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Associations of multiple domains of self-esteem with four dimensions of stigma in schizophrenia

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Abstract

Research suggests global self-esteem among persons with schizophrenia may be negatively affected by stigma or stereotyped beliefs about persons with severe mental illness. Less clear however, is whether particular dimensions of self-esteem are linked to particular domains of stigma. To examine this we surveyed a range of self-esteem dimensions including lovability, personal power, competence and moral self-approval and four domains of stigma: Stereotype endorsement, Discrimination experience, Social withdrawal and Stigma rejection. Participants were 133 adults with diagnoses of schizophrenia or schizoaffective disorder. Stepwise multiple regressions controlling for a possible defensive response bias suggested that aspects of self-esteem related to lovability by others were more closely linked with lesser feelings of being alienated from others due to mental illness. Aspects of self-esteem related to the ability to manage one's own affairs were more closely associated with the rejection of stereotypes of mental illness. A sense of being able to influence others was linked to both the absence of discrimination experiences and the ability to ward off stigma. Implications for treatment are discussed.

Keywords

Schizophrenia; Self-esteem; Stigma; Recovery; Self; Function

1. Introduction

Individuals' appraisal of their personal value is closely related to the kinds of groups they perceive themselves as belonging to and the values they and others attach to belonging to

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Contributors

Lysaker, Yanos, Roe and Tsai were involved in literature searches. Tsai and Lysaker undertook the statistical analyses. Lysaker wrote the complete first draft and all authors subsequently made meaningful contributions to the writing. All authors contributed to and have approved the final manuscript.

Conflict of interest

There are no conflicts of interest.

those groups (Major and O'Brien, 2005; Mead, 1934). For instance, the self-esteem of someone who is a young female professor at a university will likely be affected by the meanings that she and persons in her community as a whole assign to belonging to the groups of "professor," "young," and "female."

In the case of schizophrenia, many identify themselves and are identified by others as belonging to the group of "persons with schizophrenia" (Frese, 1993; Lally, 1989). Such identification may be helpful to some in various ways. For example, seeing oneself as a person with schizophrenia may allow some to see that they are not the only one who suffers certain terrifying experiences. It may also point to strategies for recovery. Nevertheless, a potential problem associated with belonging to this group is that there are stereotyped beliefs attached to severe mental illness (Martin et al., 2000; Swindle et al., 2000). Categorically referred to as stigma, these beliefs are spread across all levels of society and include expectations of violent and disorderly behavior as well as the conviction that persons with schizophrenia cannot work or make informed decisions about their welfare (Link et al., 1999; Phelan et al., 2000).

As a consequence, while identifying oneself as "a person with schizophrenia" may be linked to greater awareness of illness and possibly treatment adherence, it is also associated with threats to self-esteem, self efficacy and hope for the future (Link et al., 2001; Lysaker et al., in press; Lysaker et al., 2007a,b; Markowitz, 1998; Roe, 2003; Ritsher and Phelan, 2004; Wright et al., 2000; Watson et al., in press). In fact research has suggested that stigma may reduce self-esteem regardless of symptom level and cognitive function and lead to poorer outcome including depression, humiliation and shame (Birchwood et al., 2005; Landeen et al., 2007). Tarrier and colleagues (2004), for instance, have found that suicidal ideation among persons with psychosis was linked to hopelessness, which was in turn linked to negative self-evaluation. Speaking to the long-term effects of stigma, several authors have suggested that beyond having an immediately distressing impact, stigma may be internalized (Ritsher and Phelan, 2004), and impede a person's chances of establishing identities unrelated to mental illness (Corrigan and Watson, 2002; Skaff and Pearlin, 1992) paving the way to even more entrenched forms of psychosocial dysfunction (McCay and Seeman, 1998).

While the links between stigma, self-esteem and poorer long-term outcomes have been widely noted, less is known about whether specific aspects of stigma are linked to specific elements of self-esteem. Self-esteem is generally referred to as a singular or global construct which reflects a person's sense of his or her own worthiness (Baker and Gallant, 1985). Yet, evidence suggests that overall self-esteem is a synthesis of a number of components of semi-independent facets which correspond to specific domains of life experience. These different components may covary systematically between different types of persons and may respond differentially to changes in life experiences (O'Brien, 1991; O'Brien and Epstein, 1974). For instance, global sense of self-esteem involves appraisals of the extent to which persons feel they are lovable, competent, morally valuable and able to affect their own lives. Research suggests that there are some components of self-esteem which are especially difficult for persons with schizophrenia to achieve including the sense of personal competence and influence over others (Garfield et al., 1987).

