

Physical Attractiveness Biases in Ratings of Employment Suitability: Tracking Down the “Beauty is Beastly” Effect

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ABSTRACT. The “what is beautiful is good” heuristic suggests that physically attractive persons benefit from their attractiveness in a large range of situations, including perceptions of employment suitability. Conversely, the “beauty is beastly” effect suggests that attractiveness can be detrimental to women in certain employment contexts, although these findings have been less consistent than those for the “what is beautiful is good” effect. The current research seeks to uncover situations in which beauty might be detrimental for female applicants. In two studies, we found that attractiveness can be detrimental for women applying for masculine sex-typed jobs for which physical appearance is perceived as unimportant.

THE “WHAT IS BEAUTIFUL IS GOOD” heuristic suggests that physically attractive individuals are attributed other unrelated, positive characteristics as a result of their attractiveness (Dion, Berscheid, & Walster, 1972; Hatfield & Sprecher, 1986). Support for this hypothesis has been found in meta-analyses of both social psychological research (Eagly, Ashmore, Makhijani, & Longo, 1991) and industrial/organizational psychological research (Hosoda, Stone-Romero, & Coats, 2003). Physically attractive individuals are seen as more likely to achieve success

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(Croxtton, Van Rensselaer, Dutton, & Ellis, 1989) and more hireable as managers and management trainees (Cash & Kilcullen, 1985; Dipboye, Arvey, & Terpstra, 1977; Dipboye, Fromkin, & Wiback, 1975; Gilmore, Beehr, & Love, 1986; Marlowe, Schneider, & Nelson, 1996) than less attractive individuals. Physically attractive individuals receive higher offers for starting salary (Jackson, 1983) and receive higher performance evaluations (Drogosz & Levy, 1996). In addition, physically attractive individuals receive higher ratings for admission to academic programs (Shahani, Dipboye, & Gehrlein, 1993), higher voter ratings when vying for public office (Sigelman, Thomas, Sigelman, & Ribich, 1986), better offers in bargaining (Solnick & Schweitzer, 1999), more favorable judgments in trials (Castellow, Wuensch, & Moore, 1990), and more positive hirability ratings (Miller & Routh, 1985).

However, a small body of research suggests that attractiveness can be detrimental to women in certain situations. Most notably, Heilman and Saruwatari (1979) and Heilman and Stopeck (1985) found that the “beauty is beastly” effect may occur when attractive women apply for masculine sex-typed jobs. However, the support for this finding has been inconsistent in past research. The majority of research in this area has found support for the “what is beautiful is good” effect rather than for the “beauty is beastly” effect, regardless of job type (Hosoda et al., 2003). The current research seeks to reconcile the inconsistencies in past research related to the “what is beautiful” is good effect and the “beauty is beastly” effect. In two studies, we explore the specific circumstances under which the “beauty is beastly” effect might occur.

Beauty is Beastly

Heilman and Stopeck (1985) suggest that the “beauty is beastly” effect should occur for attractive women applying for masculine jobs in light of Heilman’s (1983) Lack of Fit model. The model states that “occupational sex bias is a result of an incongruity between one’s perceived skills and attributes, which are associated with gender, and the perceived nature of the job’s requirements” (Heilman & Saruwatari, 1979, p. 203). An assessment of poor fit would give rise to expectations of failure, whereas an assessment of good fit would result in expectations of success. If an individual lacks the characteristics required for the job or possesses characteristics that are incongruent with these requirements, then the individual is expected to fail at the job. As the lack of fit between an individual’s characteristics and the requirement of the job increases, so does the expectation of failure (Heilman, 1983). Therefore, there are two forces influencing the incongruity—the characteristics of the job and the characteristics of the individual applying for the job.

As such, Heilman and Saruwatari (1979) and Heilman and Stopeck (1985) found that attractive women were at an advantage for feminine sex-typed jobs and at a disadvantage for masculine sex-typed jobs. However, attractive men were at an advantage over unattractive men regardless of the sex typing of the

job. Jackson (1983) manipulated applicant sex (male, female), masculinity (masculine, feminine, androgynous), and job-type (masculine, feminine, neutral). Masculinity of the applicant and sex-type of the job interacted to influence employment suitability. Masculine and androgynous individuals were seen as more suitable for masculine sex-typed jobs than feminine individuals. Feminine and androgynous individuals were seen as more suitable for feminine and neutral sex-typed jobs than masculine individuals. Therefore, we suggest that attractiveness will be more beneficial for men applying for masculine jobs than feminine jobs. Likewise, attractiveness will be more beneficial for women applying for feminine jobs than masculine jobs.

