

## **An exploratory study of diverse methodological factors related with the perception of beauty**

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Recently there has been a great growth of the interest on the neural basis of visual beauty perception. However, neuroimaging procedures differ from the usual behavioral procedures, particularly, in the use of different scales to measure responses (dichotomous vs. Likert beauty judgements). The objective of this experiment is to explore whether any of the possible methodological options produced differences in the way 64 university students (32 men and 32 women) respond to a beauty rating task. We analyzed their responses on Likert (1 to 9 points) and dichotomous (beauty- non beauty) scales, order (dichotomous first or Likert first) and kind of visual stimuli: artistic (impressionist, postimpressionist, abstract, realist paintings) and none artistic (photographs). Our results reveal that differences between sexes are only appreciable using a Likert scale, particularly in relation to the time that men and women take to decide about the beauty of realist paintings, and responses to postimpressionist paintings. On the other hand, order has an effect only on reaction times to photographs, impressionist paintings on the Likert scale, and to photographs on the dichotomous scale. However, there is no interaction between order and sex regarding reaction times and responses on either scale. Conversely a high correlation between responses on dichotomous and Likert scales for both sexes is observed. This suggests that order of presentation of the visual stimuli has an influence on the way participants perceive beauty and that it must be taken into account in future research.

**Key words:** visual beauty perception; aesthetic preference; behavioral procedures; response scale; reaction time;