



TREE OF LIFE

CELEBRATE BRIGHT FUTURE

RESEARCH SUMMARY

“Autism is a lifelong and complex neurodevelopmental disorder that affects the way a person communicates and relates to other people and the world around them. It is a spectrum condition, so it affects people in different ways” (Lowe, Gaudion, McGinley, & Kew, 2014). People with ASD are different in their ability to live independently. Some of the people with ASD may be able to live with-out support, while others may not. Apart from that, they have problems such as “sensory sensitivity to visual, auditory, tactile, proprioceptive, gustatory and olfactory stimuli” (Hinder, 2004).

Evidence suggests an appropriately designed garden will encourage daily, habitual interaction with nature and can provide sensory integration opportunities for people with autism (Gaines, Bourne, Pearson, & Kleibrink, 2016). Moreover, it can improve their social, psychological, and cognitive well-being. There is plenty of evidence which shows how the exercise of gardening can have a positive impact on mood and enhance wellbeing. Hence, in this project, a gardening space is provided with the aim of improvement in the psychological state of clients.

CHARACTERISTICS

Perception	Problem with spatial perception Impaired survey-based navigation skills
Cognition	Conceptualizing, planning, and sequencing thoughts and actions / remembering and interpreting subtle social cues
Sensation	Hypo-sensitive (under-reactive) Enjoy making loud noises Touching people and objects unnecessarily Like bright colors and sunlight Hyper-sensitive (over-reactive) Sensitive to loud noises Negative reaction to being touched Bothering by bright light

GOALS

- Improving wayfinding by providing curve forms
Curvilinear walls create memorable spaces that aid in wayfinding. (Gaines, Bourne, Pearson, & Kleibrink, 2016)
- Sensory comfort - Designing a space for mind and body
Sensory processing deficits in people with autism can make a built environment a distracting and even a frightening space. Designing environments based on their sensory needs can make the environment more pleasant for them.
- Incorporating vegetation in indoor environments
- Predictable Spaces / Facilitating visual access between different spaces
Having clear sight lines makes the space more predictable which help people with autism gain independence.



Shelves and Storage



Colorful Acoustic Panels

- Noise control
- Provides sequence and order in space



Stacking Chairs



Roller Shades

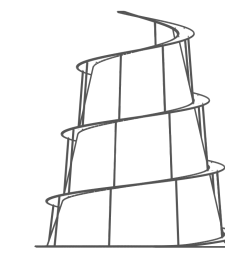
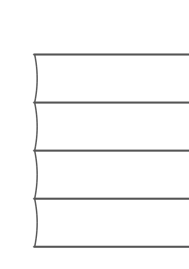
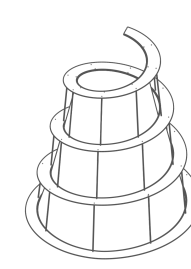
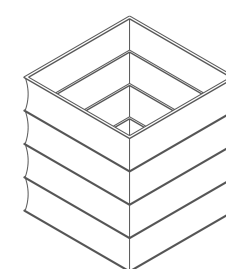
To be able to control the glare



Incorporating vegetation inside the training room

Providing a semi private space in class

This lightweight structure is mounted on the ceiling. In times of need this structure can be expanded to provide a semi private space and reduce visual sensory stimuli.



CONCEPT

The “Tree of Life” is a symbol of a fresh start in life, positive energy, good health, and a bright future. The “Tree of Life” represents growth and strength. A young tree starts out with shallow roots that strengthen and grow deeper over time. Branches start as small buds and stretch upwards, reaching for the sun and sky.

Just like the “Tree of Life”, a person with a cognitive disability can grow stronger and strives for greater knowledge and new experiences in the design facility. Hence, the tree of life is selected as the concept which shapes the branding, logo, and interior environment of this project.

SENSORY DIFFICULTIES

Auditory difficulties

Visual difficulties

Tactile difficulties

Vestibular difficulties

DESIGN CONSIDERATIONS

- Clearly defined areas; visible boundaries (visual cues); maintain sight lines for observation by staff.
- Provide a quiet room. Make it a separate identifiable area.
- Simplicity in planning increases comprehension and make the structure and order evident.
- Provide a withdrawal space or sensory integration room to lessen stress.
- Use acoustical tiles, draperies and carpet to minimize noise.
- Create a buffer space into the room from outside or from the hallway.
- Provide natural daylight with artificial light.
- Incorporate window coverings to control for glare and solar gain.
- Provide a flexible environment through placement of storage and screens that can be moved.
- Modify areas to accommodate the needs of individual people, changing them as needed.
- Fluorescent lighting should be replaced with dimmable light fixtures, task lights, and/or spotlights.



