
Report of the Sloan School of Management

Reports of the Committees on the
Status of Women Faculty

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Massachusetts Institute of Technology

Statement from the Dean of the Sloan School of Management

At the MIT Sloan School, we teach future leaders that diversity can strengthen any organization by bringing more perspectives into deliberation and decision-making processes. We also teach them that this is not automatic: unless a culture of mutual respect and awareness is nurtured, diversity can be divisive and crippling. Until I read the report of the Sloan Gender Committee, I believed that we practiced what we preached.

I was well aware that our faculty has been less diverse on several dimensions than our student body, and that this has made Sloan less than it could be. But I had believed that as an institution we were working to increase diversity, in particular by trying hard to recruit more women to our faculty. I also believed that our culture accommodated diversity well, at least along the dimension of gender. After all, male and female faculty here have similar backgrounds, speak the same jargons, and seem to share a strong commitment to equality of opportunity. As scholars interested in improving organizational performance, we condemn glass ceilings and other forms of discrimination, and I have never heard a male colleague even suggest that women should be treated less well than men.

Thus when the Sloan Gender Committee began its work in 1999, I did not expect it to uncover much beyond the troublesome and persistent fact that we have fewer women, particularly senior women, than we should. I certainly did not expect to find that female faculty work at a different and less supportive Sloan School than their male colleagues.

The Committee did find some troublesome quantitative indicators. Despite what I had thought were serious efforts, we had not noticeably increased the representation of women on our faculty over the previous decade. I believe we hire and promote with good intentions, but the data make it clear that good intentions alone will not solve this problem. In addition, careful statistical analysis of salary data yielded some problematic results. This analysis has informed salary determination in subsequent years, to the benefit of some female and some male faculty. The finding that women on average take longer to be promoted to Full Professor than men is in some ways the most disturbing quantitative result. An important reason for this difference, though surely not the only one, is that women have been more likely than men, all else equal, to decide that they are not ready to be evaluated at this stage. This hints at serious cultural issues.

By far the most surprising aspect of the Committee's work is its profoundly disturbing analysis of faculty experience. This analysis makes it inescapably clear that in our culture, men and women faculty with outwardly very similar careers are, in effect, working at two different Schools and that the women are at a much less congenial and supportive Sloan than the men. These differences and the cultural issues they reveal were the focus of the senior faculty's discussion of the Gender Committee's report. This was an illuminating but ultimately very frustrating discussion. To use an antique term, there was much consciousness-raising. It was easy to generate consensus behind most of the

Committee's recommendations, and we have moved to implement most of them. But nobody believed that doing so would close the cultural divide the Report revealed. Until we can learn how to close this divide and actually close it, until men and women faculty work at the same Sloan School, we will not produce enduring solutions to our other problems of diversity.

I do not believe the cultural problems revealed by the Sloan Gender Committee are unique to Sloan; the other Schools' Committee reports are strikingly similar along this dimension. Nor do I believe these problems are unique to MIT or even to US universities. I think the pioneering work done on gender equity at Sloan and elsewhere at MIT makes it clear that as a society we have a long way to go before women are fully equal in the workplace.

I am deeply grateful to the members of Sloan's Gender Committee for giving us a clear and objective picture of a culture that is indefensible. Now – as people of conscience and as leaders – we must commit ourselves to the difficult but unavoidable task of changing that culture.

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**REPORT OF THE GENDER COMMITTEE
SLOAN SCHOOL OF MANAGEMENT
MIT**

March 2002

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Introduction

During the academic year 1999-2000, the Sloan Gender Committee collected data on the Sloan faculty in the following areas: the pipeline; salary; promotion and tenure rates and timetables; and faculty experience. Since 1991, women have increased from 7% to 10% of the senior faculty. At the same time, we found evidence of some important inequities. We were particularly concerned that in all areas of reported experience women were consistently more alienated and felt less empowered and more marginalized than a paired group of men.

The committee made a number of recommendations, both for the committee and to the Dean, a number of which have been put into place. In particular, the salary gap previously identified is considerably less.

Background

After the release of the Report on the Women Faculty in Science and the extraordinary media response it produced, the Provost asked each of the Deans to appoint a committee to look into the experience of the women faculty in their School.

At Sloan, the process started with a meeting of the tenured women faculty, who suggested to the Dean the members of the gender committee, which he accepted. A report was given to the Dean in the spring of 2001. Thereafter a summary report was prepared which was discussed at the Personnel Committee.

Pipeline, promotion and tenure, and salary data were provided by the School and analyzed by sub-groups of the committee. To gather data on faculty experience, the committee interviewed all tenured women faculty and a matched pair of male faculty. The matching was done by the committee and attempted, as much as possible, to match field and career stage. The matched male faculty were also interviewed.

The interviews, each conducted by one male and one female member of the committee, were guided by an interview protocol (see Appendix B) but were relatively unstructured. They were then coded independently by a male and female member of the committee into categories that emerged from them (see Appendix A).

