



Published in final edited form as:

J Clin Psychol. 2014 April ; 70(4): 303–312. doi:10.1002/jclp.22050.

Narrative Enhancement and Cognitive Therapy (NECT) Effectiveness: A Quasi-Experimental Study

David Roe¹, Ilanit Hasson-Ohayon², Michal Mashiach-Eizenberg³, Oren Derhy⁴, Paul H. Lysaker⁵, and Philip T. Yanos⁶

¹University of Haifa

²Bar Ilan University

³Max Stern Academic College of Emek Yezreel

⁴Israeli Psychiatric Rehabilitation Association

⁵Roudebush VA Medical Center and the Indiana University School of Medicine

⁶City University of New York

Abstract

Objective—Accumulated evidence suggests that approximately one third of people with a serious mental illness (SMI) experience elevated self-stigma. Narrative enhancement and cognitive therapy (NECT) is a structured group-based intervention aimed to reduce self-stigma. The current study aims to examine the effectiveness of NECT. A quasi-experimental design.

Design—Baseline and follow-up data were collected and outcomes were compared between 63 persons with SMI who participated in NECT and 56 persons who received treatment as usual.

Results—The NECT treatment group showed significant ($p < .05$) reductions in self-stigma and increases in self-esteem, quality of life, and Hope-Agency scores between pre- and posttreatment assessments, compared with the control group.

Conclusions—The current results provide preliminary support for the use of NECT as an effective treatment to reduce self-stigma and its implications for treatment and practice are discussed.

Keywords

self-stigma; serious mental illness; recovery

Approximately one third of people with a serious mental illness (SMI) experience elevated self-stigma (Ritsher & Phelan, 2004; Brohan, Elgie, Sartorius, & Thornicroft, 2010; West, Yanos, Roe, & Lysaker, 2011). Self-stigma refers to the acceptance by a person with SMI that stigmatizing views (e.g., dangerousness) widely held by the general public apply to themselves. Research has shown that self-stigma is negatively linked to both subjective and objective aspects of recovery, including hopelessness (McCay & Seeman, 1998; Lysaker, Roe, & Yanos, 2007; Yanos, Roe, Markus, & Lysaker, 2008), diminished self-esteem (Corrigan, Watson, & Barr, 2006; Watson, Corrigan, Larson, & Sells, 2007; Yanos et al.,

2008), shame (Hasson-Ohayon et al., 2012), meaning in life (Ehrlich-Ben Or et al., 2013), and fewer social relationships (Lysaker et al., 2007).

Despite the substantial evidence for the negative effect of self-stigma, there have been few efforts to develop treatments to address this major roadblock to recovery. A number of preliminary efforts reveal the limitations of educational interventions to combat self-stigma (Wieczynski, 2000; Link, Struening, Neese-Todd, Asmussen, & Phelan, 2002). There is support, though, for the potential promise of group-based interventions that move beyond education and focus on changes in cognitions (Knight, Wykes, & Hayward, 2006; McCay et al., 2006). Two reports of recently developed treatment approaches targeting internalized stigma (Lucksted et al., 2011; Fung, Tsang, & Cheung, 2011) have discussed using primarily cognitive restructuring based methods to address negative beliefs about the self related to self-stigma and demonstrate the promise of this approach.

In an effort to build upon what was learned from these previous attempts, we developed narrative enhancement and cognitive therapy (NECT), targeting self-stigma among people with SMI (for a detailed description of the NECT, see Yanos et al., 2011). NECT (Yanos et al., 2011) is a structured, group-based treatment that combines (a) psychoeducation to help replace stigmatizing views about mental illness and recovery with empirical findings, (b) cognitive restructuring geared toward teaching skills to challenge negative beliefs about the self, and (c) narrative therapy focused on enhancing one's ability to narrate one's life story. We developed a group-based intervention, as we believed that a group orientation has several notable advantages for participants to gain feedback and support from peers (Yalom, 1995), and within this context to provide opportunities for interactions with an audience for their storytelling (Lysaker et al., 2007). We designed a manual that is geared to be user-friendly and could easily be implemented with reasonable fidelity by master's-level clinicians.