CELEBRATE BRIGHT
FUTURE



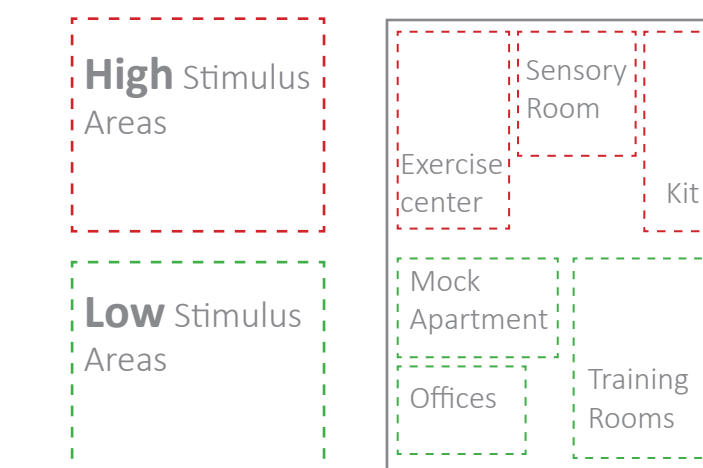
LED Lights

Folding walls



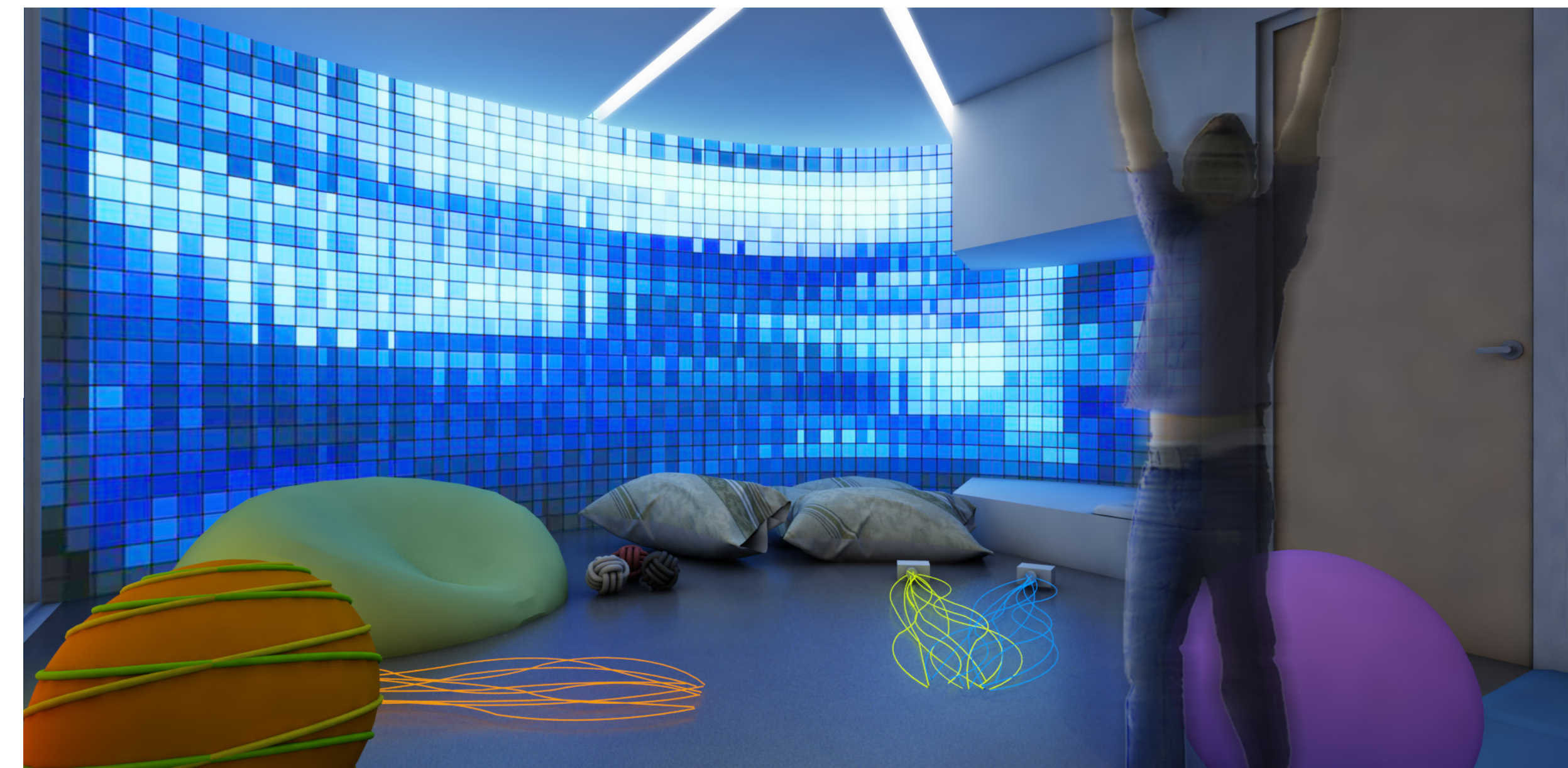
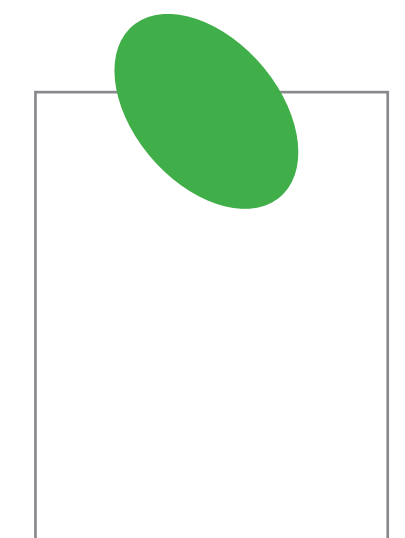
SENSORY ZONING

Zoning different areas by distinguishing the level of sound they produce



TEMPLE

This space is considered as a calming space. People with autism will start their journey from the sensory room. In sensory room their body will be calm. Then, they will go to the outdoor contemplation space. In this space their mind will get calm and they are ready to continue their every day routines.



References

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