

Working with Adolescents and Adults with High-Functioning Autism Spectrum Disorder

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Confidentiality

- All videos included in this presentation are of research participants who have consented to share their videos for research and educational purposes.
- ***Please, keep the names of these individuals confidential if you should hear a name and please no videoing this presentation.***
- Thank you!

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Learner Outcomes

1. Explain the state of the research in both assessment and intervention for adolescents and adults with high-functioning autism spectrum disorder (HF-ASD)
2. Identify the pragmatic knowledge and skills necessary to be successful socially and in the workplace
3. Discuss the Pragmatic Language Intervention Program (PLIP) and the research supporting its use
4. Describe age-appropriate assessment tools for evaluating both pragmatic language use and social inference generation

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Course Outline/Schedule

Topic	Timeline
Introduction/What are the issues?	8:00-8:15
Conceptualizing pragmatics for individuals with HF-ASD	8:15-8:45
How do we know what to target?	8:45-9:30
Break	9:30-10:00
The Pragmatic Language Intervention Program	10:00-11:15
Group discussion/Questions	11:15-11:30

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Introduction

- 1 in 88 (Centers for Disease Control and Prevention, 2012)
- ASD Definition
- Pragmatic language deficits

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Introduction: Statement of the Problem

- Early intervention focus in research (Hurlburt & Chalmers, 2004; Lounds Taylor, Dove, Veenstra-VanderWeele, Sathe, McPheeters, Jerome, & Warren, 2012)
- Majority of adults with ASD unemployed or underemployed (70%+ unemployment rate) (Ballaban-Gil, Rapin, Tuchman, & Shinnar, 1996; Cameto, Marder, Wagner, & Cardoso, 2003; Howlin, Goode, Hutton, & Rutter, 2004; Seltzer, Shattuck, & Abbeduto, 2007).
- Difficulty establishing and maintaining friendships and romantic relationships (Hendrickx, 2008).
- Increased isolation and/or an extreme fear of social situations (Kim, Szatmari, Bryson, Streiner, & Wilson, 2000; Woodbury-Smith, 2009).

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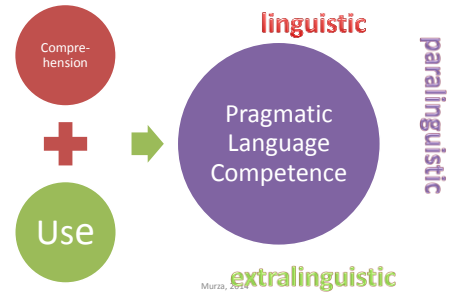
Introduction: Statement of the Problem

- Individuals with HF-ASD frequently have trouble considering the needs of their communication partner in conversation (Murza & Nye, 2013; Paul, Orlovski, Marcinko, & Volkmar, 2009)
- Individuals with HF-ASD commonly use overly formal language or unusual prosodic features (Murza & Nye, 2013; Paul, Orlovski, Marcinko, & Volkmar, 2009)
- No rigorous research studies exist to date that measure the effect of social interventions for adolescents or adults with HF-ASD on *performance* outcome measures (Bellini, Peters, Benner, & Hopf, 2007; Reichow, Steiner, & Volkmar, 2010; Westbrook et al., 2012)

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Pragmatic Language Competence

social knowledge + context = social inference generation



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What Areas Should we Assess?

- Pragmatic Language Comprehension
 - Emotion evaluation
 - Sarcasm, lies, sincerity
 - Conversational ability
 - All things topic maintenance
 - Reading verbal and nonverbal cues of partner
- Pragmatic Language Use
 - Facial expression variation
 - Vocal prosody
 - Topic initiation, maintenance, and exit
 - Gestures
 - Body proximity
 - Providing appropriate feedback to a communication partner

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Assessments to Consider: Social Inference

- The Awareness of Social Inference Test-Revised (TASIT-R) (McDonald, Flanagan, & Rollins, 2011)
 - 13-60 years
 - Administration time=30-45 minutes
 - Designed to assess social perception in individuals with ASD, TBI, schizophrenia, frontotemporal dementia, and learning disabilities
- Three subtest
 - Emotion Evaluation subtest
 - Social Inference-Minimal subtest
 - Social Inference-Enriched subtest

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Assessments to Consider

- The Contextualized Assessment of Social Skills (Ratto, Turner-Brown, Rupp, Mesibov, & Penn, 2011)
 - Videotaped 3-minute semi-structured conversational role-plays with same-age, opposite sex confederate
 - Behavioral coding system
- Prutting Pragmatic Protocol (Prutting & Kirchner, 1987)
 - Videotaped conversation and structured interview

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The Pragmatic Language Intervention Program (Murza, 2013)

- *Comprehension* and *use*
- Explicit instruction
- Controlled practice
- Video-modeling
- Video-review
- Self-assessment



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Research Results

- Feasibility Study (Murza & Nye, 2013)
 - 14 adults with HF-ASD
 - Once a week for 90 minutes for 14 weeks in small groups
 - Intention to treat analysis, paired samples t-test
 - Statistically significant effects were not found on the TASIT
 - High participant satisfaction with the overall program and individual activities
 - Statistically significant effects were found on a related reading inference measure and pragmatic language use measure

Measure	t	p	Hedge's g
WGCTA-Inference	2.38	.033	g = .72, 95% CI .29 to 1.16
PPP (number of inappropriate acts)	2.77	.016	g = .64, 95% CI .22 to 1.07

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Research Results

- Quasi-experimental design study currently underway
 - 5 treatment and 6 control adult participants with HF-ASD
 - Once a week for 90 minutes for 12 weeks in small groups
 - Pre- and post-test with TASIT & CASS
 - Additional test/questionnaire information gathered to test for potential moderating variables
 - Results analyzed summer 2014

