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# Occupational Therapy, Autism, The High School Student, & Research Trends

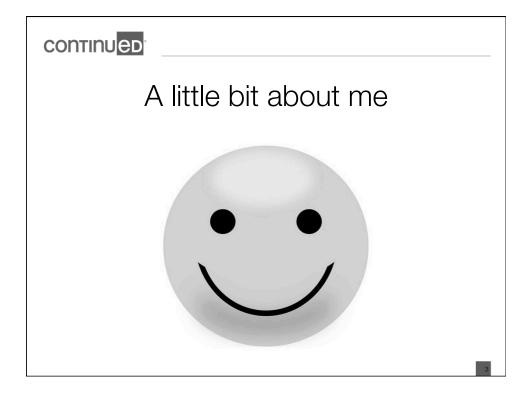
Marina Scott MS, OTR/L

continueD

# Learning Outcomes

- After this course, participants will be able to recognize common struggles for the high school student with autism.
- After this course, participants will be able to list current research in key areas.
- After this course, participants will be able to define the role of occupational therapy with the high school student with autism including the role of occupational therapy in research.





# What is Occupational Therapy?

Occupational therapy is the only profession that helps people across the lifespan to do the things they want and need to do through the therapeutic use of daily activities (occupations). Occupational therapy practitioners enable people of all ages to live life to its fullest by helping them promote health, and prevent—or live better with—injury, illness, or disability.



# What is Occupational Therapy?

Common occupational therapy interventions include helping children with disabilities to participate fully in school and social situations, helping people recovering from injury to regain skills, and providing supports for older adults experiencing physical and cognitive changes.

continued

# What is Occupational Therapy?

Occupational therapy services typically include:

- an individualized evaluation, during which the client/family and occupational therapist determine the person's goals,
- customized intervention to improve the person's ability to perform daily activities and reach the goals, and
- an outcomes evaluation to ensure that the goals are being met and/or make changes to the intervention plan.





# What is Occupational Therapy?

Occupational therapy practitioners have a holistic perspective, in which the focus is on adapting the environment and/or task to fit the person, and the person is an integral part of the therapy team. It is an evidence-based practice deeply rooted in science.

-From aota.org

continued

# Age Range

• For the purposes of this presentation, "high school" will encompass students ages of 14-21.



# IDEA and IEP's

- According to IDEA students who are eligible can have an IEP through high school graduation or age 21.
- IEP's must include a transition plan (by age 16).
- At 18 the student becomes legally responsible for his/her own IEP.

(\*Q1)

continued

# IDEA and IEP's

- Best transition planning should begin at or around the student's 13th birthday.
- At age 14, students should start attending their own IEP meetings.
- At age 16 vocational and transitional plans should start being made.

(\*Q2)



# IDEA and IEP's

- There are no IEP's or 504's in college.
- You can get accommodations under 504 in college.
- The student has to seek out the accommodations in college.

continued

# IDEA and IEP's

- "It should be realized that upon an individual's 18th birthday, they change from a system of being entitled to certain rights and privileges to a system of eligibility. They have to be considered eligible for the adult services system. This could be difficult based upon the funding for certain organizations or the severity of the individual's disorder. "
- -from Autism Speaks Transition information sheet State of CT



# Common Struggles

- anxiety
- depression
- sensory processing difficulties including self regulation
- behavioral difficulties
- addiction (drugs, video games)
- abuse (physical, emotional)
- bullying
- social difficulties
- language difficulties

(\*Q3)

# continued

# Common Struggles

- sleep issues
- medications
- puberty
- eating/food issues
- executive functioning
- college
- vocational skills
- independent living skills
- self help
- leisure activities



# Common Struggles

- friendships/relationships
- life balance
- parents
- self advocacy
- "peer pressure"
- driving
- independent living
- knowing about and finding resources available
- gender identity

continueD

# Occupational Therapy In High School

- self awareness
- relationships (sex education)
- safety
- driving
- grocery shopping
- laundry
- cleaning
- interview skills

(\*Q4)



# Occupational Therapy In High School

- job training
- resume writing
- volunteering
- phone calls
- car maintenance
- applying to college or vocational or technical school

(\*Q4)

CONTINU ED

# OT and ASD

What can occupational therapy do to help?

AOTA has a tip sheet Living With an Autism Spectrum Disorder (ASD): The High School Years.

It can be found on aota.org





# High School to College

"We make the erroneous assumption that high schools are getting students ready for college, and they're not really," said Dr. Gerard Hoefling, who works with the Autism Support Program at Drexel University. "That's not their primary task. High schools do a wonderful job of getting students ready to graduate from high school."

-from Vox article "High School Sets Up Autistic Kids to Fail in College. Here's How to Fix the Problem". 05/2015

continued

# High School to College or Work

Things occupational therapy can help support in high school that focus on the transition to college.

- supporting the student in attending their own IEP meetings
- discussing and working on life skills including independent skills
- 3. organization and time management skills
- 4. asking for help
- 5. advocating for yourself
- 6. understanding what college/work is like
- 7. campus visits (can include role playing)



# continueD

# Occupational Therapy in High School

- The focus of services should begin to shift.
- Handwriting should no longer be the focus.
- Strategies for handwriting should continue to be incorporated.
- Assistive technology to help with poor handwriting should be incorporated.

