

UNDERSTANDING CHILDREN WITH AUTISM

WHAT WE NEED TO KNOW IN CLINICAL SETTINGS



WE'RE NUMBER 1...

- 2008 CDC Study
 - Nationally, 1 in 88 children have autism spectrum disorder
 - Utah, 1 in 47 children have autism spectrum disorder
- 2010 Utah Department of Health Administrative Estimate
 - Calculates to 1 in 38 children

http://health.utah.gov/opha/publications/hsu/1301_Autism.pdf

judith.zimmerman@hsc.utah.edu



WHAT IS AUTISM?

- Autism Spectrum Disorders (ASD) begin during early development of the brain and result in varied patterns of skill acquisition as a child grows. A person who has neurobiological differences characteristic of autism may experience a range of effects from mild to severe.

What is Asperger Syndrome and High Functioning Autism?

- ❖ A category within that spectrum is Asperger Syndrome and High Functioning Autism (AS-HFA). Both are considered pervasive developmental disorders, meaning the condition affects typical development and growth patterns and are all encompassing.



A DIAGNOSIS OF AN AUTISM SPECTRUM DISORDER INVOLVES:

- **Impaired communication**
- **Impaired social interactions**
- **Restricted, repetitive and stereotyped patterns of social behavior**

NEUROLOGICAL & BIOLOGICAL UNDERSTANDING OF BEHAVIOR

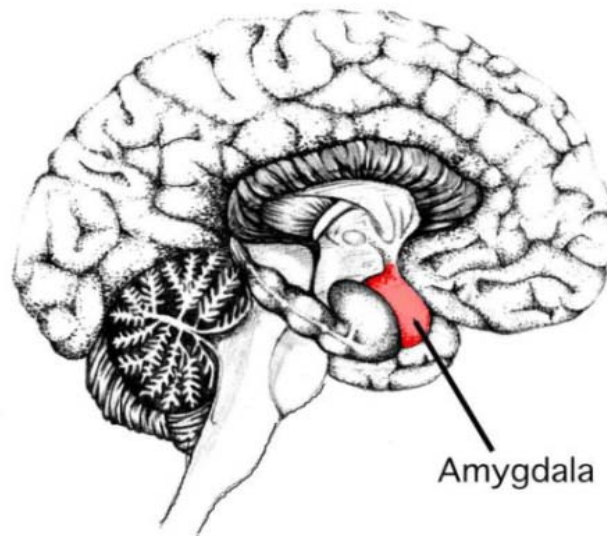
*Brain areas where individuals with autism
exhibit neurological differences:*

- Amygdala
- Hippocampus
- Frontal Lobe
- Corpus Callosum
- Cerebellum



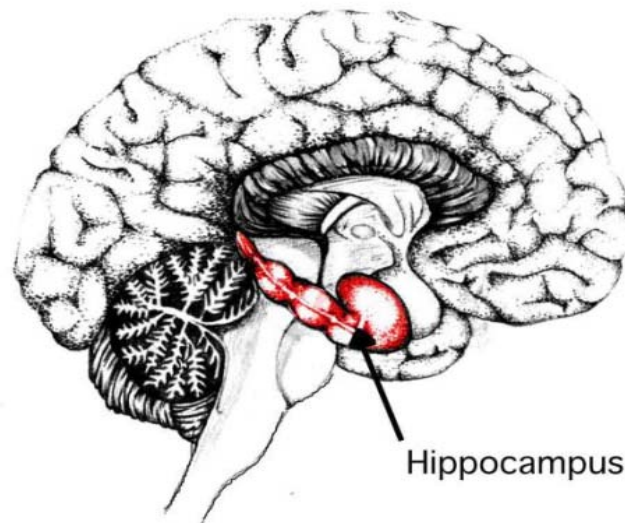
AMYGDALA

- **Function:** *evaluates threat, emotional control, stress response, aids hippocampus in memory*
- **Difference:** *enlarged*
- **Strength**– *improved memory for interests and details*
- **Weakness** – *low tolerance for stress and anxiety*



