BEAUTY AND TEACHING EVALUATION: A COMPARISON BETWEEN FEMALE AND MALE COLLEGE PROFESSORS

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Abstract

Two studies were conducted in order to examine the impact of beauty on teaching ratings. The purpose of the first study was to compare this impact between women and men. The physical attractiveness of fifty-five instructors was rated by their students and correlated with their teaching ratings that had been collected in the previous semester. More attractive male instructors received higher ratings, but only from female students. The more attractive female instructors did not receive better ratings from male or female students. We conclude that male instructors benefit from a ‘beauty premium’, while female instructors do not. The purpose of the second study was to confirm this conclusion by examining the ‘beauty premium’ in an occupation characterized by the fit between role image and gender image. The physical attractiveness of thirty-one female administrative employees was rated and then correlated with their service evaluation. The more attractive clerks received higher ratings, but only from male raters. We conclude that the gender-based differential in the evaluation bias was caused by a lack of fit between role images and gender images. When the role image corresponds to the gender image, as in the case of male instructors and female administrative employees, the ‘beauty effect’ benefits beautiful employees. Our findings have implications for the improvement of teaching evaluation tools and taking physical appearance bias into consideration.

Keywords: beauty premium, gender image, physical attractiveness, role image, teaching evaluation.

Introduction

A vast number of studies explored the impact of physical appearance on interpersonal interaction. Hatfield and Sprecher (1986) claim there is a stereotyping process that ensures that beauty equals goodness. People treat attractive people quite differently than ugly people, initiating a ‘self-fulfilling prophecy’.

Beauty is an influential factor in all spheres of life: children prefer to associate with attractive children and reject the company of unattractive children (Weiss, 1991). In marriage, more attractive people are preferred as spouses (Buss, 1989). More attractive women manage to marry established men and thus advance their own economic status. In interpersonal relationships, beautiful people gain more help and cooperation from others (Bull & Rumsey, 1988). The opinions of beautiful people receive greater acceptance, and beautiful people are considered to be nicer, more intelligent, friendlier and more sensitive. In the courts as well, beautiful people accused of criminal offenses have...
a better chance of being found innocent than less attractive people (Efran, 1974). Beautiful people who are convicted receive lighter sentences than less attractive criminals (Landy & Aronson, 1969; Stewart, 1980). In hospitals it has been found that beautiful patients receive more attention and better care from the medical staff, and they also receive a better prognosis. In the political arena, the tallest candidate has been elected in every US presidential election. In the area of employment and salaries, studies found that tall people, men in particular, earn higher salaries, on average, and have a better chance of being hired. Beautiful candidates are perceived to be more qualified for the position, and receive higher initial salary offers (Dipboye, Avrey & Terpstra, 1977; Hamermesh & Biddle, 1994). Beautiful employees receive better performance evaluations than others, and faster promotions (Morrow, McElroy, Stamper & Wilson, 1990). The more attractive people (men and women alike) are considered to be, the higher their salaries.

Jackson, Hunter and Hodge (1995) performed a meta-analysis to test hypotheses about the relationship between physical attractiveness and intellectual competence. They concluded that attractive people are perceived to be more competent than less attractive people, but the attractiveness effect was stronger for males than for females. Hamermesh and Biddle (1994) employ the term “beauty premium” to describe all these benefits.

The effects of beauty in academic institutions have been studied very little, and most of the studies have examined the students’ beauty effects on teachers’ evaluations. The purpose of this study is to examine the effect of beauty in Israeli academia. We turn now to a review of the main findings of studies on this issue, and go on to present our research hypotheses.

The effects of physical appearance in higher education system

Lombardi and Tocci (1979) found a positive relationship between a professor’s attractiveness and his or her warmth, sensitivity, ability to communicate, knowledge of subject matter, and superiority. No interaction effect of sex of the rater and sex of the ratee was found. Goebl and Cashen (1979) found that attractive teachers were seen to be more friendly, better organized, and more likely to encourage students to interact. O’Reilly (1987) asked students to attend a lecture given by an attractive or unattractive female ‘teacher’, and evaluate her on a 10-item rating form, indicating their sex on the form. Findings showed that the teacher’s physical attractiveness enhanced teaching evaluations, regardless of the student’s sex. Naumann (1988) showed subjects videotapes of a female instructor – half of them watched an attractive instructor, while half watched an unattractive instructor – and found that physical attractiveness had no significant effect on ratings. Romano and Bordieri (1989) also examined the effect of physical attractiveness of college professors on students’ impressions. The researchers asked students to listen to a 15-minute audiotape that described typical first-time experiences of college freshmen. As each student listened to the tape, he was shown a black-and-white facial photograph of someone said to be a college professor. They found that attractive professors and female professors received the highest evaluation scores. The interaction of the professor’s sex and physical attractiveness was non-significant. Newsum (1990) also examined the effects of physical attractiveness on teacher performance evaluation. Data were collected from subjects after they had observed one of two simulated pre-observation conference videotapes. In one of the videotaped conferences, an actress portrayed an attractive teacher, and in the second, the teacher was portrayed by a less attractive actress. The results show significantly higher evaluations of the attractive ‘teacher’. Feeley (2002) found significant relationships among instructors’ level of attractiveness and vocal clarity and dimensions such as teaching effectiveness, affective learning and nonverbal immediacy. Felton, Mitchell and Stinson (2004) analyzed data from www.ratemyprofessors.com for associations among perceived quality, easiness, and “hotness” scores. www.ratemyprofessors.com is one of the largest sites that allow students to post anonymous ratings of college professors in the United States and Canada. Students rate professors on three dimensions (easiness, helpfulness, and clarity of teaching). In addition, students can rate attractiveness by assigning a “chili pepper” icon to indicate “hotness”, a concept generally understood as the physical attractiveness of the instructor. Felton, Mitchell and Stinson (2004) examined data of 3,190 professors and found that the correlation between quality and “hotness” is 0.30. Kindred and Mohammed (2005) analyzed the assigned scores, and content-analyzed the comments of a sample of 1,054 ratings from
the www.ratemyprofessors.com Web site. They found that the correlation between appearance and clarity was 0.34. Hamermesh and Parker (2005) examined the impact of instructors’ looks on their instructional ratings in the courses that they teach. They found that measures of perceived beauty have a substantial independent positive impact on instructional ratings by undergraduate students. The impact of beauty on instructional ratings was statistically significant for both women and men, but was three times greater for male than for female faculty. Hamermesh and Parker discuss their findings and pose the question of whether the results imply that beauty itself makes instructors more productive in the classroom, or whether students are merely reacting to an irrelevant characteristic that differs among instructors.

