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What Is Beautiful Is Good and More Accurately Understood: Physical Attractiveness and Accuracy in First Impressions of Personality

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Abstract

Beautiful people are seen more positively than others, but are they also seen more accurately? In a round-robin design in which previously unacquainted individuals met for 3 min, results were consistent with the "beautiful is good" stereotype: More physically attractive individuals were viewed with greater normative accuracy; that is, they were viewed more in line with the highly desirable normative profile. Notably, more physically attractive targets were viewed more in line with their unique self-reported personality traits, that is, with greater distinctive accuracy. Further analyses revealed that both positivity and accuracy were to some extent in the eye of the beholder: Perceivers' idiosyncratic impressions of a target's attractiveness were also positively related to the positivity and accuracy of impressions. Overall, people do judge a book by its cover, but a beautiful cover prompts a closer reading, leading more physically attractive people to be seen both more positively and more accurately.

Keywords

personality, accuracy, social perception, physical appearance, impression formation

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It is often assumed that what is beautiful is good, as physically attractive individuals tend to be perceived and treated more positively in daily social interactions than less attractive individuals are (Dion, Berscheid, & Walster, 1972). This *attractiveness halo effect* reflects a physical-attractiveness stereotype, according to which attractive individuals are expected to be more sociable, friendly, warm, competent, and intelligent than less attractive individuals (for reviews, see Feingold, 1992; Langlois et al., 2000). Given the strength and ubiquity of this stereotype, is it still possible for physically attractive individuals to be viewed accurately? Here we report a study that went beyond examining the positivity of impressions of beautiful people to examine the accuracy of such impressions.

Is it appropriate to judge a book by its cover? Evolutionary, socialization, and social expectancy perspectives suggest that more physically attractive individuals either inherently possess or come to develop more positive personality traits (see Langlois et al., 2000, for a review). However, although several meta-analyses have shown that more physically attractive individuals are more socially competent, they have reported less consistent evidence that more physically attractive individuals are better adjusted or more intellectually competent, and have found little or no association between physical attractiveness and other personality traits, such as integrity or locus of control (Eagly, Ashmore, Makhijani, & Longo, 1991; Feingold, 1992; Langlois et al., 2000). Physical attractiveness is therefore limited in its ability to predict an individual's personality. Instead, attractive individuals are likely to differ meaningfully from one another and from the stereotype, possessing distinctive personality profiles. Are perceivers able to accurately discern these characteristics? Or is the stereotype so strong that perceivers do not even attempt to glean more accurate insight into the personalities of attractive individuals, by delving further to actually read the book beneath the beautiful cover?

The presence of bias in perceiving attractive individuals does not preclude impressions from being accurate (Funder & Colvin, 1997). Consider Jane, a highly attractive woman who is more organized and less generous than most people.

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According to the physical-attractiveness stereotype, regardless of her standing on each trait, Jane is likely to be perceived quite positively on each of these desirable characteristics. Such positive impressions correspond very well with the normative profile, as most people do tend to possess more positive than negative traits (Biesanz & Human, 2010; Borkenau & Zaltauskas, 2009; Edwards, 1957; Wood, Gosling, & Potter, 2007). Thus, we used participants' tendency to view targets as similar to the average person (i.e., normative accuracy) as an index of the operation of the physical-attractiveness stereotype in the following study.

However, normative accuracy is independent of another type of accuracy: distinctive accuracy, or accuracy in understanding an individual's unique ordering of traits, as well as how that individual differs from others on specific traits. Regardless of how positively Jane is viewed, she may still be viewed with distinctive accuracy. That is, a perceiver who sees Jane as more organized and generous than she truly is may still understand that she is more organized than generous. Distinctive accuracy entails an ability to distinguish an individual from other individuals and from the normative profile—for example, determining whether Jane is more or less organized than another equally attractive individual.

Given that the physical-attractiveness stereotype does not preclude accuracy, how might attractiveness affect a perceiver's accuracy? Funder's (1995) realistic accuracy model (RAM) outlines the necessary steps that must be completed for an accurate impression of an individual's personality to be formed. Specifically, cues that are *relevant* to the personality traits of interest must be made *available* by the target and then be *detected* and appropriately *utilized* by the perceiver. Physically attractive individuals may facilitate accuracy by making more relevant cues available to others than less attractive individuals do. Physically attractive individuals' better social skills and other people's positive expectations regarding attractive individuals should allow attractive individuals to feel comfortable in social interactions, and consequently emit more relevant cues. Indeed, the qualities associated with having a more judgable personality, such as greater social skills and adjustment (Colvin, 1993), are also linked with physical attractiveness (e.g., Langlois et al., 2000), a finding suggesting that attractive individuals likely provide others with the necessary cues for accurate understanding.

