



EXCELLENCE | EQUITY | DIVERSITY

**EVALUATION WORKSHOP  
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# 1. Tips on Reading and Writing Letters of Recommendation and Written Evaluations

**Trix, F. & Psenka, C. (2003).** Exploring the color of glass: letters of recommendation for female and male medical faculty. *Discourse & Society* 14(2): 191-220.

<http://das.sagepub.com/cgi/reprint/14/2/191>

This study compares over 300 letters of recommendation for successful candidates for medical school faculty position. Letters written for female applicants differed systematically from those written for male applicants in terms of length, in the percentages lacking basic features, in the percentages with “doubt raising” language, and in the frequency of mention of status terms. In addition, the most common possessive phrases for female and male applicants (“her teaching” and “his research”) reinforce gender schemas that emphasize women’s roles as teachers and students and men’s as researchers and professionals.

**Wysocki, V. & Schmader, T.** (unpublished study - 2005). Recommendation letters of faculty candidates for positions in Chemistry and Biochemistry at UA.

Based on Trix and Psenka’s (2003) study, Vicki Wysocki, UA Department of Chemistry, and Toni Schmader, UA Department of Psychology, studied the recommendation letters of candidates for UA faculty positions in Chemistry and Biochemistry. Results indicated that male applicants to Chemistry had more recommendation letters and a higher number of standout adjectives such as *best*, *excellent*, *superior* than females with similar qualifications. No gender differences were found in Biochemistry.

## 2. Understanding the Ways that Unconscious Bias Influences Evaluations

### 2a. Bias and its influence

**Fiske, S.T. (2004).** Intent and ordinary bias: Unintended thought and social motivation create casual prejudice. *Social Justice Research* 17(2): 117-127.

<http://web.ebscohost.com.ezproxy.library.arizona.edu/ehost/detail?vid=1&hid=5&sid=03650e29-06d1-43b5-be45-a945b334dc51%40sessionmgr9>

Social psychologists have addressed stereotyping, prejudice, and discrimination for nearly a century. Everyday prejudices first seemed to lodge in abnormal personalities, pathological bigots who were exceptional (“bad apples”), but Freudian explanations proved inadequate. Purely cognitive explanations took their place, arguing that bias inevitably results from normal processes of categorization and association, often automatic. But this so-called cognitive miser account denies the role of intent, which does influence the activation and use of stereotypes and prejudices. People are more realistically “motivated tacticians” who display more cognitive bias under particular social motivations. The author's continuum of impression formation, proceeding from

initial categorization to possible moderation by motives, illustrates this view. Plausible social motives include belonging, understanding, controlling, self-enhancing, and trusting, all known to influence ordinary bias. Social neuroscience is beginning to show that motivation and cognition mix at the earliest stages of ordinary bias (ABSTRACT FROM AUTHOR). Fiske concludes: "The practical lessons from the research on intent and ordinary bias are that policymakers and managers need to facilitate both information and motivation, to encourage decision-makers' least biased evaluations of other people. Information has to be accurate, relevant, and unambiguous. For example, adequate, relevant information about the qualifications of a new employee from an underrepresented group can override assumptions that the person is an allegedly unqualified affirmative action hire. In addition, motivations have to encourage people to be accurate. Organizations can facilitate decision-makers' thoughtful reasoning about others by the values that supervisors communicate, accountability to those supervisors, organizational structures that stress teamwork, and encouraging people's better selves. Accountability and interdependence rely on the bald use of incentives. Organizational and individual values rely on more subtle but equally impactful guides to behavior" (p. 9).

**Valian, V. (1998).** *Why so slow? The advancement of women.* Cambridge, MA: MIT Press.

Synthesizes a wide range of experimental and observational data that show the extent to which commonly held gender schemas result in the devaluation of women, particularly in science, academia, and the private sector. Referencing various experiments in cognitive psychology, Valian shows the extent to which unconscious, socially constructed notions of gender roles cause people to underestimate women's academic abilities while overestimating men's. Concludes that institutional reform, combined with better reasoning skills, will allow women academics to be more successful. Chapters include: Gender Schemas at Work; Gender Begins—and Continues—at Home; Learning About Gender; Biology and Behavior; Biology and Cognition; Schemas That Explain Behavior; Evaluating Women and Men; Effects on the Self; Interpreting Success and Failure; Women in the Professions; Women in Academia; Professional Performance and Human Values; Affirmative Action and the Law; Remedies.

**Valian, Virginia. (2004-7).** Tutorials for change: Gender schemas and science.  
[www.hunter.cuny.edu/gendertutorial/tutorials.htm](http://www.hunter.cuny.edu/gendertutorial/tutorials.htm)

Tutorial 1 -- Sex Disparities in Rank and Salary

Tutorial 2 -- Gender Schemas and Our

Tutorial 3 -- Gender Schemas and Our Evaluations of Ourselves

Tutorial 4 -- Remedies: What you can do

## ***2b. Research on the effects of stereotypes on the evaluation process***

**Aries, E. (1996).** Men and women in interaction: Reconsidering the differences. New York: Oxford University Press.

Extensive discussion of research on the effects of gender stereotypes on the perception and evaluation of task performance in groups. Chapters include The Elusive Truth about Women and Men, Task and Expressive Roles in Groups, Dominance and Leadership in Groups, Gender Stereotypes and the Perception and Evaluation of Participants in Interaction.

**Biernat, M., Manis, M., & Nelson, T., (1991).** Stereotypes and standards of judgment. *Journal of Personality and Social Psychology* 66: 5-20.

<http://web.ebscohost.com.ezproxy.library.arizona.edu/ehost/detail?vid=1&hid=14&sid=6ff1bb03-58e4-4184-a2f5-7b13f10a6262%40sessionmgr8>

People routinely adjust their subjective judgment standards as they evaluate members of stereotyped social groups. Such shifts are less likely to occur, however, when judgments are made on stable, "objective" response scales. In 3 studies, subjects judged a series of targets with respect to a number of gender-relevant attributes (e.g. height, weight, and income), using either subjective (Likert-type) or objective response scales (e.g., inches, pounds, and dollars). Objective judgments were consistently influenced by sex stereotypes; subjective judgments were not. Results were also consistent with the expectation that when a judgment attribute is unrelated to gender, male and female targets evoke the same judgment standards. A schematic model of how stereotyped mental representations are expressed on subjectively defined rating scales is presented, and implications for the study of person perception are discussed (ABSTRACT FROM AUTHOR).

**Biernat, M., & Manis, M. (1994).** Shifting standards and stereotype-based judgments. *Journal of Personality and Social Psychology*, 66(1), 5-20.

<http://web.ebscohost.com.ezproxy.library.arizona.edu/ehost/detail?vid=1&hid=13&sid=30f90e7c-87d4-4e90-a5c9-dddcea54b056%40SRCSM1>

Four studies tested a model of stereotype-based shifts in judgment standards developed by M. Biernat, M. Manis, and T. E. Nelson (1991). The model suggests that subjective judgments of target persons from different social groups may fail to reveal the stereotyped expectations of judges, because they invite the use of different evaluative standards; more "objective" or common rule indicators reduce such standard shifts. The stereotypes that men are more competent than women, women are more verbally able than men, Whites are more verbally able than Blacks, and Blacks are more athletic than Whites were successfully used to demonstrate the shifting standards phenomenon. Several individual-difference measures were also effective in predicting differential susceptibility to standard shifts, and direct evidence was provided that differing comparison standards account for substantial differences in target ratings (ABSTRACT FROM AUTHOR).

**Blair, I. V., & Banaji, M. (1996).** Automatic and controlled processes in stereotype priming. *Journal of Personality and Social Psychology*, 70, 1142-1163.

<http://zp9vv3zm2k.scholar.serialssolutions.com/?sid=google&auinit=IV&auplast=Blair&atitle=Automatic+and+controlled+processes+in+stereotype+priming&title=Journal+of+personality+and+social+psychology&volume=70&issue=6&date=1996&page=1142&issn=0022-3514>

The experiments in this article were conducted to observe the automatic activation of gender stereotypes and to assess theoretically specified conditions under which such stereotype priming may be moderated. Across 4 experiments, 3 patterns of data were observed: (a) evidence of stereotype priming under baseline conditions of intention and high cognitive constraints, (b) significant reduction of stereotype priming when a counterstereotype intention was formed even though cognitive constraints were high, and (c) complete reversal of stereotype priming when a counterstereotype intention was formed and cognitive constraints were low. These data support proposals that stereotypes may be automatically activated as well as proposals that perceivers can control and even eliminate such effects (ABSTRACT FROM AUTHOR).

**Fiske, S.T. & Taylor, S.E. (1991).** *Social Cognition*, 2nd ed. New York: McGraw-Hill.

This text has been the standard resource for scholars and students interested in the fullest understanding of the areas of social cognition. Now in its thoroughly revised second edition, "Social Cognition" goes even further in organizing and critically evaluating the theories, evidence, and practical applications centered around the basic issue of how people make sense of their social environment. By combining new developments in cognitive psychology on attention, memory, and inference, with those emerging from the study of attitudes, affect, and motivation, Fiske and Taylor give us the "state of the art" manual for appreciating that aspect of human nature which focuses on how people think about themselves and about others (ABSTRACT FROM AUTHOR). Overview of prominent theories and methods in the field of social cognition. Defines and explores the concept of a social schema---an implicit, often unconscious hypothesis about members of social groups that people use to interpret social events and experiences. Chapters include discussion of Weiner's attribution theory, Heider's theory of naïve psychology, Bem's self-perception theory, social categories and schemas, conditions of schema use, social cognition of the self, person memory, and social inference.

**Ito, T. A. & Urland, G. R. (2003).** Race and gender on the brain: Electrocardinal measures of attention to the race and gender of multiply categorizable individuals. *Journal of Personality & Social Psychology*, Vol. 85(4): 616-626.

<http://web.ebscohost.com.ezproxy.library.arizona.edu/ehost/detail?vid=3&hid=8&sid=b9cef008-2118-4720-8d3d-e8cbe605bdd2%40sessionmgr2>

The degree to which perceivers automatically attend to and encode social category information was investigated. Event-related brain potentials were used to assess attentional and working-memory processes on-line as participants were presented with pictures of Black and White males and females. The authors found that attention was preferentially directed to Black targets very early in processing (by about 100 ms after stimulus onset) in both experiments. Attention to gender also emerged

early but occurred about 50 ms later than attention to race. Later working-memory processes were sensitive to more complex relations between the group memberships of a target individual and the surrounding social context. These working-memory processes were sensitive to both the explicit categorization task participants were performing as well as more implicit, task-irrelevant categorization dimensions. Results are consistent with models suggesting that information about certain category dimensions are encoded relatively automatically (ABSTRACT FROM AUTHOR).

**Nelson, T. E., Biernat, M. R., & Manis, M. (1990).** Everyday base rates (sex stereotypes): Potent and resilient. *Journal of Personality & Social Psychology*, Vol. 59(4): 661-675.

<http://ezproxy.library.arizona.edu/login?url=http://search.epnet.com/login.aspx?direct=true&db=aph&an=9103042325>

Undergraduates studied photographs of students and estimated the heights of the pictured models. Contrary to reports of base-rate neglect, sex stereotypes regarding height (the implicit recognition that men are normally taller than women) significantly affected these estimates, even when the targets' actual height was statistically controlled. Base rates were especially influential when information about targets was ambiguous, that is when targets were pictured seated. These base-rate effects were robust, remaining significant and substantial despite efforts to lessen their magnitude. Attempts to reduce base-rate effects by encouraging Ss to strive for accuracy, discouraging their reliance on the target's sex (as a cue), or offering cash rewards for accuracy did not succeed. Informing Ss that for the sample to be judged, sex would not predict targets' heights attenuated the base-rate effect, although it remained highly significant (ABSTRACT FROM AUTHOR).

**Nosek, B. A., Banaji, M. & Greenwald, A. G. (2002).** Harvesting implicit group attitudes and beliefs from a demonstration Web site. *Group Dynamics: Theory, Research, and Practice*, Vol. 6(1): 101-115.

<http://web.ebscohost.com.ezproxy.library.arizona.edu/ehost/detail?vid=1&hid=6&sid=073c26ec-65f1-443f-a111-84db2153b9a3%40sessionmgr8>

Respondents at an Internet site completed over 600,000 tasks between October 1998 and April 2000 measuring attitudes toward and stereotypes of social groups. Their responses demonstrated, on average, implicit preference for White over Black and young over old and stereotypic associations linking male terms with science and career and female terms with liberal arts and family. The main purpose was to provide a demonstration site at which respondents could experience their implicit attitudes and stereotypes toward social groups. Nevertheless, the data collected are rich in information regarding the operation of attitudes and stereotypes, most notably the strength of implicit attitudes, the association and dissociation between implicit and explicit attitudes, and the effects of group membership on attitudes and stereotypes (ABSTRACT FROM AUTHOR).

