Toward Understanding the Insight Paradox: Internalized Stigma Moderates the Association Between Insight and Social Functioning, Hope, and Self-esteem Among People with Schizophrenia Spectrum Disorders

Paul H. Lysaker1–3, David Roe4, and Philip T. Yanos5,6

Research has paradoxically linked awareness of illness to both better function outcomes and lesser hope and self-esteem. One possible explanation for these findings is that acceptance of having schizophrenia may impact outcomes differently depending on the meanings the person attaches to this acceptance, particularly whether he or she accepts stigmatizing beliefs about mental illness. To explore this possibility we performed a cluster analysis of 75 persons with schizophrenia spectrum disorders based on single measures of insight using the Positive and Negative Syndrome Scale, internalized stigma using the Internalized Stigma of Mental Illness Scale, and compared groups on concurrent assessments of hope and self-esteem. Three groups were produced by the cluster analyses: low in insight/mild stigma (n = 23), high insight/minimal stigma (n = 25), and high insight/moderate stigma (n = 27). As predicted, analysis of variance–comparing groups revealed that the high insight/moderate stigma group had significantly the lowest levels of hope on the Beck Hopelessness Scale and self-esteem using the Multidimensional Self-esteem Inventory. As predicted, the high insight/minimal stigma group also had significantly less impaired social function than the other groups. Implications for assisting persons to come to cope with awareness of illness and stigma are discussed.

Key words: schizophrenia/stigma/quality of life/insight/hope/social function/narrative

Relative to persons with other psychiatric disorders, persons with schizophrenia spectrum disorders are often unaware or willfully contest that they have what others think to be a mental illness.1,2 Taken as a whole, this phenomenon, often referred to as “lack of awareness” or “poor insight,” has shown a pattern of apparently contradictory associations with outcome. For instance, poor insight has been linked to poorer treatment adherence,3,4 poorer clinical outcome,5 poorer social function,6–8 vocational dysfunction,9 and difficulties developing working relationships with mental health professionals.10 On the other hand, greater insight has been associated with higher levels of dysphoria,11–14 lowered self-esteem,15 and decreased well-being and quality of life.16–21

One possible explanation for the seemingly contradictory findings is that the impact of the acceptance of schizophrenia depends on the meanings persons attach to schizophrenia.22 For example, if one believes the illness means that he or she is not capable of achieving valued social roles, then awareness could lead to hopelessness and less motivation to persevere. However, if one does not believe that this illness precludes chances for a satisfying life, then awareness of the illness may be a key part of negotiating the challenges posed by the symptoms and diagnostic label. Supporting this view is research suggesting “role engulfment,” or the extent to which a person adopts the identity of a “mental patient,”23 is associated with both better insight24 and poorer social functioning.25 Internalized stigma,26 a related construct reflecting the degree to which a person has internalized societally endorsed stigmatizing beliefs about mental illness (eg, people with mental illness are violent and unable to function independently), has been found to take on personal relevance when a person is diagnosed with mental illness27 and has been linked to depressed mood.26 Also consistent with this is a longitudinal qualitative study that reported that the transformation of “sense of self” from one of “patienthood” to “personhood” was an important element in the process of improving functioning in a group with severe mental illness.28

While these findings support the view that the meanings a person attaches to having a mental illness can...
Toward Understanding the Insight Paradox

have important implications for how awareness impacts outcomes, stigma’s impact on the effects of insight on outcome in schizophrenia has yet to be explicitly studied. To investigate this we have sought to determine whether we could distinguish groups of persons with schizophrenia who varied according to level of insight and internalized stigma and then to see whether these different groups differed in hopefulness, self-esteem, and social function. Social functioning includes a person’s capacity for social relations and the breadth of social relations and is a major outcome of interest for people with schizophrenia.29 Hopefulness has been found to predict problem-oriented coping when accompanied by insight30 and is by matter of definition an appraisal of the future and thus a context in which persons make decisions about how to pursue life goals. Self-esteem has been found to predict life satisfaction and is related to positive outcome among people with schizophrenia.31–33

