How well do we know others’ liking?

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We investigated the ability of a person to predict people’s collective liking, namely, the average liking of others. Participants performed two tasks. In the likability rating task, they observed images of common object (e.g., car, chair) and rated visual likability of the object (1: very bad–7: very good). In the prediction task, each of 20 participants were shown the same objects and asked to predict the average likability rating of 20 other people. The prediction validity was measured as a correlation between prediction and the result of the actual likability rating. Each participant’s prediction modestly correlated with the average likability rating; r = .32 on average. However, the correlation was not higher than the correlation of the participant’s own likability rating with the average likability rating. We also found that the predictions were biased toward one’s own liking; each participant’s prediction correlated more with his or her own likability rating than the observed average likability rating. The results indicate that a person’s knowledge of a collective liking is incorrect and is biased toward one’s own liking.

Key words: likability, preference, object perception, vision, social consensus effect

Although some objects are favorably assessed by many people, others are not. This observation suggests there is a general trend in people’s preferences of what they like. In fact, several studies have shown that visual object preferences (face attractiveness rating, Wood & Brumbaugh, 2009; picture preference, Vessel & Rubin, 2010) are significantly correlated across individuals. Knowing the collective liking may be critical for social behaviors. How correctly do people predict it? Herein we examined this issue by assessing the correlation between the average liking (the average subjective likability rating) and the predicted likeability (the prediction of others’ likability rating).

Methods

Participants. Twenty graduate and undergraduate students (11 females and 9 males; 18–31 years old, mean 21.4) participated in this experiment.

Stimuli. Color images of 32 common objects (e.g., vehicles, furniture, kitchenware) were generated using computer- graphic software. Views were either three-quarters (Fig. 1) or frontal.

Procedure. Each participant performed two tasks: a rating task and a prediction task. The order of the tasks was counterbalanced among the participants. In the rating task, participants observed stimulus images on a computer screen, and answered the question, "How good is your impression of this object’s appearance?" The ratings were made using a seven-point Likert scale (1: very bad–7: very good). Each participant performed 64 trials (32 objects × 2 views). In the prediction task, each participant was asked to predict the average rating after hearing a cover story where 20 individuals (11 males and 9 females; 18–36 years old, mean 21.4) rated the subjective likability on the seven-point scale. Both tasks used the same stimulus images. After the experiment, a debriefing procedure for the cover story was conducted.

Results

First, we examined whether the average prediction accounted for the average likability rating. For each view of each object, the results of the individual rating task were averaged among the participants (average likability). Then the results of the prediction task were averaged in the same manner (average prediction). The object-wise correlation between the average likability and the average prediction was high; r = .87 (p < .001) for the three-quarter views and r = .85 (p < .001) for the frontal views. In short, as a group, the predictions were mostly valid.

Next we examined the validity of individual predictions (see Fig. 2). For each participant, the prediction validity (r_{idx}) was calculated for each view; that is, the object-wise correlation

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Figure 1. Examples of the stimulus images (three-quarter views). They were in color in the experiment.

Figure 2. Example diagram of the individual analysis using participant 1. $L_i$ and $P_i$ represent the individual likability rating and individual prediction of participant $i$, respectively. $L$ represents the average likability rating of the other 19 participants. Arrows denote the object-wise correlations for the ratings/predictions we examined; $r_{val}$ prediction validity; $r_{con}$ rating consistency; $r_{sel}$ prediction selfishness.

The mean $r_{val}$ was .32 and .29 for the three-quarter and frontal views, respectively. We also calculated the rating consistency ($r_{con}$); that is, the object-wise correlation between each participant's likability rating and the average of other 19's likability ratings was determined. The mean $r_{con}$ was .34 and .30 for the three-quarter and frontal views, respectively. There was not a statistically significant difference between $r_{val}$ and $r_{con}$ (paired t-tests on Fisher's z transforms). In other words, whether one predicted the collective liking or simply reported one's own liking, the power of the collective liking prediction was the same. These findings suggest that the participants' effort to predict the liking of others did not add any prediction power.

Each participant predicted as if the collective liking was similar to his or her own liking. The prediction selfishness ($r_{sel}$), which is the object-wise correlation of an individual prediction with the same individual's rating, was .51 on average for the three-quarter views and .48 on average for the frontal view. The $r_{sel}$ values were much higher ($p < .01$) than $r_{con}$ indicating that the individual predictions were more correlated with one's own liking rather than the collective liking.

Discussion

The single-category object experiment (e.g., stimulus objects were 32 cars) and the between-group experiment (20 performed the rating task and other 20 performed the prediction task) produced comparable results. The current findings indicate that people do not understand the collective liking or that they have difficulty consciously assessing the knowledge of collective liking. This difficulty is due to, at least in part, a bias, which assumes that the collective liking is similar to one's own liking. This bias may be a variant of the false consensus effect (Ross, Greene, & House, 1977).

References

