

Our Neurodiversity Desert: Solving the Absence of a Community Based Resource for Neurodivergent Children.

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Thesis: We propose to outline the importance of having a child psychiatrist in Prince Edward County with several different physiological resources for the community at large. Neurodiversity should be seen as a priority in Prince Edward County, and the local government should be able to provide necessary services to help k-12 children. The lack of a child psychiatrist fails to support the community's needs related to diagnosis, prescriptions, and advocacy. Solutions to this problem include partnering with current local therapists to have support groups for neurodiverse children and parents as well as curating workshops/presentations on topics of equity, inclusion, and biological diversity to continue to educate ourselves and the community.

Introduction:

- brief intro about the importance of prioritizing neurodivergence in children
- Find ways to share knowledge on neurodivergence
- current state of Prince Edward right now (no options, VCU, Lynchburg)
- no funding, no psychiatrists, and no support in schools
- This can help with family retention in the area particularly those with neurodiverse children because they will have more services to help their child and therefore increase money for PEC schools.
- Who can we talk to (go to town council and get support of local schools through having scientific data supporting our idea)?

Introduction Supporting Data

- What are current Virginia policies on the state of mental health care? “The Virginia Mental Health Access Program (VMAP) is a statewide initiative that helps health care providers take better care of **children and adolescents** with mental health conditions through provider education and increasing access to child psychiatrists, psychologists, social workers, and care navigators.” Virginia has a severe shortage of mental health providers. At the same time, primary care physicians treating children and adolescents are not equipped to manage mental health in their primary care settings.” (What is VMAP, 2023)
- How is biology related to the importance of neurodiversity in our community? “To elucidate, although there are clear biological markers for those with a spiky profile^{33,55} which lead to observable, measurable psychological differences, there is nothing innately disabling about those differences when we consider a traditional, tribe-based community of humans. Within the biopsychosocial model of neurodiversity, understanding work-related intervention and treatment becomes more about adjusting the fit between the person and their environment⁵⁸ than about treating a disorder. Critical review of the extant biopsychosocial research supports the social model proposition that the individual is not disabled, but the environment is disabling.” (Doyle, 2020)

Specific Aims:

#1. Currently, in Prince Edward County (PEC) there is a lack of child psychiatrists who can diagnose, support, and advocate for neurodiversity issues in the community. We must

take proactive steps to educate the community and implement evidence-based practices for the benefit of the neurodiverse in the county at large. Hopefully, these steps can ultimately lead to bringing in a child psychiatrist to the county.

- What is the current state of students with neurodiversity? “Students with neurodiversity are three to five times more likely to experience community living and participation disparities as well as lack of social inequity compared to their typically developing peers” (Mpofu et al., 2020)
- Other states, what they are doing and why? “Improving access, limitations in training, time, and specialist availability represent substantial barriers” “The Massachusetts Child Psychiatry Access Project (MCPAP),” “Access to child mental health care may be substantially improved through public health interventions that promote collaboration between PCCs (Pediatric primary care physicians) and child mental health specialists” (Barry, Gold, & Bostic et al., 2011)
- Early detection and its positive impact: “The potential positive outcome of early detection and intervention is not something that should be denied to any child or family, and will ultimately have a positive impact on society” Early and continuous intervention (ABA therapy?) in childhood for autism is crucial for development (Koegel et al., 2014)
- We need to understand that we do not need to change the neurodiverse but rather the environment: “The issue is that the very idea of neurodiversity seems to me to include a challenge to the reliance on a species norm for assessing (and valuing) our functional abilities at all, in favor of the notion that diversity itself is normal. And if this is the case, then we must find a way to acknowledge differences in functioning in a way that does not rely on the species-norm-based notion of impairment” (Chapman, 2020)

#2. Partner with current local therapists to have support groups for neurodiverse children and parents of those children focusing on preventative and ongoing care. This can include providing k-12 children with coping skills and resources in the school setting to help them manage challenges they might face. This can help prevent families from relocating because they will have more services available to help their children, and this will help increase money for PEC schools.

- Determine the context in which the student is most secure and comfortable: (e.g., outdoors, near a sandbox, at a table with a rubber ball chair, at his own desk, on the floor), and carry out the counting and comparing activity in that preferred setting (*Neurodiversity in the Classroom*, 2023).
 - Students with special needs who are included in regular classrooms develop more positive views of themselves and form friendships with neurotypical kids.
- “The results from these measures support the efficacy of the Aspirations program and provide insight into implementing a successful model for this population” (Hillier, A., 2007).
 - Support groups among adolescents with ASD show positive results.
- “In the immediate aftermath of receiving a diagnosis, the encouragement and assistance gained through the mutual aid process of a support group can be invaluable in helping parents to get through a challenging time” (Banach, M., 2010).
 - Students' ability to adapt to a more typical environment is shown to improve the student's ability to learn because they are motivated.