We assume that if the latter proposition is true, we might expect this reaction to differ for female and male students. A comparison of female and male ratings of both instruction and beauty will allow us to find the answer to this question. Therefore, we measured the beauty impact for female and male students separately. Sussmuth (2006) followed the strategy of Hamermesh and Parker and examined whether perceived attractiveness of German university teachers was correlated with the ratings they received from students. He asked 50 students to assess the attractiveness of 50 teaching tenured and non-tenured staff members of another German university. He found that the impact of teachers’ looks on their average instructional ratings for the German sample was about half of that found in the American university studied by Hamermesh and Parker.

These findings served as the basis for our study, whose goal is to examine whether the ‘beauty premium’ also exists in Israeli academia and, if so, whether the physical attractiveness of male instructors and female instructors have different effects. Specifically, we sought to examine whether physical attractiveness has an effect on the students’ perception of their teachers in the higher education system in Israel, which presumes to be a purely merit-based system. In formal terms, beauty or physical attractiveness is irrelevant to an instructor’s performance, and standards for judging and evaluating faculty are purported to be objective and based on instructors’ pedagogical and research abilities. Instructors are expected to impart theoretical knowledge to their students, and teach them relevant skills and tools; students are expected to acquire this knowledge and these tools from their instructors, as well as to rate their teaching in the feedback questionnaire, regardless of their physical attractiveness.

With regard to gender differences in the beauty effect, we based our work on the stereotypical gender image of women as unqualified or as less qualified than men for scientific research and creative work. This image is based on the widespread opinion that women have not been blessed with the necessary masculine characteristics such as rationality, abstraction, initiative, assertiveness and independence (Toren, 2005). Science, scientists and research have an imprint of masculinity, and this image is accepted not only by men, but by many women as well (Ekehammer, 1985). According to figures provided by the Planning and Budget Department of the Council for Higher Education in Israel, only 24% of academic faculty members at all levels are women, and the number of female faculty members decreases for positions higher on the academic pyramid. The small number of women among high-level faculty members is characteristic not only of Israel, but of women in scientific fields all around the world, and in Europe and the U.S. in particular (Messer-Yaron & Cahanovich, 2003). A survey of public attitudes towards women and science conducted at the initiative of the Ministry of Sciences in early 2003 revealed that the three fields perceived as scientific areas in which Israel’s achievements are impressive (technology, communications and weapons) were not cited as fields suitable for women (Messer-Yaron & Cahanovich).

Gender images constitute a basis for various performance expectations which, in turn, affect evaluations of others as well as the quality of their performance (Toren, 2005). On the other hand, physical attractiveness is one of the elements composing the gender image of women. Studies have found that self-attractiveness is more central to the gender role of women than of men, as well as to women’s personal identity, self-esteem and interpersonal outcomes (Bar-Tal & Saxe, 1976). When engaged in social interactions, women assign relatively low weight to the physical attractiveness of others (Feingold, 1992). Women’s attractiveness enhances their perceived femininity, which is supposedly incongruent with the skill, talent and job requirements of high status and ‘masculine-type’ jobs.

Based on the combination of the masculine image of the profession of college instructor, and the
The importance of beauty in women’s lives, one can predict that men will benefit more than women from a ‘beauty premium’. Indeed, Heilman and Saruwatari (1979) found that when competing for traditional ‘male jobs’, beauty did help women applicants when the job was clerical. However, when the job was a high-status managerial one, interviewers preferred the unattractive women.

Thus, it can be hypothesized that attractive female instructors will be perceived as more ‘feminine’ and receive lower ratings than male instructors. On the other hand, more attractive female professors, who are perceived to be more ‘feminine’, are believed by students to be more supportive, sensitive and empathic. As a result, students will rate her teaching highly. Homely female professors will be ‘penalized’ by this beauty stereotype.

One variable that has been virtually ignored in the studies cited above is the student’s gender. The gender effect on evaluating college professors was taken into consideration in the study of Bachen, McLoughlin, and Garcia (1999), which did not include teachers’ physical attractiveness as a variable. They found that female teachers were rated higher than male teachers on several teaching dimensions when rated by female students. They concluded that evaluations of teachers are guided, to some degree, by students’ expectations of appropriate gender role behavior. Davidowitz (2003) has also found that female students give overall higher ratings than their male counterparts.

