

DOCUMENT RESUME

ED 272 411

SO 017 321

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**TITLE** Causal Attributions for Success in Hiring Decisions.  
**SPONS AGENCY** Nebraska Univ., Lincoln. Research Council.  
**PUB DATE** Apr 86  
**NOTE** 18p.; Paper presented at the Annual Meeting of the American Educational Research Association (67th, San Francisco, CA, April 16-20, 1986).  
**PUB TYPE** Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

**EDRS PRICE** MF01/PC01 Plus Postage.  
**DESCRIPTORS** \*Employment Qualifications; \*Equal Opportunities (Jobs); \*Evaluation Methods; Feminism; Job Applicants; Psychology; Research Projects; \*Sex Differences; Sex Discrimination; Sex Fairness; Sex Role; Sex Stereotypes; \*Sexual Identity; Womens Studies  
**IDENTIFIERS** \*Counseling Psychology; Masculinity Femininity Variable

**ABSTRACT**

Attribution theory suggests four major explanations for behavioral outcomes: ability, effort, luck, and task-ease. The theory suggests that explanations given for an applicant's success-potential may influence evaluations of that applicant. The research indicates male and female applicants may be affected differently by gender-stereotyped descriptions, job level, and ambiguous fit between qualifications and job demands. In the study, 86 personnel and management association members rated hypothetical applicants for director and counselor in an Employee Assistance Program. All were qualified for the counselor position but none had managerial experience. A significant 3-way interaction of sex, gender of attributes, and job-level/ambiguity was found for the dependent variable luck, but not for the other three. Raters valued nonstereotypical attributes more highly for the director when the "fit" between qualifications and job demands was ambiguous than for the counselor. The study does not support previous findings showing external qualities to be a female characteristic of success; rather, sex appears to interact with ambiguity of fit and gender-related attributes. Tables and references are included. (Author/TRS)

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**Causal Attributions for Success**

**in Hiring Decisions**

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**Paper Presented at the American Educational Research**

**Association Annual Meeting in San Francisco, April 1986.**

**This research was funded, in part, by a research grant from**

**the University of Nebraska-Lincoln Research Council.**

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**Causal Attributions for Success  
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**Abstract**

Attribution theory suggests four major explanations for behavioral outcomes: Ability, Effort, Luck and Task-Ease. Theory suggests that explanations given for an applicant's success-potential may influence evaluations of that applicant. Research indicates male and female applicants may be affected differently by gender-stereotyped descriptions, job level, and ambiguous fit between qualifications and job demands. Personnel and management association members rated hypothetical applicants for director and counselor in an Employee Assistance Program. All were qualified for the counselor position ("non-ambiguous fit") but none had managerial experience ("ambiguous fit"). A significant three-way interaction of sex, gender of attributes and job-level/ambiguity was found for the dependent variable Luck, but not for Skill, Effort, or Task-Ease. Raters valued nonstereotypical attributes more highly for the director (when the fit between qualifications and job demands was ambiguous) than for the counselor.

# Causal Attributions for Success in Hiring Decisions

## Introduction

"Discrimination," according to Guion (1966), "occurs when people have equal qualifications but unequal probabilities of being hired." One approach to studying those unequal probabilities makes use of attribution theory--the study of perceived causation--either looking at job applicants' explanations for their success or failure, or decision-makers' explanations for their hiring decisions regarding the applicant..

The relationship between causal attributions and bias was summarized by Galvin, Flake, Powers-Alexander, and Lambert (1984), who said the type of explanation given for an individual's success "largely determines the value of that person's success." Those who make decisions about individuals see them in a more favorable light when the applicant's success is attributed to an internal variable such as ability, than when their success is attributed to an external variable, such as luck.

Powers and Wagner (1983), following Weiner (1980) explained causal attribution in terms of three underlying dimensions: locus, stability, and controllability.

(a) Locus refers to the location of a cause which may be inside the person (internal) or outside (external). Ability and effort are considered internal whereas context, task difficulty, and luck are external. (b) Stability refers to permanence or impermanence. Effort and luck are considered unstable, while ability and context are considered stable. (c) Controllability refers to the degree of

volitional control one has over a cause. Effort is perceived as being controllable, while luck is perceived being uncontrollable.

Researchers have found bias to be a complex phenomenon further complicated by attitudinal changes over time. Goldberg (1968) described a relatively simple picture of female bias against women's accomplishments, suggesting several variables that may influence the evaluation of women, such as gender, status, stereotypical interests, and attitude toward women. Further investigations of the status variable by Pheterson, Kiesler, and Goldberg (1971), Levenson, Burford, Bonno and Davis (1975), and Peck (1978) suggested that women could not expect unbiased evaluations until they "prove" themselves by achieving some tangible recognition of accomplishment.

Deaux and Enswiller (1974) asked subjects to evaluate performances by male or female stimulus persons on tasks which are stereotypically considered either masculine or feminine. Competent males were perceived as being more skillful on all tasks, and subjects attributed males' performances to skill, females' to chance. Feldman-Summers and Kiesler (1974) studied the effects of different levels of success on causal attributions. At all levels of success, subjects expected males to perform better than females. Further research suggested that both male and female subjects associate success with "maleness." Since success for women is unexpected, it is attributed to causes other than ability.

Stereotypes about the appropriateness of a field of study or profession for a male or female applicant affect the evaluation of men and women seeking to enter it (Feather & Simon, 1975). Pheterson, Kiesler and Goldberg (1971) found that prejudice against women

transcends the gender of the task or occupation under scrutiny, but women are judged equal to men when their success or competency is viewed unambiguously. Mischel (1974) found that high school and college judges rated authors more competent if their sex was normative for the professional field for which they were writing. Cash, Gillen and Burns (1977) found continuing bias against out-of-role employment for both sexes. However, Bernard (1979) found that teachers rated students as more independent and intelligent when they had written essays for fields of study which were not traditional for their sex (i.e., men for English, women for physics). Galvin et al. (1984) also found that persons attempting to enter non-traditional fields were viewed positively.

Galper and Luck (1980) found that female actors receive less personal credit than males for good (socially desirable) behavior, and more personal blame than males for bad (socially undesirable) behavior. This was consistent with earlier findings that males' successes are attributed to internal or personal causes (skill, ability, effort), and their failures are attributed to external or situational causes (bad luck, task difficulty). Galper and Luck found subjects were tolerant of females' behaving in stereotypically masculine ways if the behaviors were socially desirable. On the other hand, male violators of sex-role appropriateness were judged more harshly than females, regardless of the social desirability of their behavior.

The words used to describe men and women being evaluated may also have an influence. Many researchers have identified characteristics or attributes associated more with one gender. Bem (1974) developed the

Bem Sex Role Inventory (BSRI) to measure sex role attributes. Williams and Bennett (1975) and Williams and Best (1977) provided subjects with a list of characteristics, asking them to select which are more typical of men and which are more typical of women. Through this process they developed lists of 42 male-focused and 48 female-focused attributes.

According to Broverman, Vogel, Broverman, Clarkson, and Rosenkrantz (1972), the masculine stereotype reflected a "competency cluster," including such attributes as independent, competitive, logical, decisive, confident and ambitious, while the feminine stereotype seemed to reflect an absence of those traits, plus a "warmth and expressiveness cluster." It is no wonder that stereotypically masculine attributes are often considered more essential for work success (Bernard, 1979; Rapin and Cooper, 1980).

Galvin et al. (1984) found complex interactions between the stereotypical masculinity or femininity of (a) the field of study, (b) the attributes used to describe male or female applicants, and the role ascribed to external factors such as luck as opposed to internal factors such as skill, ability or effort.

The level of job demands also has an influence (Rosen and Jerdee, 1974). Studies comparing evaluations of equally qualified male and female applicants for managerial positions have consistently found that women were seen as less suitable, according to Muchinsky and Harris (1977). Gerdes and Garber (1983) found no bias when applicants' backgrounds and credentials matched job demands perfectly, but marked bias favoring male applicants in more ambiguous situations when applicants' qualifications fell just short of job requirements.

The purpose of this study was to extend the research on sex bias in employment-related decisions, going beyond Gerdes and Garber, who did not look at gender-related attributes or internal vs. external attributions. Since Dipboye, Fromkin and Wiback (1975) observed that first impressions which personnel employees form after looking at some applicants' resumes may result in "psychological or actual rejection" of those applicants before any job interviews take place, this study focused on that crucial stage of the application process.

### Procedure

#### Materials.

The field of Counseling Psychology was chosen for this study because it had been identified as an androgynous profession (Shinar, 1975). Bogus job application materials appropriate for a position as a Counseling Psychologist were prepared for applicants who had identical background applications but varying the: (a) Sex of applicant, (b) Gender-related attributes of the applicant, and (c) degree of fit between applicant's background and job requirements. Information about attributes was supplied by a Standard Rating Form which purportedly summarized the applicants' attributes from letters of recommendation. This form consisted of 14 attributes: three masculine (logical, confident, and rational), three feminine (understanding, warm, and sensitive), and eight neutral (truthful, helpful, reliable, friendly, adaptable, likeable, conscientious, tactful). Decisions about attributes were based on an earlier study (Speth & Plake, in press). The manipulation of masculine and feminine attributes was achieved by systematically reporting the masculine applicant as being "far above average" on all three masculine attributes, "above average" on all of

the neutral attributes and "average" on all three feminine attributes. The feminine applicant's ratings for masculine and feminine characteristics were reversed.

Two job descriptions for a counseling psychologist were formulated, Counselor and Director of an Employee Assistance Program. The Director position required all of the tasks of the Counselor position, and in addition included managerial responsibilities. All of the applicants were clearly qualified for the Counselor position so this was defined as the "non-ambiguous fit" position. Raters were given an evaluation form saying, "A person's level of job performance can be due to several factors. Please rate the degree to which you think each of the following factors would contribute to this applicant's job performance." Raters predicted the degree to which Ability (low or high), Effort (little or great), Task (ease or difficulty), and Luck (good or bad) would be involved in the applicant's success on the job, using a five-point scale from 1=probably would not contribute at all to 5=probably would contribute a great deal.

#### Method.

The materials were prepared into packets representing the eight different conditions (male or female applicant, masculine or feminine attributes, ambiguous or non-ambiguous fit of applicant's background to job requirements). The 177 members of a midwestern personnel and management association (87 males and 90 females) were randomly assigned to one of the eight conditions and materials were mailed to them with an accompanying letter from the association president encouraging cooperation in completing the materials on the packet. The

subjects were informed that the intent of the study was to assess the validity of the Standard Rating Form for facilitating hiring decisions.

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Insert Table 1 about here  
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#### Results.

Useable evaluation forms were returned by 86 members, a 48% return rate. The four dependent variables (SKILL, EFFORT, TASK-EASE, LUCK) were submitted to a multivariate 3-factor fixed-effects analysis of variance. A significant multivariate test was found for the triple interaction (transformed  $F(4,69) = 2.61, p < .05$ ). Table 1 shows the means, standard deviations and cell sizes. A univariate follow-up test, summarized by Table 2, revealed only the LUCK dependent variable to be significant,

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Insert Table 2 about here  
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$F(1,72) = 6.13, p < .05$ ). Figure 1 depicts this significant interaction. A follow-up analysis showed significantly higher LUCK ratings for males described with feminine attributes than males described with masculine attributes when they were applying for the Director position ( $t(72) = 7.31, p < .05$ ), significantly higher ratings for males described with masculine attributes than males described with feminine attributes when they were applying for the Counselor position ( $t(1,72) = 13.72, p < .01$ ), and also significantly higher LUCK ratings for females described with feminine attributes than females

described with masculine attributes when applying for the Counselor position.

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Insert Figure 1 about here  
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#### Discussion

When concerned with causal attributions as a measure of bias, the basic assumption is that the source of an individual's success (interval vs. external) largely determines the value of that person's success. The bias is in favor of a person whose source of success is interval and against a person whose source is external. Since LUCK is an external causal attribution for success, higher ratings are considered a negative bias. In this study, when males were applying to a position for which their background did not provide a direct match raters predicted greater luck for males with feminine attributes than for males with masculine attributes. Therefore, in the ambiguous fit condition, the raters showed a clear preference for the traditional male over the non-traditional male. Ratings for the female applicant for the ambiguous fit condition were not significantly different regardless of their gender-related attributes.

The ambiguous fit condition previously was shown to create a bias against women (Gerbes & Garber, 1983). One explanation for this was that stereotypes are used in evaluations only when demonstrated competence is lacking in the applicants credentials (Feldman-Summers & Keisler, 1974; Piacente, et al., 1974). The previous finding was not supported by the present study. In the ambiguous fit condition of the present study, no bias was found against women on the luck variable.

However, bias was found against the non-traditional male. This finding was similar to the findings of Galvin et al. (1984), using a traditional male field, that mismatched characteristics were significant only for men and not for women when attributing causal attributions of luck to their success. Perhaps these findings reflect respondents' sensitivity to women in management issues and/or an increasing number of stereotypes toward the non-traditional male.

For the non-ambiguous fit (counselor) condition the bias seemed to be against traditional applicants, male and female. Raters attributed more luck to the success of traditional applicants than to non-traditional applicants in the non-ambiguous condition (matched condition).

The findings of the present study do not support previous findings which found external qualities to be a female characteristic for success (Galvin et al, 1984; Galper & Luck, 1970; Feldman-Summers & Kiesler, 1974; Terborg & Ilgen, 1975). It seems to be more complex than that. Sex appears to interact with ambiguity of fit and also with gender-related attributes.