Even if attractive individuals provide more relevant cues than less attractive individuals do, would perceivers be able to detect and appropriately utilize those cues? There is reason to think that they are. Perceivers attend more to more physically attractive individuals (Langlois et al., 2000; Maner et al., 2003) and are therefore likely to detect more cues provided by those individuals. Additionally, the motivation to connect with and form relationships with attractive individuals (Lemay, Clark, & Greenberg, 2010) may translate into a motivation to know and understand them (De La Ronde & Swann, 1998). Such an accuracy motivation enhances distinctive accuracy (Biesanz & Human, 2010). Overall, more physically attractive individuals' emission of more relevant cues, in combination with perceivers' greater attention to such individuals and motivation to understand them, will likely lead more attractive individuals to be more accurately perceived.

We predicted that, relative to less attractive individuals, more attractive individuals would be perceived with greater normative accuracy, a positive bias reflecting the physical-attractiveness stereotype, and with greater distinctive accuracy, an understanding of these individuals' unique self-reported personality traits. In other words, a beautiful cover may actually make the book more easy or desirable to read, increasing both the positivity and the accuracy of personality impressions. The following study tested these predictions.

Method

A total of 73 undergraduate students at the University of British Columbia (56 female, 17 male; mean age = 19.38 years, *SD* = 1.60) participated in 10 groups, ranging in size from 5 to 11 (*Mdn* = 7) in exchange for course credit. Participants met individually with every other participant in their group for 3 min. After each meeting, participants separated and rated each other on a 21-item version of the Big Five Inventory (BFI), which assesses a diverse range of core personality traits (John & Srivastava, 1999), and on 3 additional items assessing intelligence ("is intelligent," "is bright," and "receives good grades"). Ratings were made on a scale from 1 (*disagree strongly*) to 7 (*agree strongly*). Participants also rated "how physically attractive" the other person was (scale from 1, *not at all*, to 7, *a great deal*). After all of the interactions, participants provided self-reports on the same abbreviated BFI and 3 intelligence items. The 252 dyadic interactions resulted in a total of 504 impressions; impressions from previously acquainted dyads were excluded from analysis (4.9% of the total).[1]

We examined the data using the social accuracy model (SAM; Biesanz, in press; Biesanz & Human, 2010) and R's lme4 multilevel-modeling package (Bates & Sarkar, 2007). Specifically, in the within-perceivers part of the SAM (Level 1), we predicted perceivers' ratings of each target on each personality item simultaneously from (a) the target's self-report on that item after subtracting the mean self-report for that item and (b) the mean target self-report on that item. Items were not reverse-coded prior to analysis. The relationship between the mean target self-report for an item and perceivers' ratings for that items indexes normative accuracy—the extent to which perceivers' ratings correspond to the average self-report and thus generalize to the average person. The relationship between targets' self-reports (after partialing out the mean self-report for each item) and perceiver's ratings indexes distinctive accuracy—unique self-other agreement. Distinctive accuracy in this analysis has two interpretations: It reflects (a) the ability to differentiate targets' self-reported profiles of traits from the normative (i.e., mean) self-report or, equivalently, (b) the general ability to differentiate a given target's self-reported

level on a trait from other targets' self-reported levels (see Biesanz, in press; Kenny & Winquist, 2001, pp. 275–278).

We examined the effect of physical attractiveness in the between-perceivers (Level 2) part of the model by estimating the intercept and the slopes for distinctive and normative accuracy as a function of target attractiveness. Target attractiveness was indexed in two ways: by (a) consensual attractiveness, the target's mean attractiveness score averaged across all perceivers, and (b) perceiver unique attractiveness rating, a given perceiver's rating of a target's attractiveness after controlling for the target's consensual attractiveness score.[2] The former measure allowed us to examine the main effects of target attractiveness, and the latter allowed us to examine the effects of individual perceivers' unique impressions of the attractiveness of a particular target. Both measures of attractiveness were grand-mean-centered prior to analysis and included simultaneously within the analysis. The critical parameters for this analysis were the change in distinctive agreement and the change in normative agreement as a function of target attractiveness.

