A Metacognitive Approach to the Treatment of Psychosis

Emily Gagen, PhD

Clinical Psychologist

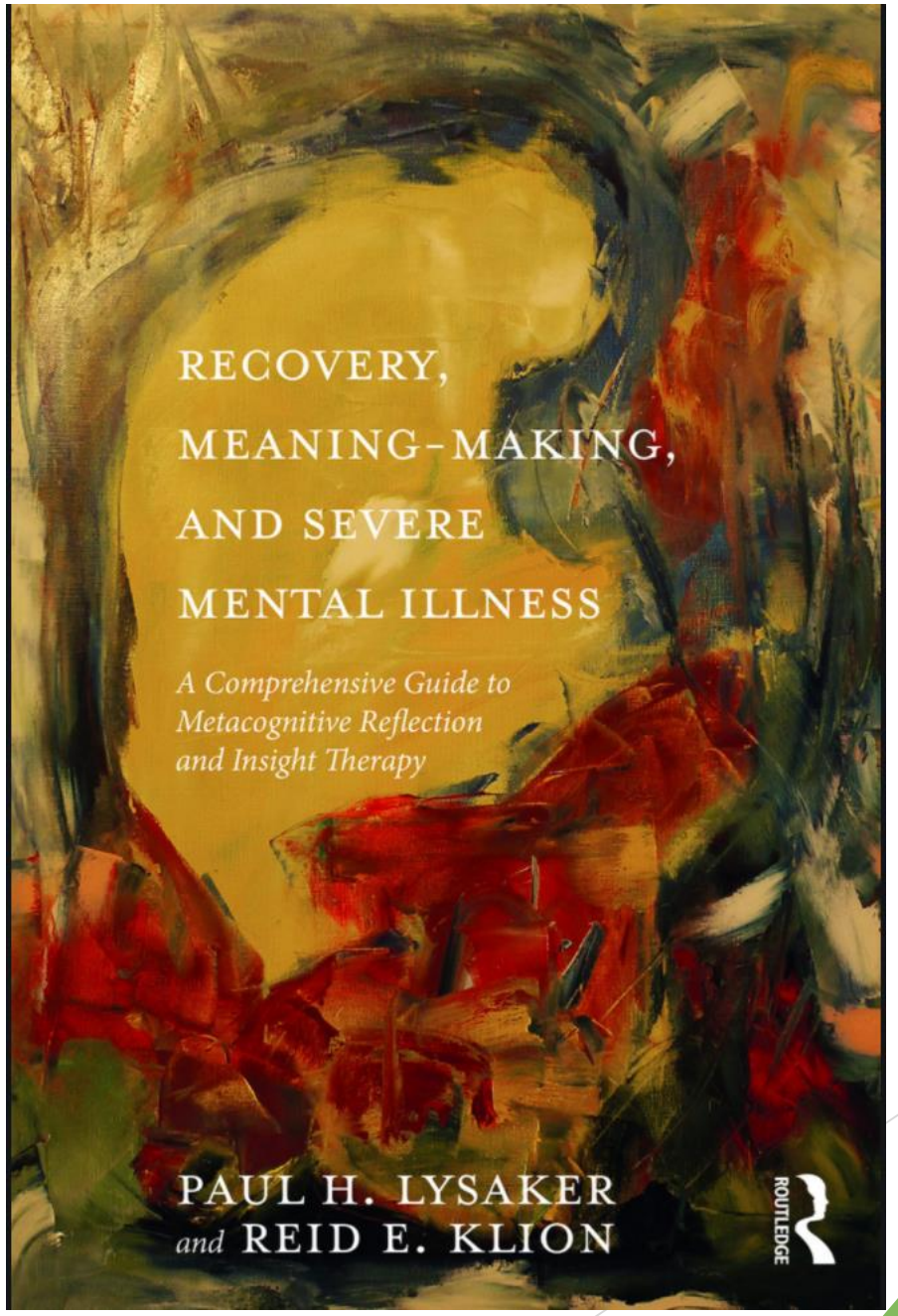
Brookline Center for Community Mental Health

Overview

- What is metacognition?
- How do we measure metacognition?
- What is the evidence for metacognitive deficits in psychosis and their relationship to other aspects of illness and recovery?
- What is MERIT?

