Three studies are described which provide evidence that women generally have a disadvantage in higher education and professional activities unless they excel in their field. To study college admission practices, bogus applications for admission were sent, ostensibly from individuals of differing ability levels, and both sexes, with appropriate photographs attached. Sex preferences disappeared only for exceptionally high ability applicants. In a second experiment, female students evaluated eight paintings the identity of which varied according to the sex of the artist and the success of the work, in all combinations. Significant differences were found in perception of the artists' technical competence and future depending on the artists' supposed sex. Bogus job interview requests by Ph.D. candidates were used in a third study which looked at the effect of sex on employers' responses. Females of less than outstanding ability were found to be at a disadvantage when compared with males of equal ability. It is concluded that women are no less responsible than men for this sex discrimination: they expect prejudicial evaluation of their work by men. (KS)
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The Effect of Sex on College Admission, Work Evaluation, and Job Interviews

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The following is a summary of three experiments designed to examine sex bias in higher education. The first study, conducted by Elaine Walster, T. Anne Cleary, and myself investigated college admission practices. A sample of 240 colleges was randomly selected from Lovejoy's College Guide (1968). Applications for admission were prepared for each school. These applications were identical in all respects, except that the sex and ability level of the applicant was randomly varied. (Half of the time the applicant was presented as a male; half of the time as a female. One-third of the time the candidate's high school transcript depicted a high-ability student, one-third of the time an average-ability student, and one-third of the time a below-average student.) The sex of the candidate was manipulated and insured by attaching an appropriate photograph to the application. The college's acceptance or rejection of the candidate served as the major dependent variable.

Data analysis indicated a trend for males being preferred over females, the difference resulted in a p-value of .06. An interaction, significant at the 5% level, showed that while the preference for males over females was large for low-ability students, this sex difference disappeared for high-ability applicants.

According to national norms, all three of the bogus candidates were of relatively high caliber; in the national high school population, there are considerably more students who resemble our low-ability candidate than there are students who resemble our high-ability candidate. Since discrimination was most prevalent at the lower level, we concluded that women are undoubtedly discriminated against in college admission.

A second experiment by Pheterson, Kiesley, and Goldberg (1971) tested the
hypothesis that the accomplishments of women are generally judged more harshly than those of men, unless those accomplishments have previously won public acclaim. In the latter case, sex discrimination was expected to be nonexistent.

One hundred and twenty freshmen and sophomore female college students were asked to evaluate eight paintings. Half of the time Ss were led to believe that the painting was created by a male artist; half of the time they were told it was the work of a female artist. Whether the painting was an acknowledged success or not was also varied. Students were either told that the work was a prize-winning painting, or simply an entry for a pending contest. The identity of each painting was counterbalanced among subjects so that all conditions were represented for each painting.

Before judging the art work students read a fictitious biographical sketch of the artist. Half of the sketches described a female artist, and half, a male. Their age, residence and occupations (identical for male and female) were briefly described. After reading the biography, and viewing the painting, the S answered questions regarding (1) technical competence, (2) creativity, (3) quality and content of the painting, (4) emotional impact of the work, and (5) artistic future of the artist.

The results on two of these five evaluation questions show surprising consistency with the results of the first study. Data on the question of technical competence, revealed that the sex of the artist and whether or not he was an acknowledged success interacted \( (F = 3.99; df = 1,119; p < .05) \). When the merit of the paintings had not yet been evaluated by professionals, a painting was rated more positively if attributed to a male as opposed to a female \( (t = 1.99; p < .05) \). When the work was presented as a prize-winning painting it was accorded equal respect regardless of whether the artist was said to be a male or a female.

• Evaluations regarding the artistic future of the artist produced results paralleling the competence data. That is, there was a significant interaction between sex and evaluative rating \( (F = 4.52; df = 1,119; p < .05) \).
The experimenters suggested that although only two of the five questions resulted in statistical significance these were the very two questions where one would most expect bias against women to occur; namely "technical competence of the artist" and "the artist's future." It is quite likely that the items involving creativity, quality and emotional impact, had more ambiguous connotations.

The third study, conducted by William Loft and myself, was designed to examine the effect of sex on employers responses to job-interview requests made by Ph.D. candidates. This study was conducted at a week-long meeting of the American Educational Research Association in 1970. Bogus application forms were submitted to the employment placement service, which operates during the convention. Applications were prepared for a high-ability and an average-ability candidate. In the high-condition the subject was presented as having two published articles, one paper presentation, one article in preparation, an NDEA fellowship, and one year of teaching experience at the college level. In the average-condition the applicant claimed only one paper presentation and two years' work as a teaching assistant. For each level sex was varied so half of the candidates were presented as males and half as females.

Requests for interviews were submitted in the name of each applicant. From among the prospective employers registered with the placement service, ten were randomly selected and assigned to each of the eight candidates; contacts were made via message forms commonly used for this purpose. The main dependent variable was the interview opportunity an applicant offered the candidate. Each of the ten observations per cell (i.e., interview inquiries initiated by the candidates) received a score from one to four dependent upon the nature of the employer's responses. For example, a score of one was assigned to replies which simply suggested that the candidate mail a vita or resume; a score of four was assigned to a response in which an interview was scheduled and an additional message requesting future contact was obtained following the scheduled interview which obviously could not be realized.
Contrary to expectation, neither the sex effect nor the Sex by Ability Interaction was secured ($F = .99; \text{df} = 1/72; p < .32$). Nevertheless, the unavoidably small sample size, combined with the fact that the interaction trends are consistent with the results of Walster et al. (1971) and Pheterson et al. (1971) led us to conclude: that while outstanding Ph.D. candidates are unlikely to experience sex discrimination, females of less than outstanding ability may indeed be at a disadvantage when compared with males of equal ability.

Conclusion

All three of these studies provide evidence that women generally have a disadvantage in higher education and professional activities. The only possibility of escape seems to lie in superb performance or public recognition. It is important to note, however, that professional underachievement of women often attributed to a prejudicial evaluation of their work by men, represents the expectations of women as well as men. In other words, there is evidence that women are culpable for the crimes of sex discrimination of which they are victims.

This summary represents the abstracting of sex-effects, although two studies examined simultaneously a race effect as well. References for studies cited above:


