How Does Theory of Mind Relate to Asperger Syndrome?

2007 Annual Convention
American Speech-Language-Hearing Association
November 16, 2007

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About Your Presenter

Timothy P. Kowalski, M.A., C.C.C. is a Speech-Language Pathologist in Winter Park, Florida. Mr. Kowalski has had extensive experience in treating individuals with psychiatric and behavioral/emotional deficits in acute, residential, and outpatient settings. He has presented extensively on Asperger’s syndrome and high functioning autistic spectrum disorders at local, state, national, and international settings. He is a consultant for academic facilities for children with and without developmental and autistic spectrum disabilities and served on the Board of Directors for the Greater Orlando Chapter of the Autism Society of America. He is also the author of the Source for Asperger’s Syndrome and Assessing Communication Skills in Asperger’s Syndrome: an Introduction to the Conversational Effectiveness Profile. He is the recipient of the “TEAMS 2000 Speech-Language Pathologist of the Year” award for his work with autism in the four county region of greater Orlando and is a graduate of Case Western Reserve University and Southern Connecticut State University. He has been residing in Orlando since February 1983.
History of Asperger Syndrome

- Hans Asperger
- Leo Kanner
- Lorna Wing
- Tony Attwood
- 1993 & 1994

Appropriate social skills are dependent upon:

- motivation to “fit in”
- accurately perceive situations
- decode information from others
- perform the necessary social skills
- recognize social feedback
- act upon the social feedback

Why is it so important?


What’s important?

<table>
<thead>
<tr>
<th>Adolescent Viewpoint</th>
<th>Teacher Viewpoint</th>
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<tbody>
<tr>
<td>nonverbal comprehension</td>
<td>turn taking</td>
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<td>perspective taking</td>
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<td>vocal tone interpretation</td>
<td>logical communication</td>
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<td>clarification</td>
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What’s unimportant?

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<tr>
<td>eye contact</td>
<td>humor comprehension</td>
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<td>Nnarrative</td>
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How often do we communicate?


- 80% of waking hours are spent communicating
  - Listening
  - Speaking
  - Reading
  - Writing

Anything Odd? Why?
Because it’s outside the zone of social expectations

It’s a function of deficits in:
- Theory of Mind
- Executive Functions
- Central Coherence
- Emotional Intelligence

Theory of Mind

- perspective taking
- deficits in perspective taking create:
  - topic domination
  - difficulty with empathy
- conceptual levels:
  - Level 1: “I know that not everyone thinks the same way as I do”
  - Level 2: “I know that what I do (or don’t do) will impact someone’s decision to be my friend (or not be my friend)”
“A nosey girl in my class butts into everyone’s conversation with her nonsensical questions and doesn’t listen to anyone but herself! Shut up and mind your own business!”
Ticked Off! The Orlando Sentinel, April 19, 2003

Filters
- Knowing what “filter” to put on helps you determine how to “fit in”
- Uta Frith
- Definition of Theory of Mind
- The Sally-Anne Test (Baron-Cohen, 1985)
  - false order belief
- “The Borg” and networked wiring

Level 1 manifestations:
- ignoring listener’s perspective
- inappropriate provision of information
- confusing “old” and “new” information
- overuse of non-specific information (e.g. “it” or “thing”)
- “everyone thinks like me”
- inability to engage another outside area of interest
- inability to recognize locations/situations have multiple expectations

Level 2 manifestations:
- poor hygiene
- “I don’t care if you don’t want this, I’m going to complete it”
- hyper-emphasis on penmanship negatively impacts content
- overwhelming ideation (“I can’t go to school - my shirt’s dirty!”)
- lack of joint attention
- inability to recognize facial expressions

- individuals with social thinking problems have difficulty with the term “think” (Ziatas, Durkin, and Pratt, 2003)
- they need more prompts to solve questions (Kaland, 2002)

Requirements for ToM
- for individuals to be able to recognize and act upon assumptions acquired from observations, it is critical that they understand the nature and causes of emotions (E. Silliman, S. Diehl, R. Bahr, T. Hnath-Chisolm, C. Zenko, S. Friedman, 2003)
- creates increased paranoia (Blackshaw, 2001)

