

Familial transmission of a body-related cognitive bias:

An eye-tracking study on attention allocation towards one's own and one's daughter's body parts in mothers of adolescents with anorexia and bulimia nervosa
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Authors

Silja Vocks, Silvia Schneider

Aim: The aim of this project was to analyze body-related gaze patterns of adolescents with eating disorders and their mothers and to compare those with attention allocation of girls with anxiety disorder and healthy girls.

Background: The development of body image disturbances in adolescents with eating disorders seems to be influenced by maternal transmission processes. Several studies indicate connections between mothers' body-related attitudes, behavior and comments on their daughters' physical appearance and body image and eating behavior of the daughter. In contrast, little is known about the transmission of associated specific cognitive processes such as selective attention allocation towards one's own and other's bodies. Hence, in the current examination, body-related gaze behavior and its maternal transmission were analyzed in adolescents with eating disorders and a clinical and non-clinical control group.

Method: Whole-body pictures of oneself and a female peer were shown to $N = 280$ participants, including $n = 29$ girls with restrictive-subtype Anorexia Nervosa and their mothers, $n = 21$ adolescents with binge eating/purging subtype Anorexia Nervosa and their mothers, $n = 19$ adolescents with Bulimia Nervosa and their mothers, $n = 21$ adolescents with anxiety disorders and their mothers and $n = 50$ healthy adolescents and their mothers. While looking at the images for 6000 ms each, eye movements were recorded. After a second photo presentation, individual attractiveness ratings for specific body areas of oneself and the peer's body were taken. Based on these evaluations, fixation duration times for the areas rated the most attractive and unattractive were accumulated and further analyzed.

Results: The analysis of gaze behavior for the adolescent participants indicated a pattern of non-self-serving attention allocation in all the five groups, while girls with Anorexia Nervosa looked significantly longer on unattractively rated body parts of the own body than healthy girls or girls with an anxiety disorder. Furthermore, the analysis of gaze behavior in healthy mothers and daughters revealed significant positive correlations and therefore provides strong support for the thesis of transmission processes in attention allocation.

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