

Psychotherapy and Recovery From Schizophrenia: A Review of Potential Applications and Need for Future Study

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Recovery from schizophrenia has been conceptualized to involve not only symptom remission of symptoms and achievement of psychosocial milestones but also subjective changes in how persons appraise their lives and the extent to which they experience themselves as meaningful agents in the world. In this article we review the potential of individual psychotherapy to address these more subjective aspects of recovery. Literature on the effectiveness of psychotherapy for persons with schizophrenia is discussed, and two different paths by which psychotherapy might modify self-experience are described. First, we detail how psychotherapy could be conceptualized and tailored to help persons with schizophrenia to construct richer and fuller narrative accounts of their lives, including their strengths, challenges, losses, and hopes. Second, we explore how psychotherapy could target the capacity for metacognition or thinking about thinking, assisting persons with psychosis to become able to think about themselves and others in a generally more complex and flexible manner. The needs for future research are discussed along with a commentary on how current evidence- and skill-based treatments may contain key elements that could be considered psychotherapeutic.

Keywords: schizophrenia, recovery, psychotherapy, metacognition, self

In the mid to later part of the 20th century, people with schizophrenia and other forms of severe mental illness were seen as inevitably having a poor prognosis, and stability or the absence of negative events such as hospitalizations or interpersonal conflict were seen as the best possible realistic outcomes. As has been

described in several recent reviews, however, contrary to these pessimistic views, most people with severe mental illness do not experience unremitting lifelong dysfunction (Bellack, 2006; Harrow, Grossman, Jobe, & Herbener, 2005; Lysaker & Buck, 2008b; Silverstein, Spaulding, & Menditto, 2006). Results of large-scale studies detailed in these reviews reveal that most with this condition can move meaningfully toward or achieve recovery over the course of their lives. As a consequence, recovery is now understood internationally as the focus and expected endpoint for psychiatric treatments and rehabilitation (President's New Freedom Commission on Mental Health, 2003; Ramon, Healy, & Renouf, 2007).

Importantly, recovery is increasingly conceptualized as not merely the remission of symptoms or achievement of psychosocial milestones. It is also seen as involving positive

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changes in how persons think about and experience themselves as individual human beings in the world, changes that may occur regardless of whether persons experience other gains in symptoms or function (Davidson, 2003; Resnick, Rosenheck, & Lehman, 2004; Silverstein & Bellack, 2008). The Substance Abuse and Mental Health Services Administration (SAMHSA; 2005) has suggested a definition of recovery as involving 10 fundamental characteristics. These characteristics are that recovery is self-directed, individualized, associated with an increasing sense of empowerment, holistic, nonlinear, associated with an approach to treatment and life that is strengths based, associated with respect for self and facilitated by respect for the person by mental health professionals, and associated with an increase in responsibility for one's life choices, and hope.

In this sense, recovery can involve persons coming to see themselves as reclaiming the sense that they possess intrinsic human value and are competent and capable of realistically affecting their lives. It may involve the development of both positive beliefs about the self and the adoption of a fuller sense of self in place of the experience of one's identity as having been diminished or irreparably shattered (Atwood, Orange, & Stolorow, 2002; Horowitz, 2006; Laithwaite & Gumley, 2007; Roe, 2005; Seikkula, Alakare, & Aaltonen, 2001). Growth in this domain has been suggested as both meaningful on its own and instrumental in the process of persons coming to think of themselves as able to attain other recovery goals, such as forming deeper bonds with others and returning to work or school (Lysaker & Lysaker, 2008). As a matter of intuition, for example, if I develop a new sense of myself as capable, it is likely that I may be willing to take more appropriate risks and persist, whereas previously I might not in the face of unexpected challenges, increasing my chances of achieving healthier levels of function in a range of different domains.

Findings that a significant percentage of people with diagnoses of schizophrenia spectrum disorders are capable of recapturing a richer sense of who they are suggest that it is a good time to reconsider the role of psychotherapy as a potentially helpful treatment option. Of note, we are not referring here to an interest in resurrecting a psychotherapy that looks for the roots of schizophrenia in psychological conflict

or one that would urge persons to accept a very limited set of possibilities for their life. We are instead wondering whether a psychotherapy that helps recovering persons cultivate a richer and more positive self-experience across a range of dimensions closely linked to the Substance Abuse and Mental Health Services Administration (SAMHSA) principles of recovery (e.g., rejection of stigma, development of a sense of agency, responsibility, hope, empowerment, and an evolving personal history) might uniquely contribute to their achieving a more satisfying life. Psychotherapy has been suggested to help a wide range of people without psychosis to develop both a richer sense of self and a more adaptive self-concept (Hermans & Dimaggio, 2005). Beyond that, others who have successfully delivered cognitive-behavioral treatments focused on the symptoms of schizophrenia have also noted the benefits of moving from symptom-focused to person-focused treatments that attend to the subjective development of the sense of self (Chadwick, 2006; Chadwick, Birchwood, & Trower, 1996). Other developments in the psychotherapy of schizophrenia have also pointed to the possibility of an enriched sense of self that may emerge from integrative psychotherapy over time (Lysaker, Buck, & Ringer, 2007). Treatments such as these, or further refinements of them, could be conceptualized not as "the" intervention but as an intervention nested among other interventions that assist with symptom control and reduction, skill acquisition, community integration, vocational and educational progress, and so forth.

