

Introduction to Autism Spectrum Disorders

Our Staff



Ryan Groeneweg, Ed.S, BCBA Community Education Director <u>Ryan.Groeneweg@usd.edu</u>



Brandon Wenzel, B.A. Department Assistant <u>Brandon.Wenzel@usd.edu</u>



Aimee Deliramich, PhD

Licensed Clinical Psychologist Aimee.Deliramich@usd.edu



Brittany Schmidt, MA-CCC/SLP Speech Language Pathologist Brittany.Schmidt@usd.edu



For any questions regarding graduate credit issuance, grade reporting, and billing or payments, please feel free to contact the Division of Continuing & Distance Education directly at (605) 658-6152

What is a UCEDD?

- University Center for Excellence in Developmental Disabilities
 - Research, Education, Health, and Services
- 67 UCEDDs
 - At least one in every US state and territory
- Core Functions include
 - Interdisciplinary Pre-Service Preparation
 - Research
 - Information Dissemination
 - Community Services





Association of University Centers on Disabilities (AUCD)

USD Sanford School of Medicine Center for Disabilities

University Centers for Excellence in Developmental Disabilities (UCEDD)

Leadership Education in Neurodevelopmental and Related Disabilities (LEND)









Autism Spectrum Disorder

A **neurodevelopmental** disorder with onset in the developmental period that causes changes in brain function resulting in:

- Persistent qualitative impairment in
 - Reciprocal social interaction
 - Verbal and nonverbal communication As well as presence of:
 - Restricted, repetitive patterns of behavior, activities and interests



What We Know About ASD

- ASD occurs in all racial, ethnic and socioeconomic groups
- Ratio of boys to girls is 4:1
 - Boys: 1:37
 - Girls: 1:151
- CDC, March 2022 prevalence rate:
 - 1 in 44
 - https://www.cdc.gov/ncbddd/autism/data.html

ASD for Educators - CDC

Information on Autism Spectrum Disorder for Educators



FAQs – CDC Website

Frequently Asked Questions | CDC





Characteristics of Autism

Characteristics





Communication Characteristics

- Individuals with ASD may have:
 - No spoken language
 - Limited speech
 - Echolalia
 - Significant pragmatic difficulties
 - High levels of vocabulary
 - Difficulty understanding idioms, slang or abstract language
 - Difficulty taking turns in conversations



Social Characteristics

- Many individuals with ASD have difficulty:
 - Understanding the perspective of others
 - Reading social cues and reacting to others
 - Understanding social interactions
 - Predicting the behavior or reactions of other people
 - Reading intentions
 - Understanding and expressing emotions
 - Explaining their own behavior



Deficits in Social Communication and Social Interaction

Deficits in Social-Emotional Reciprocity

Abnormal social approach

Failure of normal back-andforth conversation

Reduced sharing of interests, emotions, or affect

Failure to initiate or respond to social interactions Deficits in Nonverbal Communicative Behaviors Used for Social Interaction

Poorly integrated verbal and nonverbal communication

Abnormalities in eye contact and body language

Deficits in understanding and use of gestures

Total lack of facial expressions and nonverbal communication Deficits in Developing, Maintaining and Understanding Relationships

Difficulties adjusting behavior to suit various social contexts

Difficulties in sharing imaginative play or in making friends

Absence of interest in peers



Interests

- Individual with ASD may have:
 - Preoccupation with parts of objects (spinning wheels, flipping switches, parts of shows/movies, etc.)
 - Focus on collecting items
 - Focus on acquiring and remembering facts about a specific topic
 - Not so much what they are interested in, but how and how much they engage in or with that interest



Restricted, Repetitive Patterns

Stereotyped or Repetitive Motor Movements, Use of Objects or Speech

Simple Motor Stereotypes

Lining up toys or flipping objects

Echolalia

Idiosyncratic phrases

Insistence on Sameness, Inflexible Adherence to Routines, or Ritualized patterns of Verbal and Nonverbal Behavior

Extreme distress at small changes

Difficulties with Transitions

Rigid Thinking Patterns

Greeting Rituals

Need to take the same route or eat the same food every day

Highly Restricted, Fixated Interests that are Abnormal in intensity or Focus

Hyper-hyporeactivity to Sensory Input or Unusual Interest in Sensory aspects of the Environment

Difficulties adjusting behavior to suit various social contexts

Difficulties in sharing imaginative play or in making friends

Absence of interest in peers

Apparent indifference to pain/temperature

Adverse response to specific sounds or textures

Excessive smelling or touching of objects

Visual fascination with lights or movement

Restricted eating patterns and GI issues





- Individuals with ASD may have:
 - Preoccupation with sensory experiences
 - Hypo or Hyper response to sensory input
 - Lack (Hypo) of visible response to some sensory experiences (touch, pain, cold, etc.)
 - Extreme sensitivity (Hyper) to smells, noises, bright lights, etc.