In the classic experiment conducted by Dion, Berscheid and Walster (1972) on differences between male and female raters in evaluations of the beauty of individuals (not instructors), no interaction was found between the rater’s gender and the gender of the evaluated individual. Assayag’s (1998) study on managers’ evaluations of job candidates found that the beauty effect is diminished when the rater’s gender was identical to that of the ratee. One possible reason for this is jealousy: it is possible that women give lower evaluations to attractive women because they are jealous of them (Dion et al.). Another explanation is that all human beings are more sensitive and attentive to the attractiveness of members of the opposite sex, and therefore the beauty premium is weakened in the case of evaluations by members of the same sex. Helmes and Rode (1982), and Lewis and Walsh (1978) studied sex differences in male and female subjects’ evaluations of female counselors. They found that the physical attractiveness of the counselor was an issue for female but not for male subjects. Holahan and Stephan (1981) asked male and female students to read an essay allegedly written by a physically attractive or unattractive female. Subjects were classified as having traditional, moderate or liberal attitudes toward women (corresponding to three gender stereotypes). Female subjects’ evaluations were not affected by author’s physical attractiveness, although males were influenced by their sex-role attitudes and the author’s physical attractiveness. The findings showed a reversal of the physical attractiveness stereotype for liberal males.

The purpose of our first study was to replicate and extend the work of Hamermesh and Parker (2005), and Sussmuth (2006) by incorporating student gender into a similar research paradigm using similar dependent measures, in order to shed light on any interaction effect existing between the gender of the student and the gender of the instructor being evaluated. Based on Feingold’s (1990) meta-analysis showing that men place greater value on physical attractiveness than women do, it is reasonable to predict that the physical attractiveness of female instructors will be strongly correlated with the teaching ratings by their male students. Similarly, the physical attractiveness of male instructors will be strongly correlated with their teaching rating by their female students. Therefore, we hypothesize in the first study as follows:

Research Hypotheses of Study I

1. The positive relationship between physical attractiveness and teaching ratings of male instructors will be stronger for evaluations by female students compared to evaluations by male students.

2. The positive relationship between physical attractiveness and teaching ratings of female instructors will be stronger for evaluations by male students compared to evaluations by female students.
Methodology of Study I

Measuring the teaching rating variable

At the end of each semester, faculty at the Ariel University Center of Samaria, as at most Israeli colleges, administer feedback surveys. Instructors at the Ariel University Center are required to give all students an opportunity to respond to a formal questionnaire, rating each instructor and course on a 5-point Likert scale. The standard feedback questionnaire includes 8 items: 6 of which pertain to the instructor and 2 to the tutor and the physical conditions in the classroom. Of the 6 questions about the instructor, one question pertains to an overall evaluation of the instructor, which we used as the main indication of the quality of the lecturer’s teaching. The questionnaire also poses other questions concerning the student, such as gender, year in program, etc. The questionnaire is distributed during the last two weeks of each semester. Students complete the survey during the class period; the instructor leaves the classroom while the students complete the questionnaire.

Measuring the Physical Attractiveness Variable

Most studies in this field used stimuli from either pole of the attractiveness continuum (attractive or unattractive), whereas our study followed the stimuli used in the study by Hamermesh and Parker (2005), who employed a beauty variable evaluated on a scale and not as a dichotomous variable. Like Morrow et al. (1990), we addressed beauty in a holistic manner, incorporating frame, height, facial expressions and body language, rather than content ourselves with evaluating a facial image. To measure the variable of physical attractiveness, we used the consensus method, widely accepted by most researchers in the field (Hatfield & Sprecher, 1986). Researchers simply ask a number of judges to rate men and women’s looks. We asked students who responded to the questionnaire mentioned above to address one additional question: “To what degree is the instructor considered a good-looking person?” This question was written on the blackboard by the person conducting the survey while the students completed the questionnaire. Students were asked to copy the question onto their questionnaire and include their response. We treated mean beauty rankings of all raters as an instructor’s physical attractiveness score.

This study examines data for teachers of the Ariel University Center for four semesters, from spring 2005 through spring 2006. Because the focus of the study is the relationship between instructor attractiveness and instructor rating, the unit of analysis is the teacher.

Sample

At the onset of the study, we obtained permission for the study from the Dean of the Faculty of Social Sciences and Humanities. We telephoned the instructors, using an alphabetical list of the faculty members. In this manner, without knowing any of them personally, we sought to obtain a heterogeneous sample in terms of the instructors’ attitudes towards the topic of the study. We asked their permission to add a question about their physical attractiveness to the rating form. Since a person’s physical attractiveness is a sensitive issue related to his self-esteem, we were surprised that the studies cited above did not report any difficulty in obtaining instructors’ consent to participate in the study. It is possible that this was not mentioned because no such difficulties were found, or else such difficulties were encountered but were not reported by the researchers. The deliberations of the researchers in this study, as well as the considerations of the instructors, and the students’ diverse responses to the questions are all part of the phenomenon under study and its significance, and therefore it is important to describe them hereunder.

