

THE NAMES



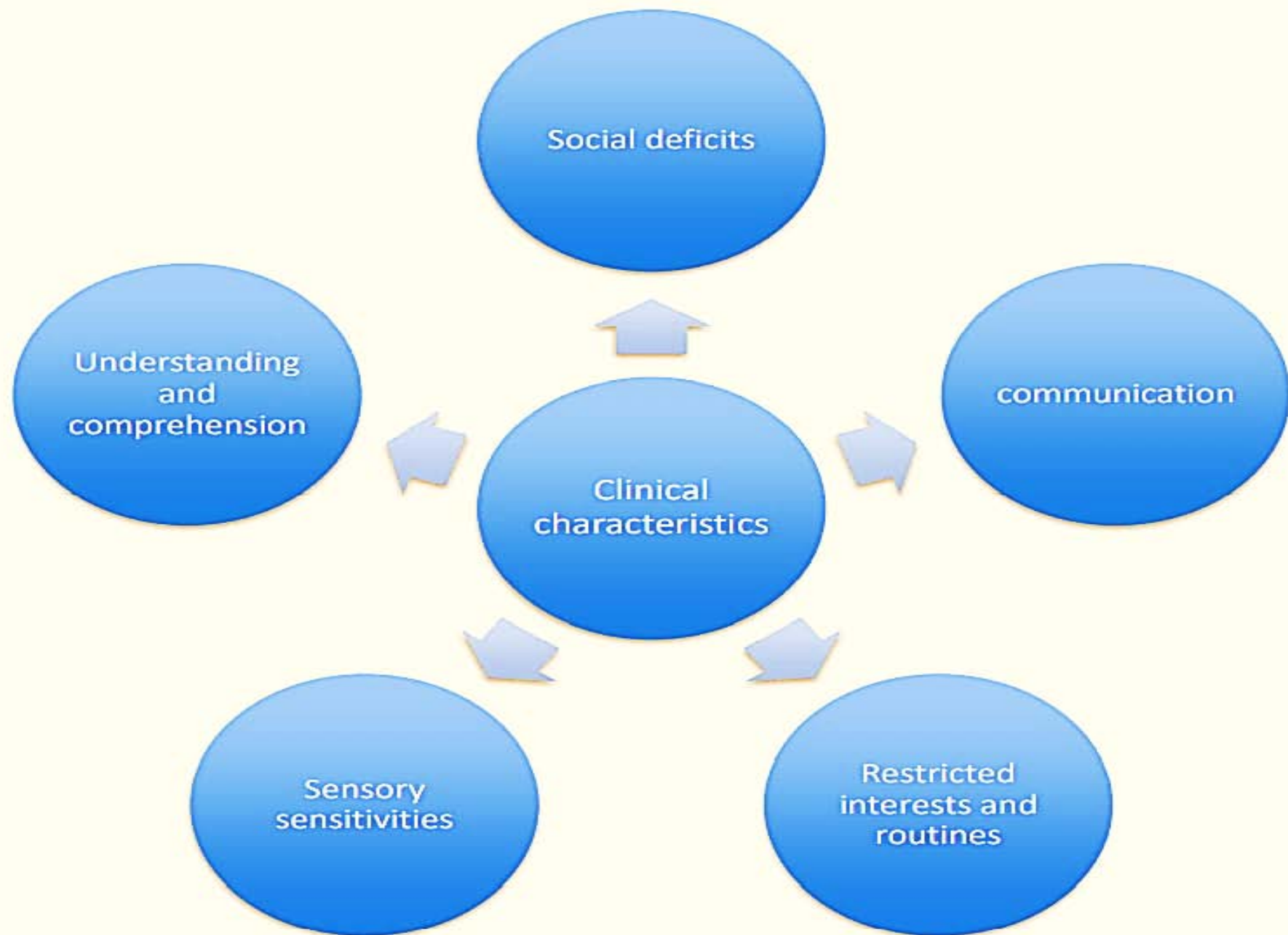


Presentations of Autism Spectrum Disorder

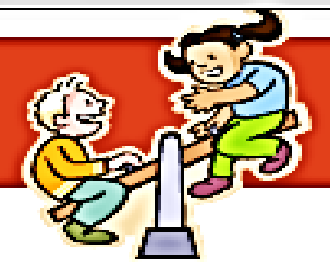
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Red Flags for Autism