**Valian, V. (1998).** *Why so slow? The advancement of women.* Cambridge, MA: MIT Press.

Synthesizes a wide range of experimental and observational data that show the extent to which commonly held gender schemas result in the devaluation of women, particularly in science, academia, and the private sector. Referencing various experiments in cognitive psychology, Valian shows the extent to which unconscious, socially constructed notions of gender roles cause people to underestimate women's academic abilities while overestimating men's. Concludes that institutional reform, combined with better reasoning skills, will allow women academics to be more successful. Chapters include: Gender Schemas at Work; Gender Begins—and Continues—at Home; Learning About Gender; Biology and Behavior; Biology and Cognition; Schemas That Explain Behavior; Evaluating Women and Men; Effects on the Self; Interpreting Success and Failure; Women in the Professions; Women in Academia; Professional Performance and Human Values; Affirmative Action and the Law; Remedies.

**Valian, Virginia. (2004-7).** Tutorials for change: Gender schemas and science.

[www.hunter.cuny.edu/gendertutorial/tutorials.htm](http://www.hunter.cuny.edu/gendertutorial/tutorials.htm)

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Tutorial 3 -- Gender Schemas and Our Evaluations of Ourselves

Tutorial 4 -- Remedies: What you can do

**Wheeler, M.E. and S.T.Fiske. (2005.)** Controlling racial prejudice: Social-cognitive goals affect amygdala and stereotype activation. *Psychological Science*. 16(1):56-63.

<http://www.ingentaconnect.com/content/bpl/psci/2005/00000016/00000001/art00010>

The malleability of stereotyping matters in social psychology and in society. Previous work indicates rapid amygdala and cognitive responses to racial out-groups, leading some researchers to view these responses as inevitable. In this study, the methods of social-cognitive neuroscience were used to investigate how social goals control prejudiced responses. Participants viewed photographs of unfamiliar Black and White faces, under each of three social goals: social categorization (by age), social individuation (vegetable preference), and simple visual inspection (detecting a dot). One study recorded brain activity in the amygdala using functional magnetic resonance imaging, and another measured cognitive activation of stereotypes by lexical priming. Neither response to photos of the racial out-group was inevitable; instead, both responses depended on perceivers' current social-cognitive goal. (ABSTRACT FROM AUTHOR).

## **2c. Research on tokenism and performance evaluation**

*Please note, the full reference for Turner 1999 is absent from this bibliography.*

**Beutel, A. M. & Nelson, D. J. (2006).** The gender and race-ethnicity of faculty in top social science research departments. *The Social Science Journal* 43(1): 111–125.

[http://www.sciencedirect.com.ezproxy.library.arizona.edu/science?\\_ob=PublicationURL](http://www.sciencedirect.com.ezproxy.library.arizona.edu/science?_ob=PublicationURL)

[&\\_tockey=%23TOC%236588%232006%23999569998%23619146%23FLA%23&\\_cdi=6588&\\_pubType=J&view=c&\\_auth=y&\\_acct=C000059541&\\_version=1&\\_urlVersion=0&\\_userid=56761&md5=7a43ce61ea6f269546f89b74499989cb](#)

This paper provides a recent profile of the gender and race-ethnicity of faculty in top research departments of economics, political science, and sociology. Most faculty are male, although there appear to be critical masses of women in political science and sociology. Blacks and Hispanics are underrepresented among faculty relative to their shares of the population. Within each racial-ethnic group examined, there are more male than female faculty members, with a smaller gender gap for Blacks than for other racial-ethnic groups. In general, the higher the rank, the greater the proportion of males than females, especially for Whites and Asians (ABSTRACT FROM AUTHOR).

**Etzkowitz, H., & Kemelgor, C., Neuschatz, M. & Uzzi, A. (1994).** The paradox of critical mass for women in science. *Science*, 266(5182), 51-54.  
<http://web.ebscohost.com.ezproxy.library.arizona.edu/ehost/detail?vid=4&hid=14&sid=69c3cfe0-ecfb-483c-8b51-6b564d2e5767%40sessionmgr3>

A study of 30 academic science departments indicates that when the number of women in a department increases moderately without a corresponding change in the structure of the workplace, women continue to experience stigma, reduced self-esteem and exclusion from informal sources of information (ABSTRACT FROM AUTHOR).

**Etzkowitz, H., Kemelgor, C., (2000).** *Athena unbound: The advancement of women in science and technology*. Cambridge, UK: Cambridge University Press.

Examining women's "life-course" (p. 3) experiences from their education (K-16 and graduate work), the tenure process, to their work in academia, this book attempts to shed light on why women in science aren't as numerous as their male colleagues. Several studies were conducted in order to gather data for this book including 50 in-depth interviews with female grad students and faculty members in 5 science and engineering disciplines at 2 universities; 400 in-depth interviews and focus groups with female and male grad students and faculty members in 5 science and engineering disciplines at 11 universities; a quantitative survey of female grad students and faculty members in 5 science and engineering disciplines at one university focusing on publication experiences; and interviews with very young children on their image of the scientist as a gender-related role. The data showed that 1) "women in departments of critical mass are more likely to report relationships that have higher levels of social support and identity enhancement than are women in departments where they are a token minority. Similarly their contacts provided more reciprocation than in departments where women were tokens, but were still less positive than men's (pp. 163-4); 2) while a large number of bridging ties (relationships outside of the department) is "uniformly beneficial" (p. 164), within a department quality of relationships outweighs the quantity; 3) relationships with high power imbalance tend to reduce academic productivity (SUMMARY by Lydia Bell, UA Advance).

**Heilman, M. E. (1980).** The impact of situational factors on personnel decisions concerning women: Varying the sex composition of the applicant pool. *Organizational Behavior and Human Performance*, Vol. 26: 386-395.

[http://zp9vv3zm2k.ssscom.ezproxy.library.arizona.edu/?sid=Refworks%3AThe%20University%20of%20Arizona&charset=utf8&\\_char\\_set=utf8&genre=article&aulast=Heilman&auinit=M.E.&title=Organizational%20Behavior%20%26%20Human%20Performance&date=1980&volume=26&pages=386395&issue=3&issn=00305073%3B%2010959920&atitle=The%20impact%20of%20situational%20factors%20on%20personnel%20decision%20concerning%20women%3A%20Varying%20the%20sex%20composition%20of%20the%20applicant%20pool&spage=386&au=Heilman%2CMadeline%20E.%20&](http://zp9vv3zm2k.ssscom.ezproxy.library.arizona.edu/?sid=Refworks%3AThe%20University%20of%20Arizona&charset=utf8&_char_set=utf8&genre=article&aulast=Heilman&auinit=M.E.&title=Organizational%20Behavior%20%26%20Human%20Performance&date=1980&volume=26&pages=386395&issue=3&issn=00305073%3B%2010959920&atitle=The%20impact%20of%20situational%20factors%20on%20personnel%20decision%20concerning%20women%3A%20Varying%20the%20sex%20composition%20of%20the%20applicant%20pool&spage=386&au=Heilman%2CMadeline%20E.%20&)

One hundred male and female MBA students evaluated a woman applicant for a managerial position when the proportion of women in the applicant pool was varied. Results indicated that personnel decisions of both males and females were significantly more unfavorable when women represented 25% or less of the total pool. Additional findings suggest that this effect was mediated by the degree to which sex stereotypes predominated in forming impressions of applicants. The results were interpreted as supportive of the thesis that situational factors can function to reduce the adverse effects of sex stereotypes in employment settings (ABSTRACT FROM AUTHOR).

**Kanter, R.M. (1977).** *Men and women of the corporation*. New York: Basic Books.

Kanter's comprehensive case study of a multinational corporation with 50,000 employees involved surveys of sales managers (n = 205) and salaried employees (n = 111), content analysis of performance appraisal forms, interviews, and observation of work group discussions. Kanter found that the social hierarchy of the workplace was skewed with men at the top and women at the bottom, and that numerical representation of different groups creates different social dynamics for members of those groups. Kanter classified work groups as:

- Uniform – all members from same social group
- Skewed - 85-15% ratio of dominants to “tokens.”
- Tilted groups - 65-35% ratio of majority to minority
- Balanced – 60-40 to 50-50% representation.

Key findings regarding women as tokens in management:

- Contrast – differences exaggerated.
- Attention - Tokens stand out as different. High scrutiny; mistakes noticed.
- Tokens stand out for *discrepant* characteristics – women managers reported working twice as hard as men to prove their competence.
- Opposite expectations for good managers and for “good” women.
- Assimilation – Majority treats tokens based on stereotype of “average” group member; female managers constantly correcting mistaken first impressions to be seen as individuals.
- Tokens are excluded from peer networks where important information is shared and decisions made.

**Niemann, Y. F. & Dovidio, J. F. (1998).** Relationship of solo status, academic rank, and perceived distinctiveness to job satisfaction of racial/ethnic minorities. *Journal of Applied Psychology*, Vol. 83(1): 55-71.

<http://web.ebscohost.com.ezproxy.library.arizona.edu/ehost/detail?vid=1&hid=20&sid=70543bca-5bbf-4600-b122-c764879fab94%40SRCM1>

The relationships among solo status of racial/ethnic minorities in psychology departments, job satisfaction, and subjective feelings of distinctiveness were examined. Distinctiveness was defined as stigmatizing feelings associated with token status of racial/ethnic minorities in academia. It was hypothesized that minorities in positions of solo (relative to nonsolo) status within their departments, members of more stigmatized groups, and minorities occupying lower academic ranks would feel more distinctive and less satisfied with their jobs and that perceptions of distinctiveness would mediate job satisfaction. The data partially supported these hypotheses, most notably for African Americans. The implications of situational salience and the importance of recognizing differences among and between minority groups are considered (ABSTRACT FROM AUTHOR).

**Sackett, P. R., DuBois, C. L., & Noe, A. W. (1991).** Tokenism in performance evaluation: The effects of work group representation on male-female and White-Black differences in performance ratings. *Journal of Applied Psychology*, 76(2), 263-267.

<http://web.ebscohost.com.ezproxy.library.arizona.edu/ehost/detail?vid=1&hid=15&sid=d2c65a17-3a30-40b8-9451-ae94c23a9c68%40sessionmgr2>

Male-female differences in performance ratings were examined in 486 work groups across a wide variety of jobs and organizations. As suggested by the sex stereotyping literature, women received lower ratings when the proportion of women in the group was small, even after male-female cognitive ability, psychomotor ability, education, and experience differences were controlled. Replication of the analyses with racial differences (White-Black) in 814 work groups demonstrated that group composition had little effect on performance ratings. The effects of group composition on stereotyping behaviors do not appear to generalize to all minority contexts (ABSTRACT FROM AUTHOR).

**Sekaquaptewa, D. & Thompson, M. (2003).** Solo status, stereotype threat, and performance expectancies: Their effects on women's performance. *Journal of Experimental Social Psychology* 39: 68–74.

<http://zp9vv3zm2k.ssscom.ezproxy.library.arizona.edu/?sid=Refworks%3AThe%20University%20of%20Arizona&charset=utf-8& charset=utf8&genre=article&aulast=Sekaquaptewa&auinit=D.&title=Journal%20of%20experimental%20social%20psychology&stitle=J.Exp.Soc.Psychol.&date=2003&volume=39&pages=68&issue=1&issn=00221031&atitle=Solo%20status%2C%20stereotype%20threat%2C%20and%20performance%20expectancies%3A%20Their%20effects%20on%20women%E2%80%99s%20performance&spage=68&au=Sekaquaptewa%2CDenise&au=Thompson%2CMischa&>

Women working in male-dominated environments may find themselves to be the only woman present, and that negative stereotypes about women persist in the environment. This experiment tested women's performance in solo status (SS: being

the only woman present) and under stereotype threat (ST: when women are stereotyped as poor performers). White male and female participants (157) learned information, then tested on it in an opposite-gender (SS) or same-gender group (nonsolo). In addition, the information was described as being traditional math material (ST) or a type of math information impervious to gender stereotypes (no threat). Women performed more poorly in SS than nonsolos, and under ST than no threat. Experiencing both factors was more detrimental to women than experiencing one or the other. Men's performance was the same across all conditions. Performance expectancies partially mediated the effect of SS, but not ST, on performance (ABSTRACT FROM AUTHOR).

**Thompson, M. & Sekaquaptewa, D. (2002).** When being different is detrimental: Solo status and the performance of women and racial minorities. *Analyses of Social Issues and Public Policy*, Vol. 2(1): 183-203.

<http://web.ebscohost.com.ezproxy.library.arizona.edu/ehost/detail?vid=1&hid=8&sid=2e199b60-06bf-4691-91b7-cffdfb97f609%40SRCSM2>

Individuals experience solo status when they are the only members of their social category (e.g., gender or race) present in an otherwise homogenous group. Field studies and surveys indicate that members of socially disadvantaged groups, such as women and racial minorities, have more negative experiences as solos than do members of privileged groups, such as Whites and males. In this article, we review research showing that the public performance of women and African-Americans is more debilitated by solo status than that of Whites and males. We also show that this effect is exacerbated when negative stereotypes about the performer's social group seem relevant to their performance, and we discuss the contributing roles of lowered performance expectancies and feelings of group representativeness. We discuss how findings from social psychological research can be applied towards the goal of reducing the decrements typically associated with being the only member, or one of few members, of one's race and/or gender in the environment (ABSTRACT FROM AUTHOR).