Many psychosocial interventions have been demonstrated to improve outcomes in schizophrenia and other serious psychiatric illnesses, including social skills training (Kurtz & Mueser, 2008), family psychoeducation (Glynn, Cohen, Dixon, & Niv, 2006), and illness management and recovery (Mueser et al., 2002). While these interventions can provide substantial benefits, they tend to focus on improvements in specific functional outcomes and, as typically implemented, do not allow extensive time for self-reflection or exploration. Individual psychotherapy, an activity wherein a client and therapist develop an alliance and mutual goals while using clients' guided self-exploration in the service of improving functioning and reducing distress, is at present notably absent

from most discussions of recovery focused treatments, however. Though still commonly offered in a range of programs (Walkup, Wei, Sambamoorthi, Crystal, & Yanos, 2006), it often takes the form of supportive therapy, without a recovery-oriented focus on the quality of the internal experience of the person and an enrichment of their sense of self. Therefore, our goal in this article is to promote a dialogue about the possible role of psychotherapy in a comprehensive recovery-oriented treatment program.

The following discussion accordingly is divided into three sections. In the first we discuss literature on the general effectiveness of psychotherapy for persons with schizophrenia as well as comment on some of the historical factors that have previously served as a barrier to considering psychotherapy as one component among many treatments. Next, we focus on the conceptual bases for thinking that psychotherapy could play a key role in promoting aspects of recovery. Here we describe two different paths by which psychotherapy might modify self-experience: (1) addressing impoverished or maladaptive personal narrative and (2) enhancing the capacity for metacognition or thinking about thinking. In the final section we discuss the needs for future research, including the manualization and assessment of emerging practices and the consideration of how current evidence- and skill-based treatments may contain key elements that could be considered psychotherapeutic.

Research on Psychotherapy of Schizophrenia

One of the first clinicians to advocate for, and practice, individual psychotherapy for people with schizophrenia was Carl Jung (1907/1960c), who treated many hospitalized patients at the Burghölzli Hospital in the early part of the 20th century (McGuire, 1960). Jung noted that many people with schizophrenia are amenable to therapy, but that caution must be used because under certain conditions, therapy could cause an increase in symptoms (Jung, 1907/1960c, 1939/1960a, 1958/1960b). In an analysis of an early case, Jung described how “the patient describes for us, in her symptoms, the hopes and disappointments of her life” (Jung, 1907/1960c, p. 144). This statement demon-

strates Jung’s view that symptoms, even bizarre ones, are linked to the life history and self-concept of the patient, and that much of the work of therapy involves increasing psychological understanding and redefining the self-concept. Once Jung left the Burghölzli Hospital, however, he rarely treated people with schizophrenia, and with a few notable exceptions (Fierz, 1991; Perry, 2005), this was true of his followers as well. Moreover, with the growth of psychoanalysis, and Freud’s (1957) claim that persons with schizophrenia could not benefit from psychoanalysis because of an inability on their part to form deep attachments with others, psychotherapy for schizophrenia was virtually nonexistent by the middle of the 20th century.

Around that time, however, psychoanalysts such as Fromm-Reichmann (1954), Searles (1965), Sullivan (1962), and Knight (1946) all contended that meaningful intimate bonds with persons with schizophrenia emerged in therapy, and that those bonds could be the basis of a movement toward health. Each of these authors produced a wealth of anecdotal reports suggesting that persons with schizophrenia could use psychoanalytic psychotherapy to consider their lives and develop richer and more satisfying experiences of themselves in daily life. Despite this early enthusiasm, as is reviewed in a range of sources, controlled trials failed to find significant benefits for psychoanalytic psychotherapy (Drake & Sederer, 1986). One of the key studies, referred to as the *Boston Psychotherapy Study*, randomly assigned over 160 adults with schizophrenia to receive exploratory insight-oriented therapy or a reality-based supportive psychotherapy (Gunderson et al., 1984). Despite extensive training of therapists, methodological sophistication, and careful selection of an appropriate sample, results revealed a drop rate of just over 40% at six months and a drop rate of nearly 70% at two years, in addition to little therapeutic benefit from insight-oriented therapy. A later reanalysis of the data suggested some improvements in negative symptoms among participants assigned to the more skilled therapists (Glass et al., 1989).

Beyond the finding that suggests two in five persons with schizophrenia are not interested in psychotherapy, at least in the forms offered in the Boston study, evolving scientific research

dealt an even more fatal blow to psychotherapy around this same point in time. Empirical research failed to support the etiological theories that were the basis for psychoanalytic psychotherapy of schizophrenia. Although some were claiming that psychotherapy alone was the way to address the faulty family dynamics that purportedly caused psychosis (Karon & VandenBos, 1981), research indicated that schizophrenia was instead a genetically influenced, neurobiological brain disorder that involves the distortion of basic human experience, and that its etiology was unrelated to unhealthy family dynamics. Nevertheless, at roughly the same time that psychotherapy seemed to be disappearing from the research horizon, surveys of mentally ill persons and their families indicated that 60% were interested in psychotherapy, a rate that possibly echoes the finding that three in five remained in the Boston study at six months (Coursey, Keller, & Farrell, 1995; Hatfield, Gearon, & Coursey, 1996).

