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Using Sensory-Based Approaches to Manage the Effects of Adverse Childhood Experiences Among Children in an Acute Behavioral Health Center

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Purpose

To develop, implement and evaluate a sensory-based program to assist in mitigating the effects of ACEs in children.

Background

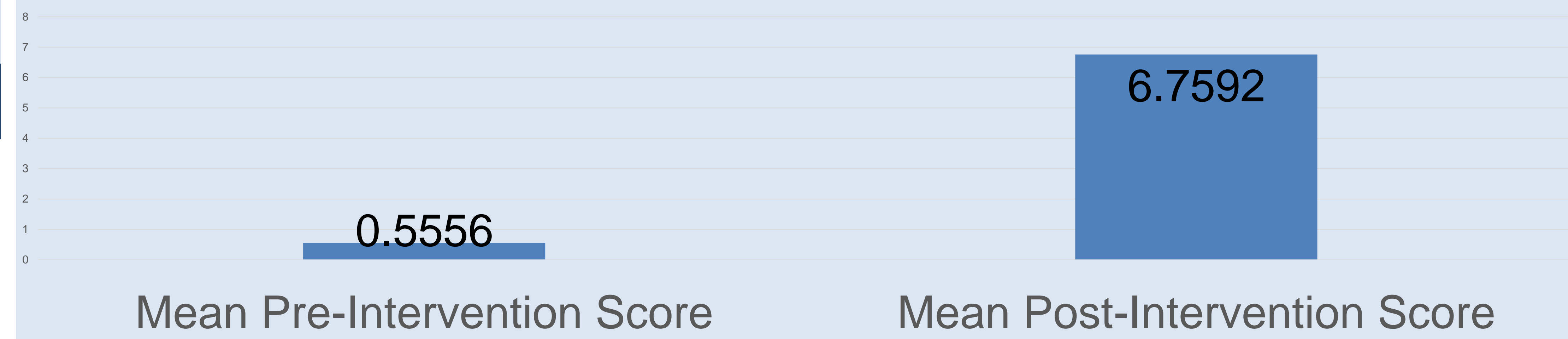
Adverse childhood experiences are traumatic events that occur between birth and the age of 17 years. ACEs are broadly categorized into abuse, neglect, and household dysfunction (CDC, 2019).

Exposure to ACEs causes physical, cognitive and emotional deficits that impact participation in occupations. Some effects of ACEs include suicidal ideations, maladaptive attachment patterns, personality disorders, aggression, self-harm and sensory processing disorders (Saleena & Suja, 2019; Ricky et al., 2019; Crow et al., 2014; Björkenstam et al., 2016; Howard et al., 2020).