Extremely diverse responses were obtained from the instructors who were asked to participate in the study, ranging from enthusiasm and considerable interest in the study and admiration for the unconventional topic of the study, to immediate consent accompanied by indifference (generally among the male instructors). We encountered polite refusals, with explanations such as “I don’t think this is appropriate for the institution,” or vehement refusals, amazement and anger at what was perceived to be an ‘undignified’ topic for research. One female instructor even tried to organize
a petition for the cancellation and immediate termination of the study. It should be noted that the percentage of those who refused to participate was significantly higher among the women: of the 58 female instructors that we approached, 18 refused (31%), whereas only (10%) of the 59 male instructors that we approached refused. A number of instructors noted that the subject is inappropriate for an academic study.

The first author included herself in the list of instructors whose physical attractiveness was ranked. However, the second author, in spite of her appreciation of the importance of the study, objected to the very idea of linking beauty and physical attractiveness to students’ feedback on academic performance. The persons who conducted the feedback survey expressed resentment over being required to write an additional question on the blackboard, and perceived it as a factor that extended the time duration of the task that they had to perform. Many students laughed at the subject of the study and joked while completing the questionnaire. Several students did not even bother to answer the question that we added about beauty.

In total, data were collected on 55 instructors, 35 male and 20 female. Of these, only 49 instructors (31 men and 18 women) had scores for the beauty evaluation in two feedback sessions that were conducted at different times. The age range of the male instructors was 31–70 and that of the female instructors was 29–75. The mean age of the male instructors was 47.97, SD=11.81 and that of the women was 45.84, SD=11.80. Twenty-eight instructors were from the Faculty of the Social Sciences and Humanities (57.3%), 6 from Health Sciences (12.2%), 9 from the Faculty of Engineering and Architecture (12.2%) and 6 from Natural Sciences (12.2%). The questionnaires were distributed to a total of 1388 students, including 553 students in the Spring semester of 2005, 243 students who attended the summer semester in 2005, 321 students in the Fall semester of 2006 and 271 students in the Spring semester of 2006. In order to rule out the self-selection effect for instructors, we examined whether the instructors in the sample received higher evaluations than the average general instructor evaluations at the college. In the two years in which the study was conducted, the college mean was 4.016 and the mean for the sample was 4.028, i.e., there was no significant difference between the means.

Procedure

When the faculty evaluation survey was administered at the end of the semester, the students were requested to respond to an additional question intended for academic research. The students were asked to address a question that was written on the blackboard: “To what degree is the instructor considered a good-looking person?” In order to analyze the data, the data were grouped by instructor. It is important to note that the limited number of subjects was a result of the need to include evaluations made at different times by different raters (the instructor’s beauty by the students in one class and the instructor’s teaching ratings by students of the class that studied with the instructor the previous semester). According to this procedure, it is possible to cancel the effect of completing the rating questionnaire concurrently with the beauty questions, i.e., the beauty evaluation and the teaching evaluation were taken at different times and from different people.

Results of Study I

In order to examine the study hypotheses, we compared the sex-based differences in teaching rating means and in the strength of the association between teaching and beauty ratings. Hypothesis 1 is supported if we obtain no differences between male and female students’ teaching evaluation means for male instructors, and furthermore, if there are differences in the strength of the correlation coefficients between instructors’ ratings and beauty ratings. Similarly, if we see no differences between the means of the male and female students’ evaluations of female instructors, and if there are differences in the strength of the correlation coefficients between instructors’ ratings and beauty ratings, then Hypothesis 2 is corroborated. We now present the “simple” mean differences between instructor evaluations, and then we present the differences in the strength of the correlation coefficients between instructors’ ratings and beauty ratings.

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1 The possibility of the ‘self-selection’ effect of the students will be addressed in the Discussion.
Differences in the Teaching Ratings by the Gender of Instructor and Student

To examine these differences, a two factorial analysis of variance was performed on the evaluations of instructors, by instructor’s gender and student’s gender, with repeated measurements for student’s gender (See table 1).

Table 1. Means and Standard Deviations of Teaching Evaluations by the Instructor’s Gender and the Student’s Gender.

<table>
<thead>
<tr>
<th>Student gender</th>
<th>Male instructors (n=22)</th>
<th>Female instructors (n=13)</th>
<th>Total (n=35)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>Male students</td>
<td>4.05</td>
<td>0.76</td>
<td>4.26</td>
</tr>
<tr>
<td>Female students</td>
<td>4.21</td>
<td>0.61</td>
<td>4.31</td>
</tr>
<tr>
<td>Total</td>
<td>4.13</td>
<td>0.68</td>
<td>4.29</td>
</tr>
</tbody>
</table>

It is evident from Table 1 and from the results of the ANOVA that no differences were found in instructors’ ratings, either by instructor’s gender (F (1, 33) =0.75, p>0.05) or by student’s gender (F (1, 33) =1.33, p>0.05). Additionally, no interaction effect was found (F (1, 33) =0.40, p>0.05).

To examine the differences in the strength of the correlation coefficients, we turn to Table 2.