Since then, there has been a renewal of interest in psychotherapy for schizophrenia. This has taken several forms. For example, cognitive-behavior therapy (CBT), targeting psychotic or negative symptoms, has grown significantly in the past 15 years (Pilling et al., 2002; Rector & Beck, 2002). Originally created to address depression, the use of CBT has steadily expanded to address schizophrenia and other psychotic disorders (Rector & Beck, 2002). A number of controlled trials have shown that persons with schizophrenia are willing to attend CBT and that CBT can reduce dysfunctional cognitions, leading to reductions in positive and negative symptoms, including those in samples of persons resistant to medication and persons early in illness (Drury, Birchwood, Cochrane, & MacMillan, 1996; Gumley et al., 2003; Sensky et al., 2000). More recently, CBT procedures have been adapted and linked to improvements in vocational function as well (Lysaker, Davis, Bryson, & Bell, in press).

Chadwick (2006) developed person-based cognitive therapy (PBCT) for distressing psychosis, in an effort to move from a symptom-focused therapy to a person-focused therapy. PBCT integrates cognitive therapy, mindfulness, Rogerian principles, and a Vygotskian social-developmental perspective that stresses language as a socially available tool that per-

sons use to make meaning of daily activity. This approach uses cognitive and experiential techniques for working with negative self-schemata and developing positive self-schemata, and for promoting self-acceptance and metacognition.

Interest has also increased in using a modified form of psychoanalytic therapy for people with schizophrenia. As was discussed by Bachmann, Resch, and Mundt (2003), proposed treatment approaches vary somewhat, but all seem to agree on the following principles: (1) psychotherapy with people with schizophrenia is possible; (2) the classic psychoanalytic approach, including free association and lying on the couch with the therapist out of sight, is contraindicated; (3) the present should be emphasized over the past; (4) interpretations should only be used with caution; (5) goals of therapy should include fostering the experience of the self and the therapist as two separate people who share a relationship, stabilization of ego boundaries and identity, and the integration of the psychotic experience; (6) the frequency of sessions should range between 1 and 3 sessions a week, and therapy should last for at least two years; and (7) therapists who work with people with schizophrenia need to have a high level of frustration tolerance, and not have a need to derive narcissistic gratification from the patient's effort or progress. Some evidence suggests that such an approach can be helpful, at least for people who are more clinically stable at the outset of treatment (Hauff et al., 2002).

Finally, Rosenbaum and colleagues (2005) have reported the results of a large-scale study in Denmark of over 560 first-episode patients who received treatment as usual; supportive individual psychodynamic psychotherapy; or an integrated, assertive, psychosocial, and psychoeducation treatment. Results reported thus far suggest that both the integrated psychosocial treatment and the supportive psychodynamic psychotherapy may lead to better overall functional outcomes after one year of treatment.

Perhaps even more compelling than these data and suggestions, however, is that recent theoretical developments suggest new methods and mechanisms by which psychotherapy for schizophrenia might be effective. These are discussed in the section below.

A Conceptual Basis for a Recovery-Oriented Psychotherapy Focused on Self-Experience in Schizophrenia

Two decades ago, Coursey (1989) pointed out that a key challenge for any psychotherapy of schizophrenia is the development of a treatment rationale that is consistent with the evolving conceptualization of the roots of the disorder. More recently, Freeman et al. (2004) noted that attempts to modify delusions must include a rationale that makes sense to the patient in terms of his or her life experience. One example of success in these regards is the claim of CBT that the neurobiological processes of schizophrenia may lead to tenaciously held delusional beliefs. Neurobiological factors are seen in this view as interacting with social, developmental, and psychological factors resulting in maladaptive beliefs about the self, and tendencies to attribute intentions to others that are rigid and overly negative. CBT helps to correct those beliefs through a systematic, collaborative process of belief examination and prediction of the consequences of behaviors and events, leading to improvements in quality of life.

Following this model, we would suggest that psychotherapy could be conceptualized more broadly as helping persons to recover richer experiences of themselves as human beings in the world. But if psychotherapy were to intervene here and help address issues related to self-experience, what processes would be implicated? Certainly some forms of psychoanalysis have suggested that they may uniquely promote the growth of richer or fuller self-activity. These, though, have tended to propose that psychoanalysis leads to enriched self-experience by strengthening defenses or resolving conflicts that caused psychosis in the first place (Karon, 2003), a possibility that seems incompatible with contemporary views on the etiologies of schizophrenia and psychotic symptoms. In response we argue that an integrative psychotherapy could be conceptualized as assisting persons to recover a richer self experience, one that could be understood and accepted by others, following two different paths.