If there are concerns with any of the following, parents can:

- Request that their Family Doctor make a referral to a Paediatrician
- Have their child assessed by a Speech-Language Pathologist



Communication Red Flags

- No babbling by 11 months of age
- No simple gestures by 12 months (e.g., waving bye-bye)
- No single words by 16 months
- No two-word phrases by 24 months (noun + verb - e.g., "baby sleeping")
- No response when name is called, causing concern about hearing
- Loss of any language or social skills at any age

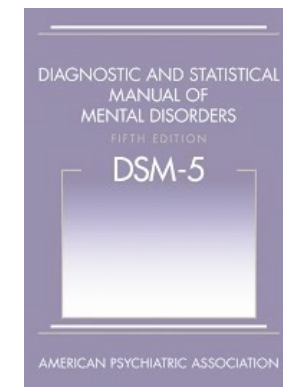
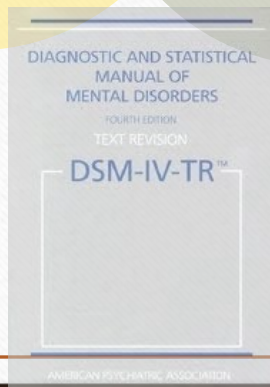
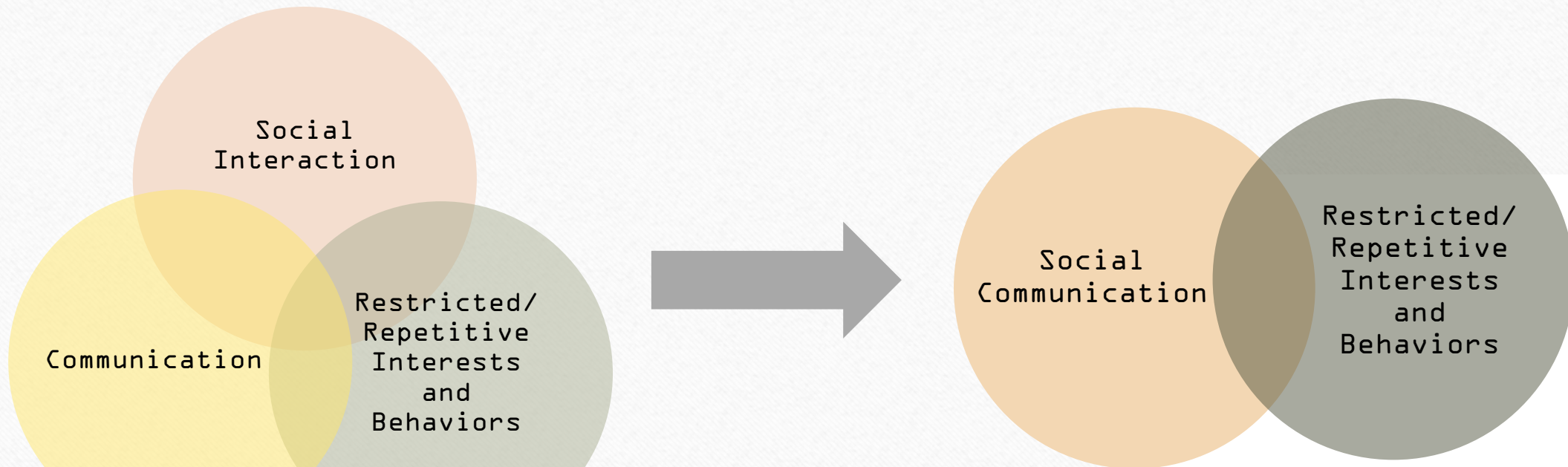
Behavioural Red Flags

