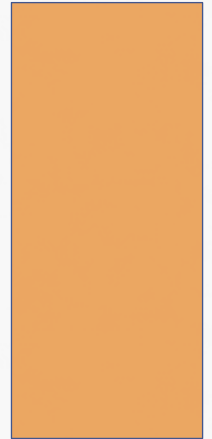


NEURODIVERSITY: CREATING AN INCLUSIVE COLLEGE CLASSROOM

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HELPFUL STRATEGIES FOR OUR UTP

- Reviewing the literature
- Assess group of interest
- Assess impact of any manipulation, teaching strategy, etc.

WHAT IS NEURODIVERSITY?

- Neurodiversity is a philosophy that emphasizes differences in human neurologies.
- Neurodiversity emphasizes that Autism and ADHD, for example, represent difference rather than deficits.
- Neurodiversity invokes an emerging disability rights/ civil rights movement.

NEURODIVERSITY

WWW.WM.EDU/NEURODIVERSITY

- At W&M, The Neurodiversity Initiative seeks first to serve our campus community and ultimately to be a model for other campuses.
- The Neurodiversity Working Group works to foster an inclusive campus culture, and organizes campus events and programs.
- The Working Group also produces and supports resources for students, faculty, and staff.

WHY NEURODIVERSITY?

- More students in college with learning differences, including autism.
- More W&M students needing support.
- We can offer effective, evidence-based support (ex.: “The Hidden Rules of Seminars.”)
- It’s the right and good thing to do. (Human rights perspective)
- Our community is enriched by diversity. (Maximizing human capital perspective)

WHAT IS AUTISM?

- Autism is one form of neurological difference that we see on campus, although it is often combined with ADHD.
- Autism Spectrum Disorders are marked by social and communication difficulties. Autistic people have more challenges interpreting implicit social communication.
- Autism is also characterized by intensely focused or restricted interests and behaviors.
- Autism, autistic people and autistic behaviors are often profoundly misunderstood.

STRENGTHS OF A STUDENT WITH AUTISM SPECTRUM DISORDER

- “Out of the box” thinkers
- Intelligent
- Reliable (once expectations are understood)
- Strong attention to detail
- Ability to maintain prolonged focus on topics of interest
- Excellent long-term and rote memory

CHALLENGES OF A STUDENT WITH AUTISM SPECTRUM DISORDER

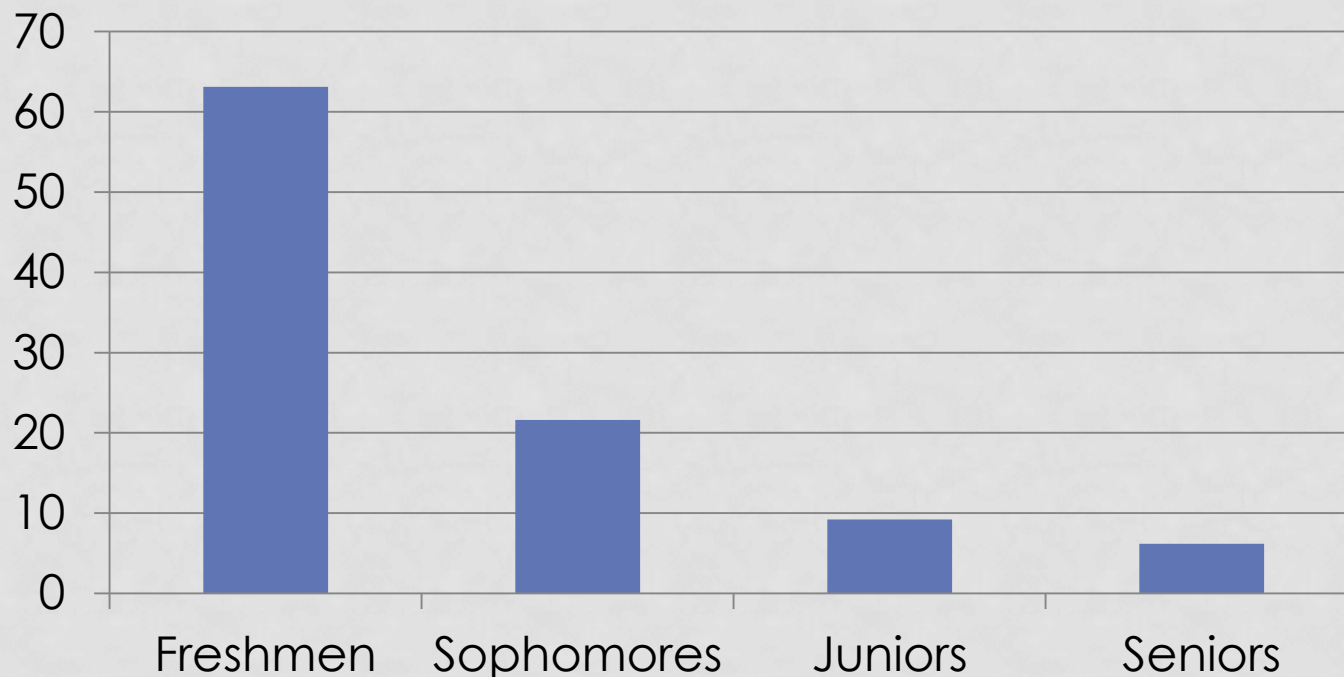
- May misread social cues or facial expressions
- Social interactions/group work may be stressful
- Stress-relieving activities may make others uncomfortable
- Sensory perceptions can interfere with learning
- Nebulous sense of time (can impact multi-tasking)
- Difficulty with changes and transitions