**Walton, G. M., & Cohen, G. L. (2007).** A question of belonging: Race, social fit, and achievement. *Journal of Personality and Social Psychology*, 92, 82-96.

<http://content.apa.org/journals/psp/92/1/82>

Stigmatization can give rise to belonging uncertainty. In this state, people are sensitive to information diagnostic of the quality of their social connections. Two experiments tested how belonging uncertainty undermines the motivation and achievement of people whose group is negatively characterized in academic settings. In Experiment 1, students were led to believe that they might have few friends in an intellectual domain. Whereas White students were unaffected, Black students (stigmatized in academics) displayed a drop in their sense of belonging and potential. In Experiment 2, an intervention that mitigated doubts about social belonging in college raised the academic achievement (e.g., college grades) of Black students but not of White students. Implications for theories of achievement motivation and intervention are discussed (ABSTRACT FROM AUTHOR).

**Yoder, J. D. (1994).** Looking beyond numbers: The effects of gender status, job prestige, and occupational gender-typing on tokenism processes. *Social Psychology Quarterly*, Vol. 57(2): 150-159.

[http://zp9vv3zm2k.ssscom.ezproxy.library.arizona.edu/?sid=Refworks%3AThe%20University%20of%20Arizona&charset=utf-8&\\_char\\_set=utf8&genre=article&aulast=Yoder&auinit=J.D.&title=Social%20psychology%20quarterly&stitle=Soc.Psychol.Q.&date=1994&volume=57&pages=150-159&issue=2&issn=01902725&atitle=Looking%20Beyond%20Numbers%3A%20The%20Effects%20of%20Gender%20Status%2C%20Job%20Prestige%2C%20and%20Occupational%20Gender-Typing%20on%20Tokenism%20Processes&spage=150&au=Yoder%2CJanice%20D.%20&](http://zp9vv3zm2k.ssscom.ezproxy.library.arizona.edu/?sid=Refworks%3AThe%20University%20of%20Arizona&charset=utf-8&_char_set=utf8&genre=article&aulast=Yoder&auinit=J.D.&title=Social%20psychology%20quarterly&stitle=Soc.Psychol.Q.&date=1994&volume=57&pages=150-159&issue=2&issn=01902725&atitle=Looking%20Beyond%20Numbers%3A%20The%20Effects%20of%20Gender%20Status%2C%20Job%20Prestige%2C%20and%20Occupational%20Gender-Typing%20on%20Tokenism%20Processes&spage=150&au=Yoder%2CJanice%20D.%20&)

Researchers of women workers in gender-skewed work groups repeatedly report evidence of visibility, contrast, and role encapsulation. The purpose of the present study was to explore the potential impact of four causal factors frequently confounded in these studies: proportional underrepresentation (tokenism), gender status, job prestige, and occupational gender-inappropriateness. Study participants' expectations for targets suggested that token numbers alone were not sufficient to produce tokenism; subordinated gender status also contributed regardless of the gender-appropriateness or prestige of the occupation. A theory of tokenism based solely on numbers thus is limited by its failure to acknowledge the impact of organizational and societal gender-based discrimination (ABSTRACT FROM AUTHOR).

**Yoder, J. D. (2002).** 2001 Division 35 presidential address: Context matters: Understanding tokenism processes and their impact on women's work. *Psychology of Women Quarterly*, Vol. 26: 1-8.

<http://web.ebscohost.com.ezproxy.library.arizona.edu/ehost/detail?vid=1&hid=5&sid=1e389896-0566-4452-8a31-c05dc59c0dff%40sessionmgr3>

Research on tokenism processes is reviewed and coalesces around two conclusions. First, gender constructs different social contexts for token women and for token men. Second, gender is most usefully conceptualized as a status variable, not something internal to the individual. Gender serves as a status marker such that women's subordinated status intersects with other indicators of status, such as race/ethnicity, and token difference to produce negative and variable outcomes for women not experienced by similarly underrepresented men. Thus, reducing negative tokenism outcomes, most notably unfavorable social atmosphere and disrupted collegueship, can be done effectively only by taking gender status and stereotyping into consideration. These findings have applied implications for women's full inclusion in male-dominated occupations (ABSTRACT FROM AUTHOR).

## ***2d. Research on impact of sex-linked tasks on performance evaluation***

**Davison, H. K. & Burke, M. J. (2000).** Sex discrimination in simulated employment contexts: A meta-analytic investigation. *Journal of Vocational Behavior*, Vol. 56(2): 225-248.

<http://www.sciencedirect.com/science/article/B6WMN-45CWX98-1F/2/efa50721fcbc98e8db0d7cdc84c8f4c5>

This study meta-analytically tested hypotheses concerning factors that affect sex discrimination in simulated employment contexts. These hypotheses, derived from the social psychological literature on stereotyping, predicted that salience of applicant sex, job sex-type, sex of rater, and amount of job-relevant information would affect discrimination against female and male applicants. Generally, the hypotheses concerning job sex-type and job-relevant information were supported. Female and male applicants received lower ratings when being considered for an opposite-sex-type job, and the difference between ratings of males and females decreased as more job-relevant information was provided. However, ratings of males and females did not differ as hypothesized in regard to salience of sex and rater sex. The research and practice implications of these results are discussed (ABSTRACT FROM AUTHOR).

**Deaux, K. & Emswiler, T. (1974).** Explanations of successful performance on sex-linked tasks: What is skill for the male is luck for the female. *Journal of Personality and Social Psychology* 29: 80-85.

Male and female subjects evaluated the performance of either a male or female stimulus person who was heard to perform in an above-average manner on either a male- or female-related task. Analysis of the attributions made to luck versus skill in explaining the performance of the stimulus person showed that as predicted, performance by a male on a masculine task was more attributed to skill, whereas an equivalent performance by a female on the same task was seen to be more influenced by luck. Contrary to prediction, the reverse did not hold true for performance on a feminine task. Overall, males were seen to be more skillful than females. The utility of an attributional analysis in the study of perceived sex differences was discussed (ABSTRACT FROM AUTHOR).

**Ellemers, N., van den Heuvel, H., de Gilder, D., Maass, A., & Bonvini, A. (2004).** The underrepresentation of women in science: Differential commitment or the queen bee syndrome? *British Journal of Social Psychology*, Vol. 43(3): 315-338.

<http://web.ebscohost.com.ezproxy.library.arizona.edu/ehost/detail?vid=3&hid=4&sid=3c96de84-0673-4e83-aa46-389907e6aef2%40SRCSM1>

We examined possible explanations for the underrepresentation of women among university faculty, in two different national contexts. In the Netherlands, a sample of doctoral students (N=132) revealed no gender differences in work commitment or work satisfaction. Faculty members in the same university (N=179), however, perceived female students to be less committed to their work and female faculty endorsed these gender-stereotypical perceptions most strongly. A second study, in Italy, replicated and extended these findings. Again, no gender differences were obtained in the self-descriptions of male and female doctoral students (N=80), while especially the female faculty (N=93) perceived female students as less committed to their work than male students. Additional measures supported an explanation in social identity terms,

according to which individual upward mobility (i.e. of female faculty) implies distancing the self from the group stereotype which not only involves perceiving the self as a non-prototypical group member, but may also elicit stereotypical views of other in-group members (ABSTRACT FROM AUTHOR).

**Foschi, M. (1996)** Double standards in the evaluation of men and women. *Social Psychology Quarterly*, Vol. 59: 237-254.  
[http://zp9vv3zm2k.ssscom.ezproxy.library.arizona.edu/?sid=Refworks%3AThe%20University%20of%20Arizona&charset=utf-8&\\_char\\_set=utf8&genre=article&aualast=Foschi&aunit=M.&title=Social%20psychology%20quarterly&stitle=Soc.Psychol.Q.&date=1996&volume=59&pages=237-254&issn=0190-2725&atitle=Double%20standards%20in%20the%20evaluation%20of%20men%20and%20women&spage=237&au=Foschi%2CMartha%20&](http://zp9vv3zm2k.ssscom.ezproxy.library.arizona.edu/?sid=Refworks%3AThe%20University%20of%20Arizona&charset=utf-8&_char_set=utf8&genre=article&aualast=Foschi&aunit=M.&title=Social%20psychology%20quarterly&stitle=Soc.Psychol.Q.&date=1996&volume=59&pages=237-254&issn=0190-2725&atitle=Double%20standards%20in%20the%20evaluation%20of%20men%20and%20women&spage=237&au=Foschi%2CMartha%20&)

This article presents the results from two expectation-states studies on gender and double standards for task competence. The emergence of such standards under several experimental conditions is investigated. In both studies, men and women, participating in opposite-sex dyads, worked first individually and then as a team in solving a perceptual task. As predicted, results from Experiment 1 show that although subjects of both sexes achieved equal levels of performance, women were held to a stricter standard of competence than men. This difference was more pronounced when the referent of the standard was the partner rather than self. Experiment 2 investigates the extent to which the double standard is affected by level of accountability for one's assessments. Results show a significant difference by sex of referent of standard when accountability was low, but not when it was increased. In both studies, measures of perceived competence in self and in partner reflected reported standards, as predicted. Theoretical and practical implications of these findings are discussed (ABSTRACT FROM AUTHOR).

**Foschi, M. (2000).** Double standards for competence: Theory and research. *Annual Review of Sociology*, Vol. 26: 21-42.  
<http://ezproxy.library.arizona.edu/login?url=http://search.epnet.com/login.aspx?direct=true&db=aph&an=3780363>

This article reviews theory and research on double standards, namely, the use of different requirements for the inference of possession of an attribute, depending on the individuals being assessed. The article focuses on double standards for competence in task groups and begins by examining how status characteristics (e.g. gender, ethnicity, socioeconomic class) become a basis for stricter standards for the lower status person. I also discuss other bases for this practice (e.g. personality characteristics, allocated rewards, sentiments of either like or dislike). Next, I describe double standards in the inference of other types of valued attributes (e.g. beauty, morality, mental health) and examine the relationship between these practices and competence double standards. The article concludes with a discussion of "reverse" double standards for competence, namely, the practice of applying more lenient ability standards to lower status individuals (ABSTRACT FROM AUTHOR).

**Foschi, M., Lai, L. & Sigerson, K. (1994).** Gender and double standards in the assessment of job applicants. *Social Psychology Quarterly*, Vol. 57: 326-339.  
[http://zp9vv3zm2k.ssscom.ezproxy.library.arizona.edu/?sid=Refworks%3AThe%20University%20of%20Arizona&charset=utf-8&\\_char\\_set=utf8&genre=article&aulast=Foschi&aunit=M.&title=Social%20psychology%20quarterly&stitle=Soc.Psychol.Q.&date=1994&volume=57&pages=326-339&issn=0190-2725&atitle=Gender%20and%20double%20standards%20in%20the%20assessment%20of%20job%20applicants&spage=326&au=Foschi%2CMartha&au=Lai%2CLarissa&au=Sigerson%2CKirsten&](http://zp9vv3zm2k.ssscom.ezproxy.library.arizona.edu/?sid=Refworks%3AThe%20University%20of%20Arizona&charset=utf-8&_char_set=utf8&genre=article&aulast=Foschi&aunit=M.&title=Social%20psychology%20quarterly&stitle=Soc.Psychol.Q.&date=1994&volume=57&pages=326-339&issn=0190-2725&atitle=Gender%20and%20double%20standards%20in%20the%20assessment%20of%20job%20applicants&spage=326&au=Foschi%2CMartha&au=Lai%2CLarissa&au=Sigerson%2CKirsten&)

Tested hypotheses on the use of gender-based double standards in the assessment of task competence. 85 undergraduates (43 male and 42 female) examined files of applicants for engineering jobs in scenarios that recreated several features of a hiring decision. The critical choice to be made by Ss was between a male and a female applicant with average but slightly different academic records. In one experimental condition the man held the better record; in the other, the situation was reversed. Results for male Ss show that when the male candidate was the better performer, he was chosen more often, and was considered more competent and more suitable, than when the female candidate was in that position. Female Ss, on the other hand, did not show any differences regarding sex of applicant. This sex-of-S effect is examined in detail (ABSTRACT FROM AUTHOR).

**Goldberg, P. (1968)** Are women prejudiced against women? *Trans-Action*, April 1968, pp. 28-30.

This study was the first to explore how the sex of the author of a paper influences evaluators' ratings of the papers' quality. Women evaluated the same articles with male, female, or neutral topics, with only the author's name changed to John or Joan McKay. Results indicated that women rated the same articles by a female author were rated lower in quality than the male author's on male and neutral topics. Subsequent studies using the "Goldberg paradigm" have had mixed results (Swim, Borgida, & Maruyama, 1989).

