

A neuropsychological examination of frontal lobe function in eating disorders

Results:

A total of 175 participants were recruited into this project, including 54 healthy females, 30 female patients with anorexia nervosa (AN), 31 healthy males, 8 male patients with AN, 29 recovered AN and 27 patients with Bulimia Nervosa (BN). All participants were assessed with the Iowa Gambling Task (IGT), clinical interview and self-report measures and were also genotyped.

Women with current AN demonstrated poor decision making on the IGT compared to both healthy controls and recovered AN participants (post hoc $p=0.05$). AN patients, but not those who were recovered from AN, showed a significantly diminished Anticipatory Skin Conductance Response (ASCR) before making high-risk choices in comparison with female controls ($p=0.01$). BN patients did not show any significant differences in IGT performance or skin conductance response compared to the other groups.

In the whole group of participants, IGT performance was not correlated to current levels of depression ($p=0.6$) or anxiety ($p=0.7$). However, IGT performance showed significant moderate correlations with ASCR ($p=0.01$).

Data analysis (e.g. males, BN, genotype and IGT performance) and is still in progress and more articles are being planned or in preparation.

Published work:

Davies H, Tchanturia K. (2005) Cognitive Remediation Therapy as an intervention for acute Anorexia Nervosa: A Case Report. *European Review of Eating Disorders*. 13, 311-316

Tchanturia K, Campbell I, Morris R, Treasure J. (2005) Neuropsychological Studies in AN. *International Journal of Eating Disorders, Special Issue ANOREXIA NERVOSA* 37:572-576

Southgate L, Tchanturia K, Treasure J, (2005) Building a model of the aetiology of eating disorders by translating experimental neuroscience into clinical practice. *Journal of Mental Health* 14 (6) 1-14

Whitney J. Easter, A. Tchanturia K (2008) The patients experiences in cognitive exercise intervention for anorexia nervosa: Qualitative findings. *International Journal of Eating Disorders* 41(6):542-50

Tchanturia K, Liao T, Uher R, Lawrence N, Treasure J & Campbell I., Decision making in anorexia nervosa *8th World Congress of Biological Psychiatry June 28th - July 3rd 2005, Vienna, Austria (abstract book)*

Kate Tchanturia, Pei-Chi Liao, Rudolf Uher, Natalia Lawrence, Janet Treasure, Ian C. Campbell. An investigation of decision making in anorexia nervosa using the Iowa Gambling Task and skin conductance measurements. *Journal of the International Neuropsychological Society* (2007) 13. 635-641.

Liao T, Uher R, Lawrence N, Treasure J, Schmidt U, Campbell I, Tchanturia K. (2008) An examination of decision-making in bulimia nervosa. *Journal of Clinical and Experimental Neuropsychology*. 11:1-7.

Liao T, Uher R, Lawrence N, Treasure J, Schmidt U, Campbell I, Tchanturia K. (2009) An examination of decision-making in bulimia nervosa. *Journal of Clinical and Experimental Neuropsychology*. 31(4):455-461

Southgate L, Tchanturia K, Treasure J. (2008) Information processing bias in anorexia nervosa. *Psychiatry Research*.15; 160 (2):221-7

Southgate L, Tchanturia K, Collier D, Treasure J. (2008) The development of the childhood retrospective perfectionism questionnaire (CHIRP) in an eating disorder sample. *European Eating Disorders Review*. 16(6):451-62

Southgate L, Tchanturia K, Treasure J. (2008) Neuropsychological studies in Eating Disorders: A review *in Progress in Eating Disorders*. Ed. Swain Pamela I. *Nova Science Publishers*.

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