Do Observers’ Negative Self-Evaluations of Their Own Bodies Mediate Their Visual Attention Towards Other Bodies?

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Abstract

Previous research suggests that spatial distributions of attentional resources reflect the potentially rewarding and threatening characteristics of stimuli. Here we investigate whether psychological characteristics of the observer, namely, dissatisfaction with one’s own body, systematically impacts distributions of attention within social scenes. Glauser et al. (2010) demonstrated that female observers exhibit attentional biases toward the bodics of thin women. We investigated whether this effect is limited to bodies, extends to male observers, and correlates with each observer’s body dissatisfaction (BD) and/or body mass index (BMI).

Background

- Body dissatisfaction is defined as negative thoughts and feelings about one’s body.
- Body dissatisfaction is one of the most significant predictors of depression, anxiety, substance use, and eating disorders (Dittmar, 2009).
- Worldwide, 70 million people are affected by eating disorders (Renfrew Center Foundation for Eating Disorders).
- 80% of women in the US are dissatisfied with their bodies (Levine & Smulak, 1998).
- The desire to be thinner emerges in girls at about 6 years of age (Leone & Tiggemann, 2003). For example, 99% of 3-10 year-old girls in U.S. own a Barbie. Barbie’s bodily proportions are basically impossible (e.g., waist = 39% smaller than anorexic patients). Exposure to Barbie dolls increases body dissatisfaction in girls 5 to 7.5 years old (Dittmar, Hallworth, & Iwe, 2006).
- Glauser et al. (2010) demonstrated that most women have an attentional bias towards images of thin women bodies. Our work grew out of this previous research and was designed to investigate whether and how this attentional bias might be related to body dissatisfaction in men and women.

Methods

- 145 subjects (87 female), mean age 21.3.
- BMI was calculated from height and weight measurements, mean BMI of 25.7.
- Body dissatisfaction was assessed with the Body Shape Questionnaire-BSQ-34 (Cooper et al., 1987).
- Male and female observers completed a modified dot probe task (Glauser et al., 2009) to assess attentional distribution across space. After a fixation, two bodies of the same gender (one thin, one overweight) appeared simultaneously one above the other. After 500ms, the bodies disappeared and an arrow appeared in the previous location of one of the bodies. Participants reported arrow direction with a key press. Reaction times in correct trials were analyzed to determine whether observers showed an attentional bias toward thin bodies. In a control condition, thin and heavy bodies were replaced with narrow and wide bottles.

Results

![Graph showing mean reaction times (ms) for different body conditions and gender groups.]

- Mean reaction times were significantly faster when participants were presented with an arrow following a thin body compared to a heavy body.
- There was a significant interaction between gender and body condition, indicating that male observers were more affected by body dissatisfaction than female observers.

Discussion

The strong relationship between attentional bias towards thin bodies and body dissatisfaction in male and female observers supports the hypothesis that psychological characteristics of observers impact their spatial distribution of attentional resources across social scenes. This bias may reflect a perceptual mechanism that maintains body dissatisfaction.

References:


