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# Promoting recovery from severe mental illness: Implications from research on metacognition and metacognitive reflection and insight therapy

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## Abstract

Research indicates that individuals with schizophrenia recover. Recovery, however means different things to different individuals and regardless of what kind of experiences define recovery, the individual diagnosed with the serious mental illness must feel ownership of their recovery. This raises the issue of how mental health services should systematically promote recovery. This paper explores the practical implications for research on metacognition in schizophrenia for this issue. First, we present the integrated model of metacognition, which defines metacognition as the spectrum of activities which allow individual to have available to themselves an integrated sense of self and others as they appraise and respond to the unique challenges they face. Second, we present research suggesting that many with schizophrenia experience deficits in metacognition and that those deficits

compromise individuals' abilities to manage their lives and mental health challenges. Third, we discuss a form of psychotherapy inspired by this research, Metacognitive Reflection and Insight Therapy which assists individuals to recapture the ability to form integrated ideas about themselves and others and so direct their own recovery. The need for recovery oriented interventions to focus on process and on patient's purposes, assess metacognition and consider the intersubjective contexts in which this occurs is discussed.

**Key words:** Schizophrenia; Rehabilitation; Self; Psychosis; Metacognition; Recovery; Psychotherapy; Social cognition

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**Core tip:** Impairments in metacognitive processes challenge the abilities of individuals with schizophrenia to form and sustain an integrated sense of self and others. These deficits in metacognition compromise individuals' abilities to manage their lives and mental health challenges. Treatments which help individuals with schizophrenia recapture metacognitive abilities can assist those individuals to regain access to the kinds of integrated ideas about themselves and others which assists them to meaningfully direct their own recovery. Metacognitive Reflection and Insight Therapy is an example of this kind of treatment.

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## INTRODUCTION

Serious mental illness, whether referring to schizophrenia spectrum disorders or psychosis more broadly, is by definition tied to a multitude of psychological and social challenges. Regardless of whether we are considering matters at the cellular level, larger brain structures, phenomenology, or complex social and environmental structures, individuals diagnosed with these conditions experience disruptions, which culminate in the interruption not only of their lives but also of the lives of their families, partners, friends, and others living in their communities.

For decades, these conditions were assumed to involve progressive decline and dysfunction. Individuals held out little hope for wellness and it was assumed that individuals diagnosed with these conditions could at best hope for stability. If operationalized, this seemed to consist only of freedom from acute distress

and institutionalization<sup>[1]</sup>. Multiple levels of evidence, including careful long-term follow-up, qualitative and quantitative clinical research, and a multitude of first person accounts, however, have offered a very different picture. Taking an optimistic turn, this work has suggested that no matter how ill a person can be at a particular moment, individuals with serious mental illness can recover in a personally meaningful manner regardless of the limitations imposed upon an individual's life by the disorder<sup>[2]</sup>.

These studies of outcome and recovery have also highlighted the complexity of the concept of recovery itself<sup>[3,4]</sup>. Among other things, it is clear that recovery can and does mean different things to different people<sup>[5]</sup>. Recovery, for some people, is mostly a matter of changes in objective phenomena. For example, to recover could mean that symptoms remit or that individuals attain certain psychosocial milestones, such as returning to work or school. Recovery can also involve a host of subjective experiences including attaining a self-appraised acceptable quality of life or reasonable sense of social rank. Recovery could mean no longer feeling tainted or different from others, or at a more subjective level, it could involve recapturing a cohesive sense of oneself as a valuable person in the world<sup>[6,7]</sup>. For many, these subjective and objective aspects of recovery are complementary and interact with each other<sup>[1,8]</sup>. Despite the complexity and individual variation of the concept of recovery, there do appear to be three things that are inevitably true about recovery: (1) It happens; (2) its meaning is contextualized; and (3) regardless of what kind of experiences define recovery, the person diagnosed with the serious mental illness must feel a sense of ownership of their recovery<sup>[2]</sup>. This is to say that the person diagnosed with mental illness must direct their own recovery. In this sense, recovery is a matter undertaken by an agent in the world<sup>[9]</sup>. Recovery consequently is not just "fixing" something or finding solutions for any number of dilemmas. Recovery requires individuals to make sense, in the moment and over time, of the experiences that surround mental illness. Sense and meaning has to be made of psychiatric and social challenges, changes in the person's own mind and body, the minds of others and about what is happening in the larger world. Meaning-making is necessary, both implicitly and explicitly, for decisions to be made about how to respond to challenges<sup>[2,10]</sup>. To sum up: Recovery from serious mental illness requires that the person diagnosed with the condition be an active agent in that process.