Table 2. Correlation Coefficients between Instructors’ Ratings and Instructors’ Beauty. Distinguishing between the gender of instructor3 and student, N=31 male instructors, N=18 female instructors

<table>
<thead>
<tr>
<th>Instructor gender</th>
<th>Student gender</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Beauty evaluation 0.19</td>
<td>Beauty evaluation 0.37</td>
</tr>
<tr>
<td></td>
<td></td>
<td>R2=0.04</td>
<td>R2=0.13</td>
</tr>
<tr>
<td>Male</td>
<td>Male</td>
<td>Beauty evaluation 0.77</td>
<td>Beauty evaluation 0.31</td>
</tr>
<tr>
<td></td>
<td></td>
<td>R2=0.59***</td>
<td>R2=0.10</td>
</tr>
<tr>
<td>Female</td>
<td>Male</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Women</td>
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</table>

* p<0.05, ** p<0.01, *** p<0.001

The first hypothesis of Study I: The positive relationship between physical attractiveness and teaching ratings among male instructors will be found to be stronger in the female students’ feedback than in that of the male students.

Examination of the first hypothesis of Study I: According to this hypothesis, we would expect 1) no differences between the means of the male and female students’ ratings of the male instructors, and that 2) the correlation coefficient between teaching ratings of male instructors and female students’ ratings of instructors’ beauty to be higher than this coefficient among male students’ ratings.

In order to test the first hypothesis of Study I, we first examine whether there are differences between the means. The ANOVA indicates no differences between male and female students’ ratings (F (1, 33) =1.33, n.s.). Now we compare the correlation coefficient between male instructors’ teaching
and beauty ratings, which were calculated on the female students’ data, with the correlation coefficient that was calculated on the male students’ data. The correlation coefficient that was calculated on the female students’ data was 0.77***, whereas the correlation coefficient that was calculated on the male students’ data is 0.19, n.s., hence the findings relevant to the first study hypothesis provide empirical support for the first hypothesis.

**The second research hypothesis of Study I:** The positive relationship between physical attractiveness and teaching ratings for female instructors will be found to be stronger in the feedback of the male students than in that of the female students.

**Examination of the second hypothesis of Study I:** According to this hypothesis, we would expect 1) no differences between the means of the male and female students’ teaching ratings of the female instructors, and that 2) the correlation coefficient between the teaching ratings and the beauty ratings of female instructors by male student to be higher than this coefficient among female students.

In order to test the second hypothesis of Study I, we first examine whether there are differences between the means. The ANOVA indicates no differences between the male students’ ratings and the female students’ ratings (F (1, 33) =1.33, n.s.). Now we compare the correlation coefficients between the female instructors’ teaching and beauty ratings, which were calculated on the female students’ data, and the correlation coefficient that was calculated on the male students’ data. The correlation coefficient that was calculated on the female students’ data is 0.31, n.s., and on the male students’ data is 0.37, n.s., hence the findings do not provide empirical support for the second hypothesis. No statistically significant correlation coefficients were found either in the female or the male students’ evaluations.

To summarize the findings, the first research hypothesis was corroborated, while the second was not. Despite the fact that no differences were found between the male and female students’ ratings of the male instructors, a positive relationship was found between physical attractiveness and teaching ratings for male instructors, which is stronger in the ratings by female students than those of the male students. In the male instructors’ ratings done by female students, a correlation coefficient of 0.77 was found, and almost 60% of the variance of teaching rating is explained by beauty. In contrast, in the evaluation of the male instructors by male students, and in the evaluation of female instructors by students of both sexes, no statistically significant relationship was found, i.e., beauty evaluations do not contribute to explained variance in instructors’ teaching ratings.

The conclusion that can be drawn from these findings is that male instructors benefit from a ‘beauty premium’, while women do not. This bias stems from the contradiction between role images and gender images. As Gillen (1981) demonstrated, beautiful people are perceived to be more characteristic of their sex, i.e., a beautiful woman is perceived to be more feminine, while an attractive man is perceived to be more masculine. Because of the ‘masculine’ stereotype of college instructors, raters of attractive female instructors may experience a contradiction between their ‘masculine’ occupational image and ‘feminine’ gender image. This contradiction is further assumed to diminish the ‘beauty premium’ for female instructors. Our second study was designed to control for this contradiction. In the second study, we examined the ‘beauty premium’ among female clerks. Female clerks work in an occupation which is considered typically ‘feminine’, and whose role image corresponds to its gender image.

**Research Hypothesis of Study II**

The positive relationship between physical attractiveness and service ratings of female clerks will be stronger in male students’ evaluations compared to evaluations by female students.

**Methodology of Study II**

**Research tools**

We gained permission from 31 administrative employees to photograph them, and to obtain service evaluations from the students emerging from their respective offices.
Measuring the Service Rating Variable

In the course of semesters A and B of a single academic year, we enrolled female administrative employees of all departments in this study. Participants were informed of the institution’s approval of the study, and it was emphasized that the results of the study would be published without disclosure of any personal information. Students who emerged from an individual service encounter with these employees were requested to complete a formal four-item questionnaire evaluating their service experience, based on a 5-point Likert scale, and to state their opinion on the quality of the service they obtained. Each administrative employee was evaluated by 3 male and 3 female students. We treated the mean rankings of all six raters as an employee’s service quality score.

Measuring the Physical Attractiveness Variable

The method used to obtain beauty scores of the female administrative employees differed from the method used in Study I. We approached them through the institute’s departments and personally asked their permission to photograph them. We then requested six individuals (3 female and 3 male) who were not previously acquainted with these clerks to rate their beauty on a scale of 1 to 10 based on their photographs. Then their ratings were averaged and a ‘beauty score’ was calculated for each clerk on the basis of her average rating.

