

Emotional Regulation Intervention for Neurodivergent Adolescents: A Group-Based Approach



Clara Andersen, MOTS¹, Sungmin Lee, MOTS¹, Katia Oliva, MOTS¹, Erika Reinhardt, MOTS¹
Faculty Advisor: Lauren Butler, MOT, OTR/L¹; Community Mentors: Heidi Hynes, OTR/L, Clinic Owner², Hannah Michlmayr, MSOT, OTR/L², Lauren Butler, MOT, OTR/L²
¹University of Washington Division of Occupational Therapy, ²Therapy Services for Children (TSFC)

Background

Neurodivergent adolescents often face challenges with emotional regulation, which can impact daily participation, peer relationships, and overall well-being.⁶

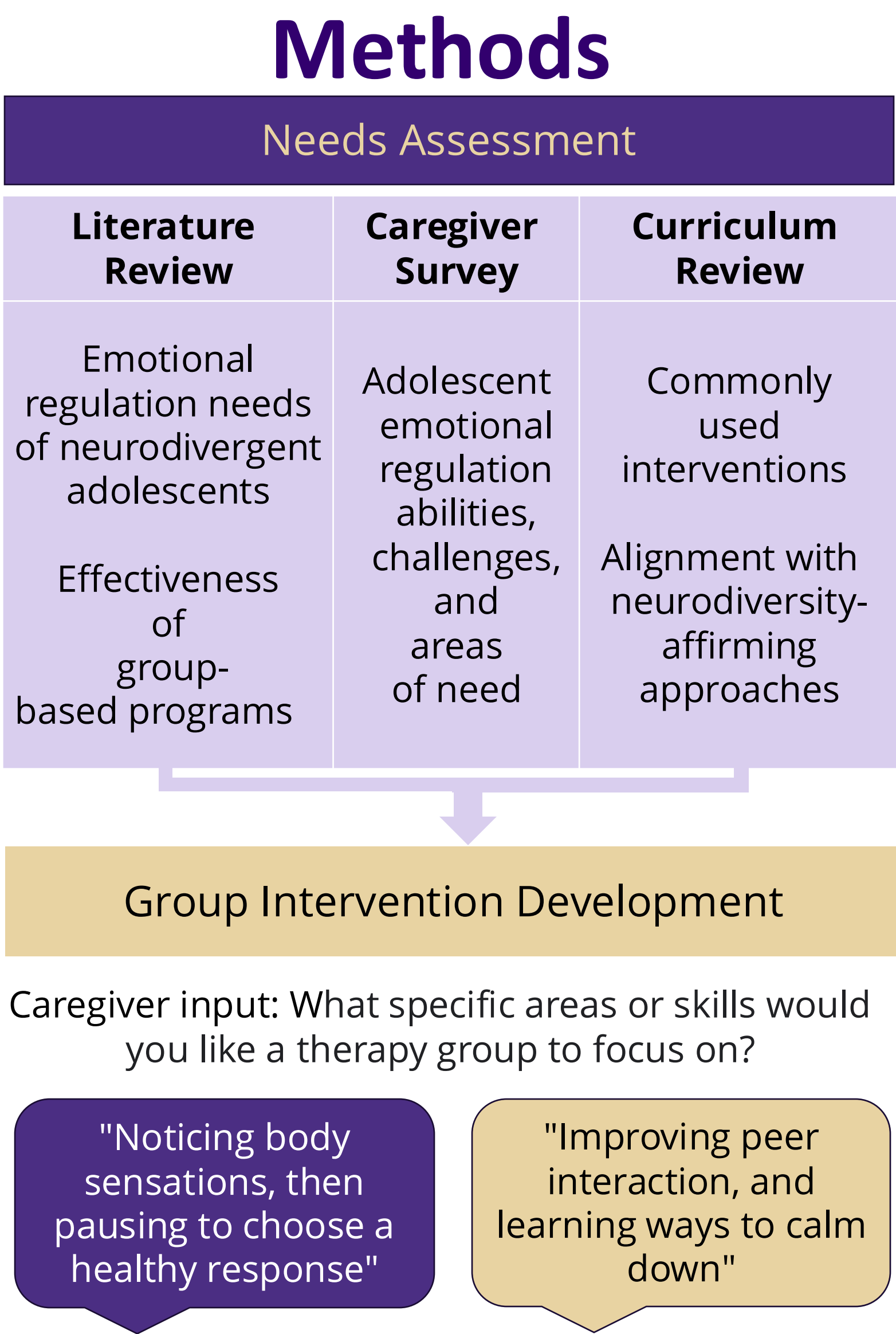
Neurodiversity-affirming practices emphasize strengths, autonomy, trauma-informed care, and respect for identity.²

Although many existing interventions are not aligned with neurodiversity-affirming practices,⁴ there is growing recognition of the need for supports that reflect these values and are responsive to the lived experiences of neurodivergent youth.¹

Interoception is the sense that helps us recognize and respond to what is going on inside our bodies, such as hunger or pain. This is a key component for emotional regulation.