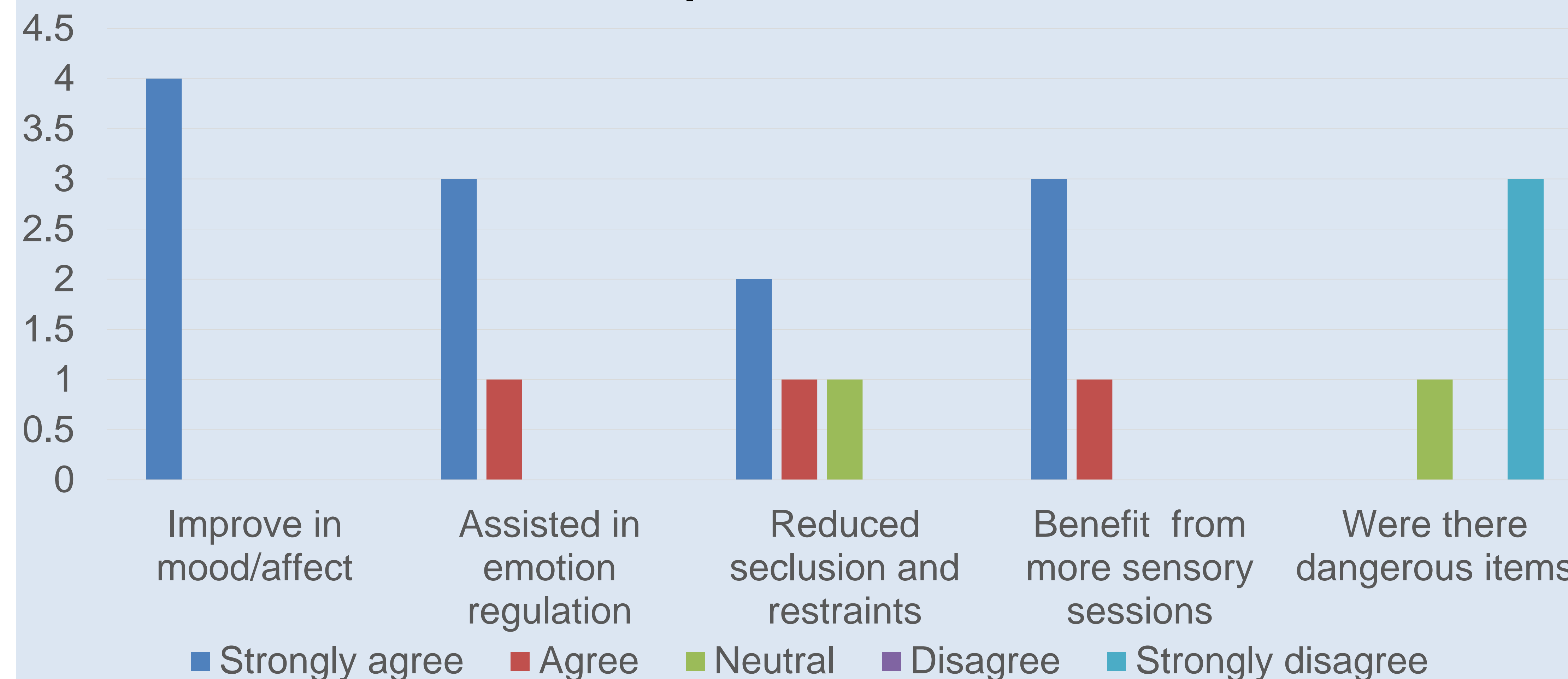
Studies suggest that occupational therapy interventions assist in mitigating the effects of ACEs (Anderson, 2005; Whitney & Cronin, 2019).

Results

Mean difference between pre-and post- intervention scores



Staff/Nurses/Therapists Feedback Questionnaire



Discussion

- The outcome measures revealed that this program was beneficial in increasing the participants knowledge and use of self-regulation strategies, reducing incidents of seclusion and restraint, and improving the participants' mood.
- Children with maladaptive behaviors or worsening mental health symptoms benefitted from 1:1 sessions.
- This confirms the literature findings in support of sensory-based interventions for children with sensory processing deficits in particular those children with ACEs.
- This capstone supports the use of sensory-based interventions for children between ages 5-12 years who struggle with ACEs because these interventions were found to support their mental health and well-being.
- OTs and OT researchers need to further investigate in a more controlled environment how sensory-based strategies can promote recovery for children with ACEs.

Methodology

Program development

- Reviewed literature
- Conducted a needs assessment
- Used occupational therapy theory
- Developed a proposed project plan covering the following objectives:
 - Participants will develop sensory kits
 - Participants will independently utilize sensory strategies
 - Participants will identify positive coping skills
 - Participants will demonstrate improvement in self-regulation
- Obtained IRB approval
- Adjusted plan according to needs assessment.