Pipeline

Table 1 gives the number and percentage of women among the junior and senior faculty at Sloan from 1991 through 2001:

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Senior # women % women	3 7% (n=45)	3 6% (n=49)	4 8% (n=49)	4 8% (n=50)	5 10% (n=52)	6 10% (n=53)	7 12% (n=56)	6 11% (n=57)	6 11% (n=56)	6 10% (n=58)	6 10% (n=62)
Junior # women % women	8 22% (n=37)	10 26% (n=39)	10 24% (n=41)	9 26% (n=35)	7 27% (n=30)	8 29% (n=28)	5 26% (n=19)	6 22% (n=27)	7 23% (n=31)	5 17% (n=29)	8 23% (n=35)
Total # women % women	11 13% (n=82)	13 15% (n=88)	14 16% (n=90)	13 15% (n=85)	13 16% (n=82)	14 17% (n=81)	12 16% (n=75)	12 14% (n=84)	13 15% (n=87)	11 13% (n=87)	14 14% (n=97)

Note: The total number of men and women faculty in any given category is given in the parentheses.

The decline in percentage female from 23% junior faculty to 10% senior faculty is typical of the distribution in other fields and at other universities, a phenomenon called the leaking pipeline. It is possible, however, that the age distribution of the faculty is not yet in equilibrium and the full professor ranks are skewed by older cohorts consisting almost entirely of men. In order partially to account for this, we eliminated from the percentages all current faculty members who in 1989-90 were already full professors (1 woman and 33 men). This increased the percentage of women among the senior faculty in 2000-2001 to 18%, which brings it more in line with the junior faculty figure of 23%. The percentage of PhDs awarded to women over the last three years is 28%. So, even after accounting for the age distribution of full professors, there is still evidence that the proportion of women declines as one moves up the career ladder.

Salary

We examined the nine-month salary data for the academic years 1995-1996 through 1999-2000. We included age, rank, gender, academic field, and Deans' Office experience (i.e., whether a faculty member had served in the Deans' Office) and fit a least-squares model to the total population. For the year 1999-2000, we were able to account for 75% of the variance in salaries with this model. Rank, field, and Deans' Office experience were the strongest predictors. Eight women fell below the estimated line and three fell above the line. There were five positive outliers (greater than one-and-a-half standard deviations above estimated values), all of them men. The average of the women's actual salaries was 9% less than the average of their predicted values from this model.

(For the current academic year, 2001-2002, there has been improvement. For this model, in the current year, half the women (8) are above and half (7) below their predicted values, and the positive outlier group is no longer exclusively, though still predominantly male. Moreover, the average actual salary of the women is essentially the same as the average predicted salary.)

Since using this approach compares women faculty to a model that already includes them, a new model was fitted just to the male population. The male model accounts for 75% of the variance in men's salaries. When women's salaries are estimated on the basis of this model, the actual salary of all eleven women falls below their predicted salary. The average of the women's actual salaries was 16% less than the average of their predicted values. This difference does not include the cumulative effect of salary on future increases and pension accrual.

(Here, too, there is improvement. 6 of the women are above their predicted line and 9 are below. And, again, the average of the women's actual salaries is essentially the same as the average of their predicted values.)

Promotion and Tenure

We compiled information on promotion and tenure for faculty appointed as assistant professors starting in 1982. Our data were incomplete for the earliest years, and the findings represent the best assessment based on available data.

We examined the tenure rates based on these data, and found that the rate of tenure is comparable for women and men. Average times between ranks are based on all of those who actually attained the higher rank. Based on these data, the average time that it took women faculty to be promoted from Assistant Professor to Associate Professor without tenure was 4.3 years. The men, on average, took 4.6 years to attain this first promotion, a slight difference in favor of the women. Timing between associate professor without tenure and tenure is essentially the same: 2.2 years for the women, 2.1 years for the men.

The difference in timing between tenure and promotion to Full Professor, on the other hand, is considerably larger. Based on the same principle of calculation, the women took on average 5.0 years, as compared to 3.0 years for the men. Obviously, this difference has not only a status but also a compensation implication.

Faculty Experience

To evaluate faculty experience, the committee interviewed all 6 tenured women faculty. In addition, for each woman interviewed, a matched male faculty member was also interviewed. The committee attempted, as much as possible, to match field and career stage.

These interviews were fairly open-ended and were coded on ten different categories of experience that emerged from them. These covered areas such as experience at entry; mentoring and coaching through the tenure process; feelings of being valued, empowered, and belonging; experience of teaching (see Appendix A on exact methods and coding categories).

With 6 pairs and 10 dimensions there are a total of 60 comparisons that can be made. They fall out in the following way:

Man rated higher than the woman	40
Woman rated higher than the man	0
Both rated equally	17
Missing data	3

There is no doubt that the reported experience of the women faculty is considerably more negative than that of the men.

