

Introduction to Autism Spectrum Disorder



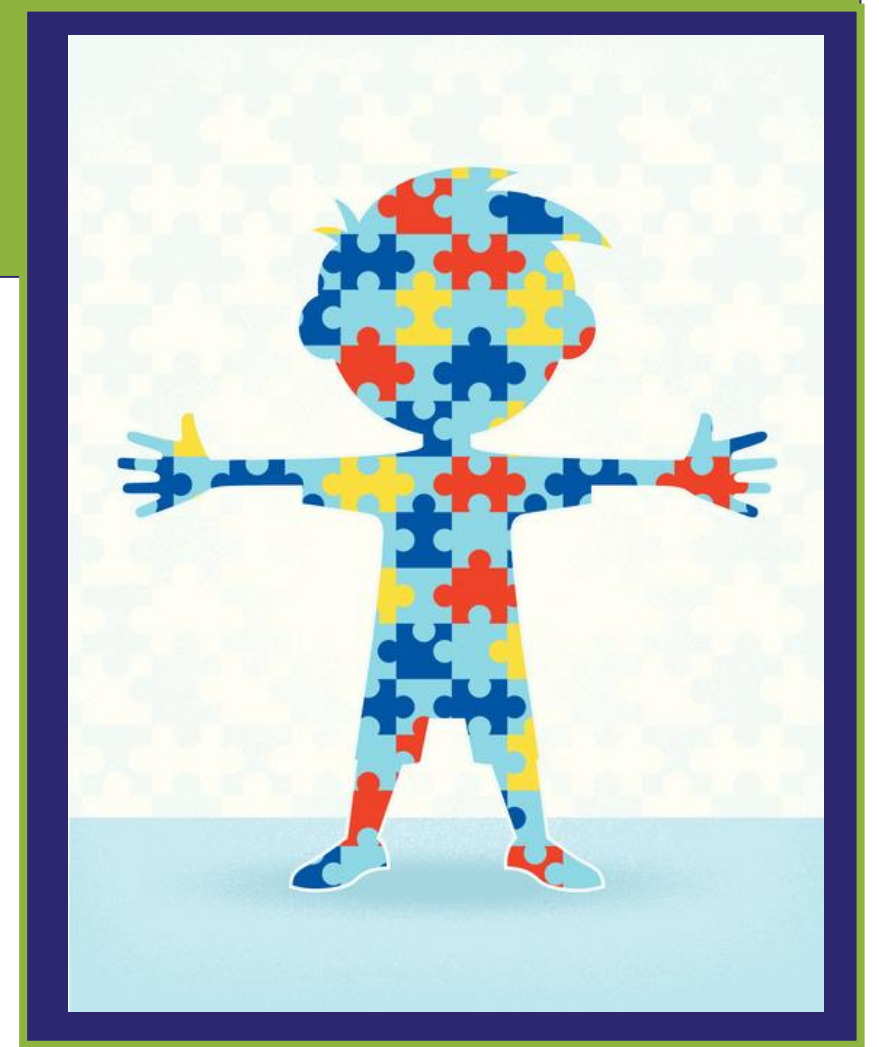
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Agenda

- Background: History and prevalence of ASD
- Diagnostic criteria and the autism spectrum
- What ASD looks like and how to provide support
 - Social Communication Traits
 - Restricted and Repetitive Behaviours
- Associated features and traits
- General Strategies for working with individuals with ASD



History of Diagnosis

- **1790's**
 - Biographical descriptions of “autistic traits”
- **1940's**
 - Leo Kanner described “Infantile Autism”
 - Hans Asperger lectures and publishes about “Autistic Psychopathy”
- **1981**
 - Lorna Wing introduced the term “Asperger Syndrome”
- **Diagnostic and Statistical Manual DSM**
 - *1980*: Autism included in DSM-III, triad of traits
 - *1994*: DSM-IV introduces Asperger's disorder
 - *2013*: DSM-5 collapses spectrum of disorders under the title “Autism Spectrum Disorder”; triad of traits changes to dyad of traits

