

Neurodiversity in Pharmacy: Challenges and Opportunities

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Disclosure

I have no financial disclosure or conflicts of interest with the presented material in this presentation.

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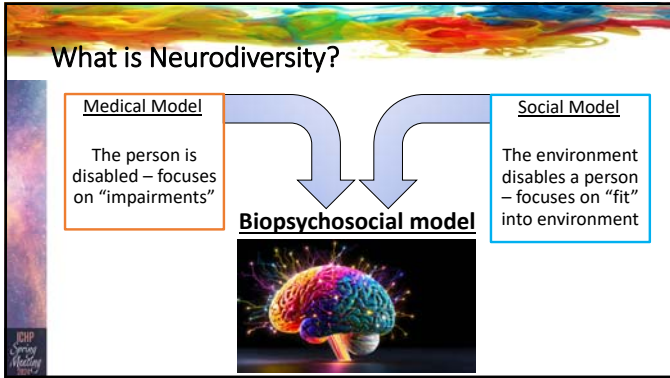
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Learning Objectives

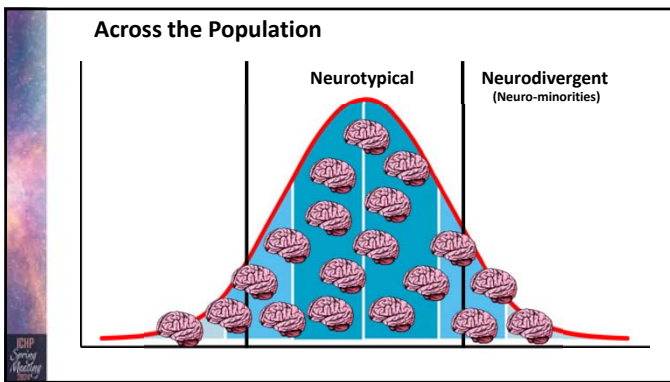
- Describe common learning differences that are incorporated under the neurodiversity umbrella.
- Identify challenges neurodiverse pharmacy students and technicians and pharmacists encounter in pharmacy education and the pharmacy workplace.
- Discuss how neurodiverse thinking can benefit the pharmacy profession.

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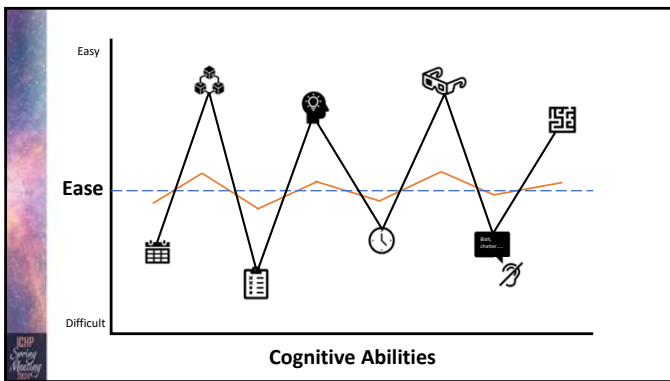
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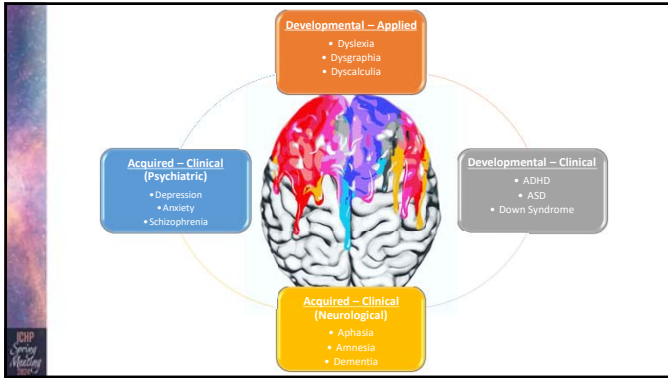
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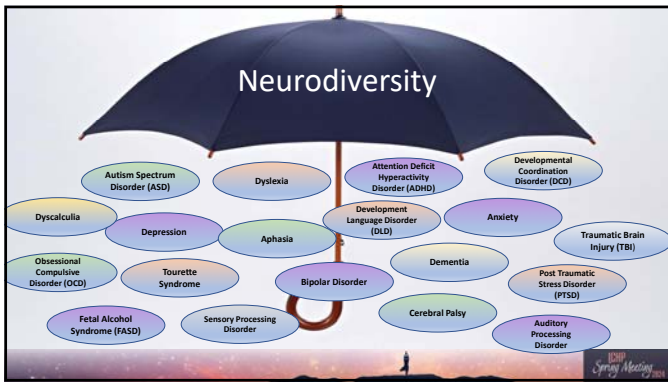
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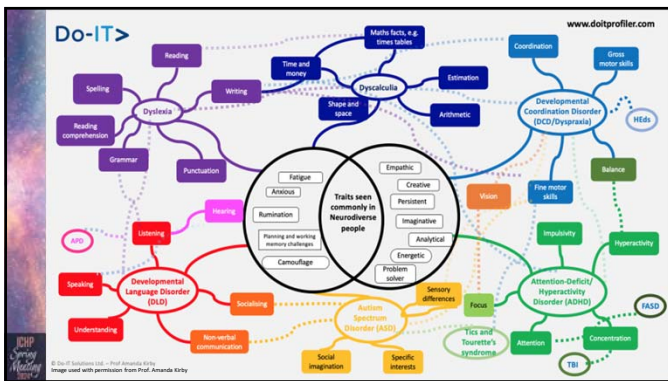
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Four Most Common/Studied Neurominorities

