

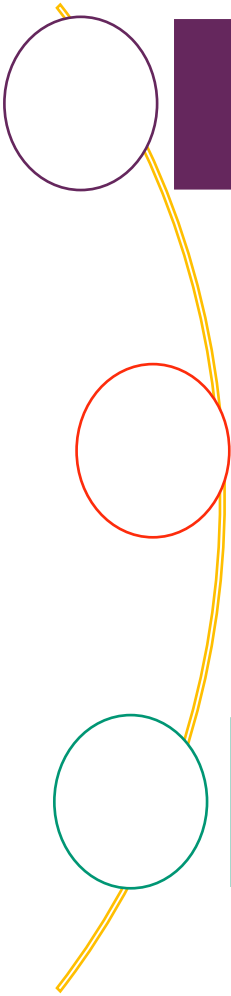
## Empowering Occupational Therapy: Integrating Multi-Sensory Environments and Community Partnerships



Nicole Halliwell DSc., OTR/L  
John Patro Jr., OTD, OTR/L  
Monmouth University



# Session Learning Objectives



Explain MSE's projects role in OT education and critically evaluate its modeled use for faculty scholarship and service.

Understand exemplar implementation MSE project across clinical and educational settings.

Identify strategies to engage community partners for supporting MSE related service and scholarship.

# Multi-Sensory Environment (MSE): Overview

A space intentionally designed for *immersive* and *individualized* sensory experiences that can be used to support sensory exploration, development, and relaxation

(Cameron et al., 2020; Haegele & Porretta, 2014)



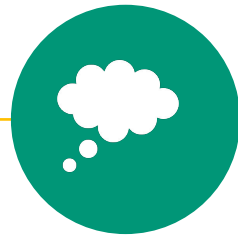
# Existing Evidence Supporting MSE in Community Health



Reduces frequency of maladaptive behaviors

(Breslin et al., 2020)

Reduce feelings of anxiety and agitation



(Consentino et al., 2021)



Increase feelings of relaxation

(Consentino et al., 2021)



