Cognitive behavioural therapy for anxiety in school-aged children with autism spectrum disorder can reduce anxiety

**What is the aim of this review?**
This Campbell systematic review examines the effects of interventions for reducing anxiety in school-aged children with autism spectrum disorder, compared to treatment-as-usual. The review summarises evidence from 24 studies using an experimental or quasi-experimental design.

**Overall, the effects of interventions on anxiety show a statistically significant moderate to high effect, compared to waitlist and treatment-as-usual control conditions at post-treatment.**

**Cognitive behavioural therapy interventions to reduce the level of anxiety in students with autism spectrum disorder are moderately effective.**

**What is this review about?**
Anxiety is a common problem in school-aged children with autism spectrum disorder (ASD). Cognitive behavioural therapy (CBT) and other psychosocial interventions have been developed as alternatives to pharmacological intervention to treat anxiety in students with ASD.

**What studies are included?**
Twenty-four studies, involving 931 school-aged children with ASD (without co-occurring intellectual disability) and clinical anxiety, are summarised in this review. The studies were experimental or quasi-experimental control-treatment trials, deemed to be of sufficient methodological quality and with reduced risk of bias. Studies spanned the period 2005 to 2018 and were mostly carried out in Australia, the UK and the USA.

Examined interventions ranged across clinical, school-based, or home-based settings, with group or individual treatment formats. Twenty-two of the studies used a CBT intervention. One study used peer-mediated theatre therapy and one study examined the benefits of Thai traditional massage for reducing anxiety. Most interventions involved parents/caregivers and were conducted face-to-face.

**What are the main findings of this review?**
Overall, the effects of interventions on anxiety show a statistically significant moderate to high effect, compared to waitlist and treatment-as-usual control conditions at post-treatment.

However, effects differ depending on who reports on the student’s anxiety. Clinician reports indicate a very high statistically significant effect, parent reports indicate a high significant effect, and self-reports indicate only a moderate...
significant effect on the reduction of anxiety in students with ASD.

There are larger effects for treatments that involve parents than for student-only interventions. Effects are also larger for individual one-on-one interventions compared to treatments delivered in a group with peers.

There are several risk-of-bias issues in most studies included in the review, mainly due to the unavoidable limitation that participants cannot be blinded to the treatment group, which may upwardly bias the estimated effects.

There are also limitations in the description of randomisation in a third of the studies, so findings should be treated with caution.

What do the findings of this review mean?
The findings provide evidence in support of interventions, particularly CBTs, designed to reduce anxiety symptoms in school-aged children with ASD.

These findings accord with and build upon the findings of previous systematic reviews into the effectiveness of interventions to reduce anxiety in children and youth with ASD. However, because of the risk of bias in current findings, it would be useful to have further studies with larger sample sizes and to reduce potential biases where possible.