Accordingly, we made 3 hypotheses. We first predicted that clustering participants in a treatment sample by insight and internalized stigma would result in 3 groups: (a) those who held stigmatizing beliefs about mental illness and believed they had a mental illness; (b) those who did not endorse having internalized stigmatizing beliefs about mental illness and believed they had a mental illness; and (c) those who endorsed stigmatizing beliefs about mental illness but did not have insight or were not aware of their mental illness. As illustrated in figure 1, we secondly predicted that the group that rejected stigma but acknowledged their illness and the group that accepted stigma but rejected their illness would have more hope and self-esteem than the group that accepted stigma and acknowledged their illness. Third, as also illustrated in figure 1, we predicted that the group that rejected stigma and acknowledged their illness would have the best social function of all 3 groups. Here we reasoned that the lesser hope and self-esteem of the group that held stigmatizing beliefs about mental illness and believed they had a mental illness could erode social function just as the unawareness of illness in the third group could erode social function by virtue of its limiting that group’s adaptation to illness. We finally planned to compare groups on symptom levels for exploratory purposes.

**Methods**

**Participants**

Sixty-four men and 11 women with Structured Clinical Interview for Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV) (SCID34)-confirmed DSM-IV diagnoses of schizophrenia (n = 40) or schizofrontic disorder (n = 35) were recruited from a comprehensive day hospital at a VA Medical Center (n = 55) and local Community Mental Health Center (CMHC; n = 20) for a larger survey of the prevalence of anxiety symptoms in schizophrenia. All participants were receiving outpatient treatment and were in a postacute or stable phase of their disorder, defined as no hospitalizations or changes in medication or housing in the last month. Participants with a history of mental retardation documented in a chart review were excluded. Participants had a mean age of 48.25 years (SD = 7.01), a mean educational level of 12.57 (SD = 2.05), and a mean of 8.73 (SD = 9.04) lifetime hospitalizations with the first occurring on average at the age of 25.26 years (SD = 8.37). Thirty-six participants were Caucasian, 37 African American, and 2 Latino.

Participants were recruited through contact with primary providers who informed patients whom they believed met study criteria. Of those 86 participants who consented to participate, 11 completed only portions of the assessments and failed to attend follow-up appointments to complete the assessments. It is estimated that the total possible number of persons who could have been recruited was approximately 450 (300 patients in the VA and 150 in the CMHC).

**Instruments**

The Positive and Negative Syndrome Scale (PANSS35) is a 30-item rating scale completed by clinically trained research staff at the conclusion of chart review and a semi-structured interview. For the purposes of this study, 2 of the 5 PANSS factor analytically derived components36 were used: positive symptoms, which includes symptoms such as hallucinations and delusions, and negative symptoms, which includes symptoms such as lack of affect. We also included the PANSS insight and judgment item that provides a rating of 1 to 7 which reflects global awareness of symptoms, treatment need, and consequences of illness. Assessment of interrater reliability for this study was found to be high to excellent with intraclass correlations for blind raters observing the same interview ranging from .84 to .93.

The Quality of Life Scale (QOLS37) is a 21-item scale completed by clinically trained research staff following a semistructured interview and chart review. For the purposes of this study, we were interested in 2 of the 4 factor scores of the QOLS that are most intimately tied to social

\[
\text{Stigma rejected + Illness accepted} \Rightarrow \text{higher hope/self-esteem, better adaptation to illness} \Rightarrow \text{better social functioning}
\]

\[
\text{Stigma accepted + Illness accepted} \Rightarrow \text{lower hope/self-esteem, better adaptation to illness} \Rightarrow \text{poorer social functioning}
\]

\[
\text{Stigma accepted + Illness rejected} \Rightarrow \text{higher hope/self-esteem, poorer adaptation to illness} \Rightarrow \text{poorer social functioning}
\]

Fig. 1. The interactions of stigma and insight and their relationship to hope, self-esteem, and social function.
function. The first, “interpersonal relations,” measures the frequency of recent social contacts and includes separate assessments, for example, of frequency of contacts with friends and acquaintances. The second, “intrapsychic foundations,” measures qualitative aspects of interpersonal relationships and includes assessments, for example, of empathy for others. High to excellent inter-rater reliability was found for the 2 QOLS factor scores for this study, with intraclass correlations for blind raters observing the same interview ranging from .85 to .93. Although originally created to assess negative symptoms in schizophrenia, the QOLS has been widely used to study social function in this population.7