Consistent positive health outcomes associated with various populations

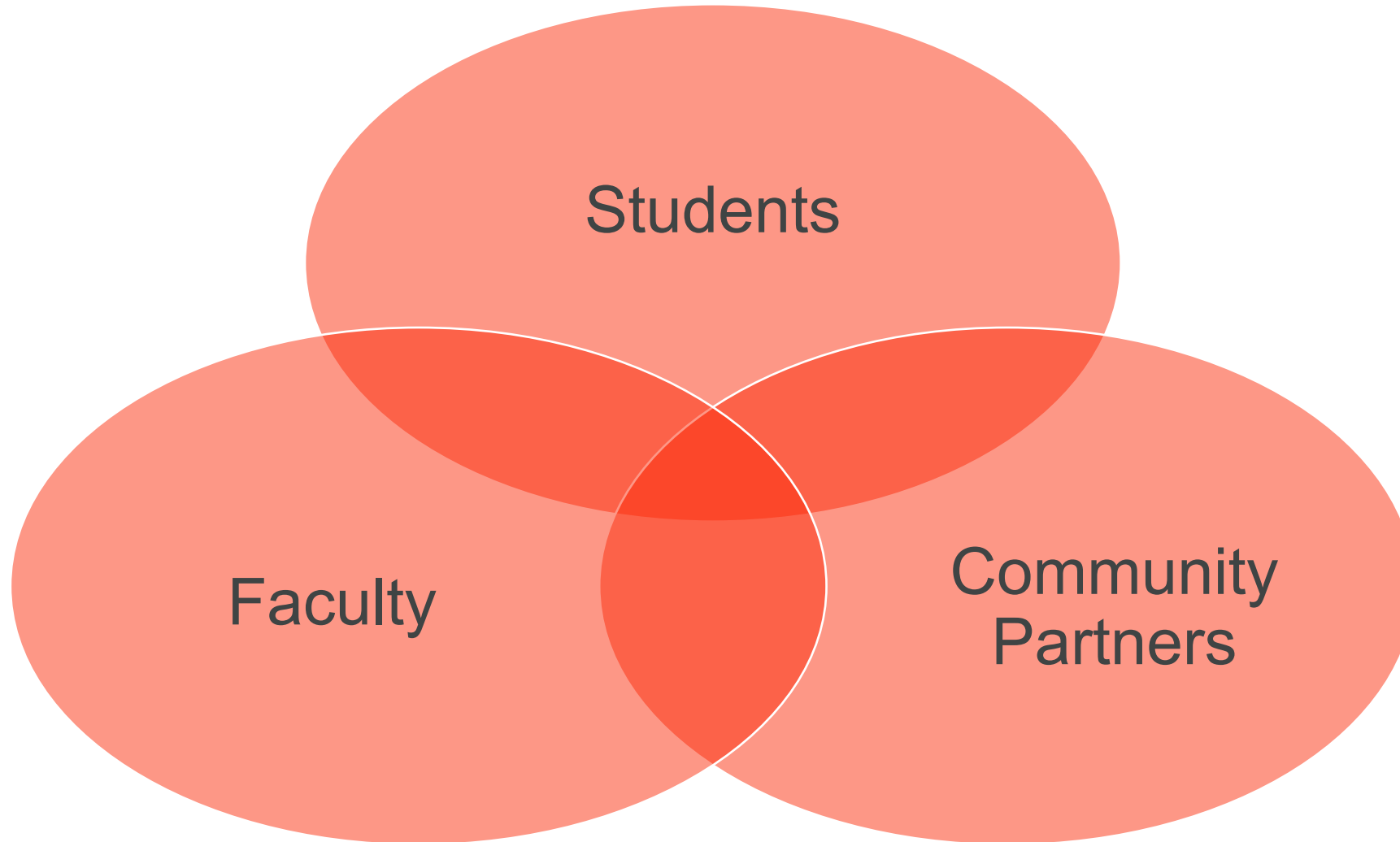
(Maseda et al., 2015; Carter & Stephenson, 2012; Cameron et al., 2019)





# Monmouth University OTD MSE Lab Space


# Centralized Service Learning Model (CSLM)



(Milton and Otty, 2018)

# MSE Community Wellness Project as CSLM

Strategic approach to higher education that enhances student, faculty, and community collaboration



Non-traditional service learning incorporated into concurrent coursework



Intentional curriculum design to connect coursework, faculty research, and community health



## Students

**Specialized  
training**

**Course content  
application**

**Scholarship  
opportunities**

## Faculty

**Course content  
application**

**Professional  
development**

**Scholarship  
opportunities**

## Community Partners

**Access to health  
services**

**Promoting  
community health  
outcomes**

**Professional  
development/  
training**







Teaching



Scholarship



Service

# Tripartite Faculty Role

# Project Development & Implementation

Establishment  
of community  
partners

Identification of  
grant funding  
and university  
resources

Development of  
evaluation  
methods

# Teaching of Related Course Content



## ● Sensory Modulation Across the Lifespan

- Direct teaching/training in MSE
- Interactive case studies
- Intervention planning
- Sensory diet/sensory space projects

## ● Principles of Practice II: Psychosocial Occupational Therapy

- Psychosocial/ mental health support concepts
- Level I Fieldwork opportunity
- Community partners