- Odd or repetitive ways of moving fingers or hands
- Oversensitive to certain textures, sounds or lights
- Lack of interest in toys, or plays with them in an unusual way (e.g., lining up, spinning, opening/closing parts rather than using the toy as a whole)
- Compulsions or rituals (has to perform activities in a special way or certain sequence; is prone to tantrums if rituals are interrupted)
- Preoccupations with unusual interests, such as light switches, doors, fans, wheels
- Unusual fears

Social Red Flags

- Rarely makes eye contact when interacting with people
- Does not play peek-a-boo
- Does not point to show things he/she is interested in
- Rarely smiles socially
- More interested in looking at objects than at people's faces
- Prefers to play alone
- Does not make attempts to get parent's attention; doesn't follow/look when someone is pointing at something
- Seems to be "in his/her own world"
- Does not respond to parent's attempts to play, even if relaxed
- Avoids or ignores other children when they approach

Diagnosis: DSM-IV to DSM-5



ASD is the name for a group of neurodevelopmental disorders

DSM V changes to the diagnosis of Autism:

- One broad category of autism spectrum disorder (ASD)
- Two categories of symptoms
 - ✓ social-communication impairment
 - ✓ repetitive/restricted behaviors
- Social communication disorder

ICD-10	DSM-IV	DSM-5	ICD-11
Pervasive Developmental Disorders: Childhood autism Asperger syndrome Atypical autism PDD-other PDD-unspecified	Pervasive Developmental Disorders: Autistic disorder Asperger's disorder PDD NOS	Autism spectrum disorder	Autism spectrum disorder
3 symptom domains	3 symptom domains	2 symptom domains Including sensory sensitivities	2 symptom domains Including sensory sensitivities
Onset by age 3	Onset by age 3	Removes age of onset	Removes age of onset
Atypical autism	PDD NOS	Social (pragmatic) communication disorder	Developmental language disorder
Comorbidity exclusions	Comorbidity exclusions	Allows co-occurring diagnoses	Allows co-occurring diagnoses

❑ Deficits in social communication (all 3)

- ✓ *Deficits in social and emotional reciprocity*
- ✓ *Deficits in nonverbal communication*
- ✓ *Deficits in maintaining relationships*

❑ Restricted, repetitive patterns of behavior, interest, and activities (2)

- ✓ *Stereotyped motor or verbal behavior*
- ✓ *Restricted, fixated interests*
- ✓ *Excessive adherence to routines and ritualized bhx.*
- ✓ *Unusual sensory behavior*

❑ Symptoms present in early childhood

Deficits in social-emotional reciprocity

- *Abnormal social approach*
- *Failure of normal back-forth conversation*
- *Reduced sharing of interests, emotions, or affect*
- *Failure to initiate or respond to social interactions*

Deficits in nonverbal communicative behaviors

- *Poorly integrated verbal and nonverbal communication*
- *Abnormalities in eye contact and body--language*
- *Deficits in understanding and use of gestures*
- *Total lack of facial expression and nonverbal communication*

Deficits in developing & maintaining relationships

- *Difficulties adjusting behavior to suit various social contexts*
- *Difficulties in sharing imaginative play or in making friends*
- *Absence of interest in peers*

Restricted/repetitive patterns of behavior, interests or activities

➤ *Stereotyped /repetitive motor movements, use of objects or speech*

- ✓ *Simple motor stereotypies*
- ✓ *Lining up toys or flipping objects*
- ✓ *Echolalia*
- ✓ *Idiosyncratic phrases*

Restricted/repetitive patterns of behavior, interests or activities

- *Insistence on sameness, inflexible adherence to routines or ritualized patterns of verbal/nonverbal behavior*
 - ✓ *Simple motor extreme distress at small changes*
 - ✓ *Difficulties with transitions*
 - ✓ *Rigid thinking patterns*
 - ✓ *Greeting rituals*
 - ✓ *Need to take same route or eat same food every day*