The Internalized Stigma of Mental Illness Scale (ISMIS26,38) is a 29-item paper and pencil questionnaire designed to assess subjective experience of stigma. It presents participants with first-person statements and asks them to rate on a 4-point Likert scale regarding whether they “Strongly disagree,” “Disagree,” “Agree,” or “Strongly agree” with statements related to having a mental illness. Items are summed to provide 4 major scale scores: alienation, which reflects feeling devalued as a member of society; stereotype endorsement, which reflects agreement with negative stereotypes of mental illness; discrimination experience, which reflects current mistreatment attributed to the biases of others; and social withdrawal, which reflects avoidance of others because of mental illness. The fifth additional score, stigma resistance, asks about participant’s perceived ability to deflect stigma. All scales scores are calculated as averages with higher scores suggesting graver experiences of stigma. Evidence of acceptable internal consistency, test-retest reliability, factorial, and convergent validity have been reported, including links with morale and well-being.26,38

The instrument was presented to persons in its written form with research assistants available to assist if participants were confused about the meaning of any item.

Of note, items of ISMIS differ from the QOLS and PANSS assessments of social function detailed above because they involve explicit attributions of abstract states of impoverished function due to discrimination on the basis of mental illness or acceptance that mental illness renders persons to a lesser status. The QOLS, for instance, asks how often a person socialized with a close friend and the PANSS may involve asking a person about the absence or presence of interest in others. The ISMIS, on the other hand, asks if the person socializes less “because my mental illness might make me look or behave weird” and whether they believe in general that “Mentally ill persons should not get married.” Items of the ISMIS also differ from the PANSS assessments of difficulties trusting people or accepting as true conspiracies again them; the ISMIS asks whether the person feels discriminated against “because I have a mental illness” or whether they “feel out of place in the world because I have a mental illness.”

The Multidimensional Self-esteem Inventory (MSEI39) is a 116-item self-report measure that assesses individuals’ self-perception of their overall social value. Respondents rate items on a 5-point scale according to the degree or frequency with which each item applies to them. The MSEI offers t scores based on a community sample. The t scores are normalized scores with a mean of 50 and a standard deviation of 10. The mean t score for this sample was 44.56 with a standard deviation of 10.33. This suggests that participants’ reported level of self-esteem was approximately 0.5 standard deviations lower than those of persons in a broad community sample. Because the MSEI has been largely used in samples of persons without psychosis, internal consistency was examined in this sample. Examination of items comprising the total score revealed a highly significant degree of internal consistency (coefficient α = .90).

The Beck Hopelessness Scale40 is a 20-item questionnaire that asks participants to endorse statements as true or false as applied to them. Individual items are then summed to provide an overall index of hope or its absence. Examples of items include, respectively, “Things just won’t work out the way I want them to” and “I might as well give up because I can’t make things work better for myself.” This scale has been used successfully with a wide range of psychiatric, medical, and community populations.41

Procedures

All procedures were approved by the research review committees of Indiana University and the Roudebush VA Medical Center. Following informed consent, diagnoses were determined using the SCID conducted by a clinical psychologist. Following the SCID, participants were administered the PANSS and QOLS interviews, MSEI, and ISMIS. A research assistant was available to assist participants if there were difficulties reading or understanding the questionnaires. PANSS and QOLS ratings were performed blind to responses to the MSEI and ISMI. QOLS and PANSS interviews were conducted by trained research assistants with a minimum of a BA degree in a field related to psychology.

