

www.wileyonlinelibrary.com

Enhancing sense of recovery and self-reflectivity in people with schizophrenia: A pilot study of Metacognitive Narrative Psychotherapy

Rebecca Bargenquast and Robert D. Schweitzer*

School of Psychology & Counselling, Queensland University of Technology, Kelvin Grove, Queensland, Australia

Objectives. This study investigated the effectiveness of an innovative, manualized psychotherapy aimed at enhancing recovery and self-experience in people with schizophrenia, Metacognitive Narrative Psychotherapy.

Design. Treatment effects were assessed using a mixed methodology. Data were quantitatively assessed using a single-sample, pre- and post-therapy design and qualitatively assessed using a case-study methodology.

Methods. Eleven patients diagnosed with schizophrenia received Metacognitive Narrative Psychotherapy over the course of 11–26 months. Therapists were seven supervised postgraduate psychology students. On average patients attended 49 sessions over the course of therapy. Patients completed interview-based and self-report measures for general and treatment-specific outcomes at pre-, mid-, and post-treatment.

Results. Quantitative analyses showed that patients significantly improved on the general outcome of subjective recovery, as well as the treatment-specific outcome of self-reflectivity, with medium to large effect sizes. Case-study evidence also showed improvements for some patients in symptom severity, and narrative coherence and complexity.

Conclusions. These results are consistent with previous case-study evidence and suggest that this manualized version of Metacognitive Narrative Psychotherapy produces general and approach-specific improvements for people with schizophrenia. Replication is needed to ascertain its effectiveness with a larger sample size and within a controlled design.

Practitioner points

- People with psychotic symptoms experience disruptions in self-disturbance that are amenable to psychological interventions.
- A focus on enhancing metacognitive capacity in people with psychotic symptoms may contribute to enhancing sense of recovery.
- The current findings support the use of interventions that target capacity for meaningful storytelling in people with psychotic symptoms.

^{*}Correspondence should be addressed to Robert D. Schweitzer, School of Psychology and Counselling, Queensland University of Technology, Kelvin Grove, Qld 4059, Australia (email: r.schweitzer@qut.edu.au).

Psychotherapy for people diagnosed with schizophrenia has a long and controversial history. While it was the treatment of choice in the mid-20th century, it came into disfavour in the late 1980s with a growing emphasis on neurobiological causes of schizophrenia and the introduction of second-wave antipsychotic medication. For the past 20–30 years the use of medication has dominated mainstream approaches to the treatment of psychotic disorders with little credibility or resources being allocated to psychological interventions. However, more recently, interest in psychological interventions aimed at ameliorating the impact of psychosis on the lives of individuals has increased. Current research evidence shows that psychological interventions including cognitive-behavioural, psychodynamic, and dialogical approaches to psychotherapy are effective in the treatment of people diagnosed with schizophrenia, both in the early and chronic stages of the disorder (Lysaker, Buck, & Ringer, 2007; Rosenbaum *et al.*, 2012; Wykes, Steel, Everitt, & Tarrier, 2008; Yung *et al.*, 2011).

Reignited interest in psychotherapy for people with schizophrenia has occurred within the context of a growing emphasis in mental health services on recovery from severe mental illness and advances in the phenomenological understanding of schizophrenia (Bellack, 2006; Davidson, 2003; Sass & Parnas, 2001). Recovery from mental illness is 'a deeply personal, unique process [which]... involves the development of new meaning and purpose as one grows beyond the catastrophe of mental illness' (Anthony, 1993, p. 527). Recovery is no longer viewed solely in terms of symptom cessation. Instead, recovery incorporates two specific domains: objective and subjective recovery (Bellack, 2006; Lysaker & Buck, 2008). The objective aspects of recovery relate to the reduction of illness-related problems while the subjective aspects of recovery relate to a person's subjective experience of their life and mental health difficulties. Research suggests a bidirectional relationship between objective and subjective aspects of recovery, linking objective measures of recovery such as paid employment and symptom severity, with subjective aspects such as empowerment, self-experience, quality of life, and hope (Lloyd, King, & Moore, 2010; Lysaker, Buck, Hammoud, Taylor, & Roe, 2006). While psycho-pharmacotherapy and vocational rehabilitation focus on the objective aspects of recovery from psychosis, there has been a lack of interventions that address sufferers' sense of self and subjective experiences of their difficulties.

Recognizing the centrality of sense of self and human subjectivity in the recovery process for people with psychotic symptoms, Lysaker et al., (2011) developed Metacognitive Narrative Psychotherapy, an adaptation of a psychotherapeutic approach to the treatment of personality disorders (Dimaggio et al., 2012; Dimaggio, Semerari, Carcione, Nicolò, & Procacci, 2007). Metacognitive Narrative Psychotherapy draws upon dialogical narrative understandings of self-experience and schizophrenia, and is influenced by multidimensional conceptualizations of recovery from mental illness (Lysaker & Buck, 2008; Lysaker, Lysaker, & Lysaker, 2001). The approach was also designed to specifically target impaired metacognitive capacity, recognizing it as a stable and independent feature of schizophrenia, which is linked to increased symptom severity and poor social functioning (Brune, Dimaggio, & Lysaker, 2011; Harrington, Langdon, Siegert, & McClure, 2005; Lysaker, Carcione, et al., 2005; Lysaker et al., 2009; Lysaker & Lysaker, 2004; Nicolò et al., 2012; Roncone et al., 2002). Metacognition refers to a spectrum of activities which involves thinking about thinking and stretches from consideration of discrete psychological phenomenon to the synthesis of discrete perception into an integrated representation of self and others (Lysaker et al., 2011).

Case-study evidence has demonstrated that the approach yields positive effects on metacognitive capacity, narrative structure and content, quality of life, symptom severity,

and insight in the treatment of people with schizophrenia (Buck & Lysaker, 2009; Lysaker et al., 2007; Lysaker, Davis, et al., 2005; Lysaker & Hermans, 2007; Salvatore et al., 2012, 2009). Metacognitive Narrative Psychotherapy is also the only intervention to date, with the exception of a case study of mentalization-based therapy (Brent, 2009), that has been designed specifically to target metacognitive deficits in people with schizophrenia. However, there is little evidence that the approach developed and described by Lysaker and colleagues is generalizable across settings. Further trials are needed to confirm the initial case-study reports of the effectiveness of the intervention.

This study expands upon earlier research conducted by Lysaker and colleagues (Lysaker et al., 2007, 2011; Lysaker, Davis, et al., 2005), by investigating the effectiveness of a manualized version of Metacognitive Narrative Psychotherapy in the treatment of 11 people diagnosed with schizophrenia. The study attempts to overcome the challenges of working with a small sample by adopting a mixed methodology. This article has two objectives: (1) to assess data quantitatively using a single-sample, pre- and post-treatment design, and (2) to explore data qualitatively using a case-study methodology. Patients were expected to show improvement in general outcomes: subjective sense of recovery and symptom severity, and in treatment-specific dimensions: metacognitive capacity, narrative coherence, and narrative complexity.