Psychotherapy and Narrative

First, psychotherapy in schizophrenia could address impoverished personal narrative. Con-

sistent with the SAMHSA principles of recovery—including self-direction, empowerment, individualized and holistic approaches, and hope—psychotherapy could be seen as a forum for the reconstruction of personal narrative in an interactive fashion involving the labeling of old and new behaviors as being consistent with a positive, gradual growth process in which the self is viewed as both more multifaceted and more integrated (Silverstein et al., 2006). As was described by Lysaker and Lysaker (2008) and others (Bradfield & Knight, 2008; Meehan & MacLachlan, 2008), qualitative analyses have suggested that experiences of diminished subjectivity in schizophrenia may reflect in part disruptions in the dialogical processes by which persons carry out conversations with one another and themselves. In particular it has been suggested that if the structures that sustain these conversations fail, there may be a loss of evolving self-experience, which in turn could lead persons to regard themselves as diminished or on the verge of destruction in at least three different ways. First, ongoing dialogue may relatively cease, resulting in the experience of the self as barren or empty. In such experiences the person's own life story may be grossly undeveloped and unembellished, consisting of only a few fragmented potential internal states that are without meaningful links to life events. Second, dialogue may persist but be dominated by a few inflexible views leading to a monological or repetitive life narrative. Finally, it is possible that dialogue will continue but be completely disorganized to the point of near cacophony. In such a condition, the potential for coherent narrative is lost, and replaced by a rapid and chaotic succession of self-experiences, which leads to an incoherent life narrative filled with abstract generalizations and preoccupations that appear to be divorced from consensually accepted accounts of reality.

Regardless of how impoverished narratives are described or categorized, there are a number of interpersonal and biological factors that have been associated with schizophrenia that could play a role in their development (Lysaker & Buck, 2008a; Roe, 2005). In consideration of interpersonal issues first, certainly one factor that might impact personal narrative in schizophrenia is socially prevalent stereotypes of mental illness that cast persons with mental illness as incompetent or dangerous (Swindle, Heller,

Pescosolido, & Kikuzawa, 2000). These may result in self-stigma, which is reflected in personal narratives of oneself as helpless or damaged (Lysaker, Roe, & Yanos, 2007). If the world sees one as helpless and incapable, it might be natural to not see oneself as being even the worthy subject of a story at all or may see any story about them as something that is dangerous and to be avoided. Schizophrenia in this way may disrupt a person's sense of autobiography (Lysaker & Buck, 2007), just as do many other serious medical illnesses (Bury, 1982). It is important to note here that this process can start well before the initial diagnosis of schizophrenia, which is typically in late adolescence or early adulthood. Many people with schizophrenia have a history of poor premorbid social and cognitive functioning (Neumann, Grimes, Walker, & Baum, 1995; Schenkel & Silverstein, 2004) dating back to childhood or adolescence. These can serve as rate-limiting factors for a healthy self-concept, as well as triggers of negative responses from others that can in turn facilitate a negative and stigma-centered self-concept.

Turning to more biologically oriented issues, impairments in neurocognition (Bell, Tsang, Greig & Bryson, 2007; Horowitz, 2006; Uhlhaas & Mishara, 2007; Uhlhaas & Silverstein, 2005) have also been suggested to make it difficult for persons with severe mental illness to organize complex subjective experiences in a coherent manner. Moreover, schizophrenia has been associated with reduced levels of brain-derived neurotrophic factor (BDNF; Pirildar, Gönül, Taneli, & Akdeniz, 2004), resulting in reductions in neurogenesis, and reduced opportunities to form new neuronal connections on the basis of new experiences. Although the reason for the BDNF reduction is not clear, it is likely due in part to physical inactivity and to understimulating environments (Cohen & Sokolovsky, 1978; Osborn, Nazareth, & King, 2007) and findings that BDNF levels and neurogenesis can be increased via physical activity, cognitive stimulation, or both (Dishman et al., 2006; Ratey, 2008; Vinogradov, Fisher, Holland, Shelly, Wolkowitz, Mellon, 2009). Other correlates of schizophrenia, such as obesity, substance abuse, homelessness, poor diet, metabolic abnormalities, and cardiovascular disease (Osborn et al., 2007), can also contribute to poor brain health and therefore to a reduction in the cognitive

flexibility required for the ongoing construction of a personal narrative.

Finally, trauma, which involves both biological and interpersonal factors, may also play a role in impoverished narrative in schizophrenia. A range of studies suggest a high rate of trauma in the histories of people with schizophrenia (Read, van Os, Morrison, & Ross, 2005; Schenkel, DiLillo, Spaulding, & Silverstein, 2005; Van Zelst, 2008), which could affect self-experience in several ways. For example, many traumatized people are unable to access or describe their own emotional experience over time (Frewen et al., 2008). In addition, the chronically high stress level associated with trauma histories can narrow the range of interpretations of experience that are considered, and lead to dysregulation of the hypothalamus–pituitary–adrenal (HPA) axis, resulting in neuronal death in the hippocampus, thereby reducing the ability to experience memories in their proper context (Read et al., 2005; Van Winkel, Stefanis, & Myin-Germeys, 2008). Consistent with the power of self-narrative presented above, the most empirically validated treatments for traumatization in nonpsychotic populations, prolonged exposure (Foa et al., 1999), and cognitive processing therapy (Resick & Schnicke, 1992) incorporate development of a coherent narrative of the traumatic event as a core component of the healing process. With regard to schizophrenia, CBT focused on cognitive restructuring has been found to be effective (Frueh et al., 2004), presumably also because of modifications in self-statements and, ultimately, personal narrative.

