Give women an even chance

An important part of the mentoring role of academic advisors is writing letters of recommendation for worthy students who are applying for research grants, fellowships, and entrance to elite programs. Such letters often have more impact than grades or test scores at the graduate level, where factors such as initiative, hard work, creativity, independence, problem-solving ability, and teamwork are prized skills. Well-crafted, honest letters help in determining whether a candidate is a good fit. For that reason, I was surprised recently when asked to review 60 proposals from graduate students for small research grants. More than 10% of the applicants had at least one supporting letter containing inappropriate material for the decision at hand. All of the students so affected, unfortunately, were women, and those writing the problematic letters were nearly equally men and women. By describing how these instances appear from the standpoint of a selection committee member, my hope is that the professionalism in recommendation letters will improve.

As examples of the sort of problems, one letter described how the candidate was so good to her elderly mother, yet still enjoyed life, spending time in nature with her husband and her animal friends. Another letter reflected amazement that the candidate managed to balance so efficiently being a student, a scientist, and a mother. Such comments do indeed make impressions on a committee that must select only 1 in 10 for an award from a highly competitive pool. They cannot help but put a candidate at a disadvantage when compared to others who are praised for their self-initiated research projects, interesting uses of coursework to address new scientific problems, or careful background preparation for the research project proposed.

Beyond comments that were simply out of place for the decision at hand, I noted an overall bias in the language used to describe the male candidates versus some of the female candidates. In some letters, women were described as “friendly,” “kind,” “pleasant,” “humble,” and frequently, “nice.” While I am sure they were all of that, those were not necessarily the most relevant characteristics I was looking for in the next generation of scientists to advance the frontiers of discovery. Very different words were used to describe the male candidates (and many of the females as well): “brilliant,” “creative,” “hard-working,” “insightful,” and “showing leadership.”

Studies have documented bias in referees’ unblinded reviews of manuscripts for publication, but this was the first time that I noted such a bias in the language used to assess a student’s suitability for a research grant—a bias that could carry over to future funding decisions. I suspect that such bias creeps in unintentionally in most cases, but I also understand that gender stereotypes persist and that they have a basis in reality. Women still bear the majority of caregiver burdens for children and elderly parents. But that information does not belong in letters of recommendation. I like to think that I am a nice person. But “nice” never got me a research grant or professional position.

Now is the time to promote women as well as other underrepresented groups in science. The future strength of the global scientific enterprise depends on boosting the influx of diverse and talented researchers into science and engineering fields. Subtle bias, even unintended, in advancing this cohort can be more damaging than outright bias, because it is more difficult to detect and correct. I urge all who write these important letters of recommendation to take a last look before hitting “send” to be sure that what you have written is free of bias.

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