Results

Means and standard deviations for all measures are presented in table 1. Analyses were conceived as the following 4 steps: First, to determine whether the first 4 subscales of the ISMIS (alienation, stereotype endorsement, discrimination experience, and social withdrawal) could be combined into a total score for the purposes of using it in a cluster analyses, internal consistency was determined. This revealed a high degree of internal consistency, coefficient α = .86, which was reduced to .80 if the fifth score was included. Correlations among all 5 ISMIS...
K-Means cluster analysis is a nonhierarchical form of cluster analysis appropriate when hypotheses exist regarding the number of clusters contained in a sample. It produces the number of clusters as initially called for, minimizing variability within clusters and maximizing variability between clusters. We chose this procedure rather than rationally defining groups in order to determine, in an exploratory and statistical manner, whether we could detect participants who demonstrated patterns of these scores as hypothesized rather than as we had artificially defined them ahead of time. To give the groups contextual meaning, however, we assigned labels with reference to the meanings of the insight and stigma scores.

In the second phase of analyses, insight and stigma scores were separately correlated with symptoms, social function, hope, and self-esteem. These revealed that internalized stigma was significantly related (P < .05) to positive (r = .36) and negative (r = .26) symptoms, as well as hope (r = -.45), self-esteem (r = .54), and QOLS interpersonal relations (r = -.34). Insight was related to positive (r = .24) and negative (r = .29) symptoms, as well as self-esteem (r = .26).

In the third phase, ISMIS and PANSS insight and judgment items were standardized into z scores and a K-Means cluster analysis was performed to identify 3 homogenous participant groups based on these scores. Cluster analysis is a method of classifying people into typologies by determining clusters of participants that display small within-cluster variation relative to the between-cluster variation. In cluster analysis, each participant is assigned to a cluster and participants are moved from one cluster to another until terminating conditions are met. In essence, a cluster analysis is similar in some respects to both factor analysis and discriminant function analysis. It differs primarily from factor analysis in that its end is to determine orthogonal groups of participants rather than orthogonal groups of variables, and it differs from a discriminant function analysis in that determining group assignment is the goal and not known ahead of time.

K-Means cluster analysis is a nonhierarchical form of cluster analysis appropriate when hypotheses exist regarding the number of clusters contained in a sample. It produces the number of clusters as initially called for, minimizing variability within clusters and maximizing variability between clusters. We chose this procedure rather than rationally defining groups in order to determine, in an exploratory and statistical manner, whether we could detect participants who demonstrated patterns of these scores as hypothesized rather than as we had artificially defined them ahead of time. To give the groups contextual meaning, however, we assigned labels with reference to the meaning of the insight and stigma scores.

First, we chose to categorize groups as “low insight” if the PANSS insight item was equal or greater than 4 of 7 and scores of less then 4 as good insight. This categorization has been used elsewhere and reflects the difference between general vs minimal awareness that something is wrong. To describe a group’s stigma level, we decided that groups with scores of 2 or less would be labeled as “minimal stigma” because such scores indicate general disagreement with items. Scores of greater than 2 but less than 2.5 were chosen to be labeled as “mild stigma,” as these scores reflect agreement of roughly less than half of the ISMIS items. Scores of greater than 2.5 but less than 3 were chosen to be labeled as “moderate stigma” because these scores reflect either agreement of more than half of ISMIS items or strong agreement on several. Scores of greater than 3 were chosen to be labeled as “severe stigma” as these scores reflect either agreement with all ISMIS items or strong agreement on many items.

The cluster analysis produced 3 groups which, based on insight and stigma levels, we have labeled low insight/mild stigma (n = 23), high insight/minimal stigma (n = 25), and high insight/moderate stigma (n = 27). As revealed in table 2, these groups did not differ significantly in age, education, or hospitalization history. Chi-square analyses additionally found that groups did not differ in proportion of participants with schizoaffective disorder or schizophrenia or in proportion of participants from the VA medical center or the CMHC. Analysis of variance also found no significant differences in raw stigma or insight score for participants from the VA medical center compared with the participants from the CMHC. Examination of symptoms, however, found that the high insight/minimal stigma group had significantly lower levels of positive and negative symptoms on the PANSS.