Just as self-esteem in general has multiple components, internalized stigma similarly has multiple elements regardless of the group being stigmatized (Major and O'Brien, 2005). Internalized stigma refers not only to the acceptance or internalization of stigmatizing beliefs, but also a general sense that one does not belong in the social world of others in routine life (Ritsher and Phelan, 2004).

The current study set out to examine the associations of different components of self-esteem with different elements of internalized stigma in a sample of persons meeting criteria for a schizophrenia-spectrum disorder. To assess self-esteem, we chose the Multidimensional Self-Esteem Index (MSEI; O'Brien and Epstein, 1998). This instrument has two subscales which assess components of self-esteem which are defined in a purely relational context: Lovability and Likeability. It also has three scales linked to self-esteem in the context of both relations and the carrying out of regular life tasks: Competence, Personal power and Moral self-approval. Finally it has a validity scale which assesses defensive self-enhancement and thus may identify persons who may present with an inflated view of their self-worth. To assess internalized stigma we chose the Internalized Stigma of Mental Illness Scale (ISMIS; Ritsher et al., 2003). The ISMIS has the benefit of providing separate assessments of discrimination experiences, acceptance of stereotypic beliefs and sense of being fundamentally different from others due to mental illness.

While we considered our analyses to be largely exploratory we did make several initial predictions. We first expected that lower self-esteem in the MSEI domains linked to a person's socially based sense of lovability and likeability would be more closely correlated with the ISMIS scales measuring feelings of alienation and social withdrawal. Here we reasoned that persons who felt a fundamental sense of disconnection with others might expect to be unloved. We secondly expected that lower self-esteem in the MSEI domains linked to persons' abilities to cope and function including competence, personal power and moral self-approval, would be more closely linked to the ISMIS scales that assess scales linked to function such as internalization of stereotyped beliefs and discrimination experiences. We reasoned here that experiences of discrimination and the acceptance of stigma might uniquely erode one's sense of efficacy or the ability to meet one's own needs. Additionally, we planned to use the MSEI defensive self-enhancement validity scale to not only eliminate participants whose responses suggested an invalidly defensive responses style, but additionally, as a covariate to rule out the possibility that any associations were due to a general response style.

2. Methods

2.1. Participants

One hundred and thirty one male and twenty one female participants with Structured Clinical Interview for DSM IV (SCID; Spitzer et al., 1994) confirmed diagnoses of schizophrenia ($n=91$) or schizoaffective disorder ($n=61$) were recruited from the outpatient psychiatry clinic of a VA Medical Center ($n=110$) or a community mental health center ($n=42$), both in a city in the Midwestern United States. Participants were recruited for one of two studies: the correlates of anxiety in schizophrenia or the effects of cognitive therapy on rehabilitation outcome. All were in a stable or post acute phase of their disorder, as defined by their receiving outpatient treatment with no hospitalizations or changes in housing or medication within the last month. Exclusion criteria for both studies included evidence in participants' chart or interview of organic brain syndrome or mental retardation. From this pool one female and 16 male participants were excluded from this study because they produced defensiveness scores on the self-esteem measure which suggested a pattern of invalid responses. Of these participants, two did not complete the stigma questionnaire leaving a pool of 133 participants available for analysis. The remaining participants were an average of 47.21 ($SD=8.33$) years old, had 12.71 ($SD=2.00$) years of education and 12.73 ($SD=15.13$) psychiatric hospitalizations, with the first occurring at age 27.73 ($SD=12.60$). Fifty-seven were Caucasian (43%), 74 were African American (55%), and two were Latino (2%).