Deficits Related to ToM (B. Myles and J. Southwick, 1999)
- difficulty explaining own behaviors
- difficulty understanding emotions
• difficulty predicting the behavior and emotional states of others
• problems understanding the perspectives of others
• problems inferring the intentions of others
• problems differentiating fiction from fact
• problems with joint attention and other social conventions
• lack of understanding that behavior impacts how others think and/or feel

• compliments are nice to receive
  ➢ presence of hyper-logical thinking and deficient ToM creates a lack of “need”
  ➢ types of compliments (C. Gray, 1999)
     character
     ability
     appearance

• use topic boxes to:
  ➢ generate opinions about a topic
  ➢ determine student’s current knowledge about a topic
  ➢ generalize new information to outside settings
  ➢ only work if one uses “active listening”

• develop “Friend Facts”
  ➢ many individuals with social thinking deficits fail to recognize the importance of remembering information about others
  ➢ as a result, they don’t know what is held in common and often interact using inappropriate means

Executive Functions

• Definition: how you process, plan, and carry out a procedure to complete a task
• Example: Time Management
• Requires 4 significant skill areas

1. Flexibility of Thought
• Definition: the ability to determine the best option for a task
• How does AS impact flexibility of thought?
  ➢ thought shifting
  ➢ changing an idea
  ➢ hyper-focus on a specific area (OCD)

“One of the reasons why so many of us do not end up in the high-level jobs we are capable of holding is because we are so inflexible during the trajectory towards achieving that goal. People like us tend to waste a lot of time on trying to get people to change their ways if we think those ways are not right. We argue endlessly about all sorts of things that may be important in themself but are not very relevant to achieving that ultimate goal we set ourselves.”
Multiple meaning words require flexible thinking
  ➢ 50% of English vocabulary is multiple meaning words
• Nonverbal information often missed
  ➢ 60-90% of message!

How does one increase flexibility of thought?

• figure-ground reversal illusions

• Stroop-like tasks
  BIG big little LITTLE BIG big little LITTLE little BIG big LITTLE BIG
  LITTLE little big BIG big LITTLE little big BIG big little LITTLE little
  big little BIG BIG little big

  Red green yellow blue red white green red yellow green white blue red
  white yellow green red blue white red yellow red green red blue yellow
  white yellow red blue blue yellow green red white red green blue red

• Teach flexibility of thought
  ➢ use set shifting games
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ASHA 2007 Annual Convention
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2. Identification of Relevance
   - Definition: determining what is important and not important to the task at hand
   - How does AS impact identifying relevance?
     - detail oriented
     - fail to see the global picture

3. Experiential Learning
   - Definition: the ability to learn from and draw upon past experiences
   - How does AS impact experiential learning?
     - identifying what works and what doesn’t
     - applying a skill to a new situation
     - difficult to see similarity of old situation and how to apply “old” skills to “new” situation

4. Goal Focus
   - Definition: the ability to remain focused and on-task, despite presence of competing information
   - How does AS impact goal focus?
     - getting stuck in details
     - getting distracted
Dropping out of school

- **NT reason:**
  - addictions
  - boredom
  - deficient intellect
- **AS/poor social thinking reason:**
  - tangential interests impede academia

**Central Coherence**

- **Definition:** the ability to integrate details into a larger picture
- **How does AS impact central coherence?**
  - details rule
  - often have the information but can’t integrate it into the big picture
  - seen as inconsiderate & thoughtless to NTs

How to “come to the point”

**Emotional Intelligence**

The Consortium for Research on Emotional Intelligence in Organizations
www.eiconsortium.org

**Emotional Intelligence**

- **Definition:** the ability to perceive, identify, and manage emotion on both a personal and social level
- **How does AS impact emotional intelligence?**
  - ability to adapt to new situations
Inappropriate coping strategies

- social regression
- fear reaction
- somatic complaints (hypochondriasis)
- paranoid feelings or thoughts
- depression
- clowning to cover up inefficiencies
- poor self-image
- passive aggression to elicit anger
- passive dependency to avoid situations
- impulsivity

