# Social Communication Disorders: Assessment of the Elementary School Child

**ASHA Convention**
**11/17/2016**

Stacy Frauwirth, MS, OTR/L
Patricia Hamaguchi, MA, CCC-SLP
Deborah Ross-Swain, EdD, CCC-SLP

# Disclosures

- Stacy Frauwirth is the Assessment Project Manager for Academic Therapy Publications

- Patricia Hamaguchi and Deborah Ross-Swain are the co-authors of the RESCA-E

# Overview

- What is social communication?

- What is a social communication disorder?

- Strategies for assessing social communication skills

- Introduction to the Receptive, Expressive, & Social Communication Assessment-Elementary

# Social Communication

- The ability to use "language in interpersonally appropriate ways to influence people and interpret events" (Olswang, Coggins, & Timler, 2001, p. 53)

- "The skill of getting a message across to another person and accurately interpreting their response" (SENaPS Central Area Team 2005, p. 6)

# Social Communication

"The synergistic emergence of social interaction, social cognition, pragmatics (verbal and nonverbal), and receptive and expressive language processing" (Adams, 2005, p. 182)

# Social Communication

Social communication development:

– Language-learning processes

– Social cognition

– Executive function

# Language-Learning Processes

Language competencies

– Form: Phonology, syntax, morphology

– Content: Semantics

– Use: Pragmatics

# Language-Learning Processes

- Intentionality Model of language acquisition (Bloom & Tinker, 2001)

---

- Language learning is an inherently social process

- Tension between two constructs:
    - Engagement
    - Effort

# Social Cognition

"The form of intelligence which allows us to create meaning from our ability to listen, observe, and consider people in context. Our social cognition also provides us with the tools to effectively communicate our social behaviors (language, gestures, facial expressions, etc.) in a manner that keeps other people comfortable." (Winner, 2014)

# Social Cognition

Relies on:
- – Theory of Mind
- – Perspective-taking
- – Emotion and facial recognition

Impacts interest in interacting with others (engagement) and effort it takes to do so

# Executive Function

- "The domains of cognitive abilities that are responsible for initiating, planning, sustaining, and inhibiting thoughts and behaviors." (Wittke, Spaulding, & Schechtman, 2013, p. 161)

- Contributes to the "effort" needed for language development and interaction

# Executive Function

- Working memory

- Inhibitory control

- Task and attention shifting
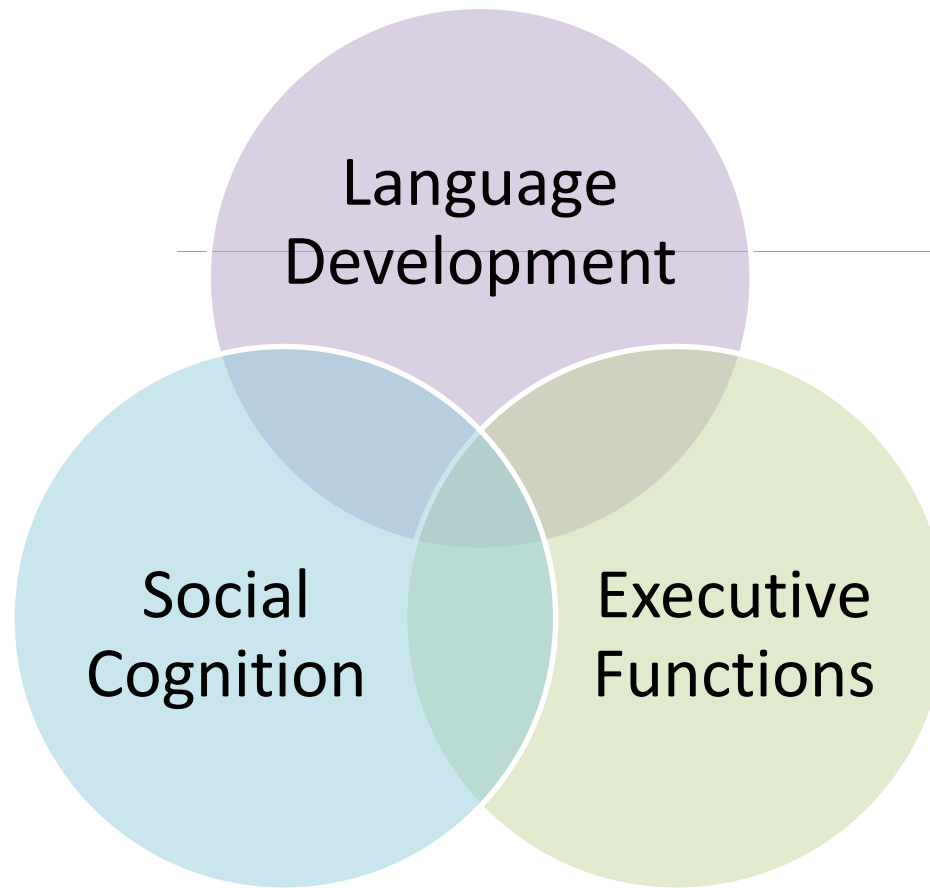
- Planning and organizing abilities

