AUTISM ALLY

FOR FACULTY AND STAFF

INTRODUCTIONS

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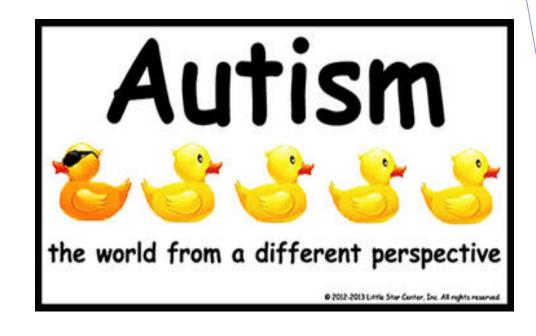
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Today's Program

- What is Autism?
- Comorbidity
- Neurological Differences
- ► The "Big Three"
- Autism at CSULB
- Challenges in College
- Strengths of Autism
- Student Panel
- Autism Resources on Campus
- Being an Ally
- Group Activity
- ► Q&A



Today's Objectives

- Understand the strengths and limitations students with ASD or Asperger's Syndrome experience in postsecondary education
- Recognize students with ASD in college
- Accommodate and assist our students with ASD or Asperger's on campus
- Diffuse situations that may be seem malicious or threatening
- Being an Ally: making/receiving referrals for services

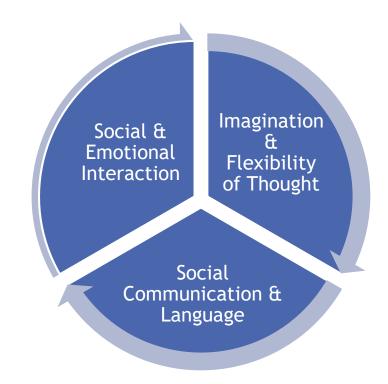
PRE-TEST

If you haven't done so already, please take 5 minutes to complete your pre-test on autism

WHAT IS AUTISM?

AUTISM SPECTRUM DISORDER (ASD)

- ► Neurodevelopmental Disorder
- Characteristics:
 - ▶ Deficits in:
 - **▶** Communication
 - ► Social interaction
 - ► Restricted Interests
 - ► Repetitive Behaviors



- ► Autism Spectrum Disorders (ASD)
 - ► Range in impact of deficit areas on overall functioning
 - ► College students with ASD are considered Highfunctioning (HFA)/Asperger's
- ► Heterogeneity- no two people with ASD are the same!

WHAT CAUSES AUTISM?

Theories that have been debunked:

- Refrigerator Mother Theory
- Vaccines

Theories being considered:

- ► Male Brain Theory
- Genetics



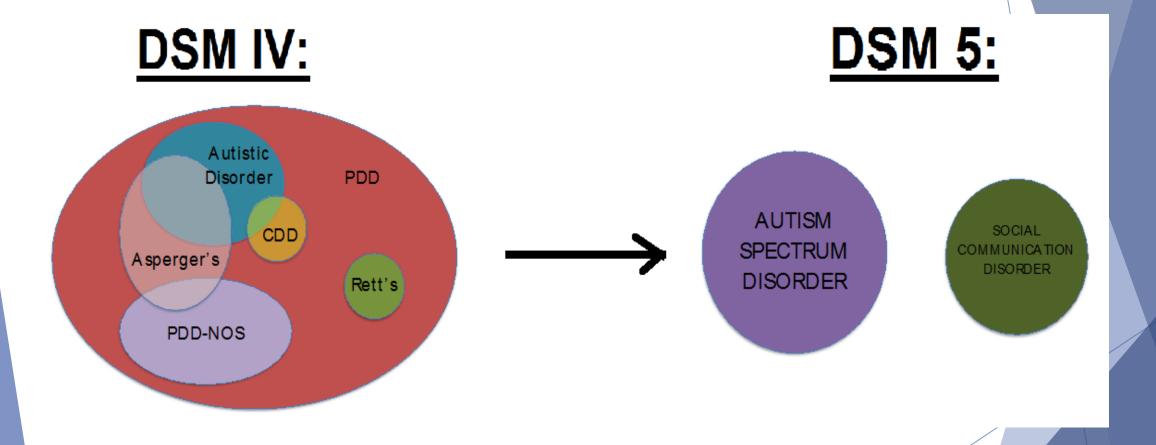
Simon Baron-Cohen

QUICK FACTS ON ASD

- Prevalence:
 - ▶ 1:68 children diagnosed with ASD
 - ▶ 5:1 Male: Female ratio in total ASD population
 - ▶ 14:1 Male: Female ratio in High-functioning ASD population
- Cost of raising a child with ASD:
 - > \$3.5-5 million- financial burden on families
 - ► Special education services
 - ► Speech-language therapy, physical therapy, occupational therapy
 - ► Housing/Transportation
 - ► Medications/Dietary Restrictions
 - ► Child care/Adult Care
 - ► Loss of parental income

► NO CURE!

AUTISM VS. ASPERGER'S



WHY THE CHANGE?

- Concerns with DSM IV
 - ▶ Diagnostic confusion/Lack of diagnostic consistency
 - ► High-functioning autism vs. Asperger's
 - ► Asperger's vs. PPD
 - ▶ Presence of PPD-NOS
 - ► Bias in diagnoses based on ethnicity and socioeconomic status
 - ▶ Parents fight for certain diagnosis
 - ► Stigma associated with Autistic Disorder
 - Lack of services available for Asperger's Syndrome

DSM 5: SEVERITY LEVELS OF ASD

Severity Level	Social Communication	Restricted Interests and Repetitive Behaviors
Level 3 Requiring VERY SUBSTANTIAL Support	 Severe deficits in social communication skills Very limited initiation of social interactions Minimal social response to others 	 Fixated rituals/repetitive behaviors significantly interfere in all aspects of daily living Extremely upset when routines/rituals are disrupted Difficult to redirect to activities outside of restricted interests
Level 2 Requiring SUBSTANTIAL Support	 Significant deficits in social communication skills Limited initiation of social interactions Reduced/abnormal social response to others 	 Fixated rituals/repetitive behaviors frequently interfere in all aspects of daily living Frustrated when routines/rituals are disrupted Difficult to redirect to activities outside of restricted interests
Level 1 Requiring Support	 Noticeable deficits in social communication skills Difficulty initiating social interactions Atypical/unsuccessful social responses to others 	 Rituals and repetitive behaviors interfere with several aspects of daily living Resists being redirected from restricted interests