Method

Participants

Nineteen people were interviewed, and 18 met inclusion criteria. Fourteen people commenced treatment and three dropped out, on average after 16 sessions. The mean age of the 11 people who completed treatment was 45.45 years. Nine were men, two were women. Three patients were employed, two were students, and six were unemployed. Most patients were single and childless. One patient was married, one divorced, and two had children. Ten patients were taking antipsychotic medication. Patient inclusion criteria were: (1) diagnosed with schizophrenia or schizoaffective disorder consistent with DSM-IV criteria, (2) medication unchanged for 2 months prior to commencement of therapy, (3) no hospitalizations for 2 months prior to commencement of therapy, (4) able to provide informed consent. Exclusion criteria included intellectual disability, and high risk of suicide or harming others.

Recruitment

Participants were recruited from non-government organizations, local psychiatrists and General Practitioners, and the Australian Schizophrenia Research Bank. The first point of contact was in the form of an email or letter, with a face-to-face meeting and presentation following this.

Measures

Clinical diagnosis

Diagnoses were assessed using the Psychotic Symptoms and Psychotic Disorders sections of the Structured Clinical Interview for DSM-IV Axis I Disorders (SCID-I). The SCID-I is a semi-structured, diagnostic clinical interview. The Psychotic Symptoms and Psychotic Disorders sections of the SCID-I focus on the presence of psychotic symptoms, and the differentiation and diagnosis of psychotic spectrum disorders. This measure has good inter-rater reliability (Lobbestael, Leurgans, & Arntz, 2011).

Recovery Assessment Scale (RAS)

The RAS is a 41-item, self-report questionnaire used to measure degree of recovery from mental illness (Corrigan, Giffort, Rashid, Leary, & Okeke, 1999). It assesses different aspects of recovery using a 5-point Likert scale. Items include, *I have a desire to succeed; I have my own plan for how to stay or become well* and *I can handle it if I get sick again*. An exploratory factor analysis and confirmatory factor analysis conducted on the RAS yielded five factors: Personal Confidence and Hope, Willingness to Ask for Help, Goal and Success Orientation, Reliance on Others, and Non Domination by Symptoms (Corrigan, Salzer, Ralph, Sangster, & Keck, 2004). An Australian study found each factor to have satisfactory internal reliability (Cronbach α range = 0.73–0.91) and convergent validity with positive and significant correlations with other recovery measures (McNaught, Caputi, Oades, & Deane, 2007).

Brief Psychiatric Rating Scale – Extended (BPRS)

The BPRS is an instrument used to measure the severity of 24 psychiatric symptoms (Lukoff, Liberman, & Nuechterlein, 1986). Scoring of the BPRS is based on a 10–30 min interview. Each of the 24 symptoms is rated on a 7-point scale, with a higher rating indicating greater symptom severity (1 = not present; 7 = extremely severe). A total score is derived by adding the scores for all items. Exploratory and confirmatory factor analyses conducted on the BPRS yielded four factors: Thought Disturbance, Apathy, Animation, and Mood Disturbance (Thomas, Donnell, & Young, 2004). Research has linked BPRS scores to clinical global impression ratings, with 'mildly ill' corresponding to a BPRS total score of 31, 'moderately ill' to a BPRS score of 41, and 'markedly ill' to a BPRS score of 53 (Leucht et al., 2005). The BPRS has good inter-rater reliability (intraclass correlations [ICC] = 0.85; Earnshaw, Rees, Dunn, & Burlingame, 2005).

Indiana Psychiatric Illness Interview (IPII)

The IPII is a semi-structured interview designed to elicit life and illness narratives (Lysaker, Clements, Plascak-Hallberg, Knipscheer, & Wright, 2002). The interview comprises five sections and takes between 30 and 60 min to complete. The sections are general free narrative; illness narrative; what is wrong versus what is not wrong; degree of influence of illness construct; and the future, hopefulness and satisfaction. For example, the leading question is, *I'd like you to tell me the story of your life in as much detail as you can from as early as you can remember up until now.*

Narrative Coherence Rating Scale (NCRS)

The NCRS measures degree of narrative coherence based on an IPII transcript (Lysaker *et al.*, 2002). The NCRS, completed by a trained rater using scoring anchors, consists of six items scored between zero and three. Three general scores are generated: Logical Connections, Richness of Historical Detail, and Plausibility, and then summed to create a total score (range = 0–18). Higher scores indicate greater narrative coherence. The NCRS has good internal consistency (Coefficient α = .88) and good to excellent inter-rater

reliability (ICC range = 0.81–0.95; Lysaker et al., 2002). In this study excellent inter-rater reliability was achieved (Total Score ICC = 0.93).

Scale to Assess Narrative Development (STAND)

The STAND measures narrative complexity based on an IPII transcript. The scale comprises four subscales: Social Worth, Social Connectedness, Personal Agency, and Illness Conception (Lysaker, Wickett, Campbell, & Buck, 2003). It is completed by a trained rater using scoring anchors. Subscale scores are used to generate a total score (range = 4-20). Higher scores indicate greater narrative complexity. The STAND subscale scores and total score have good to excellent inter-rater reliability (ICC range = 0.82– 0.94) and good internal consistency (Coeffecient $\alpha = .85$; Lysaker et al., 2003). In this study excellent inter-rater reliability was achieved (Total Score ICC = 0.94).

Metacognitive Assessment Scale – Self-Reflectivity subscale (MAS-SR)

The MAS-SR was used to assess capacity to reflect upon one's own mental states (Lysaker, Carcione, et al., 2005; Semerari et al., 2003). The MAS measures metacognitive capacity and assumes it varies along a continuum from less to more complex metacognitive acts. The MAS-SR consists of nine metacognitive acts. Raters read IPII transcripts and indicate whether the participant has used or failed to use a metacognitive function. Full presence of a function is rated '1' and partial presence of a function is rated '0.5'. Item scores are summed to provide a total score (range = 0-9). The MAS-SR has been found to have good inter-rater reliability (ICC = 0.89; Lysaker, Carcione, et al., 2005; Lysaker, Davis, et al., 2005). This study also found good inter-rater reliability for the MAS-SR (ICC = 0.76).

Therapists

Therapists comprised seven women, Caucasian psychologists with provisional registration. They were all enrolled in a clinical psychology postgraduate programme approved by the Australian Psychology Accreditation Council. Their ages ranged from 25 to 30. Therapists trained in the intervention over the course of 2 days and demonstrated competency in the model. Training involved gaining a comprehensive understanding of the manual, Metacognitive Narrative Psychotherapy for People with Schizophrenia: Guiding Principles and Practices (Bargenquast & Schweitzer, 2012). Therapists also attended fortnightly group supervision facilitated by the authors. Therapy sessions were video-recorded and randomly reviewed using the 18-item Metacognitive Narrative Psychotherapy Integrity Schedule to assess therapist adherence to the principles outlined in the manual. Three to four sessions per patient were reviewed by the first author over the course of treatment, with a high degree of therapist adherence (M = 84.29%).