Hypothesis 1: Attractiveness will be positively related to employment suitability.

Hypothesis 2: Attractiveness will be more positively related to employment suitability for men applying for masculine jobs than feminine jobs.

Hypothesis 3a: Attractiveness will be more positively related to employment suitability for women applying for feminine jobs than masculine jobs.

Hypothesis 3b: Attractiveness will be negatively related to employment suitability for women applying for masculine jobs.

In addition to the sex-type of the job, we suggest that physical appearance may be more relevant for some jobs than others (Gilmore, Beehr, & Love, 1986). When it comes to fashion models, for example, physical appearance is a necessary job requirement. For other jobs, such as salesperson, waiter, or receptionist, it is often seen as desirable, whereas for other jobs it may be seen as unnecessary. The importance of physical appearance to a given job should predict the influence of attractiveness on employment suitability for both male and female applicants. If physical appearance is seen as important to performing the job, then one's level of physical attractiveness should be more strongly related to perceptions of employment suitability. Beehr and Gilmore (1982) found support for this idea in a study where attractiveness and importance of physical appearance to the job were manipulated. Attractive individuals were hired more frequently for jobs where physical appearance was perceived as important. However, that study only used male applicants.

Hypothesis 4: Attractiveness will be more positively related to employment suitability for jobs for which physical appearance is important to the job than for jobs for which physical appearance is unimportant to the job.

STUDY 1

Because of the potential effects of stimulus sampling on construct validity (Wells & Windschitl, 1999) and Type I error (Forster & Dickinson, 1976; Santa, Miller, & Shaw, 1979) we chose to use a wide range of stimulus photographs and jobs for this research. Specifically, we started with 33 jobs and 204 photographs.

Method

Participants

Participants were psychology students at a small private university in the Southwest. Sixty-seven participants (39 males, and 28 females, mean age = 20.30, $SD = 1.53$) took part in the job ratings process (rating the jobs on sex-type and importance of appearance). Forty-two participants (21 male, 21 female, mean age = 19.10 years, $SD = 1.00$) took part in the photograph ratings process (rating the photographs on attractiveness and employment suitability). The self-reported ethnicity of the sample was 40.5% Caucasian, 33.3% Hispanic, 30.1% Asian American, and 7.1% African American (total greater than 100%, because some participants reported membership in more than one category).

Job Ratings

A diverse list of 33 jobs was chosen for this research. Many of the jobs have been used in previous research on attractiveness bias (Cash, Gillen, & Burns, 1977; Drogosz & Levy, 1996; Heilman & Stopeck, 1985; Jackson, 1983). Sixty-seven coders rated the photographs on sex-type and importance of physical appearance using the methods suggested by Krefting, Berger, and Wallace (1978). Heilman (1983) suggests that one way to conceptualize job sex-type is the percentage of men and women occupying that job. Therefore, participants estimated the percentage of job incumbents for each job that are men. Participants specifically answered the question, "What is your best estimate of the percentage of people actually holding that position in the real world who are male and female? (These should add to 100%)" and then indicated their percentage estimations. Across jobs, the percentage of incumbents estimated to be men was 51.42% ($SD = 25.86$).

For the ratings of the importance of physical appearance to the job, participants responded to the question, "How important is physical appearance in this position?" on a scale of 1 (not at all important) to 7 (extremely important). Six jobs had low inter-rater reliabilities and were removed, leaving 27 jobs. The job that had the median rating of sex-type (customer service manager) was removed so that there was an even number of jobs ($n = 26$). Across jobs, the average ratings of importance of physical appearance was 4.25 ($SD = 1.09$). Table 1 includes the mean ratings of importance of physical appearance, and sex-type for each of the 26 jobs.

Photograph Ratings

A separate set of participants rated photographs on physical attractiveness using a card-sorting task. The photographs consisted of 204 students (102 men,

and 102 women) who were chosen from a recent university yearbook. All of the photographs were of Caucasian university seniors, free from noticeable facial disfigurements, dressed in interview-appropriate clothing, and not wearing eyeglasses. For physical attractiveness, participants were asked to rate the photographs on a scale ranging from 1 = physically unattractive to 7 = physically attractive by placing each photograph in one of seven numbered boxes. Participants were given the following instructions:

In this envelope you'll find two decks of photograph cards and a brief description of a seven-point scale on which to rate the people photographed. To the best of your ability please rate each person according to the seven-point scale by placing each photograph in the appropriately numbered tray. Feel free to use the seven points on the scale however you see fit. During this task, you are free to change your mind about any of your ratings by simply moving photographs from one tray to another. Once you have finished rating all of the photographs, the experimenter will transfer the cards to envelopes for data recording. You will repeat this process four times—each time using a different seven-point scale. You may begin whenever you are ready.

