

**The Neurodivergent Experience of Puberty: A Literature Review and Needs Assessment**

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## Introduction

This literature review and needs assessment aims to explore barriers to occupational participation and performance created by the experience of puberty and sexual development for neurodivergent (ND) adolescents. Additionally, this review seeks to identify gaps in support services currently being provided to this population. This author identifies ND adolescents as any individual aged ten to 19 whose brain functions outside of typical expectations.

While current civil rights legislation requires accommodations and support to ensure disabled students have access to public education, only three states explicitly mandate the inclusion of disabled students in SE programs (Individuals with Disabilities Education Act, 2004; SIECUS, 2024). ND adolescents experiencing puberty encounter unique challenges requiring tailored support. Key areas of difficulty are sensory processing, masturbation, menstruation and emotion regulation (Cummins et al., 2018; Larson et al., 2021).

Occupational therapists (OT) are well-positioned to address many of the challenges associated with puberty through modification, prevention, and health promotion (Kurt et al., 2023; Schmidt et al., 2021). This author, a ND OT doctorate student with extensive experience working with the disabled community, has observed the challenges ND adolescents face during puberty. As an advocate for disability justice and neurodiversity-affirming practices, this author recognizes the need to create safe and empowering puberty supports, as the majority currently in place are rooted in behaviorism.

## Methods

This literature review and needs assessment loosely followed the *PRISMA 2020 flow diagram for new systematic reviews* to answer the following questions: *What barriers to*

*occupational engagement do ND adolescents face due to puberty? What limitations exist in current approaches related to puberty support for ND adolescents?*

Databases including Pubmed, CINAHL, OTseeker, APA Psyc Info, and ERIC were utilized. Search terms included: ((Education OR Intervention) AND puberty AND (neurodivergent OR disabilities OR autism)), ((disabled adolescents OR neurodivergent) AND (sexual development OR puberty)), and ((Social OR self-care OR community)) AND puberty AND (("disabilities" OR "autism")). Manual searches for grey literature were conducted using Google (<https://www.google.com/>) and Instagram (<https://www.instagram.com/>). An anonymous survey created with Qualtrics (<https://www.qualtrics.com/>) (see Appendix A) was distributed via social media and email. The 17 respondents consisted of ND individuals, OTs, OT assistants, OT students, special education teachers, behavioral support personnel, direct support professionals, recreational therapists, and family members of ND people. Data from peer-reviewed articles, grey literature, and survey responses was analyzed through thematic analysis using a concept map (see Appendix B). Survey responses are integrated in this report through direct quotes from participants.

### **Synthesis: Puberty Related Challenges**

Puberty intensifies sensory processing challenges common among ND individuals (Dean et al., 2022; Larson et al., 2021). Sensory discomfort is associated with premenstrual symptoms and the physical act of menstruation (Jones et al., 2024; Steward et al., 2018; Yellow Ladybugs, 2023). Sensory sensitivities present challenges with dressing and hygiene, including difficulty with period products, bras and deodorant, and showering (Larson et al., 2021; Ottathengil & Schenk, 2024; Sellers, 2024; Zacharin, 2009).

Menstruation is identified as negatively impacting the well-being of ND adolescents (Cridland et al., 2014; Breithart, 2022). Physical pain associated with menstruation is a particular concern, specifically for adolescents with communication and interoception challenges who may struggle to express and respond to their discomfort (Cummins et al., 2018). The “lack of education regarding symptom management and inclusive menstrual products,” along with difficulties tracking menstrual cycles, managing period products, and reliance on caregivers, decreases independence in menstrual management (Larson et al., 2021; Sellers, 2024).

The literature identifies public engagement in sexual behaviors such as masturbation, disrobing, and sexual comments as challenges for ND adolescents. Masturbation is a particular challenge as hypermasturbation (excessive masturbation leading to physical harm or impaired daily functioning) and masturbation in public spaces, around others, and with inappropriate objects is common (Bagatell, 2016; Beddows & Brooks, 2015; Davis et al., 2015; Sellers, 2024). “Public spaces are challenging for us, especially with inappropriate self-stimulation.”

