What is Beautiful is Good... Online: Physical Attractiveness, Social Interactions and Perceived Social Desirability on Facebook

Abstract

The present research examined whether physically attractive Facebook users are assumed to possess more socially desirable characteristics than unattractive Facebook users. Undergraduate psychology and speech pathology students (77 males and 306 females; median age = 18 years) were presented with portrait photographs of two attractive and two unattractive individuals in a counterbalanced order. They were informed that the photographs were profile pictures belonging to 'regular' Facebook users. Participants rated each individual's social competence, intellectual competence and integrity; estimated their number of Facebook friends; and indicated the likelihood of accepting a friend request from each. Participants perceived the attractive individuals to be more socially competent (d = 1.74), more intellectually competent (d = 1.01), and to have more integrity (d = 0.64). They also indicated they would be more likely to accept a friend request from an attractive individual (d = 0.59), and predicted that the attractive individuals would have more Facebook friends (d = 0.87). The physical attractiveness stereotype appears to manifest within social interactions on Facebook.

Background and Significance

Physical attractiveness is an easily accessible means for social judgment. We often assume that attractive individuals lead more successful lives and have more positive personal traits. This is known as the physical attractiveness stereotype (PAS), summarized by Dion, Berscheid and Walster (1972) as "what is beautiful is good" (p. 285). Previous research, such as that conducted by Goldman and Lewis (1977), has demonstrated weak correlations between physical attractiveness and social skills. They proposed that society expects attractive people to be 'good' and consequently treats them more positively. According to the researchers, this in turn creates a self-fulfilling prophecy.

In the classic study conducted by Dion and colleagues (1972), participants rated three photos of faces (attractive, average attractiveness and unattractive) on 27 different personality traits. They rated attractive faces significantly higher than unattractive faces on a subset of traits characterized as being socially desirable. In their meta-analysis of PAS research, Eagly and colleagues (1991) classified these socially desirable traits into categories, including 'social competence', 'intellectual competence' and 'integrity'. The PAS appeared to have the largest impact on judgements of social competence (d = .68), in comparison to intellectual competence (d = .46) and integrity (d = .13). These early results suggested that the PAS may have significant implications for social interactions.

As technology progresses, social interactions are often conducted and initiated on social networking sites such as Facebook. Research investigating whether the implications of the PAS extend into social interactions on Facebook is therefore very relevant in our current context. In an online questionnaire conducted by Wang and colleagues (2009), participants indicated that they were significantly more likely to initiate a friend request with an attractive profile owner. Greitmeyer and Kunz (2013) studied actual friending behaviours on Facebook, sending requests from unattractive, attractive and moderately attractive people. After seven days, significantly more participants had accepted a friend request from the attractive profile than the unattractive profile. The results of these studies suggest that the PAS does manifest on Facebook, influencing social interactions by leading people to judge physically attractive people as better candidates for friendship.

The current research aimed to build on the classic work of Dion et al. (1972), investigating the PAS and judgements of social desirability in terms of the three specific clusters proposed by Eagly and colleagues (1991; social competence, intellectual competence and integrity) on Facebook. It was hypothesized that participants would rate attractive Facebook profile owners higher on (H1) social competence, (H2) intellectual competence, and (H3) integrity, in comparison to unattractive profile owners. Inspired by the work of Wang and colleagues (2009) and Greitmeyer and Kunz (2013), it was further hypothesized (H4) that participants would be more likely to accept friend requests from an attractive individual than an unattractive individual. The number of Facebook friends one has is often an indicator of popularity, implying positive personal traits and social aptitude. Therefore, it was hypothesized (H5) participants would predict that attractive individuals have more friends on Facebook than unattractive individuals.

Methods

Design

A repeated measures, within groups experimental design was used to examine the effect of physical attractiveness on ratings of social competence, intellectual competence and integrity, willingness to accept friend requests and predictions of numbers of Facebook friends. The independent variable was attractiveness of the faces with two levels (attractive and unattractive).

Participants

Emails were sent to 458 undergraduate Psychology and Speech Pathology students enrolled in an introductory statistics unit at Curtin University, inviting them to participate in this online study in exchange for a 5% mark allocation in an assignment. We removed 21 cases due to excessive missing data. The final sample consisted of 384 students (20.1% males, 79.7% females, 0.2% other). Eight participants declined to give their age, therefore

376 participants ranged in ages from 18 to 23+, with a median age of 18 years. Regular Facebook users (defined as using the site two or more times per week) comprised 93.5% of the participants (19.5% males, 80.2% females, *Mdn* = 500 Facebook friends).

Sensitivity power analyses were conducted using G*Power 3.1 (Faul et al., 2009). When running paired samples t-tests with an alpha level of .01 (one-tailed). We had sufficient statistical power (0.8) to detect a difference of at least d = .16 between the attractive and unattractive conditions for social competence, intellectual competence and integrity, and d = .17 for predicted number of Facebook friends and likelihood of accepting a friend request. **Materials**

Four faces were selected from the CAL/PAL Face Database, a male and female with previously high attractiveness ratings and a male and female with low attractiveness ratings (Ebner, 2008). A manipulation check confirmed that participants rated the 'attractive' faces (M = 5.74, SD = 1.51) as significantly more attractive than the 'unattractive' faces (M = 2.96, SD = 1.39), t(383) = 35.00, p < .001, two-tailed, d = 1.92, 95% confidence interval for the difference between two means [2.63, 2.94]. Although the Shapiro-Wilk statistics calculated prior to running the manipulation check were p < .001, inspection of relevant histograms indicated that the normality and normality of difference scores assumptions were in fact satisfied.

