Effects of applicant sex, applicant physical attractiveness, type of rater and type of job on interview decisions* 

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Applicant sex, applicant physical attractiveness, type of rater (120 students and 105 professional employment interviewers) and the type of job were manipulated experimentally in a 2 x 2 x 2 x 2 design. Physical attractiveness of job candidates had the broadest influence on employment decisions. There was no main effect for applicant sex, but professional interviewers were biased in favour of female applicants while student raters were not. Also, as expected, professional interviewers rated job applicants less leniently than students did.

The employment interviewer's task is very complex and it has been demonstrated that interviewers are influenced by many variables including first impressions, ideal applicant stereotypes, sex, age, job information, visual cues and attitudes (Carlson et al., 1971; Schmitt, 1976; Ferris & Gilmore, 1977; Arvey, 1979; Gilmore & Ferris, 1980). One explanation for the impact of some of these variables on interviewer decisions is that interviewers have a tendency to attribute characteristics differently to applicants based upon such variables. Interviewers collect considerable, but obviously incomplete, information about an applicant before and during the interview and then presumably use an attribution process to form a complete impression of the person when making an employment decision. One of the variables that could influence an interviewer's decision is the physical appearance of the applicant. Traditional social-psychological research (Dion et al., 1972; Berscheid & Walster, 1974) indicates that people with more attractive physical appearances are perceived as having more socially desirable traits and behavioural tendencies, including expected occupational success. Thus, if interviewers are susceptible to similar processes, they too would be influenced by an applicant's physical attractiveness.

Prior research has investigated the impact of physical attractiveness by itself or in conjunction with other variables in relation to employment decisions. In the life insurance industry, Carlson (1967) found that there appeared to be some impact of applicant appearance on a hiring decision made by sales managers. Dipboye et al. (1977) using students as raters and Dipboye et al. (1975) using both students and professional interviewers reported that physical attractiveness of the job applicant affected hiring decisions. Cann et
al. (1981) found that applicant sex and applicant attractiveness had profound effects on hiring decisions for department managers so that attractive males were most favourably rated. Beehr & Gilmore (1982) found that the interaction between the attractiveness of the applicant and the perceived relevance of attractiveness for job performance affected employment decisions only about male applicants.

While the studies cited above varied applicant attractiveness simultaneously with either the type of job or applicant sex, the most pertinent to the present research are those studies that simultaneously manipulated three variables: applicant sex, applicant attractiveness and type of job. Cash et al. (1977) attempted this by varying the job according to whether it was considered traditionally male or female. Regarding attractiveness, they found that the employment potential of attractive applicants of both sexes was rated higher by personnel directors than that of unattractive applicants, and that attractive applicants tended to be rated as more qualified than unattractive applicants for in-(sex) role jobs and neuter jobs. They did not find that attractiveness had an effect on the hiring decision, however. Heilman & Saruwatari (1979) found that attractiveness was an advantage for males in both a managerial and a clerical job, whereas it was an advantage for women applicants only in the clerical job. Thus, when all three types of variables are manipulated, the results are not completely consistent, but overall it seems that attractiveness is often an advantage.

The results of these past studies may be a function of the type of job manipulation that was used. There was a limited number of jobs, and many of them (e.g. sales and some of the managerial jobs) may have been jobs in which physical attractiveness could conceivably be a job-relevant factor: that is, raters could assume that attractiveness is likely to help employees in these positions perform their jobs (because of the necessity to influence others in a face-to-face situation, in sales, for example). Also, there appeared to be more of an interest in the impact of the applicants' sex rather than of applicants' attractiveness, since the job was varied along a sex-appropriate dimension in one study (Cash et al., 1977), and in another study (Heilman & Saruwatari, 1979) it is stated that 'attractive physical appearance in and of itself was of no apparent benefit in carrying out either job' (p. 362).

