Stage 2 Theory of Mind

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Stage 2 Characteristics

• Sense of self
• Pretend play
• Developing descriptive and narrative language

Development toward Theory of Mind

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<th>ToM Development Levels</th>
<th>Intervention Stages</th>
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<td>Birth: Primary intersubjectivity</td>
<td>Developing pre ToM/ pre sense of self (intersubjectivity)</td>
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<td>8 months: Secondary intersubjectivity</td>
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<tr>
<td>17 months: Symbolic/ representational skills</td>
<td>Developing sense of self (pretend)/ pre level 1 ToM</td>
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<tr>
<td>– Pretend play</td>
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<tr>
<td>– Awareness of self</td>
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<td>– Language</td>
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<td>3 years: Narrative skills</td>
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<td>4 years: Theory of mind (1st order)</td>
<td>Developing First Order ToM</td>
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<td>5 years: Theory of mind (2nd order)</td>
<td>Developing Second and higher-Order ToM</td>
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<td>7+ years: Other higher-order ToM</td>
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<tr>
<td>– Emotional dissemblance</td>
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<td>– Figurative language</td>
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<td>– Irony/sarcasm</td>
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<td>– Social faux pas</td>
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Understanding likes/dislikes

Altruism

Reflecting on others: Emergence of empathy/altruism

Emergent Pretend

Assigning Roles and Scripts

Stage 2 Characteristics
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Emergent Pretend (Increased Intersubjectivity)

Play Prompt Hierarchy
- General verbal prompt: “What toy should we pick?”
- Specific verbal suggestion: “Let’s play with the Dora doll.”
- Verbal command: “Get the Dora doll.”
- Verbal command with gesture: Saying, “Get Dora,” while pointing to Dora.
- Partial physical prompt: Nudging the child’s arm toward Dora.
- Full physical prompt: Fully helping the child get Dora.

Autobiographical Memory

- Memory of autobiographical events (times, places associated emotions, and other contextual knowledge) that can be explicitly stated
- Properties of autobiographical memory:
  - Remembering versus knowing
    - Knowing is more factual (semantic)
    - Remembering is a feeling that is located in the past (episodic)
  - Involves intrapersonal Theory of Mind
  - Sense of subjective (emotional) self in time


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Episodic/Autobiographical Memory

- Memory of autobiographical events (times, places associated emotions, and other contextual knowledge) that can be explicitly stated
- Properties of episodic memory:
  - a subjective sense of time (or mental time travel)
  - connection to the self
  - autonoetic consciousness: a kind of consciousness that accompanies the act of remembering which enables an individual to be aware of the self in a subjective (emotional) time.

Knowing is more factual (semantic) whereas remembering is a feeling that is located in the past (episodic).


Pretend play

Autobiographical Memory

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Developing Episodic/Autobiographical Memory

- Recall/talk about past experience
- Relate emotions linked to the experience
- Reflect on/evaluate the experience
- Use mental state terms when talking about the experience (think/thought, know, remember, forget, believe, emotion words, hope, idea, plan)
- Mental state terms foster ToM development
- Journal writing

Promoting Autobiographical Memory: Deaf Child

Promoting Autobiographical Memory: Visual Support

Promoting Autobiographical Memory: No Visual Support

Journaling

Primary (universal) Emotions

Associating Emotions (nonsocial) and Situations

Emotions: happy, sad, mad, surprised, disgusted, afraid
Emotion Development

• 5 mo olds: after habituating to happy faces, look longer at any unpleasant face whether sad, fearful, angry

• Toddlers
  – Acquire words for sadness, anger, fear
  – Only reliably differentiate words in terms of valence (happy or not happy)

• 3-4 year-olds: categorize angry separate from sadness, fearful

• 7 year-olds: categorize most basic emotions, but confuse disgust with anger or sadness


Transporters

The Transporters: Discover the World of Emotions
http://www.thetransporters.com/


Avokiddo emotions app

Mind Reading

Peter feels gloomy when the holidays arrive and his family is not with him.

Sandra is devastated when her house burns down.

Keesha feels lonely in her new school where she doesn’t know anyone.

Mona was disappointed when she didn’t win the swim meet.

excited
bored
hurt
bothered

Excited

Bored

Hurt

Bothered
Coding Mom’s Talk in Storytelling

- Simple cognitions
  - He remembers
  - He’s thinking hard
  - She doesn’t realize
  - They didn’t even know
  - They are really pretending
- Cognition clarification
  - He remembers that he has not done the bedroom yet
  - He puts all the makeup back so Mummy doesn’t know what they’ve been up to


Coding Mom’s Talk in Storytelling

- Simple affect
  - They’re too excited
  - The baby’s happy
  - Carl looks worried
- Affect clarification
  - He’s getting quite angry ‘cos dogs don’t like cats
  - She’s so happy to get into the party
- False belief ending
  - Mum doesn’t know what happened while she was gone
  - He tidies up the whole house so Mum can’t see what they’ve been up to
  - Does Mum know what happened?


Results of Sally-Ann False Belief

- ToM scores of typical children
  - Significantly correlated with frequency of mother’s clarifying references to cognition and explanation of mother’s false belief
  - Not significantly correlated to simple references to cognition (e.g., “he remembers.”)
- ToM scores of children with ASD
  - Significantly correlated with mother’s clarifying references to emotions