

Integrating physical and social cues when forming face preferences: Differences among low and high anxiety individuals

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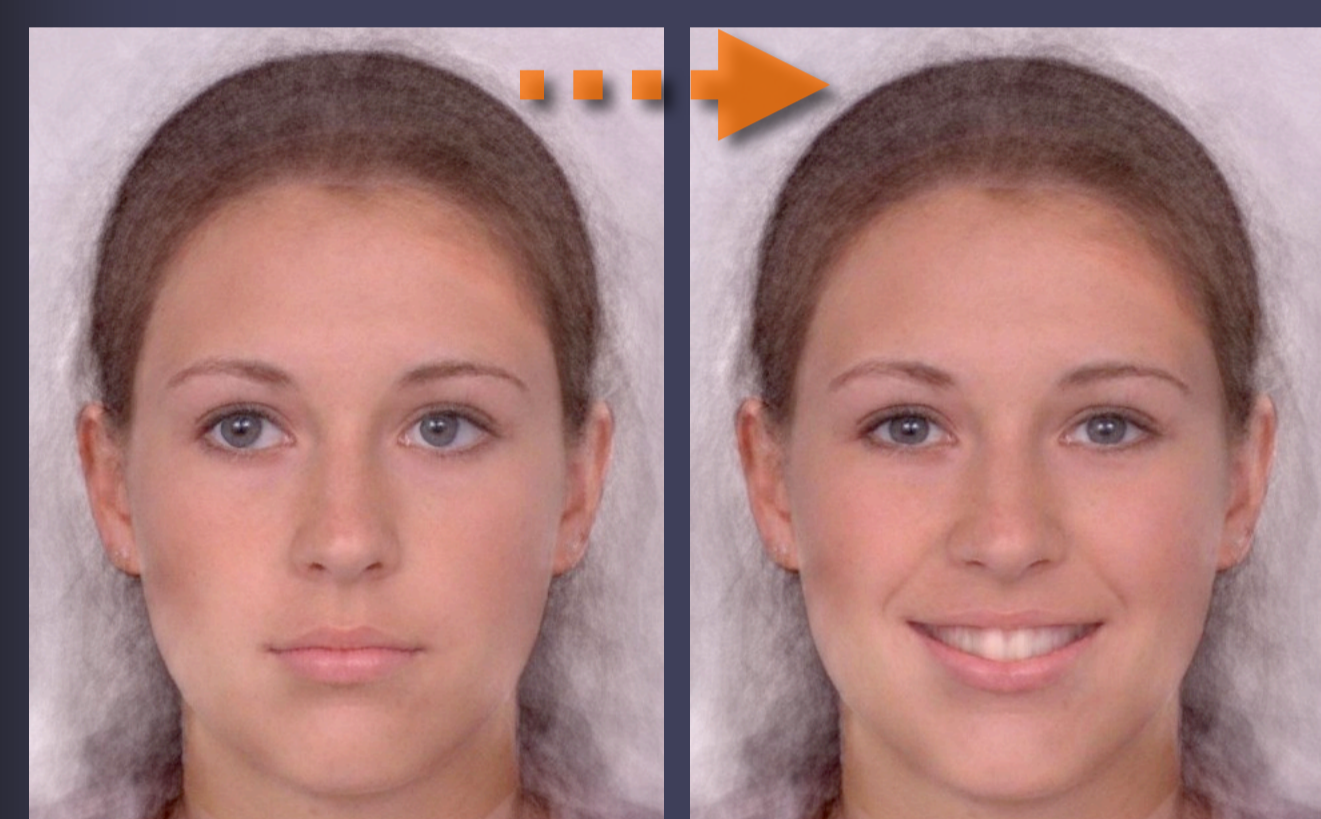
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Background Jones et al (2006) showed integration of physical attractiveness and social cues in the formation of face preferences (e.g. stronger attractiveness preferences for faces with viewer-directed smiles than for faces with other-directed smiles). Because anxious individuals may be particularly interested in social cues when viewing faces, here we investigated anxiety as a source of individual differences in the way people integrate health cues and direction of smile when forming face preferences.