In the third phase of analyses we compared hope, self-esteem, and social function between groups. As revealed in table 3, the high insight/minimal stigma group had significantly better interpersonal function on the QOLS than either of the other 2 groups. The high insight/moderate stigma group, by contrast, reported significantly poorer self-esteem and lesser hope than either of the other 2 groups. Given that the groups differed significantly on

---

Table 1. Mean and Standard Deviations

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Score</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISMIS Alienation</td>
<td>2.31</td>
<td>0.65</td>
<td></td>
</tr>
<tr>
<td>ISMIS Stereotype endorsement</td>
<td>1.99</td>
<td>0.54</td>
<td></td>
</tr>
<tr>
<td>ISMIS Discrimination experience</td>
<td>2.42</td>
<td>0.69</td>
<td></td>
</tr>
<tr>
<td>ISMIS Social withdrawal</td>
<td>2.30</td>
<td>0.66</td>
<td></td>
</tr>
<tr>
<td>ISMIS Stigma resistance</td>
<td>2.17</td>
<td>0.52</td>
<td></td>
</tr>
<tr>
<td>PANSS Positive component</td>
<td>15.93</td>
<td>5.65</td>
<td></td>
</tr>
<tr>
<td>PANSS Negative component</td>
<td>17.36</td>
<td>5.24</td>
<td></td>
</tr>
<tr>
<td>PANSS Insight and judgment item</td>
<td>3.29</td>
<td>1.39</td>
<td></td>
</tr>
<tr>
<td>QOL Interpersonal relations</td>
<td>19.92</td>
<td>7.39</td>
<td></td>
</tr>
<tr>
<td>QOL Intrapsychic foundations</td>
<td>22.57</td>
<td>5.20</td>
<td></td>
</tr>
<tr>
<td>BHS Total</td>
<td>14.16</td>
<td>5.45</td>
<td></td>
</tr>
<tr>
<td>MSEI Total</td>
<td>30.28</td>
<td>7.05</td>
<td></td>
</tr>
</tbody>
</table>

Note: ISMI, Internalized Stigma of Mental Illness Scale; PANSS, Positive and Negative Syndrome Scale; QOL, Quality of Life; BHS, Beck Hopelessness Scale; MSEI, Multidimensional Self-esteem Inventory.

scores revealed that the first 4 scores were all significantly related to one another (P < .05), while the fifth, stigma resistance, was significantly correlated only with stereotype endorsement. These findings were taken as support to not include the fifth score in the summary score.

In the second phase of analyses, insight and stigma scores were separately correlated with symptoms, social function, hope, and self-esteem. These revealed that internalized stigma was significantly related (P < .05) to positive (r = .36) and negative (r = .26) symptoms, as well as hope (r = -.45), self-esteem (r = .54), and QOLS interpersonal relations (r = -.34). Insight was related to positive (r = .24) and negative (r = .29) symptoms, as well as self-esteem (r = .26).

In the third phase, ISMIS and PANSS insight and judgment items were standardized into z scores and a K-Means cluster analysis was performed to identify 3 homogenous participant groups based on these scores. Cluster analysis is a method of classifying people into typologies by determining clusters of participants that display small within-cluster variation relative to the between-cluster variation. In cluster analysis, each participant is assigned to a cluster and participants are moved from one cluster to another until terminating conditions are met. In essence, a cluster analysis is similar in some respects to both factor analysis and discriminant function analysis. It differs primarily from factor analysis in that its end is to determine orthogonal groups of participants rather than orthogonal groups of variables, and it differs from a discriminant function analysis in that determining group assignment is the goal and not known ahead of time.

K-Means cluster analysis is a nonhierarchical form of cluster analysis appropriate when hypotheses exist regarding the number of clusters contained in a sample. It produces the number of clusters as initially called for, minimizing variability within clusters and maximizing variability between clusters. We chose this procedure rather than rationally defining groups in order to determine, in an exploratory and statistical manner, whether we could detect participants who demonstrated patterns of these scores as hypothesized rather than as we had artificially defined them ahead of time. To give the groups contextual meaning, however, we assigned labels with reference to the meaning of the insight and stigma scores.