Spectrum Considerations



Spectrum Considerations



Cognitive Characteristics

Weaker Areas

- Abstract thinking
- Auditory skills
- Reasoning
- Imitation
- Initiation
- Generalization
- Long-term planning
- Summarizing
- Perceiving emotions
- Expressing feelings

UNIVERSITY OF SOUTH DAKOTA SANFORD SCHOOL OF MEDIC

Stronger Areas

- Concrete thinking
- Punctuality
- Visual skills
- Memory
- Honesty
- Detail oriented
- Intense focus
- Logical thinking
- Following rules



Co-Occurring Disorders

Co-Occurring Disorders

- CDC Findings:
 - Over 95% of individuals with an ASD diagnosis presented with at least one additional condition (co-occurring)
 - In children ages 4-8, the average number of "additional" conditions was 4.9
 - As people age, more co-occurring disorders are present
 - Other neurodevelopmental disorders show similar findings March 2018



Common Co-Occurring Conditions

- ADHD
- Developmental Coordination Disorder
- Intellectual Development Disorder
- Specific Language Impairment
- Tourette Syndrome
- Bipolar Disorder

OF

- and Early Onset Bipolar Disorder
- Behavior Phenotype Disorders

- Neurological and Seizure Disorders
- Gastrointestinal Disorders
- Schizophrenia
- Social Anxiety Disorder
- Major Depressive Disorder
- Generalized Anxiety Disorder
- Oppositional Defiant Disorder
- Obsessive Compulsive Disorder
- Sensory Disorders
- Sleep Disorders

Cognitive Characteristics

Weaker Areas

- Abstract thinking
- Auditory skills
- Reasoning
- Imitation
- Generalization
- Long-term planning
- Summarizing
- Perceiving emotions
- Expressing feelings

Stronger Areas

- Concrete thinking
- Punctuality
- Visual skills
- Memory
- Honesty
- Detail oriented
- Intense focus
- Logical thinking
- Following rules



Intervention and Supports. Where to begin?



Short answer: Not sure*

Long answer: What we know about strengths can be utilized for specific need areas.

*See provided bibliography

Hidden Disabilit(ies)

- Students with ASD are less likely to disclose a diagnosis.
- Faculty may not recognize the characteristics.
- Disability Services offices need to consider supports beyond what is typically offered.
- Use of resources communicated to all students.



Disability Services

- Communication with HS students and parents prior to enrolling.
- Acclimating to campus in small groups.
- Build alliances with parents.
- Predicting and meeting residential needs.
- Selecting trained advisors.

What Works for College Students with ASD. JADD 2018 48:722-731.



What we know from research thus far

- Weekly coaching paired with behavioral skills training.
- Video feedback conversation and empathetic listening.
- Cognitive Behavioral therapy and problem solving.
- Transition program with social pragmatic focus.
- Communication Coaching Program.



Perceived barriers – student's point of view

- Limited understanding by university community.
- Lacking self-awareness of disability.
- Mental health needs.
- Financial resources.



Ideas for in the classroom

- 1. Successful engagement with the professor relationship building about student and understanding of ASD.
- 2. Flexibility in responding with priming for responses.
- 3. Assigned roles or responsibilities.
- 4. Routines within the class.
- 5. Written instructions provided ahead of time for assignments and task completion.
- 6. Consistently available way to communicate with the professor.



Most helpful supports

- Extra time on tests
- Copies of notes.
- Use of technology.
- Use of a notetaker.
- Tests taken at a disability center.

Helpful

- Academic coaching.
- Writing Center assistance.
- Tutoring.
- Peer mentor and faculty mentor (ranked equally)
- Increase in support during times of stress.

Success is defined by students as:

- Development of a social network.
- Self determination and Executive Functioning Skills.
- Self-advocacy for accommodations and support services.



ASD Survey - Reminder

https://southdakota.sjc1.qualtrics.com/jfe/form/SV_abZ1jLlh5v kCj42





Day 2 – Classroom Strategies for Supporting Students with Autism

November 9, 2022 12:00 – 12:45