- “According to the center for CAST, the UDL framework encourages educators to implement 1) Strategies for presenting information and content to students (recognition networks) 2) Strategies that allow students to express what they know (strategic networks) 3) strategies for stimulating and motivating students interest in learning (affective networks)” (Armstrong, 2012).
 - The focus of UDL is to design an educational environment that can accommodate a wide range of learning differences.

#3. Curate workshops and presentations on topics of equity and inclusion to continue to educate ourselves and the community. We aim to guide teachers and counselors on biologically based methods to incorporate neurodiverse materials like teaching self-advocacy, and neurological differences.

- What are some ways that people can be informed about how to deal with neurodiversity in a public setting (ex. classrooms)? “The modules introduce accurate terminology, share the strengths of various neurological profiles, and build awareness and acceptance of the neurodivergent mind” (Molett, T. A. 2022)
 - Created modules for employees on how to create a more inclusive environment for the neurodiverse, discusses the benefits of doing so
 - This is also applicable for the classroom setting
- What role do healthcare professionals play in advocating/informing neurodiverse patients? “As health care professionals, it is our responsibility to advocate for access to services, therapies, and accommodations that may help improve quality of life. But it is also our responsibility to fully inform patients and families about potential treatments and interventions, many of which have relatively little documented benefit and significant risks” (Nicolaidis, 2012)
- How can school staff support parents after their child’s diagnosis? “Both the schools and organizations interviewed cited numerous cases where parents expected a cure when in fact there was none. Especially when the process of inclusion begins, this period of the parents coming to terms with the diagnosis also requires great care and involvement from the school staff as they offer their support and understanding” (Kingji, A., 2021).
 - Discusses the role parents have after diagnosis, why parents need support for their k-12 child (pg 19)
- What’s the importance of self-advocacy skills in neurodiverse individuals? “Using logistic regression analyses, self-advocacy skills were revealed to be a significant predictor of student IEP participation among adolescents with autism spectrum disorder” (Barnard-Brak, L., & Fearon, D. D., 2012)
- Universal Design “Universal design guidelines identify qualities of instruction that take into account the diversity, including physical and neurological diversity, of the student body.” (Ross, 2019)

Discussion: why is this important?

- Helps to reduce stigma around how different people think and learn differently from others.
- “Fear and stigma prevent some students from reporting their challenges to administrators. It is time for society to break down those barriers and evolve to better serve these learners” (Elliott, N., 2018).

- Biological importance: genetics, diversity, and how neurodiversity is good for us!
- We cannot ask a new company to come into our town without working proactively to better our system first. This can be done through advocacy from schools, therapists, child, and parent education, and reducing stigma around neurodiversity. Neurodiversity is also a great opportunity to expand our horizons of understanding diversity, equity, inclusion, and belonging.
- Who is our audience and what can they do?
 - Students in the crowd, listen understand and advocate for increased neurodiversity awareness in k-12 environments. Whether this be where they go and start their own family or if they decide to stay in Farmville. It is important for current students to understand how much of an impact they can have on Farmville (for example: SGA was able to bring in sane nurses recently).
 - Teachers: understand that their own children are currently impacted by this lack of resources and go to school boards to advocate for more inclusive practices.
 - Community leaders (for example Cam Patterson, he is very involved with the community and has several seats on town councils and Mrs. Dr. Franssen was recently at a business council meeting where they discussed this very topic from a new business point of view) these are important perspectives to have to gain feedback and advice for moving forward with this initiative to bring a child psychiatrist. Then after raising awareness through town council meetings and really workshopping this proposal we will be able to convince the community that this is a worthwhile priority. The county can then set aside monetary resources to funnel into creating programs proposed in this presentation. Ideally a focus group will be made with several different important perspectives that will contribute to a well throughout and effective 5-year program to bring a child psychiatrist.

