

Overactivity & Impulsivity in Smith-Magenis Syndrome

It has been suggested that impulsivity is a key difficulty for parents and carers of people with Smith-Magenis syndrome.

How common is impulsivity in Smith-Magenis syndrome?

Impulsivity might be more common in Smith-Magenis syndrome than in individuals with intellectual disability without the syndrome.

In 1997 and 2000, Elisabeth Dykens and her colleagues found that impulsivity occurred in around 8 out of 10 individuals with Smith-Magenis syndrome.

More recently, Prof Chris Oliver and his team compared Smith-Magenis syndrome to seven other genetic syndromes. Individuals with Smith-Magenis syndrome had elevated impulsivity scores on a questionnaire (The Activity Questionnaire) compared to four of these syndromes. 4 out of 10 children and 6 out of 10 adults had levels of impulsivity that were high enough to be classed as clinically important.

[Download the Oliver, Berg, Moss, Arron & Burbidge paper here.](#)

Research suggests that impulsivity may be related to difficulties delaying gratification (i.e. waiting for rewards) and that waiting in this situation can be emotionally aversive. Emotional control may be impaired in Smith-Magenis syndrome, suggested by reports of emotional lability, thus there may be problems controlling emotional responses to delay resulting in temper outbursts.

Is impulsivity associated with challenging behaviour?

Sloneem and colleagues found that impulsivity was strongly associated with the severity of [challenging behaviour](#). In particular, those with greater impulsivity may be at risk of developing aggressive behaviours. This supports the possible association between reports of 'explosive' temper outbursts in Smith-Magenis syndrome and impulsivity.

[Download the Sloneem et al \(2011\) paper here.](#)

Does impulsivity change with age?

At least one research study has shown that high levels impulsivity continue as people with Smith-Magenis syndrome grow older. Levels of overactivity decrease during adolescence and adulthood.

What causes impulsivity?

When impulsivity has been looked at in other groups, research suggests that it might be related to inhibitory control difficulties (difficulties putting the brakes on behaviour) and difficulties delaying gratification (i.e. needing rewarding experiences) immediately.

Are you a professional with a university, NHS or company email? [Click to register](#) for our Assessment, Measures and Manuals area so you can download the Activity Questionnaire (TAQ) and access normative data for this measure.