## ● Quantitative/Qualitative Methods

- Designing/conducting research studies
- Data analysis

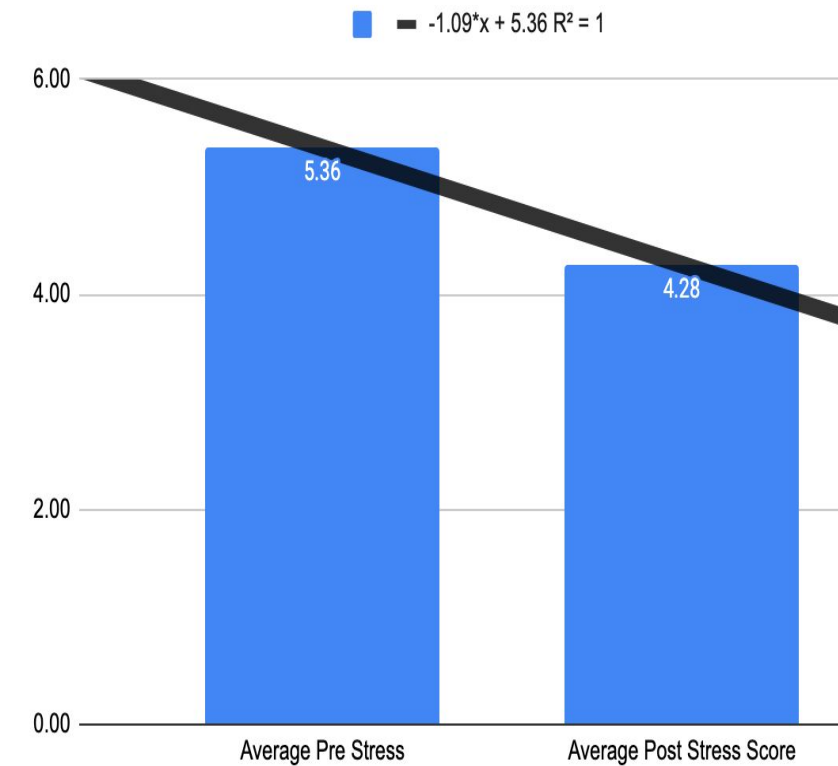
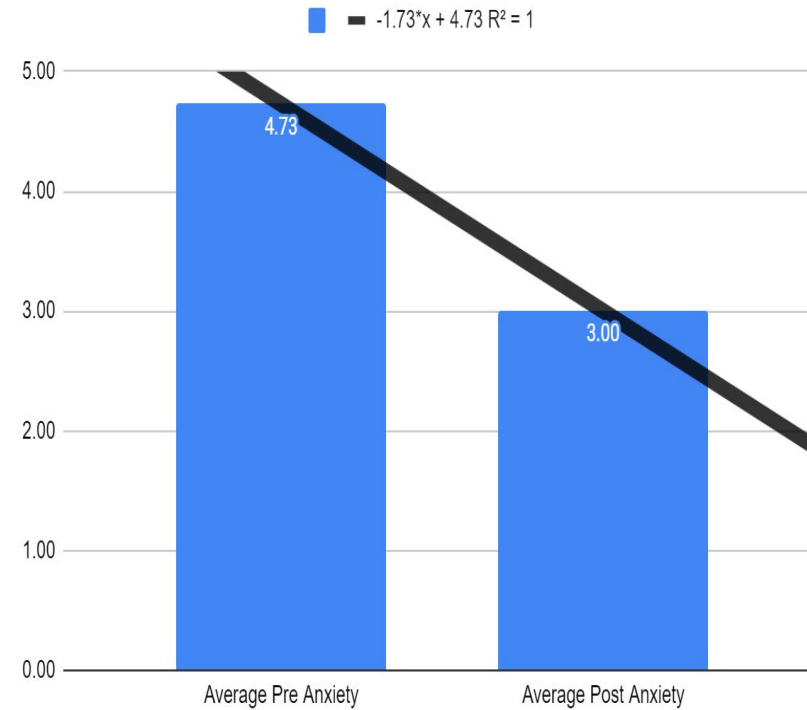
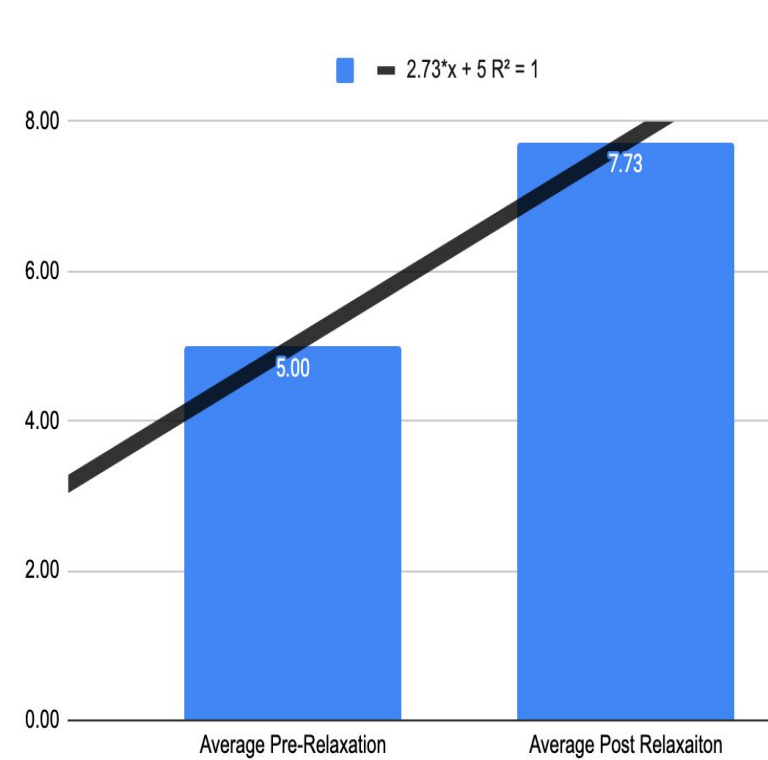
# Grant Funding & Community Partnerships