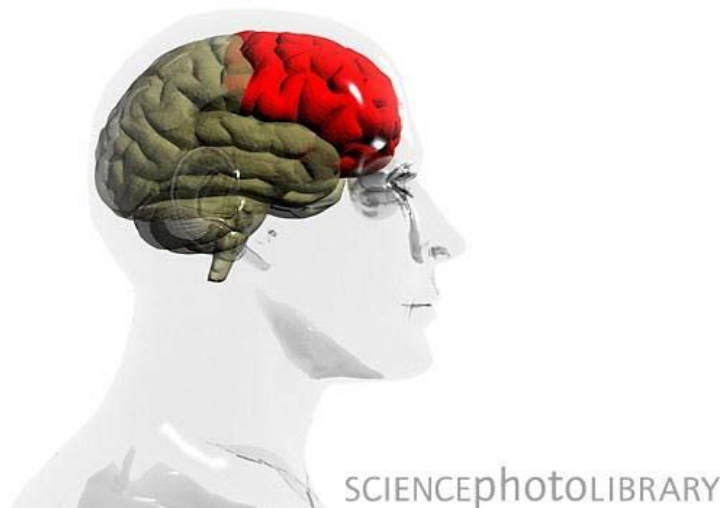
HIPPOCAMPUS

- **Function:** *Memory, sending stored memories to cerebral centers*
- **Difference:** *enlarged*
- **Strength** – *logical, systems oriented*
- **Weakness** – *perseveration*



FRONTAL LOBE

- **Function:** *problem solving, planning, control, moral reasoning, and attention*
- **Difference:** *enlarged frontal lobe due to excessive white matter*
- **Strengths** – *visual learners, laser-like focus on tasks*
- **Weakness** – *difficulty with abstract thought*



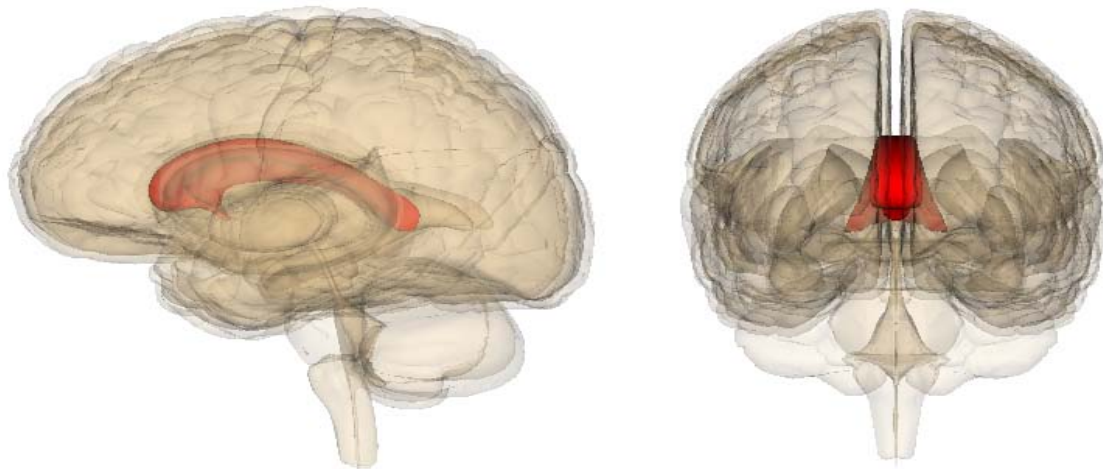
SCIENCEphotOLIBRARY

Brandon Condie, LPC,
BCBA
Kyle Bringhurst, LCSW



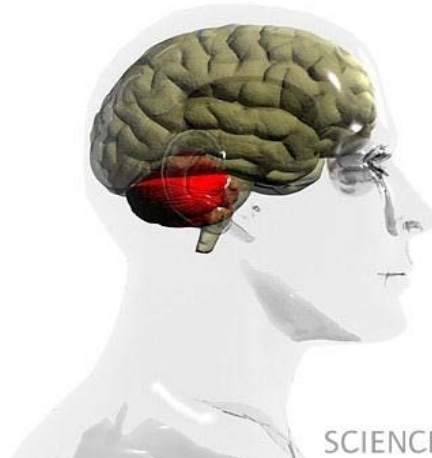
CORPUS CALLOSUM

- **Function:** *Links the left and right hemispheres of the brain*
 - **Difference:** *Significantly undersized-this hinders effective communication between the two hemispheres*
 - **Strengths –** *Hyper-focus on detail (e.g., numbers, pictures)*
 - **Weakness –** *misses the “bigger picture”, unable to bring concepts together (e.g., facial expressions, events correlated with an emotion)*



CEREBELLUM

- **Function:** *Physical coordination, sensory and motor activity, anticipating events*
- **Difference:** *Overloaded white matter*
- **Strength** – *Need for routine, become expert at task*
- **Weakness** – *Unsteady, delayed physical or verbal response, anxiety about sudden change, sensory processing disorders*



SCIENCEPHOTOLIBRARY

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MOST PEOPLE DON'T JUST HAVE AUTISM...