Results

After just 3 min of interaction, perceivers viewed others on average with considerable normative accuracy, $b = 0.80$, $z = 22.21$, $p < .0001$, and distinctive accuracy, $b = 0.18$, $z = 8.82$, $p < .0001$. Targets that were viewed by the group as more attractive were viewed with significantly greater normative accuracy, or positivity, $b = 0.18$, $z = 4.33$, $p < .0001$. Of primary interest, more attractive individuals were also viewed with greater distinctive accuracy, $b = 0.09$, $z = 2.73$, $p = .006$.

Higher perceiver attractiveness ratings, controlling for consensual attractiveness, were associated with greater normative accuracy, $b = 0.09$, $z = 5.39$, $p < .0001$. Higher perceiver attractive ratings were also significantly associated with greater distinctive accuracy, but only for targets at or above the mean level of attractiveness, resulting in a significant three-way interaction of perceiver's unique attractiveness perceptions, target's consensual attractiveness, and target's self-report in predicting perceiver's impression ratings, $b = 0.04$, $z = 2.36$, $p = .021$. Perceivers' unique attractiveness ratings were not significantly related to distinctive accuracy for targets 1 standard deviation below the average level of attractiveness, $b = –0.01$, $z = –0.48$, $p = .63$, but were related to distinctive accuracy for targets 1 standard deviation above the average level of attractiveness, $b = 0.08$, $z = 2.69$, $p = .007$.

Figure 1 presents a scatter plot of distinctive-accuracy slope as a function of perceiver's centered unique attractiveness rating, with curves showing the relationship between perceiver's unique attractiveness rating and distinctive accuracy for targets more than 1 standard deviation above and more than 1 standard deviation below the mean for consensual attractiveness. In addition, the figure presents the lowess curve of distinctive-accuracy slope as a function of target's consensual attractiveness, showing a dramatic rise above the mean attractiveness level. In the figure, distinctive accuracy levels off below the mean consensual attractiveness rating, which suggests that less attractive individuals are not necessarily viewed inaccurately. Figure 2 presents a scatter plot of normative-accuracy slope as a function of perceiver's unique attractiveness rating and includes lowess curves depicting the relation of normative accuracy to both perceiver's unique attractiveness rating and consensual attractiveness. The curves show the significantly enhanced normative accuracy associated with both greater consensual attractiveness and higher idiosyncratic perceiver attractiveness ratings.

Discussion

Overall, more physically attractive individuals were viewed both more positively and more accurately in first impressions. Specifically, in line with the physical-attractiveness stereotype, more attractive individuals were viewed with greater normative accuracy, which is indicative of being considered to possess more positive characteristics. Meanwhile, more attractive individuals were viewed with greater distinctive accuracy, as perceivers more accurately understood more attractive individuals' unique characteristics. In contrast to previous work showing that unattractive individuals are viewed negatively (e.g., Griffin & Langlois, 2006), our study did not demonstrate that unattractiveness was associated with a significant decrease in distinctive accuracy, which leveled off below the mean attractiveness rating. Whereas attractive individuals likely benefit from both more positive and more accurate impressions, less attractive individuals may not necessarily suffer from being viewed inaccurately, at least in first impressions.

How are impressions of a given target simultaneously positive and accurate? Consider again attractive Jane. She is likely to be viewed as more organized and generous than she truly is. However, perceivers will also tend to accurately discern Jane's relative ordering of traits, understanding that she is more organized than generous. Further, when comparing Jane with a similarly attractive individual, perceivers will understand who is more organized better than if they were comparing less attractive individuals. In addition, comparisons between Jane and a much less attractive individual will be very difficult given that Jane will generally be viewed more positively across all traits. Although physically attractive individuals are viewed more accurately than less attractive individuals, the physical-attractiveness stereotype will still bias perceptions and decisions involving comparisons of people of differing attractiveness levels.

In our study, the application of the physical-attractiveness stereotype and accuracy were to some extent a product of the eye of the beholder. That is, viewing a given target as particularly attractive (controlling for the group's perception) led a perceiver to form more positive perceptions of that target. Thus, even individuals who are not generally viewed as attractive can still reap the benefits of the physical-attractiveness stereotype when particular perceivers find them especially attractive. Furthermore, viewing a particular target as attractive was