The participants also rated the photographs on other characteristics (e.g., businesslike, intelligence) which are not used in the current study. Each photograph was rated by 8 coders (4 male raters, 4 female raters) on physical attractiveness, and z-scores were taken to average across raters. There was an adequate level of agreement between raters ($ICC = .91$). Before the z-scores were taken, however, the average rating of attractiveness on the 1–7 scale was 3.28 ($SD = 1.09$) with the female photographs rated as slightly more attractive ($M = 3.35$, $SD = 1.17$) than the male photographs ($M = 3.21$, $SD = 1.00$). Median splits were conducted so that each photograph was rated as unattractive = 1 or attractive = 2.

Employment Suitability

Using a similar method, a separate group of participants rated each photograph on employment suitability for each of the focal jobs. Again, each photograph was rated by 8 coders (4 male raters, 4 female raters) on employment suitability for each of the 26 jobs. The instructions for this task were the same as for ratings of photograph attractiveness except that the second sentence read, "Carefully consider the job title, and to the best of your ability please rate each person according to the seven-point scale by placing each photograph in the appropriately numbered tray." Participants read written instructions: "How suitable for employment in the position DIRECTOR OF SECURITY do you perceive this person to be on a scale of 1 to 7?" Each participant rated four different positions. The instructions remained the same, except for a change in the listed position. The scale was anchored by 1 = "not at all suitable" and 7 = "extremely suitable."

Just as with the photograph ratings of physical attractiveness, z-scores were calculated for each rater in order to aggregate across the 8 different raters' scores. Before taking the z-scores, the grand mean across photographs and jobs was close to the center of the 1–7 scale ($M = 3.94$, $SD = 1.00$). The use of z-scores helps alleviate differences in raters in strictness, leniency, and central tendency biases. That is, some participants may have generally rated all of the candidates as relatively attractive (5, 6, or 7), whereas others may have rated the photographs as relatively unattractive (1, 2, or 3). The use of z-scores sets each participant's mean to zero and standard deviation to 1, reducing the effects of such rater bias. There was an adequate level of agreement between raters ($ICC = .84$) across jobs.

Composite Measures

Each of the 26 jobs was assigned to one of four categories based on the job rating data. They were characterized as masculine or feminine sex-type and high or low on the importance of physical appearance. The mean employment suitability for all of the jobs in each category was taken so that rather than 26 jobs, we had 4 job-types (masculine job, physical appearance unimportant; masculine job, physical appearance important; feminine job, physical appearance unimportant; feminine job, appearance important). Because the average ratings of employment suitability were based on z-scores, the mean employment suitability for each job type was zero, although there were slight variations in the standard deviation (masculine job, physical appearance unimportant $SD = .36$; masculine job, physical appearance important $SD = .51$; feminine job, physical appearance unimportant $SD = .49$; feminine job, appearance important $SD = .51$). These slight variations in standard deviation are a result of averaging across the different jobs within each job category. Table 1 contains the data used to make these categorizations and the list of all of the jobs.

The 13 jobs that were rated as having fewer than 50% male incumbents were considered feminine, and the 13 jobs that were rated as having more than 50% male incumbents were considered masculine. For the ratings of importance of physical appearance, the 13 jobs that fell above the mean of importance of physical appearance ($M = 4.25$) were considered jobs for which physical appearance is important. The 13 jobs below the mean were considered jobs for which physical appearance is unimportant. Based on these distinctions there were 5 feminine jobs for which physical appearance was unimportant (e.g., nurse, social worker, bank teller) and 8 feminine jobs for which physical appearance was important (e.g., secretary, dietician, human resource manager). There were 8 masculine jobs for which physical appearance was unimportant (e.g., director of security, prison guard, hardware salesperson). There were 5 masculine jobs for which physical appearance was important (e.g., car salesperson, office manager, sales manager).

