

### **The influence of genetic, demographic and clinical information on predicting outcomes following CBT in child anxiety disorders**

#### **What was the aim of the study?**

Professor Jennie Hudson, from Macquarie University's Centre for Emotional Health, led a team of international researchers from King's College London and the University of Reading to determine why some children undergoing Cognitive Behaviour Therapy (CBT) do not obtain the same benefits as others undertaking similar treatment. They were trying to ascertain if genetic, demographic and physiological factors played any role in the success of CBT outcomes.

#### **How did we do it?**

384 children aged between 6 and 13 years who met the criteria for a primary diagnosis of an anxiety disorder were selected. Parental symptoms of stress, anxiety and depression were recorded, ethnicity noted and DNA was extracted from cheek swabs provided by the children. A risk index including genetic, demographic and clinical factors was created to predict which children would benefit from CBT for child anxiety. Further details are outlined in the study.

#### **What did we find?**

There are genetic, demographic and clinical predictors that can determine which children with an anxiety disorder are less likely to be diagnosis-free following psychological therapy for anxiety. Predictors to a less successful CBT treatment outcome included being female, the severity of the primary anxiety, whether a comorbid mood disorder existed and whether a comorbid externalising disorder existed. Interestingly, age and parental psychopathology did not play a significant role in predicting the success of CBT outcomes.

#### **What does this mean in practice?**

The identified predictors to a less successful CBT treatment outcome (i.e. gender, severity of anxiety, comorbid mood disorder and comorbid externalising disorder) have been combined to create a risk index to determine which children are less likely to be diagnosis-free following CBT alone. Being able to identify these children will allow us to pursue longer or enhanced treatments for them. It is possible that in the future clinicians could use a risk factor like this to determine, before treatment, how likely it is that a standard course of CBT will be effective in reducing the child's anxiety to non-clinical levels.

#### **Citation**

Hudson, J.L., Lester, K.J., Lewis, C.M., Tropeano, M., Creswell, C., Collier, D.A., Cooper, P., Lyneham, H.J., Morris, T., Rapee, R.M., Roberts, S., Donald, J.A., and Eley, T.C. (2013) Predicting outcomes following cognitive behaviour therapy in child anxiety disorders: the influence of genetic, demographic and clinical information, *The Journal of Child Psychology and Psychiatry* 54:10, pp 1086-1094