With this backdrop, psychotherapy could be conceptualized as an opportunity to dismiss or deepen a previously held life story that was maladaptive as a result of any of a broad range of biological and interpersonal factors (Lysaker, Buck, & Roe, 2007). Beyond exploring the validity of a particular conclusion or response to a particular symptom, psychotherapy could, as it does for many others (Adler, Skalina & McAdams, 2008; Mishara, 1995), represent a place at which persons first recognize and then examine the core beliefs they have told to, or accepted about, themselves. For instance, rather than focusing on a specific hallucinations, a discussion of one's larger life might, in keeping with the SAMHSA principle that suggests that recovery is a holistic process, lead persons with schizo-

phrenia to develop richer and more layered stories about who they are in the present, who they have been across the course of their life, and what possibilities life possesses for them. In line with the SAMSA principles of recovery, a deepened personal narrative might then naturally be an opportunity for experience of oneself as an active agent who prevails in the face of adversity. Again, whereas symptom- or problem-focused approaches might help persons move past specific hurdles, a more narrative approach might help a person evolve a larger understanding of him- or herself, which might generalize to a range of situations. Providing some pilot data on this possibility, to date, at least two quantitative case studies of people with schizophrenia have suggested that improvements in the richness of personal narratives may result during the course of individual psychotherapy and that improvements are linked with changes in symptoms and other assessments of the ability to make sense of daily experience (Lysaker et al., 2005; Lysaker, Davis, Jones, et al., 2007). Other studies have suggested that self-concept is a meaningful predictor of outcome in a range of other domains in both first-episode (Harder, 2006) and more advanced phases of illness, again regardless of the etiology of difficulties with narratization (Lysaker, Buck, Hammoud, Taylor, & Roe, 2006).

Psychotherapy and Metacognition

A second way that psychotherapy might address impoverished self-experience is through assisting persons with schizophrenia to develop enhanced capacities for metacognition. Metacognition refers to the ability to think about thinking, a capacity that clearly is a precondition for the ability to tell a coherent and reflective story about oneself in the world. Of note, it shares a considerable amount in common with terms such as *mindreading* (Dimaggio, Lysaker, Carcione, Nicolò, & Semerari, 2008), *theory of mind* (Brune, 2005), and *mentalizing* (Fonagy, Gergely, Jurist, & Target, 2002), all of which refer to a person's general capacity to think about thinking. We therefore consider it an umbrella term that describes a wide range of internal and socially driven cognitive acts that contain primarily reflexive qualities (Semerari et al., 2003).

Deficits in metacognition have been widely observed in schizophrenia and include difficulties apprehending one's own thoughts and feelings and the thoughts and feelings of others. These deficits are closely linked to psychosocial dysfunction and are not reducible to symptoms or other aspects of psychopathology (Brune, 2005; Franck et al., 2001; McGlade et al., 2008; Stratta et al., 2007). Not surprisingly, decrements in metacognition have been linked to impoverished self-experience (Corcoran & Frith, 2003; Lysaker, Buck, Taylor, & Roe, 2008). Indeed, if it is difficult to recognize one's own thoughts and intentions, it should be difficult to experience oneself as an agent or unique being in the world. As in the case of impoverished narratives, deficits in metacognition are likely the result of numerous factors, including reductions in neurocognitive capacity as is noted above (Lysaker, Dimaggio, et al., 2007; McGlade et al., 2008; Schenkel, Spaulding, & Silverstein, 2005), as well as trauma and difficulties with managing painful affects or regulating emotional states (Lake, 2008; MacBeth & Gumley, 2008; Read et al., 2005; St.-Hilaire, Cohen, & Docherty, 2008).

Can psychotherapy improve metacognitive skills? As was noted by Choi-Kain and Gundersen (2008), a number of forms of psychotherapy exist that focus on promoting metacognitive capacity in persons with mental disorders generally less severe than schizophrenia. Most prominently, Fonagy and colleagues (2002) developed a psychotherapy that seeks to enhance the ability to think about mental states. Originally designed to target persons with borderline personality disorder, results of a randomized clinical trial revealed that this treatment increased metacognition (referred to as *mentalization*) and resulted in reductions in distress, suicide attempts, and levels of dysfunction when assessed at the conclusion of the trial, at 18 months follow up, and five years later, when compared with treatment as usual (Bateman & Fonegy, 2001, 2008).