Anxiety Disorders

Anxiety
Post Traumatic Stress Disorder (PTSD)
Obsessive Compulsive Disorder

Learning Disorders

Mental Retardation

Mood Disorders Depression Bipolar

Autism Spectrum Disorders

Sensory processing disorder

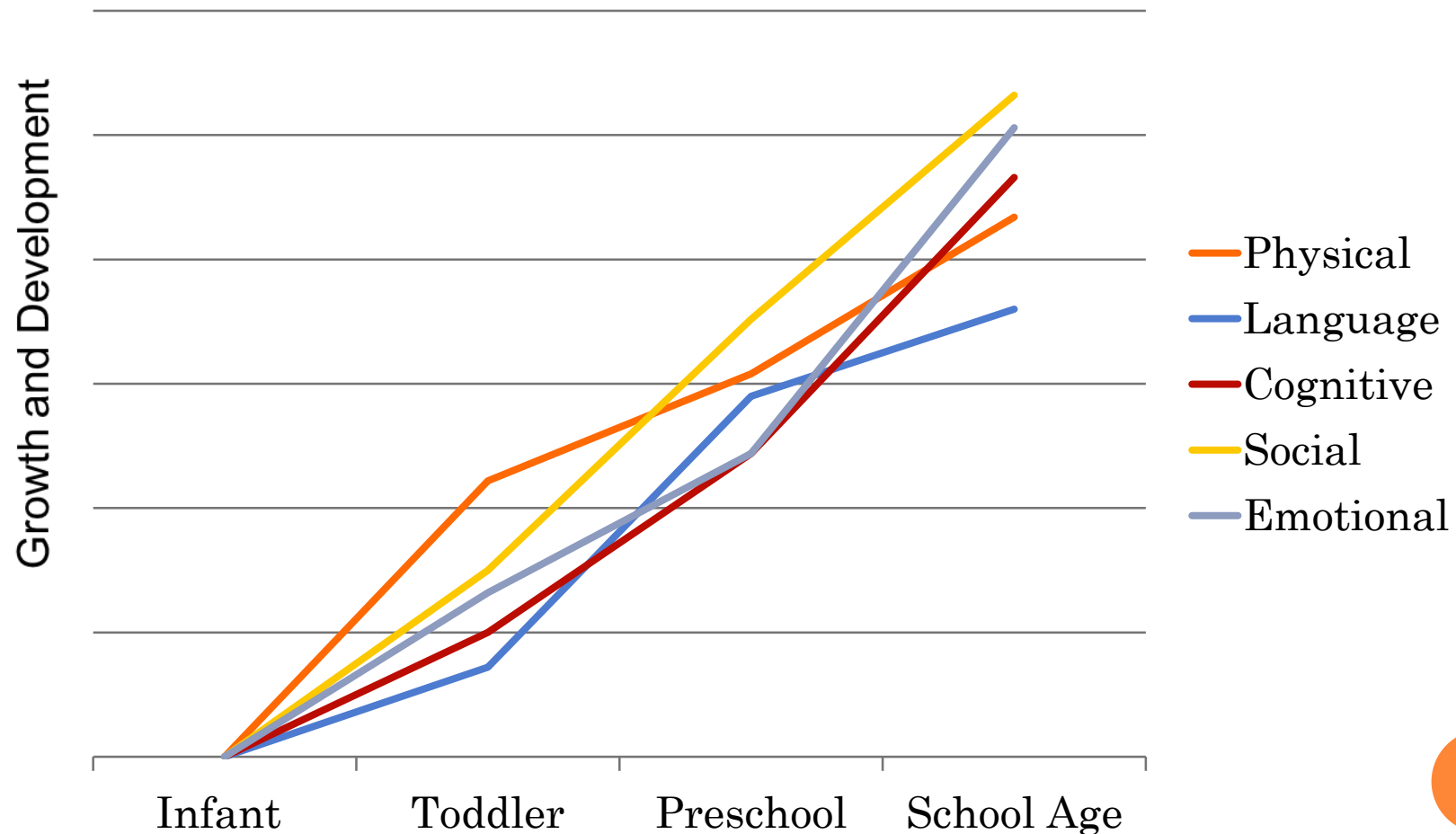
Communication Disorders