Paul Lysaker, PhD

1960-2023



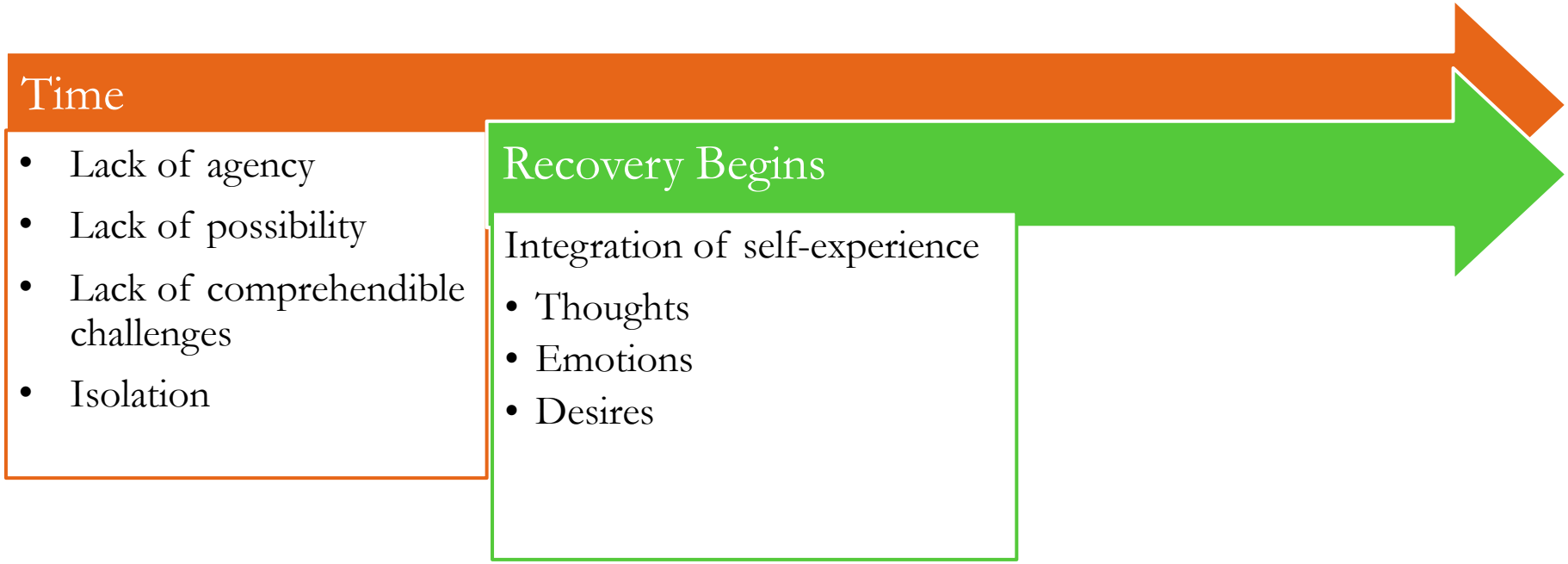
- Metacognition

Incomplete Conceptualizations of Mental Illness

- Psychosis is often represented as
  - Diagnosis
  - A collection of symptoms
  - Skill deficits
  - Biological malfunctions ("the broken brain")
- None of these fully capture what the person is experiencing.

Time

- Lack of agency
- Lack of possibility
- Lack of comprehensible challenges
- Isolation


