

Tic suppression in the classroom



Research Manager Seonaid Anderson examines current thinking around environmental effects on TS, specifically the disparity that is often noticed between home and school.

At Tourettes Action we often get asked questions about young people with tics and Tourettes Syndrome (TS) in school and how parents can explain TS to their children's teachers. One such issue about TS in school is that of tic suppression in the classroom.

Can we explain to teachers using evidence based research what tic suppression is, that it is occurring and show how effortful it is and how it will affect schoolwork as the child is concentrating on suppression? Often, when in different environments, children with TS will act differently and there are 'environmental effects' on TS. If the child has a diagnosis of TS but doesn't tic in school that doesn't mean he/she doesn't have TS! He/she will probably be suppressing.

The research papers which will be most relevant in regards to this are from Doug Woods in the States, he does a lot of work and research to do with behaviour therapy. You can watch Professor Woods videos on Tourettes Action's [YouTube channel](#), where he explains behavioural therapy, which includes tic suppression.

What is even better is that Tourettes Action often run Behavioural Therapy training for professionals. This training (subsidised by Tourettes Action) is for professionals from the disciplines of psychology, nursing, occupational therapy, psychiatry and neurology as well as clinicians with experience of delivering behavioural therapy. You can find more information about this training from Seonaid Anderson, Research Manager: seonaid@tourettes-action.org.uk

Returning to the issue of tic suppression, what Doug Woods states is that:

- 1 tic suppression is possible**
- 2 his research supported the idea that after tic suppression there *WOULDN'T* be a 'rebound' (more tics or an explosion of tics after suppression). This is an opposite view of a lot of parents who report that children have an explosion of tics when returning home from school – *BUT* Doug Woods suggested this was an environmental factor and not due to 'holding in' or suppressing tics at school.**
- 3 In addition to debunking the rebound myth, Doug Wood's studies demonstrate that environmental factors can influence the expression of Tourette syndrome.** So how is TS going to look in different environments like home and school? The papers in the references at the end of this article describe some of the environmental factors:

In one of the papers the authors state 'the symptoms of Tourette's syndrome vary in frequency and intensity. *Although such variability may be the result of deficits in the underlying neurological system, tic expression can also be systematically impacted by contextual factors. This article reviews research on the impact of several contextual factors on tic expression and discusses implications for future research and treatment development*'.

So this might help the case for showing that TS can be different in school and at home. The teachers may not see the student tic, because he is capable of and actively suppressing his tics, in that environment (explaining variability in tic symptom expression).

As Doug Wood says behavioural therapy 'can enhance voluntary tic suppression', 'can successfully be used in environments that include attention-demanding or "distracting" stimuli, such as a classroom'.

From the Conlea and Woods (2008)¹ paper, '*results also indicate that successful suppression may come at the expense of accuracy on a task performed simultaneously*' – this is of great interest to teachers and parents! He goes on to say practice doing suppression (especially helped by doing CBITS or behavioural therapy with a therapist) can '*increase the automaticity of suppression...make it easier to suppress in distracting situations and engage in simultaneous tasks*'. In the Conlea and Woods (2008)² paper it is suggested that '*tic suppression involves attentional processes*' and '*it has been suggested that performance deficits on attention-demanding tasks may occur when attentional efforts are directed to tic suppression*'. (Shimberg, 1995).

So there is some evidence for tic suppression taking up attention but this can be helped by behavioural therapy. If you would like a copy of the Tourettes Action list of therapists who can deliver behavioural therapy please email help@tourettes-action.org.uk. If you have any questions please get in touch and any educational professionals are welcome to contact Seonaid Anderson, Tourettes Action Research Manager: seonaid@tourettes-action.org.uk

References

- 1 Conelea CA, Woods DW. Behav Res Ther. 2008 Nov;46 (11):1193–200. Examining the impact of distraction on tic suppression in children and adolescents with Tourette syndrome.
- 2 Conelea CA, Woods DW. J Psychosom Res. 2008 Nov;65(5):487–96. The influence of contextual factors on tic expression in Tourette's syndrome: a review.