**Goldin, C., & Rouse, C. (2000).** Orchestrating impartiality: The impact of 'blind' auditions on female musicians." *American Economic Review* 90(4): 715-741.  
<http://web.ebscohost.com.ezproxy.library.arizona.edu/ehost/detail?vid=3&hid=17&sid=e45a4310-d8f2-4aac-92c6-d5373748af3a%40sessionmgr7>

A change in the audition procedures of symphony orchestras—adoption of "blind" auditions with a "screen" to conceal the candidate's identity from the jury—provides a test for sex-biased hiring. Using data from actual auditions, in an individual fixed-effects framework, we find that the screen increases the probability a woman will be advanced and hired. Although some of our estimates have large standard errors and there is one persistent effect in the opposite direction, the weight of the evidence suggests that the blind audition procedure fostered impartiality in hiring and increased the proportion women in symphony orchestras (ABSTRACT FROM AUTHOR).

**Greenhaus, J. & Parasuraman, S. (1993).** Job performance attributions and career advancement prospects: An examination of gender and race effects. *Organizational Behavior and Human Decision Processes*, 55(2): 273-297.  
[http://zp9vv3zm2k.ssscom.ezproxy.library.arizona.edu/?sid=Refworks%3AThe%20University%20of%20Arizona&charset=utf-8&\\_char\\_set=utf8&genre=article&aulast=Greenhaus&aunit=J.H.&title=Organizational%20behavior%20and%20human%20decision%20processes&stitle=Organ.Behav.Hum.Decis.Process.&date=1993&volume=55&pages=273-297&issn=0749-5978%3B%201095-9920&atitle=Job%20performance%20attributions%20and%20career%20advancement%20prospects%3A%20An%20examination%20of%20gender%20and%20race%20effects&spage=273&au=Greenhaus%2CJeffrey%20H.&au=Parasuraman%2CSaroj&](http://zp9vv3zm2k.ssscom.ezproxy.library.arizona.edu/?sid=Refworks%3AThe%20University%20of%20Arizona&charset=utf-8&_char_set=utf8&genre=article&aulast=Greenhaus&aunit=J.H.&title=Organizational%20behavior%20and%20human%20decision%20processes&stitle=Organ.Behav.Hum.Decis.Process.&date=1993&volume=55&pages=273-297&issn=0749-5978%3B%201095-9920&atitle=Job%20performance%20attributions%20and%20career%20advancement%20prospects%3A%20An%20examination%20of%20gender%20and%20race%20effects&spage=273&au=Greenhaus%2CJeffrey%20H.&au=Parasuraman%2CSaroj&)

The present study examined the impact of managers' gender and race on job performance attributions made by their supervisors. Among the most highly successful managers, the performance of women was less likely to be attributed to ability than the performance of men. In addition, the performance of black managers was less likely to be attributed to ability and effort and was more likely to be attributed to help from others than the performance of white managers. The findings also revealed that race differences in several attributions attenuated as supervisors gained more extensive work experience with the managers. Although black managers were perceived to have less favorable career advancement prospects than white managers, the effect of race on career advancement prospects was entirely indirect, operating through job performance ratings and ability attributions (ABSTRACT FROM AUTHOR).

**Heilman, M. E. (2001).** Description and prescription: How gender stereotypes prevent women's ascent up the organizational ladder. *Journal of Social Issues*, Vol. 47(4): 657-674.  
<http://web.ebscohost.com.ezproxy.library.arizona.edu/ehost/results?vid=3&hid=17&sid=5a18a72b-52f9-4a39-8b72-68c7764f4903%40sessionmgr2>

This review article posits that the scarcity of women at the upper levels of organizations is a consequence of gender bias in evaluations. It is proposed that gender stereotypes and the expectations they produce about both what women are like (descriptive) and how they should behave (prescriptive) can result in devaluation of their performance, denial of credit to them for their successes, or their penalization for being competent. The processes giving rise to these outcomes are explored, and the procedures that are likely to encourage them are identified. Because of gender bias and the way in which it influences evaluations in work settings, it is argued that being competent does not ensure that a woman will advance to the same organizational level as an equivalently performing man (ABSTRACT FROM AUTHOR).

**Sell, J., J.D. Knottnerus, C. Ellison, H. Mundt.(2000.)** Reproducing social structure in task groups: The role of structural ritualization. *Social Forces*.79(2):453-475.  
<http://www.jstor.org/view/00377732/di020163/02p00263/0>

The reproduction of social structure occurs with regularity, even when it is not in the interest of the group, the individual, or the society. This article uses the theories of structural ritualization and expectation states to examine a specific case of social

reproduction : the reproduction of hierarchical group procedure and practices in small task groups. The experimental test examines forty-four task groups under three different conditions : a baseline condition under which group leaders observe no task groups ; a condition under which leaders observe two groups characterized by hierarchical ritual and relatively authoritarian leaders; a condition under which leaders observe two groups characterized by lesser levels of hierarchical ritual and procedure. Based upon the two theories, we predicted that leaders would transform their own groups in the image of those they observed. This would occur even though there were no incentives for particular procedures and rituals, and even though the observed groups were not involved in tasks similar to the tasks given to the leader and his group. The experimental tests generally support the theory (ABSTRACT FROM AUTHOR).

**Heilman, M. E. & Stopeck, M.H. (1985).** Attractiveness and corporate success: Different causal attributions for males and females. *Journal of Applied Psychology*, Vol. 70(2): 379-388.

<http://ezproxy.library.arizona.edu/login?url=http://search.epnet.com/login.aspx?direct=true&db=psyh&an=1985-21575-001>

To determine whether appearance influences how an individual's corporate success is explained, 113 working men and women were presented with the work history of an assistant vice president (AVP) of a mid-sized corporation who was either attractive or unattractive male or female. Additionally, the AVP's rise to the senior ranks was depicted as either unusually rapid or normative in pace. Results indicated that, as predicted, attractiveness had different effects on the degree to which the AVP's success was attributed to ability depending upon whether the AVP was male or female; males' ability attributions were enhanced by their good looks and females' ability attributions were detrimentally affected by them. Also as expected, capability judgments followed a similar pattern. Appearance was additionally shown to have different consequences for males and females when likeability and interpersonal integrity were rated. However, contrary to predictions, the rapidity of corporate ascent did not interact with appearance or sex in affecting attributions about or impressions of the stimulus AVPs. The implications of these results, both conceptual and practical, are discussed (ABSTRACT FROM AUTHOR).

**Heilman, M. E., & Stopeck, M. H. (1985).** Being attractive, advantage or disadvantage? Performance-based evaluations and recommended personnel actions as a function of appearance, sex, and job type. *Organizational Behavior & Human Decision Process*, Vol. 35(2): 202-215.

[http://www.sciencedirect.com.ezproxy.library.arizona.edu/science?\\_ob=PublicationURL&\\_tockey=%23TOC%236978%231985%23999649997%23512401%23FLA%23&\\_cdi=6978&\\_pubType=J&\\_view=c&\\_auth=y&\\_acct=C000059541&\\_version=1&\\_urlVersion=0&\\_userid=56761&\\_md5=4a250ac756dacc106da2f828d587bc83](http://www.sciencedirect.com.ezproxy.library.arizona.edu/science?_ob=PublicationURL&_tockey=%23TOC%236978%231985%23999649997%23512401%23FLA%23&_cdi=6978&_pubType=J&_view=c&_auth=y&_acct=C000059541&_version=1&_urlVersion=0&_userid=56761&_md5=4a250ac756dacc106da2f828d587bc83)

Prompted by a concern with the effects of appearance on how individuals and their work are regarded and how rewards are allocated in work settings, an experiment was conducted to determine whether physical attractiveness differentially affects the performance evaluations and recommended personnel actions for men and women holding managerial and nonmanagerial jobs. As predicted, attractiveness proved to be

advantageous for women in nonmanagerial positions and disadvantageous for women in managerial ones. Unexpectedly, however, appearance had no effects whatsoever on reactions to men. Additional results indicated that attractiveness enhanced the perceived femininity of our female stimulus people, but did not enhance the perceived masculinity of those who were male. These data were interpreted as supportive of the idea that the differential effects of appearance in work settings are mediated by gender characterizations, and that fluctuations in the perceived person-job fit are key to understanding the seemingly inconsistent reactions to attractive and unattractive women in employment situations. The theoretical and applied implications of these findings are discussed (ABSTRACT FROM AUTHOR).

**Heilman, M. E., A. S. Wallen, D. Fuchs, & and. M. Tamkins. (2004).** Penalties for success: Reactions to women who succeed at male gender-typed tasks. *Journal of Applied Psychology* 89(3): 416-427.

<http://content.apa.org/journals/apl/89/3/416.pdf>

A total of 242 subjects participated in 3 experimental studies that compare observers' evaluations of male and female leaders in a stereotypically male position and occupational field (Assistant Vice President of an aircraft company). Results strongly supported the authors' hypotheses, indicating that (a) when women are acknowledged to have been successful, they are less liked and more personally derogated than equivalently successful men (Studies 1 and 2); (b) these negative reactions occur only when the success is in an arena that is distinctly male in character (Study 2); and (c) being disliked can have career-affecting outcomes, both for overall evaluation and for recommendations concerning organizational reward allocation (Study 3). These results were taken to support the idea that gender stereotypes can prompt bias in evaluative judgments of women even when these women have proved themselves to be successful and demonstrated their competence. The distinction between prescriptive and descriptive aspects of gender stereotypes is considered, as well as the implications of prescriptive gender norms for women in work settings (ABSTRACT FROM AUTHOR).

**Heilman, M. E. & Chen, J. J. (2005).** Same behavior, different consequences: Reactions to men's and women's altruistic citizenship behavior. *Journal of Applied Psychology*, Vol. 90(3): 431-441.

<http://web.ebscohost.com.ezproxy.library.arizona.edu/ehost/detail?vid=1&hid=14&sid=8b353c1f-11f6-4abb-ac95-47cdc7ecd024%40sessionmgr7>

In 2 experimental studies, the authors hypothesized that the performance of altruistic citizenship behavior in a work setting would enhance the favorability of men's (but not women's) evaluations and recommendations, whereas the withholding of altruistic citizenship behavior would diminish the favorability of women's (but not men's) evaluations and recommendations. Results supported the authors' predictions. Together with the results of a 3rd study demonstrating that work-related altruism is thought to be less optional for women than for men, these results suggest that gender-stereotypic prescriptions regarding how men and women should behave result in different evaluative reactions to the same altruistic behavior, depending on the performer's sex (ABSTRACT FROM AUTHOR).

**Lyness, K. S. & Heilman, M. E. (2006).** When fit is fundamental: Performance evaluations and promotions of upper-level female and male managers. *Journal of Applied Psychology*, Vol 91(4): 777-785.

<http://web.ebscohost.com.ezproxy.library.arizona.edu/ehost/detail?vid=1&hid=20&sid=39d717ba-29fb-421f-8f9e-9206c744942c%40SRCSM1>

Using archival organizational data, the authors examined relationships of gender and type of position (i.e., line or staff) to performance evaluations of 448 upper-level managers, and relationships of performance evaluations to promotions during the subsequent 2 years. Consistent with the idea that there is a greater perceived lack of fit between stereotypical attributes of women and requirements of line jobs than staff jobs, women in line jobs received lower performance ratings than women in staff jobs or men in either line or staff jobs. Moreover, promoted women had received higher performance ratings than promoted men and performance ratings were more strongly related to promotions for women than men, suggesting that women were held to stricter standards for promotion (ABSTRACT FROM AUTHOR).

**Martell, R. F. (1991).** Sex bias at work: The effects of attentional and memory demands on performance ratings of men and women. *Journal of Applied Social Psychology* Vol. 21(23): 1939 – 1960.

<http://www.blackwell-synergy.com.ezproxy.library.arizona.edu/toc/jasp/21/23>

Examined the impact of attentional and memory demands on work performance ratings accorded men and women in traditionally male jobs. 77 male and 125 female college students read a vignette depicting the work behavior of a male or female police officer and then rated the individual's work performance. The attentional demands imposed on Ss while reading the vignette and the amount of time elapsed prior to issuing the performance ratings were systematically varied. As predicted, men were evaluated more favorably than women when raters were faced with an additional task requiring attention and time pressures were made salient. Only when Ss were able to carefully allocate all of their attentional resources did sex bias in work performance ratings abate. Gender-related work characterizations paralleled the performance ratings, providing support for the idea that sex stereotypes mediate discrimination in performance appraisal judgments. (ABSTRACT FROM AUTHOR).

**Maurer, T. J. & Taylor, M. A. (1994).** Is sex by itself enough: An exploration of gender bias issues in performance appraisal. *Organizational Behavior & Human Decision Processes*, Vol. 60(2): 231-251.

<http://web.ebscohost.com.ezproxy.library.arizona.edu/ehost/detail?vid=6&hid=17&sid=e45a4310-d8f2-4aac-92c6-d5373748af3a%40sessionmgr7>

Past research on the effects of sex of a ratee on performance ratings has produced inconsistent results. The present study was an attempt to extend this literature in two ways. First, the scope in prior research was expanded by examining not only the effects of ratee sex on evaluations but also the effects of perceived masculinity/femininity of ratees in conjunction with occupation and gender-relevant stereotypes and attitudes held by raters. Results illustrated that while sex of a ratee may have no effect on ratings, perceived masculinity/femininity of the ratee may have an

effect, and attitudes held by raters regarding women in the relevant occupation may moderate this effect. The second intent of the study was to explore a potential underlying process variable for relationships with both performance ratings and the gender-relevant variables. Accessibility in memory of behavioral information was related to performance ratings and to the gender-relevant variables. While most of the variables explored in the study seemed to be potentially relevant and of value in understanding the gender bias process, sex by itself was of no significant value. Implications for practice and future research were discussed (ABSTRACT FROM AUTHOR).