NECT is unique in its focus on facilitating the transformation of personal narratives. Phenomenological observations suggest that SMI often involves a profound diminishment in a person's ability to narrate his or her own life's evolving story (Gallagher, 2003; Lysaker, Wickett, Wilke, & Lysaker, 2003). People with SMI may describe their lives without sufficient temporal organization (Gallagher, 2003; Lysaker, Clements, Placak-Hallberg, Knipschure, & Wright, 2002) and have difficulty differentiating themselves from their disorder (Roe & Ben Yishai, 1999). It has been argued that narrative transformation is essential to the process of identity transformation among people with SMI (Rhodes & Jakes, 2009). NECT attempts to help individuals transform their narratives by engaging participants in a series of story-telling exercises where they are encouraged to write or dictate stories about themselves, and then receive feedback from the facilitator and group members on alternative perspectives regarding the themes that their stories contain.

Thus, for an individual whose story stresses themes of being unable to overcome impairments associated with having a mental illness, feedback may guide the individual toward a reassessed conceptualization, wherein his or her story emphasizes personal strength, change, and success over adversity. In this way, disempowered narratives in which themes dominated by internalized stigma prevail can be gradually reframed and revised so that the narrator becomes the protagonist and themes of agency and personal strength prevail.

Recent efforts have begun to investigate the effectiveness of NECT. Qualitative analyses of interviews conducted with 18 NECT completers perceived NECT as helpful. Six domains of improvement were revealed in which participants attributed to participating in the intervention experiential learning, positive change in experience of self, acquiring cognitive

skills, enhanced hope, and coping and emotional change (Roe, Hasson-Ohayon, Derhi, Yanos, & Lysaker, 2010). Recently (Yanos, Roe, West, & Smith, 2012), 39 persons with SMI were randomized to NECT or to treatment as usual (TAU) and were assessed at baseline, posttreatment, and 3-month follow-up. Fifteen of the 21 individuals assigned to NECT were classified as “exposed” to treatment and, compared to unexposed participants, improved more in two aspects of self-stigma as well as insight; however, the small sample size and significant dropout rates restricted the ability to detect an effect.

In the current study, we examined the effectiveness of NECT in a larger sample of persons experiencing a mental illness judged to have been significantly disabling. Research supports that elevated self-stigma is a common concern among persons with a variety of disabling mental disorders including schizophrenia, bipolar disorder, and major depression (Brohan et al., 2010). Qualitative research on the experience of self-stigma has also supported that people with bipolar disorder express concerns about self-stigma similar to persons with schizophrenia-spectrum disorders (Suto, 2012). Thus, these findings suggest that the endorsement of self-stigmatizing attitudes and their subsequent effect on hope, self-esteem, and quality of life are common to people who have experienced SMI. The purpose of the present study was to investigate whether people with SMI who participated in NECT would show reductions in self-stigma and increases in self-esteem, quality of life, and hope between pre- and posttreatment assessments, compared with a control group.

Methods

Research Setting

The study was conducted at two psychiatric rehabilitation agencies and one University Community Clinic in Israel. The NECT manual had been previously translated into Hebrew through a standard back-translation approach. In one agency study, participants received employment services, and in the second agency, study participants received supportive residential and social club services. All participants heard about the possibility to participate in the intervention through flyers, local presentations about the intervention, or directly from their primary clinician. Thirty-five mental health practitioners, all of whom had experience providing psychiatric rehabilitation services, completed a 2-day NECT training, after which they advertised the opening of NECT groups. This led to the opening of a total of 25 NECT groups, each attended, at first, by approximately eight consumers and all but eight groups led by two facilitators. Upon completing the 2 full days of NECT training, practitioners attended bimonthly 2-hour group supervisions and two additional training enrichment days during the 5 months they carried out the intervention.

Data were collected between 2009 and 2011. Ethical approval for the study was obtained from the local ethics committee of the department of psychology at the Bar Ilan University. After receiving a detailed explanation of the study, all research participants provided written informed consent. Data were collected by an experienced mental health practitioner who was trained to administer the study measures.

Participants

The treatment group included 137 people who completed baseline assessment, after which they attended the first NECT group where they met the facilitators and other participants and were exposed to the NECT manual. Thirty-nine (28%) attended only one to three sessions. Ninety-five people attended most of the 20 NECT groups, of which 63 (66%) completed the Time 2 follow-up assessment upon completion of the NECT, an average of 6 months later.

A control group of 85 people, who received TAU from the same psychiatric rehabilitation agencies, at different geographical regions where NECT was not offered completed the same

assessments at an equivalent time interval. Of the 85 participants in the control group who completed baseline assessment (Time 1), a total of 56 (66%) completed the follow-up assessment (Time 2).