Site: St. Luke's Behavioral Health Center

Ages: 5-12 years N=54

Intervention

Group sessions

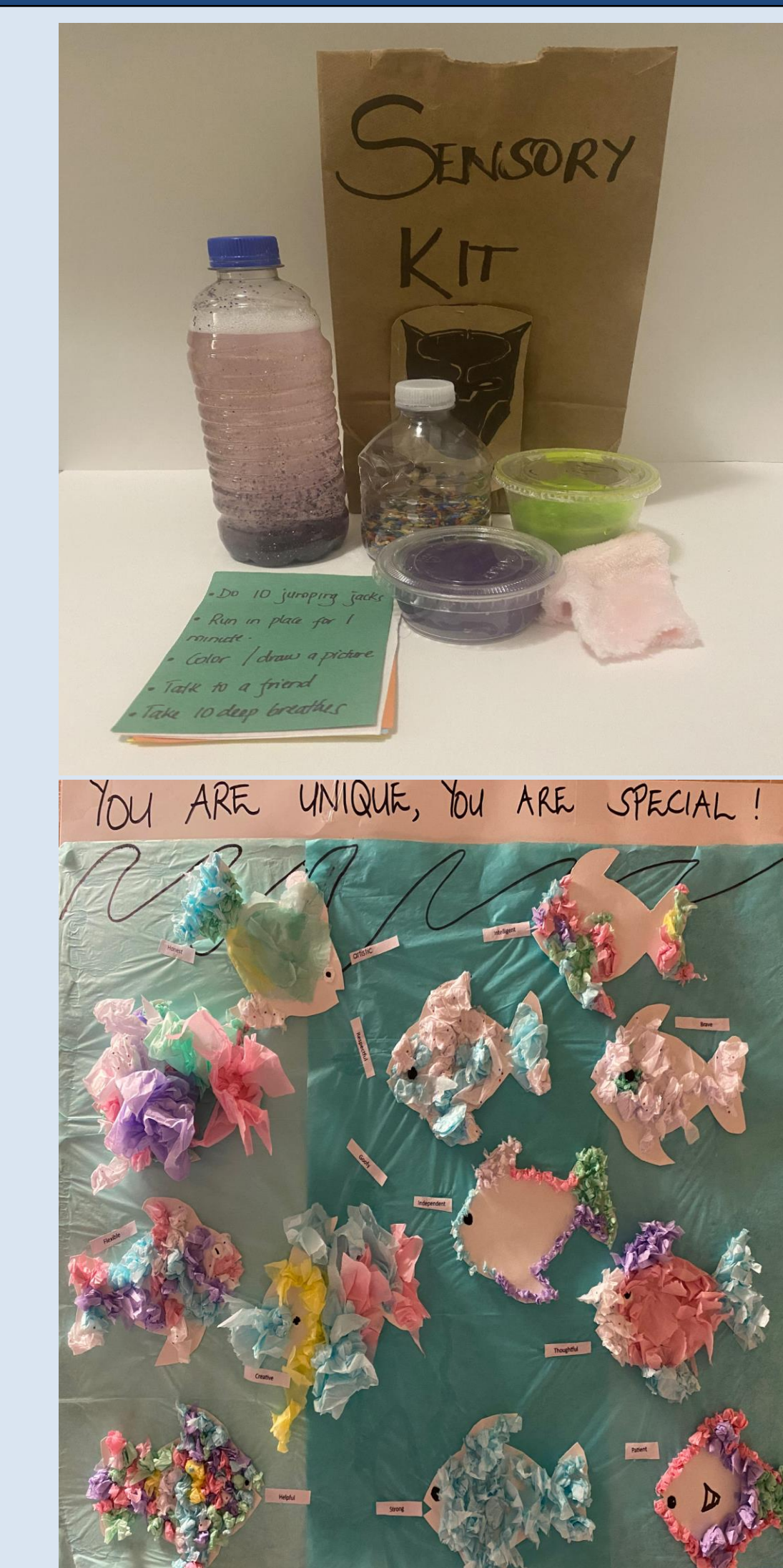
- **Activity 1:** (5 min) Introduction and gross motor activity
- **Activity 2:** (20 min) Sensory-based activity
- **Activity 3:** (5 min) Mindful meditation or breathing activity

1:1 sessions

- 15 minutes according to the child's needs

Program evaluation

- Pre-and post-intervention questionnaires
- Observation questionnaires
- Staff/Nurses/Therapists questionnaire



Limitations

- Limited literature on sensory-based interventions for children with ACEs.
- Delay in implementation due to IRB requirements
- Lack of effective screening tools
- Not included in the discharge team
- High employee turnover
- Limited use of interventions due to COVID-19

Acknowledgement

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References

See provided reference list