Treatment model

Treatment was informed by a principle-based manual of Metacognitive Narrative Psychotherapy for people with schizophrenia (Bargenquast & Schweitzer, 2012). Metacognitive Narrative Psychotherapy aims to enhance self-experience in people with schizophrenia by targeting deficits in metacognitive capacity and ability to construct a coherent, complex, and meaningful narrative. The approach is integrative and draws upon narrative theory and recent research investigating metacognitive narrative

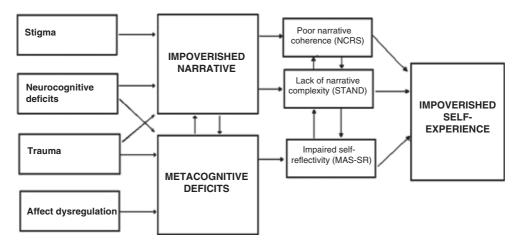


Figure 1. Two pathways to impoverished self-experience in schizophrenia. Adapted from *Psychotherapy* and *Recovery from Schizophrenia:* A *Review of Potential Applications and Need for Future Research* (p. 83), by P. H. Lysaker, S. M. Glynn, S. M. Wilkniss, and S. M. Silverstein, 2010. Adapted with permission.

approaches to the treatment of schizophrenia (Angus & McLeod, 2004; Lysaker *et al.*, 2011; see Figure 1).

Treatment comprised five phases: (1) Developing a therapeutic relationship, (2) Eliciting narratives, (3) Enhancing metacognitive capacity, (4) Enriching narratives, and (5) Living enriched narratives. While each phase of treatment consisted of specific treatment goals and techniques, sessions were not conducted in a prescriptive or rigid manner; they were tailored to the individual patient.

The therapy programme ran from September 2010 to November 2012, with participants recruited up until September 2011. Sessions were conducted face-to-face once per week. Therapists saw one to three patients each. Therapists and patients were matched based on schedule compatibility. The average total number of sessions was 49 and ranged from 25 to 88. Average length of treatment was 15.82 months and ranged from 11 to 26 months.

Procedure

Following ethical approval by the University Research Ethics Committee, patients provided informed consent. Treating psychiatrists were informed of their patient's participation in the study. Prior to commencement of the treatment protocol, pre-intervention measures: demographic information form, IPII, RAS, and BPRS were administered by the first author. Interviews were video-recorded and later transcribed with identifying information removed. The IPII transcripts were then quantitatively rated by the first author using the NCRS, STAND, and MAS-SR. In addition, to assess inter-rater reliability, initial interviews were also rated by three graduate students who completed training in the administration of the measures and were blind to participant status. The same measures were re-administered at mid-treatment (M=23 sessions, 6.8 months) for all but one patient, and at post-treatment for all patients. Patient names have been changed to maintain patient confidentiality. Male names have been used for all aliases.

Results

Quantitative

Mean score plot graphs for outcome variables at pre-, mid-, and post-treatment revealed increased scores overtime on the RAS, NCRS, STAND, and MAS-SR. No change was observed on the BPRS. Repeated measure analyses of variance were calculated for the RAS, NCRS, STAND, and MAS-SR, followed by calculation of effect sizes using pooled standard deviations and correcting for dependence among means (Cohen, 1988; see Table 1).

Positive treatment effects were indicated by significantly increased RAS scores with a large effect size, F(2, 20) = 6.75, p = .006, and significantly increased MAS-SR scores with a medium effect size, F(2, 20) = 3.58, p = .047. Differences in mean scores on the NCRS and STAND were not significant (p = .296 and .095, respectively). However, effect sizes for the NCRS and STAND were medium to large (Cohen, 1988).

Qualitative

Case-study evidence is presented to further explore changes in RAS, BPRS, NCRS, STAND, and MAS-SR scores over the course of therapy. Patients were divided into four groups according to degree of change in RAS scores from pre- to post-treatment: (1) most improved, (2) improved, (3) unchanged, and (4) deteriorated (see Table 2).

All but one patient displayed positive changes on one or more of the general outcome measures (RAS and BPRS) or specific outcome measures (NCRS, STAND, and MAS-SR). Eight patients showed a 6-point or greater increase in RAS scores from pre- to post-treatment. Decreases were found from pre- to post-treatment in BPRS Thought Disturbance scores for five patients, Mood Disturbance scores for two patients, and Apathy scores for one patient. Improvements were found from pre- to post-treatment in NCRS scores for six patients, STAND scores for nine patients, and MAS-SR scores for seven patients.

	Pre-treatment		Mid-treatment		End-treatment			
	М	SD	М	SD	М	SD	d	
General out	come measure	es						
RAS	154.18	16.82	162.45	16.13	168.91	21.14	1.064*	
BPRS	40.73	9.10	39.10	8.72	41.18	7.52	_	
Specific outo	ome measure	s						
MAS-SR	4.13	0.71	4.86	1.00	5.00	1.30	0.671*	
STAND	14.59	2.82	15.46	2.09	16.09	2.62	0.744	
NCRS	11.91	4.46	12.18	3.64	13.20	2.97	0.842	

Table 1. Mean, standard deviation, and effect size for outcome variables

Note. RAS = Recovery Assessment Scale; BPRS = Brief Psychiatric Rating Scale - Extended; NCRS = Narrative Coherence Rating Scale; STAND = Scale to Assess Narrative Development; MAS-SR = Metacognitive Assessment Scale Self-Reflectivity subscale; M = mean; SD = standard deviation; d = effect size.

^{*}b < .5.

Table 2. Individual case demographics and RAS changes pre- to post-treatmen	Table 2	. Individual	case demographics	and RAS changes	pre- to post-treatment
---	---------	--------------	-------------------	-----------------	------------------------

Patient	Age	Employment	Relationship status	Years of illness	No. sessions	Months of Tx	RAS
Most improve	ed						
William	Late thirties	Unemployed	Single	10–15	42	15	+33 pts
Orlando	Late thirties	Full-time	Single	5	52	13	+32 pts
Bernard	Late sixties	Unemployed	Single, parent	50+	25	14	+32 pts
Improved							
Thomas	Mid thirties	Full-time	Married	<5	38	17	+21 pts
Dominic	Mid fifties	Unemployed	Single, parent	30-40	45	15	+19 pts
Humphrey	Early forties	Part-time	Single	20	52	14	+16 pts
Clancy	Mid sixties	Unemployed	Single	50+	88	26	+II pts
Derek	Mid twenties	Student	Single	<5	50	15	+6 pts
Unchanged							
Walden	Mid thirties	Full-time	Single	15	52	14	+3 pts
Raymond	Early forties	Unemployed	Single	15	39	11	- I pts
Deteriorated							
Morrison	Late fifties	Unemployed	Single	30	52	20	-10 pts

Note. Tx = treatment; RAS = Recovery Assessment Scale.

Most improved

Three patients were considered 'most improved': William, Orlando, and Bernard. Each had a 32-point or greater increase in their RAS scores from pre- to post-treatment.