# How Does ADHD Impact Social Language Use?

- How do I organize my thoughts?

- How well can I focus on one conversation in the context of significant stimuli?

- Single word response formats vs. narrative

# Social Communication

# Social Communication Disorder

Pragmatic language impairment (prev. semantic-pragmatic disorder)

- 1980s-2000s
- Dorothy Bishop and colleagues
- "Difficulties using and understanding language in context" (Norbury, 2012)
- Diagnosis developed in response to children with communication profiles similar to autism, but who did not meet full criteria

# Social Communication Disorder

- DSM-V (2013)
- Social (pragmatic) communication disorder
- "Persistent difficulties in the social use of verbal and nonverbal communication"
- Cannot co-occur with autism
- Can co-occur with other communication disorders

# Social Communication Disorder

S(P)CD

– Deficits in using communication for social purposes, such as greeting and sharing information, in a manner that is appropriate for the social context.

– Impairment of the ability to change communication to match context or the needs of the listener.

# Social Communication Disorder

S(P)CD

– Difficulties following rules for conversation and storytelling.

– Difficulties understanding what is not explicitly stated and nonliteral or ambiguous language.
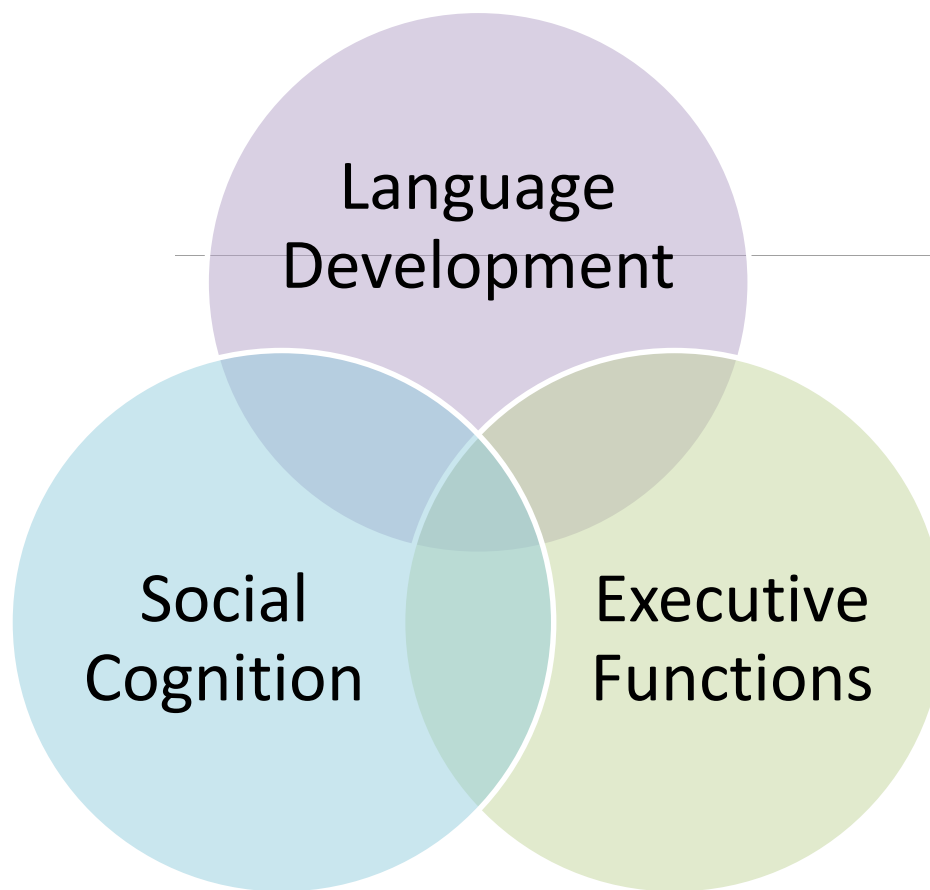
# Social Communication Disorder

