

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



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# 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:

1. *Social perception*  
ability to perceive social cues accurately
2. *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

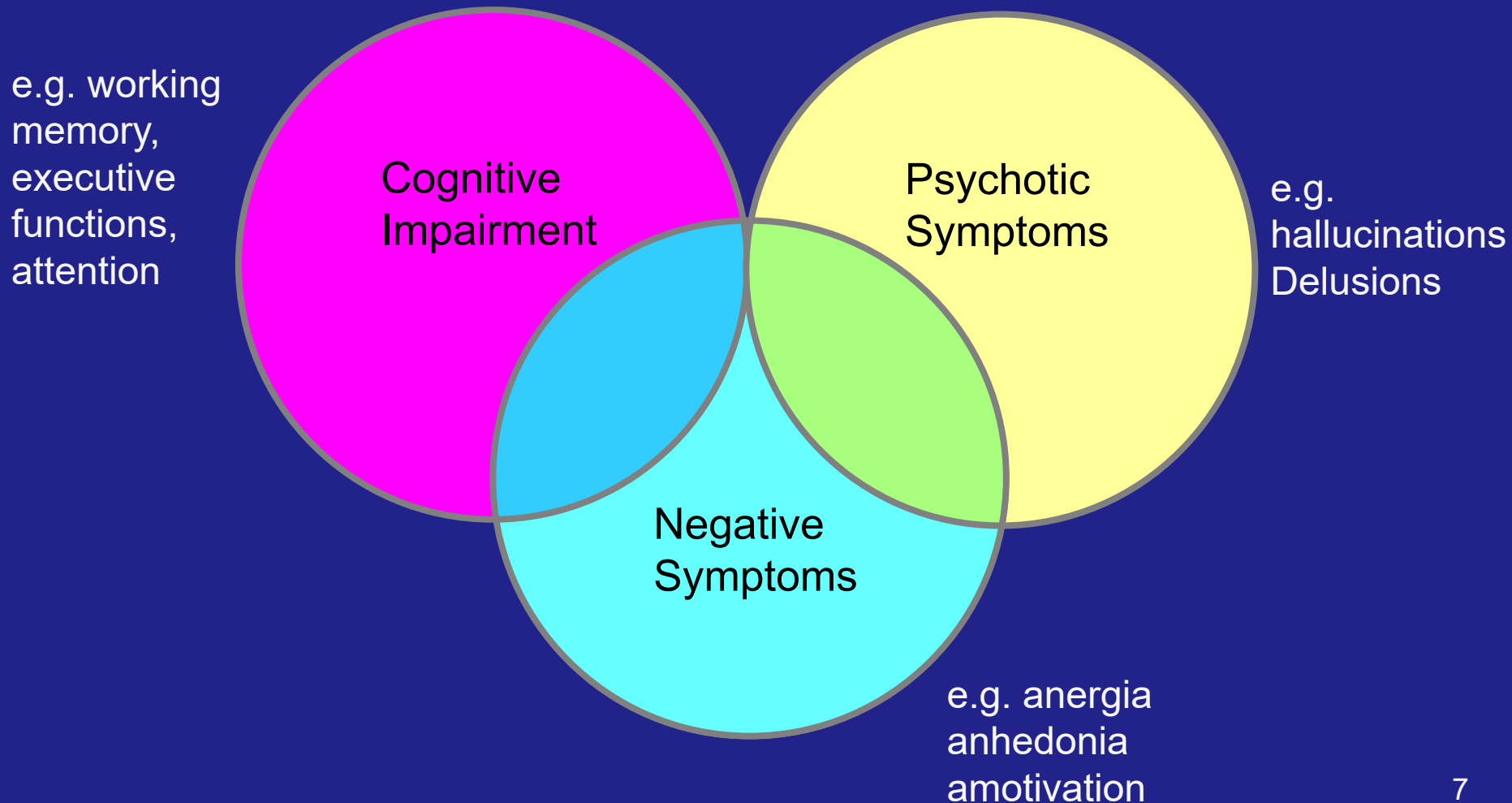
# Domains of Cognitive Impairment

- “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