First, we chose to categorize groups as “low insight” if the PANSS insight item was equal or greater than 4 of 7 and scores of less then 4 as good insight. This categorization has been used elsewhere and reflects the difference between general vs minimal awareness that something is wrong. To describe a group’s stigma level, we decided that groups with scores of 2 or less would be labeled as “minimal stigma” because such scores indicate general disagreement with items. Scores of greater than 2 but less than 2.5 were chosen to be labeled as “mild stigma,” as these scores reflect agreement of roughly less than half of the ISMIS items. Scores of greater than 2.5 but less than 3 were chosen to be labeled as “moderate stigma” because these scores reflect either agreement of more than half of ISMIS items or strong agreement on several. Scores of greater than 3 were chosen to be labeled as “severe stigma” as these scores reflect either agreement with all ISMIS items or strong agreement on many items.

The cluster analysis produced 3 groups which, based on insight and stigma levels, we have labeled low insight/mild stigma (n = 23), high insight/minimal stigma (n = 25), and high insight/moderate stigma (n = 27). As revealed in table 2, these groups did not differ significantly in age, education, or hospitalization history. Chi-square analyses additionally found that groups did not differ in proportion of participants with schizoaffective disorder or schizophrenia or in proportion of participants from the VA medical center or the CMHC. Analysis of variance also found no significant differences in raw stigma or insight score for participants from the VA medical center compared with the participants from the CMHC. Examination of symptoms, however, found that the high insight/minimal stigma group had significantly lower levels of positive and negative symptoms on the PANSS.

In the third phase of analyses we compared hope, self-esteem, and social function between groups. As revealed in table 3, the high insight/minimal stigma group had significantly better interpersonal function on the QOLS than either of the other 2 groups. The high insight/moderate stigma group, by contrast, reported significantly poorer self-esteem and lesser hope than either of the other 2 groups. Given that the groups differed significantly on
positive and negative symptoms, analyses comparing social function, hope, and self-esteem were repeated with positive and negative symptom scores included as covariates. In these analyses the groups continued to differ on hope and self-esteem ($F_{2,68} = 4.72$, $P < .05$; $F_{2,68} = 9.35$, $P < .001$), with the high insight/moderate stigma group again in post hoc comparisons having significantly poorer hope and self-esteem. When symptoms were statistically controlled for, however, no significant differences were found between groups on the QOLS interpersonal relations scores ($F_{2,62} = 0.53$, $P = \text{NS}$).

**Discussion**

In the current study we examined the hypothesis that the effects of awareness of illness in schizophrenia on self-esteem, hope, and functioning would be affected by the degree to which persons internalize stigmatizing views about mental illness. As predicted, a cluster analysis of persons in a stable phase of illness revealed 2 groups of persons relatively aware of having a mental illness: one group that did and another that did not endorse having self-stigmatizing beliefs about their condition. Also, as predicted, persons with high insight who endorsed self-stigmatizing beliefs had lower levels of self-esteem and hope and fewer interpersonal relationships than those with high insight who rejected stigmatizing beliefs. Finally, as predicted, the cluster analyses produced a third group that demonstrated low awareness and also endorsed stigmatizing beliefs, though to a lesser degree than did the high insight/moderate stigma group. This group also had more self-esteem and hope than the group with high insight and moderate stigma but did not differ from them in social functioning. This last finding may

