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## Exploring Sensory Processing & Inclusivity within a Fitness Gym Environment

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# Exploring Sensory Processing & Inclusivity within a Fitness Gym Environment

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## BACKGROUND

An individual's sensory processing involves the reception, modulation, integration, and organization of sensory stimuli, as well as behavioral responses to sensory input (Dunn, 2001). The STAR Institute for Sensory Processing Disorder (n.d.) affirms that at least 1 out of 20 children encounter symptoms of sensory processing disorder (SPD), while 1 in 6 face symptoms of sensory disruption (STAR Institute for SPD, n.d.). As adults, they may come across troubles with completing routines and tasks for work, social participation, and leisure (STAR Institute for SPD, n.d.). Since most individuals with these sensory processing challenges have struggled with symptoms continuously, they are likely to encounter secondary effects such as depression, underachievement, and social isolation (STAR Institute for SPD, n.d.). Adults with sensory processing deficits may experience difficulties with establishing their role in society, maintaining social support systems, and pursuing higher education (Clinge et al., 2016). One area of sensory processing challenges that individuals may struggle with is sensory modulation, which is defined as the central and autonomic nervous system's capability to sustain harmony by regulating and organizing sensory input and facilitate graded response (Atchinson & Morkut, 2017).

## PROBLEM

Sensory processing challenges can potentially hinder an individual's ability to participate in meaningful occupations, including gym participation. OTs are professionals who understand the dynamic interaction between individuals, environments, and the occupations in which they wish to partake and specialize in promoting greater accessibility (AOTA, 2020). However, OTs have yet to create programming or recommendations to enhance the experience and participation individuals in a fitness gym context. The current literature on sensory processing preferences within a gym environment is limited, creating leeway for exploration.

## NEEDS ASSESSMENT

### Participants

The participants for the surveys were recruited on-site and via email through the USAHS San Marcos institution. This institution previously offered students memberships to Crunch Fitness in San Marcos, CA. The criteria for recruiting participants included an active gym membership.

### Sensory-based Observational Checklist

An observational checklist was tailored to specifically fit the environment within the Crunch Fitness, San Marcos location. Such checklists helped provide insight on which tangible modifications could be made to enhance gym participation within the given variables in this specific environment.

### Surveys

The survey for gym-goers was created to assess whether there was a need for a program to aid in managing strong sensory preferences. The survey for the staff was intended to gather background information on how well-equipped they were in understanding and assisting clients with sensory processing needs.

## RESULTS

### Gym-going Participant Survey:

- 54 total participants
  - Gender: 19 male & 35 female
  - Age range: 18 – 64
  - Attendance: Daily – 1x/month or less

Survey Question	Average Response
Pre-existing knowledge of sensory processing (1-5)	3.59
Understanding own sensory processing preferences (1-5)	3.67
Inclusion satisfaction within facility (1-5)	3.8
Social inclusion satisfaction within facility (1-5)	3.7

### Staff Participant Survey:

- 8 total participants
  - All male

Survey Question	Average Response
Pre-existing knowledge of sensory processing (1-5)	3.59
Understanding own sensory processing preferences (1-5)	3.67
Inclusion satisfaction within facility (1-5)	3.8
Social inclusion satisfaction within facility (1-10)	8.75

SCAN QR CODE FOR REFERENCES



\*\*Special thank you to Dr. Martinez & Bryan MacDermott!\*\*



\*SCAN QR CODE FOR DELIVERABLES

## PROGRAM DEVELOPMENT

Deliverable	Description
Staff Training Handouts	Provide incoming/current staff members with basic understanding on sensory processing & inclusion
Sensory-friendly Fitness Class	Provide facility/clients with curriculum to aid self-regulation through deep pressure, vestibular, & proprioceptive input
Sensory Planning Guide	Provide clients with information to prepare for new sensory environment
Sensory-friendly Space	Visual of how a space within facility could be modified to reduce sensory overstimulation

## DISCUSSION

- Helped uncover current needs within facility
- Program is based on common themes found in needs assessment results regarding sensory preferences & inclusion
  - Optimize gym participation & feelings of inclusion
- OTs focus on supporting clients in maximizing abilities to engage in meaningful activities & promote overall health/wellness (AOTA, 2020)
- Further research to evaluate the efficacy of components & client satisfaction rates