WHAT ASD CAN LOOK LIKE IN THE CLASSROOM

- Student may appear inattentive or bored
- May see repetitive behaviors
- Intense focus on topics of interest
- May display unexpected emotion when stressed
- Difficulty with organization
- Difficulty with group work
- Poor awareness of body space

DATA COLLECTION: DESCRIPTIVE STATS

- $N = 1034$ students enrolled in Intro to Psych
 - 42.3% males, 57.7% females
 - 62.7% White, 12.8% Asian, 7.7% multiracial, 7.7% Black, 5.8% Latino, 3.2% prefer not to answer, 0.5% American Indian



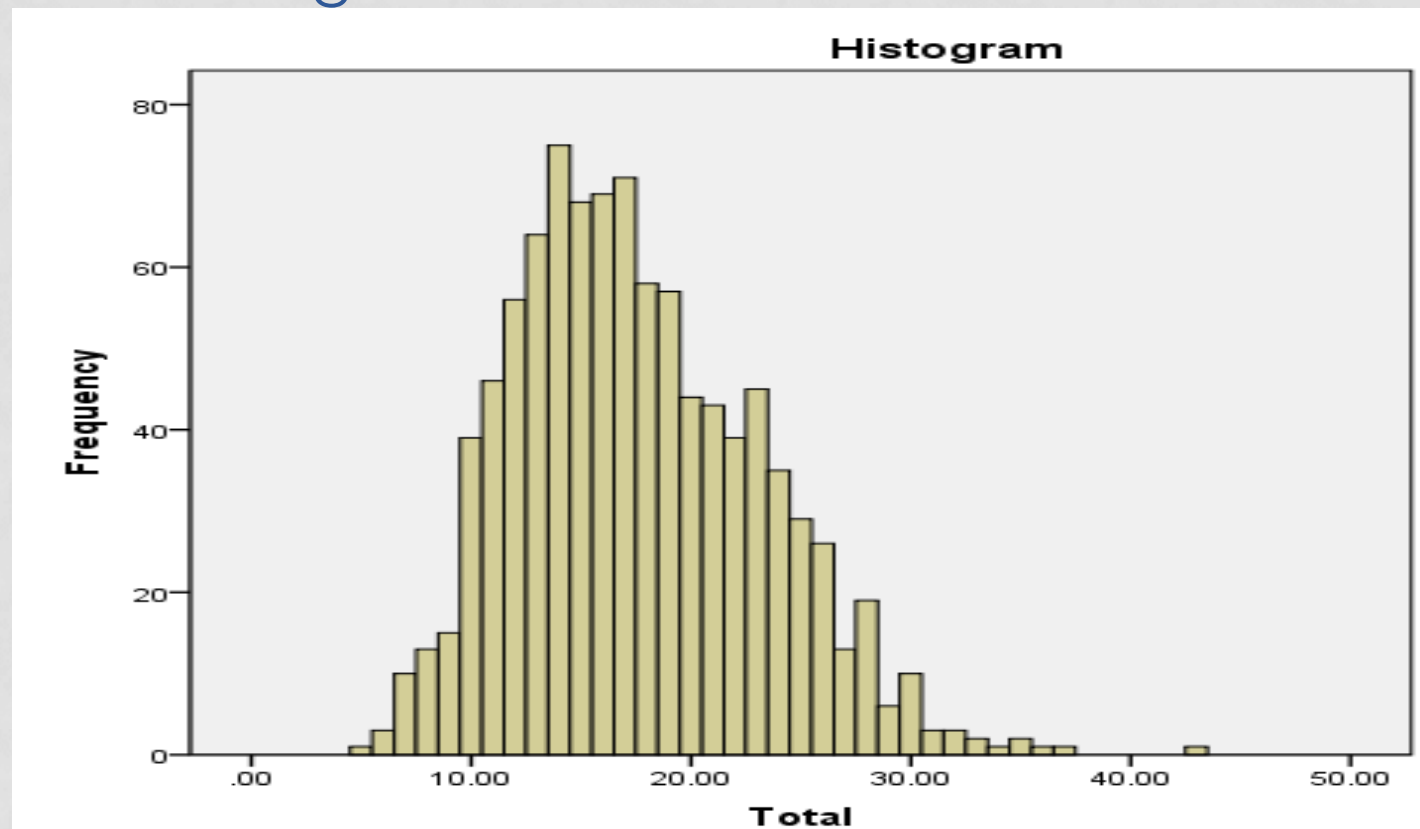
DATA COLLECTION: AUTISM QUOTIENT (AQ) (BARON-COHEN ET AL., 2001)

definitely agree slightly agree slightly disagree definitely disagree

- **Communication:** Other people frequently tell me that what I've said is impolite, even though I think it is polite.
- **Social Skill:** I prefer to do things with other rather than on my own.
- **Imagination:** If I try to imagine something, I find it very easy to create a picture in my mind.
- **Attention to Details:** I usually notice car number plates or similar strings of information.
- **Attention Switching:** I prefer to do things the same way over and over again.