To be eligible for participation in the study, participants had to meet Israeli criteria for having a “psychiatric disability,” severe enough to compromise at least 40% of one’s functioning (roughly comparable to the U.S. designation of SMI). This is determined by a medical committee, including a psychiatrist and recognized by National Insurance regulations. While we did not conduct diagnostic interviews for each participant, we note that research indicates that among the more than 16,000 people with at least a 40% psychiatric disability in Israel, 86% have a diagnosis of psychotic-related disorder (Shtruch et al., 2009). Thus, it is likely that the majority of our study sample had a psychotic disorder.

Demographic characteristics of the participants are presented in Table 1. There were no statistically significant differences between the treatment and control groups in gender and marital status. The treatment participants were significantly younger ($t = -2.09, p < .05$) and less educated, $\chi^2(2) = 9.44, p < .01$. Comparing the demographic variables among all participants (treatment and control) who completed Time 2 assessment and those who did not, revealed that those who completed the Time 2 assessment included a larger number of people with academic degrees, $\chi^2(2) = 7.03, p < .05$, but that otherwise the groups did not differ in gender, age, and marital status.

Measures

The Internalized Stigma of Mental Illness Scale (ISMI; Ritsher, Ollingam, & Grajales, 2003)—ISMI is a 29-item self-report scale designed to assess an individual’s personal experience of stigma related to mental illness and is rated on a 4-point Likert scale. Higher total scores indicate higher levels of internalized stigma. The ISMI can be broken into five subscales: Alienation (feelings of being a devaluated member of the community), Stereotype Endorsement (agreement with negative ideas about people with mental illness), Discrimination Experience, Social Withdrawal, and Stigma Resistance. Previous research has reported satisfactory internal consistency ($\alpha = .90$) and test-retest reliability ($r = .92$) in a sample of veteran administration psychiatric outpatients (Ritsher et al., 2003). The Stigma Resistance subscale was excluded as it has been found to lack internal consistency and be poorly correlated with the other ISMI subscales (Brohan et al., 2010). In our sample, we observed a high level of internal consistency for the ISMI at Time 1 as a whole ($\alpha = .92$). Cronbach’s alphas for the four subscales were .76, .69, .81, and .78 for Alienation, Stereotype Endorsement, Social Withdrawal, and Discrimination Experience, respectively.

The Manchester Short Assessment of Quality of Life (MANSA; Priebe, Huxley, & Knight, 1999)—MANSA is a brief instrument that assesses subjective quality of life. It comprises 12 items regarding satisfaction with life and is rated on a 7-point scale ranging from 1 (*negative extreme*) to 7 (*positive extreme*). Higher scores indicate higher levels of satisfaction. The scale demonstrates good levels of internal consistency, with alphas of .74, and validity, more than .83 (Priebe et al., 1999). In our sample, we observed a high level of internal consistency for the MANSA scale ($\alpha = .86$).

Adult Dispositional Hope Scale (Snyder et al., 1991)—The Hope scale is a 12-item self-report scale designed to measure an individual’s dispositional hope. It is an 8-point scale, with higher scores indicating higher levels of hope. The Hope scale comprises two subscales, Pathways and Agency. In our sample, we observed a high level of internal consistency for the scale in Time 1 as a whole ($\alpha = .85$) as well as for the two subscales ($\alpha = .74$ for Pathways and $\alpha = .78$ for Agency items).

Rosenberg Self-Esteem (RSE)—Rosenberg (1965) developed a 10-item self-report measure of self-esteem on 4-point scale, ranging from 1 (*strongly agree*) to 4 (*strongly disagree*). Higher scores indicate of higher self-esteem. The internal consistency for this measure was satisfactory in the data ($\alpha = .81$).

Intervention

The practitioners who provided services for the NECT groups were employed by the psychiatric rehabilitation centers described above; almost all of them held degrees in mental health professions (social work, occupational therapy, and psychology), all had experience in providing psychiatric rehabilitation services, and all were trained in NECT. Participation in NECT was always in addition to existing services. Sessions were an hour long and held weekly for approximately 6 months (the completion of the 20 sessions).