We found a big difference particularly between the feelings of access, empowerment, and belonging of the men and the women faculty. None of the men had a fully negative experience on these dimensions; only one woman had a clearly positive experience. We also found a difference on the experience at entry. Half of the senior women reported a negative experience with entry, in contrast to none of the men. Since experience at entry can be determining for what happens afterwards, this difference can have long-lasting effects.

Conclusion

As these findings make clear, there are identifiable differences in the compensation and reported experiences of men and women faculty members at Sloan. In compensation, the women lag the men, even though there has been improvement over the last two years. Nonetheless, when combined with the slower rate of promotion to full professor, these differences when extended through a normal career (including benefits, pension, etc.) could accumulate to a considerable sum. But it is the difference in experience that is the most striking. The men revealed a consistently more positive experience along a variety of dimensions, from mentoring and informal social contacts to committee work and feelings of power. The senior women faculty just do not feel as at home, or as valued, as was true for their male pairs.

Recommendations

We have recommendations both for the Gender Committee and for the Deans' Office.

1. Keep the Gender Committee active with rotating membership. Its activities should include the following:
 - Monitor and track salaries annually and report results to the Dean every January, prior to salary decisions. Keep a senior woman faculty member involved in this process. *(Done)*
 - Continue to track the experiences of the senior women faculty, establishing metrics by which to monitor progress. *(In progress)*
 - Initiate and regularly monitor the experiences of the junior women faculty. *(In progress)*
 - Create opportunities for conversation about gender issues.

2. The Deans' Office should undertake the following policies and actions:
 - Take the annual salary data provided by the gender committee and work towards redressing inequities in salary. *(In progress)*
 - Consider female candidates for positions and roles that could lead to Dean's Office posts. *(In progress)*
 - Put processes in place, in coordination with the Gender Committee, that will allow the monitoring of committee memberships, including committees that deal with resources; review, promotion, and tenure committees; program review committees; etc.
 - Have the Dean talk individually to every tenured faculty member not later than 3 years after receiving tenure to assess the readiness for promotion to full professor. Pay particular attention to the female faculty.
 - Make information available to current faculty and recruits about the kinds of resources that are available or may be the subject of negotiation.
 - Keep gender in mind in considering all ways in which Sloan presents itself, from presentations at faculty meetings to announcements of programs to listings for conferences, to ensure that women and men, if involved, are both represented.

Appendix A: Methods for Faculty Experience Study

The interviews, each conducted by one male and one female member of the committee, were written up by one of the interviewers and checked by the other one. Each interviewee was also given a chance to review the transcript before it was shared with the rest of the committee.

The committee read through these interviews and came up with a number of themes that seemed to emerge. These were divided into three categories as follows:

Category I:

- Experience at entry, extent of welcome
- Mentoring and coaching, particularly around tenure
- Post-tenure experience
- Amount of negotiation post entry

Category II:

- Access to central administration, feeling one is an asset, adding value
- Sense of empowerment with and respect from colleagues
- Sense of belonging, as opposed to isolation, alienation, marginalization

Category III:

- Teaching, relation to students
- Workload equity
- Support, within school and from outside

The final ratings were determined by a pair of raters (one male and one female member of the committee) randomly assigned to each category. They separately coded each of the dimensions for each of the interviews, and then compared their ratings. If there was disagreement and they could not decide, it was taken to the whole committee for resolution.

Each dimension was coded as ✓, ✓+, or ✓-. The whole interview was used to make these decisions. A check meant an average experience, with a check plus indicating a better than average experience, and a check minus indicating a worse than average experience. For example:

“I feel that I still need to demonstrate that I belong here” – coded ✓- for sense of belonging

“I feel connected to the power structure of the school. On committees, I think my voice is heard” – coded ✓+ for access to power

Appendix B: Interview Protocol

1. Open-ended: how did you get to MIT, what's happened since then? (e.g., key milestones)
2. What is the worst -- and best -- experience you've had at Sloan (whether professionally, interpersonally, etc.)?
3. What is the worst thing you've observed happen to someone else at Sloan?
4. Are there specific experiences or instances where you think being a woman/man has helped or hindered you at Sloan?
5. Specific prompts (where necessary):
 - teaching:* teaching experiences, student reactions
 - relations to Sloan:*
 - resources, non-point work (committees, secondary helping and advising with no formal recognition), mentoring, and feedback
 - power and self-esteem:*
 - negotiation experiences, feelings of marginalization and respect, meeting experiences (e.g., do you have a voice?)
 - relations with senior staff:* experiences, contacts
 - informal social contacts:*
 - dinners, lunches, sports (jogging, tennis, squash, etc.)
 - other:* ease of paper submissions and reactions to responses (both formal to journals and informal to colleagues); seminar presentations
6. Have you had any experience with harassment at Sloan?
7. Who at Sloan do you think is comparable to you in terms of career and work experiences?