Sample of Study II

In all we collected beauty ratings of 31 female administrative employees whose ages ranged from 26 to 55. Mean age was 32.65 (SD=8.22). Approximately 2–3 employees from each department participated.

The service quality questionnaires were distributed to 186 students at the College (93 male and 93 female students). For each employee, we collected service quality ratings from 6 students (3 male and 3 female).

Procedure of Study II

Due to the sensitivity of the topic of physical appearance, we were not surprised by the diverse responses we received from the administrative employees. Some expressed staunch opposition to their participation in the study, even after we explained that the institution approved the study and their photographs would not be published in any manner. Others expressed skepticism regarding the study and although they initially were not enthusiastic participants, they consented to participate out of a desire to help the researchers, rather than based on their appreciation of the significance of the study. A final group of administrative employees were extremely enthusiastic about participating in the study, and even asked to be shown the final results. They also offered their opinions on the results they believed would be obtained. We found it was easier to enroll administrative employees over the age of 40. This group expressed more self-confidence and a greater desire to assist the researchers in the study. The younger administrative employees were less inclined to participate, and required that we compliment them on their physical appearance. Such compliments occasionally assisted us in obtaining participation. Finally we note that several administrative employees combed their hair and applied make-up before we photographed them; several stipulated this preparation as a condition of their participation.

Many students expressed their willingness to respond to the items on service quality. The students completed the questionnaire immediately after receiving the service. Several students added their own personal opinions on the study topic while completing the questionnaire, and expressed considerable interest in the results. They anticipated that the more attractive administrative employees would receive high service quality ratings. Notably, the student group comprised longstanding and new students, for whom this was their first service encounter. The
Results of Study II

Research hypothesis of Study II: The positive relationship between physical attractiveness and service ratings of clerks will be found to be stronger in the male students’ feedback than in that of the female students.

In order to examine the hypothesis of Study II, we compare the sex-based differences in service rating means and in the strength of the correlation coefficient between service and beauty ratings. If we see no differences between the means of the male and female students’ service evaluations, and, furthermore, if there are differences between the strength of the correlation coefficients between service ratings and beauty ratings made by male and female raters, then the hypothesis has been supported.

Examination of the research hypothesis of Study II: According to this hypothesis, we would expect 1) no differences between the means of the male and female students’ service ratings of the clerks, and that 2) the correlation coefficient between the service ratings and the beauty ratings by male students to be higher than this coefficient among female student.

In order to test the research hypothesis of Study II, we first examine whether there are differences between the means. A two-tailed t test indicates no significant differences between the male students’ ratings and the female students’ ratings of clerks’ service (t=0.12, n.s.). Now we compare the correlation coefficients between the service and beauty ratings, which were calculated on the female students’ data, to the same correlation coefficient that was calculated on the male students’ data. The correlation coefficient that was calculated on the female students’ ratings is 0.305, n.s., R²=0.09, and this coefficient on the male students’ ratings is 0.447*, R²=0.20, hence the findings provide empirical support for the hypothesis of study II.

To summarize the findings of Study II, the research hypothesis was corroborated: there was a significant positive relationship between physical attractiveness and service ratings of clerks only in the male students’ feedback.

Discussion

The first hypothesis of Study I claimed that the association between teaching ratings of male instructors and their beauty ratings by female students would be higher than this association for ratings by male students. The data provide empirical support for this hypothesis. This sex difference may stem from women’s self-perceived lack of expertise in judging beauty (Graziano, Jensen-Campbell, Shebilske, & Lundgren, 1993). When asked directly, women attach little importance to beauty, but the effect of beauty on women in their day-to-day interactions is evident from indirect examinations. In her study, Assayag (1998) also found that the beauty effect is diminished when the rater’s gender was identical to that of the ratee. Assayag suggests this is a result of jealousy among same-sex persons. Another explanation is that all people are
more attentive to the attractiveness of members of the opposite sex, and therefore the effect is weakened in the case of members of the same sex.

The second hypothesis of Study I claimed that the correlation coefficient between teaching ratings of female instructors and their beauty ratings by male students would be higher than those by female students. The data do not provide empirical support for this hypothesis. This can be explained by the diminished importance that men attach to the physical attractiveness of women who are older than they are. When selecting a spouse, the social norm calls for the woman to be some years younger than the man, and there are very few couples where women are older than their male spouses. Men are more sensitive to the physical attractiveness of women who are potential spouses, and virtually indifferent to the appearance of women who are older than they are. For precisely this reason, the first study hypothesis was corroborated: in accordance with the norms of older males, women respond to the physical attractiveness of older males and give higher ratings to attractive male instructors. Based on the average ages of the raters (men 27.60 and women 27.37) and the ratees (men 48 and women 46), it should be noted that a woman of 50 is considered a maternal figure, and possibly even a grandmother figure for young Israeli males.