Statistical Analysis

Analyses were computed using the Predictive Analytics SoftWare (PASW, Version 18.0). To test whether the groups differed in their baseline scores on the scales and whether there were differences between participants who did and did not complete Time 2 assessment, two-way analyses of variance (ANOVAs) were performed. To examine improvement in the four outcomes (internalized stigma, self-esteem, quality of life, and hope) mixed repeated measures multivariate analysis of variance (MANOVAs) and ANOVAs were used to compare to the intervention and control groups. Mixed repeated measures MANOVAs and ANOVA allows for an examination of the extent to which participants improved over time regardless of group, as well as if they improved significantly more over time in one group versus the other (group by time interaction). Effect sizes (η_p^2) for the interaction effect between time and group were computed.

Results

As can be seen in Table 2, analyses revealed no significant differences in any of the baseline assessments between the treatment and control group participants, although there was a trend for TAU participants to have higher RSE scores. A difference in baseline quality of life and Hope-Pathway subscale scores were found between those who did and did not complete Time 2 assessments. Those who completed Time 2 assessments had higher quality of life and Hope-Pathway scores at Time 1. In addition, there was a significant interaction effect between “group” and “attendance” in the self-esteem variable. The participants in the treatment group who completed Time 2 assessments had higher self-esteem at baseline than those who did not, whereas participants in the control group who completed Time 2 assessments had lower self-esteem at baseline than those who did not complete Time 2 assessment.

To examine whether there was improvement among the treatment group compared to the control group, a mixed repeated measures MANOVA was conducted. A significant group by time interaction for the internalized stigma variable was found, $F(4,114) = 2.68, p < .04, \eta_p^2 = .09$. There was a significant difference in the mean change of self-stigma score between Time 1 and Time 2 between the two groups. The improvement in self-stigma was significantly higher in the treatment group.

Repeated measures ANOVAs were then conducted to test each subscale independently. As can be seen in Table 3, there was a significant group by time interaction in three of the four subscales: Alienation, Stereotype Endorsement, and Social Withdrawal. This indicates that participants who completed NECT showed significant reductions in three aspects of self-stigma between baseline and postassessment, in contrast to participants in the control group.

A similar analysis was conducted for the Hope scale variable. As can be seen in Table 3, there was no significant group by time interaction for the total score, but there was a significant interaction for one of the two subscales, Hope-Agency. In addition, a significant group by time interaction for the quality of life and for self-esteem variables was also found (see Table 3). These analyses indicate that participants who completed NECT improved significantly in subjective quality of life and self-esteem between baseline and postassessment, in contrast to participants in the control group who did not.

Discussion

NECT is a group-based intervention designed to assist persons with SMI to recognize the effect of stigma on how they think about themselves, identify and reconsider stigmatized beliefs about themselves, and to construct a richer and more developed narrative. Results of the current study found that NECT participants showed significant reductions in self-stigma, and increases in self-esteem, self-reported quality of life, and the experience of the Hope-Agency subscale, while TAU participants did not.

Considered as a whole, results suggest that participation in NECT was associated with changes in almost all of the outcomes that NECT was designed to target. Participants were specifically observed to reject stigma at the conclusion of the intervention and feel better about themselves and their life circumstance in the moment, as well as their chances for success in the future. Results, consistent with preliminary findings from a small randomized controlled trial, have found NECT to be feasible and tolerable and identified trends of improvement in two aspects of self-stigma and insight (Yanos et al., 2012) and a qualitative study (Roe et al., 2010) in which participation in the intervention was linked to increased hope and a richer and fuller experience of one's identity. Thus, in combination with previous work, this study offers additional evidence of the potential of NECT to assist persons along their recovery process.

While the findings provide support for the positive effect of NECT on those who completed both pre- and postassessments, of note, 28% attended no more than the first 3 sessions. While we did not specifically examine reasons for early dropout, it is possible that the subject matter of stigma is one that many consumers found uncomfortable, and that they avoided returning to the group for this reason. It is thus important to further study whether and what might make it difficult for some and try to remove any such barriers in an effort to make it as accessible as possible to those who might benefit from it. In addition, the finding of an interaction between "group" and "attendance" in the self-esteem variable suggests that higher levels of preintervention self-esteem make it more likely to complete NECT. While self-stigma was the primary outcome measure and main target of the intervention, it is important to provide appropriate support so that people with low self-esteem, who may particularly need and benefit from NECT, will be able to attend and complete it.