Time
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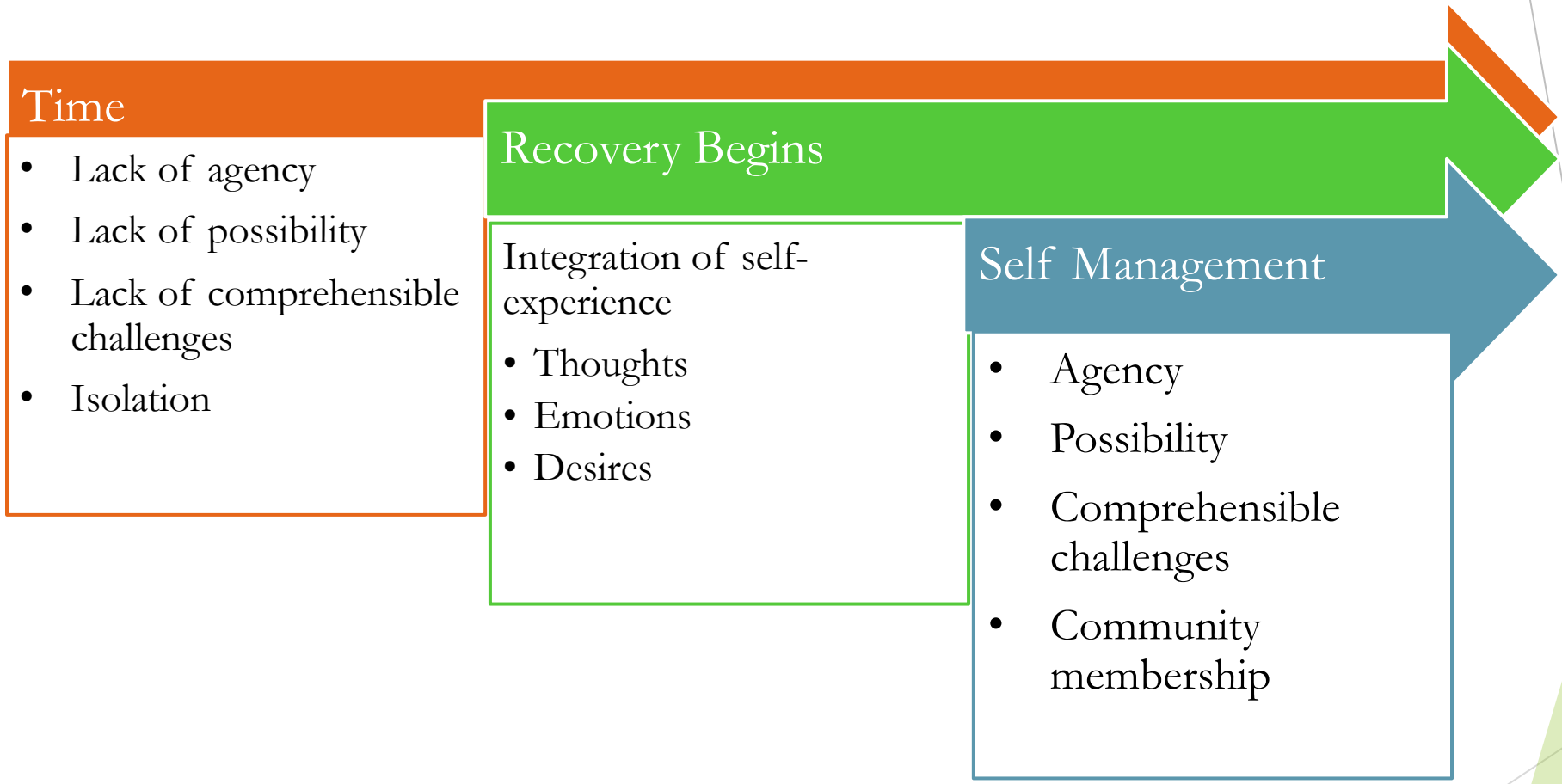
Isolation
Recovery Begins
Integration of self-experience
Thoughts
Emotions
Desires


Time
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Isolation
Recovery Begins
Integration of self-experience
Thoughts
Emotions
Desires
Self Management
Agency
Possibility
Comprehensible challenges
Community membership

Metacognition

- Encompasses a broad spectrum of mental activities
  - One end: awareness of discrete and highly specific mental experiences (thoughts, emotions)
  - Other end: Larger thoughts that are the product of the integration of those discrete experiences
- A thought about a thought; awareness of memories, feeling of knowing something
- Awareness of thoughts and ability to make judgments about them
  - Confidence ratings /error monitoring
  - Social cognition – the intentions, feelings, reactions of others
  - Theory of mind – infer intentions based on information you have
- Synthetic acts
  - Larger process in which information is integrated into complex ideas about themselves and others

Basic level: you are aware that you are feeling anxious

Mid level: you are able to know this is your own subjective idea, there may be a threat or there may not be

Synthetic level: you are able to form an idea of why this thing made you anxious; perhaps it reminds you of a time in your life when things felt out of control or when things went badly

Key Assumptions

- Metacognitive ability can be measured.
- People differ in their ability to engage in metacognition.
- Metacognitive ability may vary based on the situation.
- Metacognition is an *intersubjective* act.
- Deficits may be due to a variety of factors.

Metacognition and Psychosis

- People with psychosis show a loss in metacognitive capacity
  - Loss of ability to form integrated ideas about oneself, others, and the world, resulting in reductions in complex goal-directed behaviors (Lysaker et al., 2015)
- Fragmentation: collapse of the ability to form complex and integrated ideas about oneself and others
  - Disruption in meaning-making
  - Strongly linked with major disruptions in the course of one's life
  - These themes were all present in early descriptions of psychosis
  - Numerous first-person accounts detail disturbances in a sense of self (e.g., lost part of themselves, cannot make sense of how they are connected to others)
  - Significant barrier to recovery
- Metacognitive deficits have been linked to:
  - Greater levels of negative and disorganized symptoms
  - Poorer work performance
  - Greater functional impairment
  - Poorer response to traditional psychosocial treatments

Measuring Metacognition

What are we measuring?

Four main domains (Semerari et al., 2003):

- Self-reflectivity
- Awareness of others' mental state
- Decentration
- Mastery

Measured by the *Metacognitive Assessment Scale- Abbreviated* (MAS-A; Lysaker et al., 2005)

Self-Reflectivity

S1	I know there are thoughts in my head.
S2	I know the thoughts in my head are my own.
S3	I can distinguish different cognitive operations.
S4	I can distinguish feelings.
S5	My conclusions are subjective.
S6	My wishes are not the same as reality.
S7	My thoughts and feelings are connected in the moment.
S8	My thoughts and feelings are connected in consistent ways across many moments.
S9	My thoughts and feelings are connected across the larger story of my life.