Purpose

Create a 12-week intervention for neurodivergent 10-14-year-olds grounded in neurodiversity affirming care that supports emotional regulation. The intervention should be engaging, collaborative, and adaptable to adolescent strengths and needs.



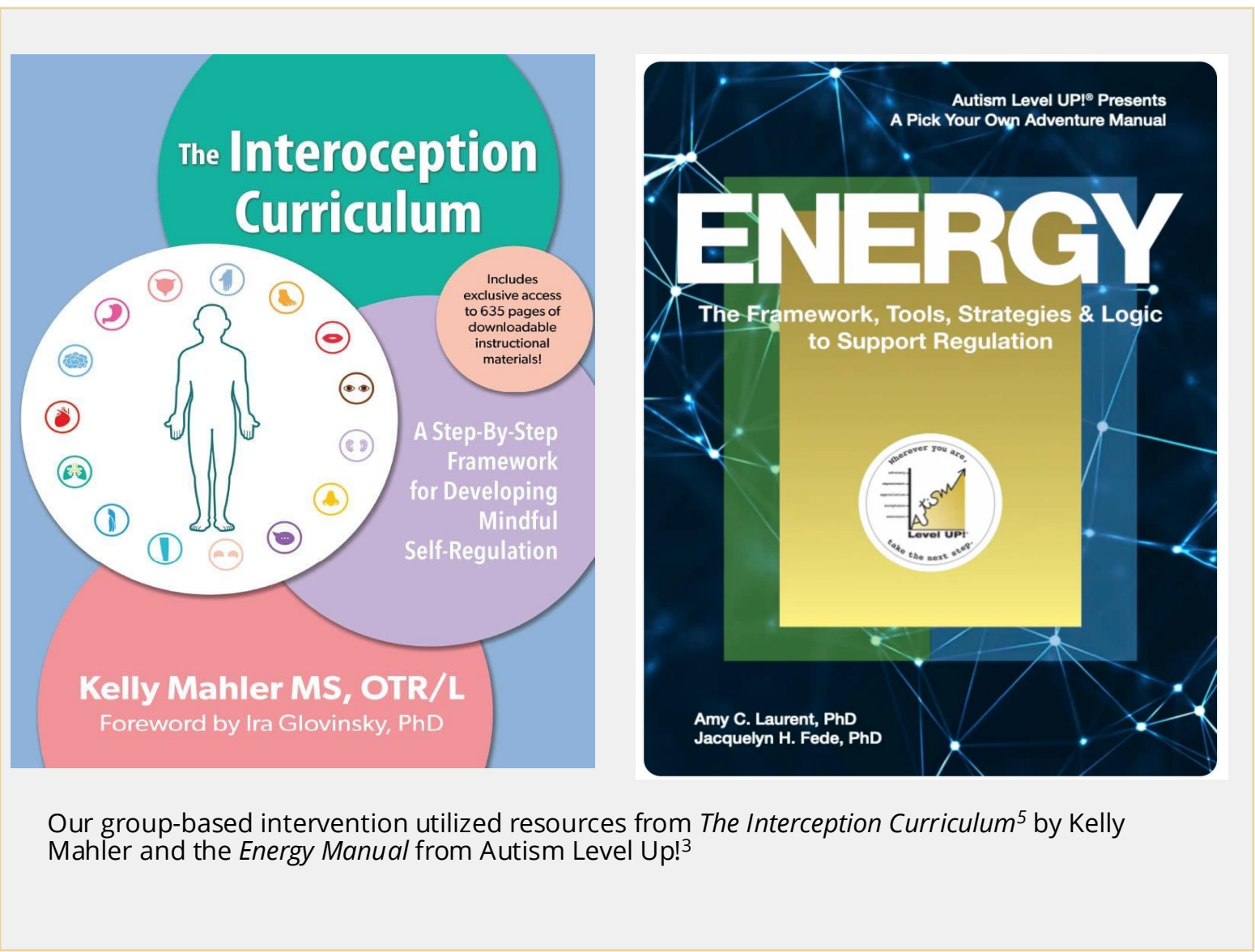
Curricula

The Interoception Curriculum⁵

ENERGY³ from Autism Level Up!