NECT contains a combination of psychoeducation, cognitive restructuring, and narrative enhancement. While no analysis was attempted here to assess the relative effect of each component, all three elements are intended to have a synergistic effect. Put another way, it is assumed that knowing about the nature of stigma and having knowledge of the relationship of thought and affect may not be sufficient for people to author a richer and more developed sense of identity. NECT is predicated on the assumption that to reject a stigmatized view of oneself requires the construction of a new story about oneself. To let go of a story of oneself as a mentally ill person who may be dangerous or incompetent, for example, may require the construction of a new story to gradually take its place (Roe & Lysaker, 2011).

The narrative development section is accordingly theorized to be the element that allows persons to form an idea of who they might be if not defined by stigma. As a result of the synergy between psychoeducation, cognitive restructuring, and narrative enhancement, it is assumed that participants develop more complex and integrated ideas of who they are as unique individuals, allowing for a greater sense of agency when facing the distress that comes with psychiatric challenges and an appraisal of oneself as more competent. This possibility is consistent with other work suggesting that with greater metacognitive mastery comes improved coping and self-esteem (Lysaker et al., 2011).

While considering these results, some important limitations of the study should be taken into account. As noted above, there was no random assignment, and thus specific characteristics of the participants who attended NECT groups may have led to their greater improvement in these areas. Furthermore, 28% of those who attended a NECT group dropped out within the first 3 sessions, and only 66% of those who attended most of the sessions completed both assessments. This leads to the possibility that participants who did not respond to the intervention may have self-selected themselves out of treatment, or, alternatively, that participants who did not respond chose not to participate in the assessment.

In addition, the study participants were not limited to a specific diagnosis that could have influenced the stigma they were subject to and what they would find helpful to cope with it. Finally, the present study was that it did not include a follow-up assessment period, which would help to determine if improvements related to participation in NECT can be sustained over time.

With the consideration of the study's limitations and future directions, the current study provides preliminary support for the use of NECT as an effective treatment to reduce self-stigma among people with SMI. This suggests the NECT as a recovery-promoting intervention that elicit positive changes in the experience of the self.

Acknowledgments

This work was supported by the National Institute of Mental Health (grant no. R34-MH082161) to the authors P.T.Y, P.H.L., and D.R.

References

- Brohan E, Elgie R, Sartorius N, Thornicroft G. Self-stigma, empowerment and perceived discrimination among people with schizophrenia in 14 European countries: The GAMIAN-Europe study. *Schizophrenia Research*. 2010; 122:232–238. [PubMed: 20347271]
- Corrigan PW, Watson AC, Barr L. The self-stigma of mental illness: Implications for self-esteem and self-efficacy. *Journal of Social and Clinical Psychology*. 2006; 25(8):875–884.
- Dicky, B. What is severe mental illness?. In: Drake, R.; Merrens, M.; Lynde, D., editors. *Evidence-based mental health practice: A textbook*. New York, NY: Norton; 2005. p. 1-18.
- Ehrlich-Ben Or S, Hasson-Ohayon I, Feingold D, Vahab K, Amiaz R, Weiser M, Lysaker PH. Meaning in life, insight and self-stigma among people with severe mental illness. *Comprehensive Psychiatry*. 2013; 54(2):195–200. [PubMed: 22938821]
- Fung KM, Tsang HW, Cheung WM. Randomized controlled trial of the self-stigma reduction program among individuals with schizophrenia. *Psychiatry Research*. 2011; 189(2):208–214. [PubMed: 21377738]
- Gallagher, S. Self-narrative in schizophrenia. In: David, AS.; Kircher, T., editors. *The self-in neurosciences and psychiatry*. Cambridge: Cambridge University Press; 2003. p. 336-357.
- Hasson-Ohayon I, Ehrlich-Ben Or S, Vahab K, Amiaz R, Weiser M, Roe D. Insight into mental illness and self stigma: The mediating role of shame proneness. *Psychiatry Research*. 2012; 200:802–806. [PubMed: 22889545]