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### Personal Competence

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<tr>
<th>Level</th>
<th>Sublevel</th>
<th>AS Impact</th>
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<tbody>
<tr>
<td>1. Self-awareness:</td>
<td>1. emotional awareness: recognizing one’s emotions and their effects</td>
<td>1. can’t recognize and explain their emotions&lt;br&gt;2. can’t associate feelings with their behavior&lt;br&gt;3. can’t realize their feelings impact performance</td>
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<td>2. self-assessment: knowing one’s strengths and limits</td>
<td>1. not aware of their own strengths and limits&lt;br&gt;2. experiential learning is difficult&lt;br&gt;3. not open to new ideas, suggestions&lt;br&gt;4. can’t show a sense of humor/perspective about themselves</td>
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<td>3. self-confidence: sureness about capabilities</td>
<td>1. limited self-confidence (esp. in new situations)&lt;br&gt;2. may be opinionated to point of obsessive&lt;br&gt;3. often based on personal views and not grounded in sound decisions</td>
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<tr>
<td>2. Self-Regulation</td>
<td>1. self-control: manage disruptive emotions/impulses</td>
<td>1. can’t manage impulsive feelings and distressing emotions&lt;br&gt;2. falls apart in trying situations&lt;br&gt;3. distractible and irrational under pressure</td>
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<td>2. trustworthiness: honesty</td>
<td>1. not prone to admit their own</td>
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<tr>
<td></td>
<td></td>
<td>and integrity</td>
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<tr>
<td></td>
<td></td>
<td>3. conscientiousness: responsibility for one’s own actions</td>
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<td>4. adaptability: flexible innovativeness: open to new ideas</td>
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<tr>
<td>3. Self-Motivation</td>
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<td>1. achievement drive: the need to meet or exceed a given standard of excellence</td>
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<td>2. commitment: embracing the goals of a group</td>
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<td>3. initiative: the ability to act on opportunities</td>
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<td>4. optimism: being able to continue a goal despite setbacks</td>
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### Social Competence

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| 1. Social Awareness          | 1. empathy: being able to recognize others’ feelings and perspective and taking an active interest in their concerns | 1. fail to attend to emotional cues  
2. don’t listen well  
3. don’t express sensitivity using a socially expected manner |
|                              | 2. service orientation: anticipating, recognizing, and meeting needs of others | 1. fail to recognize others’ needs (ToM)  
2. may not offer assistance  
3. fail to recognize others’ perspective |
|                              | 3. developing others: recognize what others need to enhance their abilities | 1. don’t acknowledge others’ achievements  
2. mentoring qualities overshadowed by perspective deficits |
|                              | 4. leveraging diversity: embracing multiculturalism to develop opportunities | 1. lack of tact may be perceived as being bigoted  
2. fail to recognize and consider cultural differences of others  
3. may be perceived as intolerant |
|                              | 5. political awareness: recognizing a groups emotional currents and power relationships | 1. fail to read emotional currents  
2. fail to recognize social networks  
3. fail to recognize the factors that shape actions of others  
4. fail to see how external events shape internal environment |
| 2. Social Skills             | 1. influence: being an effective persuader                               | 1. poor use of persuasion  
2. fail to appeal to listener’s needs  
3. poor consensus builders |
|                              | 2. communication: able to express oneself clearly and effectively        | 1. fail to recognize and act on emotional cues when communicating  
2. avoids difficult situations  
3. poor listening skills  
4. fails to be open minded especially to bad/unpleasant information |
|                              | 3. leadership: able to inspire and guide individuals and groups         | 1. attempts at arousing enthusiasm may be seen as lecturing |
## Social Competence

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<td>2. do not perform well in leadership positions 3. often seen as dictatorial</td>
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<td>4. change catalyst: initiate change</td>
<td>1. don’t like change 2. argue to argue not to produce improvement</td>
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<td>5. conflict management: negotiate and resolve differences</td>
<td>1. don’t handle difficult people well 2. don’t initiate methods to deescalate disagreements 3. fail to establish open dialogue 4. fixate on their needs/issues</td>
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<td>6. building bonds: nurturing appropriate relations</td>
<td>1. poor at friend making and friend keeping 2. may be perceived as stalking 3. often alienate colleagues</td>
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<td>7. collaboration and cooperation: working with others for shared goals</td>
<td>1. often hyperfocus on details and not on relationships 2. not good at collaborating 3. fail to identify collaborating opportunities</td>
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<td>8. team capabilities: creating group dynamics to achieve collective goals</td>
<td>1. often not perceived as being helpful, respectful, and cooperative 2. large group dynamics create excess stress</td>
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## Overall Prognosis

Despite these odds, individuals with social thinking deficits can function well within society. It has been speculated the following did...

Thanks for coming.

I hope it was worthwhile.