Methods

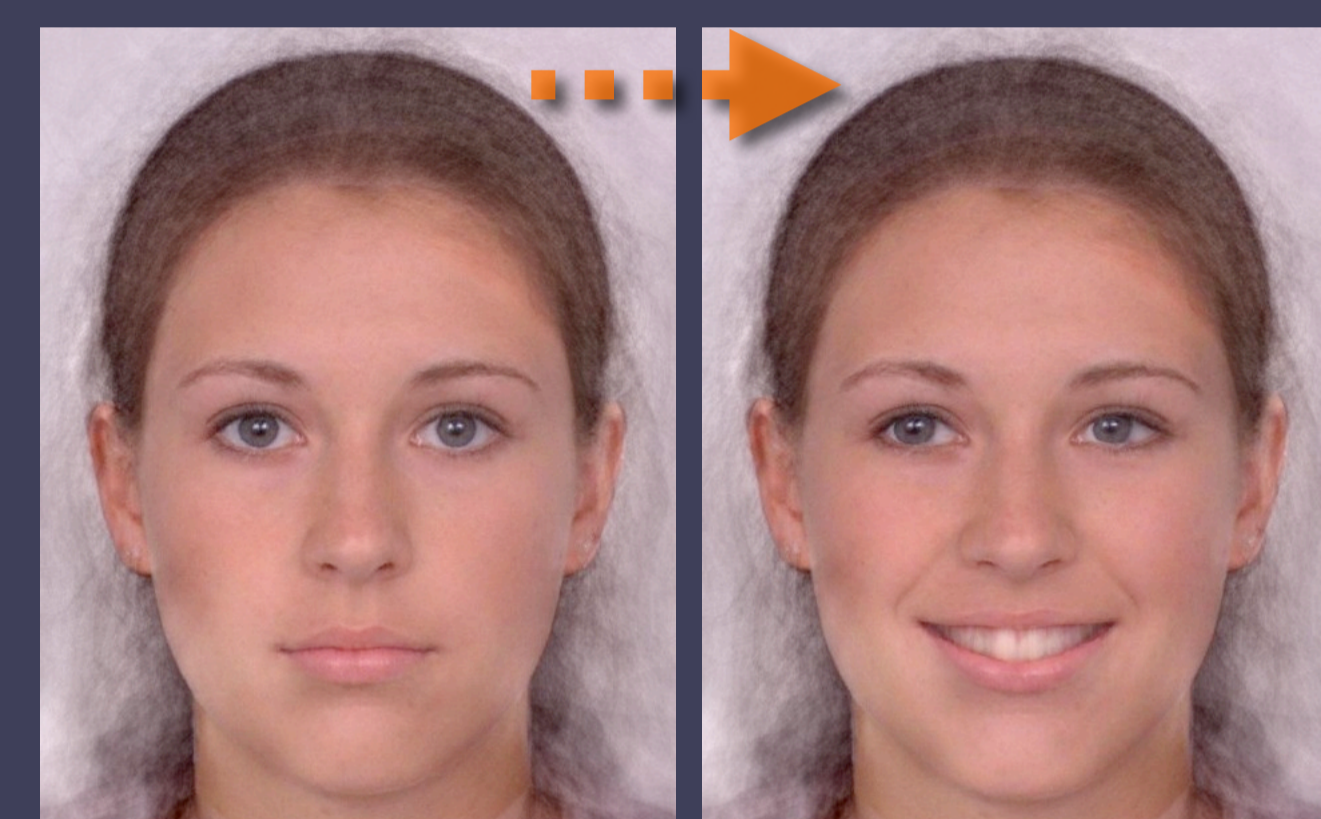
Stimuli. Using computer-graphic methods we created video sequences in which healthy and unhealthy female faces either smiled at the viewer or smiled elsewhere.



Healthy Engaging



Unhealthy Engaging



Healthy Disengaging



Unhealthy Disengaging

Procedure. Participants (N=128; age: M = 20.43, SD = 6.08 years; 57 male) viewed these video clips and rated the attractiveness of the person on a 1 (low) – 7 (high) scale.

Participants also completed the Beck (1988) Anxiety Inventory and State Trait Anxiety Inventory (Spielberger, 1968). High and low anxiety groups were formed using a median split on a composite anxiety score from these scales.

Results ANOVA [within subject factors: apparent health of face (healthy, unhealthy), direction of pro-social behavior (viewer-directed, other-directed); between-subject factors: anxiety level (low, high), participant sex (male, female); covariate: participant age] revealed a 3-way interaction among direction of pro-social behavior, apparent health of face and participant anxiety level ($F=4.63$, $df=1,123$, $p < 0.05$). The low anxiety group preferred viewer-directed smiles to other-directed smiles for healthy faces ($t=2.62$, $df=68$, $p = 0.011$), but not for unhealthy faces ($t=-0.27$, $df=68$, $p=.789$). By contrast, the high anxiety group preferred viewer-directed smiles to other-directed smiles for both healthy ($t=3.67$, $df=58$, $p=.001$) and unhealthy faces ($t=2.88$, $df=58$, $p=.006$). Anxiety level was positively related to overall preference for engagement ($r=.23$, $N=128$, $p=.009$) but not overall health preference ($r=.024$, $N=128$, $p=.784$).

Conclusions Low anxiety individuals were 'choosy' about the type of individuals from which they considered positive social interest attractive: viewer directed smiles were only more attractive than other-directed smiles when the faces were healthy. High anxiety individuals, however, demonstrated preferences for social interest that was directed towards them by both healthy and unhealthy looking faces. Anxious individuals may increase their likelihood of contracting illnesses by not discriminating between approaches from healthy and unhealthy individuals.

Anxiety level and face preference

