

Do Body Dysmorphic Traits Translate to Deficits in Body Emotion Recognition?

An investigation into the effect of body dysmorphic traits on the ability to identify emotions from the body.

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Keywords – Body dysmorphia, body emotion recognition.

Initial Research Proposal

Recent research has investigated the effects of body dysmorphia on facial emotion recognition, and found those with body dysmorphia show difficulties in this area (Buhlmann, McNally, Etcoff., Tuschen-Caffier, & Wilhelm, 2004). Particular deficits have been observed when participants are shown angry, fearful, and neutral expressions (Buhlmann et al., 2004; Buhlmann et al., 2006; Buhlmann et al., 2011; Grace et al., 2019). However, prior studies have not shown whether this deficit extends to recognition of emotions from the body alone without the presence of facial expression cues. This research will investigate whether individuals with body dysmorphic traits present with deficits in their ability to recognise the emotions of others from observed body positions.

Method

Participants

Participants will consist of 25 individuals who display body dysmorphic traits and 25 individuals presenting without body dysmorphic traits who will serve as a control group. Participants will be required to have normal or corrected-to-normal vision and provide their informed consent prior to completing the study.

Design

The independent variable for this study (IV) will be whether the participant displays body dysmorphic traits determined by a series of Likert scales. The dependent variable (DV) for this study will be the number of correctly identified emotions for each participant. The study will be conducted using a between-subjects design as both groups will be analysed as independent samples in order for a comparison to take place.

Procedure

The method of conducting the experiment will account for the possibility of COVID-19 restrictions. Prior to commencing the experiment, ethics approval will be obtained from Durham University Ethics Committee. The method of collecting data will consist of an online-based study in order to maximise participant recruitment from a variety of demographics. Participants will complete an online survey prior to completing the main component of the study in order to collect demographic information and to divide participants into either the experimental group or the control group.

In the main component of the study, participants will be shown a series of 100 figures depicting one of five emotions (contempt, anger, fear, happiness, and sadness) and be asked to identify the corresponding emotion from five presented options. The number of correctly identified emotions will be recorded for analysis. Provided sample sizes are even, data analysis will then be conducted using a Mann-Whitney U test in order to compare potential differences between the two groups. Alternatively, if even sample sizes are unable to be obtained a Welch test will be performed instead to compensate for this.

Project Objectives

- Compile an essay and poster detailing the effect of body dysmorphic symptoms on the ability to recognise emotions from body positions.
- An analysis and report detailing the results of the outlined study.
- Publishing of findings on the Laidlaw scholar's network and any external opportunities presented.

Proposed Timeline (Summer 2021)

Week 1 (12/07/21 – 16/07/21): Establish a theoretical background regarding body dysmorphia and body emotion recognition through a literature review.

Week 2 (19/07/21 – 23/07/21): Proposal of hypothesis, experimental design and set-up.

Week 3-4 (02/08/21 – 13/08/21) : Participant online surveys and main experiment participant data collection.

Week 5 (23/08/21 – 27/08/21): Data analysis.

Week 6 (30/08/21 – 03/09/21): Report and research poster.

References

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