Self-Stigma in People With Mental Illness

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Persons with mental illnesses such as schizophrenia may internalize mental illness stigma and experience diminished self-esteem and self-efficacy. In this article, we describe a model of self-stigma and examine a hierarchy of mediational processes within the model. Seventy-one individuals with serious mental illness were recruited from a community support program at an outpatient psychiatry department of a community hospital. All participants completed the Self-Stigma of Mental Illness Scale along with measures of group identification (GI), perceived legitimacy (PL), self-esteem, and self-efficacy. Models examining the steps involved in self-stigma process were tested. Specifically, after conducting preliminary bivariate analyses, we examine stereotype agreement as a mediator of GI and PL on stigma self-concurrence (SSC); SSC as a mediator of GI and PL on self-efficacy; and SSC as a mediator of GI and PL on self-esteem. Findings provide partial support for the proposed mediational processes and point to GI, PL, and stereotype agreement as areas to be considered for intervention.

Key words: self-stigma/mental illness/group identification/perceived legitimacy

Introduction

As poignantly illustrated by Christine Gallo’s remarks, persons with mental illness may internalize mental illness stigma and experience diminished self-esteem and self-efficacy. We refer to this process as self-stigma. Not everyone with a mental illness, however, suffers a loss of self-esteem due to stigma. Some people react to stigma by becoming energized and empowered, while others remain relatively indifferent and unaffected.2–4 In this article, we summarize a model of self-stigma that takes into account divergent reactions to stigma. We then describe our analysis of data collected from individuals with serious mental illness participating in community support services and provide preliminary support for the processes outlined in the model.

Research suggests that perceived stigma results in a loss of self-esteem and self-efficacy and in limited prospects for recovery.5–11 From a modified labeling theory perspective, these studies assume that prior to being labeled as “mentally ill,” individuals have internalized cultural stereotypes about mental illness.12,13 Social psychologists view stereotypes as knowledge structures that are learned by most members of a social group.14–18 Common stereotypes about people with mental illness include that they are dangerous, incompetent, and to blame for their illness.19

When individuals face the onset of a mental illness such as schizophrenia, these stereotypes become relevant to the self. This perspective also suggests that individuals constrict their social networks and opportunities in anticipation of rejection due to stigma, which leads to isolation, unemployment, and lowered income. They may also be less willing to seek treatment due to perceived stigma.20 Along with internalized stigma, these “failures” result in self-esteem and self-efficacy decrements.7,13

Internalization of stigma and loss of self-esteem are not inevitable, however. Some people react to stigma by becoming energized and empowered, while others remain relatively indifferent and unaffected.2–4 In our prior work, we describe a model of self-stigma that takes into account these divergent reactions to mental illness stigma2–4,21,22 (See figure 1). We argued that perceived discrimination is not a measure of self-stigma per se but rather of stigma awareness.22 Stigma awareness is a necessary but not sufficient component of self-stigma.

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been supported in research on several stigmatized groups, which influences how individuals respond to public stigma. A strong positive identity). As a result, they develop more positive self-perceptions. This assertion has been supported in research on several stigmatized groups, including gay and bisexual men, and women. In this study, we expect to show that identification with the group “persons with mental illness” is a protective factor that reduces the likelihood that an individual will agree with public stigma and apply it to the self. We predict that its effect on self-esteem and self-efficacy will be mediated by stereotype awareness, agreement, and self-concurrence. See figure 1.

In some situations, members of stigmatized groups believe negative outcomes that result from stigma are legitimate, while other times they think these outcomes are unjust. Crocker and Major explained the effects of justification or legitimacy in terms of equity theory. Namely, a negative outcome (eg, not being hired) is perceived as legitimate if a stigmatizing expectation (ie, persons with mental illness are incompetent and will do poorly at work) is perceived as accurate. Applying equity theory to the self, we expect to show that persons who view negative responses about mental illness as legitimate would be less aware of stigma and more likely to agree and self-concur with negative stereotypes about mental illness. We predict the negative effect of PL on self-esteem and self-efficacy to be mediated by awareness, agreement, and self-concurrence.