William attended 42 therapy sessions. He initially presented with residual positive symptoms and mild negative symptoms. His overall symptom severity fell within the 'mildly ill' range at pre-treatment. William's therapist experienced sessions as interesting; however, noticed initially that William lacked language to express his feelings, and was unable to respond to questions such as, 'What was that like for you?' She discovered that an in-session focus on affect and labelling emotions helped William better identify how he felt and reflect on intersubjective processes during sessions. His engagement in therapy varied across his treatment. At times, William would request that he finish sessions early due to painful content being discussed. He also chose not to attend for 1 month towards the end of therapy, potentially due to difficulties managing the termination process. However, following reengagement in therapy, he described improvements in his capacity to hold a conversation and engage with others, and a sense of relief at having had the opportunity to put words to painful emotional experiences. William achieved improvements in narrative complexity and self-reflectivity over the course of therapy (STAND = +25%, MAS-SR = +14.3%; see Figure 2). William also had decreased positive schizophrenia symptoms and depressive symptoms at post-treatment (BPRS Thought Disturbance = -30%; BPRS Mood Disturbance = -25%). He experienced no change in narrative coherence.

Orlando attended 57 therapy sessions. He presented with a relatively recent onset of schizophrenia reporting that the diagnosis had been made 5 years previously. His symptom severity fell within the 'mildly ill' range at pre-treatment. Like William, Orlando's capacity to engage in the therapeutic process varied. He initially struggled to talk *with* his therapist not allowing her space to think or speak. His therapist often experienced a feeling of isolation during sessions. With time, Orlando was more able to tolerate her

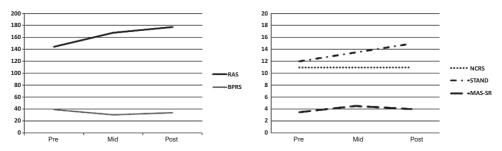


Figure 2. Outcome measure scores for William pre-, mid-, and post-treatment.

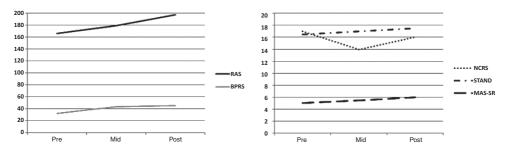


Figure 3. Outcome measure scores for Orlando pre-, mid-, and post-treatment.

reflections and developed some sense of her in his mind, for example, he referred to her a number of times during his end-treatment interview but not at all during his mid-treatment interview. During his final sessions Orlando appeared able to show his therapist that she was important and their relationship was meaningful to him. At post-treatment, he had the highest RAS score in the study, indicating a significant level of recovery. Orlando achieved a notable positive change in self-reflectivity and a modest improvement in narrative complexity (MAS-SR = \pm 20%, STAND = \pm 6.1%; see Figure 3). He evidenced an initial decline in narrative coherence with some degree of improvement from mid- to post-treatment. Orlando reported increased anxiety and tension at mid- and post-treatment, resulting in increased BPRS scores at these times (BPRS total = \pm 40.63%). His anxiety symptoms at mid- and post-treatment were mild to moderate (e.g., frequent worry, motor tension) and appeared on both occasions to be reactive to study-related stress.

Bernard attended 25 therapy sessions. He presented with grandiose delusions and had the highest BPRS Thought Disturbance score in the study at pre-treatment. His overall symptom severity fell within the 'moderately ill' range. His attendance at therapy sessions was inconsistent in part due to physical health problems, which resulted in him having the fewest therapy sessions in the study. During initial sessions, his therapist experienced Bernard's narratives as grandiose, with little sense of human vulnerability. She found it difficult to connect with him. However, as sessions progressed and Bernard attended more consistently, the narratives became laced with sadness and fear; affective experiences that Bernard was inconsistently able to experience. The final session was uncomfortable for Bernard, resulting in a significant increase in grandiosity, making it difficult for his therapist to make a connection with him. She found it difficult to assist him in thinking about the difficulty of ending. Bernard showed modest improvements in narrative coherence and complexity over the course of therapy (NCRS = +16.67%,

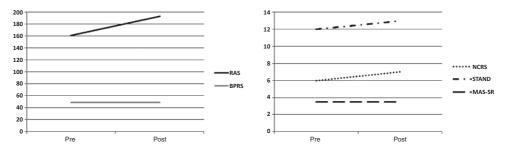


Figure 4. Outcome measure scores for Bernard pre- and post-treatment.

STAND = +8.33%; see Figure 4). He experienced no change in self-reflectivity. He was one of only two patients in the 'most improved' and 'improved' groups in which self-reflectivity did not improve. While his overall level of symptom severity was unchanged at post-treatment, he did display a decrease in his positive schizophrenia symptoms (BPRS Thought Disturbance = -16.67%).

Improved

Five patients in the study 'improved' at post-treatment, with RAS score increases of 6–21 points over the course of therapy: Thomas, Dominic, Humphrey, Clancy, and Derek.

Thomas attended 38 therapy sessions. He presented with slightly flat affect, motor retardation, and moderately severe anxiety at pre-treatment. His overall symptom severity fell within the 'mildly ill' range at pre-treatment. English was not his first language. Thomas did not accept biological or psychological explanations for his psychotic episodes. Instead, he understood his symptoms as spiritual experiences and maintained this understanding throughout therapy. This belief system appeared to interfere with his capacity to develop insight around his difficulties, for example, negative symptoms. Notably, Thomas was more amenable to understanding his mood symptoms in terms of psychological and social difficulties. His therapist experienced sessions with Thomas as affectless and lacking in the exploration of multiple aspects of Thomas's experience. Thomas was briefly hospitalized after the post-treatment interview due to a psychotic episode but recovered quickly returning to full-time work after a couple of weeks. Despite notable improvements on the RAS, Thomas experienced one of the smallest improvements in narrative coherence and complexity in the study (NCRS = +9.1%, STAND = +6.7%; see Figure 5). He was also one of only two patients in the 'most improved' and 'improved' groups with no improvement in self-reflectivity at post-treatment. At post-treatment, Thomas's depressive and anxiety

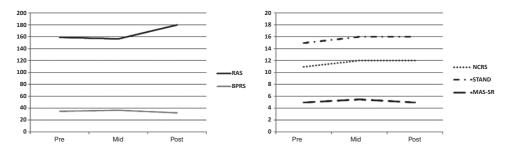


Figure 5. Outcome measure scores for Thomas pre-, mid-, and post-treatment.

symptoms had remitted, which likely contributed to his increased sense of recovery (BPRS Mood Disturbance = -50%).

Dominic attended 45 therapy sessions. He experienced daily auditory hallucinations and persecutory delusions. He also presented with a marked lack of agency and was often unable to account for his actions except in terms of following the commands of his voices, for example, 'I ate cereal this morning because my voices told me to'. When compared to other patients in the study, Dominic had the greatest overall symptom severity at pre-treatment, falling in the 'markedly ill' range. He also had the lowest RAS score pre-treatment. Initially, Dominic was only able to engage in 10-min sessions, slowly working up to 25-min sessions over the course of therapy. Dominic's therapist experienced his narrative as largely empty and disjointed, which was consistent with how Dominic described experiencing himself – as if there was not a lot to him, and he did not know why he kept 'trudging' on. Over the course of therapy, more aspects of Dominic's self-experience emerged, albeit still in a disjointed way, as Dominic seemed to become more comfortable expressing himself in the therapeutic space. Dominic achieved improvements in narrative coherence and metacognitive (NCRS = $\pm 20\%$, MAS-SR = $\pm 37.5\%$; see Figure 6). He also displayed an overall increase in narrative complexity, with a large improvement from pre- to mid-treatment followed by a decrease from mid-to post-treatment (STAND = +35.3%). Dominic displayed less severe positive symptoms at post-treatment (BPRS Thought Disturbance = -11.76%); although, overall symptom severity was unchanged.