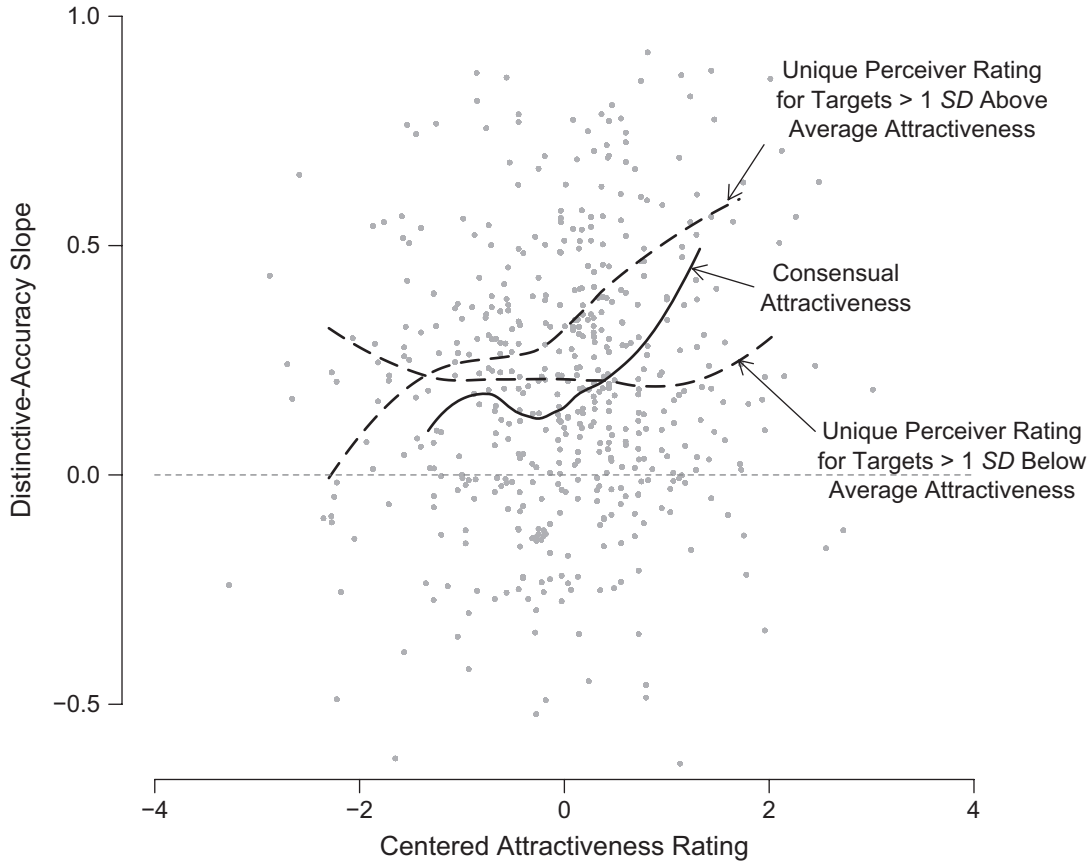

Fig. 1. Scatter plot of distinctive-accuracy slopes (distinctive self-other agreement) as a function of perceiver's unique attractiveness rating (adjusted for consensual attractiveness). Nonparametric lowess curves (Cleveland, 1979) are plotted to illustrate the relationship both for targets more than 1 standard deviation above the average level of consensual attractiveness and for targets more than 1 standard deviation below the average level of consensual attractiveness. The figure also shows a nonparametric lowess curve illustrating the relationship between distinctive-accuracy slopes and consensual attractiveness. All ratings are grand-mean-centered.

also associated with an increase in distinctive accuracy, but only for those targets who were generally perceived to be of at least average attractiveness. This suggests that physical attractiveness may enhance distinctive accuracy both because consensually attractive targets provide better information than less attractive targets and because perceivers pay more attention to them and are more motivated to understand them. That is, if a perceiver views Jane as particularly attractive, this individual is likely to be more motivated to understand her and to be more attentive to her during an interaction, and such motivation and attention enhance cue detection. Indeed, the finding that perceivers' unique attractiveness perceptions resulted in greater accuracy only for relatively attractive individuals suggests that enhanced attention and motivation emerge only when the target is attractive.

It is important to note that this study examined only one index of distinctive accuracy, distinctive self-other agreement. Although this is a common and meaningful measure of accuracy (Funder & Colvin, 1997), future research should examine whether the effects we observed extend to other indicators of accuracy, for instance, by using measures such as knowledgeable informants' reports.