This knowledge is freeing but also adds extra responsibility for clinical care<sup>[11]</sup>. If recovery is possible, naturally it should be the goal of treatment. But given the different meanings recovery has and its requirement that the individual in treatment be in charge in some meaningful way, what is the clinician to do beyond offering general support and attending

to the other common factors of treatment? How can clinical care systematically promote something that differs from person to person and which has to be ultimately directed by the person with serious mental illness?

This paper explores how research on the integrative model of metacognition and related developments in individual psychotherapy may offer a partial answer to this question by offering a larger framework for thinking about how individuals form a sense of what recovery means to them and then how they should pursue it. The integrative model of metacognition frames metacognitive processes as a spectrum of activities that enable a sense of self and others to be available to individuals in the moment that can be used to understand and respond to life's challenges. Metacognition in the integrative model is, therefore, foundational for meaning making within a given moment, for a sense of agency and ultimately the ability to decide about the meaning of psychosocial challenges and the most effective response<sup>[7]</sup>.

To explore how research on this model might help inform recovery oriented care, we will first offer a more nuanced definition of the integrative model of metacognition. We will then discuss a decade of quantitative research on the prevalence and psychosocial consequences of reductions in metacognitive capacity for adults with serious mental illness and detail the development of a specific integrative form of recovery-oriented individual psychotherapy inspired by this research. We will then suggest that this work suggests five general principles that could inform change in traditional practice in order to genuinely support recovery. Finally, we will discuss how these principles and implications of this research converge and diverge with other emerging approaches.

As an initial caveat, we think it is important to clarify two points regarding terminology. This paper will use the term schizophrenia. Many suggest the word schizophrenia is stigmatizing and questions whether there is a scientific basis for suggesting it is a medical entity. Recognizing this controversy, we will employ the word schizophrenia given that, in part, one of its later ancient Greek roots suggests the splitting or shattering of the mind, which seems a valid attempt to characterize fragmentation which those diagnosed with these conditions confront<sup>[12]</sup>. Second, when describing people engaged in treatment we use the word "patient." This also is a controversial term as many have found mental health care to be both stigmatizing and marginalizing. This has led to other terms being commonly used including consumers, experts by experience, service users, clients, and psychiatric survivors. We chose to use the word "patient" given its roots in Latin and Greek meaning "to suffer," believing again that this characterizes the often profound suffering individuals diagnosed with these

conditions experience. We do reject any suggestion that wellness in the face of mental illness comes from being a passive recipient of care.

### **Metacognition**

**Original term:** Metacognition was first used to describe the experience of having a cognition or thoughts about other cognitions. In education research it was used to examine how people are aware of their own learning and how that awareness is utilized<sup>[13]</sup>. The term was subsequently applied to other phenomena including self-regulation<sup>[14]</sup>, the ability to monitor and correct reasoning and behavior<sup>[15]</sup>, and to reflect upon memory<sup>[16]</sup> as well as to describe attentional biases or general interpersonal stances sometimes referred to as metacognitive beliefs<sup>[17]</sup>.

**Integrated model of metacognition:** As metacognition has continued to be studied across a variety of disciplines including educational, developmental, neurocognitive, and abnormal psychology the term metacognition has emerged to take on many meanings<sup>[18]</sup>. In an effort to form an integrated model of metacognition we have proposed that metacognition is a spectrum of activities<sup>[19]</sup>. One end of that spectrum involves awareness of discrete mental experiences that can be distinguished from one another, such as a specific thought, certain feeling or a particular desire. At the other end of that spectrum is the integration of those discrete experiences into a larger complex sense of oneself and others<sup>[20]</sup>. These different ends of the spectrum continuously influence one another, as for any larger sense individuals have of themselves must account for discrete experience, while the meaning of a discrete experience is always influenced by a larger understanding of the individual having that experience.