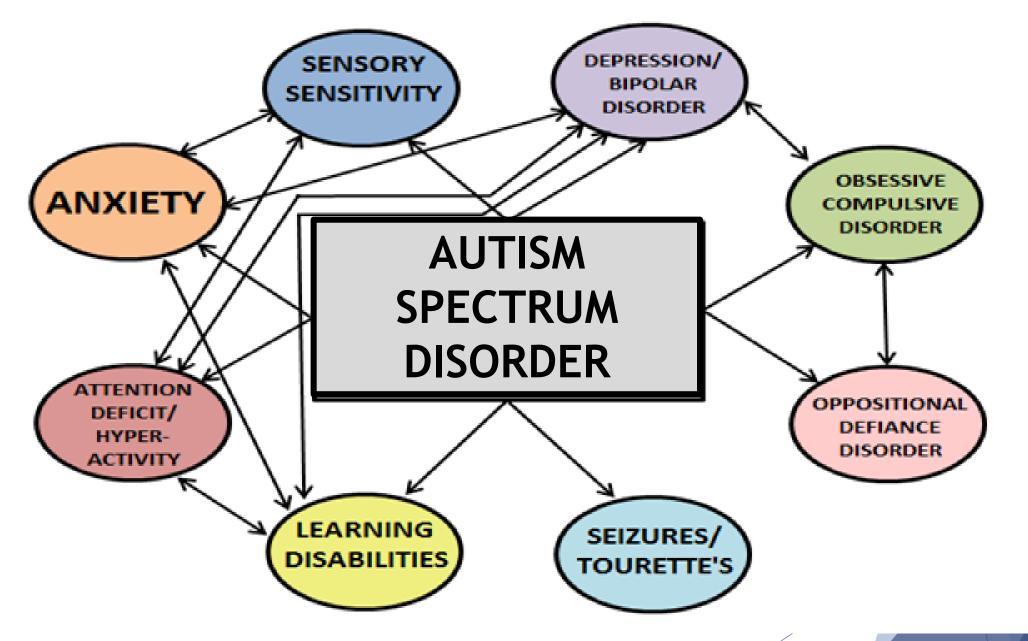
CURRENT CONSENSUS

- ► The separate disorders listed in DSM IV are now seen as different levels of severity of the same syndrome
- ▶ There is no known cause of ASD or a cure for it
- ➤ *Adults who were diagnosed with Asperger's Syndrome may strongly identify with this diagnosis and will continue to refer themselves as someone with Asperger's

COMORBIDITY

COMORBIDITY

- Secondary disorders that co-occur with primary diagnosis at a rate greater than chance due to similar risk factors
- People with ASD are more likely than general population to have co-morbid disorders
 - > 72% of ASD population have 1co-morbid disorder
 - ▶ 41% of ASD population have 2 or more
- ▶ Heterogeneous
 - ► Types and severity level of co-morbid disorders vary from individual to individual



Adapted from Veenstra-VanderWeele, J. & Blakely, R. D. (2012). Childhood disorders- networking in autism: Leveraging genetic, biomarker and Model System Findings in the Search for New Treatments. *Neuropsychopharmacology Reviews*. 37, 196-212.

COMORBIDITY

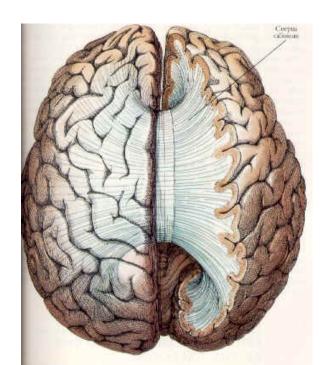
Sensory Overload

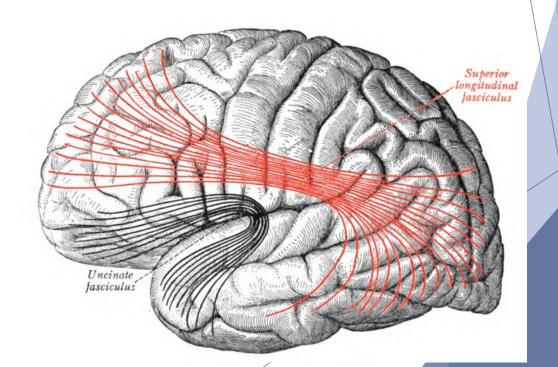
http://vimeo.com/52193530

NEUROLOGICAL DIFFERENCES

NEUROLOGICAL DIFFERENCES- RESEARCH FINDINGS

- Under-connectivity:
 - ► White matter tracts connect regions of the brain to allow for communication/synchronization of activation
 - ► In ASD: white matter is less dense, reducing efficiency and effectiveness of white matter communication

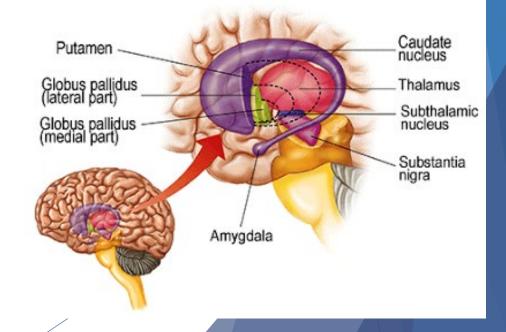




NEUROLOGICAL DIFFERENCES- RESEARCH FINDINGS:

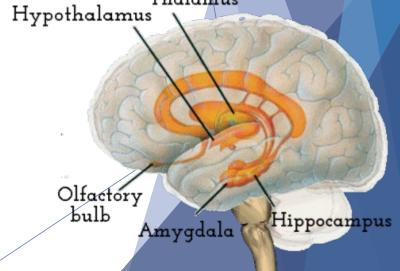
- Repetitive Behaviors: motor sequence performance and OCD like behaviors
 - Associated with developmental/activation variations of the striatum (especially caudate nucleus):
 - ▶ Regulate and integrate motor information
 - Motor learning

The Human Basal Ganglia



NEUROLOGICAL DIFFERENCES- RESEARCH FINDINGS:

- Sensory Brain Regions: Amygdala, Hippocampus, Thalamus
 - Over-activated in emotional processing and regulation in response to sensory stimuli
- Mirror neurons- respond to and observe the behavior of others: enables understanding of other's intentions, feelings, and behavior
 - ▶ Reduced activation in ASD population



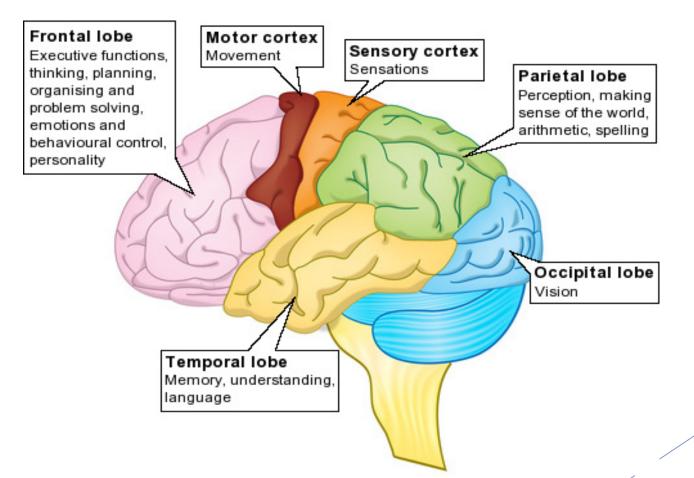
Thalamus

THE "BIG THREE"

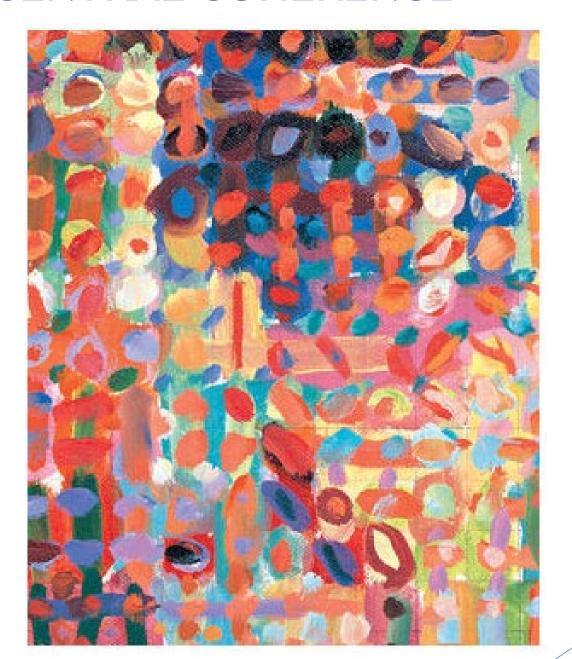
- ► Impaired executive function
- ▶ Weak central coherence
- ► Theory of mind deficits

IMPAIRED EXECUTIVE FUNCTION

➤ Difficulty with organizational skills, decision making, impulse control, emotional regulation...



