

**2011 Brown University Faculty Climate Survey:
Summary Report Prepared for ADVANCE at Brown**

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Purpose of Report

The ADVANCE Program at Brown University commissioned the Brown University Faculty Climate Survey in the spring of 2010. The purpose of this survey was to examine the quality of the environment for faculty at Brown University. More specifically, ADVANCE at Brown sought to evaluate the experiences of women and men faculty members in both the STEM and non-STEM fields on a variety of topics. These topics included: (1) general work environment and climate, (2) perceptions of tenure and promotion, (3) mentoring, and (4) work-family balance. This report summarizes the results of the survey pertaining to these topics of interest to ADVANCE at Brown.

Methodology

During the summer of 2010, ADVANCE at Brown worked closely with Institutional Research and the Office of the Dean of the Faculty to develop the best approach to conducting a wide-scale survey of faculty's experiences at Brown University. Present at these meetings were:

- K. Tracy Barnes, Director of Institutional Research
- Elizabeth Doherty, Senior Associate Dean of the Faculty
- Krista Hedderich, Program Specialist of ADVANCE at Brown
- Amy Robb, Program Manager of ADVANCE at Brown
- Carrie E. Spearin, Internal Evaluator of ADVANCE at Brown and Visiting Assistant Professor, Department of Sociology

At these meetings, it was decided that the best approach would be to utilize a core faculty climate survey constructed by the [Association of American Universities Data Exchange](#)

[\(AAUDE\)](#). The AAUDE is a public service organization whose purpose is to improve the quality and usability of information about higher education. Membership is comprised of AAU institutions that support this purpose and participate in the exchange of data/information to support decision-making at their institution. Because Brown University is a member of the AAU, ADVANCE at Brown could take advantage of this core survey with the possibility of constructing additional, Brown specific, questions if warranted. Furthermore, if Brown University used this core survey and supplied the data to the AAUDE, Brown would have the ability to access similar data collected from other peer institutions who are also members of the AAU. Institutional Research and the Office of the Dean of the Faculty then contracted with Massachusetts Institute of Technology to administer the survey to all regular faculty members at Brown in January and February of 2011.

Questions contained in the core faculty climate survey gathered data on the following themes: (1) overall satisfaction, (2) workload, (3) atmosphere of department, (4) mentoring, (5) promotion and tenure, (6) hiring and retention, (7) life outside the institution, and (8) basic demographic information. In addition to the questions contained in these eight main thematic areas, ADVANCE at Brown developed a series of detailed questions specifically designed to assess perceptions of the importance of mentoring and experiences with mentoring programs created and managed by ADVANCE at Brown staff. The first of these questions asked respondents if they had a formal mentor assigned to them from their department and/or outside their department. Follow-up questions assessed the helpfulness of this departmental or non-departmental mentoring.

A second set of questions examined the importance of mentoring. This series of questions asked faculty their level of agreement with the following questions:

1. I believe that good mentoring is important to the success of most faculty members.
2. Brown places a high priority on quality mentoring.
3. My department, in particular, places a high priority on quality of mentoring.
4. My discipline or field values mentoring.
5. Mentoring about teaching is important.
6. Mentoring about the promotion process is important.
7. Mentoring about publications is important.
8. Mentoring about work-life issues is important.

9. It is important for mentors to assist mentees in establishing a balance between teaching, research, and service responsibilities.
10. It is important for mentors to help mentees set goals: short term (people, procedures) and long term (promotion, professional profile, tenure).

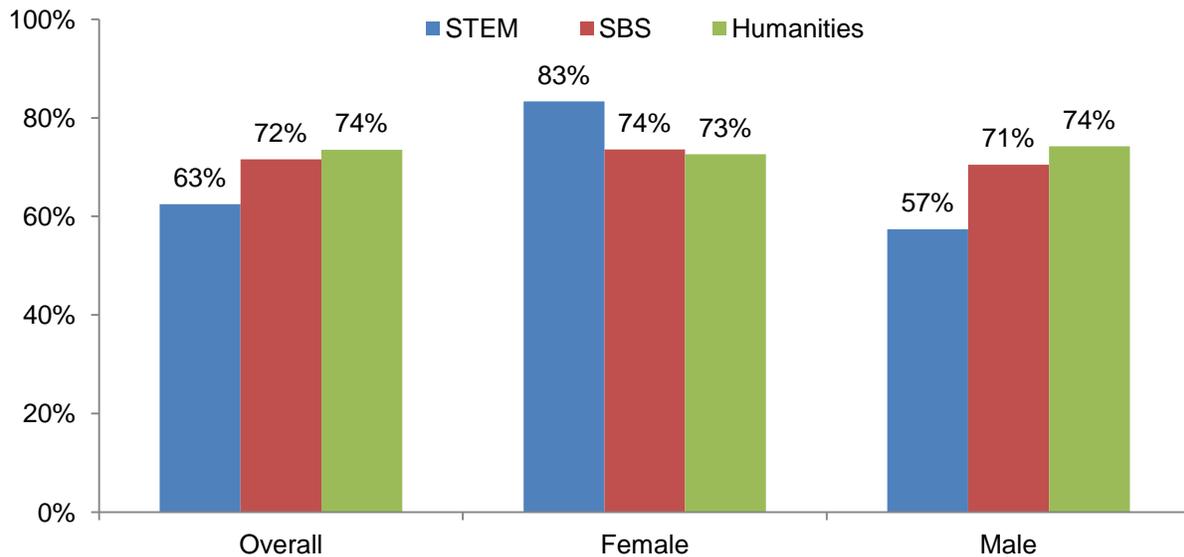
All other edits to the core survey questions were minimal and only altered to make the survey tailored to experiences of Brown University faculty.

