To: Computer Science Faculty  
Re: Recommendation letters and Unintended discrimination based on gender  
From: Anita Jones  
Date: December, 2007

This is the season for faculty to write recommendation letters. I came across some quite compelling data on unintended discrimination that I think might be useful for all of us to consider.

All of this material comes from a well-reasoned site on the subject of gender discrimination at [http://www.hunter.cuny.edu/gendertutorial/tutorials.htm](http://www.hunter.cuny.edu/gendertutorial/tutorials.htm) by Professor Virginia Valian who is at Hunter College and City University of New York.

Content of this document:

- Two premises:
  - Both men and women perceive factual data about men and women differently.
  - Both men and women require more evidence to be convinced that a woman is in a leadership position than a man.
- Results of one study on letters of recommendation in academia where women are—unintentionally—discriminated against. This data is interesting because it calls out the elements of the kind of letters of recommendation that we all write.
- Conclusion: We should all think carefully about what we write in letters of recommendation for women, and men as well.

So, if you are still reading…… Any quoted material comes from the web site above which contains four tutorials. The term “schema” or “gender scheme” can be loosely translated as “gender expectation” or “gender stereotype”.

*Both men and women perceive factual data about men and women differently.*  
“Experimental data demonstrates that we do not see other people simply as people; we see them as males or females. Our gender expectations direct and skew our perception, even in the case of objective characteristics like height. In one example, a study (Biernat, Manis, & Nelson, 1991), the experimenters exploited the fact that our schemas include information that men are on average taller than women. In this experiment, college students saw photographs of other students and estimated their height in feet and inches. The photos always contained a reference item so that height could be accurately estimated.

“Unbeknownst to the students who were doing the estimating, the experimenters had matched the photographs so that for every photograph of a male student there was a female student of the same height. The students were affected by their knowledge that men are on average taller than women. They judged the women as shorter than they really were, and the men as taller.
“We all have non-conscious hypotheses about males and females and we all use those hypotheses in perceiving and evaluating others. The important point about this study is that a genuinely objective characteristic is not immune from the effects of gender schemas.”

*Both men and women require more evidence to be convinced that a woman is in a leadership position than a man.*

“Not only do schemas affect perceptions of competence, they also make it difficult for women to reap the benefits of their achievements and be perceived as a leader. In the head-of-the-table experiment, carried out by Porter and Geis (1981), college students saw a slide of 5 people seated around a table. The group was described as working together on a project. Two people sat at each side and one person sat at the head of the table.

“Some students saw a group in which all the people were male, others a group in which all the people were female, and yet others a group that included both males and females. Students were asked to say who was the leader of the group.

“In same-sex groups, students consistently identified the man or woman sitting at the head of the table as the leader. In mixed-sex groups, if a man was at the head of the table, students saw him as the leader. But if a woman was at the head, students labeled her as the leader about half the time and labeled a man seated elsewhere at the table as the leader about equally often.

“An important point is that there were no differences between male and female observers. Both made the same judgments. Nor was there any intention to discriminate. Nevertheless, notice that the female leader who is sitting at the head of a table loses out compared to the male leader. The symbolic position of leadership carries less weight for a woman than for a man. Women are less likely to obtain the automatic dereference that marks of leadership confer for men.

“Women are objectively hurt in situations of that sort, even if observers intend no hurt. A woman has to work harder to demonstrate that her apparent position of leadership is a real position of leadership.

“Not every person behaves on every occasion in accordance with gender schemas. Many different factors affect our evaluations and behaviors. But that variability should not distract us from what the odds are: the odds are that we all have a tendency to overrate men and underrate women, and we all have a tendency to see women as less leaderly than men.”

*Results of one study on letters of recommendation in academia.*

“Gender also is likely to influence letters of recommendation. Trix and Psenka (2003) analyzed 312 letters of recommendation for 103 successful applicants for faculty positions in a large medical school. Thirty percent of the people hired were women. Trix and Psenka found that letters for women were shorter than letters for men, which meant that fewer of the women's credentials were being described.

“More worrying, letters for women contained twice as many doubt raisers as letters for men; doubt raisers are statements like "she has a somewhat challenging personality"; "she worked hard on
projects she accepted"; her "personal life was in turmoil and in view of the difficulties she was experiencing ..., her performance was especially impressive". Letters for women also contained more grindstone adjectives, words like "hardworking", "conscientious", "dependable", and "diligent". There is nothing wrong with those traits, but unless they are balanced by words that suggest research excellence, it will seem as if the person works hard but isn't especially talented.

"The letters for women did not contain as many stand-out adjectives as did letters for men. Stand-out adjectives are words like "superb", "outstanding", and "excellent". Letters for women did not stress their research abilities as much as letters for men did. Strong letters of recommendation are important components of successful applications for graduate school admission, for post-docs and for jobs. Trix and Psenka's study has implications up and down the ladder. It suggests that faculty letters of recommendation for undergraduates, graduate students, and post-docs might unintentionally put women at a disadvantage."

The graph on the following page indicates that this research shows a dramatic difference in "quality" elements of a recommendation letter for men and for women.

*Note:* Nothing in the above implies that men and women have different schemas. Professor Valian asserts that both women and men have the same gender schemas and act on them.

**Bibliography**


Abstract: This study examines over 300 letters of recommendation for medical faculty at a large American medical school in the mid-1990s, using methods from corpus and discourse analysis, with the theoretical perspective of gender schema from cognitive psychology. Letters written for female applicants were found to differ systematically from those written for male applicants in the extremes of length, in the percentages lacking in basic features, in the percentages with doubt raisers (an extended category of negative language, often associated with apparent commendation), and in frequency of mention of status terms. Further, the most common semantically grouped possessive phrases referring to female and male applicants (‘her teaching,’ ‘his research’) reinforce gender schema that tend to portray women as teachers and students, and men as researchers and professionals.
Letters of recommendation: An example

Number of letters mentioning a given semantic realm