Hormonal fluctuations, especially those associated with menstruation, intensify emotional responses and “can result in behavioral issues like aggression or elopement” (Steward et al., 2018). A higher prevalence of and a decreased ability to manage anxiety, aggression, anger, and moodiness is common. Difficulty recognizing, communicating, and responding to emotions often results in behavioral outbursts or withdrawal. A lack of self-advocacy or misinterpretation of behavioral responses to emotional dysregulation may result in unmet support needs. Increased emotion dysregulation often manifests in behavioral responses such as impulsivity, agitation, aggression, meltdowns, and shutdowns (Cummins et al., 2018; Larson et al., 2021).

### **Synthesis: Limitations to Puberty Related Supports**

Sex education for ND adolescents is often limited or absent in schools. SE curricula are designed for neurotypical students and use a one-size-fits-all approach limiting the applicability of the content (Schmidt et al., 2021; Smusz et al., 2024; Strnadová et al., 2021). Programs focus on biological aspects of sexual health and provide minimal guidance on topics such as sexual pleasure, queer sexualities, and dating (Cridland et al., 2014; Hole et al., 2021; Smusz et al., 2024). Limited understanding of ND communication styles, especially when discussing abstract concepts, limits the accessibility of the content (Breithart, 2022; Jones et al., 2024; Kurt et al., 2023; Larson et al., 2019).

Pubertal support is limited by a lack of training among educators, caregivers, and healthcare providers, leading to avoidance of the subject, while inconsistent guidance from adults contributes to deficits in knowledge about critical topics (Kurt et al., 2023; Schmidt et al., 2021; Strnadová et al., 2021). Misinterpreting sexual needs, adverse reactions from caregivers, and a lack of clear, shame-free education can lead to feelings of guilt (Ferrell, 2025; Smith, 2023; Wenger, 2024). Stigma, misconceptions, and religious beliefs contribute to the gatekeeping of information and incomplete or biased education (Hole et al., 2021; Smusz et al., 2024).

### **Conclusion**

Puberty is an exceptionally challenging period for ND adolescents, and the support services this population is provided with have significant gaps, including a lack of tailored curricula, inaccessible teaching methods, communication barriers, and social stigma. The occupational impacts of puberty-related challenges are expansive. Sensory processing and menstruation challenges impact activities of daily living and health management. Emotional dysregulation inhibits engagement in instrumental activities of daily living, rest and sleep, and social participation. Inappropriate sexual behavior also impact social participation (American

Occupational Therapy Association, 2020). This author aims to develop a program that equips ND adolescents and their support networks with the necessary skills to navigate puberty confidently. This will be achieved by employing client-centered, sex-positive, and neurodiversity-affirming methodologies in occupational therapy interventions related to puberty.

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## Appendix A

**Guidelines:**

Please answer the following questions about puberty and sexual development in adolescents who are neurodivergent or have IDD. Please be as detailed as you can.

*Relevant definitions:*

*-Neurodivergence: a variety of conditions that change the way the brain processes information, learns new things, and engages with the world around it (i.e. autism, ADHD, mental health conditions, etc.)*

*-IDD: Intellectual and Developmental Disabilities are different conditions that can influence how a person develops. These disabilities can affect someone's thinking, physical abilities, or emotions.*

*-Puberty/Sexual development: When a child's body goes through changes to become an adult body that can have babies.*

*-Occupations: the everyday activities that people do to fill their time and make their lives meaningful.*

What is your relationship to neurodivergent and/or IDD adolescents?

(Are you a provider- if so what is your title, parent, member of this group, etc?)

What challenges do you observe in neurodivergent and/or IDD adolescents related to puberty and sexual development?

For this population, what specific occupations are impacted by puberty and sexual development.

*Occupations are the everyday activities that people do to fill their time and make their lives meaningful.*

*Examples of occupations include personal care, education, social engagement, play & leisure, etc.*

What specific situations/environments/contexts create significant challenges related to puberty and sexual development for this population?