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Table 1

Means, Standard Deviations and Cell Sizes

		Luck		Task Ease		Effort		Skill		
		N	$\bar{X}$	sd	$\bar{X}$	sd	$\bar{X}$	sd	$\bar{X}$	sd
<b>Attributes--</b>										
<b>Masculine</b>										
<b>Job--Director</b>										
Sex--Male	10	3.90	1.29	4.50	1.08	4.70	.95	5.20	.79	
Female	12	4.7	.58	4.58	.90	4.92	.79	5.17	.72	
<b>Job--Counselor</b>										
Sex--Male	13	4.54	.88	5.08	.64	5.00	.82	5.23	.60	
Female	7	3.14	1.21	4.14	1.07	4.71	1.60	5.57	.53	
<b>Attributes--</b>										
<b>Feminine</b>										
<b>Job--Director</b>										
Sex--Male	9	4.33	1.22	4.78	.83	4.67	.50	5.00	.50	
Female	10	4.10	1.10	4.50	1.08	5.20	.63	5.30	.67	
<b>Job--Counselor</b>										
Sex--Male	11	3.82	1.33	4.91	.83	5.27	.79	5.36	.50	
Female	8	4.38	1.06	4.38	1.19	5.25	.46	5.00	.93	

Table 2

Univariate Follow-Up Summary Table

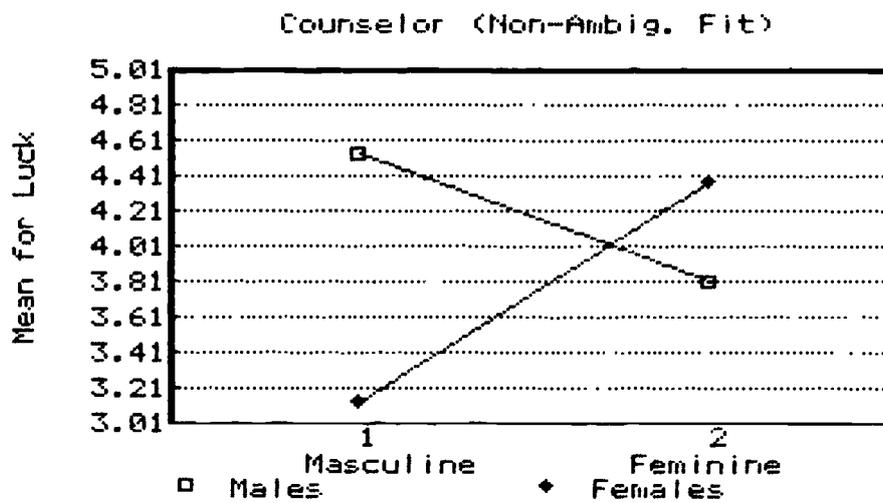
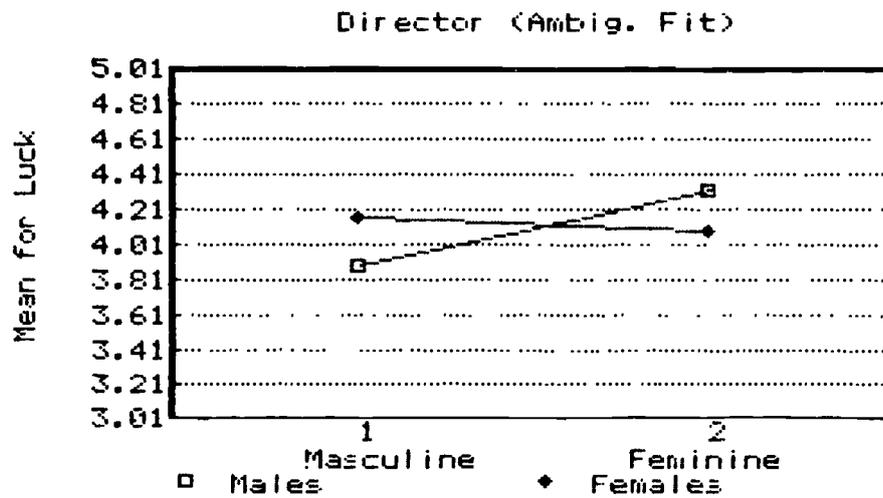
df = (1,72)

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Variable	SS	MS	F	p
Luck	7.245	7.245	6.132	.016 *
Task ease	.698	.698	.785	.379
Skill	.003	.003	.005	.945
Ability	1.297	1.297	2.924	.092

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$\alpha = .05$



**Figure 1.**

**Triple interaction of sex of applicant, gender-related attributes, and degree of fit between applicant's qualifications and job demands.**