**Paludi, M. A. & Bauer, W. D. (1983).** Goldberg revisited: What's in an author's name. *Sex Roles*, Vol. 9(3): 387-390.

<http://www.springerlink.com/openurl.asp?genre=article&id=doi:10.1007/BF00289673>

The present research was a replication and extension of Goldberg's 1968 study of performance evaluation. 360 college students (180 male; 180 female) were asked to evaluate an academic article in the fields of politics, psychology of women or education (judged masculine, feminine, and neutral, respectively) that was written either by a male, female, or an author whose name was initialized. Results indicated that the articles were differentially perceived and evaluated according to the name of the author. An article written by a male was evaluated more favorably than if the author was not male. Subjects' bias against women was stronger when they believed the author with the initialized name was female (ABSTRACT FROM AUTHOR).

**Ridgeway, C. L. & Smith-Lovin, L. (1999).** The gender system and interaction. *Annual Review of Sociology*, Vol. 25:191–216

<http://web.ebscohost.com.ezproxy.library.arizona.edu/ehost/detail?vid=11&hid=17&sid=e45a4310-d8f2-4aac-92c6-d5373748af3a%40sessionmgr7>

The gender system includes processes that both define males and females as different in socially significant ways and justify inequality on the basis of that difference. Gender is different from other forms of social inequality in that men and women interact extensively within families and households and in other role relations. This high rate of contact between men and women raises important questions about how interaction creates experiences that confirm, or potentially could undermine, the beliefs about gender difference and inequality that underlie the gender system. Any theory of gender difference and inequality must accommodate three basic findings from research on interaction. (a). People perceive gender differences to be pervasive in interaction. (b). Studies of interaction among peers with equal power and status show few gender differences in behavior. (c). Most interactions between men and women occur in the structural context of roles or status relationships that are unequal. These status and power differences create very real interaction effects, which are often confounded with gender. Beliefs about gender difference combine with structurally unequal relationships to perpetuate status beliefs, leading men and women to recreate the gender system in everyday interaction. Only peer interactions that are not driven by cultural beliefs about the general competence of men and women or interactions in which women are status- or power-advantaged over men are likely to undermine the gender system (ABSTRACT FROM AUTHOR).

**Rudman, L. A. & Glick, P. G. (1999).** Feminized management and backlash toward agentic women: The hidden costs to women of a kinder, gentler image of middle managers. *Journal of Personality and Social Psychology*, Vol. 77(5): 1004-1010. <http://web.ebscohost.com.ezproxy.library.arizona.edu/ehost/detail?vid=15&hid=17&sid=e45a4310-d8f2-4aac-92c6-d5373748af3a%40sessionmgr7>

Women who display masculine, agentic traits are viewed as violating prescriptions of feminine niceness (L. A. Rudman, 1998). By legitimizing niceness as an employment criterion, "feminization" of management (requiring both agentic and communal traits for managers) may unintentionally promote discrimination against competent women. Participants made hiring recommendations for a feminized or masculine managerial job. Agentic female job applicants were viewed as less socially skilled than agentic males, but this perception only resulted in hiring discrimination for the feminized, not the masculine, job. Communal applicants (regardless of sex) invariably received low hiring ratings. Thus, women must present themselves as agentic to be hireable, but may therefore be seen as interpersonally deficient. Ironically, the feminization of management may legitimize discrimination against competent, agentic women (ABSTRACT FROM AUTHOR).

**Rudman, Laurie A. & Glick, P. (2001).** Prescriptive gender stereotypes and backlash toward agentic women. *Journal of Social Issues*, Vol. 57 Issue (4): 743, 20p. <http://web.ebscohost.com.ezproxy.library.arizona.edu/ehost/detail?vid=4&hid=4&sid=0c623f1e-1548-48d1-b42f-afe069acfbdd%40sessionmgr9>

In an experiment, job description and applicants' attributes were examined as moderators of the backlash effect, the negative evaluation of agentic women for violating prescriptions of feminine niceness (Rudman, 1998). Rutgers University students made hiring decisions for a masculine or "feminized" managerial job. Applicants were presented as either agentic or androgynous. Replicating Rudman and Glick (1999), a feminized job description promoted hiring discrimination against an agentic female because she was perceived as insufficiently nice. Unique to the present research, this perception was related to participants' possession of an implicit (but not explicit) agency-communality stereotype. By contrast, androgynous female applicants were not discriminated against. The findings suggest that the prescription for female niceness is an implicit belief that penalizes women unless they temper their agency with niceness. [ABSTRACT FROM AUTHOR]

**Swim, J., Borgida, E., Maruyama, G., & Myers, D. G. (1989).** Joan McKay versus John McKay: Do gender stereotypes bias evaluations? *Psychological Bulletin*, Vol. 105(3): 409-429.

Examines research using a classic, influential experiment conducted by Goldberg (1968), showing that women were likely to rate male authors (e.g., John T. McKay) more favorably than female authors (e.g., Joan T. McKay) of identical articles. Although replications of this study have been inconclusive, Goldberg's research is still frequently cited as demonstrating an evaluative bias against women. A quantitative meta-analysis of research using Goldberg's experimental paradigm shows that the average difference between ratings of men and women is negligible. Furthermore, although the effect sizes are not homogeneous, the difference remains negligible when other factors such as sex

of subject or year of publication are taken into consideration. Several explanations for the heterogeneity of effect sizes and the inconsistency of findings are discussed (ABSTRACT FROM AUTHOR).

**Thomas-Hunt, M. C. & Phillips, K. W. (2004).** When what you know is not enough: Expertise and gender dynamics in task groups. *Personality and Social Psychology Bulletin*, Vol. 30(12): 1585-1598.

<http://ejournals.ebsco.com.ezproxy.library.arizona.edu/Article.asp?ContributionID=6607653>

This study investigates how the contribution, identification, and consideration of expertise within groups are affected by gender differences. The authors examined the effects of member expertise and gender on others' perceptions of expertise, actual and own perceptions of influence, and group performance on a decision-making task. The authors' findings are consistent with social role theory and expectation states theory. Women were less influential when they possessed expertise, and having expertise decreased how expert others perceived them to be. Conversely, having expertise was relatively positive for men. These differences were reflected in group performance, as groups with a female expert underperformed groups with a male expert. Thus, contrary to common expectations, possessing expertise did not ameliorate the gender effects often seen in workgroups. The findings are discussed in light of their implications for organizational workgroups in which contribution of expertise is critical to group performance (ABSTRACT FROM AUTHOR).

**Uhlmann, E. L. & Cohen, G. L. (2005).** Constructed criteria redefining merit to justify discrimination. *Psychological Science*, Vol. 16(6): 474-480.

<http://web.ebscohost.com.ezproxy.library.arizona.edu/ehost/detail?vid=26&hid=17&sid=e45a4310-d8f2-4aac-92c6-d5373748af3a%40sessionmgr7>

This article presents an account of job discrimination according to which people redefine merit in a manner congenial to the idiosyncratic credentials of individual applicants from desired groups. In three studies, participants assigned male and female applicants to gender-stereotypical jobs. However, they did not view male and female applicants as having different strengths and weaknesses. Instead, they redefined the criteria for success at the job as requiring the specific credentials that a candidate of the desired gender happened to have. Commitment to hiring criteria prior to disclosure of the applicant's gender eliminated discrimination, suggesting that bias in the construction of hiring criteria plays a causal role in discrimination (ABSTRACT FROM AUTHOR). Participants are likely to discriminate against female applicants for traditionally male jobs (e.g., manager) and against male applicants for traditionally female jobs (e.g., secretary).

### 3. A Department Head's Daily Life and Evaluation

#### 3a. Reading and assessing performance evaluations and references

**Cole, M. S., Field, H. S. & Giles, W. F. (2004).** Interaction of recruiter and applicant gender in resume evaluation: A field study. *Sex Roles* 51: 597-608.  
<http://web.ebscohost.com.ezproxy.library.arizona.edu/ehost/detail?vid=29&hid=17&sid=e45a4310-d8f2-4aac-92c6-d5373748af3a%40sessionmgr7>

In the present study, we examined the effect of recruiter and applicant gender on recruiters' evaluations of applicants' qualifications as reported on actual applicant resumes. Forty recruiters evaluated applicant resumes that were randomly allocated to them. In total, 388 recruiter evaluations of applicant resumes comprised the sample. Results indicate that recruiter and applicant gender interacted to predict recruiters' perceptions of applicants' qualifications. Male recruiters' perceptions of applicants' work experiences did not differ depending on applicant gender. However, female recruiters perceived male applicants' resumes to report more work experiences than resumes of female applicants. Furthermore, male recruiters perceived female applicants as having more extracurricular interests than male applicants. Female recruiters rated both male and female applicants as having about the same amount of extracurricular activity information on their resumes. Gender role theory provides a possible explanation for the study's findings (ABSTRACT FROM AUTHOR).

**Cuddy, A., Fiske, S. T., & Glick, P. (2004).** When professionals become mothers, warmth doesn't cut the ice. *Journal of Social Issues*, Vol. 60(4): 701-718.  
<http://ezproxy.library.arizona.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2004-21619-004&site=ehost-live>

Working moms risk being reduced to one of two subtypes: homemakers (viewed as warm but incompetent), or female professionals (characterized as competent but cold). The current study (N = 122 college students) presents four important findings. First, when working women become mothers, they trade perceived competence for perceived warmth. Second, working men don't make this trade; when they become fathers, they gain perceived warmth and maintain perceived competence. Third, people report less interest in hiring, promoting, and educating working moms relative to working dads and childless employees. Finally, competence ratings predict interest in hiring, promoting, and educating workers. Thus, working moms' gain in perceived warmth does not help them, but their loss in perceived competence does hurt them (ABSTRACT FROM AUTHOR).

**Trix, F. & Psenka, C. (2003).** Exploring the color of glass: letters of recommendation for female and male medical faculty. *Discourse & Society* 14(2): 191-220.  
<http://das.sagepub.com/cgi/reprint/14/2/191>

This study compares over 300 letters of recommendation for successful candidates for medical school faculty position. Letters written for female applicants differed systematically from those written for male applicants in terms of length, in the percentages lacking basic features, in the percentages with "doubt raising" language,

and in the frequency of mention of status terms. In addition, the most common possessive phrases for female and male applicants (“her teaching” and “his research”) reinforce gender schemas that emphasize women’s roles as teachers and students and men’s as researchers and professionals.

**Wysocki, V. & Schmader, T.** (unpublished study - 2005). Recommendation letters of faculty candidates for positions in Chemistry and Biochemistry at UA.

Based on Trix and Psenka’s (2003) study, Vicki Wysocki, UA Department of Chemistry, and Toni Schmader, UA Department of Psychology, studied the recommendation letters of candidates for UA faculty positions in Chemistry and Biochemistry. Results indicated that male applicants to Chemistry had more recommendation letters and a higher number of standout adjectives such as *best*, *excellent*, *superior* than females with similar qualifications. No gender differences were found in Biochemistry.

### **3b. Writing faculty performance evaluations and references**

**Cole, M. S., Field, H. S. & Giles, W. F. (2004).** Interaction of recruiter and applicant gender in resume evaluation: A field study. *Sex Roles* 51: 597-608.

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In the present study, we examined the effect of recruiter and applicant gender on recruiters' evaluations of applicants' qualifications as reported on actual applicant resumes. Forty recruiters evaluated applicant resumes that were randomly allocated to them. In total, 388 recruiter evaluations of applicant resumes comprised the sample. Results indicate that recruiter and applicant gender interacted to predict recruiters' perceptions of applicants' qualifications. Male recruiters' perceptions of applicants' work experiences did not differ depending on applicant gender. However, female recruiters perceived male applicants' resumes to report more work experiences than resumes of female applicants. Furthermore, male recruiters perceived female applicants as having more extracurricular interests than male applicants. Female recruiters rated both male and female applicants as having about the same amount of extracurricular activity information on their resumes. Gender role theory provides a possible explanation for the study's findings (ABSTRACT FROM AUTHOR).

**Cuddy, A., Fiske, S. T., & Glick, P. (2004).** When professionals become mothers, warmth doesn't cut the ice. *Journal of Social Issues*, Vol. 60(4): 701-718.

<http://ezproxy.library.arizona.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2004-21619-004&site=ehost-live>

Working moms risk being reduced to one of two subtypes: homemakers (viewed as warm but incompetent), or female professionals (characterized as competent but cold). The current study (N = 122 college students) presents four important findings. First, when working women become mothers, they trade perceived competence for perceived warmth. Second, working men don't make this trade; when they become fathers, they gain perceived warmth and maintain perceived competence. Third, people report less interest in hiring, promoting, and educating working moms relative to working

dads and childless employees. Finally, competence ratings predict interest in hiring, promoting, and educating workers. Thus, working moms' gain in perceived warmth does not help them, but their loss in perceived competence does hurt them (ABSTRACT FROM AUTHOR).

