

## Overactivity and Impulsivity in Fragile X Syndrome

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### What are overactivity and impulsivity?

For an overview of what the terms ‘impulsivity’ and ‘overactivity’ visit our common issues section and select them from the drop-down menu [here](#).

### Overactivity and impulsivity in fragile X syndrome

A substantial number of studies have found that overactivity, impulsivity and concentration problems are common in individuals with fragile X syndrome, even in individuals who are more able. It is estimated that many individuals with fragile X syndrome show impulsive and overactive behaviour.

You can download a paper about over-activity and impulsivity in fragile X syndrome below; however, it is important to remember that this is only one study and the findings need to be replicated. In this study researchers found that approximately 25% of males with fragile X syndrome showed ‘excessively high’ levels of impulsivity when compared to other genetic syndromes. Impulsive speech appeared to be particularly common in individuals with fragile X syndrome.

Individuals with fragile X syndrome were also found to have greater levels of overactivity when compared to individuals with Lowe and Prader-Willi syndromes, and a group of individuals with intellectual disability without fragile X syndrome.

[Download the original research article here](#)

Some research suggests that overactivity decreases with age in individuals with fragile X syndrome.

### Self-injurious behaviour, impulsivity and overactivity

Overactivity and impulsivity have been linked to self-injurious behaviours in fragile X syndrome and some other syndrome groups.

This suggests that individuals with higher levels of impulsivity and overactivity were more likely to have higher levels of these other behaviours.

This study cannot tell us whether one behaviour leads to another. Despite this, there is growing evidence that overactivity, impulsivity and repetitive behaviour may be risk markers for the development of behaviours such as self-injurious behaviour. Watch the short film above for more information.

## **ADHD in fragile X syndrome**

Many individuals with fragile X receive a diagnosis of Attention Deficit Hyperactivity Disorder (ADHD), although the exact numbers of individuals that this diagnosis is suitable for is unclear. More research needs to be done to find out whether impulsivity and overactivity in fragile X syndrome look the same, or are underpinned by the same mechanism, as in children with ADHD who do not have the syndrome, or whether there are differences between the two.