In this model, metacognitive processes are what allows an integrated and cohesive sense of self and others to be available to an individual in a given moment<sup>[7]</sup>. When metacognitive processes are fully functional they allow individuals to engage effectively in a number of mental operations simultaneously and automatically. These include the ability to recognize and distinguish specific mental experiences, to perceive how those mental experiences are changing or not changing, to contrast those mental states with the demands of reality, to see how all of that is happening in a larger context, and to see how those concrete situations fit into a larger narrative of our lives and the lives of others. Metacognition thus allows individuals access to a sense of themselves (and of others) which is multifaceted and multidimensional, while also allowing for that sense of self and others to change responsively and adaptively as contexts change. Metacognition in the integrated model is not a form of disembodied cognition or set of calculations that exist in isolation. They are vital activities that enable individuals to respond to psychological and

social challenges and ultimately function as members of the human community<sup>[19]</sup>.

For the purposes of thinking about recovery from serious mental illness, the integrative model suggests metacognitive processes have at least three distinguishing characteristics. First, metacognitive acts occur and evolve intersubjectively. The ideas individuals have of themselves or others, whether elemental and complex, are formed with others in mind, others who may be either present or implicitly imagined, such that those ideas can be shared with and acknowledged by other people<sup>[21-23]</sup>.

Second, metacognitive processes can be differentiated from one another according to their focus. As Semerari *et al.*<sup>[24]</sup> have described, there are four discernable objects or domains of metacognition which can be distinguished from one another. These include groups of metacognitive acts, which are focused on the self, others, one's larger community and the use of knowledge about self and others to respond to life's problems, or mastery.

Third, synthetic metacognitive processes are holistic in nature and involve a series of hierarchical steps. These steps are conceptualized, per domain, as a series of levels with each level incorporating something larger into what was incorporated into the step before it. For example, the fourth step of the metacognitive processes which are focused on the self adds and incorporates something new to what was incorporated in the third step allowing for a more complex sense of self to be available in the moment. A key implication of this is that for a given step to be operating successfully the step below it also has to be operating successfully. Consequently, once a step is not operating successfully then no higher step can operate in a fully successful manner given that those higher steps would necessarily be missing the information that was supposed to be provided by the more basic or lower step. This conceptual framework allows for individual differences in metacognitive capacity to be quantified and characterized as more or less functional on the basis of an identified level of metacognition which is not fully operational. Importantly, this is not to say that individuals with lesser metacognitive capacity have less experience of the self or others, but instead that their experience of self and others is less integrated or more fragmented. It is also not to imply a purely developmental model of metacognition, as individuals with lesser metacognitive abilities may have previously held these abilities but lost them for any number of different social, biological or psychological reasons<sup>[7]</sup>.

**Measuring metacognition:** The Metacognition Assessment Scale (MAS<sup>[24]</sup>) was one of the first scales that incorporated metacognition as a core construct to characterize how individuals form an evolving and multidimensional sense of self and others. The MAS offered multiple advances. First, it was explicitly

interested in the psychological processes that go beyond momentary self-awareness and facilitate the emergence of a broader sense of self and others. It also operationally differentiated metacognitive acts based on their focus and allowed for the measurement of changes in how often particular metacognitive acts were being performed. This scale was adapted by Lysaker and colleagues<sup>[25]</sup>, who transformed the original MAS into an ordinal scale referred to as Metacognition Assessment Scale Abbreviated (MAS-A). The MAS-A retained the original distinctions offered by Semerari *et al.*<sup>[24]</sup> and so contained four scales: Self-reflectivity (S), Understanding other's minds (O), Decentration (D), and Mastery (M).

While the MAS was originally designed to detect the presence or proportion of times a metacognitive act could have been used vs was used within a psychotherapy session, the MAS-A is used to rate metacognitive capacity as it is manifest within an interview (e.g., Indiana Psychiatric Illness Interview; IPII<sup>[25]</sup>) which provides opportunities for participants to reflect about their life and psychological challenges. Training for rating using the MAS-A consists of the completion of an established set of transcripts followed by supervision and the establishment of inter-rater reliability.