Motor Skills Disorder

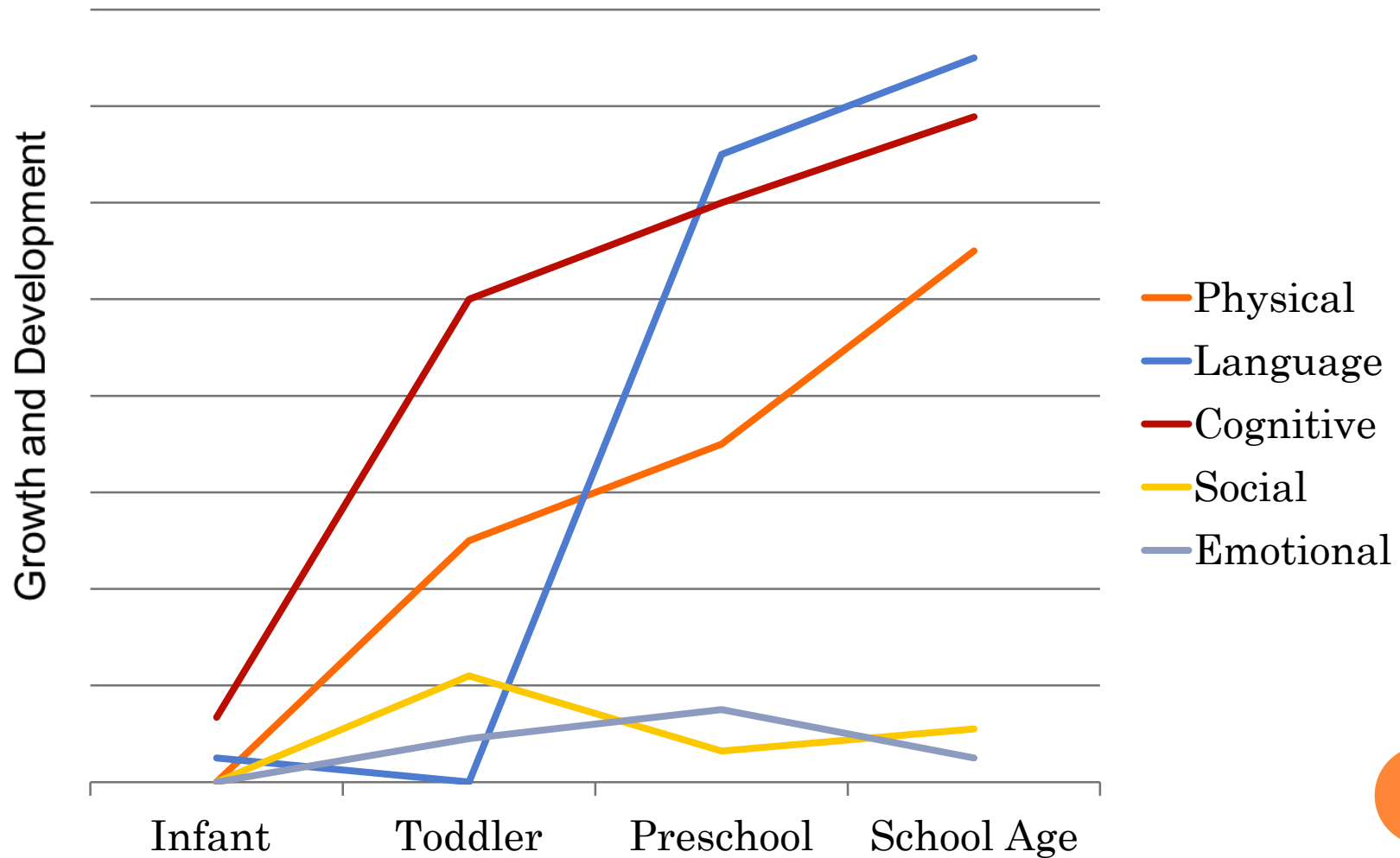
Attention-Deficit/Hyperactivity Disorder (ADHD)



Most children develop cognitive skills, motor skills, social competence and the ability to process sensory information according to fairly predictable patterns.