- Knight MTD, Wykes T, Hayward P. Group treatment of perceived stigma and self-esteem in schizophrenia: A waiting list trial of efficacy. *Behavioural and Cognitive Psychotherapy*. 2006; 34:305–318.
- Link BG, Struening EL, Neese-Todd S, Asmussen S, Phelan JC. On describing and seeking to change the experience of stigma. *Psychiatric Rehabilitation Skills*. 2002; 6:201–231.
- Lucksted A, Drapalski A, Calmes C, Forbes C, DeForge B, Boyd J. Ending self-stigma: Pilot evaluation of a new intervention to reduce internalized stigma among people with mental illnesses. *Psychiatric Rehabilitation Journal*. 2011; 35(1):51–54. [PubMed: 21768078]
- Lysaker PH, Clements CA, Placak HC, Knipschure SJ, Wright DE. Insight and personal narratives of illness in schizophrenia. *Psychiatry*. 2002; 65:197–206. [PubMed: 12405078]
- Lysaker PH, Erickson MA, Ringer J, Buck KD, Semerari A, Carcione A, Dimaggio G. Metacognition in schizophrenia: The relationship of mastery to coping, insight, self-esteem, social anxiety and various facets of neurocognition. *British Journal of Clinical Psychology*. 2011; 50(4):412–424. [PubMed: 22003950]
- Lysaker PH, Roe D, Yanos P. 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. *Schizophrenia Bulletin*. 2007; 33(1):192–199. [PubMed: 16894025]
- Lysaker PH, Wickett AM, Wilke N, Lysaker JT. Narrative incoherence in schizophrenia: The absent protagonist, neurocognitive impairments and fear of audience. *American Journal of Psychotherapy*. 2003; 57:153–166. [PubMed: 12817547]
- McCay E, Beanlands H, Leszcz M, Goering P, Seeman MV, Ryan K, Vishnevsky T. A Group intervention to promote healthy self-concepts and guide recovery in first episode schizophrenia: A pilot study. *Psychiatric Rehabilitation Journal*. 2006; 30:105–111. [PubMed: 17076053]
- McCay EA, Seeman MV. A scale to measure the impact of a schizophrenic illness on an individual's self concept. *Archives of Psychiatric Nursing*. 1998; 12:41–49. [PubMed: 9489173]
- Priebe S, Huxley P, Knight S. Application and results of the Manchester Short Assessment of Quality (MANSA). *International Journal of Social Psychiatry*. 1999; 45(1):7–12. [PubMed: 10443245]
- Rhodes, J.; Jakes, S. *Narrative CBT for psychosis*. New York, NY: Routledge/Taylor and Francis Group; 2009.
- Ritsher JB, Otilingqam PG, Grajales M. Internalized stigma of mental illness: Psychometric properties of a new measure. *Psychiatry Research*. 2003; 121(1):31–49. [PubMed: 14572622]
- Ritsher JB, Phelan JC. Internalized stigma predicts erosion of morale among psychiatric outpatients. *Psychiatry Research*. 2004; 129(3):257–265. [PubMed: 15661319]
- Roe D, Ben-Yishai A. Exploring the relationship between the person and the disorder among individuals hospitalized for psychosis. *Psychiatry*. 1999; 62:370–380. [PubMed: 10693233]
- Roe D, Hasson-Ohayon I, Derhi O, Yanos PT, Lysaker PH. Talking about life and finding solutions to different hardships: A qualitative study on the impact of narrative enhancement and cognitive therapy on persons with serious mental illness. *The Journal of Nervous and Mental Disease*. 2010; 198(11):807–812. [PubMed: 21048471]
- Roe, D.; Lysaker, PH. The role of narratives in promoting, studying and understanding recovery from psychosis. In: Geekie, J.; Lampshire, D.; Randal, P.; Read, J., editors. *Subjectivity and psychosis*. New York, NY: Routledge Press; 2011. p. 5-14.
- Rosenberg, M. *Society and the adolescent child*. Princeton, NJ: Princeton University Press; 1965.
- Snyder CR, Harris C, Anderson R Jr, Holleran SA, Irving LM, Sigmon ST, Harney P. The will and the ways: Development and validation of an individual differences measure of hope. *Journal of Personality and Social Psychology*. 1991; 60:570–585. [PubMed: 2037968]
- Suto M. Stigma shrinks my bubble: A qualitative study of understandings and experiences of stigma and bipolar disorder. *Stigma Research & Action*. 2012; 2(2):85–92.
- Watson AC, Corrigan PW, Larson JE, Sells M. Self-stigma in people with mental illness. *Schizophrenia Bulletin*. 2007; 33(6):1312–1318. [PubMed: 17255118]
- West C, Yanos P, Roe D, Lysaker PH. Prevalence of internalized stigma among persons with severe mental illness. *Stigma Research and Action*. 2011; 1(1):54–59.