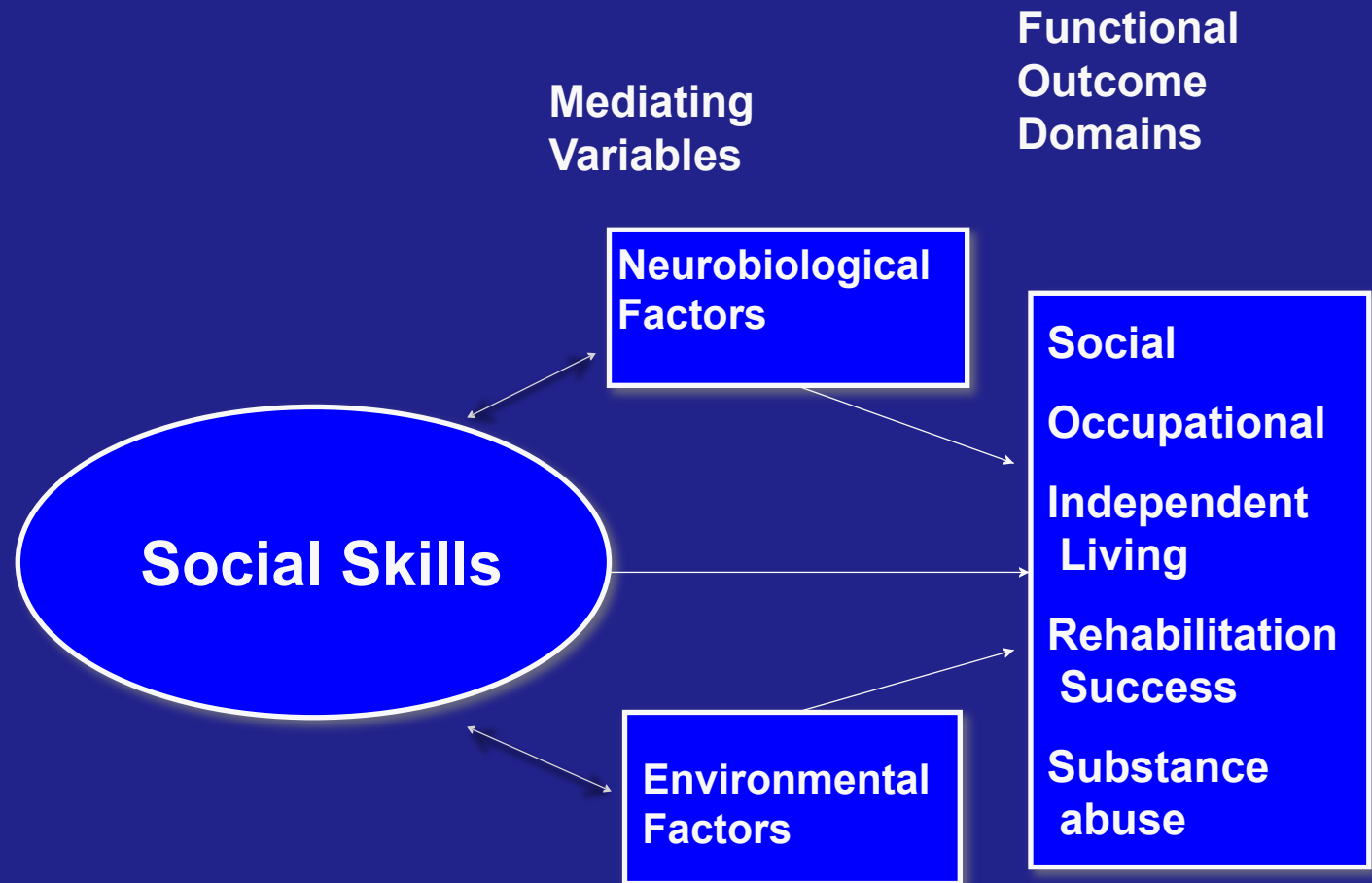
- Range of levels from “normal” to severe impairment.
- Structured Clinical Interview for DSM disorders (SCID); Positive and Negative Syndrome Scale for Schizophrenia (PANSS); Scale for the Assessment of Negative Symptoms (SAPS);
- HRB—Category Test, Trailmaking B, TPT Location
- Measurement and Treatment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