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Innovation Configuration Map

Key Elements	Ideal Implementation (4)	In Process (2)	No Implementation (0)
Baseline social inference generation & pragmatic language use	SLP establishes baseline levels of social inference generation skills and pragmatic language use based on social inference generation.	Establishes baseline for either social inference generation or pragmatic language use based on social inference generation.	No baseline is established for social inference generation or pragmatic language use based on social inference generation.
Development of goals	SLP develops goals with input from the participant by integrating baseline data and personal/vocational goals of each client. Goals are objective, measurable, functional and realistic, and prioritized. Goals are explained to each client and client's opinions and values are considered.	SLP develops goals by integrating baseline data and personal/vocational goals of each client. Goals are objective, measurable, functional and realistic and prioritized. Goals are not explained to each client.	Goals are not developed.
Progress monitoring	SLP monitors progress by recording data on ability of client to make social inferences and use pragmatic language features based on social inference generation.	The distinction between identification and use is not made in data keeping.	No data is recorded.
Data-based decision-making	SLP uses individual client data to make decisions about instruction.	Teacher instructs based on a predetermined schedule, although data exist.	Data are not gathered to provide evidence of pragmatic language abilities.
Client self-management	SLP ensures that clients collaborate with SLP to check progress toward mastery of goals frequently.	Clients collaborate with SLP to set goals but do not check progress.	Clients do not set goals or check their own progress.
Scaffolded instruction	SLP employs scaffolded instruction to ensure that the client is successful in therapy tasks as independently as possible.	SLP employs scaffolded instruction periodically but at times provides the incorrect level of support (i.e. too much, too little).	No evidence of scaffolded instruction.

Innovation Configuration Map Up Close

Key Elements	Ideal Implementation (4)	In Process (2)	No Implementation (0)
Development of goals	SLP develops goals with input from the participant by integrating baseline data and personal/vocational goals of each client. Goals are objective, measurable, functional and realistic and prioritized. Goals are explained to each client and client's opinions and values are considered.	SLP develops goals by integrating baseline data and personal/vocational goals of each client. Goals are objective, measurable, functional and realistic and prioritized. Goals are not explained to each client.	Goals are not developed.

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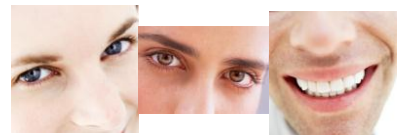
Social Inference Generation

- Emotion Evaluation
- Differentiation among sincerity, sarcasm, and lies
- Managing a conversation based on feedback from your partner

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Emotion Evaluation

- Researchers at Cambridge University, led by Simon Baron-Cohen, have identified 412 discrete emotional concepts. (see Mindreading software)
- When these emotions are demonstrated by individuals they are *fleeting*
- No wonder emotion evaluation is tough!



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Differentiating Among Sincerity, Sarcasm, and Lies

- Context is important
- Linguistic, paralinguistic, and extralinguistic aspects have to be considered
I had a great time with you last night at the dance.



Take a look



Five Types of Sarca

- Emphasize that it is rarely appropriate to use sarcasm
- Five types
 - Vocal overemphasis
 - Vocal underemphasis
 - Exaggeration (e.g., I've never been happier in my entire life)
 - Statement does not match context (e.g., out-of-control kids running around house and babysitter says, "I can't think of a more enjoyable way to spend the evening.")
 - Statement is completely outlandish usually in response to someone who states the obvious.



Polite Lies

- A polite lie is a lie that a politeness standard requires, and which is usually known to be untrue by both parties. It is heavily dependent on culture if such lies are acceptable. A common polite lie in international etiquette is to decline invitations because of "scheduling difficulties".

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Pragmatic Language Use

- Facial expression variation
- Vocal inflection
- Providing appropriate feedback to a communication partner
- Verbal conversational components

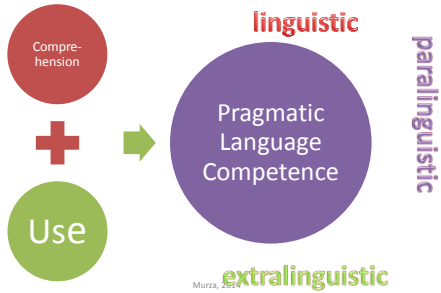
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Varying Facial Expressions

- Video modeling
- Video review using scenarios
 - Your boss is giving you directions and you don't understand what exactly she is asking you to do.
 - Your friend is telling you about a really rude customer at her work.
 - Your friend is telling you about her experience at a restaurant and having the most disgusting appetizer ever!
 - Your friend is telling you about her awful weekend, her cat died and her car broke down.
 - Your friend is telling you about a movie she really enjoyed.
 - Your boss is telling you a funny story about her weekend.

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Pragmatic Language Competence



Vocal Expressiveness

- The degree to which you are able to vary the
 - Tempo
 - Pitch
 - Tone
 - Volume and/or
 - Rhythm of your speech
- Using acting tips/activities to work on vocal inflection
 - “Grummelot” Commedia Del Arte

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Providing Appropriate Feedback to a Communication Partner

- Showing interest and engagement while a conversational partner is speaking in a conversation
 - Most individuals with HF-ASD I have worked with have trouble with this!
- Video modeling
 - Talk show host examples
 - Clinician modeling
- Video review

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Conversation

- Conversation Magnets (Peter Murphy www.howtotalkwithconfidence.com)
 - Surface
 - Bridge
 - Deep
- Reciprocation
- Questioning and commenting
 - Avoiding the interview and “What about you?”

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Questions? Comments?



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