Humphrey attended 52 therapy sessions. He had a 20-year history of persecutory delusions but was relatively free of positive schizophrenia symptoms at the beginning of treatment. He experienced marked negative symptoms and had the second highest BPRS Apathy subscale score in the study. Humphrey was relatively well-functioning and had the highest RAS score at the beginning of treatment. His overall symptom severity fell within the 'mildly ill' range at pre-treatment. Humphrey engaged readily in the therapeutic process. During the initial stage of therapy Humphrey's therapist experienced sessions as devoid of affect with little variation in the story or emotion. However, as therapy progressed his therapist felt a greater sense of connection with Humphrey and his narrative as they developed a shared understanding of his experiences. Termination occurred at a time when Humphrey was dealing with the loss of a friend, and although both Humphrey and his therapist felt sadness at ending there was still a sense of hope and direction for the future. Humphrey displayed notable improvements in his reflective capacity in the first 6 months of treatment (MAS-SR = +100%; see Figure 7). He also displayed modest improvements in narrative complexity and coherence (STAND = +11.8%; NCRS = +6.3%). Facilitation of Humphrey's understanding of his

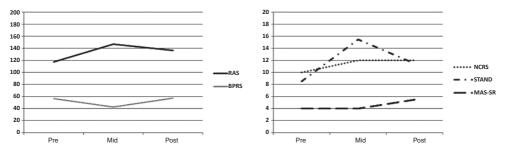


Figure 6. Outcome measure scores for Dominic pre-, mid-, and post-treatment.

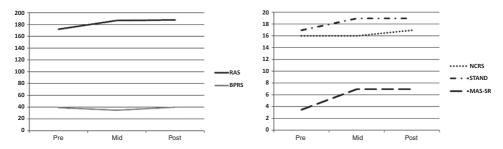


Figure 7. Outcome measure scores for Humphrey pre-, mid-, and post-treatment.

emotions (Item 4, MAS-SR) quickly led to the acquisition of higher order metacognitive functions, for example, ability to recognize the limited impact that his expectations and desires have on reality, and ability to recognize his behaviour is influenced by his emotions. Improved reflective capacity occurred alongside a reduction in Humphrey's negative symptoms (BPRS Apathy = -18.18%).

Clancy attended 88 therapy sessions. He had experienced paranoid delusions since adolescence and had one of the longest lengths of illness in the study. At pre-treatment, he had one of the lowest RAS scores and one of the highest BPRS scores in the study, falling within the 'moderately ill' range. Clancy presented with a barren narrative (Lysaker & Lysaker, 2002) and some persecutory ideation. He was extremely socially isolated. Clancy attended sessions consistently for 2 years and had the greatest number of therapy sessions in the study. For the first year of treatment, his therapist experienced sessions as repetitive, seemingly 'empty', and lacking an enlivened dialogue between patient and therapist. The second year saw the establishment of a shared partnership between Clancy and his therapist and the development of a more flexible, lively dialogue, as new aspects of Clancy's self-experiences were revealed within the therapeutic dialogue. Termination appeared to be a difficult process for Clancy; he expressed notable anger during his final session. He achieved positive changes in narrative coherence, narrative complexity, and self-reflectivity over the course of therapy (NCRS = +50%, STAND = +11.11%, MAS-SR = +14.29%; see Figure 8). He also experienced an overall decrease in symptom severity (BPRS total = -20.75%), in particular he had less severe depression and anxiety symptoms at post-treatment (BPRS Mood Disturbance = -40%). Clancy was the only patient in the study to improve on each of the general and specific outcome measures at post-treatment.

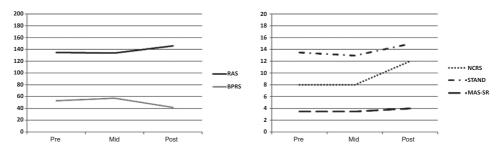


Figure 8. Outcome measure scores for Clancy pre-, mid-, and post-treatment.

Derek attended 50 therapy sessions. He was the youngest patient and had one of the shortest illness lengths in the study. He presented at pre-treatment relatively symptom free, with the lowest BPRS score in the study. Derek attended sessions consistently over the course of treatment but struggled at times with the power differential that existed in the therapeutic relationship. When vulnerable he often questioned his therapist's competence and experienced her as trying to make him cry or feel difficult emotions. Derek appeared to struggle greatly with the termination process, expressing significant anger towards his therapist in his final therapy session. He achieved notable improvements in narrative complexity and self-reflectivity, particularly during the second half of therapy (STAND = +33.33%, MAS-SR = +40%; see Figure 9). He also reported an increased awareness and understanding of his emotional experiences. Despite an overall improvement on the RAS, Derek displayed a 10-point decrease in his RAS scores from midto post-treatment. He also had increased depressive and positive symptoms at post-treatment (mild depression, and moderate anxiety and suspiciousness; BPRS total = +27.59%).

Unchanged

Two patients in the study were 'unchanged' at post-treatment, with RAS score changes of three or less points from pre- to post-treatment: Walden and Raymond.

Walden attended 52 therapy sessions. He presented as relatively well-functioning with mild negative symptoms and mild depression and anxiety. His pre-treatment RAS score was the second highest in the study. His overall symptom severity fell within the 'mildly ill' range at pre-treatment. Walden attended his sessions relatively consistently over 14 months but struggled to engage with his therapist. His therapist experienced their sessions as repetitive, at times boring, and as if there was no need for her to be in the room. Walden also seemed to find it difficult to discuss parts of himself in session that he had not pre-planned before arriving. However, over the year of therapy, snippets of new, more vulnerable aspects of Walden's self-experience emerged as he began to feel more comfortable within the therapeutic relationship. Walden only experienced a 3-point increase in his RAS scores from pre- to post-treatment. However, he displayed a notable positive change in self-reflectively, developing a greater awareness of his emotional experiences and the subjectivity of his mental states (MAS-SR = 57.1%; see Figure 10). He also displayed an improvement in narrative complexity (STAND = +15.2%) and a slight decrease in narrative coherence (NCRS = -5.88%).

Raymond attended 39 therapy sessions and had the shortest length of treatment in the study (11 months). He presented with persecutory ideation, with his overall symptom severity falling in the 'mildly ill' range at pre-treatment. Over the course of therapy,

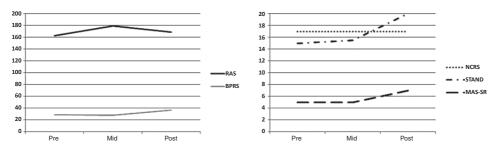


Figure 9. Outcome measure scores for Derek pre-, mid-, and post-treatment.

