Physical attractiveness and its halo effects on a partner: “Radiating beauty” in Japan also?

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We studied physical attractiveness effects and examined whether radiating beauty effects (Sigall & Landy, 1973) would be induced in Japan. In the two experiments, 201 female and 128 male subjects rated pictures of a man and a woman. The description found in the questionnaire informed the subjects that two stimulus people were associated, or unassociated. In addition, attractiveness of female stimulus was manipulated by the two kinds of pictures, either attractive or unattractive. The results of the two experiments demonstrated the consistent pattern of the stereotype “Beauty is good, but not masculine”. However, we could not confirm the generalized halo effects called “radiating beauty effects”. That is, the male associated with an attractive female was not perceived favorably and the male with an unattractive female was not perceived unfavorably. Unexpected effects of the association and the subjects sex were revealed. Female subjects place high value on association with the opposite-sex. Implications of these results are discussed with attention to Japanese arranged marriage.

Key words: physical attractiveness, facial appearance, interpersonal attraction, halo effects, beauty stereotype, sex stereotype, implicit personality, interpersonal perception.

Numerous studies focusing on physical attractiveness have been conducted (see Adams & Crossman, 1978; Bull & Rumsey, 1988; Dion, Berscheid, & Walster, 1972; Patzer, 1985). Most studies revealed that physical attractiveness is a very important factor in judging others. Although some people display psychological resistance, failing thus to realize that a book is often judged by its cover, the results of a preceding study conducted in Japan indicated also that there is a beauty stereotype phenomenon (Onodera, 1989). This stereotype phenomenon consists mainly in believing that “what is beautiful is good”. Thus, a beautiful woman is perceived as having socially desirable traits. Besides the advantage for the beautiful woman herself, Sigall and Landy (1973) reported that the man associated with the beautiful woman also benefits from her. They explain that the effects of the woman's attractiveness had radiating effects on her companion. Moreover, Meiner and Sheposh (1977) showed that intelligence as well as physical attractiveness confer a benefit upon not only an endowed woman but also her associated man.

The purpose of the present study was to confirm the physical attractiveness effects and to examine the radiating effects of beauty in Japan.

Experiment 1

Method

Subjects were 149 female college students. The experimental design was...
a 2x2 factorial design—attractiveness of the female (attractive condition vs. unattractive condition) and the male—female association (associated condition vs. unassociated condition).

The two levels of physical attractiveness were manipulated by black-and-white pictures of a face, and the association by a questionnaire based description. Two pictures of a male and a female were pasted to the questionnaire. While the picture of the male was the same through all the conditions, the pictures of the female were of two kinds, a picture of a physically attractive person and one of an unattractive person. Those pictures were selected based on the results of a pretest. In the pretest, three males and three females evaluated 80 female pictures taken from a year-book and ranked them with respect to physical attractiveness. We selected the pictures which were evaluated as the most attractive and the most unattractive. Another factor, “association”, was manipulated by a questionnaire based description.

In the association condition, the female stimulus person and the male stimulus person in the pictures were described as a couple and who had been associated with each other for five years. On the other hand, in the unassociation condition, there was no description suggesting the existence of a relationship between the two stimulus persons.

Procedure

Subjects were told that the purpose of the present experiment was to study how people can accurately judge others on the basis of very few cues. Each subject was then, randomly given one of four questionnaires corresponding to the four conditions. Subjects were instructed to judge the target person’s personality traits from the pictures. On the questionnaire, a 7-point scale was presented and eleven trait related items were printed for rating on the basis of the scale.

Dependent Measures

Subjects evaluated both the female target and male target with regard to the eleven items. The female target was evaluated by the following traits: (1) beauty (2) intelligence (3) kindness (4) self-confidence (5) positiveness (6) cheerfulness (7) sex appeal (8) strong will (9) femininity (10) tenderness (11) friendliness. For the male target, “attractiveness” and “masculinity” were used instead of “beauty” and “femininity”. Other items were the same in rating both stimulus.

Results

A multivariate analysis of variance (MANOVA) was performed on the eleven dependent measures for each target stimulus. The evaluation of the female target showed two significant overall main effects: effect of association, $F(11, 134) = 2.08, p < .025$ and effect of attractiveness, $F(11, 134) = 38.24, p < .001$. The overall interaction of association and attractiveness was not significant but marginal, $F(11, 134) = 1.70, p < .079$.

Then, univariate analyses of variance were performed. Table 1 and Table 2 show the mean scores of the significant items for female target evaluation.

Concerning the interaction, there is a tendency that the associated-attractive female is considered more beautiful and the associated-unattractive female as the least beautiful. Although univariate F-tests of other items did not indicate a significance, the associated-attractive female was perceived as high in “intelligence”, “kindness”, “sex appeal”, “femininity”, “tenderness” and “friendliness”. Except for “kindness”, the unassociated-unattractive female was rated as the lowest among these items. On the other hand, the unassociated-unattractive female was rated high in “self confidence”, “positiveness” and “strong will”.