RESULTS: AUTISM QUOTIENT (AQ)

- 9 scored as autistic (5 females)
 - Approximately 60 undergrads fit criteria on campus
- 49 scored greater than 2 SDs above mean



RESULTS: AUTISM QUOTIENT (AQ)

	W&M Student Average	National Student Average
Communication	2.5 (1.9)	2.9 (2.0)
Social Skill	2.7 (1.9)	2.3 (2.2)
Imagination	2.3 (1.7)	2.5 (1.9)
Attention to Detail	5.3 (2.2)	5.3 (2.2)
Attention Switching	4.8 (2.0)	4.5 (2.0)
Total AQ	17.6 (5.6)	17.6 (6.4)

DATA COLLECTION: SPECTRUM QUESTIONS

- Have you been diagnosed on the autism spectrum (including Asperger's Syndrome)?
- Yes
 - As an autistic individual, what challenges do you face in the classroom, if any?

RESULTS: SPECTRUM QUESTIONS

- 5 students diagnosed on spectrum
- 6 preferred not to say
- Classroom challenges:
 - Awkward social situations such as group projects
 - Attention deficit
 - Obsessive-compulsive tendencies

DATA COLLECTION: SPECTRUM QUESTIONS

- Have you been diagnosed on the autism spectrum (including Asperger's Syndrome)?
- No
 - What behaviors do you feel are characteristic of an autistic college student?
 - Have you had experience with students in your classes whom you've known or believed were autistic (including Asperger's)?
 - If yes, do you feel that these individuals have influenced your own classroom experience?

RESULTS: SPECTRUM QUESTIONS

- What behaviors do you feel are characteristic of an autistic student?
 - Social awkwardness, antisocial behavior
 - Frequent fidgeting
 - Intelligence, giftedness
 - “crazy”, “weird”, “afraid of people”
 - Mood swings
 - Repetition, obsessive behaviors
 - Organization
 - Lack of attention

RESULTS: SPECTRUM QUESTIONS

- Have you had experience with students in your classes whom you've known or believed were autistic (including Asperger's)?
 - Yes: 43.0%
- Do you feel that these individuals have influenced your own classroom experience?
 - Yes: 32.8%

DATA COLLECTION: SOCIAL PHOBIA (CONNOR ET AL., 2001)

not at all a little bit somewhat very much extremely

1. Fear of embarrassment causes me to avoid doing things or speaking to people.
2. I avoid activities in which I am the center of attention.
3. Being embarrassed or looking stupid are among my worse fears.

RESULTS: SOCIAL PHOBIA

- 362 (35.3%) scored above cut-off for problems with social anxiety
- National average: 3.31
- W&M average: 4.54

PROVISOS

- Spectrum means spectrum
- Best practices
- Best if student initiates contact

IDEAS TO CONSIDER TO SUPPORT LEARNING

- Transparent pedagogy
 - What does success in this class typically entail?
- Executive Functioning challenges
 - Provide specific, explicit instructions for organizing information and completing assignments
 - Give clear, written plan of assignments
 - Provide detailed schedule
 - Have a clear, predictable class routine

CLASSROOM SUGGESTIONS

- Fine motor challenges
 - Provide printed or online accessible notes
 - Allow use of laptop or other voice-activated technology to take notes
- Sensitivity to Environment
 - Provide quieter testing environment
 - Allow use of headphones to block out sounds during exam
- Easing Transitions
 - Begin class with discussion of diversity
 - Allow for extra transition time
 - Allow for sensory or comfort items (e.g., a fidget)

CLASSROOM SUGGESTIONS

- Social situations in class
 - Provide explicit instructions on how to work in groups including
 - How to divide up work
 - Being flexible when scheduling meetings
 - How to make decisions about work load, etc.
 - Sharing personal contact information
 - Communicating with each other
 - Adopting a collaborative mind set
 - Provide additional options for class participation such as electronic comments, coming to office hours
 - Directly address non-verbal and verbal inappropriate behavior that may be distracting to other students by discussing with the student

WHAT WE'VE TRIED . . .

- 10-min presentation that offers concrete information about what it means to be in a seminar

Question	Freshman seminar	Senior-level seminar	Graduate course
Have you had a seminar class before?	31% Yes	74% Yes	100% Yes
Have you had a presentation like this before?	13% Yes	5% Yes	7% Yes
Is this presentation relevant?	6.3	6.0	5.9
Was it helpful?	5.6	5.9	4.3
Was it a good reminder?	6.0	6.1	5.6
Would you recommend for other classes?	5.2	5.5	6.3

CONTACT US!

- www.wm.edu/neurodiversity
- neurodiversity@wm.edu