CHILDREN WITH AUTISM DEVELOP SOME SKILLS MORE RAPIDLY THAN NORMAL WHILE OTHERS DEVELOP SLOWLY OR FAIL TO DEVELOP AT ALL.





SKILLS THAT MOST PEOPLE TAKE FOR GRANTED DEVELOP MORE SLOWLY OR EVEN FAIL TO DEVELOP IN CHILDREN WITH AUTISM

Text from Video : Essentials for Educators-High Functioning Autism
<http://autismcouncilofutah.org/life-with-autism/best-practices>

THESE SKILLS INCLUDE:

- **The capacity to decipher non-verbal messages**
- **Having enough self awareness to conceal odd or eccentric behaviors in public**
- **The ability to take the perspective of another person, or to predict what another person is likely to do**

Kids autism “don’t seem to appreciate the unwritten rules of social engagement.”

A Parent’s Guide to Asperger Syndrome & High Functioning Autism, Ozonoff, S., Dawson, G., & McPartland, J. (2002). p. 10



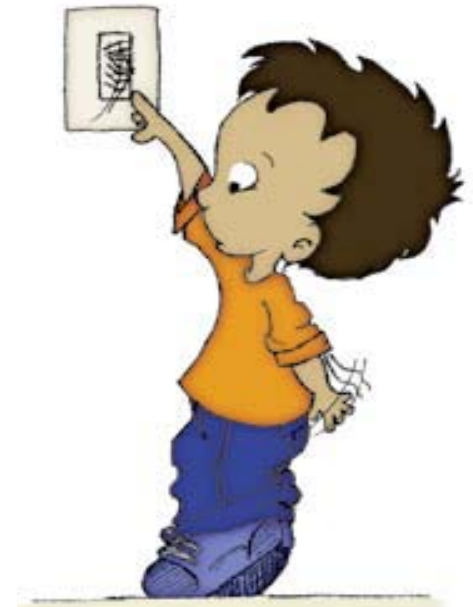
Social / Communication Issues



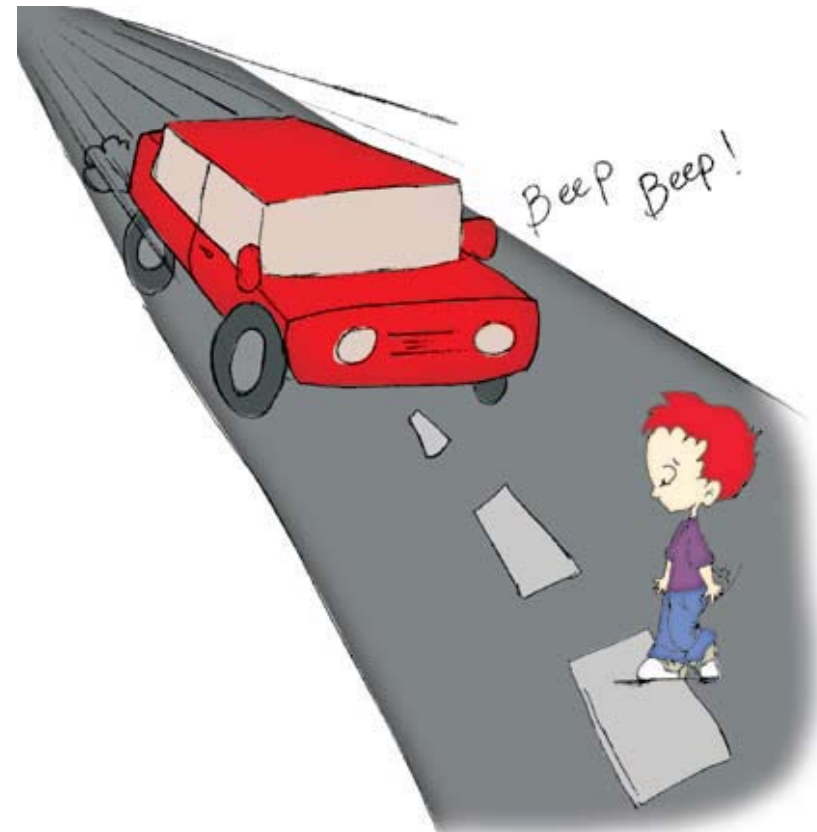
Bizarre / Repetitive Behaviors



Bizarre / Repetitive Behaviors



Safety Issues



Head banging

Sensory Issues



Motor Abnormalities in some areas



Yet...

