

## **The neural bases of the perception of beauty: Differences and similarities between men and women**

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Perception of beauty (aesthetic judgment) appears to be one of humans' most distinctive traits. Neuroimaging techniques are proving to be instrumental in the understanding of the biological basis of this trait. Results of recent studies suggest that a broad array of brain regions are involved in our appreciation of beauty. However, the use of different techniques makes it difficult to compare across studies. Our objective in the present work was to examine sex-related differences in the neural underpinnings of beauty appreciation by means of functional Magnetic Resonance Imaging (fMRI), and to compare these results with those of an analogous study carried out earlier by means of magnetoencephalography. Here we recorded the BOLD signal of 12 male and 12 female participants while they decided whether diverse visual stimuli were beautiful or not-beautiful. Our results suggest that there are interesting differences in specific brain regions and in lateralization. However, in both men and women, fMRI revealed occipito-temporal activity that could not be registered with magnetoencephalography due to its limitations measuring activity below cortical surface. The present results are discussed in relation to a model of beauty appreciation of visually-perceived objects.