Monmouth  
University  
Diversity and  
Innovation  
Grant Program

Community  
Partner  
Organizations  
&  
Level I  
Fieldwork  
Partners

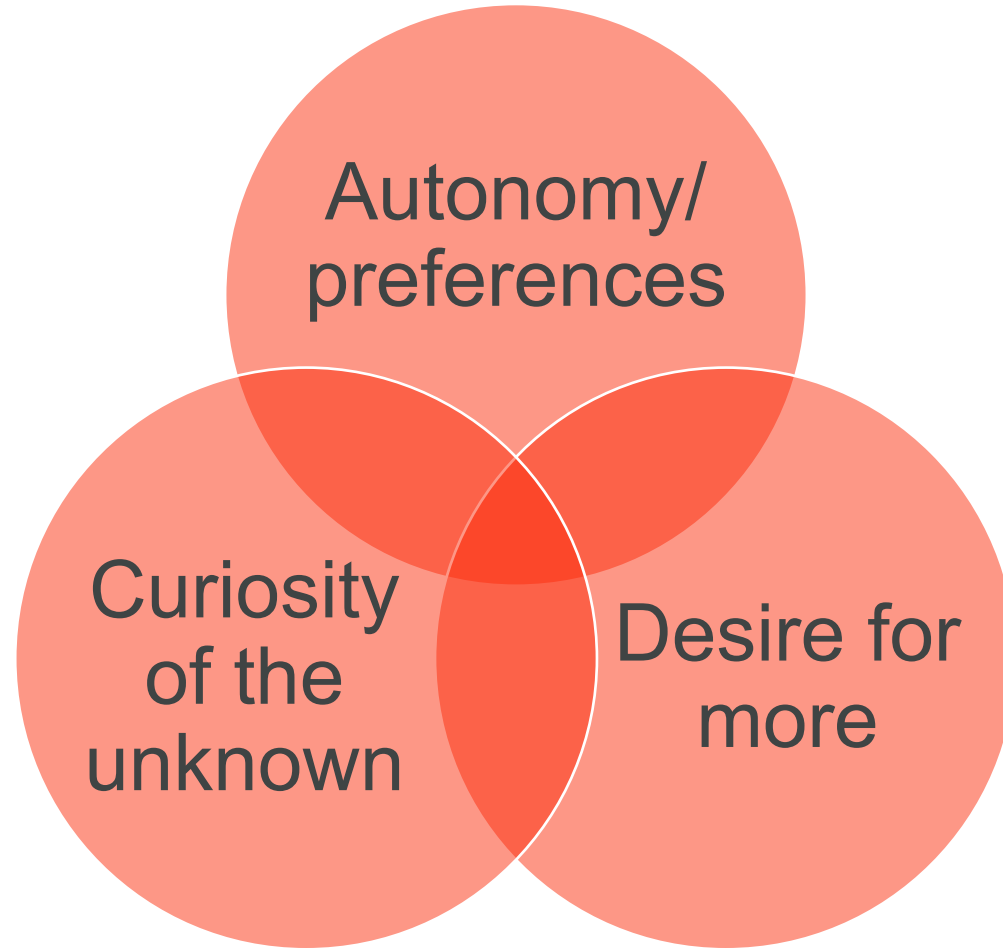


# Results of MSE Community Wellness Project





# Results of MSE Community Wellness Project



# Future Directions: MSE Community Wellness Project

Increased customization flexibility to meet diverse sensory needs



Identification of methods for program enhancement



Diversification of offerings through continued curriculum integration, current/future OTD capstones

# MSE Community Wellness Project



**Bubble tube**



**MSE Lab**



**Bean bag**

# Lessons Learned & Tips for Future Implementation

## **Limitations of the present study:**

- Small size convenience sample
- Protocol inclusivity for persons with visual deficits
- Limited use of space capabilities and equipment

## **Considerations for future implementation:**

- Enhancing customization of MSE experiences
- Planning for material upkeep and prevention of damage
- Addition of standardized measurement
- Expansion of offerings
- Next steps for programming

# Q&A



# References

- Breslin, L., Guerra, N., Ganz, L., & Ervin, D. (2019). Clinical utility of multisensory environments for people with intellectual and developmental disabilities: A scoping review. *American Journal of Occupational Therapy*, *74*(1), 7401205060p1-7401205060p12.
- Cameron, A., Burns, P., Garner, A., Lau, S., Dixon, R., Pascoe, C., & Szafraniec, M. (2020). Making Sense of Multi-Sensory Environments: A Scoping Review. *International Journal of Disability, Development and Education*, *67*(6), 630–656.  