TABLE 1. Ratings of Jobs on Sex-Type and Importance of Appearance

Job title	Ratings of jobs			
	Sex-type (% male)		Importance of appearance	
Lingerie Salesperson	Feminine	7.60	High	6.01
Cosmetics Salesperson	Feminine	10.52	High	6.15
Secretary	Feminine	20.30	High	4.97
Office Receptionist	Feminine	22.28	High	4.93
Director of Day Care Services	Feminine	22.64	Low	4.17
Executive Secretary	Feminine	23.85	High	5.25
Nurse	Feminine	27.11	Low	4.05
Counselor for Abused Children	Feminine	30.51	Low	4.04
Dietician	Feminine	35.67	High	5.22
Social Worker	Feminine	35.93	Low	3.79
Bank Teller	Feminine	38.55	Low	3.84
HR Manager	Feminine	48.63	High	4.33
Public Relations Officer	Feminine	48.90	High	5.31
Marketing Manager	Masculine	59.18	High	4.81
Office Manager	Masculine	60.55	High	4.49
Sales Manager	Masculine	61.19	High	4.85
Corporate Sales Manager	Masculine	66.93	High	4.76
Manager of R&D	Masculine	68.03	Low	3.48
Director of Finance	Masculine	71.30	Low	4.15
Mechanical Engineer	Masculine	76.37	Low	2.64
Car Salesperson	Masculine	79.45	High	5.24
Director of Security	Masculine	80.87	Low	3.57
Hardware Salesperson	Masculine	80.95	Low	3.09
Prison Guard	Masculine	82.82	Low	3.10
Construction Supervisor	Masculine	87.48	Low	2.63
Tow Truck Driver	Masculine	89.31	Low	1.54

Note. $n = 67$ raters.

Results

The final data set included 204 photographs, each of which had a rating of attractiveness (unattractive = 1, attractive = 2), the applicant's sex (1 = male, 2 = female), and a rating of employment suitability for the four job types (masculine/appearance unimportant, masculine/appearance important, feminine/appearance unimportant, feminine/appearance important). All hypotheses were tested with a 2 X 2 X 2 X 2 repeated measures analysis of variance (ANOVA) with sex-type of the job (masculine, feminine) and importance of physical appearance (unimportant, important) as the within subjects variables and photograph sex (male,

TABLE 2. Repeated Measures ANOVA Results From Study 1

	λ	F	η^2
Job Sex-type	1.00	0.05	.00
Job Sex-type X Applicant Sex	.73	73.23***	.27
Job Sex-type X Applicant Attractiveness	.84	37.23***	.16
Job Sex-type X Applicant Sex X Applicant Attractiveness	.85	34.37***	.15
Importance of Appearance	1.00	0.05	.00
Importance of Appearance X Applicant Sex	1.00	0.01	.00
Importance of Appearance X Applicant Attractiveness	.57	153.31***	.43
Importance of Appearance X Applicant Sex X Applicant Attractiveness	.87	29.80***	.13
Job Sex-type X Importance of Appearance	1.00	0.01	.00
Job Sex-type X Importance of Appearance X Applicant Sex	.89	24.94***	.11
Job Sex-type X Importance of Appearance X Applicant Attractiveness	.91	19.61***	.09
Job Sex-type X Importance of Appearance X Applicant Sex X Applicant Attractiveness	.97	6.16*	.03
Applicant Sex	—	5.64*	.03
Applicant Attractiveness	—	122.57***	.38
Applicant Sex X Applicant Attractiveness	—	0.65	.00

Note. $n = 204$. Attractiveness is coded as 1 = unattractive, 2 = attractive. Rater sex is coded as 1 = male, 2 = female. Sex-type of job is coded as 1 = masculine, 2 = feminine. Importance of appearance to job is coded as 1 = unimportant, 2 = important.

female) and photograph attractiveness (low, high) as the between subjects variables. Table 2 contains the results of the ANOVA, and Table 3 contains the means used to test all hypotheses.

Test of Hypotheses

In order to test Hypothesis 1, which states that attractiveness will be positively related to employment suitability, we examined the main effect for attractiveness on employment suitability. Attractive applicants were rated as significantly more suitable for employment ($M = .24$, $SD = .31$) than less attractive applicants ($M = -.24$, $SD = .29$, Table 2, $F(1, 200) = 122.57$, $p < .001$, $\eta^2 = .38$) across jobs.

Next, we tested Hypotheses 2, which states that attractiveness is more strongly related to employment suitability for men applying for masculine sex-typed jobs than feminine sex-typed jobs; Hypothesis 3a, which states that attractiveness is more strongly related to employment suitability for women applying for feminine sex-typed jobs than masculine sex-typed jobs; and Hypothesis 3b, which states that attractiveness would be negatively related to employment suitability for women