Concerning the content of the scale, the MAS-A, in contrast to the MAS, follows the integrated model of metacognition, and considers each item of each scale to reflect a more complex metacognitive act than the one before it. Each item describes a metacognitive act that requires the integration of a new kind of information that was not included in the previous item. Concretely then, a rater scores each item in the MAS-A as adequately functioning or attained ("1") if they judge the participant to be capable of performing that act or as not attained ("0") if they judge the participant to not be capable of performing that act and once a score of "0" is given for an item no further levels can be scored as attained. Thus, the scores from the MAS-A indicate participants' maximal level of metacognitive function, or the last level before their metacognitive processes were judged to fail to fully operate and so the scores on each MAS-A subscale allows for the degree of fragmentation (or lack of integration in a given metacognitive domain to be measured dimensionally.

### **Research on metacognition in schizophrenia:**

Research has found the MAS-A has fully acceptable psychometric properties<sup>[20]</sup> and assesses phenomenon which are distinct from the social cognition<sup>[26,27]</sup> as well as content specific metacognitive beliefs<sup>[28]</sup>. To date, research using this scale has addressed two broad research questions: (1) Are individuals with schizophrenia spectrum disorders more likely to experience disruptions in earlier or more basic aspects of metacognitive capacity; and (2) when disruptions occur at more basic levels of metacognitive function

are individuals more likely to experience greater levels of impairment in current and future function.

In response to the first question, research has revealed that individuals experiencing both first episode psychosis and prolonged schizophrenia experience significantly greater metacognitive deficits relative to others. Specifically, individuals with first episode psychosis and prolonged schizophrenia tend to experience disruptions in more basic levels of metacognitive capacity more often than individuals without any significant mental health concerns<sup>[26,28]</sup>, minor anxiety and affective disorders<sup>[29]</sup> or with serious and prolonged non-psychiatric medical conditions<sup>[30]</sup>. Other mental health conditions have been found to involve metacognitive deficits including depression<sup>[31]</sup> substance use, borderline personality disorder<sup>[32,33]</sup>, posttraumatic stress disorder<sup>[34]</sup>, and bipolar disorder<sup>[28]</sup>, though these deficits occur in less basic elemental levels than what is seen in schizophrenia spectrum disorders.

Concerning the relationship with function, disruptions observed in basic or more elemental levels of metacognition (referred to as more severe metacognitive deficits) have been found to predict generally poorer function<sup>[35]</sup>. This includes greater reductions in functional competence<sup>[36]</sup>, reports of poorer subjective sense of recovery<sup>[37]</sup>, a weaker therapeutic alliance in cognitive-behavior therapy<sup>[38]</sup>, less reported ability to reject stigma<sup>[39]</sup>, anhedonia in the absence of depression<sup>[40]</sup>, a more sedentary life style<sup>[41]</sup>, reduced awareness of negative changes in psychological and social function states<sup>[42]</sup> and lesser levels of behavior that is driven by internal rewards<sup>[43]</sup>, all regardless of concurrent symptom severity. Individuals with schizophrenia spectrum disorders who experience disruptions in basic metacognitive function have also been found to be more likely to have future problems with vocational function<sup>[44]</sup>, more likely to develop negative symptoms<sup>[45-47]</sup>, and to experience reduced intrinsic motivation<sup>[48]</sup>, regardless of baseline assessments of these phenomena.

**Metacognitive reflection and insight therapy:** An illustration of an emerging recovery-oriented treatment that targets metacognition in psychosis.

**Application of metacognitive research to treatment:** Inspired by both research on metacognition and emerging models of recovery, efforts commenced to develop a form of integrative psychotherapy that could promote recovery through stimulating metacognition. The core assumption was individuals with a more fragmented sense of self and others would struggle to make sense of psychiatric and social challenges and thus struggle to move toward recovery. Put another way, a treatment enabling the processes which allow individuals to form a more integrated sense of self and others (*i.e.* metacognition) would promote recovery. What was proposed then was a process oriented

therapy referred to as Metacognitive Reflection and Insight Therapy (MERIT)<sup>[7]</sup>, a therapy focused on enabling the metacognitive processes which would allow individuals diagnosed with schizophrenia spectrum disorders to determine what recovery meant to them, what steps they needed to take and to take charge of their own recovery.