- Specific learning disability

- Specific language impairment

- Emotional-behavioral disorders

- Autism

# Assessment



Language Development

Social Cognition

Executive Functions

# Who Diagnoses?

- Psychologists
- Speech-Language Pathologists
- Psychiatrists
- Developmental Pediatricians

# The Development Process of the RESCA-E

- Data/Scores for IEPs, Insurance Companies
- Needed a test that looked at critical skills for children with ASD within the receptive, expressive, social domains
- CALSEC
- Evolution of DSM> Broader Scope to SCD> RESCA-E

# Options for Standardized Comprehensive Language Testing

- Clinical Evaluation of Language Fundamentals 5
  - Receptive/Expressive Cores
  - ages 5.0-21.11
- Comprehensive Assessment of Spoken Language
  - Lexical/Semantic, Syntactic, Supralinguistic, and Pragmatic Cores ages
  - ages 3.0-21.11
- Oral and Written Language Scales II
  - Listening Comprehension, Oral Expression, Reading Comprehension, and Written Expression
  - ages 3.0-21.11
- Test of Language Development Intermediate 4th Edition
  - Spoken Language, with 2 subtests for Listening
  - ages 8.0-17.11

# Limitations of These Standardized Language Tests

- Discrete, decontextualized tasks
- Learned "testable" skills (synonyms, definitions, etc.) often strengths
- Given in a quiet, sterile environment
- Often at word/sentence level
- Focuses on language content rather than use or function

# Options for Standardized Testing of Social Communication

- Social Language Development Test: Elementary
  - ages 6.0–11.11

- Test of Pragmatic Language-2 (TOPL-2)
  - ages 6.0–18.0

- Clinical Evaluation of Language Fundamentals-5: Metalinguistics
  - ages 9.0–21.11

- Social Emotional Evaluation
  - ages 6.0–12.11

# Limitations of These Standardized Tests for Social Communication

- Few choices
- Require competence with receptive and expressive language
- Include tasks that are contrived
- Do not actually involve socializing with peers or looking at everyday *function* across settings
- Gender, geographic, cultural and age differences
- Scoring challenges—voice, suprasegmentals, qualitative
- Checks "adult forms" of social language

# What has typically been missed?

- Slang, sarcasm, tone, facial expression
- Body language comprehension/use
- Situational *application*, not just knowledge of what to say/do
- Higher order tasks for inference, idioms
- Narrative language development

# Assessing Social Behaviors within a Culturally Sensitive Framework

How children speak to adults differs from how they speak to peers

- – Conversational initiation
- – Eye contact
- – Volume of speech
- – Role of play

# What about Conversational Skills?

Challenges

Child to Child conversations are different

Conversations require natural contexts and peer relationships

What subskills are required? We can test those and observe function in context

# RESCA-E Overview

- 3 Cores (Receptive, Expressive, Social Communication)

- Social Communication Inventory

- 13 core and supplemental subtests with directly administered tasks + Parent/Teacher Report= Balanced Overview of Skills AND Function Across Settings

# RESCA-E Overview

- Norming sample
  - RESCA-E: 825 children
  - SCI: 400 children
- Strong internal consistency, test-retest, and inter-rater reliability
- Confirmatory factor analysis – 3 core model significantly fit data (CFI=0.951)

# What RESCA-E Can't Do

- Diagnose
- Capture the influence of behavior, mood, compliance on responses
- Quantify suprasegmentals (child's voice, facial affect, cadence)
- Look at every kind of social behavior/issue
- Explain *why* child performed poorly

# RESCA-E Receptive Language Subtests

- Core Subtests
  - Comprehension of Vocabulary
  - Comprehension of Oral Directions
  - Comprehension of Stories and Questions
- Supplemental Subtests
  - Comprehension of Basic Morphology and Syntax
  - Executing Oral Directions

# Comprehension of Vocabulary

What do we know about concept acquisition in children with weak social communication?

Vocabulary for categories, emotions, family relationships and adjectives—abstract concepts challenging

# Comprehension of Oral Directions

Concepts + Syntax = Comprehension?

What role does working memory, attention and behavior play?