- Wieczynski, DM. Dissertation Abstracts International: Section B: the Sciences and Engineering. Vol. 61. Ann Arbor, MI: University Microfilms International; 2000. Effects of a stigma management group for individuals with mental illnesses; p. 2786
- Yanos PT, Roe D, Lysaker PH. Narrative enhancement and cognitive therapy: A new group-based treatment for internalized stigma among persons with severe mental illness. *International Journal of Group Psychotherapy*. 2011; 61:577–595. [PubMed: 21985260]
- Yanos PT, Roe D, Markus K, Lysaker PH. Pathways between internalized stigma and outcomes related to recovery in schizophrenia-spectrum disorders. *Psychiatric Services*. 2008; 59:1437–1442. [PubMed: 19033171]
- Yanos PT, Roe D, West ML, Smith SM. Group-based treatment for internalized stigma among persons with severe mental illness: Findings from a randomized controlled trial. *Psychological Services*. 2012; 9(3):248–258. [PubMed: 22545821]

Table 1

Comparison of Baseline Characteristics Between the Treatment and the Control Groups

	Treatment N = 63		Control N = 56		p ^a
	N	%	N	%	
Gender:					.603
Man	30	48%	24	43%	
Woman	33	52%	32	57%	
Marital status:					.725
Single	46	73%	42	76%	
Married	7	11%	7	13%	
Divorced	10	16%	6	11%	
Education:					.009
Less than high school	3	5%	6	11%	
High school	53	90%	36	67%	
Academic	3	5%	12	22%	
Age (M ± SD)	39 ± 12.1		44 ± 12.3		.038
min-max	20-69		20-68		

Note. SD = standard deviation.

^aDifferences between the groups were tested with chi-square test for categorical variables and with two sample *t* test for continuous variables.

Table 2
Means and Standard Deviations on the Baseline Scores on the Scales and Two-Way ANOVA Results for Effects of “Group,” “Attendance” and the Interaction

	Treatment				Control				Group ^d				Attendance ^e				Group × attendance ^f			
	Completers N = 63 M (SD)	None completers N = 74 M (SD)	Total N = 137 M (SD)	Completers N = 56 M (SD)	None completers N = 29 M (SD)	Total N = 85 M (SD)	F	P	η_p^2	F	P	η_p^2	F	P	η_p^2	F	P	η_p^2		
ISMI – Total Scale (1–4)	2.08 (0.55)	2.20 (0.55)	2.14 (0.55)	2.09 (0.54)	2.08 (0.61)	2.08 (0.56)	0.54 ^a	.465	.002	0.42 ^a	.517	.002	0.63 ^a	.428	.003	0.63 ^a	.428	.003		
ISMI-Alienation	2.32 (0.66)	2.50 (0.68)	2.42 (0.67)	2.29 (0.65)	2.27 (0.75)	2.28 (0.68)	1.93 ^a	.166	.009	0.74 ^a	.392	.003	1.14 ^a	.288	.005	1.14 ^a	.288	.005		
ISMI-Stereotype endorsement	1.80 (0.55)	1.89 (0.47)	1.85 (0.51)	1.86 (0.49)	1.87 (0.63)	1.87 (0.54)	0.09 ^a	.769	.000	0.50 ^a	.481	.002	0.29 ^a	.589	.001	0.29 ^a	.589	.001		
ISMI-Social withdrawal	2.13 (0.72)	2.21 (0.73)	2.17 (0.73)	2.10 (0.69)	2.00 (0.71)	2.07 (0.69)	1.42 ^a	.235	.006	0.01 ^a	.938	.000	0.79 ^a	.375	.004	0.79 ^a	.375	.004		
ISMI-Discrimination experience	2.14 (0.66)	2.25 (0.74)	2.20 (0.70)	2.16 (0.67)	2.24 (0.72)	2.18 (0.68)	0.00 ^a	.959	.000	0.88 ^a	.349	.004	0.02 ^a	.901	.000	0.02 ^a	.901	.000		
MANSA (1–7)	4.51 (1.11)	4.20 (1.11)	4.34 (1.11)	4.44 (1.13)	3.94 (1.13)	4.27 (1.15)	1.03 ^b	.312	.005	6.59 ^b	.011	.030	0.36 ^b	.550	.002	0.36 ^b	.550	.002		
Hope-Total Scale (1–8)	5.83 (1.42)	5.22 (1.66)	5.50 (1.58)	5.70 (1.30)	5.53 (1.87)	5.64 (1.51)	0.16 ^c	.692	.001	3.15 ^c	.077	.014	0.97 ^c	.326	.004	0.97 ^c	.326	.004		
Hope-Pathway	6.03 (1.35)	5.31 (1.80)	5.64 (1.64)	5.79 (1.36)	5.54 (1.98)	5.70 (1.59)	0.00 ^c	.976	.000	4.44 ^c	.036	.020	1.05 ^c	.308	.005	1.05 ^c	.308	.005		
Hope-Agency	5.63 (1.67)	5.13 (1.78)	5.36 (1.74)	5.61 (1.63)	5.50 (2.09)	5.57 (1.79)	0.47 ^c	.496	.002	1.46 ^c	.229	.007	0.62 ^c	.431	.003	0.62 ^c	.431	.003		
RSE (1–4)	2.98 (0.59)	2.75 (0.48)	2.85 (0.54)	2.96 (0.57)	3.07 (0.51)	2.99 (0.55)	3.67 ^b	.057	.017	0.59 ^b	.444	.003	4.75 ^b	.030	.022	4.75 ^b	.030	.022		