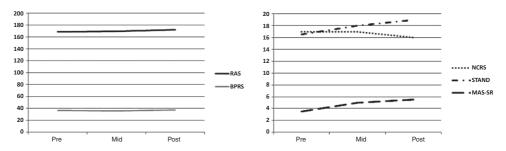


Figure 10. Outcome measure scores for Walden pre-, mid-, and post-treatment.

Raymond's therapist experienced him as consumed by a strong sense of having been exploited and victimized, which impacted his capacity to engage in a flexible dialogue in-session. After a termination date was set, Raymond chose to end therapy 2 months early, unable to acknowledge that a relationship would be lost as part of the termination process. Over the course of therapy Raymond experienced decreases in narrative coherence, narrative complexity, and self-reflectivity (NCRS = -15.38%, STAND = -5.88%, MAS-SR = -30%; see Figure 11). He was the only patient in the study to experience decreases on all the treatment-specific outcome measures at post-treatment. Raymond also experienced an increase in depression and anxiety symptoms at post-treatment (BPRS Mood Disturbance = +80%). Notably, his positive schizophrenia symptoms had decreased at post-treatment (BPRS Thought Disturbance = -37.5%).

Deteriorated

Morrison was the only patient in the study to have 'deteriorated' over the course of therapy, with a 10-point decrease in his RAS scores from pre- to post-treatment. Morrison attended 52 therapy sessions. He presented with grandiose delusions, inappropriate affect, and somewhat disorganized speech. His overall symptom severity fell within the 'moderately ill' range at pre-treatment. Morrison's therapist initially experienced him as childlike with him filling sessions with elaborate but incoherent narratives. The therapeutic process was further complicated by intense transference and countertransference reactions. Most notably, Morrison frequently disclosed romantic feelings towards his therapist leaving her feeling destabilized. As therapy continued, his therapist experienced his narratives as easier to follow and somewhat more reality-based. Morrison and his therapist were more able to have some experiences of separateness. The process

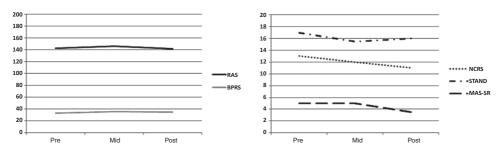


Figure 11. Outcome measure scores for Raymond pre-, mid-, and post-treatment.

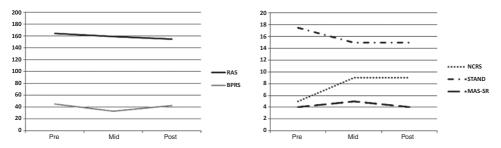


Figure 12. Outcome measure scores for Morrison pre-, mid-, and post-treatment.

of termination was frightening for Morrison, although he showed resolve in being able to think about what it might be like for him and what he may need to do to keep himself psychically safe. During the final session, the therapist's experience of Morrison was that he was palpably desperate, expressing fanciful ideas of a continuing relationship with her. Over the course of therapy, Morrison experienced the largest improvement in narrative coherence of all patients in the study (NCRS = +80%; see Figure 12). However, he displayed a decrease in narrative complexity (STAND = -8.57%). At post-treatment he also presented with decreased grandiosity but increased anxiety (BPRS Thought Disturbance = -41.67%, BPRS Mood Disturbance = +22.22%).

Discussion

This study demonstrates the feasibility and value of implementing an innovative psychological intervention for a group of people who have previously been considered 'untreatable'. Despite claims of the chronic nature of schizophrenia, research shows that many sufferers achieve meaningful degrees of recovery from the disorder and that the recovery process can be facilitated by promoting metacognitive capacity (Buck & Lysaker, 2009; Davidson & McGlashan, 1997; Lysaker et al., 2007; Salvatore et al., 2012). The results of this study strongly support this assertion. Based on the largest cohort to date, current findings demonstrate that the manualized version of Metacognitive Narrative Psychotherapy results in positive outcomes for people with schizophrenia. Subjective sense of recovery and self-reflectivity improved most over the course of therapy, with medium to large effect sizes and significant differences between group means at pre- and post-treatment. These findings indicate the approach's utility in improving self-experience and facilitating recovery in sufferers of schizophrenia. While no group changes in symptom severity were found, evidence of patient improvement in subjective sense of recovery, despite ongoing psychiatric symptoms, is consistent with consumer models of recovery from schizophrenia (Bellack, 2006). Findings support the notion that Metacognitive Narrative Psychotherapy fills a gap in current treatment options for this population by addressing the subjective aspects of recovery from mental illness and improving patients' capacity to think of themselves and their experiences in more meaningful ways.

Current findings also point to the capacity of the approach to enhance patients' narrative coherence and complexity overtime. Although group analyses were not significant, medium to large effects sizes were yielded for these treatment-specific outcomes. Qualitative data demonstrate the positive impact of Metacognitive Narrative Psychotherapy on patients' narratives. Notably, degree of improvement in narrative coherence appears to be impacted by level of coherence at pre-treatment, with patients who initially presented

with relatively coherent narratives, for example, Orlando, Humphrey, Derek, and Walden, achieving smaller gains than those who presented with notable deficits in narrative coherence, for example, Dominic, Clancy, and Morrison.

Results from this study illustrate the value of Metacognitive Narrative Psychotherapy in the treatment of even the most chronic sufferers of schizophrenia. Several patients in the study might well have been considered untreatable, presenting with extremely fragmented self-experience and chronic schizophrenia-related symptoms. Nevertheless, over time even those patients most affected by psychiatric symptoms demonstrated improvement. For example, in the case of Dominic, the use of shorter therapy sessions helped him manage his engagement in the therapeutic process, resulting in notable positive outcomes; and in the case of Clancy a longer length of treatment led to improvements on all outcome measures. Such findings point to the need to re-examine long-standing assumptions about working psychotherapeutically with persons who have a long history of schizophrenia, and as such be cautious when determining certain patients are not going to benefit from psychological interventions due to symptom severity or poor reflective capacity.

Current results also highlight the integral role of the therapeutic relationship in facilitating therapeutic change in Metacognitive Narrative Psychotherapy for people with schizophrenia. Therapist experiences illustrated that a meaningful therapeutic relationship with patients with schizophrenia can be established, and that the development of a shared understanding between therapist and patient enhanced the patient's ability to make use of interventions. Responses to termination also illustrated the crucial role of the therapeutic relationship in treatment, with the end of therapy evoking feelings of anger and confusion, fantasies of an ongoing relationship, withdrawal from therapy, and potentially an increase in positive schizophrenia symptoms (e.g., in the case of Derek). Qualitative findings point to the importance of thoughtful management of the termination process in psychotherapy with people with schizophrenia, especially in research trials where termination may be forced by treatment protocols. Future investigation of the effectiveness of Metacognitive Narrative Psychotherapy would benefit from the inclusion of a formal measure of therapeutic alliance, for example, the Working Alliance Inventory (Horvath & Greenberg, 1989), to enhance understanding of the role of the therapeutic relationship in treatment outcomes for people with schizophrenia.