WEAK CENTRAL COHERENCE



WEAK CENTRAL COHERENCE

➤ Difficulty integrating information into the "big picture" using contextual information



THEORY OF MIND

► The ability to understand that a person's beliefs, desires, emotions, and intentions are different from one's self

Acquired through the development of social and cognitive skills

Deficits in theory of mind underlie social, behavioral and communicative impairments of ASD

THEORY OF MIND

- ► Components:
 - ► False beliefs
 - Pretense
 - Deception
 - ► Recognition of emotions
 - ► Perspective taking
 - **▶** Empathy
 - ► Humor
 - ▶ Distinguishing lies from jokes
 - ► Moral Reasoning

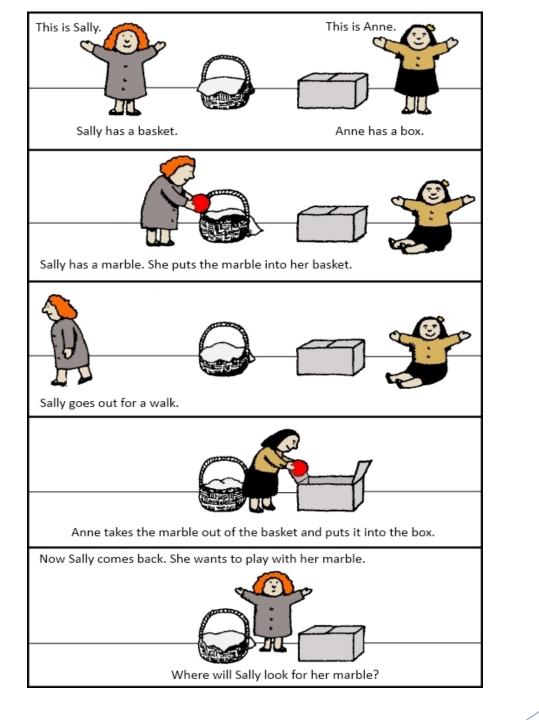


Which smile is genuine?

THEORY OF MIND

- ► First order beliefs
 - ► Attributing thoughts and beliefs to another person
 - "John thinks that..."
- Second order beliefs
 - Attributing a person's thoughts and beliefs about another person's thoughts and beliefs
 - "John thinks that Mary thinks..."

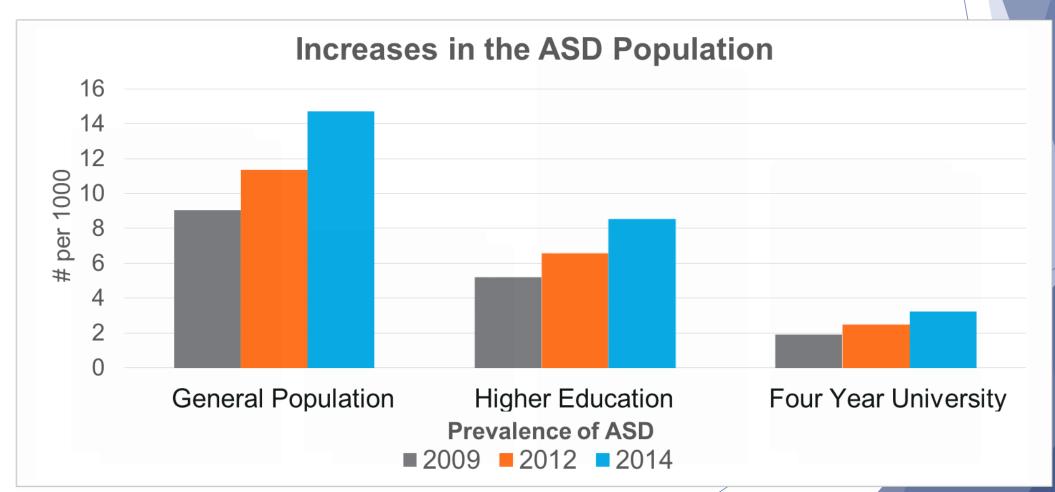




Autism at CSULB

ASD IN HIGHER EDUCATION

- ▶ 10.8% of students in Higher Education have disabilities
- ▶ 58% of students with ASD receive education after high school
 - ▶ 22% of students with ASD attend four-year colleges



TRANSITIONING TO COLLEGE

High School vs. College

High School Accommodations	College Accommodations
Responsibility- the school's	Responsibility- the students'
Parent involvement	Self-determination
Required by law	Provided if advocated for

- ► Self-determination
 - Making one's own choices and decisions related to quality of life
- ► Self- advocacy
 - ► Effectively communicating and negotiating one's own interests

How many students with autism do you think we have on campus?

