Satisfaction with Research Environment among
Junior STEM and Non-STEM Faculty at Brown University:
A Comparison of 2006 and 2008 COACHE Reports

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Collaborative on Academic Careers in Higher Education Survey (COACHE)

Based at the Harvard Graduate School of Education and supported by the Ford Foundation, COACHE is committed to gathering the peer diagnostic and comparative data academic administrators need to recruit, retain, and develop the cohort most critical to the long-term future of their institutions.

In 2006, the COACHE survey was administered to all eligible (n=82) junior level faculty at Brown University. The final response rate at Brown was 68%. The survey was repeated in 2008 with a response rate of 74%. The results from Brown tenure-track faculty were then examine in aggregate with almost 4,500 other junior faculty from universities across the United States.

The survey asked several questions on a variety of categories including: (1) tenure clarity and fairness, (2) nature of workload, including research and teaching environment as well as quality of students, (3) effectiveness of key policies, including mentoring, childcare, leaves, etc., (4) compensation, (5) work and family balance, (6) collegiality, and (7) global stratification.

As compared to other peer institutions, Brown University was named an “exemplar” institution. In order to qualify as an “exemplar” university, Brown needed scores that were notably higher than similar institutions (n=31). Five universities (Auburn, Brown, Ohio State, Stanford, and the University of Illinois at Urbana-Champaign) achieved exemplary status in four of the seven categories detained above.

Brown University ranked highest amongst its peers in the categories “nature of work” and “global satisfaction.” It ranked second in the categories “tenure clarity” and “collegiality.”

First collected in 2006, the Collaborative on Academic Careers in Higher Education (COACHE) Survey captured tenure-track faculty members’ understandings of tenure and promotion practices and policies, satisfaction with research and teaching opportunities, and experiences of campus culture and collegiality. The following highlight additional analyses comparing the experiences of STEM and non-STEM faculty over time (from 2006 to 2008) as well as comparing levels of satisfaction with other NSF ADVANCE institutions.
The Way Faculty Members Spend Time
Junior faculty were asked a variety of questions regarding their satisfaction with their research environment. From 2006 to 2008, the percent of junior STEM women and men faculty who were satisfied with the way they spent their time as faculty members decreased. For STEM women, this percentage of those who were satisfied declined by nearly one half, from 90% to 44%, two years later. For junior men, this figure also decreased, with a smaller differential, from 80% to 64%. It is notable that an overwhelming percent of junior faculty were satisfied with the way they were spending their time in 2006. Although this figure diminished for men and women in 2008, still approximately half of faculty remained satisfied. In 2006, all STEM junior faculty were more satisfied with their time spent as researchers than compared to peers at Other NSF ADVANCE institutions. However, in 2008, all STEM junior faculty were less satisfied when compared to their counterparts at Other NSF advance institutions.

What is Expected of Faculty as Researchers
Junior faculty were asked a series of questions to assess to what degree they were satisfied with what was expected of them as a researcher. In 2006, the majority of Brown STEM faculty answered that they were satisfied with researcher expectations with an overwhelming 88% for men and 80% for women. The figures for men and women are both higher than the level of satisfaction expressed by STEM faculty (men and women) at Other NSF ADVANCE institutions. Of note, female STEM faculty at Brown in 2006 were shown to be satisfied 15% more than satisfied (at 80%) when compared with their female counterparts at other institutions.
Also in 2006, data was collected on this same question for Non-STEM faculty at Brown. The level of satisfaction of Non-STEM faculty for men and women was apparently similar to the response of Non-STEM faculty at other NSF ADVANCE Institutions. For Non-STEM men at Brown, 79% were satisfied with what was expected of them as a researcher as 72% of the men from Other NSF Advance institutions expressed this satisfaction as well. The figure for Non-STEM women who were satisfied at Brown in 2006 and women Non-STEM at Other NSF institutions was exactly the same, measuring at 66%.

**Research Service and Facilities**

Faculty were asked about their research services and the quality of their facilities which include offices, labs, and classrooms. Overall, Brown STEM women and men faculty expressed a greater amount of dissatisfaction with research services and quality of facilities when compared to their counterparts at Other NSF ADVANCE institutions. There are, however, two exceptions to this trend. In 2006, female STEM faculty at Brown were 12% less dissatisfied with research services than their female counterparts at Other NSF ADVANCE institutions. In 2008, male STEM faculty at Brown were 5% less dissatisfied with the quality of facilities than their male counterparts at Other NSF ADVANCE institutions.

In 2006, 43% of male STEM faculty at Brown were dissatisfied with research services while a lower percentage, (20%) of female STEM faculty were similarly dissatisfied. In 2008, the number of men who were dissatisfied decreased slightly, measuring at 39%. However, the figure for women STEM who were dissatisfied increased by 30%. This 30% increase of Brown
STEM women in dissatisfaction presents the greatest differential of measurement when compared to the changes in STEM men from Brown and Other NSF ADVANCE institutions figures.

When faculty were asked about the quality of their facilities as pertaining to offices, labs, and classrooms, approximately one half of Brown STEM faculty expressed dissatisfaction in 2006 (44% of men and 50% of women). However, two years later, the level of dissatisfaction decreased for both male and female STEM faculty. In 2008, 16% of men STEM faculty were dissatisfied which is a 28% decrease from the finding in 2006. Nevertheless, it is notable that the level of dissatisfaction at Other NSF institutions for male and female STEM faculty was 21% and 24% respectively, which is markedly lower than the Brown figures from 2006.

**Research Funding**

Faculty were asked how satisfied they were with the amount of research funding they were expected to find. In both 2006 and 2008, a greater percentage of Non-STEM faculty men and women answered they were satisfied when compared to men and women STEM faculty. In 2006, 32% of male STEM and 40% of female STEM faculty responded that they were satisfied with funding while a higher percentage of Non-STEM faculty expressed this satisfaction (55% for men and 57% for women). In 2008, the percentage of male STEM faculty who were satisfied only decreased by 1%. However, the amount of female STEM faculty who were satisfied decreased by 29%.

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**Percent of Brown University Faculty "Satisfied" with "The amount of research funding you are expected to find" - 2008**

- **STEM**
  - Women: 11%
  - Men: 31%

- **Non-STEM**
  - Women: 30%
  - Men: 53%
Access to Teaching Assistance

Faculty were asked about their level of satisfaction with the amount of access to teaching fellows and graduate assistants. In 2006, approximately one half of STEM faculty at Brown were satisfied with their access to teaching assistance (52% for men and 40% for women). These figures are similar to the data accrued from Other NSF Advance institutions in which 49% of men and 46% of women STEM faculty were satisfied. Comparably, in 2008, 50% of men STEM faculty at Brown were also satisfied. However, also in 2008, 22% of women STEM faculty at Brown were satisfied which is 18% less than the amount of STEM women satisfied in 2006 and 24% less than the amount of women STEM at Other NSF ADVANCE institutions.