Helps individuals build awareness and understanding of their internal body signals to support emotional regulation and daily functioning.

Provides individualized tools and strategies for emotional regulation using the concept of energy levels and energy needed for a task.



Results

12-week group intervention focused on supporting emotional regulation

Group-Based Intervention Sample – Week 1

Intervention was shared with therapy team at TSFC.

Weekly plan includes:

- Materials list
- Activities
- Parent Resources

WEEK 1 Materials List

- Handouts & Visuals
 - Autism Level Up! Energy Meter Examples
 - Energy Meter blank copies
- Art Supplies
 - Paper
 - Pens/pencils + other coloring materials (e.g. crayons, colored pencils, etc.)
 - Stickers
 - Magazines
 - Scissors
 - Glue

WEEK 1 - Introduction

Timeline:

- Icebreaker (15 minutes)
- Group Expectations (10 minutes)
- Explain Interoception and Autism Level Up (20 minutes)
- Create Energy Meter (20 minutes)
- Wrap up (10 minutes)

Agenda:

- Icebreaker:
 - Self introduction and share fun fact
 - Activity: Common Ground - Students start seated in a circle and stand up or raise their hand when the statement applies to them. "Stand up if you have a pet", "Stand up if you are nervous on the first day of something new"
- Explain group plans and expectations; participants help establish group expectations and together create a list of group norms.
- Examples of group norms: respect other's thoughts and feelings, take turns speaking, sharing materials, communicate when you need a break
- Explain Interoception and Autism Level Up - purpose, program outline, goals
- Explain Autism Level Up! Energy Meter (present different options/versions to cater to different interests)
- Have kids make own meter
- Wrap up: share their Energy Meter with the group

WEEK 1 Parent Resources

- Intro to Interoception page on Kelly Mahler's website - <https://www.kelly-mahler.com/what-is-interoception/>
- Video "What is interoception" - <https://www.kelly-mahler.com/resources/videos/how-i-feel-episode-1-what-is-interoception/>
- Autism Level Up! Website - <https://www.autismlevelup.com/>
- Autism Level Up! Energy Meter - <https://www.autismlevelup.com/#tools>

"We appreciate the clear structure and thoughtful organization. We can't wait to implement it!"- TSFC Therapists

Discussion

First-hand reports and research demonstrate a need and preference for learning emotional regulation skills while following the pillars for neurodiversity affirming care. However, there is limited research supporting the effectiveness of several interventions and many research papers only include Autistic individuals. Further research is needed to support emotional regulation curriculums that include more neurodivergent communities.

Conclusion

The group format offers a supportive social environment where adolescents can build self-awareness and peer connections.

Next steps: TSFC plans to implement the group in the near future. OTs will establish intake process and outcome measurements.

References

1. Cherewick, M. (2023). Future directions for neurodiversity affirming autism interventions: Adolescence is a second sensitive period to support positive developmental trajectories. *Current Psychology*, 43(4), 9191-9198. <https://doi.org/10.1007/s12144-023-05053-7>
2. Dallman, A., Williams, K., & Villa, L. (2022). Neurodiversity-affirming practices are a moral imperative for occupational therapy. *The Open Journal of Occupational Therapy*, 10(2), 1-9. <https://doi.org/10.15453/2168-6408.1937>
3. Fede, J., & Laurent, A. (2023). *ENERGY*. Autism Level Up!
4. Gardner, F. (2017). *First-hand perspectives on behavioral interventions for autistic people and people with other developmental disabilities*. Autistic Self Advocacy Network. <https://autisticadvocacy.org/wp-content/uploads/2017/05/Behavioral-Interventions-Report-Final.pdf>
5. Mahler, K. (2019). *The interoception curriculum: A step-by-step guide to developing mindful self-regulation*. Kelly Mahler Publications.
6. Mahler, K., Hample, K., Jones, C., Sensenig, J., Thomasco, P., & Hilton, C. (2022). Impact of an interoception-based program on emotion regulation in autistic children. *Occupational Therapy International*, 2022, Article 9328967. <https://doi.org/10.1155/2022/9328967>