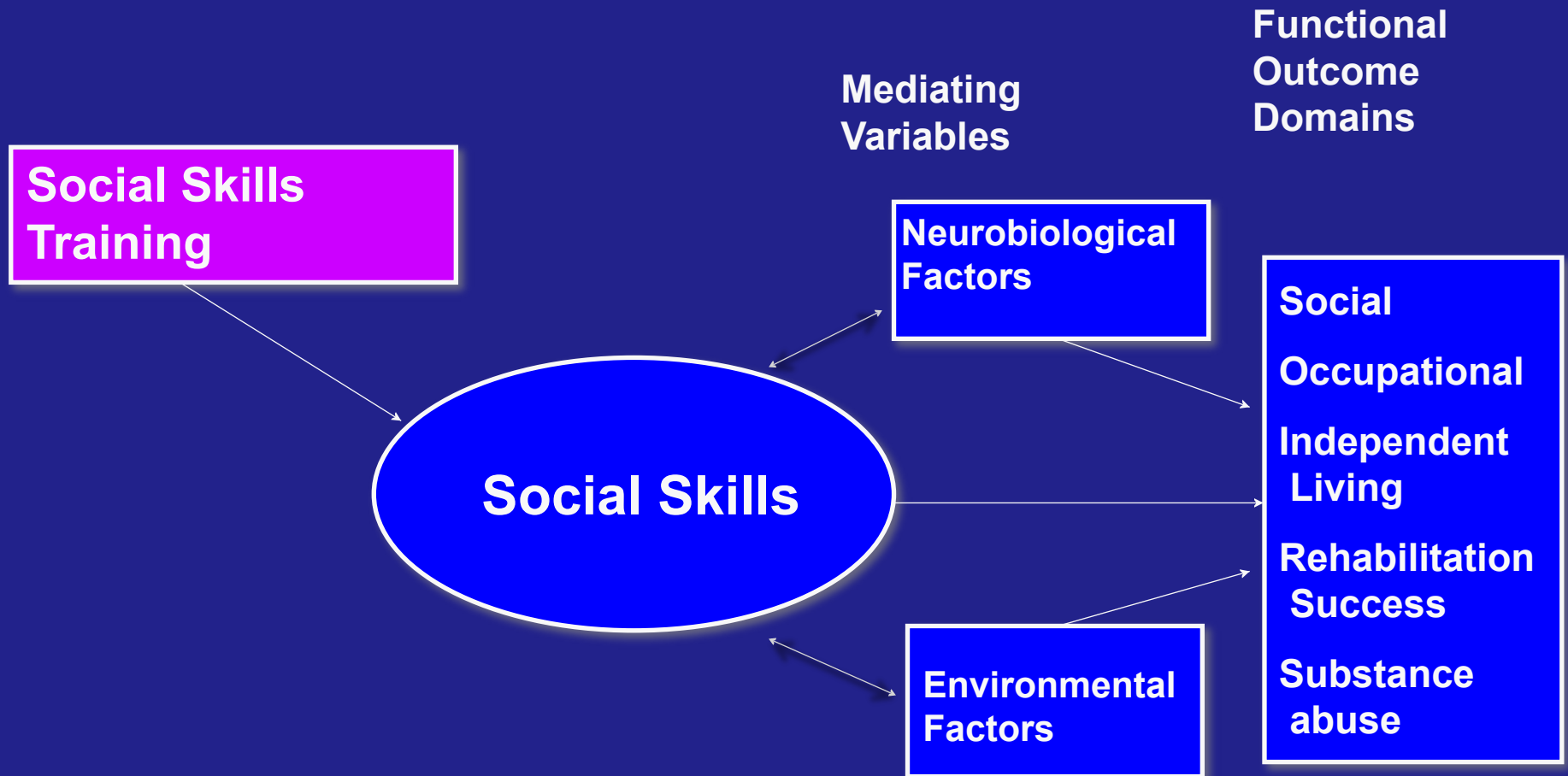
# Behavioral Components of Social Skill

- 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

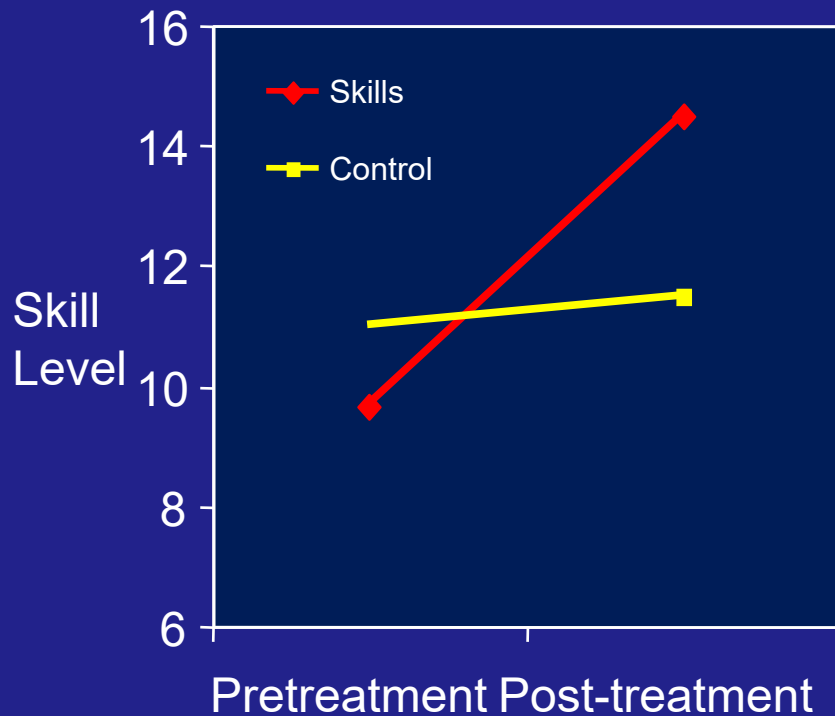


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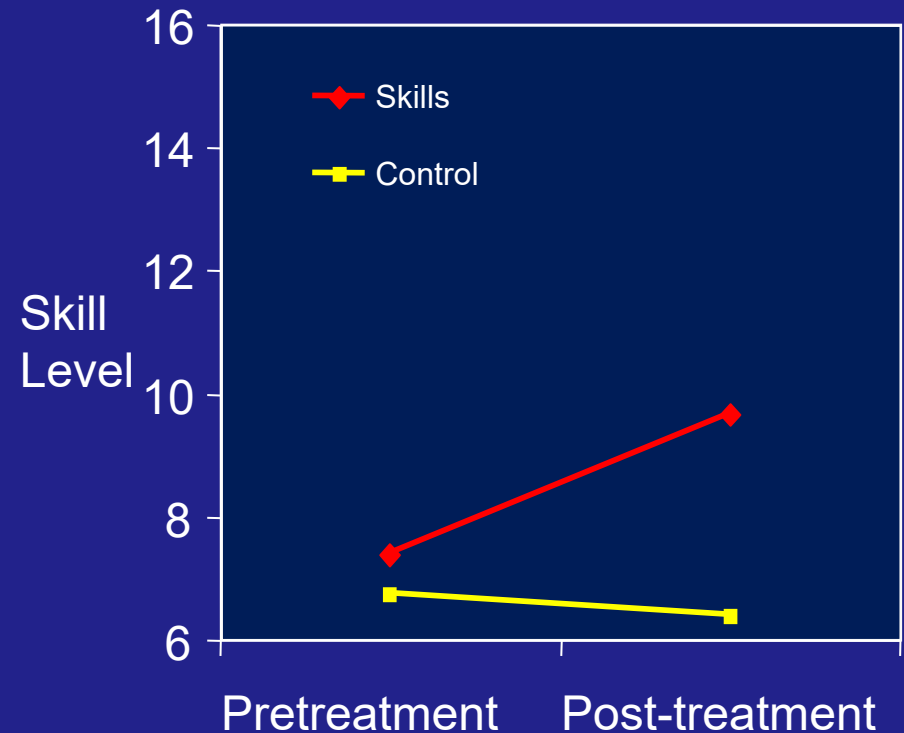


# SST and Cognitive Impairment

## Good Verbal Memory



## Poor Verbal Memory



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 Domain	Effects
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Symptoms

N

Relapse

N

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).

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Questions???