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Is College Liberating For All Students? The Impact of Sensory Challenges on Participation of Students on the Autism Spectrum and With Other Neurodivergent Diagnoses

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Is College Liberating For All Students? The Impact of Sensory Challenges on Participation of Students on the Autism Spectrum and With Other Neurodivergent Diagnoses

Sophia Starvaggi; Mary Smith, PhD, OTR/L; Susan Frommer, Assistant Director of the Office of Accessibility

BACKGROUND

- Neurodiversity describes unique ways in which a person's brain works, causing difference in skills such as executive function, social interaction, communication, and sensory processing (Pillar & Barimo, 2020).
- Hypo- and hypersensitivity are muted or heightened reactions to sensory stimuli received from the environment, associated with neurodiversity (Seeberger, 2020).
- Policies which require support for people with disabilities in higher education are access-based, leaving neurodivergent college students lacking proper support for sensory challenges (Mallory & Keehn, 2021).

PROBLEM

Neurodivergent college students report sensory-based challenges in their campus environments, which interfere with their academic, daily, and occupational participation; it is currently unknown how to support these sensory-related needs.

PURPOSE

To identify challenging sensory features within environments on a college campus that limit the occupational participation and performance of neurodivergent students with sensory processing differences.

METHODOLOGY

This study utilized a **mixed methods design** to identify sensory challenges experienced by neurodivergent college students. IRB approval from USAHS was obtained.

Inclusion criteria:

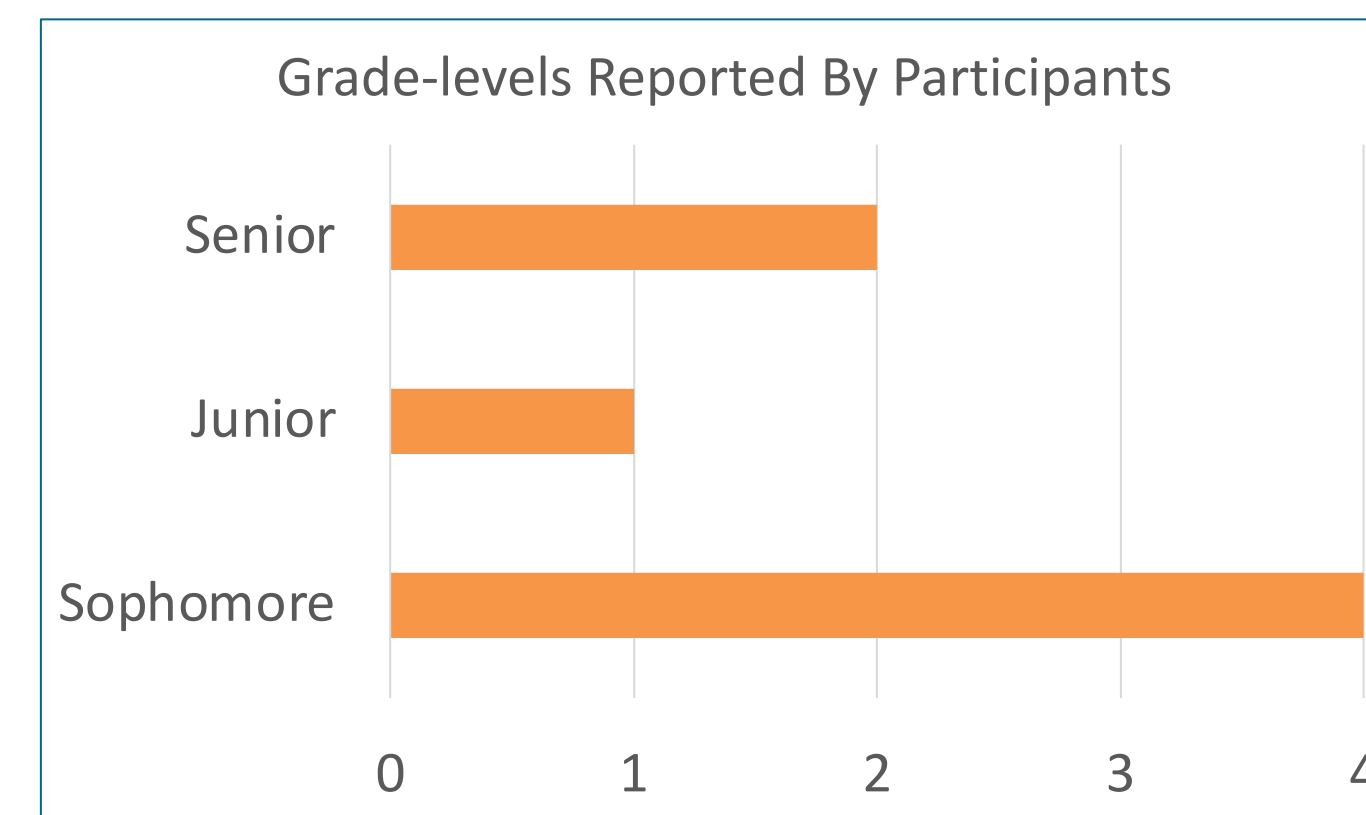
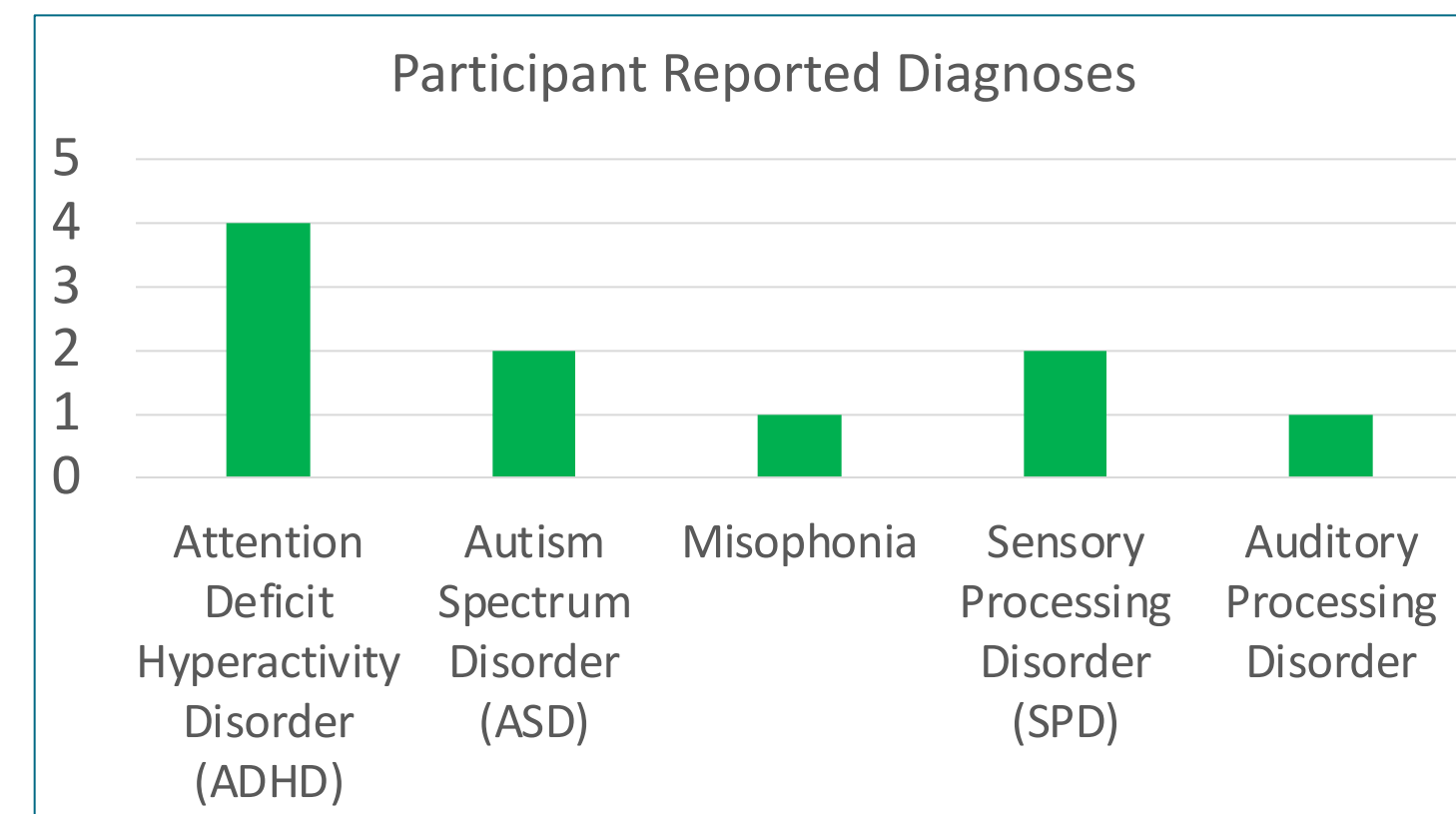
- Students enrolled in the college
- Students who identify as experiencing sensory challenges
- Students able to communicate in English