As described elsewhere<sup>[7]</sup> this therapy was developed through a series of international conversations among clinicians with extensive experience providing long-term psychotherapy to individuals with serious mental illness. It was conceptualized as integrative in that it would describe principles that could be adapted by therapists from other perspectives in order to promote metacognition. These principles were explicitly described as core activities that offered patients maximal opportunity for the development of metacognition which should be present in any given psychotherapy session rather than a rigid set of activities to be carried out in a certain order. In this sense treatment does not approach metacognition as something someone has or does not have. Instead, MERIT approaches metacognition as something a person possesses to a varying degree and something they can further cultivate with time and practice.

**Structure and principles of MERIT:** The central assumption of MERIT is that patients can gain metacognitive capacity by practicing metacognitive acts within the flow of a psychotherapy session<sup>[7]</sup>. Following the integrative model of metacognition, it is assumed that as patients become able to perform a level of metacognitive acts, they will begin to be able to perform more complex metacognitive acts and consequently have a richer sense of self and others available to them as they seek to recover. Analogous to processes in physical therapy, patients could be expected over time to become able to perform more complex metacognitive acts, as physical therapy builds upon existing ability and stretches to the next level of function<sup>[49]</sup>.

MERIT is grounded in several general principles including foremost that recovery from serious mental illness is expected, regardless of the severity of the mental health condition<sup>[7]</sup>. Consistent with the material presented above, MERIT also assumes patients must be active agents who direct their own recovery during all phases of illness and that this requires the rejection of stigma, as well as a non-hierarchical therapist-patient relationship in which the therapist's role is best understood as one of a co-participant or consultant. It is thus a therapy for any patient who consents and there are no particular preconditions before therapy can begin<sup>[7]</sup>. Importantly, MERIT is not intended as a replacement for other treatments but can be offered both on its own or in combination with other rehabilitative practices depending on unique patient needs and clinic resources.

In MERIT, eight elements should be present in any given session, each of which is assumed to uniquely assist adults with psychosis to recapture damaged, atrophied, or undeveloped metacognitive abilities. Each element describes a measurable activity that can occur regardless of the unique problem or dilemma a patient is experiencing or wanting to discuss in psychotherapy. The elements are conceptually and synergistically inter-related, but each can be considered and assessed independently<sup>[7]</sup>.

The eight elements are divided into three classes. The first class includes what are referred to as content elements. These include four specific elements that call for the session to focus upon and discuss (E1) the patient's agenda, or wishes and needs in the moment, (E2) the patient's experience of the therapist's thoughts and feelings about the patient and his or her agenda, (E3) the patient's experience of life as revealed within specific and minimally abstract personal narrative episodes and (E4) the psychological challenges which emerge from the first three content elements. The second set of elements includes what are referred to as the process elements. The process elements include a discussion (E5) of the therapeutic relationship in which the patient is thinking about their sense of themselves and others and (E6) discussion of progress, including resultant changes in their minds and bodies. The final two elements are considered superordinate elements and call for reflections about (E7) self and others and (E8) mastery to be stimulated at a level consonant with the patient's metacognitive ability as assessed in the moment. In other words, efforts to meaningfully engage patients in conversations about their sense of themselves and others need to match the patient's metacognitive capacity.

Regarding treatment mechanisms, it is assumed that these elements will have the ability to enhance metacognitive capacity that will result in a more integrated sense of self and others becoming available to patients in the moment. This integrated and flexible understanding of self and others will then enhance the opportunities for more effective self-management culminating in recovery. An adherence scale has been developed which allows for assessment of whether a given session sufficiently conforms to the session guidelines and is available in the MERIT guidebook<sup>[7]</sup>. This adherence scale can be self-rated by therapists or by others in order to allow for fidelity to the MERIT procedures to be formally assessed between therapists.

