

Sensory Room Design

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FACS 300 Interior Design III

Professor Layell

February 2, 2024

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In recent years, there has been a growing recognition of the profound impact that sensory rooms can have on individuals with mental disorders such as autism. The increasing popularity of sensory rooms has prompted the implementation of these innovative, therapeutic spaces in many different facilities. These specialized rooms provide an immersive sensory experience that appeals to all the senses. This research paper will discuss the purpose of sensory rooms for those with autism and provide examples of what these rooms might in terms of improved emotional regulation along with stress and anxiety reduction.

Sensory rooms were developed as a way to help those with sensory processing disorders by providing them with a safe space to decompress from the rest of the world. They originated from the concept of Snoezelen rooms, which is a word that is derived from the Dutch words meaning to explore and to relax. These rooms often provide soft and relaxing seating for those with autism to both de-stress and engage with the room. Modern sensory rooms can even incorporate many digitalized elements such as projectors or screens that create immersive, themed spaces to aid in relaxation. Many research studies have seen dramatic improvements in the severity of autistic behaviors after the prolonged, consistent visits to these sensory spaces.¹

People with autism perceive the world differently than the average, neurotypical person does. The interaction between a person's senses and their central nervous system allows them to interpret the world easily and clearly. However, a brain with autism struggles to understand what is perceived through their senses, and what would be a common perceptual experience for others becomes highly disturbing for those with autism. This can often lead to irritation, anxiety, and other potentially dangerous behaviors.² The number of people in a room can also heavily affect

¹ Basadonne, I., Cristofolini, M., Mucchi, I., Recla, F., Bentenuto, A., & Zanella, N. (2021). *Working on Cognitive Functions in a Fully Digitalized Multisensory Interactive Room: A New Approach for Intervention in Autism Spectrum Disorders*. *Brain Sciences*, 11, 1459. <https://doi.org/10.3390/brainsci11111459>

people with autism by causing sensory overload or overstimulation, which also results in negative behaviors.³ Therefore, designers need to create an environment specifically designed for those with autism so they can temporarily escape from the stimulation of the world and thrive in a space that is made for them.

Successful sensory rooms incorporate elements that engage as many senses as possible, in order to create a more immersive space for people with sensory disorders. Autistic people specifically benefit from quiet, uncluttered spaces with low lighting. They often have a variety of tactile preferences, so it is beneficial to provide various objects that can suit each individual's needs to avoid meltdowns or outbursts. Smells can also be very overpowering for autistic people, so it is preferable to have a subtle and relaxing scent in the room. Sound equipment can aid in creating a calming space with ambient sounds that pair well with images or videos being projected in the dark room. Bubble tubes are another valuable object because they provide visual, auditory, and tactile input.⁴ Candles or scent diffusers also aid in creating a relaxing space. It is beneficial to provide objects that allow for controlled movement such as exercise balls, rocking chairs, or fidget toys. Fiber optic cable lights can also provide good visual stimulation that doubles as something to fidget with.

In conclusion, sensory rooms are extremely beneficial to people with autism who need an escape from the overstimulating environment of the regular world. Sensory spaces allow people with ASD to take a break from the sensory overload that can occur when they are exposed to

² DeGuzman, P. B., Abooli, S., Sadatsafavi, H., Bohac, G., & Sochor, M. (2023). *Back to Basics: Practical Strategies to Reduce Sensory Overstimulation in the Emergency Department Identified by Adults and Caregivers of Children with Autism Spectrum Disorder*. *International Emergency Nursing*, 72, 101384. <https://doi.org/10.1016/j.ienj.2023.101384>

³ Tackx, E., Nguyen, P., Leuven, K., & Heylighen, A. (2022). *Student Life on the Autism Spectrum: Exploring the Role of Student Housing in Experiences of Three Students*. *Journal of Interior Design*, 47(4), 31–47. <https://doi.org/10.1111/joid.12227>

⁴ Cameron, A., Burns, P., Garner, A., Lau, S., Dixon, R., Pascoe, C., & Szafraniec, M. (2019). *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>

everyday environments. The goal of designing these rooms should be to cater to autistic people's sensory needs by finding items that appeal to their senses and relax their minds.

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