# Psychophysiological, behavioural and experiential responses to evoked positive and negative emotion in people with eating disorders

## **Results:**

This study used an amusing and sad film clip to evoke emotion responses in participants with anorexia nervosa and bulimia nervosa. Emotion response was measured via facial expression, subjective reports and skin conductance (SC) reactivity. Results showed differences in emotion responses between positive and negative affect and across the eating disorder groups. The anorexia nervosa group showed a general attenuation of positive affect but more of a dysregulated profile to negative stimuli with attenuated facial expression but subjective and physiological arousal similar to controls. Therefore, supporting the notion that negative expression is being inhibited. Generally, it was observed that the bulimia nervosa participants had a similar profile in emotion response to the control group, however they demonstrated an increase in SC reactivity to the sad film clip, compared to HC.

In conclusion, this study highlights the importance of using multiple measures of emotional responding in clinical samples as group differences may be observed with some response measures but not with others. This study supports models of eating disorders which propose emotion avoidance in anorexia nervosa (Schmidt & Treasure, 2006; Treasure et al, 2012) and dysregulation in bulimia nervosa (Cooper et al, 2006) as maintaining factors of the disorders.

# **Published Works:**

Davies, H., Schmidt, U., & Tchanturia, K. An experimental assessment of emotion responding in anorexia and bulimia nervosa. (Submitted)

Davies, H., Tchanturia, K., & Schmidt. U. Emotional facial expression in non-psychotic mental disorders: A systematic review, (Submitted).

Tchanturia, K., Liao, T., Forcano, L., Fernandez-Aranda, F., Uher, R., Treasure, J., Schmidt, U., Penelo, E., Granero, R., Jimenez-Murcia, S., Sanchez, I., & Campbell, I. (2012). Poor decision making in male patients with anorexia nervosa. European Eating Disorders Review, 20(2), 169-173. doi: 10.1002/erv.1154

Tchanturia, K., Hambrook, D., Curtis, H., Jones, T., Lounes, N., Fenn, K., Keyes, A., Stevenson, L., & Davies, H. (2013). Work and social adjustment in patients with anorexia nervosa. *Comprehensive Psychiatry*, 54(1), 41-45. doi: 10.1016/j.comppsych.2012.03.014

Davies, H., Fox, J., Naumann, U., Treasure, J., Schmidt, U., & Tchanturia, K. (2012). Cognitive remediation and emotion skills training for anorexia nervosa: An observational study using neuropsychological outcomes. *European Eating Disorder Review*, 20(3), 211-217. doi: 10.1002/erv.2170

Tchanturia, K., Davies, H., Harrison, A., Fox, J., Treasure, J., & Schmidt, U. (2012). Altered social hedonic processing in eating disorders. International Journal of Eating Disorders, 45(8), 962-969. doi: 10.1002/eat.22032

Davies, H., Swan, N., Schmidt, U., & Tchanturia, K. (2011). An experimental investigation of verbal expression of emotion in anorexia and bulimia nervosa. *European Eating Disorders Review*, 20(6), 476-483. doi: 10.1002/erv.1157

Lounes, N., Khan, G., & Tchanturia, K. (2011). Assessment of cognitive flexibility in anorexia nervosa-self-report or experimental measure? A brief report. *Journal of the International Neuropsychological Society*, *17*(5), 925-928. doi: 10.1017/S1355617711000671

#### **Book Chapter:**

Lopez, C., Davies, H., & Tchanturia, K. (2012). Neuropsychological inefficiences in anorexia nervosa targetted in clinical practice: The development of a module of cognitive remediation therapy. In J. R. Fox & K. Goss (Eds.), *Eating and its disorders* (pp. 185-199). Chichester, UK: John Wiley & Sons. doi: 10.1002/9781118328910.ch13

## Area(s) of Interest:

Eating disorders, emotion processing, emotion expression

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