The research reported here investigates the interaction of applicant sex and attractiveness on hiring decisions while simultaneously varying perceived relevance of attractiveness to job performance. Thus the research controls the extent to which physical attractiveness is perceived as relevant to the job. In addition, the type of job is controlled for both in terms of hierarchical level (entry level vs. management trainee) and in terms of perceptions of the job as typically male or female employment. Also, interviewers' tendencies to attribute personality and ability traits based upon applicant sex and attractiveness are investigated for their potential as an explanation of why hiring bias may occur. In summary, therefore, this research attempts to separate the effects of applicant sex, physical attractiveness and the type of job on interview decisions. The research involves two types of participants—college students and professional employment recruiters. The recruiters were used to enhance the generalizability of the results to actual interview situations.

Three null hypotheses were examined: (1) the interaction between applicants' physical attractiveness and the perceived job relevance of attractiveness for performance in a given job would have no effect on interviewers' decisions; (2) the interaction between applicants' physical attractiveness and the relevance of attractiveness for a given job would have no effect on interviewers' attribution of job-specific characteristics to the applicants; and (3) there would be no difference in interviewers' attributions of general characteristics to job applicants based on the applicants' physical attractiveness. In addition, the effects of applicant sex were studied in combination with attractiveness and the type of job.
METHOD

Participants

Student participants were 50 male and 70 female undergraduates who volunteered to participate in the experiment in return for extra course credit, and 105 volunteer recruiters who visited two universities during a spring semester. They were assigned randomly to eight experimental conditions (a 2 x 2 x 2 x 2 factorial design with applicant sex, applicant attractiveness, type of rater and type of job as the independent variables). The average age of the college student participants was 21.5 years and the recruiters' average age was 33.5.

Procedure

Within each condition, a participant was randomly presented with a résumé (constant) with a photograph attached (sex and attractiveness varied), an interview transcript (constant), and a job description (varied). The photographs were taken from the senior's section of a college year-book and were pre-tested on college instructors and on college students using a six-point attractiveness scale ranging from 'extremely unattractive' to 'extremely attractive'. The range of the final pictures selected for the study were 4.38-4.87 (attractive) and 1.73-2.00 (unattractive), with six different pictures being used to represent each condition.

Four experimental entry level management trainee job descriptions were developed, two for which physical attractiveness might be a more job-relevant characteristic (personnel interviewer and personnel counsellor), and two for which physical attractiveness would be a less job-relevant characteristic (safety administration and personnel records). The descriptions were as identical as possible except that the more attractiveness-relevant jobs required working more with others in face-to-face situations, whereas the other two jobs required working more with data or with things. Consistent with this procedure Dipboye et al. (1977) concluded that there is a need for research on applicant attractiveness in conjunction with jobs 'that are visible and require social interaction' (p. 294). Pre-testing using college students who were not in experimental groups found that each of the jobs in the more attractiveness-relevant group (personnel interviewer and personnel counsellor) were perceived as more likely to be performed better by a physically attractive employee than an unattractive employee (P < 0.05) when compared with the less attractiveness-relevant group (personnel records and safety administration). In addition, the four job descriptions were not significantly different on a seven-point rating of whether the job could be done equally well by a male or a female.

Dependent measures

Participants' hiring and salary decisions were recorded on the following items using seven-point rating scales:

1. Would you hire this applicant for the job described on the job description form? (X = 4.29, SD = 1.37).
2. The typical beginning salary for this job is between $12,000 and $18,000 per year. If this applicant were hired, what salary would you offer to applicant? (X = $13,415, SD = $1276).

