

How to create an autism-friendly environment

Over the past few years, more and more people have asked themselves how they can create an autism-friendly environment. Architects have written about designing autism-friendly buildings and families have remodelled rooms to provide positive sensory experiences.

It is clear from listening to people who have an autistic spectrum condition that they can experience the world very differently to others. This can be both debilitating and empowering. In creating an autism-friendly environment we must try to reduce the negative effects of sensory differences and enhance the positive effects.

Every individual on the autism spectrum will experience the world differently from a sensory point of view; therefore, the points below are very generic and, where possible, attention needs to be paid to each individual's preferences.

Questions we need to ask ourselves



Before we begin to remodel a room or design a building there are some questions we should be asking ourselves to help inform how we will go about making changes that will be positive for individuals with autism. Many of these questions entail assessing the existing environment and taking into account the seven sense indicators, as well as being attentive to the people who will be using the environment.

It is important when considering the questions relating to the senses to remember that people with autism can be either hypersensitive (receive too much sensory information) or hyposensitive (receive too little sensory information). They can also be both hypersensitive or hyposensitive, requiring less stimulus at times and more at others.

The questions we should ask ourselves when trying to create an autism-friendly environment deal with -

1. Visual sense (Sight)
2. Auditory sense (Hearing)
3. Touch and pressure sense
4. Olfactory sense (Smell)

5. Taste sense
6. Vestibular sense(Balance)
7. Proprioceptive sense (Space)
8. Who will use the space?
9. What the space will be used for?

Questions dealing with visual input

- What is the lighting like in the rooms, both natural and artificial?
- What colour are the walls?
- How many things are in the room that would require visual awareness/recognition?
- Are curtains, carpets and furnishings patterned?

Lighting plays a large part in the sensory experiences of many autistic people. We now know that fluorescent lights can be distracting to the point of debilitating for some people because they can see the lights flickering at 60 flashes per second (60Hz). Some fluorescent lights have a flicker rate of 120 Hz.

Natural lighting also plays a part, especially with sleeping patterns. One reason is that melatonin (a hormone which helps to regulate sleep/wake patterns). Usually melatonin rises during darkness and dips during daylight hours. If people with autism are experiencing sleep problems, one of the many strategies to try is to ensure that there is darkness during times of sleep.

Paying attention to colour is also important. Different colours have different effects on us. As an example, the colour red has the longest wave length and, therefore, can stimulate us and raise our pulse rate. Yellow also has a long wavelength and can stimulate. Light blues can calm the mind and aid concentration. Green can be restful. Think about the room you are designing – are you trying to create a stimulating environment or a calming one?

How cluttered or minimalist rooms are should also be taken into consideration. Many autistic people are particularly observant of every detail and can become overwhelmed by too much visual information to process. Others need more visual stimulation.

Patterned fabrics can be particularly distressing to some individuals with an autistic spectrum condition. Patterns can be distracting and overwhelming and can even cause visual distortion.

Questions dealing with auditory input

- Are there regular external sounds, such as traffic, children playing or building works?
- Are there regular internal sounds, such as clocks ticking, refrigerators humming, music?
- Is it possible to reduce external sounds from permeating to the inside?
- Is there a way of reducing sounds for each individual, such as earplugs?

Many people with autism tell us that they can hear sounds at many decibels above those others can hear. They can hear sounds that are a lot further away and the intensity of sounds can be deafening. They can be listening to rock music on high volume and still hear a conversation in the room next door.

Questions dealing with touch and pressure

- Is there an area that provides for different textures to be felt or stroked?
- Are there items to provide different feelings on the skin, such as sand or water?
- Are there items to provide pressure if needed, such as wooden massagers?

Some autistic people shun touch unless they are in control of it. Others need extra pressure to feel calm and safe and benefit from items such as weighted blankets if used appropriately. Some people need extra stimulation to feel, if they are particularly hyposensitive (filter out too much sensory information as opposed to too little).

Questions dealing with the sense of smell (Olfactory)

- Are there any smells outside of the room or building that permeate through the walls, windows or doors?
- Are there any smells from indoors that can cause distress, such as cleaning products, perfumed products or foods?

Some people with autism find smells so overwhelming that they cause extreme nausea. Some will even smell the product long after it has been removed from the room or cupboard.

Questions dealing with taste

In creating an environment where the sense of taste will be used, such as dining rooms, it is worth remembering that sometimes we can assume a distaste for a flavour when the distaste could be something else. It is possible that distaste can come from a discomfort from the texture of the food, or the appearance of the food. Questions to ask would be –

- Have we created an environment where choice is available and clear to see?
- Are choices of foods shown pictorially as well as in words?

Questions dealing with balance (vestibular) and space (proprioceptive)



- Are there opportunities for swinging?
- Are there opportunities to balance on beams or boards?
- Are there opportunities to bounce or climb?
- Are there opportunities for a person to sit with their backs against the wall?
- Are there opportunities to sit where a person can see the whole room?
- Are there quick exit routes?

Some autistic people find it difficult to have a sense of themselves in relation to the physical world around them. Rocking, swinging and balancing can help them gain a sense of self. Having too much room in front of them or behind them can cause anxiety if they need to have something directly behind them or in front of them to gain a sense of themselves. In addition, some people with autism experience anxiety if they cannot see what is happening or where sounds are coming from and they find this very disorientating.

Many people with autism need space around them and feel overwhelmed by crowds or clutter. They can feel hemmed in by corridors and need to know there is a quick escape route.

Who will use the space?

This might seem an obvious question to ask; however, it is important to think the answer through. The environment might need to be different for children or adults. You might also need to consider whether the same environment will be used by others who might have sensory differences, or by a group with very differing sensory needs. If there is a risk of sensory overload; is there somewhere else a person can go to escape from the overload?



What will the space be used for?

Some spaces are used for large groups of people, such as school halls or open-plan offices. Other spaces are for single use or small groups. Yet, other spaces are intended for transition, eg corridors or lifts.

Transition spaces can be difficult for people on the autism spectrum, because it can sometimes be difficult to move from one space to another or one activity to another.

Therefore, consideration needs to be made as to how to make transition spaces easier to deal with. Some questions you can ask are –

- Can there be a natural flow from one space to another without using a corridor? Are there less claustrophobic ways to go up or down a building than the use of lifts?
- If spaces are being used for large numbers of people, are there smaller spaces available for retreat if necessary?
- If spaces are small and intimate, are there opportunities to go easily to a more open space?
- Can you create a map of where individuals with autism seem to become most anxious? Are there alternative routes?

Conclusion

There are architects who specialise in designing buildings that are autism-friendly such as Maria Luigia Assirelli Dott. Arch (Rome) ARB, partner in GA Architects and Magda Mostafa, associate professor in the Department of Construction and Architectural Engineering in Egypt. However, we can all play a part in providing an autism-friendly environment by taking into consideration sensory differences and the need for structure.

Although every individual on the autistic spectrum will have their own environmental needs, there

are some general questions we can ask ourselves to create a physical environment that will reduce anxieties as opposed to increasing them. We need to pay attention to all seven of the senses – visual, auditory, olfactory, taste, touch, vestibular and proprioceptive. We also need to pay attention to space and how it is used.

Addressing everyone's personal preferences will always be difficult; however, some thought and consideration can make all the difference to some.

If you need help looking for services for an individual with an autism spectrum condition, we can help. Click below for the Autism Placement Support Service.