The interrelationships of these constructs are illustrated in figure 1. Both GI and PL are seen to have an indirect effect on self-esteem and self-efficacy. For example, people high in group identity will ultimately show greater self-esteem and self-efficacy. For example, people high in group identity will ultimately show greater self-esteem and self-efficacy. Key to figure 1 is the mediating effects of self-stigma. Self-stigma here is operationalized in terms of 3 factors: stereotype awareness, agreement, and self-concurrence. Each step in the process mediates the effect of GI and PL on the next step. We hypothesize that our findings will support paths with the three self-stigma variables as mediators.

### Methods

Seventy-one individuals receiving community support services from the outpatient psychiatry department of a community hospital in the Chicago metropolitan area met study criteria and were recruited for this study. Study criteria included having a serious mental illness (such as schizophrenia, bipolar disorder, or major depression), being at least 18 years old, and not having a legal guardian. Serious mental illness was defined as having a disability due to mental illness of such severity that the person received social security monthly annuity. On average, participants were 41.2 years old (SD = 10.78) and 49.3% female. The mean age of initial diagnosis was 23.7 years (SD = 11.3). The sample was 22.5% African American, 60.6% White, 2.8% Native, 2.8% Asian American, and 11.3% other. Only 1 participant (1.4%) acknowledged Hispanic ethnicity. In terms of marital status, 73.2% were single/never married, 5.6% currently married, 18.3% separated or divorced, and 2.8% widowed. Our prior work validating the Self-Stigma of...
Mental Illness (SSMI) Scale used in this study did not find diagnosis to be predictive of self-stigma constructs. Thus, we did not collect diagnostic information for this study.

This study protocol was approved by the Institutional Review Board of Evanston Northwestern Healthcare, and all participants completed written consent procedures prior to any data collection in accordance with Office for Human Research Protections regulations.

Measures
Research participants completed the revised version of the SSMI Scale as well as measures of GI, PL, self-esteem, and self-efficacy.

Self-Stigma of Mental Illness Scale The development and psychometrics of the SSMI Scale are described in detail elsewhere. It contains 40 items, with 10 items representing each of the 4 constructs in our self-stigma model: stereotype awareness, stereotype agreement, stereotype self-concurrence, and self-esteem decrement. The initial stereotype awareness items were adapted from the Devaluation-Discrimination subscale of Link’s perceived stigma measure. For stereotype awareness, research participants responded to items with the following format: “I think the public believes most persons with mental illness….” The introduction for stereotype agreement was “I think most persons with mental illness are…” The introductory clause for self-concurrence was “Because I have a mental illness, 1…” Order of items within each subscale was randomized to diminish order effects. Research participants were asked to respond to each item using a 9-point agreement scale (9 = strongly agree). Cronbach alphas for the SSMI subscales from our prior study were .89, .80, and .72, for awareness, agreement, and self-concurrence, respectively. Note that these scores are related hierarchically. People need to be aware of stereotypes before they can agree with them. Likewise, they must agree before they can self-concur with them. For this analysis, we use the first 3 subscales. Respondents had difficulty with the wording of the items of the Self-Esteem Decrement scale, and scores were skewed. For the purposes of our analysis, we instead use the Sherer and Adams Self-Esteem Scale to measure self-esteem/self-efficacy in the model. Responses to both, which are described below, were normally distributed.

Group Identification Adapting a strategy developed by Jetten et al, we assessed the extent to which participants identified with the mental illness group. Initially, we asked participants what term they prefer to use to refer to themselves within mental health settings (eg, patient, client, consumer, customer, recipient, and resident). Next, they were asked to respond to 5 items on 9-point scales, ranging from (1) “not at all” to (9) “very much” in terms of how much they identify with, feel strong ties with, and see themselves as part of the group called “their preferred term”; how often they think about themselves as part of the group; and how close they feel to other members of the group. Higher scale scores indicate greater GI. Jetten et al reported an alpha of 0.86 for this task.

Perceived Legitimacy In order to measure PL, we utilized a method described by Schmader et al that anchors PL in terms of fairness in status differences. Research participants were asked 3 questions: How fair do you think it is that persons without mental illness have a higher status than those with mental illness? How accurate do you think it is to say that persons without mental illness are superior to those with a mental illness? Do you believe it is justified that people without mental illness have higher status than those with mental illness? Responses were made on a 7-point scale and averaged so that higher scores indicate greater PL of mental illness discrimination. Work by Schmader et al found this score to be internally consistent.

