Neuropsychology/Cognition in Schizophrenia: SST procedures to decrease the cognitive load on group members



Michael Drexler, Ph.D., C.P.R.P. National Consultant/Trainer, & Regional Master Trainer VISN 21 VA Psychosocial Rehabilitation Training Program Associate Clinical Professor University of California, San Francisco



Instructional Goals

After attending this presentation, participants will be able to:

- 1. Articulate the general cognitive challenges found in Schizophrenia.
- 2. Provide a statement about the cognitive requirements for SST.
- 3. Demonstrate an overall understanding of the supports inherent in SST to reduce the cognitive load on group members.

Social Skills Model

Social skill consists of three interrelated functions:

- Social perception ability to perceive social cues accurately
 Social problem solving
 - ability to analyze the social situation correctly and identify an effective response
- *3. Behavioral competence* ability to implement the response effectively

Domains of Cognitive Impairment

- Attention
 - Deployment
 - Effortful
 - Sustained
- Memory
 - Working memory
 - Semantic/episodic memory
- Processing speed, capacity
- Higher level processing
 - Problem solving
 - Executive functioning

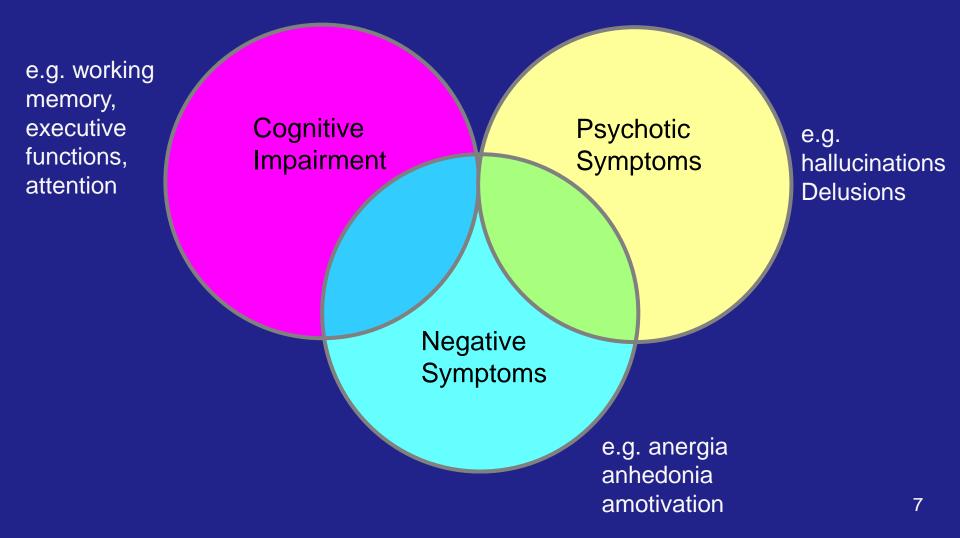
Domains of Cognitive Impairment

- "Theory of mind" (perspective taking)
 - Recognition of facial expressions/other expressions of emotion/social cognition
- Neuropsychological assessment

Example References

Table 1 Tasks more or less likely to be affected in schizophrenia	
More affected	Less affected
Executive	Non-executive
Effortful	Non-effortful
Controlled	Automatic
Serial	Parallel
Conscious	Unconscious

Components of Illnesses (SMI)



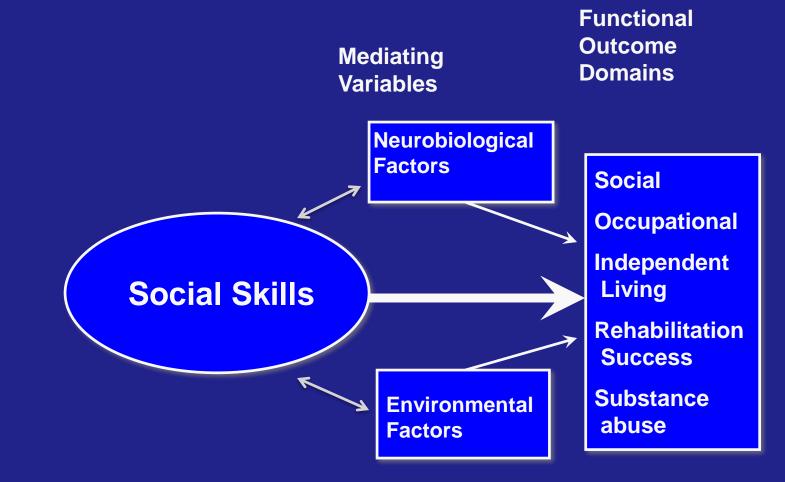
Neuropsychological Assessment and SMI in Veterans—selected points

- Range of levels from "normal" to severe impairment.
- Structured Clinical Interview for DSM disorders (SCID); Positive and Negative Syndrome Scale for Schizophrenia (PANSS); Scale for the Assessment of Negative Symptoms (SAPS);
- HRB—Category Test, Trailmaking B, TPT Location
- Measurement and Treatment Research To Improve Cognition in Schizophrenia Consensus Cognitive Battery (MATRICS)
- Wisconsin Card Sorting Test (WCST)
- Continuous Performance Tests, Digit Vigilance