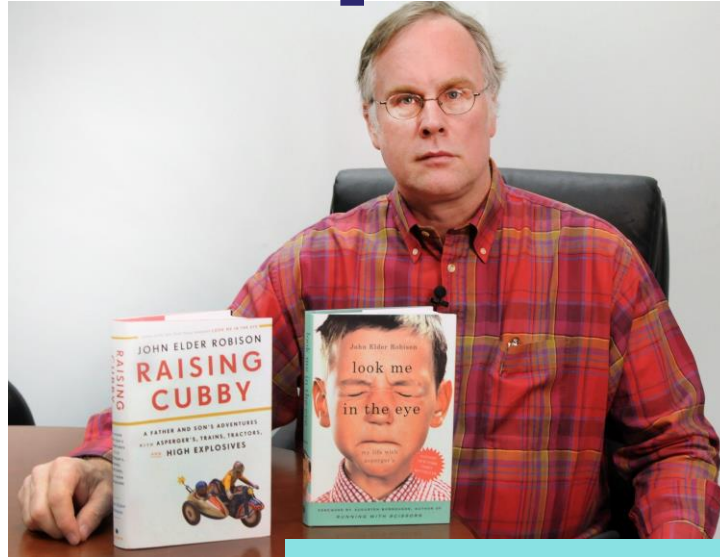
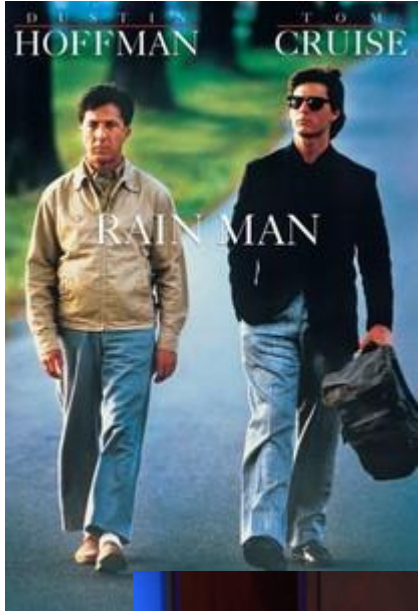
Prevalence Estimates

- Global estimates of prevalence range from 1% - 3% (Baird et al. 2006; Baron-Cohen et al. 2009; CDC, 2014; Kim et al. 2011).
- Centre for Disease Control and Prevention (CDC)