TABLE 3. Cell Means From Study 1

Applicant sex	Applicant attractiveness	Job sex-type	Importance of appearance	<i>M</i>	<i>SD</i>	<i>n</i>
Male	Low	Masculine	Low	-0.13	0.41	49
Male	Low	Masculine	High	-0.33	0.45	49
Male	Low	Feminine	Low	-0.39	0.43	49
Male	Low	Feminine	High	-0.40	0.34	49
Male	High	Masculine	Low	0.25	0.35	53
Male	High	Masculine	High	0.32	0.45	53
Male	High	Feminine	Low	0.05	0.48	53
Male	High	Feminine	High	0.21	0.33	53
Female	Low	Masculine	Low	0.01	0.23	53
Female	Low	Masculine	High	-0.30	0.36	53
Female	Low	Feminine	Low	-0.08	0.34	53
Female	Low	Feminine	High	-0.33	0.36	53
Female	High	Masculine	Low	-0.15	0.28	49
Female	High	Masculine	High	0.30	0.36	49
Female	High	Feminine	Low	0.41	0.36	49
Female	High	Feminine	High	0.54	0.33	49

Note. *n* = 204.

applying for masculine jobs. These hypotheses were tested by examining the three-way interaction between applicant sex, applicant attractiveness, and sex-type of the job. The three-way interaction was statistically significant (Table 2, Wilks' $\lambda = .85$, $F(1, 200) = 34.37$, $p < .001$, $\eta^2 = .15$).

Given the significance of the three-way interaction, we continued to test the specific hypotheses by running the ANOVAs separately for male and female applicants. The cell means are presented in Table 3. For male applicants, the interaction between job sex-type and attractiveness was not statistically significant (Wilks' $\lambda = 1.00$, $F(1, 100) = .03$, $p > .05$, $\eta^2 = .00$). Therefore, Hypothesis 2 was not supported. Attractiveness was not more beneficial for men applying for masculine jobs than feminine jobs.

To test Hypothesis 3a, we examined the interaction between attractiveness and job sex-type for the female applicants. The interaction was statistically significant (Wilks' $\lambda = .55$, $F(1, 100) = 83.61$, $p < .001$, $\eta^2 = .46$, Table 3). Follow-up independent samples *t*-tests revealed that attractive women were rated as more suitable than unattractive women for feminine jobs ($t(100) = -11.43$, $p < .001$, Cohen's $d = 2.23$, Table 3), as expected. Attractiveness was also positively related to employment suitability for masculine sex-typed jobs, although to a lesser extent than for feminine jobs ($t(100) = -3.21$, $p < .01$, Cohen's $d = .64$, Table 3). Therefore, Hypothesis 3a, that attractiveness will be more beneficial for women

applying for feminine sex-typed jobs was supported. Hypothesis 3b, that attractiveness would be negatively related to employment suitability for women applying for masculine jobs, was not supported.

Next, we tested Hypothesis 4, which states that attractiveness will be more positively related to employment suitability for jobs for which physical appearance is important to the job than for jobs for which physical appearance is unimportant to the job. There was a statistically significant interaction between applicant attractiveness and importance of physical appearance to the job (Table 2, Wilks' $\lambda = .57$, $F(1, 200) = 153.31$, $p < .001$, $\eta^2 = .43$). To test our specific hypothesis, we conducted another repeated measures ANOVA, just examining the attractive applicants. Attractive applicants were rated as more suitable for jobs for which physical appearance was important ($M = .34$, $SD = .35$) than jobs for which physical appearance was seen as unimportant ($M = .12$, $SD = .30$, Wilks' $\lambda = .68$, $F(1, 101) = 47.36$, $p < .001$, $\eta^2 = .32$). Therefore, Hypothesis 4 was also supported.

Post Hoc Analysis

Finally, although not hypothesized, there was also a four-way interaction between job sex-type, importance of physical appearance to the job, applicant sex, and applicant attractiveness (Wilks' $\lambda = .97$, $F(1, 200) = 6.16$, $p < .05$, $\eta^2 = .03$). In the interest of exploring this interaction we examined the cell means for the four-way interaction (Table 3). Based on the means, it appears that unattractive applicants were rated as less suitable than attractive applicants for all jobs, regardless of applicant sex, job sex-type, and importance of physical appearance to the job, with one exception. Attractive female applicants were rated as less suitable for masculine jobs for which physical appearance was unimportant ($M = .01$, $SD = .23$) compared to unattractive female applicants for these jobs ($M = -.15$, $SD = .28$). An independent samples t-test demonstrated that this mean difference was statistically significant ($t(101) = 3.11$, $p < .01$, Cohen's $d = .62$). Therefore, although we did not find a "beauty is beastly" effect for masculine jobs in general, we did find the effect for masculine jobs for which physical appearance is rated as unimportant.