Validity

- MAS-A scores predict:
  - Cognitive insight
  - Awareness of illness
  - Social cognition
  - Coping style
  - Accuracy of self assessment (work performance)

Lysaker, Warman, DiMaggio, et al. (2008). Metacognition in prolonged schizophrenia: associations with multiple assessments of executive function. *Journal of Nervous and Mental Disorder 196,* 384-389.
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Lysaker PH, Erickson MA, Ringer J, et al. (2011). Metacognition in schizophrenia: the relationship of mastery to coping, insight, self-esteem, social anxiety and various facets of neurocognition. *British Journal of Clinical Psychology, 50*(4), 412- 424

MAS-A Scores by Diagnosis

	SZ(1) n=183	SA(2) n=59	PTSD(3) n=51	HIV+(4) n=51	F	Post hoc (p<.05)
Self-reflectivity	4.2(1)	6.0(2)	6.1(2)	6.4(2)	38.39	1<2,3,4
Awareness of Other	3.0(1)	4.0(1)	4.3(1)	4.3(1)	30.4	1<2,3,4
Decentration	0.8(1)	1.2(1)	1.4(1)	1.6 (1)	11.12	1<2,3,4
Mastery	3.6(2)	4.0(1)	4.8(1)	6.0(2)	28	1<3,4; 4>2,3,4
Total	11.6(4)	15.2(4)	16.6(4)	18.3(4)	38.6	1<3,4 4>2,3,4

Lysaker, P. H., Dimaggio, G., Wickett-Curtis, A., Kukla, M., Luedtke, B., Vohs, J., ... & Davis, L. W. (2015). Deficits in metacognitive capacity are related to subjective distress and heightened levels of hyperarousal symptoms in adults with posttraumatic stress disorder. *Journal of Trauma & Dissociation*, *16*(4), 384-398.

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Lysaker, P. H., George, S., Chaudoin–Patzoldt, K. A., Pec, O., Bob, P., Leonhardt, B. L., ... & Dimaggio, G. (2017). Contrasting metacognitive, social cognitive and alexithymia profiles in adults with borderline personality disorder, schizophrenia and substance use disorder. *Psychiatry Research*, *257*, 393-399.

MAS-A Scores and Chronicity

	First Episode (1) (n=26)	Prolonged Psychosis (2) (n=72)	Substance Abuse (3) (n =15)	F	Post hoc (p<.05)
Self-reflectivity	4.3(1.7)	4.3(1.3)	6.8(1.5)	17.6***	3>1,2
Other	2.3(1.1)	3.0(0.9)	4.2(1.1)	15.9***	3>2>1
Decentration	0.5(0.7)	1.0(0.9)	1.7 (1.5)	8.5***	3>2>1
Mastery	3.9(1.8)	3.7(1.6)	4.1(1.5)	0.4	ns
Total	11(4.9)	12(4.1)	17(4.1)	9.1***	3>1,2

Vohs et al (2014). Metacognition, social cognition, and symptoms in patients with first episode and prolonged psychosis. *Schizophrenia Research,* 153, 54-59.

Metacognitive Correlates

- Subjective accounts of recovery
- Functional capacity
- Social relationships
- Insight
- Forensic history
- Stigma resistance
- Reasoning style

Kukla et al (2013) The association of metacognitive capacity and symptom severity with the subjective experience of recovery in schizophrenia. *Psychiatry Res* 209(3): 381-385

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Snethen G, et al. (2014). Physical activity and psychiatric symptoms in adults with schizophrenia spectrum disorders. *J Nerv Ment Dis 202(12),* 845-852.

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Nabors LM, et al . (2014). Stereotype endorsement, metacognitive capacity, and self-esteem as predictors of stigma resistance in persons with schizophrenia. *Compr Psychiatry*. 55(4), 792-798.

Bo, S., et al. (2013). Attachment, mentalizing and personality pathology severity in premeditated and impulsive aggression in schizophrenia. International Journal of Forensic Mental Health. 12: 126–138

Lysaker, P. H. et al. (2013). Social cognition and metacognition in schizophrenia. Acta Psychiatrica Scandinavica, 127(3), 239-247

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Metacognitive functioning predicts positive and negative symptoms over 12 months in first episode psychosis

Hamish J. McLeod [a,*], Andrew I. Gumley [a], Angus MacBeth [b,c], Matthias Schwannauer [d], Paul H. Lysaker [e,f]