Restricted/repetitive patterns of behavior, interests or activities

- *Highly restricted, fixated interests that are abnormal in intensity or focus*
 - ✓ *Strong attachment to or preoccupation with unusual objects*
 - ✓ *Excessively circumscribed or perseverative interests*

Restricted/repetitive patterns of behavior, interests or activities

- *Hyper/hypo-reactivity to sensory input*
- *or Unusual interest in sensory aspects of environment*
 - ✓ *Apparent indifference to pain/temperature*
 - ✓ *Adverse response to specific sounds or textures*
 - ✓ *Excessive smelling or touching of objects*
 - ✓ *Fascination with lights or spinning objects*

Severity rating be given for each domain

Ratings include:

Level 3: Requiring very substantial support

Level 2: Requiring substantial support

Level 1: Requiring support

Behaviors/symptoms not captured in DSM-5 ASD

➤ Problems with play/imagination

- ✓ Impairments in imaginative/symbolic play
- ✓ Lack of functional play skills
- ✓ Difficulty distinguishing fantasy from reality

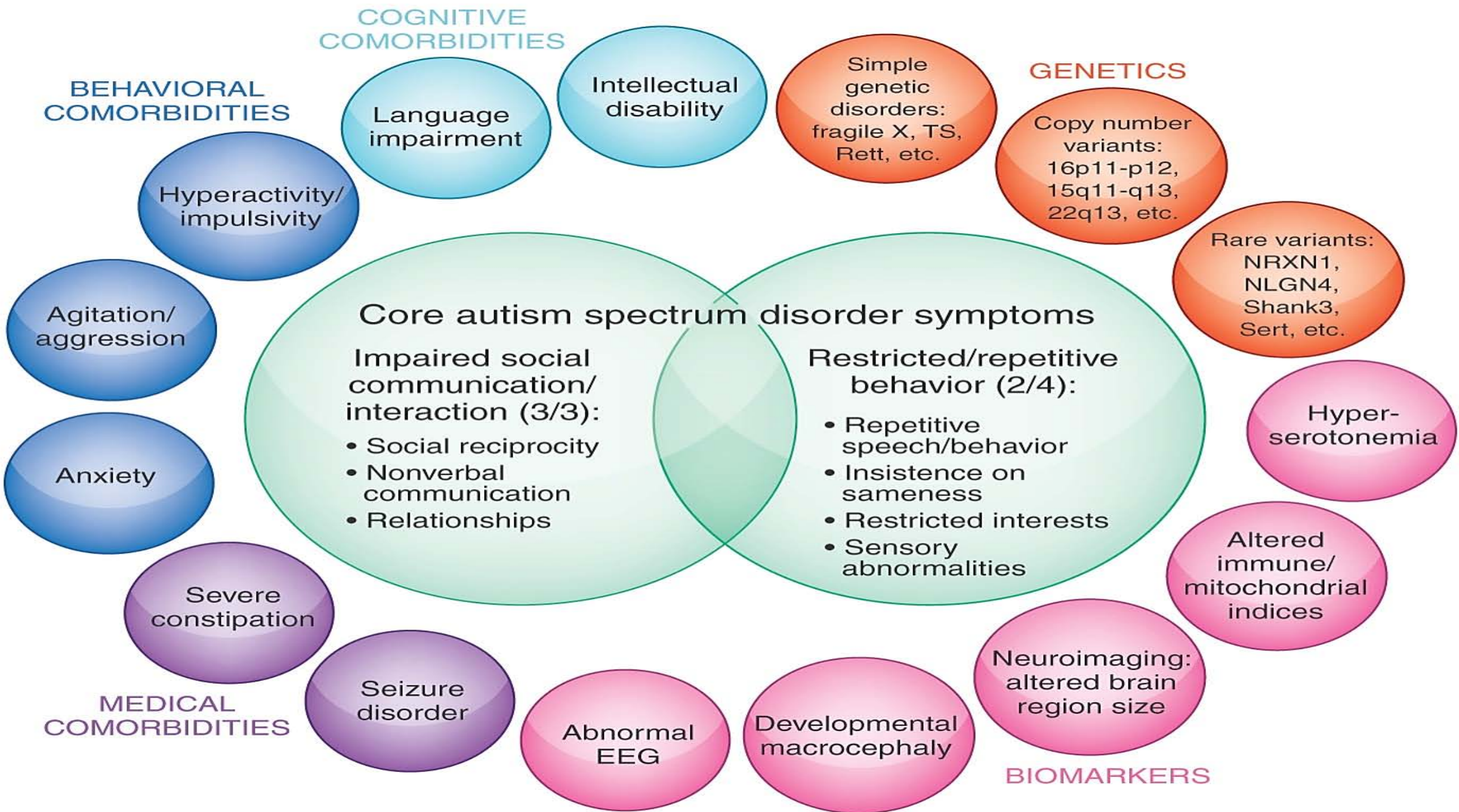
➤ Shyness/social anxiety

➤ Language and developmental delays

- ✓ Milestone delays/developmental delays
- ✓ Speech delays (expressive or receptive)
- ✓ Language disorder

➤ Behavioral difficulties/temper tantrums

➤ Poor imitation skills



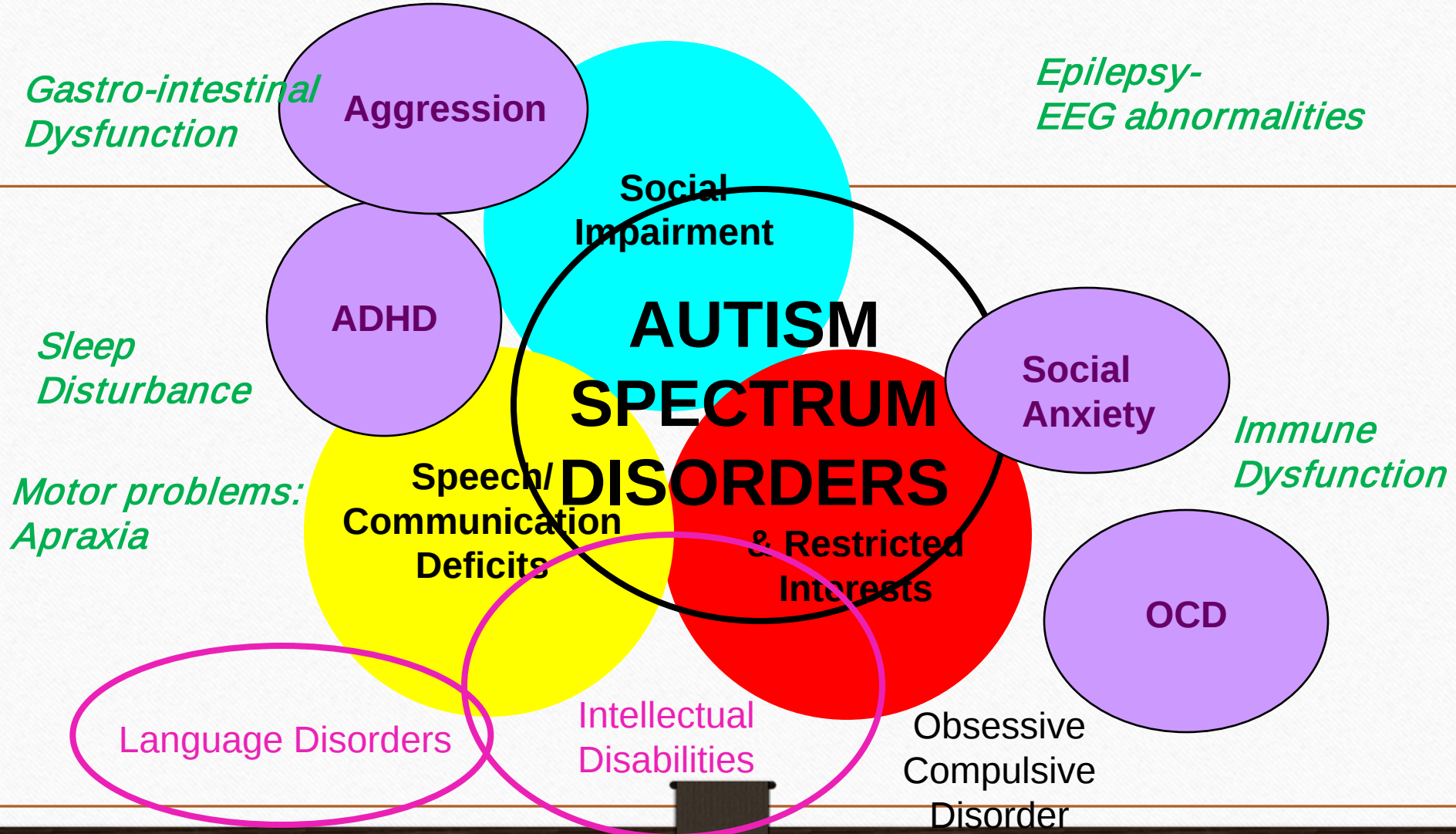
<i>Tantrum</i>	<i>Meltdown</i>
Giving child an item or bribe can calm them	Handing a child his favourite thing may just result in it being thrown across the room, and then further tears later when calm because it broke
Child looks at and gauges audience reaction	Child does not care how audience is reacting, they are just doing they are doing
The child having a tantrum will be careful not to hurt themselves or others	The child melting down is oblivious to their surroundings
A soon as the causing situation is resolved the child having a tantrum will calm down and settle	A meltdown has to run its course. It is very rare that a parent can resolve a meltdown unless they know what sensory input may help sooth their child
Tantrums are thrown to manipulate people and achieve goals	A meltdown happens because a child is overtired, overstimulated and just one little thing is the final thing they need to overload their system
When a tantrum is thrown, there is a definite feel that the child is trying to control people around them	When a meltdown occurs, no one is in control, especially not the person having the meltdown