Exceptional motor skills in other areas

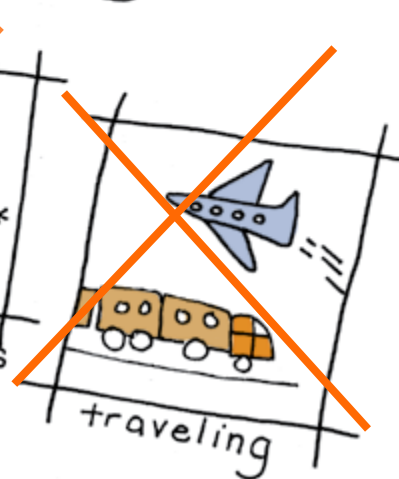


OTHER UPSETTING BEHAVIORS

- **Sleep disturbances**—child may go for days on end not sleeping for more than a few hours at a time--consider the impact on parents
- **Gastrointestinal trouble**—severe self-limiting diet or food sensitivity, diarrhea, constipation, eating non-food items, GERD, frequent vomiting
- **Altered pain responses**—sometimes diminished or absent, sometimes heightened pain
- **Seizures**—more common in individuals with autism

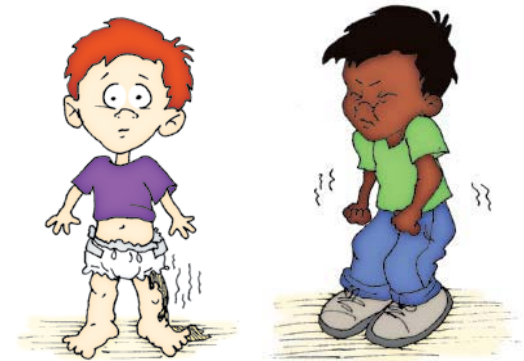


Routine
family
activities
are,
at
times,
impossible
with
a
child
with
autism...



POTENTIAL REFERRALS

- Evaluation by Early Intervention
- Hearing Evaluation
- Speech Evaluation
- Physical Therapy
- Occupational Therapy
- Pediatric Gastroenterologist
- Pediatric Neurologist
- Child Psychiatrist/Psychologist
- Social worker/Family Counseling
- Local Support Groups





SENSORY PROCESSING DIFFICULTIES

Angela Weathers, OTR\L

ALMOST ALL CHILDREN WITH AUTISM HAVE TROUBLE PROCESSING SENSORY INFORMATION FROM THE ENVIRONMENT

Example 1



Example 2



under-responsive = *seeks out*
sensory experiences

“can’t get enough”

over-responsive = *avoids*
sensory experiences

“get away from this”