For the evaluation of the male target,
Table 1

Mean scores of significant items for female target (Experiment 1)

<table>
<thead>
<tr>
<th>Association</th>
<th>Associated (n=75)</th>
<th>Unassociated (n=73)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>kindness</td>
<td>5.94 (1.11)</td>
<td>4.58 (1.16)</td>
<td>p&lt;.005</td>
</tr>
<tr>
<td>positiveness</td>
<td>3.87 (1.54)</td>
<td>4.27 (1.36)</td>
<td>p=.046</td>
</tr>
<tr>
<td>femininity</td>
<td>4.85 (1.38)</td>
<td>4.27 (1.54)</td>
<td>p&lt;.001</td>
</tr>
<tr>
<td>tenderness</td>
<td>5.16 (1.19)</td>
<td>4.69 (1.27)</td>
<td>p&lt;.006</td>
</tr>
</tbody>
</table>

Note. For missing values, one case was dropped from this analysis. Figures in parentheses indicate SDs.

Discussion

For the female target evaluation, the results of the previous study (Onodera, 1989) were supported. While the attractive female was perceived to be high in the most socially desirable traits, she was perceived low in some stereotypically masculine traits (“self confidence”, “positiveness” and “strong will”); whereas the unattractive female was perceived as high in all those traits. These results confirmed the existence of a strong stereotype of beauty in Japan also. However, other findings were unexpected. There was no overall significant effect or tendencies for male target person, but there was a strong main effect for the evaluation of the female target person. Table 1 shows that subjects perceived the associated female high in “kindness”, “femininity” and “tenderness”, but low in “positiveness”. Furthermore, there is a tendency to perceive the associated female high in “cheerfulness”, “friendliness” and low in “self confidence” (for all the items; p<.2). Thus, we may say that the associated female was stereotypically perceived as having feminine traits, but not
masculine traits. This perception pattern is somewhat correspondent to the pattern of beauty effect.

**Experiment 2**

The purpose of Experiment 2 was to confirm the stability of the findings in Experiment 1 and explore how the sex of the subjects affects the way the stimuli are perceived.

**Method**

Fifty-two female subjects and 128 male subjects were recruited from an introductory psychology course in a university. The same stimuli and procedure as in Experiment 1 were used, as were dependent measures, and the sex of subjects factor was included in Experiment 2.

**Results**

Results of MANOVA on the eleven dependent measures of female target stimuli yield a significant three-way interaction, attractiveness \times association \times sex of subjects \( F(11, 162)=2.52, p<.006 \). There was also a significant two-way interaction for attractiveness \times association \( F(11, 162)=2.02, p<.030 \).

Moreover, all independent measures indicate significant simple main effects: sex of subjects \( F(11, 162)=3.36, p<.001 \); association \( F(11, 162)=2.22, p<.016 \); attractiveness \( F(11, 162)=25.01, p<.001 \).

In the three-way interaction of MANOVA, the following five items—“intelligence”, “kindness”, “positiveness”, “strong will” and “tenderness”—were significant in ANOVAs (“positiveness” \( p<.01 \); others \( p<.05 \)). Table 3 shows the means of each condition. The same pattern of effects was found among “intelligence”, “kindness” and “tenderness”. And the same pattern was found between “positiveness” and “strong will”. In the former group of items, high ratings in the unattractive-associated-female subject condition were prominent.

Furthermore, female subjects tended to highly evaluate the attractive-unassociated female target stimulus. In the latter group of items, high ratings in the unattractive-unassociated-female subject condition are common. Thus, high ratings in the unattractive-associated-female subject condition are not uncommon. While all the items which showed significant three-way effects revealed significant at-

### Table 3

<table>
<thead>
<tr>
<th></th>
<th>Attractive Associated</th>
<th>Attractive Unassociated</th>
<th>Unattractive Associated</th>
<th>Unattractive Unassociated</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>female ((n=11))</td>
<td>male ((n=36))</td>
<td>female ((n=10))</td>
<td>male ((n=36))</td>
</tr>
<tr>
<td>Intelligence</td>
<td>4.91</td>
<td>4.97</td>
<td>5.70</td>
<td>5.17</td>
</tr>
<tr>
<td></td>
<td>(.94)</td>
<td>(.97)</td>
<td>(1.06)</td>
<td>(.97)</td>
</tr>
<tr>
<td>Kindness</td>
<td>5.00</td>
<td>5.37</td>
<td>5.40</td>
<td>5.28</td>
</tr>
<tr>
<td></td>
<td>(1.27)</td>
<td>(1.00)</td>
<td>(.97)</td>
<td>(1.14)</td>
</tr>
<tr>
<td>Positiveness</td>
<td>4.09</td>
<td>3.55</td>
<td>3.50</td>
<td>3.86</td>
</tr>
<tr>
<td></td>
<td>(1.04)</td>
<td>(1.37)</td>
<td>(.97)</td>
<td>(1.31)</td>
</tr>
<tr>
<td>Strong Will</td>
<td>4.64</td>
<td>4.34</td>
<td>3.60</td>
<td>4.67</td>
</tr>
<tr>
<td></td>
<td>(1.96)</td>
<td>(1.26)</td>
<td>(.96)</td>
<td>(1.31)</td>
</tr>
<tr>
<td>Tenderness</td>
<td>5.36</td>
<td>5.29</td>
<td>5.80</td>
<td>5.42</td>
</tr>
<tr>
<td></td>
<td>(1.43)</td>
<td>(1.01)</td>
<td>(.92)</td>
<td>(1.18)</td>
</tr>
</tbody>
</table>