**Research evidence:** Though still emerging as a treatment, research has indicated that MERIT can be delivered under routine conditions in natural clinical settings and that patients with severe mental illness will accept this treatment and demonstrate improvements in metacognition<sup>[50-53]</sup>. Exploring the first-person experience of MERIT, a qualitative study has examined the self-reported experience of patients who received at least one year of either

MERIT or supportive psychotherapy<sup>[54]</sup>. This study found that MERIT, in contrast to supportive therapy, leads to improvements in sense of agency and the ability to tolerate and manage previously disabling levels of emotional distress. Studied at the level of individuals and their own unique needs, detailed case reports have indicated that participation in MERIT is associated with improvements in the unique goals patients set for themselves in both early and later phases of serious mental illness<sup>[10,55-61]</sup>. Concerning patients who deny they have a mental illness, Vohs and colleagues<sup>[53]</sup> randomly assigned adults with first episode psychosis with poor clinical insight to receive a 6-mo trial of MERIT vs treatment as usual. They found that the treatment completion rate for MERIT was 80% with statistically significant improvements in objective measures of awareness of illness without any concurrent increases in hopelessness or emotional distress.

### ***Implications for developing and implementing recovery-oriented care in serious mental illness***

At the outset of this paper we suggested that conventional treatment models for serious mental illness are challenged to account for three aspects of recovery: (1) Recovery is to be expected; (2) recovery means different things to different people; and (3) recovery must be self-directed to be meaningful. We then summarized research suggesting metacognitive deficits may hinder a person's abilities to form the kinds of complex ideas about self and others needed to direct one's own recovery effectively. We then offered an illustration of a form of integrative therapy, MERIT designed to target metacognition and promote a kind of recovery that is personally meaningful and self-directed. Consistent with the need for integrative approaches in the treatment of serious mental illness<sup>[62]</sup>, MERIT offers principles which can be incorporated into different approaches in psychotherapy and hence does not require yet another new treatment approach unrelated to others<sup>[22,63]</sup>.

Returning to the issue of how treatment can promote unique, individualized, and self-directed recovery, we would suggest this body of research on metacognition suggests at least five general principles that conventional treatments could potentially embrace.

**Treatment must be process oriented:** First, if treatment is to be concerned with how people understand their psychiatric and social challenges it has to begin with curiosity and inquiry about what patients think about those challenges. How does the patient experience challenges? How do they think about challenges now and how have they thought about challenges in the past? Thus, what therapy is trying to provoke or support is a process and not specific content such as accepting a fact. It is as much about how people think as what they think. Moreover,

that process is about making meaning of often complex and painful material.

This is not to say that content is irrelevant. Certain content may prove helpful for supporting the process of meaning making but those contents are likely different from patient to patient. Whereas one patient may find psychoeducation and support helpful, another may find it destructive and marginalizing. Some may find a particular skill based approach helpful, but others may experience that as useless or harmful. Content in fact should differ from person to person depending upon any number of individual differences in ages, gender, education, cultural background, trauma history, socio-economic status, talents, family history *etc.* Nevertheless, because understanding challenges involves making meaning and not the grasping of facts, treatment cannot be conceptualized as primarily following a curriculum seeking to “teach” patients to perform certain acts or “getting them” to think certain things. This requires the clinicians to “give up” the knowing attitude<sup>[63]</sup> and let themselves be taken by surprise<sup>[64]</sup>.

**Treatment must be concerned with purposes beyond problems:** Given that it is the meaning of challenges and the best response to them is at stake, a recovery-oriented approach also needs to be at least as focused on patients’ purposes as it is on problems. In other words, it is vital for therapy to address not just what has gone wrong discretely, but what the patient is seeking, both in the moment and in recovery more broadly. Here the conventional assumption that the patient-clinician dyad should identify the problem and then the solution can be seen to risk undermining recovery and meaning making. For example, two patients could agree that they have the same problem, such as being anxious or hearing voices. Yet each may come to treatment and approach life with very different purposes. One patient may primarily want to avoid any future humiliation by keeping within the safety of the patient role and the other be primarily concerned only with finding a romantic partner. Clinician blindness to patient’s purposes could then obviously derail the chances for joint meaning making.

Accordingly, an explicit requirement of recovery-oriented therapy seems likely to be that it involves direct and continuous discussions of patient’s purposes and wishes, assuming that those wishes and purposes are likely to be complex. It is more likely than not that patients will have multiple purposes which may be contradictory, complementary or unrelated<sup>[65]</sup>. These purposes may be more or less in awareness and may change over time. In parallel, the purposes patients have for their therapists are also likely to be fluid and changing. Accordingly, an intervention which promoted the process of meaning making at one point might not at a later point and vice versa.

