

Evaluation of the impact of autism specific accommodation on children with autistic spectrum disorders (ASD)



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Background

In addition to the triad of impairments associated with ASD, children also suffer from difficulties with spatial awareness and sensitivities within all the domains of sound, touch, taste, sight and smell. Environmental barriers have long been perceived to exacerbate the problems encountered by these children and increasing evidence has been accumulated to suggest that enabling environments hold the key. Based upon such evidence, an autism specific building, costing in excess of £1 million, has been developed to house twelve young people with ASD at Sunfield.

Evidence based practice should inform evidence based design and this was the premise upon which Sunfield went about building a living environment for children with profound autistic spectrum disorder (ASD).

The aim of the project

To assess the impact of the autism specific design on the children and the extent to which adaptations in their environment can ameliorate the negative effects associated with ASD.

Method

The evaluation used qualitative methods to gain an understanding of the experiences of both children and staff residing in the new accommodation. This included:

- interviews with Team Leaders
- focus groups involving a range of care staff
- feedback from the children via photographs

Using information from the triangulation of this data it is possible to consider each feature incorporated into the design and explore its benefits and impact upon the residents.

Summary of Main Findings

- **Curvilinear design** - facilitates movement into the building. This is particularly useful for children who have difficulties with visuo-spatial processing. Staff noticed that children often placed their hands on the walls, following the contours round the corridors
- **Specific colours** - Research conducted at Sunfield has found that pink and purple have been found to be the most positive colours and these

have consequently been used extensively on walls. This has contributed to the calmness which is noticeable upon entering the building.

- **Noise reduction fabrics** - Ceilings with sound-absorbent backings have been used to prevent reverberated sound.
- **Non-fluorescent lighting** - Soft non-flickering lighting has been placed on the walls of the central areas of the living accommodation. Children with ASD often experience a range of sensory problems including an aversion to very bright fluorescent lighting can affect their visual field
- **Sensory Suite** - children have greater access to this facility
- **Courtyard & outdoor canopies** - Staff have reported enormous benefits of this shared outdoor space
- **Specific floor coverings**- A new type of floor covering was suggested for the ASD specific house based on a Flotex ® design. This adds another dimension to the sound absorbency of the building and provides warmth and comfort to the house.
- **Specific bedroom design** - Bedrooms for the children were designed specifically to ensure the children felt safe and that their privacy was respected and maintained. The layout of the bedroom wings follows a zig-zag pattern, enabling every child to have a view from their window without being overlooked. All rooms have TV, DVD, video and music equipment.
- **Under floor heating** - Under floor heating has been used to create a warm environment without the need for radiators. This addresses the difficulties of children with ASD posting objects, climbing onto radiators, and indeed, pulling radiators off the walls
- **Circulation space** - An important feature of the design was to incorporate space into the building but to move away from an 'institutionalised' feeling. Children prefer the circulation space to the lounge for social activities

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