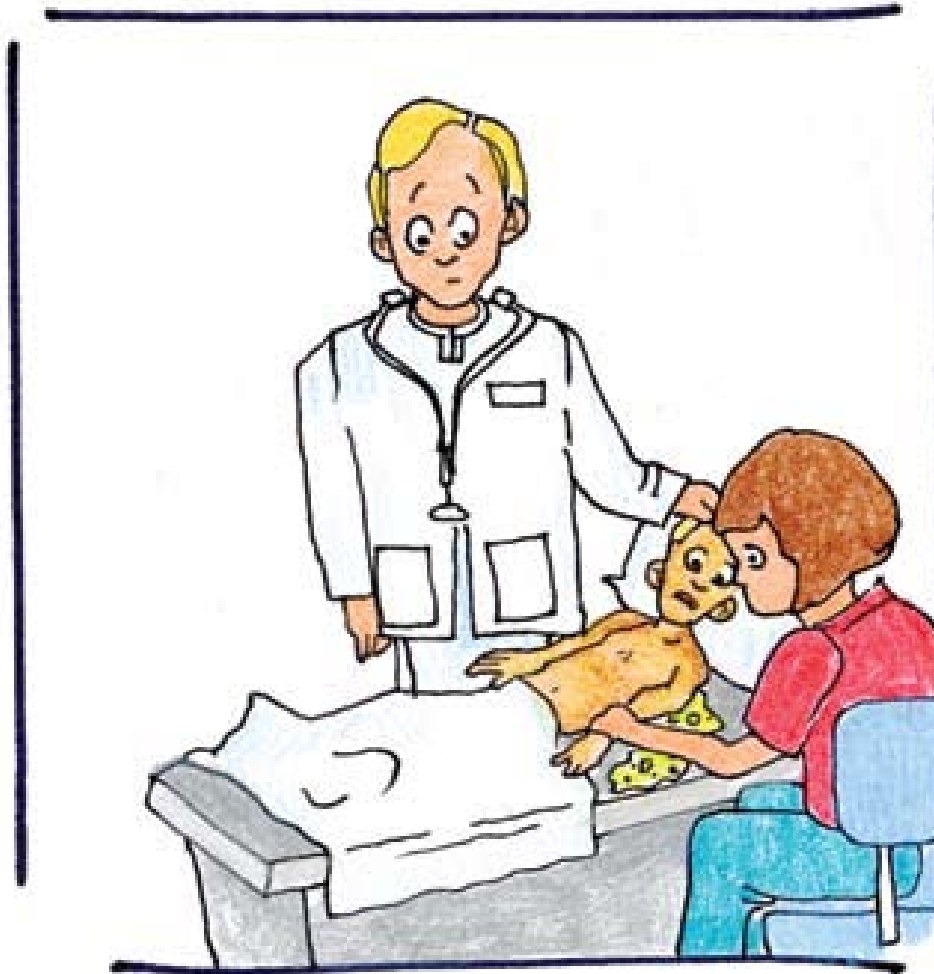
THERE ARE SEVEN SENSORY SYSTEMS:

- Sound
- Taste/ Smell
- Vision
- Touch
- **Proprioception** (body awareness, neurological input from muscles and joints)
- **Vestibular** (balance, inner ear)



WHAT CAN I DO TO EASE HEALTHCARE EXPERIENCES FOR CHILDREN WITH AUTISM...?





In healthcare, we are trained primarily
to look for physical illness





**We may be tempted to think the child is
just lacking in parental control**

GET SOME BACKGROUND

- Parents/caregivers are the best resource—find out what is calming, motivating, upsetting to that particular child
- A child with autism sees the world differently—try not to interpret social interactions as deliberate, disrespectful or hostile. She may:
 - be honest to the point of bluntness
 - appear argumentative and stubborn
 - repeat everything said (echolalia)
 - misjudge personal space
- Offer reassurance if the child becomes fixated on a particular object or topic, or if she asks repeated questions



TRY TO CONNECT

- Talk to her even if she is not looking at you or doesn't seem to be paying attention
- Allow patient extra time to process verbal information
- Try to take the emotion out of requests so she can focus on what is being said
- Give specific directions and use less words to say what you need to say