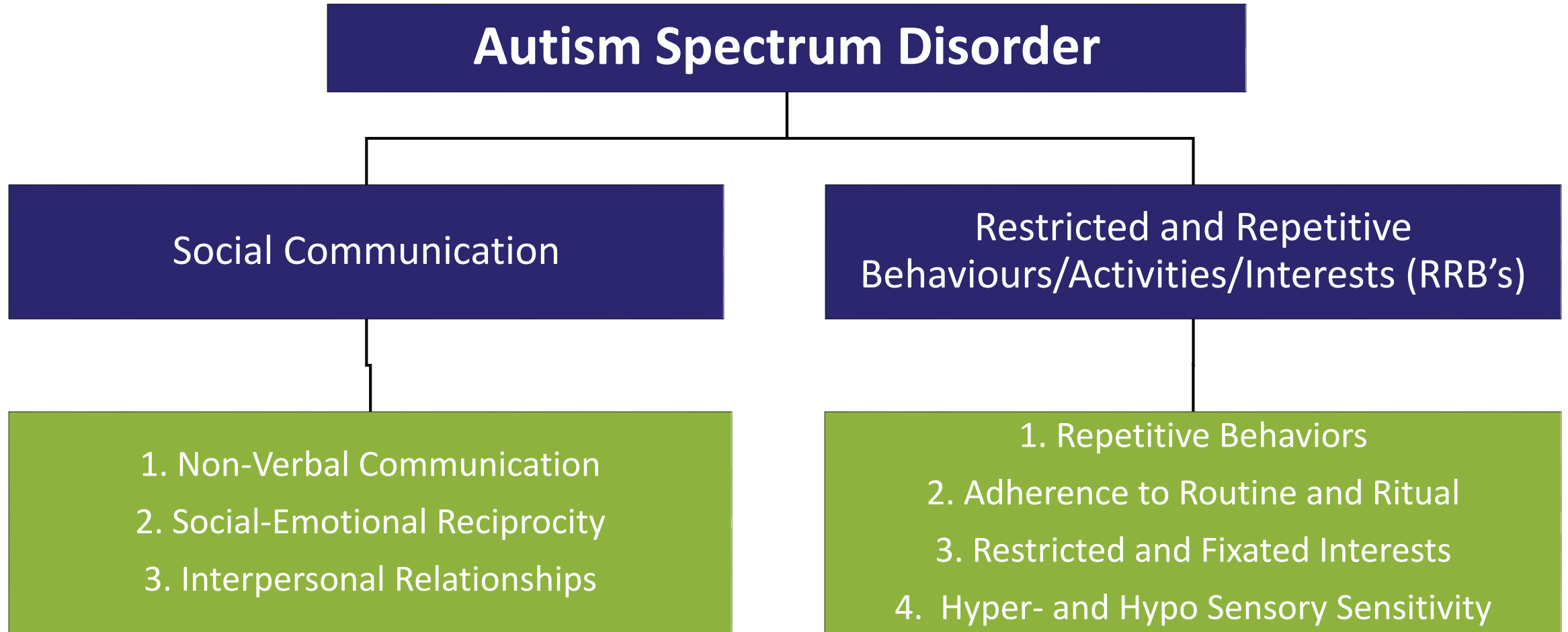
2000	2002	2004	2006	2008	2010	2012	2014
1 in 150	1 in 150	1 in 125	1 in 110	1 in 88	1 in 68	1 in 69	1 in 59

- Trend in increasing prevalence
 - Increased awareness
 - Changes in clinical practice (e.g., better access to diagnostic assessment, improved screening, changes to diagnostic criteria)