While these procedures were rooted in the psychoanalytic tradition, others have similarly linked improvements in metacognition with increases in health and wellness in psychotherapy. One group, working from within a cognitive perspective, has found that growth in metacognitive capacity across the course of psychotherapy was linked with improved function in a

wide range of personality disorders (Dimaggio, Semerari, Carcione, Nicolò, & Procacci, 2007; Fiore, Dimaggio, Nicolò, Semerari, & Carcione, 2008). Investigators examining other Axis I disorders—including anxiety, depression, substance abuse, and eating disorders—have similarly reported findings that participation in psychotherapy was associated with improvements in metacognition and reductions in psychopathology (Karlsson & Kermott, 2006; Moreira, Beutler, & Gonçalves, 2008; Osatuke et al., 2007; Scaruder, 2007).

In schizophrenia, several lines of evidence suggest that it is possible to improve metacognitive skills. For example, Spaulding, Reed, Sullivan, Richardson, and Weiler (1999), in a study of cognitive rehabilitation, demonstrated that the primary gains involved not improvements in specific aspects of basic cognition but rather an increased ability to utilize the cognitive process that is most relevant to solve the task at hand. Regarding social cognition, a new intervention, social cognition and interaction training (SCIT), has shown promise in improving emotion perception and theory of mind, and reducing hostile attributions regarding others in people with schizophrenia (Penn, Roberts, Combs, & Sterne, 2007). Furthermore, many versions of CBT for psychosis (Kingdon & Turkington, 2004) incorporate explicit discussions of common errors in logic, and procedures to correct these misperceptions as a core aspect of the treatment.

In light of this literature it seems possible that some of these procedures could be modified for an integrated psychotherapy for schizophrenia. In particular, if metacognition is thought of as a capability that varies along a continuum from good to limited, psychotherapy could be conceptualized as aiding in the recovery of metacognitive capacity by providing a place in which such capacities can be practiced and exercised at increasing degrees of complexity. Psychotherapy can offer clients a chance, in the manner of physical therapy, to develop over time the capacity to reengage in acts they were once better able to perform. With such practice, metacognitive capacities that have atrophied may be improved such that more complex metacognitive acts can be performed with greater ease in regular life, leading to a genuinely greater sense of empowerment and self-confidence. Following the metaphor of physical

therapy, practice of these capacities may be difficult and painful, but incremental progress is to be expected, given the plasticity of the human organism.

Consistent with this, Chadwick (2006) has noted that the goals of PBCT include promoting metacognitive insight with regard to the meaning of symptoms, relationship to internal experiences, negative self-schemata, and the self as a complex, contradictory, and changing process. He provides methods for achieving these goals, and sample therapy transcripts documenting how this work proceeds. Also consistent with this, two quantitative case studies of people with schizophrenia have suggested that improvements in metacognition may occur across individual psychotherapy and that improvements are linked with changes in other forms of assessment (Lysaker, Buck, & Ringer, 2007; Lysaker et al., 2005).

As is summarized in Figure 1, we thus propose two paths to impoverished self-experience that offer a target or focus for psychotherapy concerned with subjective elements of recovery. Stigma, several forms of neurocognitive compromise, and trauma may lead to impoverished narratives, and the same forms of neurocognitive compromise, trauma, and affect dysregulation may lead to metacognitive deficits. The deficits in metacognition and impoverished narratives could then be seen directly as leading to alterations in self-experience.

Future Research: Three Related Foci

Given the potential of psychotherapy to address subjective aspects of recovery by addressing both personal narrative and metacognitive capacity, one clear need for future research is the development of manualized treatments that could be tested for feasibility and effectiveness in randomized controlled trials. Following the illustration in Figure 1, we envision this psychotherapy as addressing both narrative and metacognition deficits, conceptualizing them as interdependent. Without metacognitive capacity it should be difficult to evolve a complex storied understanding of one's life, and without a sense that one's life is worth telling a story about, there should be little need for complex acts of metacognition. With regard to issues of narrative we would also envision this psychotherapy as addressing developing narratives as complex

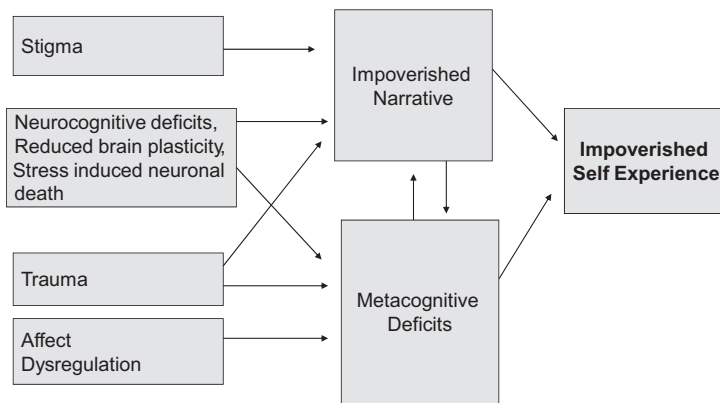


Figure 1. Two paths to impoverished self-experience.

multilayered acts. The development of an enriched narrative for one person might not proceed in the same manner as for another, but in general this work should involve the simultaneous development of a number of semi-independent stories, including for instance, stories about personal challenges, aspects of life in which competence was experienced, grief over losses, hopes for the future, and stories about how the present situation could evolve into the hoped-for future. Challenges and symptoms would need to be linked to personal life experience in a way that was both potentially consensually valid but also preserving of self-esteem, rather than attributing them exclusively to a biological illness and brain disorder.