In previous studies, a general correlation was found between the instructor’s physical attractiveness and the ratings of his teaching, $r = 0.30$ (Felton et al., 2004) and $r = 0.34$ (Kindred & Mohammed, 2005). In our sample we obtained a general correlation of $r = 0.35$. However, unlike these studies, we distinguished between the genders of the instructors and the students, and our findings were surprising. When the gender of both instructors and students are taken into account, an interaction effect between the variables is revealed: the correlation between beauty and the lecturer’s ratings is $0.77$ (p<0.001) when the evaluated instructors are male and the raters are female students. Moreover, the value of the correlation drops and loses its statistical significance in the remaining situations (male instructors and male students, and female instructors and male or female students). In our study, the correlation coefficient obtained among male instructors was $0.36$, and among women $0.31$, n.s. (when the student’s gender was not taken into consideration). The findings of our study provide empirical support for the findings in the study conducted by Hamermesh and Parker (2005), and confirm that the beauty premium has an effect mainly relating to the male instructors. The regression coefficient obtained in their study among male instructors was $0.384$, and among women $0.128$. Susmuth (2006) found an effect with German students that was almost half the size of the findings of Hamermesh and Parker with American students. Susmuth hypothesizes that the reason for this is that the German students are older than the Americans by an average of two years. In the Israeli sample the estimated mean age was 27.78, an age some years older than both the American and German samples. Nevertheless, instructors’ beauty had a highly significant effect.

Romano and Bordini (1989) found that attractive male and female professors received the highest teaching scores. In their study, the interaction of instructor’s sex and physical attractiveness was non-significant, implying that physical attractiveness had a main effect on teaching scores. Our findings, however, point to an interaction effect: only attractive male instructors received higher ratings. Attractive female instructors did not receive higher ratings. The hypothesis of Study II claimed that the positive relationship between physical attractiveness and service ratings of clerks will be stronger in male students’ ratings than in those of female students. The data provide empirical support for this hypothesis. When calculated on the male respondents’ data, a significant positive correlation was found between the clerks’ appearance and their service evaluations. In contrast, no significant correlation was found in the female raters’ data. This finding corresponds to the finding regarding the first research hypothesis of Study I. Male instructors received a ‘beauty premium’ from female students; likewise, female clerks received a ‘beauty premium’ from male students. Similarly to the findings of Study I, in which female students were more influenced by male instructors’ appearance, and male students

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4 The mean is estimated and not precise because students indicated an age group rather than a precise age.

5 The age mean is high since all high school graduates in Israel must serve in the military immediately after graduation: men serve for 3 years and women for 2 years. Additionally, in the wake of a law that was passed 11 years ago, there is a large number of older students aged 30–50.
were more influenced by female clerks’ appearance. The beauty effect is weakened when the rater’s gender was identical to that of the ratee. Jealousy between same-sex persons and greater attention to the attractiveness of members of the opposite sex may explain these findings.

A comparison of findings based on these two hypotheses, taken together with findings of the second research hypothesis of Study I lead to the following conclusion: **Employees benefit from a beauty premium in their performance evaluations when their gender image corresponds to their role image.**

The findings of our study are consistent with findings of Assayag’s study (1998), indicating a reduced beauty effect when rater and ratee are of the same sex. Assayag also reviewed studies on sex-based differences on the degree of the beauty effect, and found that such differences were found to be more salient in studies that were conducted by men, while female researchers (excluding Assayag, 1998) did not find sex differences in this context. The findings of our study, conducted by two female researchers, cast doubt on Assayag’s contention. Our study is in line with study of Holahan and Stephan (1981), who found that attractive women are not rated as talented when they are rated mainly by men who hold traditional gender stereotypes about women. Our findings provide additional evidence for the conclusion drawn by Cash and Trimer (1984), whereby feminine beauty confers less of a benefit in the context of the performance of masculine tasks.

In the studies by Hamermesh and Parker (2005) and Sussmuth (2006), beauty rankings were obtained from people who did not take a course given by the instructor (Hamermesh and Parker presented pictures of the instructors to six raters in order to evaluate their beauty; in Sussmuth’s study, beauty ratings were obtained from students at another university, who were also unacquainted with the instructors). In our study, we calculated the correlation coefficients based on the beauty ratings obtained from each instructor’s students, and based on teaching ratings that were obtained from students who were clearly exposed to the instructor’s physical attractiveness during the course of their studies. We consider this procedure to be preferable to the others, and a better representation of reality because, in practice, students’ evaluations of beauty affect their ratings of their instructors. A student’s acquaintance with the instructor, his or her character, and his or her attitude affect the student’s perception of the instructor’s beauty.

It is possible that a self-fulfilling prophecy occurs; students expect attractive faculty to be warmer, more sensitive, available, knowledgeable, etc. Instructors unconsciously perceive these expectations and act according to them. We nevertheless believe that if this self-fulfilling prophecy does occur, it occurs among both female and male faculty. Thus, the self-fulfilling prophecy cannot explain why only male instructors benefited from the beauty effect.

The main conclusion of the study is that males in academia benefit from a ‘beauty premium’, while women do not. This ‘discrimination’ stems from the contradiction between role images and gender images. As Gillen (1981) demonstrated, beautiful people are perceived as more characteristic of their sex, i.e., a beautiful woman is perceived as more feminine and a man as more masculine. When the role image corresponds to the gender image, one can expect the ‘beauty effect’ to benefit beautiful people. However, when such correspondence is absent, as is the case with female instructors, the beautiful person (and, in our case, the beautiful woman) does not merit a ‘beauty premium’.

