



Consumer Factsheet

Designing home environments for people with problems with aggressive or self-injurious behaviour

PEER
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What motivates aggressive or self-injurious behaviour in people experiencing problems with cognition?

People who experience problems with cognition may display aggressive or self-injurious behaviours for a variety of reasons. They may be unable to communicate a need in another way, frustrated with an environment that is too complex to negotiate or they may be attempting to remove themselves from a situation or environment that they find unpleasant. In the case of self-injurious behaviour, the individual may also be attempting to provide some sensory stimulation to their experience within the environment.

Why does the design of the home environment matter?

The home environment is important to almost everybody; however, this is particularly true for people who may experience problems with cognition. The physical environment has been described as a potential therapeutic resource for people with cognitive impairment and, given the general importance of the home, the home environment may play a great role in mediating the aggressive or self-injurious behaviour an individual with problems with cognition may display.

If, as discussed above, the individual who is displaying aggressive or self-injurious behaviours may be trying to communicate a need or a want relating to the environment (e.g., wanting to leave, it is too complicated, it is boring, it is cold, etc). By providing a home environment that caters to the needs of the individual, the necessity for such behaviour as a means of communication or outlet for frustration may be reduced.

Design guidelines for the home

While all homes should be designed with the specific needs and wants of the individual in mind, some general principles pertaining to designing homes for people who experience problems with cognition and display aggressive or self-injurious behaviours provide a good starting point and are discussed below.

Reduction of known stressors

The home can be a place that is buzzing with activity, noise, people, light and other forms of stimulation. Sometimes this stimulation can be overwhelming and stressful for some individuals who experience problems with cognition and they may display aggressive or self-injurious behaviours in response, particularly if a number of different forms of stimulation are all happening at once. Keeping your home free from too much or competing forms of stimulation may assist in reducing the incidences or intensity of aggressive or self-injurious behaviours. Some known stressors are television, glare, clutter, crowded spaces and inappropriate room temperature.

Keep the environment free of complexity

Similar to stressors within the home, the complexity of the home may also cause some people who experience problems with cognition to feel overwhelmed and frustrated and possibly behave aggressively or self-injure. Keeping the environment as simple to negotiate as possible reduces this frustration. Such features as an open planned home without corridors to navigate and having visual access to places that the individual may want to get to often or quickly, such as the toilet, may make the home easier to navigate. Removing unnecessarily complex elements of tasks also helps to keep the home environment simpler and promote greater independence.

Balance between over and under stimulation

Just as it is important not to inundate the individual experiencing problems with cognition with too much stimulation, it is also important not to deprive them of adequate stimulation in the home environment. As noted earlier, some people who experience problems with cognition may engage in self-harming behaviour because they are under stimulated.

Familiar sounds and smells may mediate the aggressive and self-injurious behaviour of people who experience problems with cognition, while calming colours have also be noted to have a calming effect. It should be noted that simply using sensory stimulation that does not mean anything significant to the individual (such as multi-coloured optic fibres) may aid in the calming of people who experience problems with cognition. However, the stimulation

should be used as a strategy to reduce aggressive and self-injurious behaviour and not replace more meaningful activities.

Must be flexible and afford opportunities for choice and control

As the needs and wants vary between individuals, so do the needs and wants of an individual across time. Consequently, the home needs to be designed to accommodate the changing needs and wants of the individual in the short term (for example, what activity they would like to engage in) and over the long term (for example, the need for greater space or to have somebody live with them).

It is important that an individual be afforded opportunities for choice and control over their environment. The home environment should facilitate this by providing options for the individual to select from (such as which activity they would like to engage in) and by enabling the individual to succeed in activities wherever possible.

Facilitating use of preventative and reactive support strategies

The home should facilitate both preventative strategies such as those discussed above, and reactive strategies. A reactive strategy, such as removing the individual from the environment in which the behaviour is occurring (timeout), may mean that an additional physical space is required. The space should be contingent on the motivation for the behaviour, for example, if the individual was self-injuring to escape from a task, the space should be less reinforcing of the behaviour than the original room. Please note that the use of timeout and other reactive techniques are effective only when performed under particular conditions, so please consult with a professional such as an Applied Behaviour Analysis (ABA) therapist before using the techniques.

Environment must be safe

The safety of those in the home is paramount. Again, the specific needs of the individual should be addressed in order to assess home modifications and design features to make the home as safe as possible for that particular individual (for example, if they have a tendency to wander). However, changes such as softening or rounding hard, sharp edges, ensuring the floors are slip resistant, removing small hard objects which may easily be thrown, installing thermostatic mixing valves on all taps and providing safer cooking appliances such as an induction cooktop are a good start to making homes safer.

Features with a history of being damaged made durable or removed

Any features that the individual has a history of damaging need to be made more durable or removed if possible. Common features include window panes, walls, doorframes, toilets and faucets. Windows in the home should be fitted with safety glass to avoid injury if broken. Similarly, features of the home that factor in self-injurious behaviour need to be removed or made as safe as possible if required features. For example, if head-banging the floor is practiced, the floor should have a soft covering rather than tiles or floor boards.

Home-like design needs to blend with the community

The required durability of the home should not be to the detriment of the appearance of the home. The home should fit with the other homes in the neighbourhood and should have minimal exposed mechanical devices or any other features that are suggestive of an institution. Features that impact the 'homey' feel of the home include lighting, room sizes, finishes and other aesthetic features.

Accommodate staff/family support

The provision for family and/or staff assistance needs to be considered from the very early design stages of the home. This consideration should be given considerable attention in areas of the home which may traditionally only accommodate one person at a time such as the toilet, utility room and smaller kitchens.

Where can I find more information?

- Architect or builder
- Occupational therapist
- Regional home modification and maintenance service provider
- Resource library on the HMinfo website www.homemods.info

***This information was correct at time of printing.*