Figures

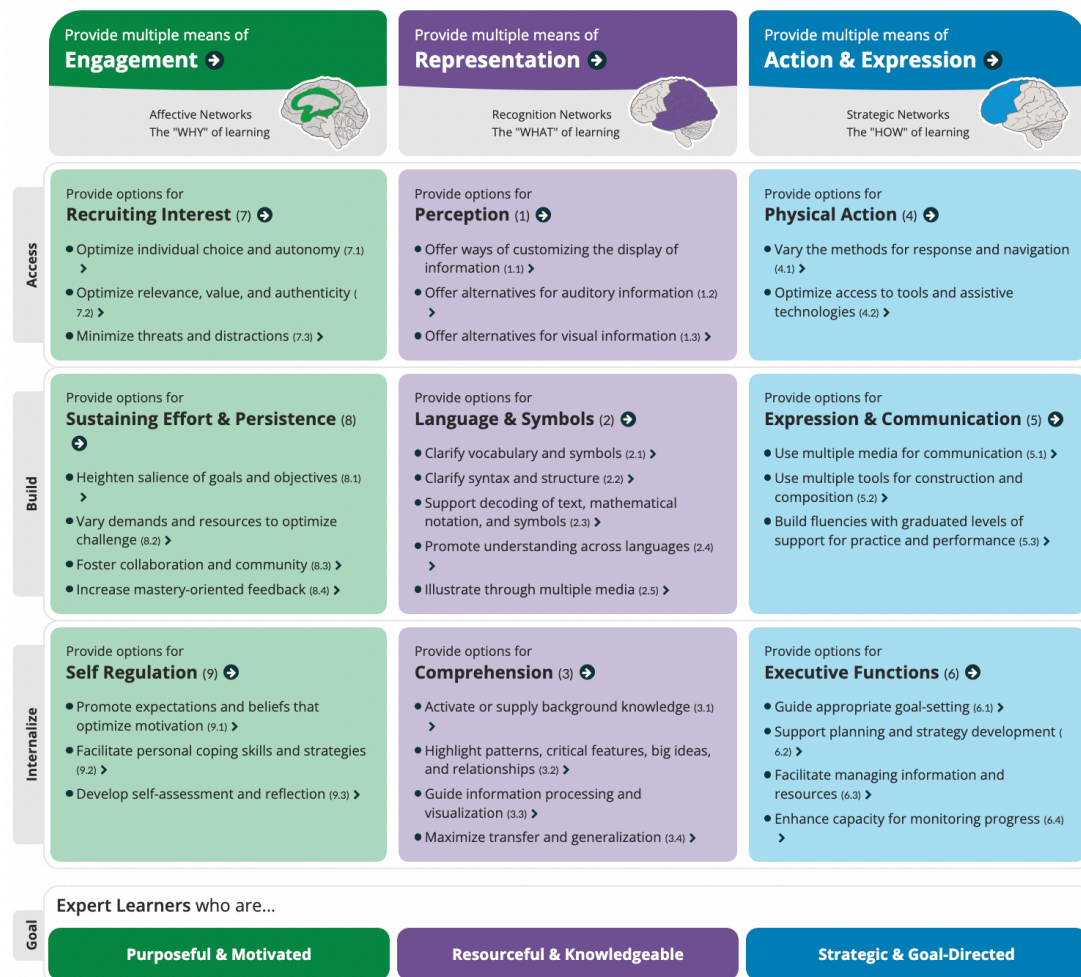
Table 3: Behavioural strategies to support children with sensory processing difficulties

Sensory processing difficulty	Behavioural strategy
Heightened by aspects of the sensory environment	Regular calming activities: <ul style="list-style-type: none">• repetitive, rhythmic input (e.g. swaying, swinging, rocking)• deep pressure input (e.g. wrapping up tight in a blanket, massage, bear hugs – see note)• heavy work (e.g. squishing play dough or a stress ball, jumping on the trampoline)• taking a break from the environment.
Becomes drowsy and overwhelmed by aspects of the sensory environment	Regular alerting activities: <ul style="list-style-type: none">• providing exposure to sensory input that helps a child to maintain alertness (according to the child's preference)• active movement breaks using large muscle groups (e.g. star jumps)• frequent opportunity to change body position.
Difficulty with attention and concentration	Encourage oral and fine motor activities: <ul style="list-style-type: none">• using a fidget toy or allowing the child to doodle• allowing the child to chew or suck on sour lollies, or drink through resistance (straw).
Difficulty recognising bodily cues, such as hunger and thirst, or toileting needs	Support recognition of body signals: <ul style="list-style-type: none">• creating a visual timetable of regular bathroom or nutrition breaks• teaching habits to avoid toileting accidents (e.g. go to toilet one hour after lunch)• using technology (e.g. mobile phone alarms) to cue attention to bodily signals• engaging in mindful activities that raise awareness of internal body signals (e.g. nostril breathing).

Note: Each child's sensory issues are unique and a comprehensive assessment and support plan should be developed by a suitably qualified professional. The use of deep pressure techniques involving touch (e.g. bear hugs) can be counter-indicated in children who have experienced interpersonal trauma.

(Mclean, 2022)

Universal Design for Learning Guidelines



(Cast, 2018)

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