*Examples of contexts include home, school, community*

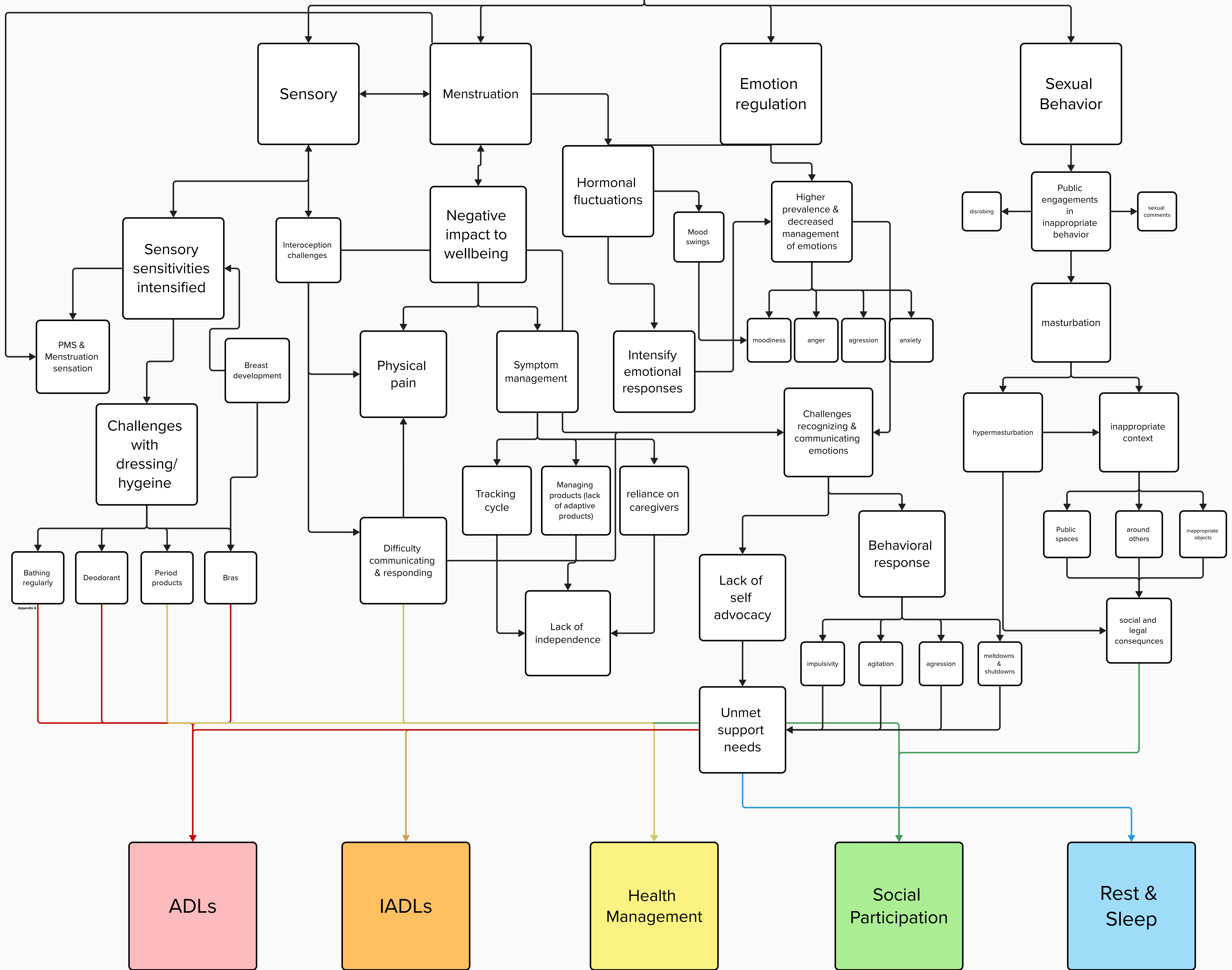
What gaps (what is missing) do you see in support services/interventions/practices for this population during puberty and sexual development?

Is there anything else you want to add about puberty and sexual development for adolescents who are

neurodivergent or have intellectual and developmental disabilities?

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# Puberty related challenges



Appendix A