Four phases:

1. Recruitment
2. Data collection
3. Data analysis
4. Deliverable

RESULTS

DEMOGRAPHIC DATA



QUALITATIVE DATA

Themes	Subthemes	Quotes
Spectrum of sensory processing and sensitivities	<ul style="list-style-type: none"> • All senses are impacted • Spectrum of preferences 	<ul style="list-style-type: none"> ○ "I suddenly can hear six conversations at once and can't turn them off." ○ "Lights are tricky... I find that ambient light is too calming and too distracting, but I find that bright lights are so overstimulating and painful for my eyes..."
Environmental Challenges	<ul style="list-style-type: none"> • Built environments • People as a challenge 	<ul style="list-style-type: none"> ○ "Another setting that I have some sensory challenges in is...the dining experiences...I try not to go when it's super crowded, but sometimes I can't really avoid it." ○ "[Class] is pretty hard because there's always that one pair that's talking in the background...I try to sit near the front...they normally sit in the back."
Need for education and advocacy of neurodiversity	<ul style="list-style-type: none"> • Fear of judgement • Neurotypical expectations • Sensory seeking 	<ul style="list-style-type: none"> ○ "If I am feeling sensory overload coming on, I just kind of grin and bear it. Because if I put headphones on in the middle of class, my professor's gonna think like, 'what the hell? Why are you not listening to me...?' And even if I talk to my professor about it beforehand, then my classmates would think the same thing...during the labs it works cause they think I'm just listening to music, but during lecture it just wouldn't pan out."
Impact on participation	<ul style="list-style-type: none"> • Social interaction and participation • Academic responsibilities • Other occupations 	<ul style="list-style-type: none"> ○ "...it sort of hits me like, 'oh, it's going to be one of those nights'...it always like it throws the next four hours of my day off..." ○ "I didn't have a safe space where I could study my first year...my grades were definitely impacted by me not being able to concentrate on homework, projects, studying..."
Sensory overload	<ul style="list-style-type: none"> • Effects • Impact 	<ul style="list-style-type: none"> ○ "It's too many layers for my brain to penetrate through." ○ "It's like bombs are just consistently going off...one after the other, after the other"
Future career aspirations	<ul style="list-style-type: none"> • Difference in interests 	<p><i>Forensics, bioethics, neurosurgery, international social work, museum curator, elementary education, and forest ecology</i></p>

DISCUSSION

- Sensory challenges do impact neurodiverse students' participation in several occupational areas
- Despite reports of similar challenges, neurodivergent people are unique from one another, therefore, there must be a range of solutions
- Education of neurodiversity and sensory processing differences might reduce the prevalence of sensory challenges
- Sensory inclusion will require a combination of equipping neurodiverse students with self-regulation strategies and modifications to campus environments
- OT has potential to contribute to this gap, with skills in environmental modification, sensory regulation, and assistive or adaptive equipment
- Observations of campus environments reinforced the findings from interviews; themes: lighting, sounds, smells, vestibular and proprioception

DISSEMINATION

- Present findings to the office of accessibility at this college
- Present findings at a state or national conference
- Write an article for publication in an OT journal
- Further analysis and triangulation of the data will be conducted

REFERENCES