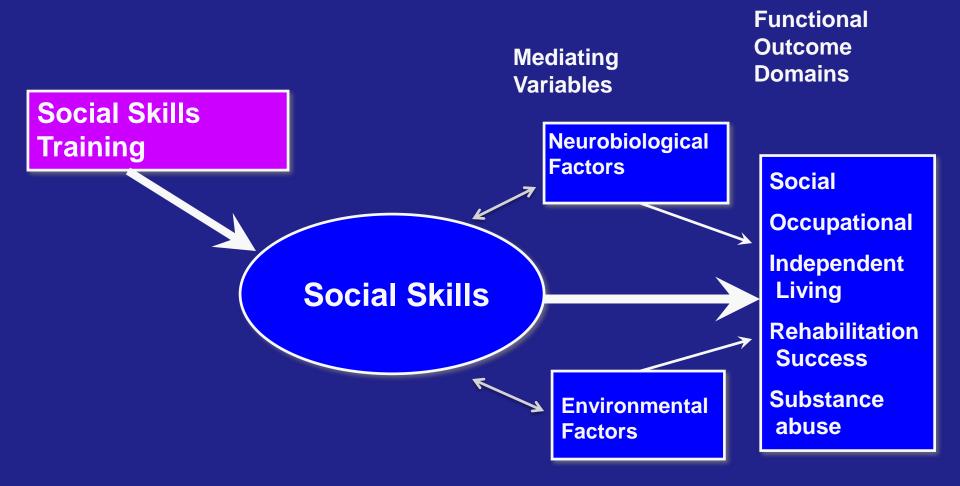
Behavioral Components of Social Skill

- Speech Content
- Paralinguistic Features voice volume
 - pace
 - pitch
 - tone
- Nonverbal Behavior
 - proxemics kinesics
 - gaze
 - facial expression

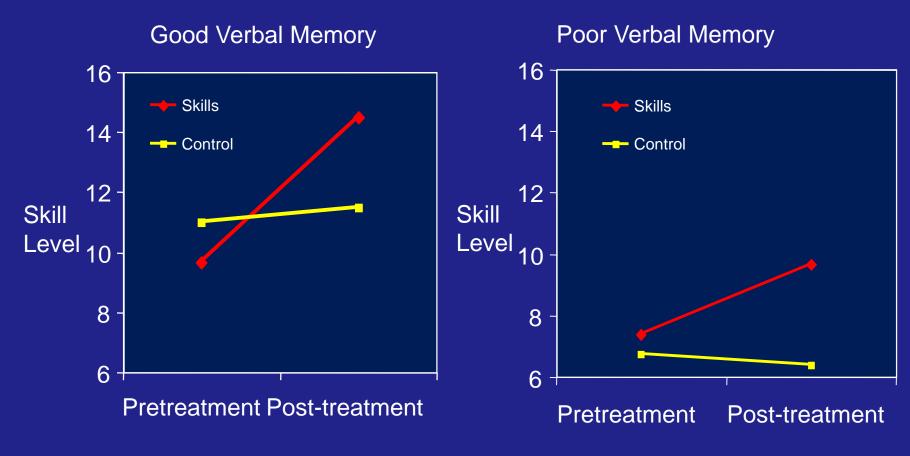
Model of Social Skills, SST, Mediators and Functional Outcome



Model of Social Skills, SST, Mediators and Functional Outcome



SST and Cognitive Impairment



Based on Smith TE et al. Am J Psychiatry. 1999;156:1817-1818.

Review of Training Procedure

• Instructions:

what to do and why - keep it simple - keep it relevant

• *Modeling*: illustrate how to do it

- keep it simple

- keep it relevant

• Role Play: rehearsal

- keep it brief

- make it successful

Positive Feedback and Shaping

- keep it positive

Repeat Role Plays:

- repeated practice

Areas of Support for Cognitive Functions: Selected Examples

- Overall group sequence, posted in more than one location (Premack principle)
- Small groups with active focus on enhance participation
- Steps of the current skill on the board and held by attendees
- Modeling of the skill with discussion (multimodal encoding)
- Successive approximations and error free learning (decreasing cognitive load)
- Generalization of training built in (specific outside practice to decrease need for abstraction)

Review of Areas of Effectiveness

Outcome	Effects
Domain	
Symptoms	Ν
Relapse	Ν
Behavioral skills	Y
Social role function	Y
Specialized skill	Y
Self-efficacy	Y

Example References

Allen, D.N., & Goldstein, G. (2014). Schizophrenia spectrum and other psychotic disorders: General considerations. In S.S. Bush (Ed.), *Psychological assessment of veterans*. New York: Oxford University Press. (Chap. 8).

Allen, D.N., & Goldstein, G. (2014). Schizophrenia spectrum and other psychotic disorders: Test measures and procedures. In S.S. Bush (Ed.), *Psychological assessment of veterans*. New York: Oxford University Press. (Chap. 9).

Bush, S.S. (Ed.) (2012). *Neuropsychological Practice with Veterans*. New York: Springer Publishing Company.

Grant, I., & Adams, K.M. (Eds.) (2009). *Neuropsychological Assessment of Neuropsychiatric and Neuromedical Disorders* 3rd ed. New York: Oxford University Press.

Questions???