Students with Autism at CSULB

- Projected to have over a minimum of 400 students with ASD to be on this campus
- Over 100 students are registered through DSS with a primary disability of autism
- Over 110 students with autism or Asperger's are involved in the LIFE Project through DSS
- ▶ 45 students with ASD attend LIFE Project meetings weekly

Popular majors of students with ASD

College of Engineering

- Chemical Engineering
- Mechanical Engineering
- Biomedical Engineering
- Computer Science

College of Business Administration

- Accounting
- Finance
- Information Systems

College of Natural Sciences and Mathematics

- Biology
- Chemistry
- Advanced Mathematics

College of the Arts

- Theatre Arts Performance
- ► Fine Arts Illustration, Animation

College of Liberal Arts

- **▶** History
- ► English

CHALLENGES IN COLLEGE

BEING SUCCESSFUL IN COLLEGE

- ► What are social skills?
 - Perceiving situations and knowing which behaviors will lead to a positive outcome
 - ► Reading social situations and being flexible in responses
 - Solving problems by changing behaviors to achieve a positive outcome
 - ► Interacting with others in a mutually beneficial way or in a way that is primarily beneficial to others
 - ► Utilizing Theory of Mind skills

*A college degree is worthless without the social skills needed to use it

AREAS OF DIFFICULTY FOR STUDENTS WITH ASD

Social skills

Pragmatics

Variety of interests

Figurative language

Changes in routine

Managing sensory input

Attention

Motivation

Motor skills

Executive functioning

Emotional regulation

Reading body cues and facial expressions

AREAS OF DIFFICULTY FOR STUDENTS WITH ASD

- ► Making transitions and adapting to changes in routine
- Written language tasks: composition and penmanship
- Complex language: multiple meanings
- ► Abstract concepts and language
- Conversational skills
- ► Reciprocal social interactions skills
- ► Concentration: frequently off task and easily distracted
- Centralizing learned information and skills
- Organizations skills
- Peer interactions and group situations: exclusion and rejection