**Galinsky, A. D. and Moskowitz, G. B. (2000).** Perspective-taking: decreasing stereotype expression, stereotype accessibility, and in-group favoritism. *Journal of Personality and Social Psychology*, Vol. 78(4): 708.

<http://ezproxy.library.arizona.edu/login?url=http://search.epnet.com/login.aspx?direct=true&db=aph&an=3178355>

Using 3 experiments, the authors explored the role of perspective-taking in debiasing social thought. In the 1st 2 experiments, perspective-taking was contrasted with stereotype suppression as a possible strategy for achieving stereotype control. In Experiment 1, perspective-taking decreased stereotypic biases on both a conscious and a nonconscious task. In Experiment 2, perspective-taking led to both decreased stereotyping and increased overlap between representations of the self and representations of the elderly, suggesting activation and application of the self-concept in judgments of the elderly. In Experiment 3, perspective-taking reduced evidence of in-group bias in the minimal group paradigm by increasing evaluations of the out-group. The role of self--other overlap in producing prosocial outcomes and the separation of the conscious, explicit effects from the nonconscious, implicit effects of perspective-taking are discussed (ABSTRACT FROM AUTHOR).

**Lerner, J. S. & Tetlock, P. E. (2003).** Bridging individual, interpersonal, and institutional approaches to judgment and decision making: The impact of accountability on cognitive bias.; In: *Emerging perspectives on judgment and decision research*. Schneider, Sandra L.; Shanteau, James; New York, NY, US: Cambridge University Press: 431-457.

Research on accountability takes an unusual approach to the study of judgment and decision making. By situating decision makers within particular accountability conditions, it has begun to bridge individual, interpersonal, and institutional levels of analysis. We propose that this multilevel approach can enhance both the study of judgment and choice and the application of such research to real-world settings. To illustrate the multilevel approach, we present a review of accountability research, organized around an enduring question in the literature: Under what conditions will accountability improve judgment and decision making? After considering the shortcomings of two seemingly straightforward answers to this question, we propose a multifactor framework for predicting when accountability attenuates bias, when it has no effect, and when it makes matters even worse (ABSTRACT FROM AUTHOR).

**Tetlock, P. E. (1983).** Accountability and the perseverance of first impressions. *Social Psychology Quarterly*, Vol. 46(4): 285-292.

<http://ezproxy.library.arizona.edu/login?url=http://search.epnet.com/login.aspx?direct=true&db=aph&an=13569043>

Previous research indicates that our initial impressions of events frequently influence how we interpret later information. This experiment explored whether accountability--pressures to justify one's impressions to others--leads people to process

information more vigilantly and, as a result, reduces the undue influence of early-formed impressions on final judgments. Subjects viewed evidence from a criminal case and then assessed the guilt of the defendant. The study varied(1) the order of presentation of pro-vs. anti-defendant information, (2) whether subjects expected to justify their decisions and, if so, whether subjects realized that they were accountable prior to or only after viewing the evidence. The results indicated that subjects given the anti/pro-defendant order of information were more likely to perceive the defendant as guilty than subjects given the pro/anti-defendant order of information, but only when subjects did not expect to justify their decisions or expected to justify their decisions only after viewing the evidence. Order of presentation of evidence had no impact when subjects expected to justify their decisions before viewing the evidence. Accountability prior to the evidence also substantially improved free recall of the case material. The results suggest that accountability affects how people initially encode and process stimulus information (ABSTRACT FROM AUTHOR).

**Tetlock, P. E. (1985).** Accountability: A social check on the fundamental attribution error. *Social Psychology Quarterly*, Vol. 48 (3): 226-236.  
<http://ezproxy.library.arizona.edu/login?url=http://search.epnet.com/login.aspx?direct=true&db=aph&an=13568824>

Previous studies indicate that people are often quick to draw conclusions about the attitudes and personalities of others-even when plausible external or situational causes for behavior exist (an effect known as the fundamental attribution error). This experiment explores whether accountability--pressures to justify one's causal interpretations of behavior to others--reduces or eliminates this bias. Subjects were exposed to an essay that supported or opposed affirmative action. They were informed that the essay writer had freely chosen or had been assigned the position he took. Finally, subjects either did not expect to justify their impressions of the essay writer or expected to justify their impressions either before or after exposure to the stimulus information. The results replicated previous findings. Subjects were significantly more sensitive to situational determinants of the essay writer's behavior when they felt accountable for their impressions prior to viewing the stimulus information. The results suggest that accountability eliminated the over-attribution effect by affecting how subjects initially encoded and analyzed stimulus information (ABSTRACT FROM AUTHOR).

**Trix, F. & Psenka, C. (2003).** Exploring the color of glass: letters of recommendation for female and male medical faculty. *Discourse & Society* 14(2): 191-220.  
<http://das.sagepub.com/cgi/reprint/14/2/191>

This study compares over 300 letters of recommendation for successful candidates for medical school faculty position. Letters written for female applicants differed systematically from those written for male applicants in terms of length, in the percentages lacking basic features, in the percentages with "doubt raising" language, and in the frequency of mention of status terms. In addition, the most common possessive phrases for female and male applicants ("her teaching" and "his research") reinforce gender schemas that emphasize women's roles as teachers and students and men's as researchers and professionals.

**Wysocki, V. & Schmader, T.** (unpublished study - 2005). Recommendation letters of faculty candidates for positions in Chemistry and Biochemistry at UA.

Based on Trix and Psenka's (2003) study, Vicki Wysocki, UA Department of Chemistry, and Toni Schmader, UA Department of Psychology, studied the recommendation letters of candidates for UA faculty positions in Chemistry and Biochemistry. Results indicated that male applicants to Chemistry had more recommendation letters and a higher number of standout adjectives such as *best*, *excellent*, *superior* than females with similar qualifications. No gender differences were found in Biochemistry.

### **3c. Reading and assessing promotion and tenure reviews**

#### **3c1. Assessing quality and impact of research**

**Brouns, M. (2000).** The gendered nature of assessment procedures in scientific research funding: The Dutch case. *Higher Education in Europe, Vol. 25(2):* 193-199. [www.ingentaconnect.com/content/routledg/chee/2000/00000025/00000002](http://www.ingentaconnect.com/content/routledg/chee/2000/00000025/00000002)

This article discusses the results of a study on gender bias in assessment procedures in the two major institutions for scientific grants in The Netherlands: the Dutch Organization for Scientific Research (NOW) and the Royal Dutch Academy for the Sciences (KNAW). The study concentrated on a qualitative sample of one of the prestigious grants. A total of 128 files were analyzed on the basis of a correlation of characteristics of the applicant (sex, age, and scientific productivity), assessments by the external advisors (peer review), and the decision of NOW. The analysis indicated that women applicants were evaluated differently from male applicants. However, women were not discriminated against in all disciplines. On the contrary, in some disciplines they received a bonus. One of the major conclusions is that gender matters, but in different ways within the different disciplines (ABSTRACT FROM AUTHOR).

**Steinpreis, R. E., Anders, K. A., & Ritzke, D. (1999).** The impact of gender on the review of the curricula vitae of job applicants and tenure candidates: A national empirical study. *Sex Roles, 41(7)*, 509-528. <http://web.ebscohost.com.ezproxy.library.arizona.edu/ehost/detail?vid=6&hid=4&sid=0c623f1e-1548-48d1-b42f-afe069acfbdd%40sessionmgr9>

The purpose of this study was to determine some of the factors that influence outside reviewers and search committee members when they are reviewing curricula vitae, particularly with respect to the gender of the name on the vitae. The participants in this study were 238 male and female academic psychologists who listed a university address in the 1997 Directory of the American Psychological Association. They were each sent one of four versions of a curriculum vitae (i.e., female job applicant, male job applicant, female tenure candidate, and male tenure candidate), along with a questionnaire and a self-addressed stamped envelope. All the curricula vitae actually came from a real-life scientist at two different stages in her career, but the names were

changed to traditional male and female names. Although an exclusively between-groups design was used to avoid sparking gender-conscious responding, the results indicate that the participants were clearly able to distinguish between the qualifications of the job applicants versus the tenure candidates, as evidenced by suggesting higher starting salaries, increased likelihood of offering the tenure candidates a job, granting them tenure, and greater respect for their teaching, research, and service records. Both men and women were more likely to vote to hire a male job applicant than a female job applicant with an identical record. Similarly, both sexes reported that the male job applicant had done adequate teaching, research, and service experience compared to the female job applicant with an identical record. In contrast, when men and women examined the highly competitive curriculum vitae of the real-life scientist who had gotten early tenure, they were equally likely to tenure the male and female tenure candidates and there was no difference in their ratings of their teaching, research, and service experience. There was no significant main effect for the quality of the institution or professional rank on selectivity in hiring and tenuring decisions. The results of this study indicate a gender bias for both men and women in preference for male job applicants (ABSTRACT FROM AUTHOR).

**Wenneras, C. & Wold, A. (1997).** Nepotism and sexism in peer-review. *Nature*, 387: 341-343.

<http://web.ebscohost.com.ezproxy.library.arizona.edu/ehost/detail?vid=9&hid=4&sid=0c623f1e-1548-48d1-b42f-afe069acfbdd%40sessionmgr9>

Examines the peer-review system of the Swedish Medical Research Council, where the success rate of female applicants for post-doc positions during the 1990s has been less than half of that of male applicants. Suggests that peer reviewers cannot judge scientific merit independent of gender. By comparing equally productive male and female applicants, the study found two non-merit-based variables that significantly affected the peer reviewers' scoring of an applicant: whether the applicant was affiliated with a reviewer (which was an almost identical percentage for male and female applicants) and the gender of an applicant (ABSTRACT FROM AUTHOR).

### **3c2. Assessing quality and impact of teaching**

**Aleamoni, L. M. (1999).** Student rating myths versus research facts from 1924 to 1998. *Journal of Personnel Evaluation in Education*, Vol. 13(2): 153-166.

Sixteen of the most common myths regarding student ratings of instructors and instruction are looked at from the perspective of the research that has been conducted on them over the past seventy-four years. It is concluded that the myths are, on the whole, myths. However, suggestions are made about how the information regarding the myths can be used to both improve and document instructional effectiveness (ABSTRACT FROM AUTHOR).

**Arbuckle, J. & Williams, B. D. (2003).** Students' perceptions of expressiveness: Age and gender effects on teacher evaluations. *Sex Roles*, Vol. 49(9/10): 507-516.

<http://web.ebscohost.com.ezproxy.library.arizona.edu/ehost/detail?vid=15&hid=4&sid=0c623f1e-1548-48d1-b42f-afe069acfbdd%40sessionmgr9>

In this study we investigated the relationship between college students' perceptions of professors' expressiveness and implicit age and gender stereotypes. 352 male and female students watched slides of an age- and gender-neutral stick figure and listened to a neutral voice presenting a lecture, and then evaluated it on teacher evaluation forms that indicated 1 of 4 different age and gender conditions (male, female, "old," and "young."). Main and interaction effects indicated that students rated the "young" male professor higher than they did the "young" female, "old" male, and "old" female professors on speaking enthusiastically and using a meaningful voice tone during the class lecture regardless of the identical manner in which the material was presented. Implications of biased teacher-expressiveness items on student evaluations are discussed (ABSTRACT FROM AUTHOR).

**Bauer, C. C., & Baltes, B. B. (2002).** Reducing the effects of gender stereotypes on performance evaluations. *Sex Roles*, 47(9), 465-476.

[http://www.findarticles.com/p/articles/mi\\_m2294/is\\_2002\\_Nov/ai\\_97728460](http://www.findarticles.com/p/articles/mi_m2294/is_2002_Nov/ai_97728460)

Two hundred and forty-seven college students provided performance ratings for vignettes that described the performance of male or female college professors. Results indicated that without the intervention, raters who have traditional stereotypes evaluated women less accurately and more negatively. Conversely, the structured free recall intervention, having raters rely on their memories of specific behaviors of the ratee rather than overall judgments, successfully eliminated these effects. The usefulness of the structured free recall intervention as a tool for decreasing the influence of gender stereotypes on performance ratings is discussed (ABSTRACT FROM AUTHOR). This study suggests that 1) people vary in the degree to which they hold gender stereotypes, 2) holding gender stereotypes influences their evaluations of other people, 3) individuals with traditional stereotypes evaluate women lower than their true performance level, and 4) it is possible to reduce the impact of commonly-held stereotypes by relatively simple means.

**Fandt, P. M. & Stevens, G. E. (1991).** Evaluation bias in the business classroom: Evidence relating to the effects of previous experiences. *Journal of Psychology*, Vol. 125(4): 469-477.

<http://web.ebscohost.com.ezproxy.library.arizona.edu/ehost/detail?vid=1&hid=2&sid=ffa8f9c1-db7f-4c47-b2c5-4bfb901dd511%40sessionmgr7>

We found that teaching evaluations were assigned as a function of the professors' gender and students' previous experience with a female professor. Based on the professor's style of organization, enthusiasm, credibility, and effectiveness, and students' willingness to take a course with the professor, students assigned higher evaluations to male professors than female professors. Previous experience with a female faculty member was found to be a relevant variable influencing perceived credibility, organization, and effectiveness evaluations. The findings imply that exposure to women in positions of responsibility may reduce stereotypical attitudes regarding women's ability to function in gender-atypical roles (ABSTRACT FROM AUTHOR).