STUDY 2

A second study was developed to replicate the findings from Study 1 related to the "beauty is beastly" effect. Specifically, we will test the extent to which attractive female applicants are perceived as less suitable for masculine jobs for which physical appearance is unimportant than unattractive female applicants. Using the job scaling data from Study 1, we identified one masculine job for which physical appearance was rated as important (car salesperson) and one masculine job for which physical appearance was rated as unimportant (prison

guard). We chose one feminine job for which physical appearance was rated as unimportant (social worker) and one for which physical appearance was rated as important (secretary).

In addition, we chose two attractive and two unattractive female photographs from those that were between one and two standard deviations above and below the mean. Therefore, the photographs represent attractive and unattractive women, without going to the extremes. Moreover, the photographs were rated on other characteristics (e.g., intelligence, kindness), and we made every attempt to match the photographs based on those criteria so that the only difference was attractiveness.

Hypothesis 1: Attractiveness will be negatively related to employment suitability for attractive women applying for masculine sex-typed jobs for which physical appearance is unimportant.

Method

Participants

Participants consisted of business students from a large university in Colorado. There were 25 men and 32 women, as well as 8 participants who failed to indicate their sex, resulting in 65 participants. The mean age of the participants was 25.69 ($SD = 5.39$). Most of the participants were White ($n = 43$), although there were also 3 Asian, 2 Black, 5 Hispanic participants. Twelve participants indicated “other” as their race or left the item blank.

Design

This study used a within and between subjects design, in which all participants rated all photographs for one of the four jobs. Participants were told that they were to rate several candidates for a position as prison guard, car salesperson, secretary, or social worker. The participants were told that all candidates had passed an initial screen and were given scores for the candidates in terms of their resumes, personality tests, ability tests, and interview score. The four chosen female photographs were included in the packet along with several other male and female filler photos. The four focal candidates had the same scores on all of the measures, while the filler candidates had lower scores on the measures. The names of the candidates were counterbalanced, as was the order in which the stimuli were presented.

Participants rated each candidate on a scale ranging from 1 to 10 on 4 items. The instructions said, “On a scale of 1 (LOW) to 10 (HIGH) please rate each applicant on the following items . . . Overall suitability for the job, How well he/she would perform the job, How well he/she would fit in on the job, The likelihood that you would hire him/her for the job.” A rating form with the four questions was

included adjacent to each candidate's information to ease the rating task. The scale had a high level of internal consistency for all of the stimulus photographs ranging from Cronbach's $\alpha = .81$ to Cronbach's $\alpha = .95$ with an average internal consistency of Cronbach's $\alpha = .87$. The average suitability score across the four stimulus photographs and across all jobs was 7.53 ($SD = 1.23$), suggesting that the participants perceived the candidates as relatively suitable for the jobs.

Results

Stimuli

Because two photograph stimuli were used to represent attractive and unattractive female applicants, it was important to determine if there were significant differences between the chosen stimuli in terms of participants' perceptions of employment suitability across all jobs and for each individual job. A 4 X 2 repeated measures ANOVA was conducted for each pair of stimuli with job (prison guard, car salesperson, secretary, social worker) as the between-subjects variable, and stimulus (stimulus 1, stimulus 2) as the within subjects factor. There were no differences between the two unattractive female stimuli (Wilks' $\lambda = .97$, $F(1, 61) = 2.24$, $p > .05$, $\eta^2 = .04$) or the stimulus by job interaction (Wilks' $\lambda = 1.00$, $F(3, 61) = .08$, $p > .05$, $\eta^2 = .00$). There were no differences between the two attractive female stimuli (Wilks' $\lambda = .99$, $F(1, 61) = .66$, $p > .05$, $\eta^2 = .01$) or the stimulus by job interaction (Wilks' $\lambda = .90$, $F(3, 61) = 2.29$, $p > .05$, $\eta^2 = .10$).

As there were no differences between the two stimuli for each condition, the data from the two stimuli for each condition were collapsed. The mean suitability rating for the two unattractive stimuli, across the four jobs ($M = 7.42$, $SD = 1.00$) was only slightly lower than the mean for the two attractive stimuli, across the four jobs ($M = 7.64$, $SD = 1.50$).