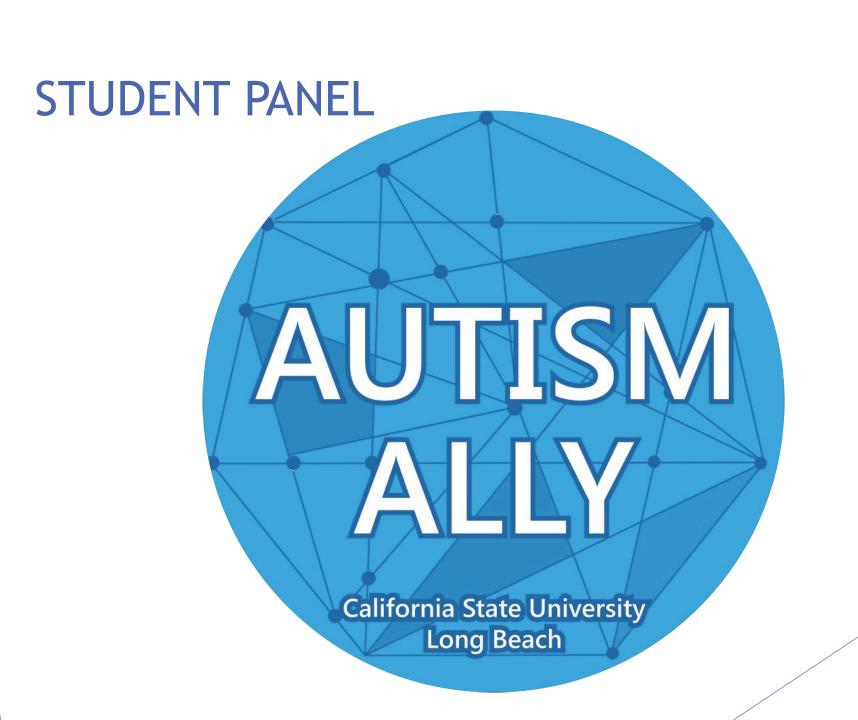
RECOGNIZING COLLEGE STUDENTS WITH ASD

- Students with ASD may...
 - ► Have trouble maintaining appropriate eye contact
 - Struggle with answering/asking questions
 - ► Inappropriately- too personal
 - ► Inaccurately- off topic
 - ► Repeatedly- interrogating
 - ► Appear rude, inflexible, insensitive, stubborn, or impatient to the listener
 - Perseverating over personal concerns
 - ▶ May or may not actually be something to worry about
 - ▶ Not respect personal space

*Use intuition to determine if there is need for support during an interaction

STRENGTHS OF ASD

- ► Knowledgeable of their professional field
- Efficient employees
- Less judgmental: not as caught up in the social game
- Not interested in work politics
- Say what they mean: very honest
- ► Appreciate literal, direct language
- Unique
- Good long term memory
- Passionate about their interests
- Strong visual/spatial skills
- Good at following rules
- Detail-oriented
- Vocabulary skills



On-Campus Services

Provided by Disabled Student Services for students with ASD



Learning Independence for Empowerment

Promotes independence and autonomy through social interactions, coaching and roleplay for students with ASD, Asperger's Syndrome, or a social-cognitive deficit

Student Learning Outcomes

- 1. Students with autism or Asperger's Syndrome who regularly participate in LIFE Project will develop the skills necessary for social interaction with peers and professors in order to be successful in developing the networking skills needed to obtain a job after graduating.
- 2. Students with autism and Asperger's Syndrome benefit greatly from peer support and guidance for the purposes of navigating the campus through self-advocacy and communicating needs and desires to peers, staff and professors.

LIFE Project Components

Peer Coaching

Personalized Goals

Weekly Meetings

- Workshops and Interventions
- ► Tracking Folders

Branching Programs

- ► LIFE Leadership
- ► LIFE RECAP
- ► LIFE TIPS

Parent Education Seminars

BEING AN ALLY

- ▶ Diffuse situations quickly and properly by asking specific questions for odd or offensive behavior
- ▶ Be EXPLICIT about what the laws, rules and social norms for the campus: use concrete examples and specific examples
- Check for understanding by asking the student to paraphrase what you stated
- ► Understand that situations may seem malicious, but generally it's due to a lack of understanding and is not intentional
- Make referrals to on-campus services for support/educate colleagues on how to make referrals to services

BEING AN ALLY

- ▶ If a student discloses that he/she has ASD or comorbid disorder:
 - ► DON'T laugh
 - ► DON'T brush it off lightly
 - ▶ DON'T ignore what that person said
 - ▶ DO take it seriously
 - ► ASK direct questions:
 - ► How will this impact the nature of our relationship?
 - ► What can I do to support any of the challenges that may come up during our interactions?

TIER 1

Listen to the student and reflect on what the student needs then advise or refer

TIER 2

Refer the student to Disabled Student Services

562-985-5401

562.985.4101

TIERS OF SUPPORT

562-985-4001

TIER 3

Walk student to CAPS

TIER 4

Contact the University Police

VIGNETTES

Group Activity

Q and A

POST-TEST

Please complete the post-test and talk about what you are able to answer differently after the training



THANK YOU!

Your commitment to learning in today's Autism Ally and your will to support students with ASD in higher education is greatly appreciated!

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