Self-Esteem The Rosenberg Self-Esteem Scale was used to measure self-esteem. This 10 item, 4-point summed scale yields a single overall, reliable score that has been widely shown to be valid and is frequently used in psychological research on self-esteem. Scores range from 10 to 40 with higher scores indicating higher self-esteem.

Self-Efficacy The Sherer and Adams Self-Efficacy Scale was included to assess self-efficacy. The Self-Efficacy Scale comprises 23 items scored on a 5-point scale measuring expectation of personal ability to initiate and persist in behavior. Of its various scales, we selected the General Self-Efficacy Scale which has demonstrated reliability and validity. Scores range from 23 to 115, with higher scores indicating greater self-efficacy.

Analysis
Using SPSS 14.0, we examined Cronbach alphas to confirm internal consistency of study scales and examine descriptive statistics and correlations between model variables (see table 1). We planned to test 4 mediation models (see figure 2) to examine the model paths illustrated in figure 1.

1. Stereotype awareness as a mediator of GI and PL on stereotype agreement.
2. Stereotype agreement as a mediator of GI and PL on self-concurrence.
3. Self-concurrence as a mediator of GI and PL on self-efficacy.
4. Self-concurrence as a mediator of GI and PL on self-esteem.

Note that these analyses correspond to the hierarchal format of the scale. For example, stereotype awareness mediates agreement and agreement mediates self-concurrence.

We used a series of regression analysis as specified by Baren and Kenny\textsuperscript{43} to test the mediational models proposed in this study if the initial bivariate correlations required for the analysis were supported. Four equations were run for each model as follows: Equation A regresses the dependent variable (DV) on the independent variables (IV) (eg, self-concurrence is regressed on GI and PL), Equation B regresses the mediator on the IVs (eg, stereotype agreement is regressed on GI and PL), Equation C regresses the DV on the mediator variable (eg, self-concurrence is regressed on stereotype agreement), and the full model regresses the DV on the mediator variable and the IVs (eg, self-concurrence is regressed on stereotype agreement, GI, and PL). A mediational model is supported if: the IVs significantly affect the DV in Equation A, the IVs significantly affect the mediator in Equation B, the mediator significantly affects the DV in Equation C, and the affect of the IVs in the full model is smaller than in Equation A. Full mediation is supported if the coefficients of the IVs are no longer significant in the full model. Smaller but still significant coefficients in the full model would suggest partial mediation.

Results

As outlined in table 1, Cronbach alphas for the 3 subscales of the SSMI, the GI and PL scales, and the self-esteem and self-efficacy scales are all within satisfactory limits. Pearson correlations were used to test the hypothesized relationships between model variables. Most were significant as predicted. Interestingly, stigma awareness was only correlated with PL (\(-.276, P < .05\)). The more aware of public stigma a person is, the less he or she perceives it as legitimate. Stigma awareness was not significantly correlated with stereotype agreement, self-concurrence, self-esteem, or self-efficacy as we predicted.

