed based on these parameters. The Likert Scale of Difference followed Harry's vignette with eight items: four representing how different, unlike, comparable, and similar is Harry to me, and four items comparing Harry to most other people. Responses were made on 9-point agreement scales (9= agree very much). Three scores were determined by averaging responses for Difference from Me, Difference from Others, and Total Difference. The Semantic Differential: Similar-Different Scale comprised three items. In using the Semantic Differential, respondents choose their position vis-à-vis a psychological construct anchored by bipolar descriptors: e.g., unlike me – like me (Snider and Osgood, 1969). The closer a response is to one pole, the more the respondent endorses that pole. Research participants responded to 9-point semantic differentials where Harry was rated as similar or not similar to me, like or unlike me, and comparable or not comparable to me. A total score was determined by averaging responses across the three items.

Finally, research participants were asked to rate which person with various illnesses was "most like me" using a different 9-point semantic differential; readers should note that choices made on this last scale concern a generic person and not Harry. Scales were anchored by five illnesses, which have been shown to be stigmatized in public response (Corrigan, 2014): mental illness, autism, Alzheimer's disease, alcoholism, and lung cancer. A Semantic Differential: MI versus Other Illness scale consisted of four items with mental illness and each of the four other illnesses at bipolar ends. A total score was determined by averaging responses between mental illness and the four other conditions.

A short, 9-item, version of the Attribution Questionnaire (AQ-9) was administered to assess endorsement of stigmatizing stereotypes (Corrigan et al., 2014b). Research participants rate Harry on 9-point agreement scales (9=strongly agree) representing the stereotype constructs in our attribution model: responsibility, pity, anger, help, danger, fear, avoidance, segregation, and coercion. Psychometrics on the AQ-9 suggest some problem with reliability and validity because of the pity item; pity might alternately be construed as a benefit (people who are pitied receive more help) or negative stereotype (pity may be perceived as degrading). Hence, an 8-item version of the AQ (AQ-8) was generated for these analyses representing mean response to all items except pity.

Decreasing stereotypes and prejudice is not sufficient to erase the stigma; the public must also embrace affirming attitudes and behavior. Two scales have been developed and tested to evaluate the affirming constructs of recovery and empowerment (Corrigan et al., 2014b). The Recovery Scale (adapted from Corrigan et al., 2004) comprises three statements – e.g., People with mental illness are hopeful about their future. – to which participants respond with a 9-item agreement scale (9= strongly disagree). The Empowerment Scale (adapted from Rogers et al., 2010) also comprises three statements – e.g., People with mental illness are able to do things as well as most other people. – to which participants respond with a 9-item agreement scale (9= strongly disagree). Recovery and Empowerment scores were determined from averages of participant responses. Finally, in order to assess label avoidance, research participants completed the six item Care Seeking Scale. Using a 9-point agreement scale (9= strongly disagree), research participants reported willingness to seek help for anxiety or depression from traditional healthcare providers (e.g., primary care doctor, psychiatrist, counselor) or other helpers (clergy, friend/family, peer support).

Although we hypothesize participant responses to Harry are based on his mental illness, we directly tested this in one last measure. The Cause of Perceived Difference Scale has research participants report why Harry was perceived "different from me" based on 10 descriptors taken directly from the vignette: e.g., Harry is 30 years old; Harry is single; Harry has schizophrenia; Sometimes Harry hears voices. Research participants responded to individual items using a 9-point agreement scale (9=agree very much). Note that the order of individual measures was randomly varied to avoid order effects.

2.1. Sample

Adults from across the United States were solicited to participate in this study using Mechanical Turk (MTurk) from February to March, 2014. MTurk, operated by Amazon, is a crowdsourcing internet marketplace that, among other things, is used to solicit participants for social science research. Data show more than 100,000 workers are registered with MTurk (Pontin, 2007). Research is mixed regarding the degree to which demographics of MTurk workers match the US population, though there is some consensus that MTurk samples work best for random population modeling (Paolacci et al., 2010; Ross et al., 2010; Buhrmester et al., 2011). A solicitation was posted on the MTurk Human Intelligence Tasks list requesting US workers to participate in a survey "examining knowledge and thoughts about mental health issues". Consistent with our review of MTurk payments for similar social science projects, workers completing the task would be paid 25 cents. We were concerned about failing to meet recruitment goals after obtaining 98 participants, so the reimbursement rate was doubled to 50 cents.

A total of 684 MTurk workers responded to the solicitation. One concern about online surveys is research participants who fail to fully attend to task. Our MTurk survey included validity questions meant to catch people in this group; e.g., "Please choose the number '8' for your answer below". We also excluded people whose time on task was below the minimal cutoff to complete the survey competently or who took the survey more than once. After collecting 184 surveys, the research team learned the online survey was not compatible with some hand-held devices. We therefore excluded those surveys because it was unclear whether responses were tainted. As a result, 460 MTurk workers provided useable data.

After being fully informed about the study and consenting to participate, survey respondents answered items about demographics. Table 1 summarizes their characteristics and shows that the sample, in some ways, paralleled the young and middle age American population. The sample was almost 35 years of age on average and 50% female. In terms of ethnicity, the sample was 82.8% European American but under represented African Americans (7.8%). More than 80% of the sample had some college experience with 45% having earned a degree. About 40% of the sample was employed full time, earning towards the low end of the scale (44.8% of the sample reported yearly income below $25,000). About 9% reported being LGBT.

2.2. Data analyses

Since one of the primary goals of this study was to compare difference, stereotype, and affirming attitude scores, all Likert scales were set at 9 and averages determined as the index of interest. Moreover, direction of scales was set so that high scores represented stigmatizing responses: perceived difference, high stereotypes, low affirming attitudes, and low care seeking. Exploratory factor analyses (EFA) were completed to examine factor structure of the two scales specifically developed for this study: Cause of Perceived Difference and Care Seeking Scales. Internal consistency was reported for all measures as an index of reliability. Planned comparisons of scales measuring difference, stereotype, and affirming attitudes were examined using within subjects ANOVAs. Relationships among