Autism Spectrum Disorder (ASD) <1-2% globally	Dyslexia up to 10%
Developmental Coordination Disorder (DCD) [dyspraxia] up to 6%	Attention Deficit Hyperactivity Disorder (ADHD) up to 5% worldwide, higher in USA

British Medical Bulletin, Volume 115, Issue 1, September 2010, Pages 108-120, <https://doi.org/10.1093/bmb/abd021>




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Task-related challenges

ASD	Dyslexia	ADHD	DCD
<ul style="list-style-type: none"> Time management Concentration Coping with more than one task Social/communication difficulties 	<ul style="list-style-type: none"> Time management Organizational skills Short-term memory Social self-esteem Literacy Communication Stress management 	<ul style="list-style-type: none"> Time management Concentration Difficulty working on teams Depression Self-regulation Insomnia 	<ul style="list-style-type: none"> Organizational skills Working memory Self-esteem Processing speed Motor difficulties operating equipment

British Medical Bulletin, Volume 115, Issue 1, September 2010, Pages 108-120, <https://doi.org/10.1093/bmb/abd021>




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Task-related attributes

ASD	Dyslexia	ADHD	DCD
<ul style="list-style-type: none"> Memory Focusing or hyper-focusing on interest area – "specialist" skill Detail observation Creative 	<ul style="list-style-type: none"> Entrepreneurialism Creativity Visual-spatial reasoning Story-telling 	<ul style="list-style-type: none"> Creativity Visual-spatial reasoning Hyper-focus Passion 	<ul style="list-style-type: none"> High verbal comprehension

British Medical Bulletin, Volume 115, Issue 1, September 2010, Pages 108-120, <https://doi.org/10.1093/bmb/abd021>



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Profile of six different individuals with ADHD

Embrace Neurodiversity

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Unmask the potential

- Outside the box thinking
- Empathetic
- Innovative
- Attention to detail
- Hyper-focus
- Entrepreneurship
- Visual-spatial skills
- Social interaction

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What can we do to embrace neurodiversity in pharmacy?

- Neurodiversity training – part of DEIA efforts
 - Dispel misconceptions
 - Benefit of diverse workforce
- Universal Design – *especially in communication*
- Peer support groups
- Job carving
- Sensory-friendly workspaces or sensory-friendly spaces
- Mentoring and coaching programs
- Clear expectations and goals
- Creating a culture of open communication and celebration of diversity

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Summary

- Training students, preceptors, pharmacy staff, and faculty as part of DEIA efforts can help increase awareness of neurodiversity and help to decrease stigma and misunderstanding
- Designing spaces and materials to be more inclusive of individuals with neurodiversity can also improve accessibility for all
- In a rapidly changing pharmacy landscape, neurominorities can bring a wealth of attributes to the pharmacy field



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References

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- Doyle N. Neurodiversity at work: a biopsychosocial model and the impact on working adults. *British Medical Bulletin*. 2020;135:108-125.
- Kamalakannan A. A theoretical perspective on workplace neurodiversity; opportunities and challenges for HR management. *Bharatiya Shiksha Shodh Patrika*. 2023;42(2):79-84.

Resources

- Employer Assistance and Resource Network on Disability Inclusion (EARN) <https://askearn.org/page/neurodiversity-in-the-workplace>
- Neurodiversity in the Workplace <https://nitw.org/>
- Do-IT <https://doitprofiler.com/>
- Neurodiversity Hub <https://www.neurodiversityhub.org/resources-for-universities>
- Neurodiversity Network <https://www.neurodiversitynetwork.net/neurodiverse-universities-initiatives>

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