\begin{table}[h]
\centering
\caption{Descriptive Statistics and Bivariate Correlations of Model Variables}
\begin{tabular}{lcccccccc}
\hline
 & Cronbach Alpha & Mean & SD & 2 & 3 & 4 & 5 & 6 & 7 \\
\hline
1. Group identification\textsuperscript{a} & .818 & 6.07 & 1.89 & .076 & \(-.056\) & \(-.352^{**}\) & \(-.241^{*}\) & .183 & .252\textsuperscript{*} \\
2. Legitimacy\textsuperscript{a} & .730 & 3.24 & 2.11 & \(-.276^{*}\) & \(.405^{**}\) & \(.291^{*}\) & \(-.037\) & \(-.230\) & \\
3. Awareness\textsuperscript{a} & .852 & 6.58 & 1.58 & \(-.010\) & \(-.227\) & .071 & \(.020\) & \\
4. Agreement\textsuperscript{a} & .878 & 3.55 & 1.67 & \(.522^{**}\) & \(-.114\) & \(-.176\) & \\
5. Concurrence\textsuperscript{a} & .834 & 2.46 & 1.32 & \(-.410^{**}\) & \(-.403^{**}\) & \\
6. Self-esteem & .872 & 29.77 & 5.35 & \\
7. Self-efficacy & .887 & 59.87 & 12.91 & \\
\hline
\end{tabular}
\textsuperscript{a}Rated on scale of 1 to 9 with higher score indicating greater agreement.
*\(P < .05\); **\(P < .001\).
\end{table}
Thus, the preliminary analysis suggested that subsequent analysis of stigma awareness as a mediator of GI and PL on stereotype agreement (model 1) would not be fruitful, so it was not performed. GI and PL were not significantly associated with self-esteem as predicted (model 3). Again, subsequent analysis of this mediation model was not supported. Additionally, the bivariate correlation between PL and self-efficacy only approached significance (\(-.23, P = .06\)). However, as indicated below, when self-efficacy was regressed on both GI and PL, both coefficients were significant at the \(P < .05\) level. Thus, we proceeded to test model 4.

Based on the correlational results, we were able to go on to test mediational models 2 and 4 (See figure 2). Model 2 tests stereotype agreement as a mediator of the effect GI and PL on stigma self-concurrence (SSC). Model 4 tests SSC as a mediator of the effect of GI and PL on self-efficacy.

For mediational model 2, path A regresses self-concurrence on GI and PL (See table 2). GI has a negative influence on self-concurrence while PL has a positive influence, together explaining 12.9% of the variance. In path B, GI negatively influences and PL positively influences stereotype agreement, explaining 29.1% of the variance in stereotype agreement. In path C, stereotype agreement positively affects stereotype self-concurrence, explaining 26.2% of the variance. Finally, in the full model, stereotype agreement positively affects self-concurrence and GI and PL are no longer significant. This suggests that stereotype agreement fully mediates GI and PL. Together, the 3 variables explain 25.5% of the variance in SSC.

Path A of mediation model 4 regresses self-efficacy on GI and PL. Coefficients for both are significant (\(P < .05\)), with GI positively affecting and PL negatively affecting self-efficacy, together accounting for 10.4% of the variance. In path B, GI negatively influenced and PL positively influenced stereotype self-concurrence, explaining 12.9% of the variance. In path C, stereotype self-concurrence negatively predicts self-efficacy, accounting for 15.0% of the variance. Finally, in the full model, the effects of GI and PL on self-efficacy are no longer significant, while the negative effect of stereotype self-concurrence is significant. This suggests that stereotype self-concurrence fully mediates the relationship between GI and PL and self-efficacy. However, had the sample size been larger, the coefficients may have remained significant, albeit smaller, indicating partial rather than full mediation. This model accounted for 17.8% of the variance in self-efficacy.

| Table 2. Results of Regression Analysis Testing for Mediation, Models 2 and 4 |
|-----------------|-----------------|-----------------|-----------------|
| Mediation Model 2 | Dependent Variable | Standardized B | Adj R² | Model Significance |
| Path A | Self-concurrence | -.265* | .129 | F₂,₆₈ = 6.201, \(P = .003\) |
| GI | -.265* | | | |
| PL | .311* | | | |
| Path B | Stereotype agreement | -.385** | .291 | F₂,₆₈ = 15.382, \(P = .000\) |
| GI | -.385** | | | |
| PL | .434** | | | |
| Path C | Self-concurrence | .522** | .262 | F₁,₆₉ = 25.798, \(P = .000\) |
| GI | | | | |
| PL | | | | |
| Full model | Self-concurrence | -.096 | .255 | F₃,₆₇ = 8.997, \(P = .000\) |
| GI | | | | |
| PL | | | | |
| Stereotype agree | | | | |
| Full model | Stereotype agree | | | |
| GI | | | | |
| PL | | | | |