This is not to say that clinicians should unconditionally support any patient agenda. For example,

patients may want to remain in the sick role, for the therapist to provide endless support, or to avoid guilt for neglecting real life responsibilities such as child support. What is essential is that what the patient is seeking is directly discussed and those discussions are employed in the service of understanding what the patient is facing and what he or she wants to do about that.

**Process of recovery-oriented treatment is fundamentally intersubjective:** The process of making meaning of challenges and purposes should be further understood as one that occurs between people. As noted above, individuals do not make meaning of themselves and their lives in isolation. Thus, the clinician has a clear role beyond blanket support or reassurance. In fact, supporting everything anyone thinks is never likely to be a successful strategy for promoting reflection.

What is necessary instead is an open and genuine dialogue which allows for disagreement but in which the clinician does not derail conversation by virtue of their power in the relationship. In this relationship, disagreement should not be confused as an expression of disrespect. Indeed, challenging individuals to think more deeply about their lives may be among the most respectful things human beings can offer one another.

The process promoted by recovery-oriented treatments should be conceptualized as taking place within the therapeutic intersubjective space, between the clinician and patient<sup>[63,66]</sup>. A deepening sense of self and others does not first occur in the mind of the therapist to then be shared with the patient. It is understanding that emerges from and within the encounter of unique persons. This allows for the therapeutic relationship to be a vehicle for a reflective dialogue.

**Goals and outcomes will appear and change fluidly over time:** Given that recovery-oriented treatment is concerned with meaning and purpose as well as the relationship within which it is taking shape, patients’ goals within and outside of therapy are likely to evolve in ways that cannot be anticipated. It is likely that with more integrated ways of understanding oneself and others, or in the face of unexpected emotional pain, patients will find themselves with a different set of purposes and potentially very different goals. For example, a patient might originally seek to improve a relationship with an adult child but then suddenly on her own realize she needs to drive. This new goal may then shift the focus as he or she considers buying a car and learning to drive, despite that never having been a goal at any earlier part of treatment. Another patient may, with more awareness, suddenly take a more active role in thinking about medication he or she needs while another may decide it is time to try to manage his or her life without medication.

**Interventions should match a patient’s meta-cognitive capacity:** Finally, if metacognitive

processes are what allow individuals to have an integrated sense of self and others, then interventions which seek to facilitate metacognitive capacity, need to continuously assess patients' level of metacognitive capacity and offer interventions that match that level of metacognitive capacity. Practically, asking a patient to question their own thoughts and perceptions is likely to only lead to frustration and misunderstanding rather than reflection if that patient is unable to see that their emotions and affects change over time and that their mental states are accordingly subjective and transitory.

This would require the assessment of metacognition and its responsiveness to changes within and between sessions. Certainly, the MAS-A is not the only means for assessing changes in metacognition but it does exist as a method of identifying points where metacognition fails to fully function and therefore the MAS-A can be used as a guide for intervention. The MAS-A further distinguishes metacognitive acts pertaining to the self, others, the community, and the use of that knowledge. This instrument has the benefit of responding to awareness of self and others as something more nuanced than a vague monolithic phenomenon. It allows clinicians to respond differently to patients based on clearly delineated levels of metacognitive capacity.

In this way recovery interventions may come to take on an usual character. Whereas most interventions tend to be considered in terms of high structure vs. low structure, the need to appraise metacognition and respond differently to individuals given their capacities in the moment give the clinician a highly structured task while the patient's task of making sense of what they face and need to do about it is clearly a highly unstructured task.

In summary, research suggests that many with schizophrenia experience deficits in metacognition, and that while these deficits are tied to poorer outcomes they may be the target of treatment leading to self-directed and personally meaningful recovery. In this paper we have suggested that this research offers some important directions for clinical interventions which could support recovery in serious mental illnesses such as schizophrenia. We have proposed this research suggest that these interventions need to be focused on process and on patient's purposes as well as the intersubjective context in which this is occurring. Further, these interventions need to allow for the fluid formation and evolution of goals while imposing on clinicians the highly structured task of assessing metacognitive capacity and responding accordingly to patients as they seek to make sense of what recovery means to them and how they should pursue it.