Note. Figures in parentheses indicate SDs.
tractiveness × association effects in the female subject condition ("kindness", $p<.05$; others, $p<.02$), there was no significant effect in the male subject condition (all: ns). We divided all cases into two groups according to their sex, and compared only the results of female subjects with those in Experiment 1. MANOVA of female subjects revealed a significant two-way interaction (tractiveness × association: $p<.019$) and two significant main effects (association: $p<.001$; attractiveness: $p<.001$). These results are consistent with those in Experiment 1 except that the nearly significant effect of the interaction of attractiveness × association effect ($p<.079$) is significant in Experiment 2 ($p<.019$). The female subjects perceived the unattractive female target as being intelligent, kind and tender when she had a boyfriend. On the other hand, the unattractive female who had a boyfriend was perceived to be weak-willed and passive. The greatest effect in both Experiment 1 and Experiment 2 was the simple attractiveness main effect. That is, while an attractive female was significantly perceived as high in "beauty", "intelligence", "sex appeal", "femininity", "tenderness" (all: $p<.01$), an unattractive female was perceived as high in "strong will" ($p<.005$).

The association effect shows an associated female was perceived as high in "beauty", "cheerfulness", "sex appeal" and "friendliness" (all: $p<.05$), whereas an unassociated female was perceived high in "self confidence" and "positiveness" (both: $p<.05$). These results confirm the stability of the attractiveness effect and association effect. In the items concerning "strong will", "self confidence" and "positiveness", an unassociated female or an unattractive female was evaluated as high, and in other items, an attractive or an associated female was evaluated as high.

Another confirmation was obtained from the male target evaluation. All effects were insignificant for female subjects of both Experiment 2 and Experiment 1. The results of MANOVA of the total cases for the male target evaluation showed that the association effect was significant ($F(11, 162)=2.07, p<.025$). The univariate analysis showed that "attractiveness", "intelligence", "sex appeal", "masculinity" (all: $p<.05$) and "tenderness" ($p<.001$) have reliable effects. The male who was associated with a female got significantly higher ratings in those items.

General Discussion

The results of the two experiments consistently indicated that there are no radiating effects as observed by Sigall and Landy (1973).

Furthermore, the results of analysis in Experiment 2 indicated the significant effects of the subject's sex. These effect were not expected from either Sigall and Landy's experiment (1973) or Meiners and Sheposh's (1977). Japanese females seem to regard the association as valuable. Thus, an unattractive female can receive a good evaluation from the same sex if she has a boyfriend. However, a Japanese male is not affected by the association factor, and the unattractive female is always perceived as lower by the Japanese male. This asymmetry between male and female can be explained in terms of sex difference, concerning orientation of romantic relationships. For example, Patzer (1985) quoting from Lehner writes that in Japanese marriages "the men are all looking for good-looking women and the women are all looking for men who can support them well". Thus, Japanese female subjects could perceive that the associated female must have traits to achieve success regardless of her physical attractiveness. In contrast, Japanese male subjects might lay emphasis on attractiveness rather than association. Moreover, the associated male was perceived to possess desirable traits in both sexes.

These findings suggest that the association generally has a greater value in Japan.
than in Western countries. Marriages in Japan are often arranged by other people. This system called "OMIAI" is arranged as a formal blind date for marriageable persons. This system helps the persons who have difficulties finding a partner to marry. However, some young people put a high value on a love-marriage rather than on an arranged marriage. In a sense, the person who can find a partner by him/her self may be regarded as having desirable attributes. Thus, the emphasis of association could be explained by the fact that finding a partner by oneself is not necessarily a matter of course in Japan.

Although higher interactions were found in the female target evaluation, the main effects of attractiveness were consistent and far greater than the interactions. The attractive female was believed to be more beautiful, intelligent, kind, cheerful, sexy, feminine, tender and friendly, but less self-confident, weak-willed and passive. That the attractive female was perceived low in some attributes corresponds to the reports by Cash and Janda (1984). Cash and Janda note that "If a woman wants to succeed in a man's world, she had better not look too feminine" (p. 48). It is possible that the attractive female is placed at a disadvantage in Japan when the situation demands strong-will, positiveness, or self-confidence, or other stereotypically masculine attributes.

References
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