

Topic 5.



Most previous studies of face preferences have focused on the effects of physical cues such as symmetry and masculinity-femininity. Faces also contain social cues such as expression and gaze direction, however. These communicate an individual's emotional state and what they are currently interested in. This section describes findings about how people integrate physical and social cues when viewing faces and judging their attractiveness.

Integrating social and physical cues when judging attractiveness

Physical and social signals in faces

As the previous sections on preferences for symmetry, masculinity-femininity and average-ness have shown, most studies of facial attractiveness have emphasised the importance of physical aspects of face when judging attractiveness (e.g. how symmetric, feminine or average the faces are). Faces also contain social signals, however. For example, facial expressions reveal an individual's emotional state (e.g. smiling people are generally happy) and the direction of people's attention is revealed by where they are looking (i.e. their gaze direction). These social signals may also be important for facial attractiveness.

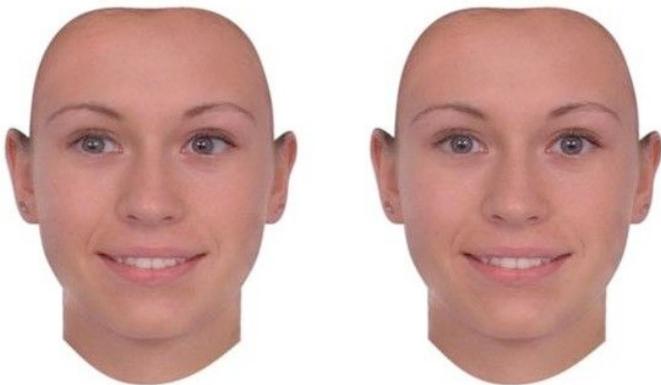
Attraction is not only influenced by physical beauty

Brain imaging techniques allow researchers to examine the effects of viewing attractive and unattractive faces on activity in regions of the brain that are known to be important for processing rewards. Generally, viewing attractive faces causes more activity in the brain's reward centres than viewing unattractive faces does, indicating that viewing attractive faces is rewarding. However, the extent to which viewing attractive faces is rewarding is influenced by the facial expression shown in the faces and also by where they are looking (i.e. the direction of their attention). Attractive faces are more rewarding when they are smiling than when they are shown with neutral expressions. Also, attractive faces are more rewarding when they are shown with direct gaze (i.e. appear to be looking at the viewer) than when they are

shown with averted gaze (i.e. when they appear to be looking at someone other than the viewer). Because someone looking at you or smiling at you indicates they are probably interested in engaging with you in social interaction, these findings suggest attraction is not only influenced by 'physical beauty' but is also influenced by how interested a person appears to be in you.

Gaze direction and smiling influence preferences for physical beauty

Although one of the studies described above indicated that smiling increases how rewarding an attractive face is, whether or not the person shown is smiling because they are happy in general or smiling because they are happy to see you (i.e. smiling at you) might also be important for attraction. To investigate this issue, Jones et al. tested if viewer-directed smiles (i.e. when faces are smiling at the viewer) and other-directed smiles (i.e. when faces are smiling away from the viewer) have the same effect on the strength of preferences for attractiveness or if they have different effects.



In Jones et al's study, participants were asked to choose between attractive and unattractive versions of female faces, and to indicate the extent to which they preferred the attractive versions. When the faces were shown with direct gaze (i.e. appeared to be looking at the participant) preferences for the attractive faces were stronger when the faces were smiling than when they had neutral expressions. By contrast, when the faces were shown with averted gaze (i.e. appeared to be looking away

from the participant) preferences for the attractive faces were stronger when the faces had neutral expressions than when they were smiling. These findings demonstrate that attraction is influenced by the extent to which an individual appears interested in engaging you in social interaction (i.e. the extent that they are smiling at you or smiling at someone else) and not only by their physical beauty. Taking into account how interested somebody is in interacting with you before approaching them minimises the chances of rejection during social interaction because you can identify the most attractive individuals who are most open to interacting with you.

Collectively, these findings demonstrate that people are adept at integrating many different cues when reading faces (e.g. gaze direction, expression and physical attractiveness). This demonstrates the incredible sophistication of the mechanisms and processes that are involved in face perception.

Gaze direction changes what expressions mean

Jones et al. showed that gaze direction and expression both influence the strength of preferences for attractive faces. Other research has shown that gaze direction also influences how we interpret facial expressions. For example, people are quicker to classify angry faces as looking angry when they are shown with direct gaze than when they are shown with averted gaze. By contrast, people are quicker to classify fearful faces as looking scared when they are shown with averted gaze than when they are shown with direct gaze. We appear to have evolved to be more sensitive to social signals that indicate someone is angry with us than social signals that indicate they are angry at something that is nearby but to be more sensitive to social signals that indicate something scary is nearby than social signals that indicate someone is scared of us. Being quick to identify when someone is angry with us and quick to identify when something scary is nearby will help us avoid being caught unawares and attacked.



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Further Reading

Jones, B. C., DeBruine, L. M., Little, A. C., Conway, C. A. & Feinberg, D. R. (2006). Integrating physical gaze direction and expression with physical attractiveness when forming face preferences. *Psychological Science*, in press.