Note. ISMI = The Internalized Stigma of Mental Illness Scale; MANSA = The Manchester Short Assessment of Quality of Life; RES = Rosenberg Self-Esteem; M = mean; SD = standard deviation; df = degree of freedom. Two-way analysis of variance results for effects of group, attendance, and the interaction.

^a df = (1,218).

^b df = (1,216).

^c df = (1,215).

^d Differences between the control and treatment groups.

^e Differences between those who did and didn't complete Time 2 assessments.

^f Interaction between “groups” and “attendance”.

Table 3
 Repeated Measures ANOVAs in the Four Dependent Variables Compared Between the Treatment and Control Groups

	Treatment N = 63				Control N = 56				Time × Group					
	Time 1		Time 2		Time 1		Time 2		Time		Group		Time × Group	
	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	F	P	F	P	F	P
ISMI – Total Scale (1–4)	2.08 (0.55)	1.85 (0.49)	2.09 (0.54)	2.08 (0.57)	8.62 ^a	.004	1.72 ^a	.193	7.81 ^a	.006	0.06			
ISMI-Alienation	2.32 (0.66)	2.06 (0.60)	2.29 (0.65)	2.26 (0.63)	7.81 ^a	.006	0.66 ^a	.417	5.33 ^a	.023	0.04			
ISMI-Stereotype endorsement	1.80 (0.55)	1.62 (0.49)	1.86 (0.49)	1.95 (0.55)	1.40 ^a	.239	5.21 ^a	.024	10.44 ^a	.002	0.08			
ISMI-Social withdrawal	2.13 (0.72)	1.85 (0.64)	2.10 (0.69)	2.07 (0.76)	7.05 ^a	.009	0.62 ^a	.433	4.34 ^a	.039	0.04			
ISMI-Discrimination experience	2.14 (0.66)	1.92 (0.60)	2.16 (0.67)	2.07 (0.64)	8.55 ^a	.004	0.62 ^a	.434	1.63 ^a	.205	0.01			
MANSA (1–7)	4.51 (1.11)	4.73 (0.92)	4.44 (1.13)	4.32 (1.01)	0.30 ^b	.585	1.89 ^b	.172	4.20 ^b	.043	0.04			
Hope-Total Scale (1–8)	5.83 (1.42)	6.22 (1.16)	5.70 (1.30)	5.80 (1.43)	4.92 ^b	.029	1.55 ^b	.215	1.74 ^b	.190	0.02			
Hope-Pathway	6.03 (1.35)	6.19 (1.26)	5.79 (1.36)	5.92 (1.49)	1.28 ^b	.260	1.41 ^b	.237	0.02 ^b	.890	0.00			
Hope-Agency	5.63 (1.67)	6.25 (1.29)	5.61 (1.63)	5.68 (1.70)	7.02 ^b	.009	1.27 ^b	.263	4.19 ^b	.043	0.04			
RSE (1–4)	2.98 (0.59)	3.20 (0.51)	2.96 (0.57)	2.95 (0.49)	7.99 ^c	.006	2.25 ^c	.136	9.37 ^c	.003	0.08			

Note. ISMI = The Internalized Stigma of Mental Illness Scale; MANSA = The Manchester Short Assessment of Quality of Life; RES = Rosenberg Self-Esteem; M = mean; SD = standard deviation; df = degree of freedom; ANOVA = analysis of variance.

^a df = (1,117).

^b df = (1,115).

^c df = (1,116).

^d Effect sizes for the interaction effect between time and group.