Test of hypotheses. To test the hypothesis that the attractive female stimuli would be rated as less suitable for employment in the masculine job, we conducted a 2 (unattractive female, attractive female) X 2 (masculine job, feminine job) X 2 (physical appearance unimportant, physical appearance important) repeated measures ANOVA with job sex-type, using importance of physical appearance to the job as the between-subjects variable and applicant attractiveness as the within subjects variable. There was a significant three-way interaction between job sex-type, importance of physical appearance to the job, and applicant attractiveness (Wilks' $\lambda = .93$, $F(1, 52) = 4.65$, $p < .05$, $\eta^2 = .07$). Paired samples t-tests, comparing the attractive and unattractive stimuli for each job supported the hypothesis. Compared to the unattractive women, the attractive women were rated as significantly more suitable for the masculine job for which physical appearance was important (car salesperson) and for the two feminine jobs (social worker and secretary) but significantly less suitable for the masculine job for which physical

TABLE 4. Repeated Measures ANOVA Results From Study 2

	λ	F	η^2
Applicant Attractiveness	.94	3.86*	.06
Applicant Attractiveness X Sex-type of Job	.81	14.25***	.19
Applicant Attractiveness X Importance of Appearance	.78	17.56***	.22
Applicant Attractiveness X Sex-type of Job X Importance of Appearance	.93	4.61*	.07
Sex-type of Job	—	13.39***	.18
Importance of Appearance	—	3.32	.05
Sex-type of Job X Importance of Appearance	—	4.57*	.07

Note. $n = 65$. * $p < .05$, ** $p < .01$, *** $p < .001$. Attractiveness is coded as 1 = unattractive, 2 = attractive. Rater sex is coded as 1 = male, 2 = female. Sex-type of job is coded as 1 = masculine, 2 = feminine. Importance of appearance to job is coded as 1 = unimportant, 2 = important.

TABLE 5. Means and Paired Samples t-Test Values From Study 2

Sex-type of job	Importance of appearance	Applicant attractiveness	M	SD	n	t -value	Cohen's d
Male	Low	Unattractive	6.85	1.62	14	3.01**	.37
Male	Low	Attractive	6.10	2.41	14		
Male	High	Unattractive	7.32	0.71	18	-2.43*	.56
Male	High	Attractive	7.74	0.78	18		
Female	Low	Unattractive	7.85	0.46	18	-2.35*	.77
Female	Low	Attractive	8.19	0.42	18		
Female	High	Unattractive	7.85	0.83	15	-4.09***	.51
Female	High	Attractive	8.29	0.88	15		

Note. $n = 65$.

appearance was unimportant (prison guard) (Table 4, Table 5, all $ps < .05$). Therefore, we confirm our finding that the “beauty is beastly” effect occurs for masculine jobs for which physical appearance is rated as unimportant.

Discussion

This research revealed important information as to how job characteristics influence the relationship between physical attractiveness and ratings of employment suitability. In two studies, we found that attractiveness is beneficial for men and women applying for most jobs, in terms of ratings of employment suitability. Attractiveness was equally beneficial for men for masculine and feminine jobs.

However, attractiveness was more beneficial for women applying for feminine sex-typed jobs than masculine sex-typed jobs. Both of these findings are consistent with previous research and theory (Heilman & Saruwatari, 1979; Heilman & Stopeck, 1985). However, unlike previous research, we did not find a negative relationship between attractiveness and employment suitability for women applying for masculine sex-typed jobs, termed the “beauty is beastly” effect.

However, we did discover that attractiveness could be detrimental for attractive women applying for masculine jobs for which physical appearance was perceived to be unimportant. We found this effect in Study 1 and replicated the finding in Study 2. This finding provides an important caveat to the “beauty is beastly” effect and may provide insight into the inconsistent findings related this effect. Moreover, the finding is theoretically consistent with Heilman’s Lack of Fit model. If an attractive woman is applying for a masculine sex-typed job, for which physical attractiveness is important, then she may *not fit* in terms of her femininity, but she *fits* in terms of her attractiveness. If physical appearance is unimportant to the job, an attractive woman would fit less well than if physical appearance were important to the job.

It is possible that our use of a larger number of stimulus jobs or stimulus photographs in the current research accounts for differences between our findings and past findings related to the “beauty is beastly” effect (Heilman & Saruwatari, 1979; Heilman & Stopeck, 1985). Alternatively, it is possible that perceptions of women have changed since Heilman and colleagues’ findings. Given the increase in working women in the United States in very diverse types of jobs (U.S. Bureau of Labor Statistics, 2007), it is possible that there is less discrimination against women in applying for historically masculine job-types. For example, Diekmann and Goodfriend (2006) found that as people perceived that more women would be entering male-dominated roles in the future, they had more positive feelings toward women in competitive contexts and with male stereotypical characteristics. Therefore, it is possible that the “beauty is beastly” effect is now limited to the very narrow job category of masculine jobs for which physical appearance is unimportant.