The survey consisted of three questions and was administered using the online survey software, Qualtrics. The first question asked participants to rate each face on 10 socially desirable personality traits derived from the work of Dion and colleagues (1972). Ratings were made on 6-point numeric scales (e.g. 1 = unsociable to 6 = sociable). For analysis, these traits were grouped into three subsets: social competence (social, likeable, interesting, friendly), intellectual competence (intelligent, hardworking, successful) and integrity (trustworthy, honest, sincere), inspired by Eagly and colleagues (1991). Reliability analyses revealed a high Cronbach's alphas for the social competence (.804), intellectual competence (.811) and integrity (.835) subscales. The second question asked participants to predict the number of Facebook friends each face had, given a choice of 11 categories, increasing in increments of 50 starting from "fewer than 50" and finishing with "more than 501. The third question was only administered to regular Facebook users. It measured the likelihood of participants accepting friend requests from attractive and unattractive faces on a numeric scale from 1 (very unlikely) to 6 (very likely), under the pretense that the target was a friend of a friend.

Procedure

Participants received an email with a hyperlink to the online survey and were informed that the current research was focused on 'first impressions' formed online. They were instructed to complete the survey on a device and in a location of their choosing, which took approximately 10 minutes. Participants indicated whether or not they were regular Facebook users, and were presented with the four faces in a randomized/counterbalanced order. They rated each face on 10 socially desirable traits, number of Facebook friends, likelihood of accepting their friend request (regular Facebook users only) and attractiveness. They also provided demographic information.

Results

We conducted five paired samples t-tests using IBM SPSS Statistics 22, in order to compare mean ratings for the attractive and unattractive faces on the five outcome variables: social competence, intellectual competence, integrity, likelihood of accepting a friend request and predicted number of Facebook friends. Although Shapiro-Wilk tests were significant at p < .05, inspection of relevant histograms and boxplots revealed that the scores and difference scores were sufficiently normally distributed. It was therefore decided that the paired samples t-test would be robust to the small departures. The results of the paired samples t-tests are presented in Table 1, showing that the attractive faces were rated significantly higher than the unattractive faces on all five outcomes. Effect sizes ranged from medium to very large.

Table 1.

Summary of the differences between participants ratings of the attractive and unattractive faces on the five outcome variables

Outcome	Condition M (SD)		95% CI	t	d
	Attractive	Unattractive	_		
Social Competence	4.12 (0.55)	3.03 (0.70)	[1.01, 1.17]	27.96***	1.74
Intellectual Competence	3.96 (0.63)	3.27 (0.75)	[0.61, 0.78]	16.90***	1.01
Integrity	3.82 (0.64)	3.36 (0.80)	[0.37, 0.54]	10.72***	0.64
Facebook Friends	7.21 (2.26)	5.30 (2.16)	[1.75, 2.08]	22.57***	0.87
Friend Request Acceptance	2.82 (1.31)	2.12 (1.10)	[0.62, 0.80]	15.52***	0.59

Note: 95% CI = 95% confidence interval of the difference between two means *** p < .001

Discussion and Conclusions

The results supported all five hypotheses, suggesting that the PAS can influence social judgements and interactions on Facebook. Participants rated attractive individuals whom they believed to be regular Facebook users higher for social competence (H1), intellectual competence (H2) and integrity (H3). Participants also indicated they were more likely to accept a friend request from an attractive individual (H4) and predicted that attractive individuals would have more Facebook friends than unattractive individuals (H5).

Our results were consistent with the work of Dion et al. (1972), suggesting that physically attractive individuals are perceived to possess more socially desirable characteristics than unattractive individuals, and that this applies for social interactions on Facebook. Interestingly, the difference between ratings for attractive and unattractive people was largest for social competence, then intellectual competence and smallest for integrity. This is consistent with Eagly and colleagues (1991) meta-analytic review, in which they concluded that the PAS is mostly consisting of sociability and similar attributes, and has lesser impact on intellectual competence and again on integrity.

The rates of friend request acceptance in the present study were consistent with theoretical and actual rates found by Wang and colleagues (2009) and Greitemeyer and Kunz (2013) respectively, supporting notions that attractive individuals are seen as better potential friends online. The number of Facebook friends one has can often be an indicator of how popular or sociable they are, and in turn, how much people like them. In our study, participants predicted that attractive individuals would have more Facebook friends than the unattractive individuals. Both judgements imply that the participants are making some other positive attributions about the physically attractive individuals character.

Care should be taken when generalizing these results to a wider population, because we only studied undergraduate Psychology and Speech Pathology students who may have had prior knowledge or unrepresentative opinions. Similar to Wang and colleagues (2009), it should be noted that our survey only provides an insight into intentions, and the behaviours did not actually occur on Facebook.

In general, the PAS can have a significant impact on society. Often in political elections for example, attractive candidates are evaluated more favorably than their unattractive competitors, regardless of other traits (Hart, Ottati, & Krumdick, 2011). As technology progresses and the proportion of interaction conducted online increases, the nature of online PAS becomes more important. For instance, individuals using attractive avatars in online job interviews often progress further in the interview stages (Behrend et al., 2012). Research in this area is important, because there is a real potential for the PAS to affect important aspects of individuals lives. An interesting avenue of exploration is whether the supply of other personal information (for example hobbies, likes, dislikes) will impact the PAS and whether is can be used to reduce bias in more important online situations.

The current findings indicate that the PAS can influence both judgements and behaviours on Facebook, the implications of which will only increase with our dependence on technology for interactions.

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