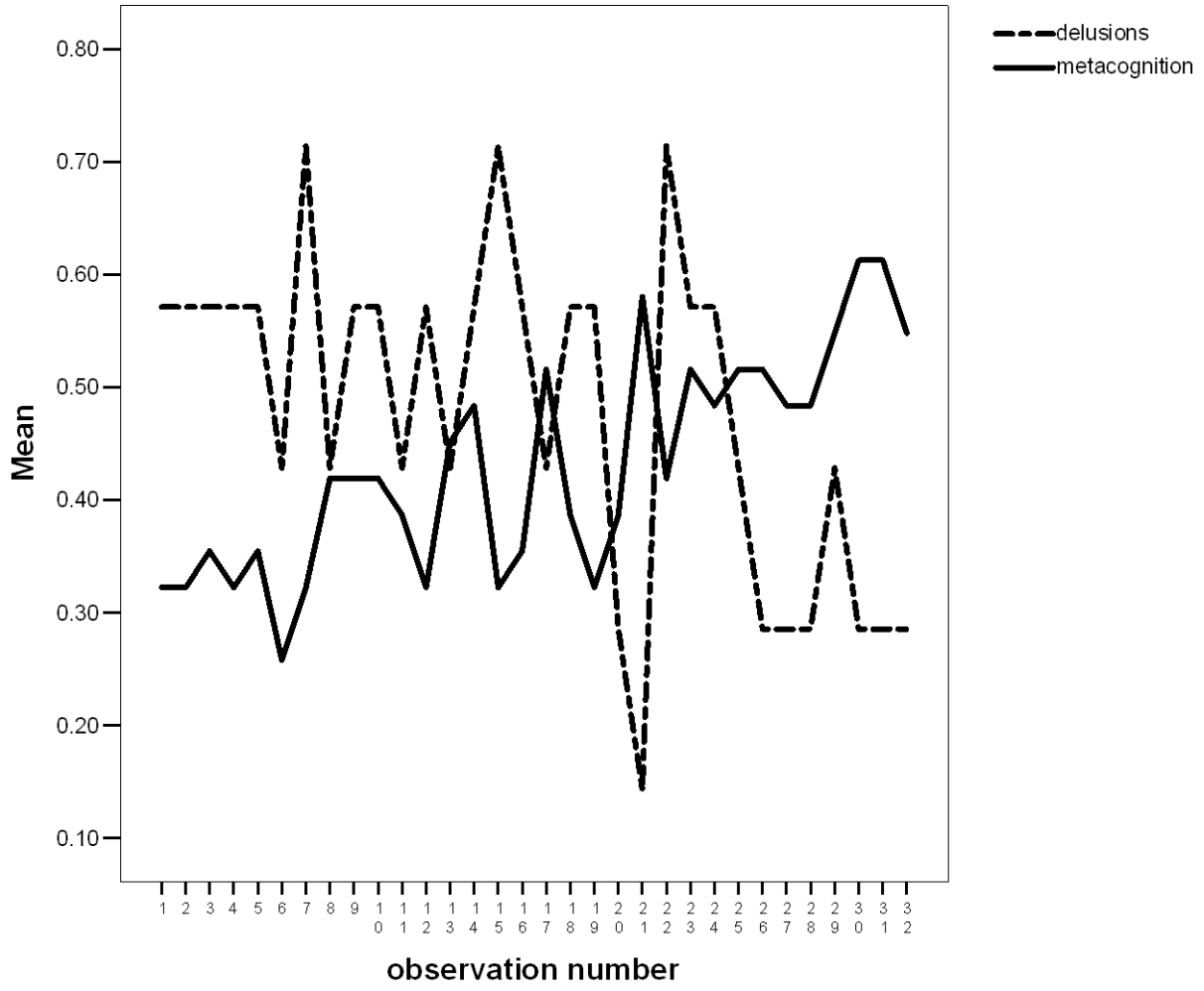
[a] Institute of Health and Wellbeing, University of Glasgow, Academic Centre, Gartnavel Royal Hospital, 1055 Great Western Road, Glasgow G12 0XH, UK
[b] NHS Grampian, Psychiatry Research Group, Clinical Research Centre, Royal Cornhill Hospital, Aberdeen AB25 2ZD, UK
[c] University of Aberdeen, Psychiatry Research Group, Clinical Research Centre, Royal Cornhill Hospital, Aberdeen AB25 2ZD, UK
[d] Section of Clinical & Health Psychology, University of Edinburgh Medical School, Teviot Place, Edinburgh EH8 9AG, UK
[e] Roudebush VA Medical Center, Indiana University School of Medicine, USA
[f] Department of Psychiatry, Indiana University School of Medicine, USA