Overall, in first impressions, physically attractive people are perceived both more positively and more accurately than less attractive individuals. In turn, attractive individuals are likely to benefit from this enhanced positivity (Langlois et al., 2000) and accuracy (Swann, Pelham, & Krull, 1989). Indeed, recent research suggests that to be viewed both accurately and positively is an ideal scenario in close relationships (Lackenbauer, Campbell, Rubin, Fletcher, & Troister, in press; Luo & Snider, 2009). Perceivers' idiosyncratic views of a target's attractiveness are also associated with the positivity and accuracy of personality impressions, which indicates that both the application of the physical-attractiveness stereotype and accuracy are partially in the eye of the beholder. In sum, people do judge a book by its cover, but a beautiful cover prompts a closer reading, leading more physically attractive individuals to be viewed both more positively and more accurately.

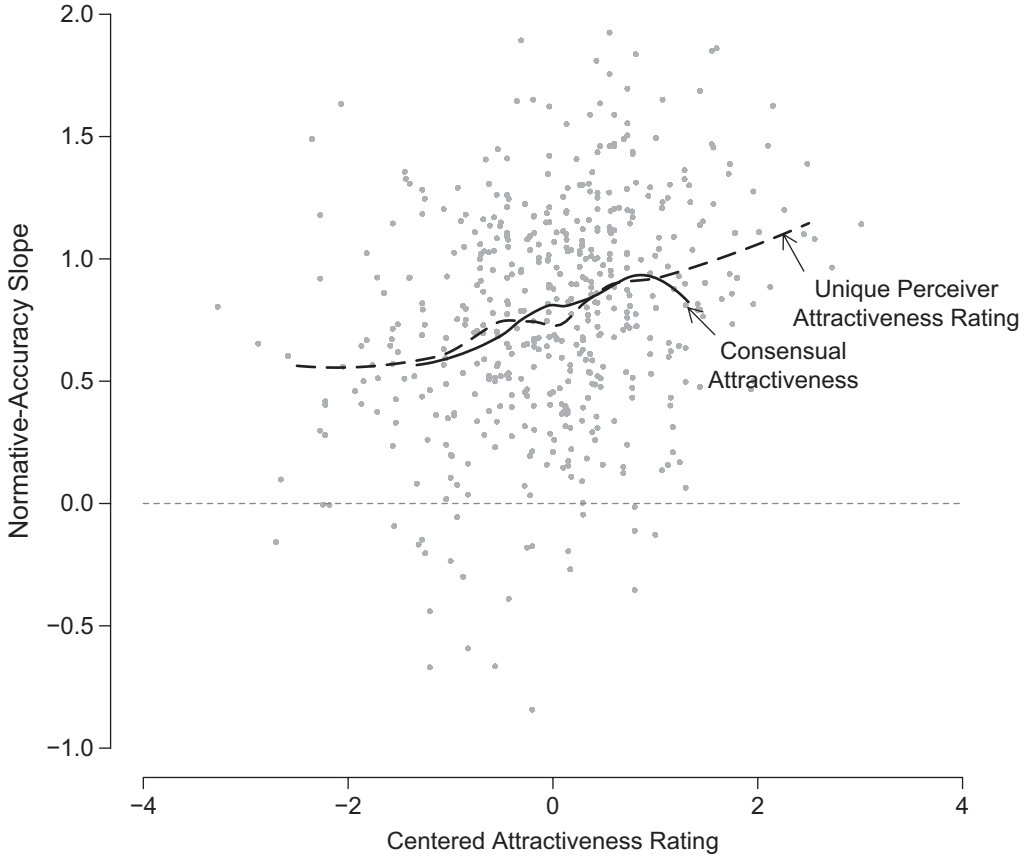

Fig. 2. Scatter plot of normative-accuracy slopes (normative self-other agreement) as a function of perceiver's unique attractiveness rating (adjusted for consensual attractiveness). Nonparametric lowess curves (Cleveland, 1979) are plotted to illustrate the relationship between normative accuracy and both perceiver's unique attractiveness rating and target's consensual attractiveness rating. All ratings are grand-mean-centered.

Declaration of Conflicting Interests

The authors declared that they had no conflicts of interest with respect to their authorship or the publication of this article.

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Notes

1. The study included an unrelated experimental condition that was not significantly related to perceivers' impressions of attractiveness, $t(250) = 0.84$, n.s.
2. A social-relations-model analysis (Kenny & LaVoie, 1984) revealed substantial consensus ($R^2 = .33$) on targets' level of attractiveness. The mean attractiveness rating was just above the midpoint of the 7-point scale ($M = 4.57$, $SD = 1.19$).

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