<https://doi.org/10.1080/1034912X.2019.1634247>
- Carter, M., & Stephenson, J. (2011). The use of multi-sensory environments in schools servicing children with severe disabilities. *Journal of Developmental and Physical Disabilities*, *24*(1), 95–109. <https://doi.org/10.1007/s10882-011-9257-x>
- Haegele, J. A., & Porretta, D. L. (2014). Snoezelen multisensory environment: An overview of research and practical implications. *PALAESTRA*, *28*(4), Article 4. <https://js.sagamorepub.com/palaestra/article/view/6138>

# References

Halliwell, N., Patro, J., Aguilar, T., Storino, F. (2024, March). Multisensory environment program improving relaxation and reducing stress and anxiety for community health. [Poster Presentation]. American Occupational Therapy Association INSPIRE 2024, Orlando, FL.

Mayersen, D., Dixon, R., Lau, S., Garner, A., Burns, P., Cameron, A., & Szafraniec, M. (2019). “She would love that”: Identifying community needs in a multisensory environment. *Progress in Community Health Partnerships: Research, Education, and Action*, 13(1), 5–6. <https://doi.org/10.1353/cpr.2019.0002>

Unwin, K. L., Powell, G., & Jones, C. R. G. (2021). A sequential mixed-methods approach to exploring the experiences of practitioners who have worked in multi-sensory environments with autistic children. *Research in Developmental Disabilities*, 118, 104061. <https://doi.org/10.1016/j.ridd.2021.104061>

# Presenters



**Nicole Halliwell**

Assistant Professor  
nhalliwe@monmouth.edu  
732-923-4347



**John Patro**

Associate Professor  
Chair/ Program Director  
jpatro@monmouth.edu  
732-923-4557



American  
Occupational Therapy  
Association