2.2. Instruments

2.2.1. The multidimensional self-esteem inventory—The multidimensional self-esteem inventory (MSEI; O'Brien and Epstein, 1998) is a 116-item self-report measure which 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. While we chose this instrument because its wide range of items may better estimate different dimensions of self-esteem, to reduce the numbers of analyses performed, we focused our hypotheses on the total score and on five of the eight subscales which seemed particularly pertinent in schizophrenia. These were Competence, Lovability, Likeability, Personal Power, and Moral self-approval. Competence assesses the degree to which a person feels capable of learning and mastering tasks. Personal Power measures the extent to which a person feels that they can influence others. Lovability assesses feelings of being worthy of love. Likeability assesses acceptance by peers, and Moral self-approval assesses feelings of having behaved in an acceptable moral fashion. Defensive Self-enhancement, an additional validity scale, detects an inflated view of self-worth vs. a willingness to acknowledge weaknesses. Scale scores are calculated with higher scores reflecting greater levels of self-esteem.

Examination of items comprising the chosen subscales revealed a significant degree of internal consistency for all, with coefficient alphas ranging from .73 for Likeability to .79 for Moral self-approval ($p < .001$). These coefficient alphas are modestly lower than those reported from the normative sample. The three components measured by the MSEI which we did not make predictions were Self-control which assesses self appraisal of self discipline, Bodily appearance which assesses self appraisal of physical attractiveness and Body functioning which assesses self appraisal of physical agility. 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.

2.2.2. The internalized stigma of mental illness scale—The internalized stigma of mental illness scale (ISMIS; Ritsher et al., 2003; Ritsher and Phelan, 2004) is a 29-item 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 agree or disagree with statements related to having a mental illness. Items are summed to provide four subscales: 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. Scale 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 (Ritsher et al., 2003; Ritsher and Phelan, 2004).

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 MSEI items primarily in that they ask the participant for explicit links between personal difficulties and stigma. The MSEI, for instance, asks persons whether they think they influence others while 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."

2.3. 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 Structured Clinical Interview for DSM-IV conducted by a clinical psychologist. Following the SCID, participants in both studies were administered the ISMIS and MSEI. A research assistant was available to assist participants if there were difficulties reading or understanding the questionnaires. No interventions were performed in either study prior to obtaining the baseline information analyzed here.

2.4. Analyses

Analyses were planned in four steps. First, we planned to examine whether self-esteem and stigma measures were linked with demographic variables. In the second step, to determine if we could reduce the number of variables to be included in our correlation matrices, and so reduce chances of spurious findings, we planned to correlate the subscales of the MSEI with one another and the subscales of the ISMIS with one another. Here we decided that correlations of .70 or higher, which suggest scales share at least one half of the variance with each other, would indicate redundancy and one of the scales would be eliminated from further analyses. In the third step we planned to correlate the selected self-esteem scales and stigma scales with one another. Of note, if defensiveness was found to be linked to the selected self-esteem scales we planned to control for defensiveness in these correlations. Fourth, if multiple stigma measures were linked to multiple self-esteem measures we planned to perform stepwise multiple regressions, again controlling for defensiveness if necessary.

3. Results

Mean scores for the ISMIS and MSEI are reported in Table 1. Examination of demographic variables revealed greater age was weakly linked with poorer ability to reject stigma ($r=.19$, $p<.05$) but not to any other stigma or self-esteem measure. Lesser education was weakly correlated with higher defensiveness ($r=.18$, $p<.05$) but not to any other stigma or self-esteem measure.

Correlations of the MSEI subscales with one another and the ISMIS subscales with one another are presented in Tables 2 and 3 respectively. As revealed in these analyses the self-esteem scales of Likeability and Lovability and the stigma scales of Alienation and Social withdrawal were highly correlated with one another and thus at least partially redundant. We, therefore, for purposes of data reduction, decided to perform no further analyses of the Likeability and Alienation subscales. We chose to retain the Lovability and Social withdrawal scale given how commonly these are reported as sources of distress in schizophrenia.

The remaining MSEI subscales and the MSEI total scores were correlated with the remaining ISMIS subscales. Because the MSEI subscales were significantly correlated with the defensiveness subscale, partial correlations were obtained controlling for defensiveness and these are reported in Table 4. Of note, given the number of correlations utilized, we chose to use two-tailed tests despite having made unidirectional hypotheses. As illustrated in Table 4 greater degrees of all dimensions of stigma predicted lower levels of self-esteem. Some of the strongest associations ($r=-.45$ or greater) included the links of Stereotyped endorsement with Competence and Moral self-approval and Social withdrawal with the MSEI total, Lovability and Moral self-approval. Stigma rejection tended to have the relatively weakest correlations with self-esteem.