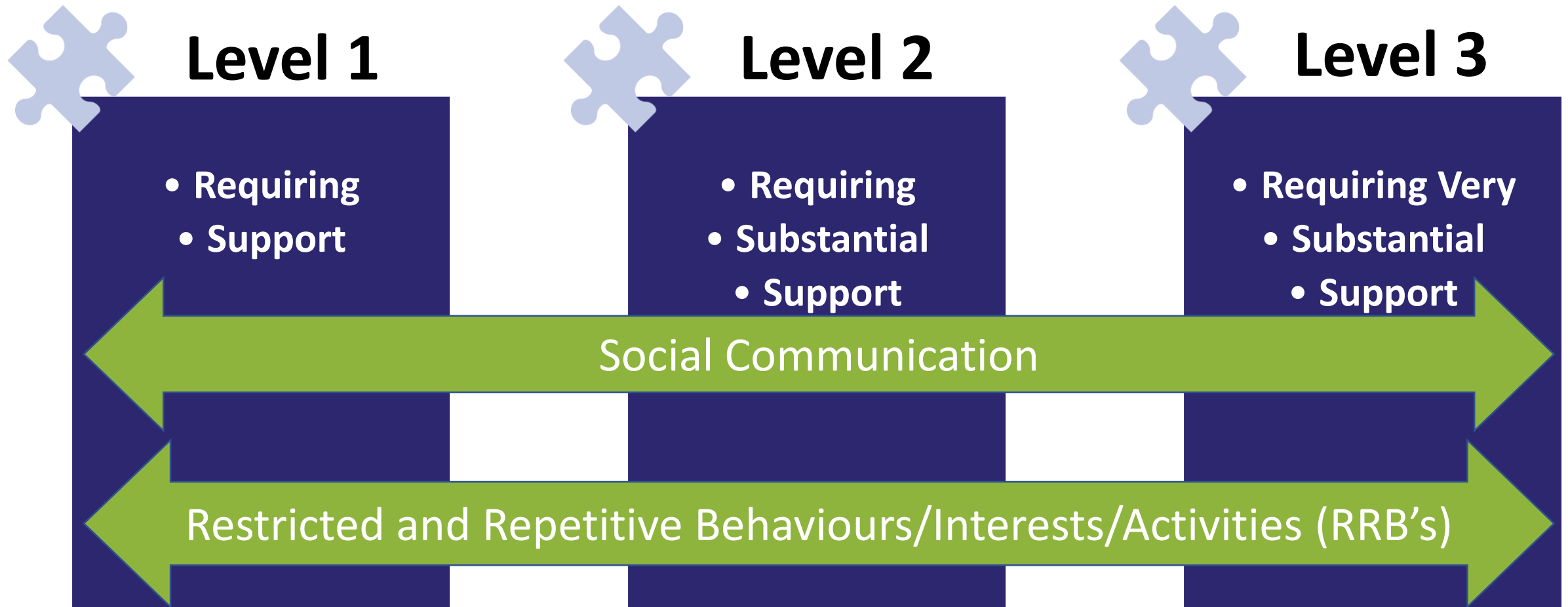
Autism in Popular Culture



Diagnostic Traits



Spectrum of Abilities



**“If you’ve met one
person with autism,
you’ve met one person
with autism”**

- Dr. Stephen Shore

Social Communication: Non-Verbal Communication



Examples

- Integration of non-verbal communication with verbal communication
- Eye contact
- Body language
- Understanding and using gestures
- Facial expression
- Tone of voice and prosody of speech

Support Strategies

- May consider formal intervention (e.g., for eye contact and gesturing)
- Help others to understand areas of challenge to normalize
- Teach individual how to recognize and express their emotions

Social Communication: Social-Emotional Reciprocity



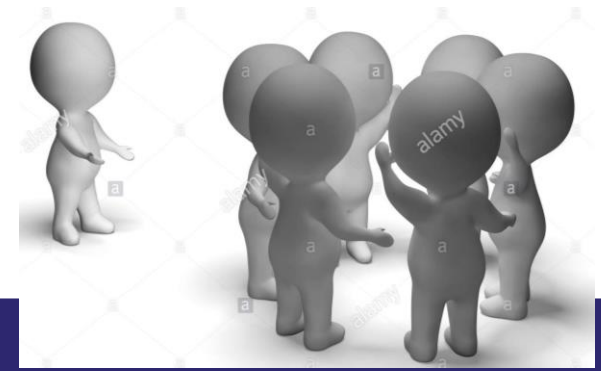
Examples

- Social approach
- Back and forth conversation
- sharing Interests
- Expressing emotions or affect
- Initiating and responding to social interaction

Support Strategies

- Prompt to engage in conversation or interaction
- Practice conversations and interactions
- Teach skills for interaction
- Educate about emotions & practice identifying emotions

Social Communication: Interpersonal Relationships



Examples

- Adjusting behavior to suit various social contexts
- Play
- Making friends
- Understanding the nature of different relationships
- Interest in other people

Support Strategies

- Role play
- Practice
- Prepare for new situations
- Explore relationship concepts together
- Teach skills (e.g., for dating)
- Talk about relationship preferences
- Seek out natural communities (e.g., online forums, clubs)

Restricted & Repetitive Behaviour: Repetitive Behaviours



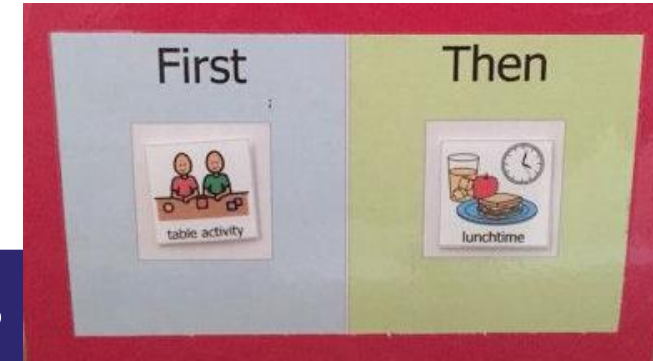
Examples

- Motor movements (e.g., whole body rocking)
- Use of objects (e.g. lining things up)
- Speech (e.g., echolalia, idiosyncratic phrases, neologisms)