Reasons for Meltdowns

- **Communication (don't have the language skills to communicate)**
- **Sensory problem**
- **Routine or surroundings have been disturbed**
- **Can't understand the point of view of someone else (theory of mind)**
- **Underlying medical issue**

Core Symptom Domains

PLUS Associated Medical Features



Behavioral and developmental features (Hx.)

- ❖ **Developmental regression**
- ❖ **Absence of proto-declarative pointing**
- ❖ **Abnormal reactions to environmental stimuli**
- ❖ **Absence of symbolic play**
- ❖ **Abnormal social interactions**
- ❖ **Repetitive and stereotyped behavior**

Physical Examination

- ❖ Pretend play
- ❖ Gaze monitoring
- ❖ Proto-declarative pointing
- ❖ Body movement
- ❖ Head and hand features
- ❖ Self-injurious behaviors
- ❖ Physical abuse
- ❖ Sexual abuse

Developmental regression

- 13% and 48%
- 15-30 months
- lose verbal and nonverbal communication skills
- may be **precipitated** by environmental event (immune or toxic exposures)
- more likely it is coincidental with other environmental events

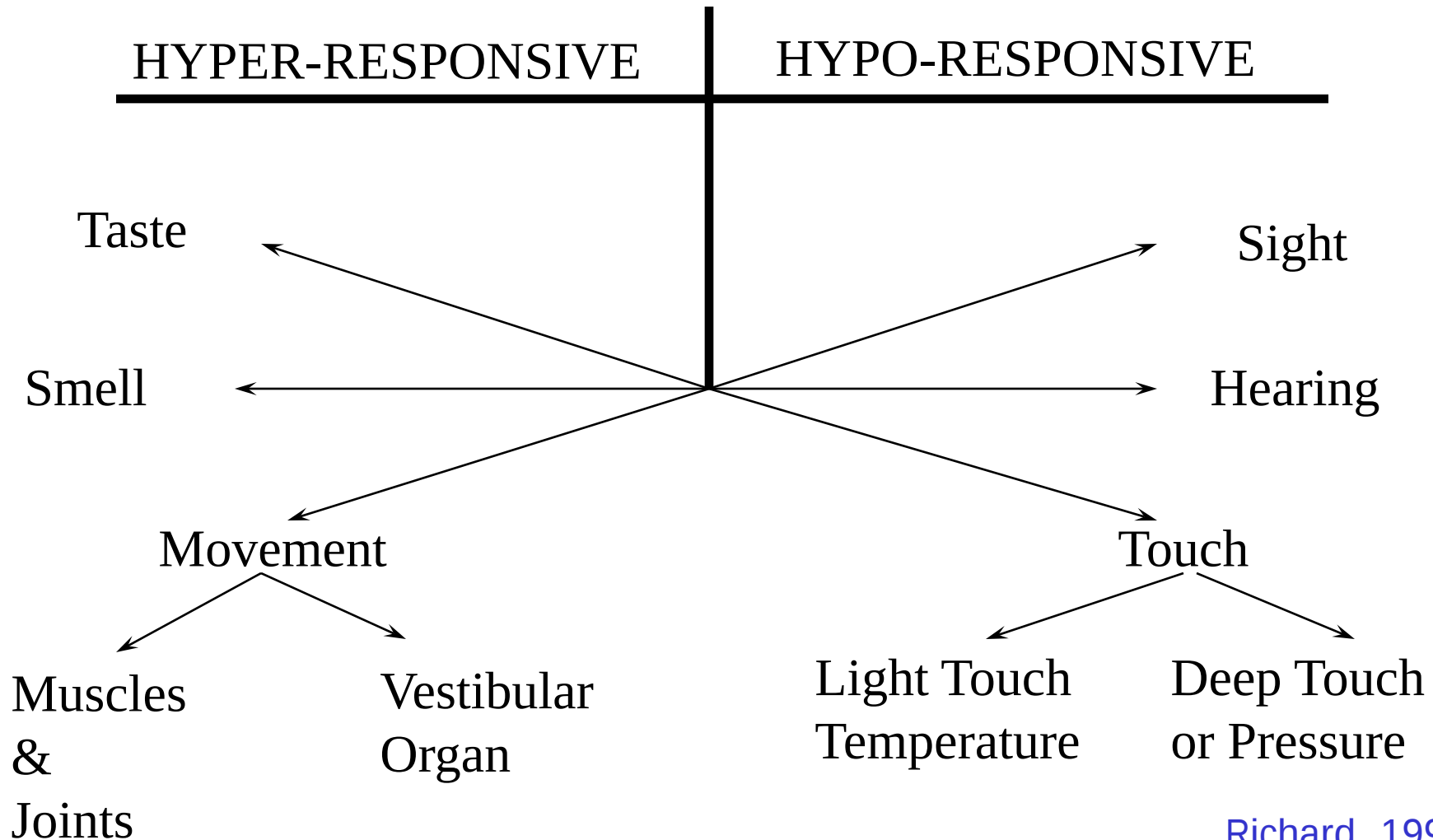
Proto-declarative pointing

- *Proto-declarative pointing is the **use of the index finger** to indicate an item of interest to another person.*
- *Screening questions include "Does your child ever use his or her index finger to point, to indicate interest in something?"*

Environmental stimuli

- More interested in geometric patterns
- Prefer dynamic geometric patterns to participating in physical activities
- Unusual responses to environmental stimuli (excessive reaction / lack of reaction)
 - ✓ Certain sounds (vacuum cleaners or motorcycles) may elicit incessant screaming
 - ✓ Playing a radio, stereo, or television at a loud level may appear to produce hyperacusis
- Exaggerated responses or rage to everyday sensory stimuli, such as bright lights or touching