Two issues need further attention. While there was improvement of symptoms for some patients, the overall findings failed to demonstrate symptom improvement at the group level. There was also a subgroup of patients who deteriorated on some outcome variables over the course of the study (e.g., Morrison). It is likely that a combination of patient factors, therapist qualities, and therapist–patient dynamic issues contributed to the poor response of some patients. Further analysis of poor responders is needed to enhance our understanding of the approach's effectiveness, for example, what interventions help and for whom. Future trials may aid in the development of more nuanced ways for assessing patient appropriateness for Metacognitive Narrative Psychotherapy.

Furthermore, research suggests that accurate case formulation and interpretation of interpersonal patterns is associated with positive outcomes in psychotherapy (Luborsky & Crits-Christoph, 1998; Safran & Muran, 2000; Weiss, 1993). It is possible that variability in the training and competency of the therapists involved in this study resulted in varying accuracy in case formulation and management of relational difficulties in-session, with poorer therapist sensitivity linked to poorer outcomes. Qualitative findings suggest that future studies utilizing the approach described would benefit from increased therapist training in case formulation and management of therapy relationship factors.

The current findings demonstrate the effectiveness of Metacognitive Narrative Psychotherapy in enhancing recovery in people diagnosed with schizophrenia. Nevertheless, the generalizability of the findings is limited. Factors contributing to the limitations include the small sample size, lack of a control group, and restricted number of data collection points. However, the methodology employed demonstrates the feasibility of a larger, controlled trial. A larger trial with multiple assessment time points would provide the opportunity to investigate the impact of the approach on other variables, for example, social functioning, quality of life, and mastery, and also take better account of the non-linear change process. In addition, it would be appropriate for future studies to include a more comprehensive assessment of symptomatology utilizing the Positive and Negative Syndrome Scale, as well as measures of depression and anxiety. A controlled trial is the necessary next step in further confirming the utility of Metacognitive Narrative Psychotherapy in the treatment of people with schizophrenia.

Acknowledgements

This study was supported by the Australian Schizophrenia Research Bank (ASRB), which is supported by the National Health and Medical Research Council of Australia, the Pratt Foundation, Ramsay Health Care, the Viertel Charitable Foundation and the Schizophrenia Research Institute. We also thank the therapists who participated in the study for their dedication to their patients: Jasmine Dubost, Trudi Little, Candice Loopstra, Beth Mackay, Alix Vann, and Sierra Van Wyk.

References

- Angus, L. E., & McLeod, J. (Eds.). (2004). The bandbook of narrative and psychotherapy: Practice, theory, and research. London, UK: Sage.
- Anthony, W. (1993). Recovery from mental illness: The guiding vision of the mental health service system in the 1990s. Psychosocial Rehabilitation Journal, 16, 11-24. doi:10.1037/h0095655
- Bargenquast, R., & Schweitzer, R. (2012). Metacognitive Narrative Psychotherapy for people diagnosed with schizophrenia: An outline of a principle-based treatment manual. Psychosis, 1-11. doi:10.1080/17522439.2012.753935
- Bellack, A. S. (2006). Scientific and consumer models of recovery in schizophrenia: Concordance, contrasts, and implications. Schizophrenia Bulletin, 32, 432-442. doi:10.1093/schbul/sbj044
- Brent, B. (2009). Mentalization-based psychodynamic psychotherapy for psychosis. Journal of Clinical Psychology, 65, 803–814. doi:10.1002/jclp.20615
- Brune, M., Dimaggio, G., & Lysaker, P. H. (2011). Metacognition and social functioning in schizophrenia: Evidence, mechanisms of influence and treatment implications. Current Psychiatry Reviews, 7, 239–247.
- Buck, K. D., & Lysaker, P. H. (2009). Addressing metacognitive capacity in the psychotherapy for schizophrenia: A case study. Clinical Case Studies, 8, 463-472. doi:10.1177/1534650109352005
- Cohen, J. (1988). Statistical power analysis for the behavioral sciences (2nd ed.) Hillsdale, NJ: Erlbaum.
- Corrigan, P. W., Giffort, D., Rashid, F., Leary, M., & Okeke, I. (1999). Recovery as a psychological construct. Community Mental Health Journal, 35, 231–239. doi:10.1023/a:1018741302682
- Corrigan, P. W., Salzer, M., Ralph, R. O., Sangster, Y., & Keck, L. (2004). Examining the factor structure of the Recovery Assessment Scale. Schizophrenia Bulletin, 30, 1035–1041.
- Davidson, L. (2003). Living outside mental illness: Qualitative studies of recovery in schizophrenia. New York, NY: New York University Press.

- Davidson, L., & McGlashan, T. H. (1997). The varied outcomes of schizophrenia. *Canadian Journal of Psychiatry*, 42, 34–43.
- Dimaggio, G., Salvatore, G., Fiore, D., Carcione, A., Nicolò, G., & Semerari, A. (2012). General principles for treating personality disorder with a prominent inhibitedness trait: Towards an operationalizing integrated technique. *Journal Of Personality Disorders*, 26, 63–83. doi:10. 1521/pedi.2012.26.1.63
- Dimaggio, G., Semerari, A., Carcione, A., Nicolò, G., & Procacci, M. (2007). *Psychotherapy of personality disorders: Metacognition, states of mind and interpersonal cycles.* East Sussex, UK: Routledge.
- Earnshaw, D., Rees, F., Dunn, T., & Burlingame, G. (2005). Implementing a multisource outcome assessment protocol in a state psychiatric hospital: A case study. *Psychiatric Services*, 56, 411–413.
- Harrington, L., Langdon, R., Siegert, R., & McClure, J. (2005). Schizophrenia, theory of mind, and persecutory delusions. *Cognitive Neuropsychiatry*, *10*, 87–104.
- Horvath, A. O., & Greenberg, L. S. (1989). Development and validation of the Working Alliance Inventory. *Journal of Counseling Psychology*, *36*, 223–233. doi:10.1037/0022-0167.36.2.223
- Leucht, S., Kane, J. M., Kissling, W., Hamann, J., Etschel, E., & Engel, R. (2005). Clinical implications of Brief Psychiatric Rating Scale scores. *The British Journal of Psychiatry*, 187, 366–371. doi:10. 1192/bjp.187.4.366
- Lloyd, C., King, R., & Moore, L. (2010). Subjective and objective indicators of recovery in severe mental Illness: A cross-sectional study. *International Journal of Social Psychiatry*, 56, 220–229. doi:10.1177/0020764009105703
- Lobbestael, J., Leurgans, M., & Arntz, A. (2011). Inter-rater reliability of the Structured Clinical Interview for DSM-IV Axis I Disorders (SCID I) and Axis II Disorders (SCID II). *Clinical Psychology & Psychotherapy*, 18, 75–79. doi:10.1002/cpp.693
- Luborsky, L., & Crits-Christoph, P. (1998). *Understanding transference: The Core Conflictual Relationship Theme method*. Washington, DC: American Psychological Association.
- Lukoff, D., Liberman, R. P., & Nuechterlein, K. H. (1986). Symptom monitoring in the rehabilitation of schizophrenic patients. *Schizophrenia Bulletin*, 12, 578–603. doi:10.1093/schbul/12.4.578
- Lysaker, P. H., & Buck, K. D. (2008). Is recovery from schizophrenia possible? An overview of concepts, evidence, and clinical implications. *Primary Psychiatry*, *15*, 60–65.
- Lysaker, P. H., Buck, K. D., Carcione, A., Procacci, M., Salvatore, G., Nicolò, G., & Dimaggio, G. (2011). Addressing metacognitive capacity for self reflection in the psychotherapy for schizophrenia: A conceptual model of the key tasks and processes. *Psychology and Psychotherapy: Theory, Research and Practice*, 84, 58–69. doi:10.1348/147608310x520436
- Lysaker, P. H., Buck, K. D., Hammoud, K., Taylor, A. C., & Roe, D. (2006). Associations of symptoms, psychosocial function and hope with qualities of self-experience in schizophrenia: Comparisons of objective and subjective indicators of health. *Schizophrenia Research*, 82, 241–249. doi:10. 1016/j.schres.2005.12.844
- Lysaker, P. H., Buck, K. D., & Ringer, J. (2007). The recovery of metacognitive capacity in schizophrenia across 32 months of individual psychotherapy: A case study. *Psychotherapy Research*, 17, 713–720. doi:10.1080/10503300701255932
- Lysaker, P. H., Carcione, A., Dimaggio, G., Johannesen, J. K., Nicolò, G., Procacci, M., & Semerari, A. (2005). Metacognition amidst narratives of self and illness in schizophrenia: Associations with neurocognition, symptoms, insight and quality of life. *Acta Psychiatrica Scandinavica*, 112, 64–71. doi:10.1111/j.1600-0447.2005.00514.x
- Lysaker, P. H., Clements, C. A., Plascak-Hallberg, C. D., Knipscheer, S. J., & Wright, D. E. (2002). Insight and personal narratives of illness in schizophrenia. *Psychiatry*, *65*, 197–206.
- Lysaker, P. H., Davis, L. W., Eckert, G. J., Strasburger, A. M., Hunter, N. L., & Buck, K. D. (2005). Changes in narrative structure and content in schizophrenia in long term individual psychotherapy: A single case study. *Clinical Psychology & Psychotherapy*, 12, 406–416. doi:10.1002/cpp.457
- Lysaker, P. H., Dimaggio, G., Carcione, A., Procacci, M., Buck, K. D., Davis, L. W., & Nicolò, G. (2009). Metacognition and schizophrenia: The capacity for self-reflectivity as a predictor for prospective assessments of work performance over six months. [Corrected Proof]. *Schizophrenia Research*, 122(1-3), 124–130. doi:10.1016/j.schres.2009.04.024