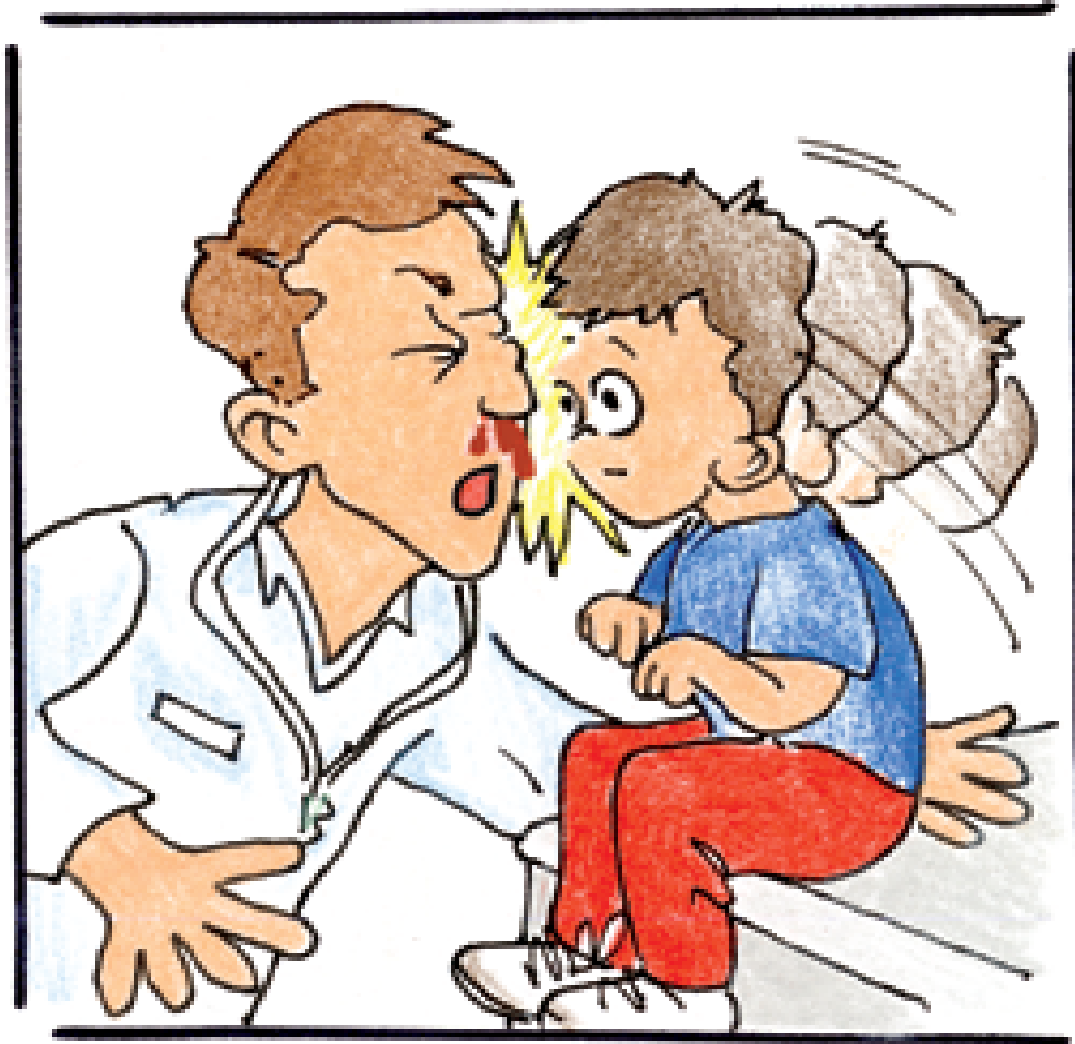


APPROACH SLOW, RESPOND QUICK

- Allow extra personal space and assess patients distal to proximal
- Firm touch instead of light touch when touch is necessary
- Be ready to intervene quickly to prevent patient from bolting or injuring self
- Ignore negative behavior and redirect attention to something else
- Stay alert for your safety as well!



For sure, this is not
how you want to connect!



OPTIMIZE THE HEALTHCARE SETTING

- Remember children with autism can have altered pain and sensory experiences
- Try to make room assignments that will expose the child to the least amount of noise and commotion
- Whenever possible, decrease wait times in exam rooms
- Always think about safety



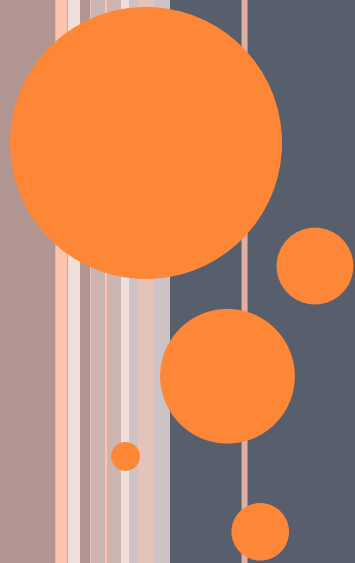
THINGS AREN'T ALWAYS AS THEY SEEM

Before calling DCFS, remember children with autism :

- Have little or no pain sensations
- Are prone to self-injury
- Can be almost impossible for caregivers to bathe, groom, and change clothes due to sensory issues
- Have little or no awareness of dangerous situations



COMMUNITY RESOURCES



NO ONE CAN DO IT ALONE...

- Early Intervention Programs
 - Provo Early Intervention Program (PEIP)
 - Kids on the Move
 - Kids who Count
- Help Me Grow—United Way of Utah County
- Autism Resources of Utah County Council (ARUCC)
- United Angels Foundation
- Wasatch Mental Health: GIANT Steps Autism Preschool
- Wasatch Mental Health: Exel Adolescent Autism Program
- Clear Horizons School for Autism
- Bridges Autism Program



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