Practical Implications

Although the findings reported here demonstrate the “what is beautiful is good” and “beauty is beastly” effects, it is important to address the likelihood of such stereotypes influencing actual employment decisions. For example, in situations where there is a high cost of making a mistake, as would be the case for a hiring decision, one would expect the decision maker to rely more on individuating information, rather than on stereotypes about physical appearance. However, it is important to note that the bias for the physically attractive, unlike other stereotypes, seems to impact impression formation in a broader range of circumstances. Recent meta-analyses suggest that the what is beautiful is good effect is pervasive, even when the perceiver has additional information about the target

(Hosoda et al., 2003; Langlois et al., 2000). Attractiveness may influence decision-making at a subconscious level, where exposure to an attractive individual elicits positive feelings in the decision maker, causing him or her to judge the target more favorably (Eagly et al., 1991). Moreover, in situations where a decision maker is under a high cognitive load or under time pressure, he or she may be more likely to rely on stereotypes (Fiske & Taylor, 1991; Pendry & Macrae, 1994).

One could argue that, under certain conditions, physical appearance may be a legitimate basis for hiring. In jobs involving face-to-face client contact, such as sales, more physically attractive applicants could conceivably perform better than those who are less attractive. Indeed, we found that attractive applicants were particularly preferred for jobs for which appearance was important. Motowidlo and his colleagues have also demonstrated that visual cues may have predictive validity for job performance (DeGroot & Motowidlo, 1999; Motowidlo & Burnett, 1995). DeGroot and Motowidlo (1999) found that visual cues (physical attractiveness, smiling, gaze, hand movement, and body orientation) were related to both interviewer ratings and supervisory performance ratings. However, it is important that if physical attractiveness is weighed equally for men and women to avoid discrimination against women under Federal Civil Rights legislation.

Limitations and Strengths

There are several potential limitations to our research. First, in Study 1, no information was provided to participants on the applicants other than their photographs and, in Study 2, only limited information about each applicant was provided to participants on the applicants. Models of impression formation have suggested that stereotypes, such as attractiveness, are more likely to be used in situations such as this, where little other information is available (e.g., Locksley, Borgida, Brekke, & Hepburne, 1980; Locksley, Hepburn, & Ortiz, 1982). However, as Hosoda et al. (2003) found, this is not the case for attractiveness. This meta-analysis showed that having job-relevant information did not attenuate the “what is beautiful is good” effect. Langlois et al. (2000) found similar effects, demonstrating that preference for the physically attractive persisted even when the target and perceiver knew each other. An additional concern of this study is the use of photographs as the applicants. Using video or face-to-face evaluations of attractiveness would add to the generalizability of our findings.

Second, it could be argued that the use of student subjects as raters limits generalizability of the results across respondents. However, the “what is beautiful is good” effect has been found in both laboratory and field research with working adults, and there is little convincing evidence that the effects are limited to students (Hosoda, Stone-Romero, & Coats, 2003; Stone, Stone, & Dipboye, 1992). We also intentionally limited our stimulus photographs to college-aged Caucasians so that we could compare our findings with previous research, which has focused primarily on the same type of target person. Although a preference for physically

attractive individuals tends to hold across cultures and ethnicities (Langlois et al., 2000), an important direction for future research is to examine whether these findings would hold with photographs of people of different ages and ethnicities. An additional concern is the fact that each participant rated all of the stimulus photographs, which may elicit stronger effects for stimulus attractiveness (Eagly et al., 1991). This limitation should not, however, account for the interactions between sex and attractiveness described in these studies. Moreover, the more typical selection situation is one where the decision maker is presented with more than one applicant.

These and the other limitations mentioned here are inherent in highly controlled laboratory experiments that attempt to remove as many extraneous variables as possible. The experimental control allowed us to explore the effects of the stimulus sample in a way that could never be done ethically in more realistic field settings. Despite these limitations, the research reported here took great steps to increase the internal validity of the methodology. In Study 1, we used a large sample of jobs and photographs to avoid the pitfalls of insufficient stimulus sampling. The stimulus sampling is a methodological improvement over previous research and adds to the validity and generalizability of the findings. In the second study, the jobs and photographs used were prescreened to be representative of the categories while holding constant other characteristics. Taken together, the findings reported in the two studies add new insights into the effects of applicant attractiveness on ratings of employment suitability. The findings show that the “what is beautiful is good” effect is robust over a wide range of stimuli and jobs. The “beauty is beastly” effect appears to be limited to those situations in which attractive women are applying for masculine sex-typed jobs for which physical appearance is perceived to be unimportant.

AUTHOR NOTES

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