**Table 2. Background and Symptoms Among Groups**

<table>
<thead>
<tr>
<th></th>
<th>Group 1, Low Insight/Mild Stigma ($n = 23$)</th>
<th>Group 2, High Insight/Minimal Stigma ($n = 25$)</th>
<th>Group 3, High Insight/F = Moderate Stigma ($n = 27$)</th>
<th>ANOVA</th>
<th>Group Comparisons, $P &lt; .05$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>48.00 (7.65)</td>
<td>49.60 (6.40)</td>
<td>47.22 (7.04)</td>
<td>0.76</td>
<td>NS</td>
</tr>
<tr>
<td>Education</td>
<td>12.00 (1.47)</td>
<td>13.04 (2.25)</td>
<td>12.63 (2.23)</td>
<td>1.56</td>
<td>NS</td>
</tr>
<tr>
<td>Lifetime hospitalizations</td>
<td>10.35 (9.63)</td>
<td>7.84 (7.22)</td>
<td>9.33 (10.27)</td>
<td>0.19</td>
<td>NS</td>
</tr>
<tr>
<td>Age of first hospitalization</td>
<td>23.30 (5.44)</td>
<td>25.20 (7.03)</td>
<td>26.78 (10.89)</td>
<td>0.99</td>
<td>NS</td>
</tr>
<tr>
<td>Stigma score</td>
<td>2.19 (0.30)</td>
<td>1.80 (0.40)</td>
<td>2.75 (0.54)</td>
<td>5.93**</td>
<td>$3 &gt; 1 &gt; 2$</td>
</tr>
<tr>
<td>PANSS insight and judgment</td>
<td>4.83 (0.87)</td>
<td>2.40 (0.76)</td>
<td>2.81 (1.11)</td>
<td>40.08**</td>
<td>$1 &gt; 2, 3$</td>
</tr>
<tr>
<td>PANSS positive</td>
<td>17.70 (5.01)</td>
<td>12.92 (4.31)</td>
<td>17.22 (6.25)</td>
<td>6.11*</td>
<td>$2 &lt; 1, 3$</td>
</tr>
<tr>
<td>PANSS negative</td>
<td>19.22 (5.35)</td>
<td>14.80 (3.89)</td>
<td>18.15 (5.47)</td>
<td>5.28*</td>
<td>$2 &lt; 1, 3$</td>
</tr>
</tbody>
</table>

*Note: ANOVA, analysis of variance; PANSS, Positive and Negative Syndrome Scale; NS, not significant.

$*P < .01; **P < .001.$

**Table 3. Hope, Self-esteem, Symptoms, and Social Function Among Groups**

<table>
<thead>
<tr>
<th></th>
<th>Group 1, Low Insight/Mild Stigma</th>
<th>Group 2, High Insight/Minimal Stigma</th>
<th>Group 3, High Insight/F = Moderate Stigma</th>
<th>ANOVA</th>
<th>Group Comparisons, $P &lt; .05$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beck Hopelessness Scale</td>
<td>14.80 (4.46) ($n = 20$)</td>
<td>16.33 (4.10) ($n = 24$)</td>
<td>11.65 (6.38) ($n = 26$)</td>
<td>5.39**</td>
<td>$3 &lt; 1, 2$</td>
</tr>
<tr>
<td>MSEI self-esteem total</td>
<td>32.95 (7.92) ($n = 21$)</td>
<td>32.92 (4.41) ($n = 24$)</td>
<td>25.69 (6.07) ($n = 26$)</td>
<td>11.20***</td>
<td>$3 &lt; 1, 2$</td>
</tr>
<tr>
<td>QOLS interpersonal relations</td>
<td>18.06 (6.18) ($n = 17$)</td>
<td>23.29 (8.08) ($n = 21$)</td>
<td>18.36 (6.79) ($n = 25$)</td>
<td>3.54*</td>
<td>$2 &gt; 1, 3$</td>
</tr>
<tr>
<td>QOLS intrapsychic foundations</td>
<td>21.65 (4.21) ($n = 17$)</td>
<td>24.33 (5.00) ($n = 21$)</td>
<td>21.72 (5.20) ($n = 25$)</td>
<td>1.86</td>
<td>NS</td>
</tr>
</tbody>
</table>

*Note: ANOVA, analysis of variance; MSEI, Multidimensional Self-esteem Inventory; QOLS, Quality of Life Scale.

$*P < .05; **P < .01; ***P < .001; NS, not significant.$

196
suggest that both the acceptance of stigma or unawareness of illness may lead to social isolation. However, it is also possible that an underlying risk factor for both poor insight and social isolation, such as neurocognitive impairment, may explain these relationships.

Exploratory comparisons of symptom levels between the groups revealed that groups with higher insight and minimal stigma had significantly lower levels of positive and negative symptoms than either of the 2 other groups. This suggests several possible interpretations. First, it is possible that having more symptoms makes one the target of more stigma and therefore makes it more difficult to reject these beliefs. Second, it is possible that with more symptoms it becomes harder to formulate positive beliefs about oneself and, therefore, to reject societal beliefs about schizophrenia. It is also possible that having less internalized stigma allows one to manage symptoms more effectively, thereby reducing their severity. Regardless of which interpretation is valid, when symptoms were controlled for, groups continued to differ on self-esteem and hope, although notably group differences in interpersonal relatedness were no longer significant once initial differences in symptoms were accounted for.