The following three job-specific attributions were made by the participants on seven-point scales:

1. Rate the applicant's ability for the job described on the job description form (X = 4.20, SD = 1.17).
2. Rate the applicant's personality, describing how well it fits the job described on the job description form (X = 4.50, SD = 1.35).
Table 1. Significant univariate analysis of variance effects, means and standard deviations (in parentheses) for all participants combined

<table>
<thead>
<tr>
<th>Applicant attractiveness:</th>
<th>Attractive</th>
<th>Not attractive</th>
<th>F</th>
<th>( \omega^2 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hiring decision</td>
<td>4.48(1.25)</td>
<td>4.08(1.47)</td>
<td>4.50*</td>
<td>0.02</td>
</tr>
<tr>
<td>Expected performance</td>
<td>4.89(1.19)</td>
<td>4.51(1.41)</td>
<td>5.24**</td>
<td>0.02</td>
</tr>
<tr>
<td>Perceived personality for job</td>
<td>4.89(1.21)</td>
<td>4.14(1.32)</td>
<td>19.75**</td>
<td>0.08</td>
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<table>
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<tr>
<th>Type of rater:</th>
<th>Recruiters</th>
<th>Students</th>
</tr>
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<tbody>
<tr>
<td>Expected performance</td>
<td>4.40(1.41)</td>
<td>4.97(1.16)</td>
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<table>
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<tr>
<th>Applicant sex:</th>
<th>Male</th>
<th>Female</th>
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</thead>
<tbody>
<tr>
<td>Type of rater:</td>
<td>Recruiter</td>
<td>Student</td>
</tr>
<tr>
<td>Hiring decision</td>
<td>3.85(1.38)</td>
<td>4.51(1.27)</td>
</tr>
</tbody>
</table>

*\( P < 0.05; **P < 0.001.\)

3. Rate the applicant’s expected performance if the person were hired for the job described on the job description form (\( X = 4.71, SD = 1.29 \)).

Participants also responded to 27 general personality attribution scale items (e.g. altruistic, self-assertive, dependent) on a five-point Likert-type scale.

RESULTS

In order to test the hypotheses, a 2 x 2 x 2 x 2 (applicant attractiveness x job x sex x type of rater) multivariate analysis of variance (MANOVA) was computed using the two interviewer decisions and the three job-specific attributions as dependent measures. The multivariate main effects for attractiveness (\( F = 5.46, \) d.f. = 5, 204, \( P < 0.001, \) \( \omega^2 = 0.10 \)) and type of rater (\( F = 2.52, \) d.f. = 5, 204, \( P < 0.05, \) \( \omega^2 = 0.04 \)) indicate that both physical attractiveness of applicants and the type of person evaluating the job applicant influenced judgements in the simulated employment process. A two-way multivariate interaction between applicant sex and type of rater was also significant (\( F = 2.60, \) d.f. = 5, 204, \( P < 0.05, \) \( \omega^2 = 0.04 \)).

Univariate ANOVAs for the main effects of attractiveness and type of rater as well as for the two-way interaction (applicant sex x type of participant) were examined. The results of these univariate effects are presented in Table 1. Applicant attractiveness had a main effect on the hiring decision, expected performance in the job, and perceived personality for the job. Attractive applicants were given higher ratings for the hiring decision, for the job-relevant personality variable, and for the expected performance rating. The physical attractiveness of applicants had its strongest impact on the job-relevant personality rating (\( \omega^2 = 0.08 \)) and also accounted for 2 per cent of the variance for the hiring decision and 2 per cent of the variance on the expected performance rating. The general (not job-related) personality attributions were not affected by any of the experimental manipulations and were not considered in any additional analyses.
Fig. 1. Interaction effect of applicant sex and type of rater on hiring decision. ———, students; ———, recruiters. Scheffé tests for differences between all pairs of means found that 4·51 differed from 3·85 ($F = 6·46$, d.f. = 1, 107, $P < 0·05$) and 4·41 differed from 3·85 ($F = 4·42$, d.f. = 1, 102, $P < 0·05$).

For the type of rater (student or recruiter), the expected performance variable was significantly affected: student raters gave higher mean ratings than did professional recruiters, accounting for 5 per cent of the variance. The impact of the sex of applicant × type of rater interaction on the hiring decision is presented in Fig. 1. Recruiters gave lower hire ratings to male applicants than student raters, and recruiters rated female applicants significantly higher than male applicants. This interaction accounted for 2 per cent of the variance in the hiring decision.