Treatment Research

Case Studies

- Lysaker, P. H., Davis, L. W., Eckert, G. J., Strasburger, A. M., Hunter, N. L., & Buck, K. D. (2005). Changes in narrative structure and content in schizophrenia in long term individual psychotherapy: A single case study. *Clinical Psychology & Psychotherapy: An International Journal of Theory & Practice*, *12*(5), 406-416.
- Lysaker, P. H., Buck, K. D., & Ringer, J. (2007). The recovery of metacognitive capacity in schizophrenia across 32 months of individual psychotherapy: A case study. *Psychotherapy Research*, *17*(6), 713-720.
- Leonhardt, B. L., Benson, K., George, S., Buck, K. D., Shaieb, R., & Vohs, J. L. (2016). Targeting insight in first episode psychosis: a case study of metacognitive reflection insight therapy (MERIT). *Journal of Contemporary Psychotherapy*, *46*, 207-216.
- Leonhardt, B. L., Ratliff, K., & Vohs, J. L. (2018). Recovery in first-episode psychosis: a case study of metacognitive reflection and insight therapy (MERIT). *American Journal of Psychotherapy*, *71*(4), 128-134.

Changes in metacognition and delusions over time



Treatment Studies

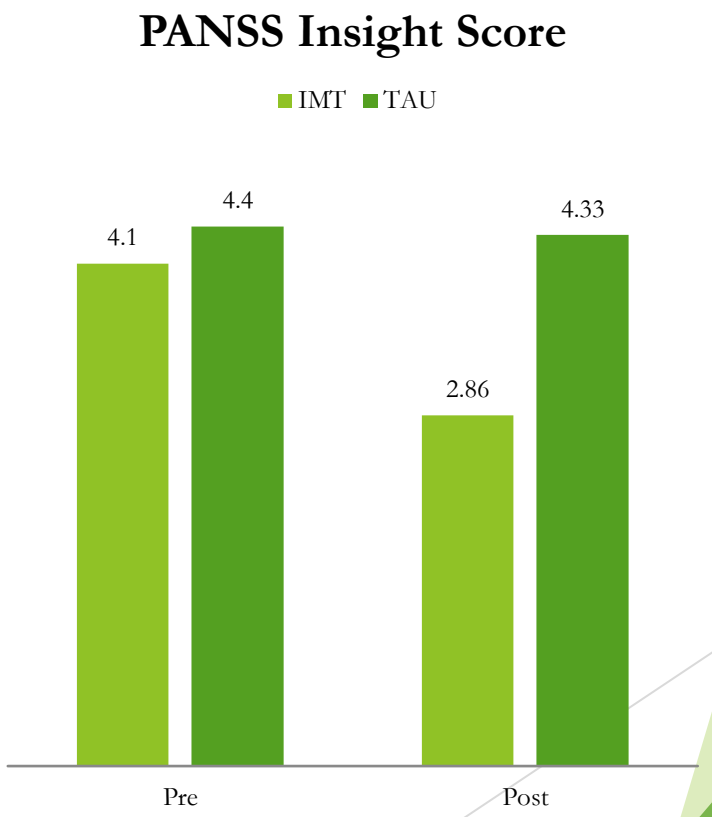
- Pilot study examining effectiveness (Bargenquast & Schweitzer, 2014)
  - Improvements in subjective recovery and self-reflectivity
  - Case-study evidence suggested improvements in symptom severity
- MERIT vs. supportive psychotherapy (Lysaker et al., 2015)
  - All participants demonstrated improvements in self-esteem, self-confidence, clarity of thought, and meaningful goal setting
  - MERIT participants demonstrated:
    - Better integration of current experiences into larger life narrative
    - Increased agency
    - Increased ability to understand and manage psychological pain and distress

Treatment Studies

- Pilot: Brief (12 session) version of MERIT (de Jong et al., 2016)
  - Format was determined to be acceptable
  - Pattern of improvement was observed
- RCT with first episode psychosis (Vohs et al., 2018)
  - MERIT group demonstrated improved insight compared to TAU group
- RCT: MERIT vs. TAU (de Jong et al, 2019)
  - Metacognition improved in both groups; no significant differences
  - MERIT group continued improvement after completion whereas TAU group returned to baseline
  - Specific improvements on self-reflectivity and mastery scales

MERIT-EP: improvements in insight

- Original adaptation by Vohs et al., 2017
  - Targeted insight
  - Findings:
    - Feasible
    - Acceptability: 70-80%
    - Statistical and clinically significant improvements in insight via PANSS and SUMD



- MERIT

General Stigmatizing Attitudes Towards Psychosis

- General paternalistic/infantilizing attitudes, skepticism about recovery
- Incompetence in self-care, independent living
- Prone to violence or erratic behavior
- Treatment
  - Psychotherapy: Can patients do it?!
    - Must be skill-based, manual-based, time-limited
    - Focus on symptom reduction
  - Medication: Lack of shared decision-making, polypharmacy
- Intersection between SMI and other marginalized identities
- Experiences of patients are difficult (or impossible) to understand
  - Tendency to turn our brains off

Metacognitive Reflection and Insight Therapy

- **Premise**: helping people with SMI to develop more complex understandings of themselves and others will enable them to better manage their lives and achieve their personal goals and aspirations (Lysaker & Klion, 2018)
- Assumptions:
  - Metacognition has multiple foci – self, other, decentration, mastery
  - Metacognition is an essential activity
  - Metacognition is fundamentally intersubjective
  - Metacognition is a capacity
  - Deficits can result from multiple factors

Preconditions for MERIT

1. The client can recover.
2. The client is the only person who can direct his or her path to recovery.
3. The conversations which support recovery must be non-hierarchical.
4. Disorganized or unusual material which emerges in the dialogue can be understood.
5. Enhanced metacognition can result in heightened emotional pain.
6. Stigma is present in the mind of everyone and must be continuously assessed and countered.

Major Elements of MERIT Sessions

- Focus on the patient's agenda
- Insertion of the therapist's mind
- Eliciting narrative episodes
- Eliciting the psychological problem
- Reflection on the therapeutic relationship
- Reflection upon progress
- Stimulating reflections about the self and others
- Stimulating reflections about mastery

- Measurable processes
- Present in every session, regardless of clinical presentation
- Specific curricula or activities are *not* prescribed

Common Features

- Warmth
- Respect
- Trust
- Common goals
- Curiosity
- Dialogue
- Freedom from jargon

Unique Features

- Assessing the integration of experience of the self, others, community and its enactment
- Guiding thinking with patients about their experience at levels that match patients' metacognitive abilities.

Agenda

Attending to the patient's immediate wishes and desires.

Goal	Patients will develop a greater awareness of their wishes and intent.
Helped by	Ongoing and evolving curiosity and interest in the patient's wishes and intentions.
Impeded by	Taking verbalizations at face value and ignoring the subtleties and hints inherent during session communication.

Insertion of therapist's mind

Therapists share their thoughts about patients' mental activities and behaviors without overriding patients' agendas.

Goal	Patients will develop a greater awareness of how they are reacting to the therapist.
Helped by	Therapists sharing their own thoughts about the patient and joint reflecting upon them.
Impeded by	Therapists taking a hierarchical, education-based, fearful, or timid stance.

Narrative Focus

Attending to and reflecting with patients about their sense of themselves and others within the flow of life.

Goal	Patients will develop a greater ability to envision themselves and others within the flow of life.
Helped by	Therapists eliciting and exploring narrative episodes.
Impeded by	Therapists not seeking sufficient details or mistaking abstraction for understanding.

Psychological Problem

Attending to patients' sense of the psychological and social challenges they face.

Goal	Patients will develop a greater awareness of themselves as confronted with specific dilemmas, challenges, and emotional distress.
Helped by	Therapists identifying personal and meaningful psychological struggles using common, understandable language.
Impeded by	Therapists focusing on preconceived problems or using non-specific symptom focused language.

Reflection on therapeutic relationship

Attending to the patients' sense of how they are relating to the therapist.

Goal	Patients will develop greater awareness of how they are relating to the therapist.
Helped by	Therapists providing opportunities to think about how patients perceive and relate to the therapist.
Impeded by	Therapists failing to try to develop a frank and evolving understanding of how they are experienced by patients.

Perception of Change

Attending to the patients' sense of what they are experiencing as it is happening within the session

Goal	Patients will develop greater awareness of their own experience of progress (and lack of progress) in therapy.
Helped by	Therapists actively eliciting how the session has affected and not affected the patient.
Impeded by	Therapists assuming what progress has or has not been accomplished.

Optimal stimulation of reflection about self and others

Ensuring that patients are stimulated to think about themselves and others at a level consistent with their current capacity for the metacognitive activity

Goal	Therapist tailors interventions to meet the clients' current level of metacognitive function.
Helped by	Assessing client's current level of metacognitive capacity throughout session.
Impeded by	Lack of awareness of client's current level of metacognitive function or assuming that it will be the same from from session to session.

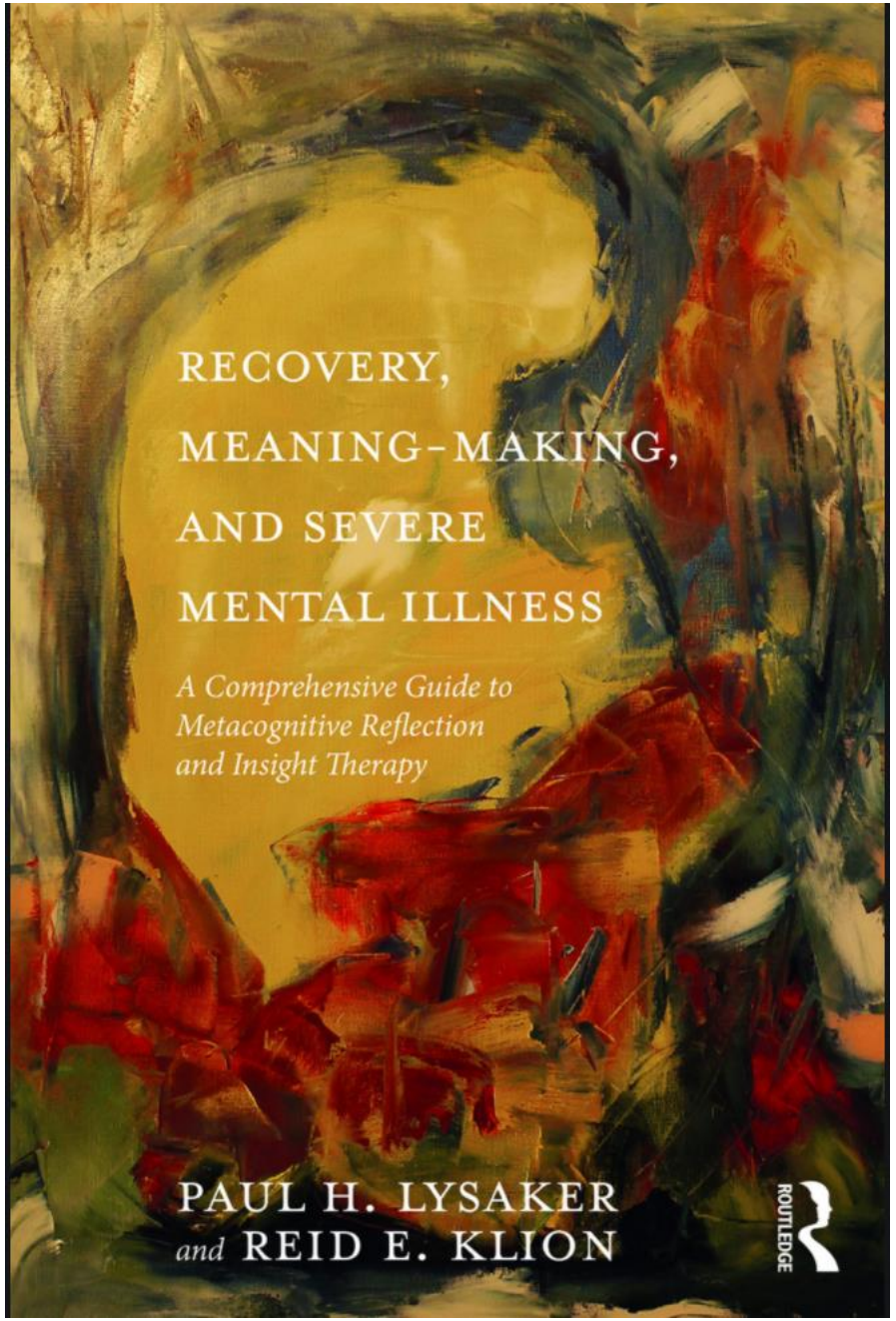
Optimal stimulation of mastery

Attending to the patient's use of sense of self and others to respond to psychological and social challenges.

Goal	Patients will develop an increasing ability to utilize metacognitive knowledge when responding to psychological and social challenges.
Helped by	Therapists using interventions that are appropriate to the patients' current metacognitive capacity.
Impeded by	Therapists failing to adjust interventions to patients' capacity for metacognitive mastery.

Key Points About MERIT Elements

- Not a lesson plan or sequential curriculum
- Synergistic with each other
- Must occur in every session
- Not substitute for therapist reflection or emotional engagement
- Measurable and connected through a conceptual model designed to treat a core dysfunction



http://www.meritinstitute.org

http://www.youtube.com/@meritinstitute1709

Collaborators

- Steven de Jong
- Reid Klion
- Marina Kukla
- Nicolai Ladegaard
- Tania Lecomte
- Bethany Leonhardt
- Nancy Lundin
- Lauren Luther
- John Lysaker
- Kyle Minor
- Hamish McLeod
- Kelly Buck
- Simone Cheli
- Nikita Chernov
- Giancarlo Dimaggio
- Julien Dubreucq
- Laura Faith
- Ruthie Firmin
- Helena Garcia Mieres
- Andrew Gumley
- Jackie Abate
- Kelsey Bonfils
- Martin Brune
- Benjamin Buck
- Alison James
- Raffaele Popolo
- Hugo Phulphin
- Ashley Schnackenberg Martin
- Robert Schweitzer
- Jennifer Vohs
- Aieyat Zalzala
- Jay Hamm
- Ilanit Hasson-Ohayon
- Jackie Hillis
- Kelsey Huling

Thank You!