ABERRANT SENSORY SYSTEM RESPONSES



Play

- Baron-Cohen and colleagues demonstrated that the absence of symbolic play in infants and toddlers is *highly predictive of a later diagnosis of autism*
- screening for the presence of symbolic play is a key component of the routine assessment

Odd play

- Interest in parts of objects instead of functional uses of the whole object (repeatedly spinning a wheel of a car, lining up objects or dropping objects from a particular height)
- May be fascinated with items that are not typical toys (pieces of string/paper)
- May spend hours watching traffic lights, fans, and running water

Social interactions

- Lack of appropriate interaction with *family members*.
- Problems *making friends* and understanding the social intentions of other children
- Show attachments to objects not normally considered child oriented
- May *exhibit inappropriate friendliness*
- and lack of awareness of personal space

High pain threshold

- *Rather than crying and running to a parent → no change in behavior*
- Parents often report that they need to ask the child if something is wrong when the child's mood changes, and may need to examine the child's body to detect injury

Language

- Pronominal reversals
- Repeating words and sentences
- Language only the child understands

Response to febrile illnesses

- ❖ During a febrile illness, children with autistic disorder may show a *decrease in behavioral abnormalities* that plague the parents when the child is well (self-injurious behaviors, aggression toward others, property destruction, temper tantrums, hyperactivity).
- ❖ This inhibition of negative behaviors may occur with various febrile illnesses, including ear infections, upper respiratory tract infections, and childhood illnesses. (A parent may say, "When he is suddenly an angel, I know that he has an ear infection.")

Physical Examination

Abnormalities in

- ✓ *Pretend play*
- ✓ Gaze monitoring
- ✓ Proto-declarative pointing

Pretend play

- ✓ The presence of symbolic play
- ✓ *The child should respond appropriately to a pretend activity*
compared with most other children of the same culture

Gaze monitoring

- The clinician calls the child's name, points to a toy on the other side of the room, and says, *"oh look! There's a [name a toy]!"*
- If the child looks across the room to see the item indicated by the clinician, then a joint attention is established, indicating normal gaze monitoring

Proto-declarative pointing

- ❑ Assess for the presence of proto-declarative pointing:

Say to the child, “*where's the light?*” Or “*show me the light*”

- ❑ A normal response is for the child *to point with his or her index finger at the light while looking up at the clinician's face*

Body movement

- *Clumsiness, awkward walk, and abnormal motor movements* are characteristic features of autistic disorder
- Hand flapping
- It may occur in combination with movement of the entire body, such as bouncing (jumping up and down) and rotating (constantly spinning around a vertical axis in the midline of the body)
- Motor tics
- Akathisia (no verbalization of a sensation of inner restlessness and an urge to move)

Head and hand features

- Aberrant **palmar creases** and other dermatoglyphic anomalies are more common
- The **head circumference** of children with autism may be small at birth
 - ✓ many children with autism experience a rapid increase in the rate of growth from age 6 months to 2 years (approximately one fifth of the population of children)
 - ✓ Increased head circumference is more common in boys and is associated with poor adaptive behavior
 - ✓ The head circumference may return to normal in adolescence

Self-injurious behaviors

- *Picking at the skin*
- *Self-biting*
- *Head punching and slapping*
- *Head-to-object and body-to-object banging*
- *Body punching and slapping*
- *Poking the eye, the anus, and other body parts*
- *Lip chewing*
- *Removal of hair and nails*
- *Teeth banging*

Physical abuse

- Persist incessantly with repetitive behaviors *that annoy others ...*
- *Parents, teachers, and others may eventually lose control and inflict physical injury on the child ...*

Sexual abuse

- *Physically normal* in appearance, *without dysmorphic features*
- Lack ability to communicate inappropriate sexual contact to responsible authorities ...

A close-up photograph of a pair of hands, palms up, holding a small, rectangular white card. The card has a slightly distressed or torn edge. The words "Thank You" are written on the card in a black, elegant cursive script. The hands are positioned symmetrically around the card, with the fingers slightly curled. The background is dark and out of focus.

Thank You