Turning to the issue of metacognition, we would envision a psychotherapy that might promote recovery by providing a place in which clients may develop their capacities to think about thinking. This might well involve offering opportunities to practice acts of metacognition, leading to the strengthening of the ability to perform metacognitive acts of increasing complexity. As was discussed by Chadwick (2006), psychotherapy can provide many opportunities for this, in terms of examining and monitoring (1) attributions regarding self and others; (2) symptoms and mental states; (3) schemata-linked habitual reaction patterns in thinking and behavior; and (4) thoughts and feelings about all parts of the self. As has been suggested by Buck and Lysaker (in press), psychotherapy is thus one method in which different kinds of metacognition capacity are regularly assessed and

intervention is accordingly staged to match client's capacities.

The development and definition of such treatments would seem likely to be able to draw from a range of existing procedures and by definition be integrative in nature. For instance, cognitive-behavior therapy for psychosis has been used to address the personal meaning of symptoms (Silverstein, 2007) as well as awareness of the process of thinking beyond the correction of maladaptive beliefs (Davis & Lysaker, 2005). The incorporation of methodologies that target metacognition in other groups (Bateman & Fonegy, 2001; Fiore et al., 2008) could also enrich and speed the process of definition and testing of such an intervention.

A related issue for future research regards the development of tools that could be used to assess changes in subjective sense of self. If psychotherapy can lead to change in personal narrative or metacognition, how could this be reliably assessed? Certainly, a range of relevant instruments exist; Resnick and colleagues (2004), for instance, have reported on the responses of over 800 persons to measures of life satisfaction, hope, knowledge about mental illness, and empowerment and linked those with other aspects of outcome. Others have similarly linked other assessment of hope and internalized stigma to outcome as well (Landein, Seeman, Goering, & Streiner, 2007; Wright, Gronfein, & Owens, 2000).

While these measures may produce estimates of beliefs relevant to self-experience, other efforts have also recently been undertaken to de-

velop a recovery-oriented scale to quantitatively assess self-experience as it is expressed in the personal narratives of persons with schizophrenia. One tool, the Scale to Assess Narrative Coherence (STAND; Lysaker, Taylor, Miller, et al., 2006), can be used to rate the extent to which a coherent story of an individual person and his or her psychiatric challenges is present in spontaneously generated speech samples (e.g., from psychotherapy transcripts or semi-structured interviews). The STAND assesses specifically the extent to which persons portray themselves as possessing social worth, being connected to others, and having the ability to meaningfully affect their own destiny, elements closely tied to the SAMHSA principles of recovery. Evidence of interrater reliability, internal consistency, and concurrent validity have been demonstrated across several samples of adults with schizophrenia in a postacute phase of illness (Lysaker, Buck, Taylor, & Roe, 2008; Lysaker, Buck, Hammoud, Taylor, & Roe, 2006). Davidson (2003) noted that the earliest phases of recovery may involve struggling to fully accept oneself as a person whose story is worthy of being told. Roe, Yanos, and Lysaker (2006) noted that the later stages of recovery involve achieving mastery in the process of constructing and negotiating meaning. The STAND may offer developing research on recovery-oriented psychotherapy as a way to quantify movement along this most personal and subjective continuum.

Regarding assessment of metacognition, formal tests exist that assess different aspects of metacognition (Brune, 2005). However, these instruments assess metacognition as cued within the laboratory, and were not developed to detect metacognitive capacity in speech samples such as those derived from psychotherapy sessions and clinical interviews (Lysaker, Warmen, et al., 2008). As a result, paralleling the issue of narrative, efforts have also been undertaken to develop a scale that could rate the presence of metacognitive capacity from the same speech samples utilized to rate the STAND (e.g., from psychotherapy transcripts or semistructured interviews). This scale, the Metacognition Assessment Scale (MAS; Semerari et al., 2003), was originally designed to detect changes within psychotherapy transcripts in the ability of persons with severe personality disorders to think about their own thinking, and has since been modified

for use as a dimensional scale. The MAS contains four scales that pertain to different foci of metacognitive acts: (1) the comprehension of one's own mental states, (2) the comprehension of other individuals' mental states, (3) the ability to see the world as existing with others having independent motives, and (4) the ability to work through one's representations and mental states to implement effective action strategies in order to accomplish cognitive tasks or cope with problematic mental states. Individuals are assumed to possess varying capacities in each of these domains such that any given persons might be able to perform better on some scales and more poorly on others.

Evidence of interrater reliability and validity of the MAS have been presented across several samples of adults with schizophrenia in a postacute phase of illness (Lysaker, Dimaggio, et al., 2007; Lysaker, Warmen, et al., 2008), as well as evidence that it measures different phenomena than does the STAND (Lysaker, Buck, Taylor, & Roe, 2008). Like the STAND, the MAS may offer future research on recovery-oriented psychotherapy a way to quantify movement along this most personal and subjective continuum.