While the cross-sectional nature of this study precludes reaching any conclusions regarding causality, results do suggest hypotheses and directions for future research. First, consistent with the initial hypotheses of this study it appears that persons who both accept that they have a mental illness and who accept stigmatizing beliefs about mental illness are at risk for having low self-esteem and expecting less of their futures. These persons, regardless of whether they adhere to treatment, may show little “motivation” to pursue personal or rehabilitation goals, having little hope that they can find a satisfying life. This group, substantial in size (roughly a third of our sample), may pose a great challenge to mental health providers, who struggle to encourage these clients to pursue vocational and other goals, when they, the clients themselves, lack hope for the future.

Our findings, consistent with others, also potentially raise a challenge to the view that insight, as traditionally defined, is always desirable for people with schizophrenia. In fact, some with stigmatizing beliefs about mental illness may find accepting their illness burdensome in some ways. This is consistent with the findings suggesting that benefit from psychiatric treatment is related to the meanings persons assign to both their illness and the treatment itself. It is also consistent with observations that well-being for persons who suffer from a wide range of chronic medical illnesses is a function of the degree to which they experience a balance among bodily concerns or symptoms, the sense of coherence of their personal narrative or biography, and conceptions they have formed about the nature of their identity.

With replication, our findings may have several clinical implications. First, it may be useful to consider interventions that decrease internalized stigma. Warner, for instance, has suggested that it is just as important for interventions to assist in developing a sense of mastery as it is to help enhance insight. This is consistent with a recent intensive case study that suggested that as a person with schizophrenia recovered, he first evolved a greater sense of personal agency before developing a more complex grasp of his illness. It is also consistent with a study using a different sample that suggested that hope was more closely tied to sense of agency than illness awareness. Perhaps, if dysfunctional beliefs stemming from social stigma impact life in such an enduring manner, tailored interventions could be devised to help persons combat these self-stigmatizing beliefs. Future interventions and research could be directed to help persons with schizophrenia overcome their negative beliefs and find newer and more adaptive ways to think of themselves and their futures, thus allowing for the acceptance of mental illness to have fewer devastating effects. One possibility is for research to study ways to facilitate the efforts of persons with schizophrenia to replace self-stigmatizing beliefs and transform their narratives and experience themselves as active protagonists in their own lives with realistic appraisals of their strengths and deficits.

Of note there may be additional parallels here with earlier studies of differing styles of framing past experience of mental illness as persons recover. Specifically, McGlashan and colleagues have suggested the existence of a continuum of recovery styles. On one end of their continuum lies “integration,” which is characterized by patients showing interest in their psychotic experiences, appearing eager to discuss and learn more about them and to gain a perspective of them. On the other end of the continuum is “sealing over,” characterized by patients’ denial of the existence and/or severity of their illnesses, expectations to return rapidly to normal functioning, and poor ability to recall or describe the phase of acute psychosis. Perhaps these findings coupled with the results of this study point to the reality that, for some, forgetting or recasting the past in such a way as to deny previous difficulties may be adaptive. As a corollary, it may also be that forcing or urging persons who have sealed over to do otherwise may not be helpful, and research that more fully explores what meets their needs is needed.

Importantly, there are several limitations to the study. Given its cross-sectional nature, no conclusions can be drawn regarding causality and alternative explanations of the findings cannot be ruled out. For instance, it is possible that having less hope and self-esteem makes persons more vulnerable to stigma or that acceptance of stigma and low self-esteem is the product of other biological or sociocultural variables not measured here.
Generalization of findings is also limited by sample composition. Participants were mostly men in their 40s, all of whom were involved in treatment. It may well be that a different relationship exists among insight, internalized stigma, hope, and self-esteem among younger persons with schizophrenia, in a predominantly female sample, or among persons who decline treatment. Thus, more research that involves collecting data at multiple time points with broader samples is necessary. We also did not assess the nature of stigmatizing experiences. More “fine-grained” assessments of stigma including appraisals of the nature of stigmatizing experiences are necessary to replicate and confirm the importance of the findings noted here.

References