While these ideas may appear radical in some ways, it is worth noting that the metacognitive model of schizophrenia does not differ terribly from key features of Bleuler's<sup>[67]</sup> original model of schizophrenia which attributed the interruption of the lives in schizophrenia

to disturbances in associative process or the ability to link ideas together *via* associative threads. The model of therapy inspired by this work, MERIT, shares this understanding with the practices of other contemporary approaches. For example, like Cognitive Behavior Therapy for Psychosis (CBT-P)<sup>[68]</sup>, MERIT focuses on normalizing distressing experiences<sup>[69]</sup>. It also shares with mindfulness<sup>[70]</sup> and Acceptance Commitment Therapy<sup>[71,72]</sup> a focus on patients' relationship to their experience. MERIT and these therapies, sometimes called third wave Cognitive Behavior Therapy<sup>[73]</sup>, seek to address matters that go beyond individual cognition and require curiosity about mental experience with the expectation that patients will have unique responses to psychological and social challenges<sup>[69]</sup>. MERIT, also like psychodynamic mentalization-based approaches, is interested in the ideas people form about one another in an explicitly intersubjective context. Like traditional humanistic practices<sup>[74,75]</sup> MERIT is concerned with self-actualization, agency, and understanding experience in the context of the human condition. Similar to skills based approaches to rehabilitation, MERIT is focused on real world outcomes, the rejection of stigma and the patient's movement beyond the sick role.

However, MERIT and treatments driven by its supporting research do diverge from these views. Unlike CBT-P, MERIT is expressly interested in understanding how individuals synthesize or integrate information, above and beyond particular beliefs considered in isolation. In contrast to the third wave of CBT, MERIT is explicitly concerned with joint reflection about self-experience in the moment, as it occurs in the relationship with the therapist and across patients' personal narratives<sup>[69]</sup>. Unlike ACT, MERIT is not concerned with abstractions about values but instead explores the larger complex web of meanings that span the course of an individual life. In contrast to mindfulness, MERIT is interested in patients' experiences as they occur in the mind in the moment, in response to the therapist's mind, and further asks about the meaning of those mental experiences in relation to one another, again in the context of a unique narratized life. MERIT also thinks about self-knowledge differently than other cognitive therapies. The self-knowledge that emerges from MERIT is not a knowledge of a true self or a matter of a more transparent perception of a self but instead the availability of a diverse self, which is able to respond to what is emerging at any point in a unique life<sup>[69]</sup>. In contrast to psychodynamic and mentalization based treatment<sup>[76]</sup>, MERIT's use of the MAS-A to operationalize metacognition differentiates thoughts about the self, others, the community, and ability to use this knowledge to respond to life's challenges. Further differentiating MERIT from mentalization approaches is the assumption that difficulties in reflectivity can occur outside of the context of disturbed attachment and emotion dysregulation and have a bidirectional relationship with both constructs<sup>[77]</sup>.

Concerning self-actualization and the development of agency, MERIT also moves beyond some of the classic humanistic approaches to psychotherapy<sup>[74,75]</sup>, in that it proposes a method for scaffolding a complex and nuanced sense of self that could be actualized. Finally, the suggestions offered here are potentially at odds with rehabilitative skills based approaches which directly seek to “get” people to “do” particular things or to exercise certain skills that a clinician thinks are needed. Indeed, the work detailed above suggests that when those approaches take on the responsibility for deciding what patients need to think or do, that those approaches, regardless of how benevolent the clinician's intentions are, may do a significant disservice by reinforcing the patient's lack of agency and positioning them as stigmatized and not fully competent adults.

While considering the strengths and evidences of metacognitive approaches to recovery focused treatment such as the MERIT, limitations should be mentioned. Randomized controlled trials of MERIT are needed in a broad range of settings. Despite being an integrative psychotherapy, it is unclear how easily clinicians from different disciplines and with different backgrounds can make the adaptations we suggest. Methods for assessing treatment adherence exist but it remains to be determined how these affect therapists from different perspectives. It is also unclear how to make these adaptations in settings that do not allow extended contact with patients but instead offer only brief and intermittent contact, such as inpatient units. There is further need for replication and further study of both the methods for assessing metacognition and for delivering metacognitive therapies.

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