Importantly, with the development of assessments of changes in narrative and metacognition, opportunities for other important practical and more theoretical avenues of research are likely to open. First, with future general empirical support for these procedures, it will have to be determined what would assist clinical settings to implement such a form of psychotherapy. Whereas SAMHSA and others frame recovery as a nonlinear and certainly not necessarily a relatively short-term process, what are the sorts of time frames within which change might be expected? Another set of practical issues to be addressed will also pertain to what forms of training and supervision are necessary to support them. For instance, what sorts of staff can learn and implement these procedures, and what staff and environmental variables determine whether the intervention is implemented faithfully?

Second, on a more theoretical note, although we have focused on self-experience as a meaningful domain of recovery in its own right, changes in this domain are likely to lead to changes in other domains of recovery. With new procedures and assessments of changes in self-

experience, it may be possible to empirically examine how changes in metacognition and narrative are reciprocally related to changes in functional assessments of work, interpersonal, and community function. Such research would not only be of theoretical import in terms of conceptualizing the process of recovery but also might help to develop and refine new treatments. Ultimately, such a program of research could be capable of exploring whether the kinds of psychotherapy described above have an effect on more internal and subjective constructs linked to recovery, such as the extent to which one feels one is more in control of one's choices, self-esteem, involvement in one's own recovery process, and feeling that one's life has meaning.

Consistent with this, as has been long noted, participation in a range of rehabilitative activities may reshape how one makes meaning of one's life both in the immediate and in the larger narrative sense (Bell et al., 2007; Harris et al., 1997). Thus it seems important to study the psychotherapeutic effects of currently employed rehabilitative and other evidence-based methods that stress the benefits of natural supports. Does the acquisition of skills and the development of natural supports in other evidenced-based programs have similar or different effects on personal narrative, cognition, and social skills as psychotherapy? Such research may point to a way to further enhance the effects of these interventions with regard to narrative and metacognition. It may also point to important developments with regard to the interface of psychotherapy and other interventions and some promising avenues for synergistic combinations of interventions. For example, might not cognitive rehabilitation (to improve cognitive flexibility) augment the possible impact of a recovery-oriented psychotherapy, leading to greater degree of improvement in the subjective domains of recovery? Similarly, given findings on the multiple positive effects and meanings of work for people with schizophrenia, might not supported employment help generate beliefs and feelings about the self that can be further explored and integrated with other aspects of personal narrative in psychotherapy (Cook et al., 2005; Roe, 2001)?

Finally, future research is also needed to address for whom such forms of psychotherapy might be most useful. For instance, are these

interventions better suited for persons who are earlier on versus later on in their illness? Intuitively, given that persons early in their illness have many difficult things to make sense of (i.e., the meaning of the psychotic episode in their life trajectory, whether it is an obstacle to overcome or evidence of inevitable decline, whether life dreams will be pursued or abandoned, etc.), and many troublesome decisions to reach, a therapy that addressed issues of narrative and metacognition might be uniquely useful. Of note, as has been suggested in one recent review, the usefulness of more symptom-focused cognitive interventions is still a matter of debate (Morrison, 2009). That said, it may also be that persons late in their illness may also have unique though somewhat different needs, including the mourning of dreams lost earlier in life because of illness as well as just the ravages of persistent disease and what is seen as possible for the remainder of life. Research has suggested that the needs of older persons with schizophrenia are still not well understood and often go unaddressed (Karlin, Duffy, & Gleaves, 2008).

Summary and Conclusions

Recent changes in the conceptualization of recovery have pointed to the possibility that psychotherapy could again come to play a significant role in the treatment of persons with schizophrenia. To explore this issue, we have summarized literature on the history of psychotherapy for schizophrenia and discussed whether impoverished self-experience in schizophrenia, a potent barrier to recovery, could be targeted by psychotherapy. In particular we have suggested that psychotherapy could address two interrelated facets of self-experience—personal narrative and the capacity for metacognition—and potentially set the stage for the achievement of an enhanced quality of life. We have suggested that with the attainment of a richer personal narrative and greater capacity to think about thinking, individuals with schizophrenia may feel sufficiently empowered and able to envision a realistically hopeful future, and to plan out courses of action likely to lead to goal attainment. With a fuller multidimensional and storied account of one's own strengths and weaknesses, and with a greater ability to reason about one's own internal states,

it seems likely that persons could make more reasoned and less impulsive decisions in the face of adversity. In contrast to symptom- or problem-focused approaches, addressing these larger facets of self-experience might enable persons to flexibly formulate more courses of action in response to a greater range of challenges and to weather general threats to self-esteem, all leading to sustained wellness and the experience on the part of the persons with schizophrenia that they themselves are shaping a meaningful life for themselves in an individualized, self-determined, and holistic manner.

With regard to future research, we have suggested that these possibilities point to the need to develop carefully defined and testable integrative psychotherapeutic methods, tools for tracking change in self-experience over time, and explorations of the potential psychotherapeutic impact of existing rehabilitative practices and the synergistic combination of psychotherapy with other practices.

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Received March 12, 2009

Revision received September 3, 2009

Accepted January 2010 ■

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