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2023

Effects of Physical Activity, Play and Mindfulness-Based Interventions on Emotional Regulation and Emotional Awareness Skills in Adults with Developmental Disabilities at a Day-Time Assistance Program

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Background

According to literature, deficiencies in emotional regulation and emotional awareness skills are more prevalent among adults diagnosed with developmental disabilities. Limited research shows promising support that the use of noninvasive treatments such as exercise, and play can promote emotional well-being among this population. This project aims to better understand the benefits of physical activity, play and mindfulness-based interventions on emotional regulation skills in adults with developmental disabilities who attend a day-time assistance program.

Methods

- The occupational therapy doctorate (OTD) student developed and implemented an inclusive group-based program that served adults with developmental disabilities.
- Throughout the duration of this project approximately 45, 30-minute group sessions were completed. A pre-and-post assessment survey was administered to gather quantitative data on the effectiveness of program in relation to frequency of behaviors.
- The number of participants in each group was dependent on staffing and scheduling for that given day. On average, each group session contained a minimum of five participants and a maximum of 12, with at least two staff members assisting with facilitation.

Capstone Site

This capstone project was conducted at Lauren's Institute for Education's Adult Day Treatment program, Located in Gilbert, AZ.

Program Objectives

- Develop and deliver group session plans that incorporate physical activity, play, and mindfulness-based interventions while maintaining age-appropriateness to promote emotional regulation and emotional awareness skills in adults with developmental disabilities.
- Deliver an educational handbook consisting of 8 unique session plans to increase long-term sustainability of the program and support clients and staff members at Lauren's Institute for Education.

Participants

- The participants for this capstone project were predetermined and recruited by Lauren's Institute for Education's Adult Day Treatment program director, Ashley Watzke. A total of 34 clients who attended the site's day program participated and 9 on-site staff members assisted with project facilitation.
- The ages of participants ranged from 21 to 64 years old, and diagnoses of each client varied.



References available via QR code:

Figure 1

Mean Scores Per Response

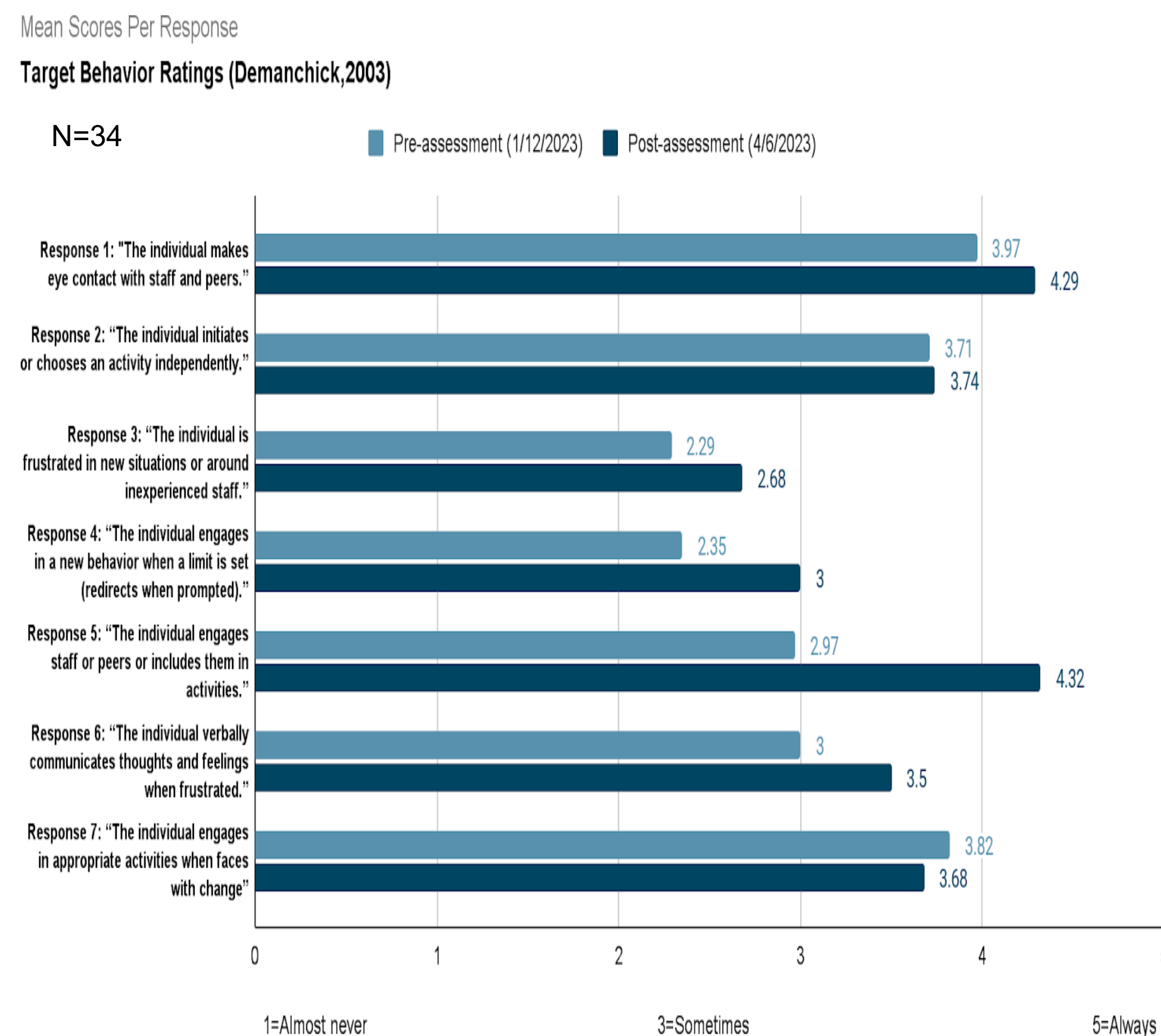
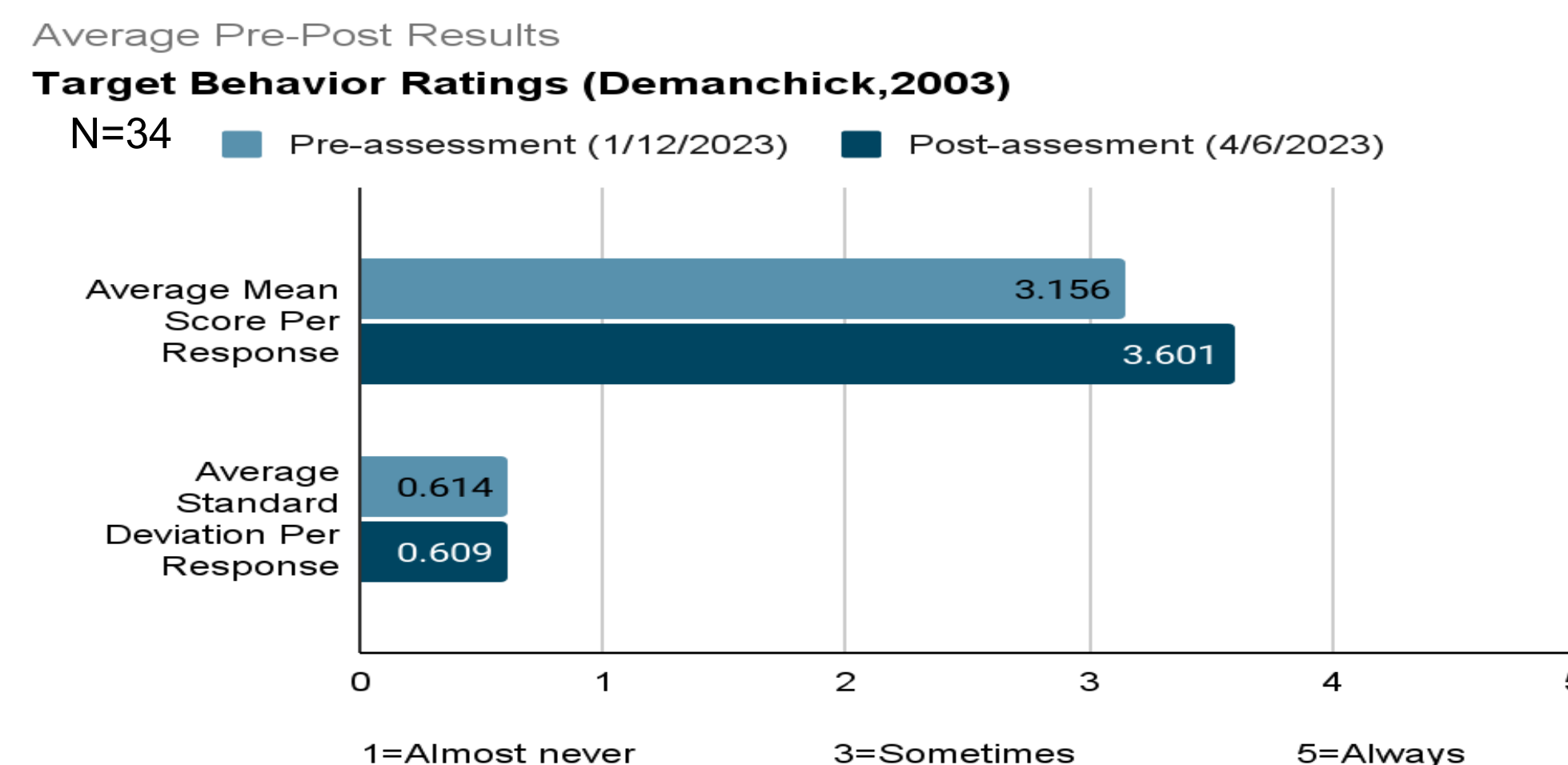