### CONTINU ED

# Occupational Therapy in High School

- Assistive technology can include
  - voice to text
  - word prediction
  - writing apps



# Occupational Therapy In High School

- Services can continue to be individual or group.
- Things that may be important to focus on for the student with autism:
  - Word processing/computer skills
  - Independent living skills
  - Executive functioning skills
  - Money management
  - Environment negotiation (reading maps)
  - Emergency skills (911, first aid)
  - Medication management

# CONTINU ED

# Occupational Therapy In High School

- These are skills that are good for all students, but important for the student with autism.
- It might take them longer to learn, more structure may be need to be provided or other resources may be needed.



# Occupational Therapy In High School

#### Interventions

- motor based role play
- video modeling
- visual models
- real life experiences
- social skills groups
- group intervention
- cognitive behavior approaches
- interest based groups

# continueD

# Occupational Therapy In High School

#### Interventions and resources

- The Zones of Regulation
- You Tube (or other tutorials)
- Autism Speaks has a transition tool kit and a community based assessment tool.
- The Center on Secondary Education for Students with Autism Spectrum Disorders.



### continued<sup>®</sup>

# Occupational Therapy in High School

#### **Assessments**

- Canadian Occupational Performance Measures (COPM).
- The Sensory Profile Adolescent/Adult
- Behavior Rating Inventory of Executive Functioning (BRIEF)
- Career Interests, Preferences and Strengths Inventory (CIPSI)
- Transition Planning Inventory

(\*Q5)

### continueD

# Occupational Therapy in High School

Assessments

- Ayers Sensory Integration Clinical Observation
- Wide Range Assessment of Visual Motor Abilities



# Transitioning to College

- College is not a right but a privilege.
- IDEA does not apply.
- Student responsibility increases (they need to provide documentation and advocate for themselves, and they are responsible for their progress).

(\*Q6)

continued

# Transitioning Out of High School

- Not all student will pursue a college education.
- Life skills become critical at this age.
- Independence also becomes critical.



# Transitioning Out of High School

- This can be a big change for any student
  - Finishing high school can be perceived as a huge loss in support.
  - Students and parents must find their own support system and resources.
- IT IS CRITICAL PLANNING AND TRAINING FOR THIS CHANGE BEGIN EARLY!

continued

# Transitioning Out of High School

- There are often YEARS long waiting lists for services and supports.
- This is a large area that OT's can work on and address. OT's should be working with students to help them gain independence, explore resources and teach them basic life skills.



# Transitioning Out of High School

 Sometimes it can be difficult for schools and parents to make this shift to "non academic" goals.

continued

# Research and Methods

What research is being done?

- There is a lot of research being done around social engagement and social skills.
- Usually, the sample size is small and based off of the many variables in individual people, studies are hard if not impossible to replicate.



continueD

# Research

- There is research being done around gender identity.
- There is research around various and new treatment options.

CONTINU ED

# Research

- It is difficult to find research geared towards the high school student.
- Most research is geared towards either younger children or adults transitioning into either college or the workforce.
- There is not a lot of research that is specific to occupational therapy and the high school student.



# Medication Research

- There are currently 2 medication trials being conducted.
- Both involve altering the hormone vasopressin for increased social communication.
- One medication suppresses vasopressin the other increases the amount of vasopressin.

continued

# Medication Research

- There is evidence that people who have autism produce too much or too little vasopressin.
- In general there is a lack of research when it comes to adolescents with autism and medications.



# Gender Identity Research

- In a 2019 study by Anglia Ruskin University (Dr. Steven Stagg) found a link between autism and transgender and non binary individuals.
- Dr.Stagg's research showed gender identity was more prevalent in people who were female at birth.
- He also hinted at underdiagnosis of autism in females complicating the issue.

(\*Q7)

continued

# Driving Research

- There are no evidence-based guidelines for fitness to drive.
- Teens with ASD and/or ADHD made more errors when driving.

(\*Q8)



## Treatment Research

- Researchers at UCLA are looking into personalizing interventions with a treatment plan called SMARTer (sequential multiple assignment randomization trial) Approach.
- In this research the students are assigned to a therapy. If they are not making progress after a set amount of time there are 3 options. Continue therapy, increase the amount of the same therapy, or switch therapy. This is done to see what is the greatest benefit to the child including specific therapy.

(\*Q9)

continued

# Complications with Research

- Small sample sizes.
- Hard to replicate.
- Lack of diversity (race, socio-economic, and gender).



continueD

# Occupational Therapist's Role in Research

What Can We Do

- Begin research.
- Apply to join in on current research projects.
- Share information. Collaborate with other occupational therapists as well as other providers.

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# Occupational Therapist's Role in Research

- Develop questions that can be tested and researched.
- Gain ideas from current work with high school students.



### continued<sup>®</sup>

# Occupational Therapist's Role in Research

- The Journal of Autism and Developmental Disorders published a study in 2016. How Sensory Experiences Affect Adolescents with an Autistic Spectrum Condition within the Classroom.
- One of a few studies that looked at self report of sensory issues.
- It found all students reported sensory issues.
   Some reported it affected their classroom performance, others did not.

(\*Q10)

### CONTINU ED

# Occupational Therapists Role in Research

 This study opens the door for many more research questions and opportunities around sensory processing.



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# Questions?

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