

Neurodiverse Connection – Written evidence (ALN0075)

Neurodiverse Connection

Neurodiverse Connection are a neurodivergent led Community Interest Company. Our mission is to advocate for neurodivergent people to have equal opportunities and outcomes in health and in life; to challenge understanding of sensory and social processing differences, particularly in relation to the built environment; and to promote neurodivergent employment, including in leadership positions and in facilitating change.

Why we are responding to this call for evidence

It is estimated that 700,000 (or 1 in 100) people in the UK are autistic (BMA, 2020). Many autistic and otherwise neurodivergent people experience heightened sensitivity, including to light and sound. Some sensory experiences can have a significant and negative impact on mental health, wellbeing, and quality of life.

Many of the autistic people we have engaged with have reported significant negative impact from light and noise pollution.

There is limited research and evidence about the impact of sensory and perceptual differences for neurodivergent people and further work is needed to fully understand the needs of this group.

We have prepared a short response to some of the topics raised, but do not attempt to respond to all the questions in the call for evidence. We welcome further engagement.

Light pollution

There is limited information about the impact of lighting on neurodivergent people. Additional research on the impact of light pollution, with consideration to the impact on those with light sensitivity, would be beneficial. The personal and professional anecdotal experience of our team is that there is a significant negative impact of LED lighting which is often overwhelmingly bright, insufficiently diffused, creates significant glare and is a cool / white blue colour tone.

We have reported the impact of this in healthcare buildings in the ILP Lighting journal (see Paton 2022 in references for more info). We have also worked with partners to develop a technical note on sensory friendly LED lighting for healthcare environments, which speaks to many of the same issues (see NDTi 2022 in references).

Noise pollution

Noise pollution has a significant negative impact on those with auditory sensitivity. Many autistic people experience hyperacusis, an unusual intolerance to ordinary environmental sounds (Davies, 2019). People experiencing auditory sensitivity are more likely to have a greater hearing range, and less likely to be able to 'filter' out background noise. 'The sensory environment often presents a barrier for autistic adults accessing public spaces' (MacLennan et al, 2022)

“One of the biggest influences on wellbeing for people with sensory processing differences can be noise. Noise can have a negative physiological and psychological impact. Whilst most neurotypical people can adjust to a variation in noise levels, this can be much harder for individuals with a range of sensory processing differences. For example, high sensitivity and hypersensitivity result in increased stress, anxiety and in the absence of any mitigating measures, sensory overload.

People with sensory processing differences are often very sensitive to sound and noise. This includes people with neurodegenerative conditions (such as dementia), neurodivergent conditions (such as autism, ADHD, dyspraxia), or hearing differences due to hyperacusis or misophonia. The types of noise people are sensitive to are different for different people. It might be a continuous noise, intermittent noise, unexpected noise, high volume noise, or specific frequencies of noise.”

British Standards Institution (2022:51)

It would be beneficial to have additional research to fully understand the impact of noise pollution on neurodivergent wellbeing and inclusion in public spaces.

We suggest that additional consideration of the noise created by decarbonising technologies would be beneficial to ensure that a focus on carbon efficiencies does not negatively impact the auditory environment in both private and public spaces.

References

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