**Martell, R.F. and R.A. Guzzo. (1991.)** The dynamics of implicit theories of group performance: When and how do they operate? *Organizational Behavior and Human Decision Processes*. 50:51-74.

[http://www.sciencedirect.com/science?\\_ob=ArticleURL&\\_udi=B6WP2-4CYG34G-F1&\\_user=56761&\\_coverDate=10%2F31%2F1991&\\_rdoc=1&\\_fmt=&\\_orig=search&\\_sort=d&\\_view=c&\\_acct=C000059541&\\_version=1&\\_urlVersion=0&\\_userid=56761&md5=2cf09494f742da757355620aa7d887c8](http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6WP2-4CYG34G-F1&_user=56761&_coverDate=10%2F31%2F1991&_rdoc=1&_fmt=&_orig=search&_sort=d&_view=c&_acct=C000059541&_version=1&_urlVersion=0&_userid=56761&md5=2cf09494f742da757355620aa7d887c8)

A laboratory experiment was designed to: (1) reexamine recent findings that observers' recollections of a group's activities, in contrast to subjective evaluations, are unaffected by performance feedback and the implicit theories that such cues elicit; and (2) identify the underlying process(es) mediating the effects of performance cues on distorted recollections of group behavior. Two hundred and twenty-one participants observed a task performing group and then were given positive, negative, or no performance feedback. Immediately after or 1 week later, participants completed an evaluative rating scale and a questionnaire measuring their recollections of the group's effective and ineffective behavior. Results indicate that the evaluative ratings *and* the behavioral recollections were distorted by the performance cues. However, contrary to predictions, the biasing effects of positive versus negative cues were not more pronounced in the delayed rating conditions. In fact, only in the immediate rating conditions were recollections of ineffective behavior affected. Analyses using measures derived from statistical decision theory indicated that distorted recollections of the group's behavior were the result of a systematic response bias in which observers adopted a more liberal decision criterion when judging the occurrence of expected behaviors. The implications of this research for organizational practices and theory development are discussed. (ABSTRACT FROM AUTHOR).

**Santhanam, E. & Hicks, O. (2002).** Disciplinary, gender, and course year in perceptions of teaching: explorations and implications. *Teaching in Higher Education*, Vol. 7(1):

<http://web.ebscohost.com.ezproxy.library.arizona.edu/ehost/detail?vid=1&hid=3&sid=f85459cd-8b7b-46a8-916d-0cda1b0324e3%40sessionmgr8>

The prevalent use of student ratings in teaching evaluations, particularly the reliability of such data, has been debated for many years. Reports in the literature indicate that there are many factors influencing student perceptions of teaching. Three of these factors were investigated at the University of Western Australia, namely the broad discipline group, course/unit year level and student gender. Data collected over 3 years were analyzed. The outcomes of this study confirmed results reported by other workers in the field that there are differences in ratings of students in different discipline groups and at different year levels. It also provided a possible explanation for the mixed results reported in studies of student gender in relation to student ratings (ABSTRACT FROM AUTHOR).

**Sprague, J. & Massoni, K. (2005).** Student evaluations and gendered expectations: What we can't count can hurt us. *Sex Roles*, Vol. 53(11/12): 779-793.

<http://zp9vv3zm2k.ssscom.ezproxy.library.arizona.edu/?sid=Refworks%3AThe%20University%20of%20Arizona&charset=utf->

[8&\\_char\\_set=utf8&genre=article&aulast=Sprague&auinit=J.&title=Sex%20Roles&date=2005&volume=53&pages=779-793&issue=11%2F12&issn=03600025&atitle=Student%20Evaluations%20and%20Gendered%20Expectations%3A%20What%20We%20Can't%20Count%20Can%20Hurt%20Us&spage=779&au=Sprague%](http://www.jstor.org/stable/2005&volume=53&pages=779-793&issue=11%2F12&issn=03600025&atitle=Student%20Evaluations%20and%20Gendered%20Expectations%3A%20What%20We%20Can't%20Count%20Can%20Hurt%20Us&spage=779&au=Sprague%20J)

Does teacher's gender impact students' evaluations? We critically evaluated the research literature and concluded that the form gender bias takes may not be easily detectible by quantitative scales. To explore this possibility, we did a qualitative analysis of the words that 288 college students at two campuses used to describe their best- and worst-ever teachers. Although we found considerable overlap in the ways that students talked about their male and female teachers, we also saw indications that students hold teachers accountable to certain gendered expectations. These expectations place burdens on all teachers, but the burdens on women are more labor-intensive. We also saw signs of much greater hostility toward women than toward men who do not meet students' gendered expectations (ABSTRACT FROM AUTHOR).

**Weinberg, B. A., Fleisher, B. M., & Hashimoto, M. (2006).** Evaluating Methods for Evaluating Instruction: The Case of Higher Education. Released in 2007 by the National Bureau of Economic Research: 46 pages.

This paper studies methods for evaluating instruction in higher education. We explore student evaluations of instruction and a variety of alternatives. We develop a simple model to illustrate the biases inherent in student evaluations. Measuring learning using grades in future courses, we show that student evaluations are positively related to current grades but uncorrelated with learning once current grades are controlled. We offer evidence that the weak relationship between learning and student evaluations arises in part because students are not aware of how much they have learned in a course. We conclude with a discussion of alternative methods for evaluating teaching (ABSTRACT FROM AUTHORS). The study is based on student evaluation data from 50,000 enrollments in 400 course offerings over several years in various economics courses.

### **3c3. Assessing quality and impact of service and outreach**

(See 3.d. below)

#### ***3d. Workload assignments***

1. Committee
2. Teaching
3. Research-related assignments
4. Leadership roles versus supportive roles versus free riders

#### **3d1. Committee assignments**

**Baez, B. (2000).** Race-related service and faculty of color: Conceptualizing critical

agency in academe. *Higher Education* 39: 363–391.

Based on a qualitative study of sixteen faculty of color at a private research university, this article argues that service, though significantly presenting obstacles to the promotion and retention of faculty of color, actually may set the stage for a critical agency that resists and

redefines academic structures that hinder faculty success. The construct of 'service,' therefore,

presents the opportunity for theorizing the interplay of human agency and social structures.

The article suggests that faculty may seek to redefine oppressive structures through service,

thus, exercising an agency that emerges from the very structures that constrain it.

Faculty of

color, in particular, may engage in service to promote the success of racial minorities in the

academy and elsewhere. Thus, service, especially that which seeks to further social justice,

contributes to the redefinition of the academy and society at large (ABSTRACT FROM AUTHOR).

**Neumann, A. & Terotsky, A. L. (2007).** To give and to receive: Recently tenured professors' experiences of service in major research universities. *The Journal of Higher Education*, Vol. 78(3): p282-310.

The authors discuss university professors' careers as being created through research, teaching, and service. A three-year study shows that faculty service increases after tenure. Service is defined as contributions made by the faculty member, both internally and externally, to the operation of the employing institution, such as being on a curriculum committee or being involved in a public service. The authors state that professors receive little recognition for their efforts, and the services are underacknowledged and underappreciated. This information is based only on faculty service in major American research universities (ABSTRACT FROM AUTHOR).

**Twale, D. J. & Shannon, D. M. (1996).** Professional service involvement of leadership faculty: An assessment of gender, role and satisfaction. *Sex Roles* 34 (1996): 117-126. [http://find.galegroup.com.ezproxy.library.arizona.edu/itx/retrieve.do?contentSet=IAC- Documents&resultListType=RESULT\\_LIST&qrySerId=Locale%28en%2CUS%2C%29%3AFQE%3D%28JN%2CNone%2C34%29%22Sex+Roles%3A+A+Journal+of+Research%22%3AAnd%3ALQE%3D%28DA%2CNone%2C8%2919960101%24&sgHitCountType=None&inPS=true&sort=DateDescend&searchType=PublicationSearchForm&tabID=T002&prodId=ITOF&searchId=R2&currentPosition=8&userGroupName=uarizona\\_main&docId=A18498761&docType=IAC](http://find.galegroup.com.ezproxy.library.arizona.edu/itx/retrieve.do?contentSet=IAC- Documents&resultListType=RESULT_LIST&qrySerId=Locale%28en%2CUS%2C%29%3AFQE%3D%28JN%2CNone%2C34%29%22Sex+Roles%3A+A+Journal+of+Research%22%3AAnd%3ALQE%3D%28DA%2CNone%2C8%2919960101%24&sgHitCountType=None&inPS=true&sort=DateDescend&searchType=PublicationSearchForm&tabID=T002&prodId=ITOF&searchId=R2&currentPosition=8&userGroupName=uarizona_main&docId=A18498761&docType=IAC)

This study explored gender differences among educational administration faculty and their participation in and satisfaction with professional association activities. The study population would be characterized as overwhelmingly male and white, but with women and minority candidates beginning to enter the faculty ranks. Women faculty reported involvement in more professional service activities and a slightly higher

satisfaction with their involvement than their male colleagues. However, women participated in different types of and more professional association activities than men (ABSTRACT FROM AUTHOR).

### 3d4. Leadership roles: assignment and evaluation

**Aries, E. (1996).** *Men and women in interaction: Reconsidering the differences.* New York: Oxford University Press.

Extensive discussion of research on the effects of gender stereotypes on the perception and evaluation of task performance in groups. Chapters include The Elusive Truth about Women and Men, Task and Expressive Roles in Groups, Dominance and Leadership in Groups, Gender Stereotypes and the Perception and Evaluation of Participants in Interaction.

**Brown, V. & Geis, F. L. (1984).** Turning lead into gold: Evaluations of men and women leaders and the alchemy of social consensus. *Journal of Personality and Social Psychology, Vol. 46(4):* 811-824.

Consensual affect cues of fellow group participants raised or lowered the perceived quality of identical leadership performances. Subjects viewed a color videotape of a scripted group discussion by a leader and four group members. Leader's suggestions, members' compliance, and the focal action of discussion content were the same in all conditions. Two nonfocal consensus variables, authority legitimation of the leader and group members' nonverbal "leakage" cues of affective reaction to the leader, were manipulated by tape editing in factorial design and replicated on two leaders, a male and a female. Both leaders' performances with authority legitimation or nonverbal peer approval were evaluated higher than the identical performances without legitimation or disapproved by peers. The results showed that a difference in the affective consensus surrounding a performance could produce discriminatory evaluations of equally competent men and women, and equalizing the consensus values could eliminate discriminatory bias. Consensus cues were not manipulated for the other stimulus group members, and men were rated higher than equally competent women (ABSTRACT FROM AUTHOR).

**Butler, D., & Geis, F. L. (1990).** Nonverbal affect responses to male and female leaders: Implications for leadership evaluations. *Journal of Personality and Social Psychology, 58(1),* 48-59.

<http://web.ebscohost.com.ezproxy.library.arizona.edu/ehost/detail?vid=1&hid=7&sid=b9aa79f8-0cde-4820-ba9c-f45b7f3e538c%40sessionmgr2>

It was hypothesized that female leaders would elicit more negative nonverbal affect responses from other group members than male leaders offering the same initiatives. Male and female subjects participated in 4-person discussions in which male or female confederates assumed leadership. During the discussion subjects' nonverbal affect responses to the confederates were coded from behind one-way mirrors. Female leaders received more negative affect responses and fewer positive responses than

men offering the same suggestions and arguments. Female leaders received more negative than positive responses, in contrast to men, who received at least as many positive as negative responses. The data demonstrate a concrete social mechanism known to cause devaluation of leadership, and thus support a more social interpretation of female leadership evaluations, in contrast to previous interpretations based on private perceptual bias (ABSTRACT FROM AUTHOR).

**Carli, L. L. & Eagly, A. H. (2001).** Gender, hierarchy, and leadership: An introduction. *Journal of Social Issues, Vol. 57*(4): 629-636.

<http://web.ebscohost.com.ezproxy.library.arizona.edu/ehost/detail?vid=1&hid=6&sid=6fc426b2-322c-4130-a2ba-be1ea55d2a2d%40SRCM2>

Although women's status has improved remarkably in the 20<sup>th</sup> century in many societies, women continue to lack access to power and leadership compared with men. This issue reviews research and theory concerning women's leadership. The articles included in the issue provide evidence of bias in the evaluation of women, discuss effects of gender stereotypes on women's influence and leadership behaviors, and evaluate strategies for change. This introductory article provides a brief summary of changes in women's status and power in employment and education and the absence of change at the upper echelons of power in organizations. Also included is an outline of the contributions of the other articles in the issue (ABSTRACT FROM AUTHOR.)

**Carr PL, L. Szalacha, R. Barnett, C. Caswell, and T. Inui. (2003.)** A "ton of feathers": gender discrimination in academic medical careers and how to manage it. *J Womens Health (Larchmt)*. 12(10):1009-18.