Mediation model 4

| Path A | Self-efficacy | .278* | .104 | F₂,₆₇ = 4.992, \(P = .010\) |
| GI | | | | |
| PL | -.258* | | | |
| Path B | Self-concurrence | -.265* | .129 | F₂,₆₈ = 6.201, \(P = .003\) |
| GI | -.265* | | | |
| PL | .311* | | | |
| Path C | Self-concurrence | -.403* | .15 | F₁,₆₈ = 13.193, \(P = .001\) |
| GI | | | | |
| PL | | | | |
| Full model | Self-efficacy | -.164 | .178 | F₃,₆₆ = 5.997, \(P = .001\) |
| GI | | | | |
| PL | | | | |
| Stereotype agree | | | | |
| Full model | Stereotype agree | -.314* | | | |

Note: GI, group identification; PL, legitimacy.
*\(P < .05\); **\(P < .001\).
Discussion

Results of this study provide partial support for our model of self-stigma. We proposed a hierarchy of mediational processes, with the effect of GI and PL on model constructs being mediated by its preceding model construct: stereotype awareness on agreement, agreement on self-concurrence, and self-concurrence on self-esteem and self-efficacy. Two of the 4 proposed models were supported, with stereotype agreement fully mediating the effect of GI and PL on self-concurrence and self-concurrence fully mediating their effect on self-efficacy. While our model maintains that stereotype awareness is a necessary initial component of the self-stigma process that results in loss of self-esteem and self-efficacy, preliminary bivariate analysis did not support further testing of the first model on these data. While PL was negatively correlated with awareness as hypothesized, GI was not correlated with awareness, and awareness was not correlated with agreement as we had expected. Perhaps, as the negative correlation between stereotype awareness and PL suggests, awareness is a precursor to both agreeing and disagreeing with mental illness stigma. In other words, you have to be aware to have any opinion, thus the effect gets cancelled out in the analysis.

Bivariate analysis also did not support further testing of the third model, which proposed that self-concurrence mediates the effect of GI and PL on self-esteem. While GI and PL were correlated with self-concurrence, which was correlated with self-esteem, they were not significantly correlated with self-esteem. This finding may have conceptual significance. Variance in self-esteem may be unrelated to GI and PL. It is also possible that our measures did not capture the full range of these constructs. Future research needs to repeat the study using broader measures of PL and GI.

This study has several limitations that point to further research on the process of self-stigma and alternative responses. First, due to the sample size and cross sectional design, we were not able to test the full model and determine causal direction of the relationships between model constructs. Given the small sample size, effect sizes had to be relatively large to reach significance. A larger sample might have detected smaller but significant effects that further support (or not) our model. This suggests a larger longitudinal study that examines the self-stigma process over time is warranted. Second, our sample may not be representative of all people with mental illness that may be affected by self-stigma; eg, our findings may not be generalizable to individuals from different ethnic groups (eg, Hispanics, Asians) or those with greater or lesser disability than the participants in this study. Third, there are numerous factors that may influence the self-stigma process that were not measured or included in our analysis. For example, time since illness onset, level of disability, socioeconomic status, and service utilization may be important predictors of self-stigma. While our prior work found that depression partially explains self-esteem and self-efficacy, self-stigma explains significant and unique variance. Thus, we did not include depression current analysis. To do so with our small sample would have seriously reduced our statistical power. Again, this points to the need for additional research with larger samples.

Identification with the group of persons with mental illness appears to play a protective role in terms of reducing stereotype agreement and self-concurrence and bolstering self-esteem and self-efficacy. In contrast, endorsing the legitimacy of mental illness stigma and discrimination makes one vulnerable to self-stigma by reducing stereotype awareness and increasing agreement and self-concurrence.

Our study of self-stigma clearly indicates that the self-stigma process varies between individuals and points to GI, PL, and stereotype agreement as important points of intervention. Addressing all 3 is likely to benefit persons experiencing self-stigma. GI might be enhanced through participation in self-help and consumer operated services. This would provide interactions with peers in settings that respect empowerment and self-determination. PL and stereotype agreement might be addressed through cognitive behavioral approaches. From this perspective, perceptions of stereotypes as legitimate and correct are viewed as irrational or hurtful beliefs. Cognitive behavioral strategies can teach the person how to challenge these beliefs and reduce their impact on the self. Future research is needed to evaluate mechanisms that promote opportunities for strengthening GI and challenge the legitimacy of mental illness stigma at various points of the illness career, from symptom onset through the phases of recovery.

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