Support Strategies

- Find appropriate replacements
- Limit time engaging in behavior
- Encourage and reward imaginative play
- Model speech

Restricted & Repetitive Behaviour: Adherence to Routine



Examples

- Difficulty with change & transitions
- Rigid thinking patterns
- Rule following behavior
- Greeting rituals
- Insistence on sameness (e.g., route to school, morning routine, food restrictions)

Support Strategies

- Count downs
- Schedules (visual)
- “First-Then” instruction
- Prepare in advance and practice (e.g., visuals, role play, visit)
- Redirect thinking patterns
- Develop new mantras
- Build in change one step at a time

Restricted & Repetitive Behaviour: Restricted and Fixated Interests



Examples

- Preoccupation with unusual objects (e.g., locks)
- Perseverative interests (e.g., intense interest in trains)

Support Strategies

- Develop an interest yourself
- Set limits (e.g., 5 times day or 10 minutes)
- Use “Interest box”
- Redirect to current topic or activity
- Incorporate interests into other activities of lesser interest (e.g., write an essay about space)

Restricted & Repetitive Behaviour: Sensory Sensitivity



Examples

- Indifference to pain/temperature
- Adverse reactions to sounds or textures
- Excessive smelling or touching objects
- Visual fascination with light
- Pressure

Support Strategies

- Consider sensory assessment
- Use sensory strategies to regulate
- Modify the environment
- Consider the role of sensory sensitivity when behavior is escalating
- Limit time in overstimulating environment

Associated Features and Traits

- **Theory of Mind and Cognitive Empathy**
 - Understanding what other people might be thinking or feeling
 - Understanding that other people have different experiences, thoughts, feelings, and preferences than oneself (Dziobek et al., 2008; Gillespie, McCleery, & Oberman, 2014)
- **Language**
 - Language impairment
 - Using language and communication for social purposes/understanding the social context of communication (Eigsti et al., 2011; Marchena, 2015)
- **Executive Functioning**
 - Skills required for organization, planning, and problem solving (Crone, 2009; Luna et al., 2007; Rosenthal et al., 2013)
 - E.g., Working Memory, Cognitive Flexibility, Inhibition

Associated Features and Traits

- **Emotional and Behavioural Regulation**

- Increased difficulty understanding and coping with emotions (Laurent & Rubin, 2004; Lerner et al., 2012)
- Require additional support for coping

- **Psychiatric Comorbidities**

- Higher rates of mental health problems as compared to individuals without ASD; e.g., depression, anxiety, OCD, ADHD, psychotic disorders (Bjorn et al., 2009 ; Howlin, 2000; Hudson, Hall, & Harkness, 2018; Sverd, 2003)
- *Diagnostic Overshadowing*: tendency for behavior challenges to be attributed to ASD rather than a mental health diagnosis

General Strategies for Supporting Individuals with ASD

1. Focus on strengths
2. Build genuine relationships
3. Be curious & consider their perspective
4. Give praise and validation
5. Patience
6. Regulate your own emotions
7. Use routine and clear expectations
8. Empower them to educate others

Resources

- Autism Ontario Website: <http://www.autismontario.com/>
 - Educational information, resources and service lists, support groups
- Toronto Autism Services: <https://www.torontoautismservices.ca/>
 - Information about services, workshops, and resources
- Surrey Place Website: <https://www.surreyplace.ca/>
 - Access to services for individuals with ASD and developmental disabilities

Resources

- Ontario Government Website (Ontario Autism Program):
<http://www.children.gov.on.ca/htdocs/English/specialneeds/autism/ontario-autism-program.aspx>
 - Information on changes to the Ontario Autism Program and how to access the new childhood budgets
- Autism Speaks Website: <https://www.autismspeaks.ca/>
 - Information about services, toolkits, and resources
- Association for Science in Autism Treatments: <https://www.asatonline.org/>
 - Scientifically based information about different treatment options for ASD

SURREY PLACE

Specialized Clinical Services for People with Developmental Disabilities and Autism Spectrum Disorder