Is "knowing" what to do enough to be successful?

# Comprehension of Stories and Questions

- With Pictures & Without Pictures
- Fiction Vs. Non-Fiction
- Use of fictional planet and country

- Question formats and language follow Common Core and language development

- Multiple choice to reduce expressive language load

  - Wh questions
  - How do you know…?
  - True/false
  - Negation (What *don't* we know about…?)
  - Recall/memory tasks

# Comprehension of Basic Morphology and Syntax

- Provides a way to assess early language users with age-appropriate materials

- Looks at deeper level for those who have poor scores on other receptive language subtests

# Executing Oral Directions

- Distractors
- Role of "Listening Set"
- Perseverance
- Motor Involvement
- Inflexible Thinking
- Metacognitive Strategies
- Contrast with Comprehension of Oral Directions

# RESCA-E Expressive Language Subtests

- Core Subtests
  - Expressive Labeling of Vocabulary
  - Expressive Skills for Describing and Explaining
  - Narrative Skills

- Supplemental Subtest
  - Expressive Use of Basic Morphology and Syntax

# Language Competence is often Task-Specific

Talking about:

- What we see
- What we have experienced 5 minutes ago
- What we have experienced 5 days ago
- What we have just heard or been taught
- What we know about something
- Something that is emotional or upsetting

# How Does Expressive Language Intersect with Social Communication?

How do I express to you what I see?

How do I express to you what happened?

How do I express to you how I feel?

Vocabulary, syntax, word retrieval and organization deficits=poor social language

# Expressive Labeling of Vocabulary

Picture labeling of objects

Picture labeling of action

States of being/emotions—beyond happy/sad/mad

Descriptors

Categories

Family relationships

Naming members in a given category

Synonyms (tell me another word for…)

# Describing & Explaining

Describe a dog/man pictures:

- Saliency—do I know what is important and unique about this picture?
- Vocabulary accuracy
- Quantity of language

# Tell Me Everything You Can About…

- An elephant  (Divergent thinking)

- What are the distinguishing features? (saliency)

- Different kinds of info (color, shape, what it does, where you find it, etc.)


- About *YOU.*

- What kinds of information?

- Quantity of information

# Narrative Skills

Story-retelling with Pictures

Talking About a Past Experience

Story-retelling without Pictures (same story)

Creating a Story with Given Pictures

# Expressive Use of Basic Morphology and Syntax

- Critical for early language learners

- Can impact clarity of expression

- English Language Learners

# RESCA-E Social Communication Subtests

- Core Subtests
  - Comprehension of Body Language and Vocal Emotion
  - Social and Language Inference
  - Situational Language Use
- Supplemental Subtests
  - Elicited Body Language
  - Social Communication Inventory (SCI)

# Comprehension of Body Language and Vocal Emotion

- Combines auditory and visual input (requires multi-sensory integration)

- What do the words mean when spoken with a given tone of voice?

- What is the face/body language telling us?

- CD ensures consistent vocal delivery

# Social and Language Inference

- Visual Inference  (What can we tell from what we see?)

- Linguistic Inference  (Idioms, slang)

- Social Inference (A wink? "What's new?")

# Situational Language Use

- Integration of visual, inference, theory of mind with expressive language competence-choosing words, using language to influence others' behavior and perceptions

- Assigning pragmatic tasks (e.g. convince your friend that she doesn't need to be afraid of your dog)

- Testing requires level of receptive language competence

# Elicited Body Language

- Why is the ability to project a given emotion important?

- How do competent communicators integrate their facial expression with body language?

- Social self-awareness and desire to elicit positive peer perceptions—what motivates?

# Social Communication Inventory

- Standardized testing tasks/skills often taught and can be learned

- Combination of Standardized Social Communication Core PLUS SCI *best*

- Functional application most critical piece of social information

# Social Communication Inventory

- 28 items

- 1-6 Likert scale

- Assesses frequency of behavior on a typical day

  – Initiation behaviors
  – Social conventions
  – Behavioral and emotional regulation
  – Social play

# Social Communication Inventory

- Secondary data analysis (N=9)
  - 2/3 of children with autism had SCI scores significantly lower than Social Communication Core scores
  - 1/3 of children had no significant score difference
  - Narrower range of scores on SCI

# Thank you!

Thank you very much for attending our presentation!

We will be available for questions.

Stacy Frauwirth

Deb Swain

Patti Hamaguchi