- Lysaker, P. H., & Hermans, H. J. M. (2007). The dialogical self in psychotherapy for persons with schizophrenia: A case study. Journal of Clinical Psychology, 63, 129–139.
- Lysaker, P. H., & Lysaker, J. T. (2002). Narrative structure in psychosis: Schizophrenia and disruptions in the dialogical self. Theory Psychology, 12, 207–220. doi:10.1177/0959354302012002630
- Lysaker, P. H., & Lysaker, J. T. (2004). Schizophrenia as dialogue at the ends of its tether: The relationship of disruptions in identity with positive and negative symptoms. Journal of Constructivist Psychology, 17, 105–119. doi:10.1080/10720530490273890
- Lysaker, P. H., Lysaker, J. T., & Lysaker, J. T. (2001). Schizophrenia and the collapse of the dialogical self: Recovery, narrative and psychotherapy. Psychotherapy: Theory, Research, Practice, Training, 38, 252–261.
- Lysaker, P. H., Wickett, A. M., Campbell, K., & Buck, K. D. (2003). Movement towards coherence in the psychotherapy of schizophrenia: A method for assessing narrative transformation. The Journal of Nervous and Mental Disease, 191, 538–541.
- McNaught, M., Caputi, P., Oades, L. G., & Deane, F. P. (2007). Testing the validity of the Recovery Assessment Scale using an Australian sample. Australian and New Zealand Journal of Psychiatry, 41, 450–457. doi:10.1080/00048670701264792
- Nicolò, G., Dimaggio, G., Popolo, R., Carcione, A., Procacci, M., & Hamm, J., ... Lysaker, P. H. (2012). Associations of metacognition with symptoms, insight, and neurocognition in clinically stable outpatients with schizophrenia. Journal of Nervous & Mental Disease, 200, 644-647.
- Roncone, R., Falloon, I. R. H., Mazza, M., De Risio, A., Pollice, R., Necozione, S., ... Casacchia, M. (2002). Is theory of mind in schizophrenia more strongly associated with clinical and social functioning than with neurocognitive deficits? Psychopathology, 35, 280-288. doi:10.1159/000067062
- Rosenbaum, B., Harder, S., Knudsen, P., Køster, A., Lindhardt, A., Lajer, M., ... Winther, G. (2012). Supportive psychodynamic psychotherapy versus treatment as usual for first-episode psychosis: Two-year outcome. Psychiatry: Interpersonal & Biological Processes, 75, 331–341. doi:10. 1521/psyc.2012.75.4.331
- Safran, J. D., & Muran, J. C. (2000). Resolving therapeutic alliance ruptures: Diversity and integration. Journal of Clinical Psychology, 56, 233–243.
- Salvatore, G., Lysaker, P. H., Gumley, A., Popolo, R., Mari, J., & Dimaggio, G. (2012). Out of illness experience: Metacognition-oriented therapy for promoting self-awareness in individuals with psychosis. American Journal of Psychotherapy, 66, 85–106.
- Salvatore, G., Procacci, M., Popolo, R., Nicolò, G., Carcione, A., Semerari, A., & Dimaggio, G. (2009). Adapted metacognitive interpersonal therapy for improving adherence to intersubjective contexts in a person with schizophrenia. Clinical Case Studies, 8, 473-488. doi:10.1177/ 1534650109354916
- Sass, L. A., & Parnas, J. (2001). Phenomenology of self-disturbances in schizophrenia: Some research findings and directions. Philosophy, Psychiatry & Psychology: PPP, 8, 347–358.
- Semerari, A., Carcione, A., Dimaggio, G., Falcone, M., Nicolò, G., Procacci, M., & Alleva, G. (2003). How to evaluate metacognitive functioning in psychotherapy? The metacognition assessment scale and its applications. Clinical Psychology & Psychotherapy, 10, 238–261.
- Thomas, A., Donnell, A. J., & Young, T. R. (2004). Factor structure and differential validity of the Expanded Brief Psychiatric Rating Scale. Assessment, 11, 177–187. doi:10.1177/1073191103262893
- Weiss, J. (1993). How psychotherapy works: Process and technique. New York, NY: Guilford
- Wykes, T., Steel, C., Everitt, B., & Tarrier, N. (2008). Cognitive behavior therapy for schizophrenia: Effect sizes, clinical models, and methodological rigor. Schizophrenia Bulletin, 34, 523–537. doi:10.1093/schbul/sbm114
- Yung, A. R., Phillips, L. J., Nelson, B., Francey, S. M., PanYuen, H., Simmons, M. B., ... McGorry, P. D. (2011). Randomized controlled trial of interventions for young people at ultra high risk for psychosis: 6-month analysis. The Journal of Clinical Psychiatry, 72, 430-440.