Finally, because multiple stigma subscales were linked to multiple self-esteem subscales and the total, stepwise multiple regressions were performed to determine whether different stigma subscales were uniquely related to the different self-esteem dimensions. These are reported in Table 5 and reveal that only one stigma scale was necessary to capture the variance in three of the four MSEI scale scores: Competence was linked to Stereotyped endorsement, Lovability to Social withdrawal, and Moral self-approval to Stereotyped endorsement. Stigma resistance and Discrimination both uniquely contributed to Personal power. The total scores were mostly predicted by Social withdrawal.

4. Discussion

Consistent with a widely ranging literature (Link et al., 2001; Wright et al., 2000), results revealed that among our sample the experience of greater levels of stigma was generally related to poorer self-esteem. Examining individual components of self-esteem using stepwise multiple regression equations controlling for response style, results suggest that participants who accepted stereotyped beliefs tended to view themselves as less competent and tended to have less moral self-approval. Participants who had greater levels of social distance or withdrawal as a result of stigma tended to view themselves as less lovable and a combination of the inability to reject stigma and discrimination experiences predicted lesser levels of personal influence in the social world. Taken together, these results thus provide partial support for our initial hypotheses. Elements of self-esteem linked to others' appraisal of self-worth such as lovability were associated with elements of internalized stigma which leave people feeling fundamentally different from others while components of self-esteem linked to functional aspects of life would be more closely associated with the acceptance of self stigma or stigmatizing beliefs.

While the cross sectional design and exploratory nature of this study does not allow us to directly address the question of causality, results could suggest several hypotheses for future study. In particular, it is possible that the sense of oneself as being fundamentally cut off from others because of a mental illness strongly limits the expectation that one will be the object of affection, care and concern by others. With a sense of having few connections or things in common with others, indeed it seems a matter of intuition that one would not experience oneself as very lovable. This would seem to be consistent with findings, for example, linking social rejection to prospective levels of self-esteem among persons with HIV/AIDS (Kang et al., 2006). Similarly, acceptance of stereotypes of mental illness might make it difficult to hold a vision of oneself as capable of managing daily challenges and ultimately having a say in one's destiny. Perhaps if persons internalize stigma in the sense that they accept stereotypes as accurate they are especially vulnerable to concluding that they are not someone who should be making their own decisions. This would seem to be consistent with findings, for instance, linking stereotype endorsement among adults with obesity with self-esteem (Friedman et al., 2005). Again there are rival hypotheses which cannot be ruled out, including the possibility that poorer self-esteem leaves persons more vulnerable to stigma or that other factors not assessed here are responsible for the associations observed. Of note, the correlations of stigma domains with Personal power all fell within a close band of one another, in contrast to the others scales, thus it is possible that the influence of different elements of stigma may be clinically equivalent for this dimension of self-esteem.

With replication this pattern of findings may have clinical implications. For one, it may be that when dealing with persons with poor self-esteem it is important to distinguish between persons who feel more that they are unlovable as opposed to being incompetent or ineffectual to some significant degree. Either may point to a different set of experiences linked to stigma which might be addressed differently in treatment. For example, a cognitive

based psychotherapy might assist persons who feel unlovable to challenge the belief that they are fundamentally different than others. Persons who have little sense of themselves as able to take charge and influence the course of their life might be assisted by contrast to examine whether they might challenge and reject any stereotyped beliefs they hold about persons who belong to the group of persons with schizophrenia. Perhaps a person's distinct "self-esteem profile" might thus point to different foci for treatment given possible links with different aspects of stigma.

Additionally, there were unexpected findings. Personal power or the ability to influence others was linked most strongly with the experience of the ability to dispel stigma and discriminatory experiences. This may suggest that the experience of social influence is uniquely tied to the experience of being able to interact with others and generally dispute their prejudices and to feel free from encounters in which one feels discriminated against. With replication this might suggest that a useful element of counseling for persons with schizophrenia might involve both assisting them to address stigma when they encounter it in routine life but also to openly explore concerns about how stigma affects the counseling relationship (c.f. Lysaker et al., 2007b). As with all unexpected findings though, further research is necessary before any weight is afforded these speculations.

