STUDIES

Influences on S.A.D. symptoms in twin sample

Genetic and environmental influences on separation anxiety disorder symptoms and their moderation by age and sex

Feigon et al., (2001) – Estimated genetic and environmental influences on separation anxiety disorder symptoms in 2,043 (348) male and female twin pairs aged between 3 to 18 years. Researchers used DeFries and Fulker’s (1985) multiple regression analysis and found that both genetic and environmental influences contributed to variation in SAD symptoms, and significantly moderated by sex and age. Genetic influences were greater for girls, meanwhile shared environmental influences were greater for boys. Genetic influences increased with age whilst environmental influences decreased. Findings suggest that genes and the environment definitely have an impact on individuals with SAD.

Risk factors in developing S.A.D.

Risk for Separation Anxiety Disorder Among Girls: Paternal Absence, Socioeconomic Disadvantage, and Genetic Vulnerability

Cronk et al., (2004) – Researchers examine genetic and environmental influences in 1,887 female twin pairs. Four different symptoms categories of SAD were considered. It was found that all four SAD symptom categories were heritable, whereas the contribution of shared environmental influences to the variation in risk was significant for only 2 of 4 SAD categories. Paternal absence was found to have an important influence in vulnerability for SAD whereas socioeconomic disadvantages were less evident. Findings demonstrate that genetics and direct factors such as paternal absence has a role of a significant risk on SAD than environmental influences.

Eye-movement and S.A.D.

Vigilance and Avoidance of Threat in the Eye Movements of Children with Separation Anxiety Disorder

In-Albon et al., (2009) – The present research, using eye-tracking methodology, tested whether anxious children show the same pattern. Children with separation anxiety disorder or no mental disorder viewed pairs of pictures while the direction of their gaze was tracked. Each picture pair showed one picture of a woman separating from a child, the other picture of a woman reuniting with a child.

The results supported the vigilance-avoidance model in children. Although the two groups’ gaze direction did not differ during the first second of viewing, anxious children gazed significantly more at separating (threatening) pictures than non-anxious children after a period of 1-s. But after 3-s the pattern reversed: anxious children gazed significantly less at the separating pictures than non-anxious children.

HPA activity in children with S.A.D.

Children suffering from separation anxiety disorder (SAD) show increased HPA axis activity compared to healthy controls

Brand et al., (2010) – Study aimed at investigating association between SAD and hypothalamic pituitary adrenocortical axis activity in children suffering from separation anxiety compared to healthy controls. 31 children with diagnosed SAD took part in the study. All participants underwent psycho-physiological testing for HPA axis challenge. Testing consisted of a separation and a social exposure paradigm. Saliva samples to assess HPA axis-related cortisol secretion were gathered in parallel.

Compared to healthy controls, children with SAD showed greatly increased HPA axis activity, as reflected by an increased cortisol secretion throughout the entire period of investigation. The rise of cortisol was already observed in anticipation of, but not following the separation paradigm. No gender-related differences of cortisol secretion were observed. SAD in children is reflected in greatly increased HPA axis activity. Concluded that both the anticipation of a separation and a persistent hyperactivity of the HPA axis system leads to an increased cortisol secretion.