<http://www.liebertonline.com/doi/abs/10.1089%2F154099903322643938>

To evaluate the experience of gender discrimination among a limited sample of women in academic medicine, specifically, the role of discrimination in hindering careers, coping mechanisms, and perceptions of what institutions and leaders of academic medicine can do to improve the professional workplace climate for women. **METHODS:** In-depth, semistructured telephonic individual interviews of 18 women faculty who experienced or may have experienced discrimination in the course of their professional academic medical careers from 13 of the 24 institutions of the National Faculty Survey. A consensus taxonomy for classifying content evolved from comparisons of coding. Themes expressed by multiple faculty were studied for patterns of connection and grouped into broader categories. **RESULTS:** Forty percent of respondents ranked gender discrimination first out of 11 possible choices for hindering their career in academic medicine. Thirty-five percent ranked gender discrimination second to either "limited time for professional work" or "lack of mentoring." Respondents rated themselves as poorly prepared to deal with gender discrimination and noted effects on professional self-confidence, self-esteem, collegiality, isolation, and career satisfaction. The hierarchical structure in academe is perceived to work against women, as there are few women at the top. Women faculty who have experienced gender discrimination perceive that little can be done to directly address this issue. Institutions need to be proactive and recurrently evaluate the gender climate, as well as provide transparent information and fair scrutiny of promotion and salary decisions. **CONCLUSIONS:** According to this subset of women who perceive that they have been

discriminated against based on gender, sexual bias and discrimination are subtly pervasive and powerful. Such environments may have consequences for both women faculty and academic medicine, affecting morale and dissuading younger trainees from entering academic careers. Medical schools need to evaluate and may need to improve the environment for women in academe.

**Eagly, A. H., Karau, S. J. & Makhijani, M. G. (1995).** Gender and the effectiveness of leaders: A meta-Analysis. *Psychological Bulletin* 117(1): 125-145.

<http://content.apa.org/journals/bul/117/1/125.pdf>

This article presents a synthesis of research on the relative effectiveness of women and men who occupy leadership and managerial roles. Aggregated over the organizational and laboratory experimental studies in the sample, male and female leaders were equally effective. However, consistent with the assumption that the congruence of leadership roles with leaders' gender enhances effectiveness, men were more effective than women in roles that were defined in more masculine terms, and women were more effective than men in roles that were defined in less masculine terms. Also, men were more effective than women to the extent that leader and subordinate roles were male-dominated numerically. These and other findings are discussed from the perspective of social-role theory of sex differences in social behavior as well as from alternative perspectives. (ABSTRACT FROM AUTHOR)

**Eagly, A.H. & Karau, S.J. (2002).** Role congruity theory of prejudice toward female leaders. *Psychological Review* 109(3): 573-597.

<http://ezproxy.library.arizona.edu/login?url=http://search.epnet.com/login.aspx?direct=true&db=psyh&an=2002-13781-007>

A role congruity theory of prejudice toward female leaders proposes that perceived incongruity between the female gender role and leadership roles leads to 2 forms of prejudice: (a) perceiving women less favorably than men as potential occupants of leadership roles and (b) evaluating behavior that fulfills the prescriptions of a leader role less favorably when it is enacted by a woman. One consequence is that attitudes are less positive toward female than male leaders and potential leaders. Other consequences are that it is more difficult for women to become leaders and to achieve success in leadership roles. Evidence from varied research paradigms substantiates that these consequences occur, especially in situations that heighten perceptions of incongruity between the female gender role and leadership roles (ABSTRACT FROM AUTHOR).

**Porter, N., & Geis, F.L. (1981).** When seeing is not believing: Nonverbal cues to leadership. In C. Mayo & N. Henley (Eds.), Gender, Androgyny, and Nonverbal Behavior. New York: Springer Verlag, Inc.

**Porter, N., Geis, F. L., & Jennings, J. (1983).** Are women invisible as leaders? *Sex Roles*, 9(10), 1035-1049.

<http://zp9vv3zm2k.ssscom.ezproxy.library.arizona.edu/?sid=Refworks%3AThe%20University%20of%20Arizona&charset=utf-8& charset=utf8&genre=article&aulast=Porter&aunit=N.&title=Sex%20Roles&date=>

[1983&volume=9&pages=1035-1049&issue=10&issn=0360-0025%3B%201573-2762&atitle=Are%20women%20invisible%20as%20leaders%3F&spage=1035&au=Porter%2CNatalie&au=Geis%2CFlorence%20L.&au=Jennings%20\(Walstead\)%2CJoyce&](http://www.sagepub.com/journalsPermissions.nav?path=/journals/0360-0025/vol14/issue08/1035-1049.xml)

This study shows that women are unlikely to be perceived as leaders. Subjects (n=448) rated each member of a five-person group (shown in a photograph) on leadership attributes and also chose one of the five as contributing most to the group. Eight different stimulus slides were used. In two slides the head-of-the-table cue to group leadership was pitted against sex-role stereotypes. A man seated at the head of the table in a mixed-sex group was clearly seen as leader of his group, but a woman occupying the same position was ignored. The head-of-the-table cue identified women as leaders only in all-female stimulus groups. The data were consistent with the hypotheses that sex stereotypes still control social judgments, and that discrimination operates nonconsciously and in spite of good intentions (ABSTRACT FROM AUTHOR).

### **3e. Nominations for awards and allocation of resources**

**Carnes, M., Geller, S., Fine, E., Sheridan, J. & Handelsman, J. (2005).** NIH Director's Pioneer Awards: Could the selection process be biased against women? *Journal of Women's Health, Vol. 14(8):* 684-691.

<http://ezproxy.library.arizona.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=aph&AN=18598884&site=ehost-live>

One of the first National Institutes of Health (NIH) Roadmap initiatives to be launched was the Director's Pioneer Award. This award was established to "identify and fund investigators of exceptionally creative abilities and diligence, for a sufficient term (five years) to allow them to develop and test far-ranging ideas." Nine excellent scientists were chosen as NIH Pioneers, but the selection of all men is at odds with the percentage of women receiving doctoral degrees for the past three decades, serving as principal investigators on NIH research grants, and achieving recognition as scientific innovators in non-NIH award competitions. The absence of women Pioneers provokes the following question: In the context of extant research on the impact of gender-based assumptions on evaluation of men and women in traditionally male fields, such as science, were there aspects about the process of nomination, evaluation, and selection that inadvertently favored men? We present evidence to suggest that women scientists would be disadvantaged by the following components of the NIH Director's Pioneer Award initiative: (1) time pressure placed on evaluators, (2) absence of face-to-face discussion about applicants, (3) ambiguity of performance criteria, given the novelty of the award, combined with an emphasis on subjective assessment of leadership, potential achievements rather than actual accomplishments, and risk taking, (4) emphasis on self-promotion, (5) weight given to letters of recommendation, and (6) the need for finalists to make a formal, in-person presentation in which the individual and not his or her science was the focus of evaluation. We offer an analysis of this process to encourage the NIH to embark on self-study and to educate all reviewers regarding an evidence-based approach to gender and evaluation (ABSTRACT FROM AUTHOR).

**The RAND Corporation. (2005).** Gender differences in major federal external grant programs.

<http://www.rand.org/publications/TR/TR307/>

At NSF and USDA, over a recent three year period (2001–2003), there were no gender differences in the amount of funding requested or awarded.. The major exception was at NIH, where female applicants in 2001–2003 received on average only 63 percent of the funding that male applicants received (one third of this gender gap is explained by the under-representation of women among top 1 percent award winners). At NSF and NIH, women who applied in 2001 were less likely to apply again. The difference was much larger at NIH (more than 20 percent) than at NSF (5percent), and it applied to both successful and unsuccessful applicants in the first year (ABSTRACT FROM AUTHOR).

**Steinpreis, R. E., Anders, K. A., & Ritzke, D. (1999).** The impact of gender on the review of the curricula vitae of job applicants and tenure candidates: A national empirical study. *Sex Roles*, 41(7), 509-528.

<http://web.ebscohost.com.ezproxy.library.arizona.edu/ehost/detail?vid=6&hid=4&sid=0c623f1e-1548-48d1-b42f-afe069acfbdd%40sessionmgr9>

The purpose of this study was to determine some of the factors that influence outside reviewers and search committee members when they are reviewing curricula vitae, particularly with respect to the gender of the name on the vitae. The participants in this study were 238 male and female academic psychologists who listed a university address in the 1997 Directory of the American Psychological Association. They were each sent one of four versions of a curriculum vitae (i.e., female job applicant, male job applicant, female tenure candidate, and male tenure candidate), along with a questionnaire and a self-addressed stamped envelope. All the curricula vitae actually came from a real-life scientist at two different stages in her career, but the names were changed to traditional male and female names. Although an exclusively between-groups design was used to avoid sparking gender-conscious responding, the results indicate that the participants were clearly able to distinguish between the qualifications of the job applicants versus the tenure candidates, as evidenced by suggesting higher starting salaries, increased likelihood of offering the tenure candidates a job, granting them tenure, and greater respect for their teaching, research, and service records. Both men and women were more likely to vote to hire a male job applicant than a female job applicant with an identical record. Similarly, both sexes reported that the male job applicant had done adequate teaching, research, and service experience compared to the female job applicant with an identical record. In contrast, when men and women examined the highly competitive curriculum vitae of the real-life scientist who had gotten early tenure, they were equally likely to tenure the male and female tenure candidates and there was no difference in their ratings of their teaching, research, and service experience. There was no significant main effect for the quality of the institution or professional rank on selectivity in hiring and tenuring decisions. The results of this study indicate a gender bias for both men and women in preference for male job applicants (ABSTRACT FROM AUTHOR).

**Wenneras, C. & Wold, A. (1997).** Nepotism and sexism in peer-review. *Nature*, 387: 341-343.

<http://web.ebscohost.com.ezproxy.library.arizona.edu/ehost/detail?vid=9&hid=4&sid=0c623f1e-1548-48d1-b42f-afe069acfbdd%40sessionmgr9>

Examines the peer-review system of the Swedish Medical Research Council, where the success rate of female applicants for post-doc positions during the 1990s has been less than half of that of male applicants. Suggests that peer reviewers cannot judge scientific merit independent of gender. By comparing equally productive male and female applicants, the study found two non-merit-based variables that significantly affected the peer reviewers' scoring of an applicant: whether the applicant was affiliated with a reviewer (which was an almost identical percentage for male and female applicants) and the gender of an applicant (ABSTRACT FROM AUTHOR).

#### **4. Bias and the Multi-level Nature of Evaluation**

**Martell, R. F., Lane, D. M., & Emrich, C. (1996).** Male-female differences: A computer simulation. *American Psychologist*, Vol. 51(2): 157-158.

<http://web.ebscohost.com.ezproxy.library.arizona.edu/ehost/detail?vid=1&hid=22&sid=a8eac764-5e75-4889-93cd-b283084faeb9%40sessionmgr9>

Computer simulation modeled a pyramid organizational structure with initial conditions of equal men and women; 1% bias toward promoting men resulted in a community with 65% men at the senior levels. The authors conclude (p. 158) that "when sex differences explained but 1% of the variance, an estimate that might be dismissed as trivial, only 35% of the highest-level positions were filled by women. Thus, relatively small sex bias effects in performance ratings led to substantially lower promotion rates for women, resulting in proportionately fewer women than men at the top levels of the organization. These results confirm Eagly's (1995) point that the effects of male-female differences are best determined not by the magnitude of the effect but its consequences in natural settings. In this case, by taking into account the relative scarcity of very senior level positions in organizations as well as the weight accorded early career performance ratings, a little bias hurt women a lot. We suggest, then, a salutary approach to assessing practical significance is not to reject traditional effect size measures but to translate them into estimates of real world impact. Computer simulations are ideal for this" (ABSTRACT FROM AUTHOR).

**Valian, V. (1998).** Sex, schemas, and success: What's keeping women back? *Academe* 84(5): 50-55.

In this article, based on her book *Why So Slow? The Advancement of Women* (MIT Press 1998), Valian examines how gender schemas and the distribution of seemingly minor accumulations of advantages ultimately result in a glass ceiling. Refers to studies that have examined comparably educated men and women workers and found that men's experiences and qualifications count for much more than women's. In academia, men and women now start with the same salaries, but women's salaries do not progress as quickly as men's---the same applies to rank and tenure.

**Valian, V. (1998).** *Why so slow? The advancement of women.* Cambridge, MA: MIT Press.

Synthesizes a wide range of experimental and observational data that show the extent to which commonly held gender schemas result in the devaluation of women, particularly in science, academia, and the private sector. Referencing various experiments in cognitive psychology, Valian shows the extent to which unconscious, socially constructed notions of gender roles cause people to underestimate women's academic abilities while overestimating men's. Concludes that institutional reform, combined with better reasoning skills, will allow women academics to be more successful. Chapters include: Gender Schemas at Work; Gender Begins—and Continues—at Home; Learning About Gender; Biology and Behavior; Biology and Cognition; Schemas That Explain Behavior; Evaluating Women and Men; Effects on the Self; Interpreting Success and Failure; Women in the Professions; Women in Academia; Professional Performance and Human Values; Affirmative Action and the Law; Remedies.