Gillen (1981) suggested that attractiveness enhances gender characterizations, thus an attractive female professor is perceived to be more feminine and an attractive male professor is viewed to be more masculine than their less attractive colleagues. As mentioned in the Introduction, scientific and academic abilities are stereotyped as masculine (Ekehammer, 1985; Toren, 2005). This is another reason why female instructors do not benefit from the ‘beauty premium’. Attractive female instructors work at a masculinely sex-typed job, and their exaggerated feminine attributes (e.g., beauty) are incongruent with those believed necessary for their job. In contrast, attractive female clerks work at a femininely sex-typed job, and their exaggerated feminine attributes are congruent with those believed necessary for their job. Thus, it can be suggested that if an attractive female

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6 This contradiction exists in addition to the contradiction between beauty and talent among women, which is raised in Holahan and Stephan’s study (1981), cited above. This contradiction is stronger among men who endorse traditional gender stereotypes about women.
instructor receives high ratings, it is not because of their appearance, rather it is in spite of it!

As to the sex differences in the degree of the beauty effect on female and male students, it is conceivable that men and women differ in their role expectations. Women may be more tolerant of discrepancies between female instructors’ gender image and their role characterizations, but their overall tendency to award higher teaching ratings offsets the beauty premium that they would ‘award’ to more attractive female instructors. This offsetting, combined with jealousy of beautiful women, leads to the absence of a “beauty effect” benefit for female instructors.

Furthermore, women may be less influenced by attractiveness of same-sex objects in forming gender characterizations. Men, on the other hand, may be more influenced by attractiveness in forming such characterizations, and less tolerant of discrepancies between their gender image and role expectations, thus ‘penalizing the attractive female instructors.

Following Hamermesh and Parker (2005) and Sussmuth (2006), we took into consideration a self-selection bias: instructors who agreed to permit us ask students to rate their physical appearance during the teaching survey may be better teachers than those who did not agree to do so. We controlled for this bias by comparing the mean overall teaching evaluations of all the instructors at the Ariel University Center and the mean of our sample. We found no difference and concluded that the self-selection bias did not exist.

We also took into consideration another type of self-selection bias: those who agreed to permit us ask students to rate their physical appearance may be better looking than those who did not agree to do so. Unfortunately, in order to control for this bias, beauty ratings for all of the instructors at the Ariel University Center were required, which was obviously impossible (because of the ethical requirement to obtain the individual consent of all instructors). A self-selection bias of students may also have been at work, based on the reluctance of some students to respond to the additional question about beauty. It is possible that students who intentionally avoided answering this question were more sensitive to the issue of physical appearance. As a result, correlation coefficients would have been greater if they answered.

Furthermore, the size of the present quantitative sample, while useful for initial investigation, may need to be increased for further analysis. There may have been a bias in the beauty and teaching rankings, such that the students formed an opinion of the instructor even before ranking his or her beauty or teaching, due to previous information such as gossip or pedagogical reputation (mean grade level in the course). The findings of Cavior, Miller and Cohen (1975), that people judge others as more attractive if they have a longer acquaintance period should also be taken into consideration. Moreover, it was found that longer acquaintance with the lecturer reduced the halo effect in students’ teaching ratings (Jacobs & Kozlowski, 1985).

In order to rule out the possibility that the effect is bi-directional, i.e., beauty affects teaching ratings, but the teaching method and knowledge of the instructor’s personality affects the instructor’s beauty ratings, we suggest investigating the relationship between beauty and evaluations at two points in time: Before the beginning of the semester – before students are personally acquainted with the instructor through the course – and again at the end of the semester, in order to examine whether acquaintance affects the beauty evaluation, either positively or negatively and, in other words, whether teaching ratings affect beauty perceptions.

Finally, we suggest conducting a similar study in additional cultures, in order to examine whether there are cross-cultural differences in the ‘sensitivity’ to beauty levels. Since the ethnic composition of our sample was heterogeneous, and included Jewish students of European and eastern descent, religious and secular students, new immigrants from the former Soviet Union and Ethiopia, as well as Moslem and Christian Arabs, it is possible that there are stronger effects within some cultural groups, but these were not evident in our studies due to the heterogeneous

7 As was found in the data for the college as a whole (Davidowitz, 2003)
8 See note 4 above.
9 Halo effect is a strong tendency by the rater to think of the ratee in general as rather good or rather inferior and to color the judgment of separate qualities by this general feeling (Thorndike, 1920).
10 Proof of the fact that acquaintance with the lecturer could raise the perception of his beauty was found in our study: a negative correlation was found between attendance in the course and beauty evaluations (r=-0.36, p<.01). We found that higher the percentage of students who attended up to 40% of all class sessions, the lower the instructors’ beauty rating.
sample and small sample size. Therefore it is advisable to study this subject taking students’ cultural background into account. Similarly, a comparison should be made between the younger and older students, to see whether rater age constitutes a covariate for the beauty–teaching evaluation correlation. Yet another relevant question for future research is whether attractive male ratees benefit from a ‘beauty premium’ in feminine-typed jobs, e.g., kindergarten teachers, hospital nurses.

In summary, our study confirms findings of past studies on this issue, and sheds light on one variable that has not been addressed in previous studies, specifically the interaction between instructor’s gender and student’s gender. We explain this interaction by confronting two images: gender stereotypes and role expectations. The combination of these concepts, aligned with a differential attentiveness to same-sex person’s attractiveness to the raters, provides an insightful interpretation of the findings.

According to Baker (1984), the first step in escaping the beauty trap is to admit its existence. We hope that the findings of our study help increase public awareness of the subject and thereby improve the tools for evaluating instructors and other employees.

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