**DISCUSSION**

The hypotheses were not supported by these data. The hypothesized physical attractiveness × type of job interactions (hypotheses 1 and 2) received no support from the data. As in previous research (e.g. Carlson, 1967; Dipboye et al., 1977), the physical attractiveness of the applicant in this experiment affected interview decisions. Attractive applicants were perceived as having a more appropriate personality for the job, were expected to perform better than their less attractive counterparts, and were likely to be hired. The physical appearance of the applicant appears to have a broad influence on employment decisions and judgements.

The failure to detect the attractiveness × type of job interactions may have occurred because, even though the two attractiveness-relevant jobs (counsellor and interviewer) were significantly different from the safety administration and personnel records jobs in pre-testing, the ratings for the attractiveness-relevance of jobs were just above the mid-point. Thus, although the safety and records jobs were not perceived as requiring attractiveness, both the counsellor and interviewer positions were actually rated as neutral in terms of whether attractiveness was perceived as relevant for the job. Jobs where attractiveness would be more highly relevant, such as sales positions, might have produced the hypothesized effect.

Two prior research studies (Cash et al., 1977; Heilman & Saruwatari, 1979) investigated the type of job and applicant attractiveness in combination with applicant sex, in a search for interactions which might explain the conditions under which sex-based discrimination occurs or does not occur. Just as each of these studies used a different type
of job manipulation, the present research employed a third type of job manipulation, i.e. one focusing on the perceived relevance of physical attractiveness for job performance. The research described here investigated the impact of applicant attractiveness, applicant sex, type of rater and the type of job on interviewer decisions. The only previous research (Beehr & Gilmore, 1982) manipulating the attractiveness-relevance of the job used only male applicants and used college students as subjects. In that research, an attractiveness x type of job interaction was found in which attractive males being considered for a job involving considerable face-to-face contact received the most favourable 'hire' ratings.

The present research expanded upon that experiment by utilizing applicant sex as an independent variable in addition to applicant attractiveness and attractiveness-relevance of the job and included two types of participants as raters (college students and professional interviewers). It was apparent that applicants' attractiveness influenced job-related impressions in a favourable direction.

The third hypothesis, that physical attractiveness would affect general but not job-specific attributions, was not supported. Participants in this research did not differentially attribute general personality characteristics to applicants based upon their physical appearance, even though there was a strong effect of attractiveness on job-specific attributions (perceived personality for the job and expected performance). Even though the social psychology literature (Dion et al., 1972; Berscheid & Walster, 1974) suggests that physical attractiveness should influence participants' attributions of general personality characteristics, participants were influenced only with respect to job-specific attributions. One possible explanation is that the general attribution scale items from social-psychological research were too general to be affected in research that had strong employment demand characteristics.

Student raters were generally more lenient than recruiters, which is consistent with prior research (Bernstein et al., 1975; Dipboye et al., 1975). Student raters were particularly lenient when rating male applicants, and recruiters gave much lower ratings to the same male applicants while rating female applicants more positively than the male applicants.

Obviously, the use of résumés and interview transcripts to study the employment decision process has some inherent weaknesses, but it is a frequently used paradigm (e.g. Dipboye, Fromkin & Wiback, 1975; Cash et al., 1977; Dipboye, Arvey & Terpstra, 1977) and is not unlike the first stage in the employment process where many applicants are typically rejected. The results obtained in this investigation appear to reflect current practices, particularly for the recruiters who may be more likely to hire a female than a male because of affirmative action programmes. The differences between student participants and interviewers in these experiments argue for more research using real personnel professionals as participants.

In the future, additional research might be directed towards different jobs. In these experiments all jobs were of the management trainee type, which is one of the most commonly studied classes of jobs in the organizational literature. Future research on applicant attractiveness might look at jobs at different levels in the job hierarchy or at jobs with more or less technical skill requirements than management trainee. Care must be taken, however, to avoid unintentionally confounding the jobs with other variables (sex stereotypes, etc.). This could be done using the technique of this experiment, i.e. by pre-testing to be sure on which variables jobs are equivalent or different.

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REFERENCES


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