Finally, there are also limitations to this study. Participants were mostly male and in their 40s. In addition, self-esteem and stigma were assessed using one self-report. Replication is needed with samples including more females and males in earlier phases of illness incorporating multiple methods of assessing self-esteem and stigma. Importantly, given the many analyses performed, this study must be considered as exploratory in nature. Lastly, since all participants had schizophrenia-spectrum disorders we do not know if the purported relationships have anything to do with schizophrenia per se or its specific impact upon the person. To address this issue future studies are needed that include as a comparison condition, people with medical disabilities other than schizophrenia. This would give us more direct, and less speculative, insight into what is specific to the illness and what is simply what most human beings experience in the face of discrimination.

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Table 1Mean and standard deviations for self-esteem and stigma measures ($n=135$)

	Mean	Standard deviation
ISMIS alienation	2.45	(.68)
ISMIS stereotype endorsement	2.00	(.51)
ISMIS discrimination experience	2.48	(.65)
ISMIS social withdrawal	2.37	(.65)
ISMIS stigma rejection	2.25	(.51)
MSEI total	43.88	(10.75)
MSEI competence	42.89	(10.30)
MSEI lovability	41.47	(10.15)
MSEI personal power	45.13	(10.36)
MSEI moral self-approval	46.91	(12.33)
MSEI defensive self-enhancement	56.10	(8.93)

Table 2

Intercorrelations of ISMIS stigma scales (*n*=133)

	Alienation	Stereotype endorsement	Discrimination experience	Social withdrawal	Stigma rejection
Alienation	xxx	.59**	.66**	.71**	.30**
Stereotype endorsement	.59**	xxx	.47**	.57**	.40**
Discrimination experience	.66**	.47**	xxx	.66**	.08
Social withdrawal	.71**	.57**	.66**	xxx	.23**
Stigma rejection	.30**	.40**	.08	.23**	xxx

* *p*<.01;
** *p*<.001.

Table 3Intercorrelation of select MSEI self-esteem scales ($n=152$)

	Total	Competence	Likeability	Lovability	Personal power	Moral self-approval	Defensive self-enhancement
Total	xxx	.61*	.71*	.59*	.63*	.56*	.44*
Competence	.61*	xxx	.51*	.37*	.67*	.39*	.29*
Likeability	.71*	.51*	xxx	.70*	.55*	.55*	.46*
Lovability	.59*	.37*	.70*	xxx	.42*	.51*	.44*
Personal power	.63*	.67*	.55*	.42*	xxx	.41*	.30*
Moral self-approval	.55*	.39*	.55*	.51*	.41*	xxx	.50*
Defensive self-enhancement	.44*	.29*	.46*	.44*	.30*	.50*	xxx

* $p<.001$.

Table 4

Partial correlations between self-esteem and stigma covarying for defensiveness ($n=133$)

ISMIS scales	MSEI scores				
	Total	Competence	Lovability	Personal power	Moral self-approval
Stereotype endorsement	-.38***	-.47***	-.35***	-.28**	-.48***
Discrimination experience	-.40***	-.33***	-.42***	-.33**	-.35***
Social withdrawal	-.53***	-.39***	-.52***	-.30**	-.56***
Stigma rejection	-.26**	-.29**	-.17*	-.29**	-.21*

* $p<.05$;

** $p<.01$;

*** $p<.001$.

Table 5Multiple regressions controlling for defensiveness ($n=133$)

Self-esteem dimension	Contributing factors	<i>F</i> (<i>df</i>)	Partial R^2	Model R^2
Self-esteem total	Defensiveness	34.37 (3,129)***	.21***	.21
	Social withdrawal		.22***	.43
	Stigma resistance		.02*	.44
Competence	Defensiveness	29.96 (2,130)***	.09**	.09
	Stereotyped endorsement		.20***	.29
Lovability	Defensiveness	44.48 (2,130)***	.19***	.19
	Social withdrawal		.22***	.41
Personal power	Defensiveness	15.63 (3,129)***	.10***	.10
	Stigma resistance		.10***	.20
	Discrimination		.07**	.27
Moral self-approval	Defensiveness	47.30 (2,130)***	.25***	.25
	Stereotyped endorsement		.18***	.42

*
 $p < .05$,**
 $p < .01$,***
 $p < .0001$.