

Yoga for Wellbeing in Autistic Adults

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Autism

- Involves a wide range of social and communication challenges.
- Is currently diagnosed in 1 of 44 births (Maenner et al., 2021).
- Thanks to decades of research and practice, children with autism are being included in classrooms with typical peers, forming friendships, and learning new social and communication skills

But In Adulthood

- Increases in anxiety, depression, physical health challenges, isolation/loneliness, unemployment, suicidality, incarceration (Lawson et al., 2020)
- Lack of research serving this population

Our Solution

- Community-based yoga designed with and for autistic adults
- Our team will conduct community-engaged research investigating the benefits of community yoga for autistic adults' mental, emotional, and physical wellbeing
- In a randomized waitlist-controlled trial.

Yoga

- Yoga has been found to reduce anxiety and depression while improving physical health in adults with a variety of health conditions (Pascoe et al., 2017).
- Further, mindful movement and yoga is an evidence-based practice for children with autism that provides social, communication, and behavioral benefits (Hume et al., 2021)
- However, the benefits of yoga have rarely been studied in autistic adults.



We will co-construct a **community-based yoga** program with and for **autistic adults** to support their **mental, emotional, and physical wellbeing.**

Community Partner

- Research Site and Community Partner, **Open Up Pittsburgh**
- 501c(3) teaching inclusive mindfulness tools through movement and art practices that center people living with disabilities.
- Serves over 2,000 community members through in **Lawrenceville** studio and virtual classes
- Over 60 diverse participants join weekly in studio
- <https://www.open-up.org/>



Project Description

- **Phase 1:** Development of yoga program tailored to support mental and physical needs of autistic adults
- Development team includes:
 - Pitt researchers in autism, yoga, mindfulness, and mental health
 - Autistic Adults Participating in Open Up Pittsburgh's ongoing programs
 - Open Up Pittsburgh Leaders and Instructors
- **Phase 2:** Randomized waitlist-controlled test of program with Pittsburgh area autistic adults
- **Phase 3:** Project and community dissemination; Applications for external funding

Potential Impact

- Leverage the Teaming grant into a mutually beneficial collaboration that generates new knowledge, gains external funding, and delivers services that positively impact wellbeing in our communities.

References

- Hume et al. (2021). Evidence-based practices for children, youth, and young adults with autism: Third generation review. *Journal of autism and developmental disorders*.
- Lawson et al. (2020). Cross-sectional and longitudinal predictors of quality of life in autistic individuals from adolescence to adulthood: The role of mental health and sleep quality. *Autism*, 24(4), 954-967.
- Maenner, M. J. et al. (2021). Prevalence and characteristics of autism spectrum disorder among children aged 8 years—autism and developmental disabilities monitoring network, 11 sites, United States, 2018. *MMWR Surveillance Summaries*, 70(11), 1.
- Pascoe et al. (2017). Yoga, mindfulness-based stress reduction and stress-related physiological measures: A meta-analysis. *Psychoneuroendocrinology*, 86, 152-168.

Broader Partner Ecosystem

Robertson (PI; Special Education)

- Project Implementation and Management, Research Design, Data Collection and Analysis, Autism and Behavioral Wellbeing, Academic Dissemination and Grant Writing

Vogel (Co-I; Open Up Pittsburgh)

- Setting, Participants, Instructors, Programming, Community Dissemination, Community Leadership

Sherman (Co-I; Exercise Physiology)

- Renowned Expert in Yoga Research and Practice, Physical Wellbeing, Mindful Movement Programming, NIH Funded

Mazefsky & Conner (Co-Is; Psychiatry)

- Renowned experts in Autism, Mindfulness, and Emotional Wellbeing, NIH-Funded

Co-I on the Autism Spectrum (TBD) & Develop. Group

- Lived Experience with Measurement Constructs of Interest, Assure Relevance and Value to Lived Experience of Autism

GSRs (1 in SoE; 1 in SoM; Embedded at Open Up)

- Data Collection and Analysis