Figure 2

Average Pre-Post Results



Guiding Theories

- Cognitive-Behavioral Frame of Reference emphasizes the importance of one's thoughts, behaviors, emotions, physiological responses, and environment (Duncan, 2011). Examples of Cognitive-Behavioral based interventions that were used in this project are positive self-talk, relaxation, modeling, and role-playing (Pietrangelo, 2019).
- Model of Human Occupation (MOHO) Operates under the open systems theory. Participation in occupations is influenced by an individual's input from environment, personal motivation level, patterns and routines, and performance capacity (Kielhofner & Burke, 1980). Group session plans incorporated interventions that increased volition among participants and established healthy routines, to encourage appropriate emotional responses.

Data Collection and Analysis

- Lauren's Institute for Education staff members were asked to respond to the best of their knowledge, based on their experiences and observations working with the clients who attend the Adult Day Treatment program.
- Using the Wilcoxon signed ranks test, the data analysis revealed that there were significant increases from pre-to-post-test scores on 4 out of 7 response questions. Also, the collected data demonstrated a significant difference in the average pre-to-post-test score.

Discussion

- This capstone project was specifically designed to serve adult clients and staff members who are connected to Lauren's Institute for Education.
- The results for this project further supports existing evidence that physical activity, play, and mindfulness-based interventions can be used as tools to reduce the frequency of target behaviors.
- Staff members found program handbook beneficial and verbally reported a high level of confidence with program carryover and long-term sustainability.

Conclusion

- This capstone project attempted to promote emotional regulation and social awareness skills in adults with developmental disabilities using physical activity, play, and mindfulness-based interventions.
- It is important that adults with developmental disabilities receive continuous support relating to their social and emotional needs.
- The data collected from this project provides further evidence that non-invasive mindfulness-based interventions such as physical activity and play can promote emotional regulation and emotional awareness skills in adults with developmental disabilities and should be considered for future program use.

Acknowledgments

Brandi Fulwider, PhD, OTR/L
Melinda Delbridge, MS, OTR/L, CBIS
Curt Bay, PhD
Stephen Demanchick Ph.D, LMHC, RPT
Ashley Watzke, Adult Day Treatment program director at L.I.F.E
All the staff members at L.I.F.E and the 34 participants who were involved in this project.