In mid-January of 2011, all regular faculty were sent a cover letter from the Provost and Dean of the Faculty's Offices detailing the purpose of the survey and encouraged faculty response when the invitation to participate arrived. On January 18, all regular faculty were contacted via email to participate in the Brown University Climate Survey using a web-based format. Email reminders were sent on January 24, 31, and February 7. Additionally, all regular faculty were sent an email from the Faculty Executive Committed encouraging their participation on February 4. The survey closed on February 9, 2011.

During the 23 survey days, 404 of the 595 regular (tenured and tenure-track), non-medical school faculty completed the Brown University Climate Survey¹. This yielded an overall response rate of 67.9%. There were slight differences in response rate by broad area of study and gender (Figure 1). Response rates were highest (73.5%) among the faculty from the Humanities. Response rates were lowest (62.5%) among the science and engineering (STEM) faculty. The response rate for the social and behavioral sciences (SBS) fell between the two, at 71.6%.

¹ In total, the survey was administered to 676 faculty members at Brown University. This included lecturers and senior lectures, as well as some faculty members from the medical school (e.g. Community Health, Pathology, Orthopedics, etc.). Due to the overall focus of ADVANCE at Brown, these non-tenure track faculty as well those from the medical school were excluded from the population of interest, resulting in a total population of 595.

Figure 1. Response Rates by Broad Academic Division and Gender



Within these broad academic areas of study, there are notable differences in response rates by gender. The response rate for STEM women was 83.3% whereas the response rate for STEM men was only 57.4%. Among all areas of study, male STEM faculty have the lowest response rates (70.5% SBS, 74.2% Humanities). Overall, with the exception of male STEM faculty, response rates are fairly high (close to or greater than 70%) indicating a high degree of confidence in the generalizability of the following results. It is highly likely that the descriptive report that follows represents the general experience and sentiment of Brown University faculty in the early Spring of 2011.

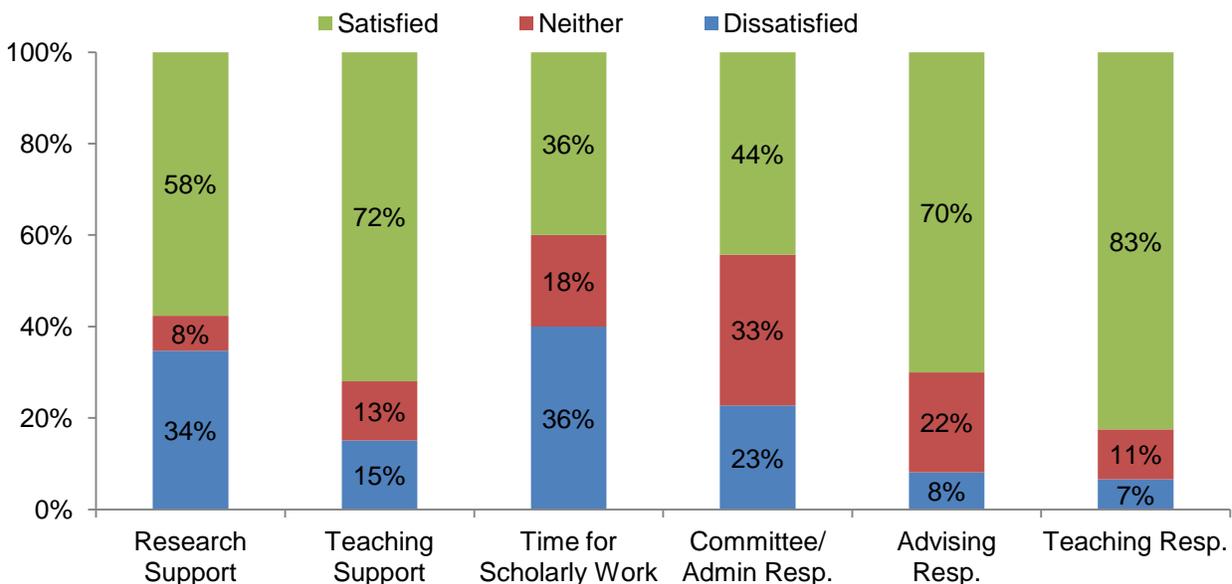
Results

The data were held at Institutional Research at Brown University. ADVANCE at Brown made a series of data requests detailing the type of analyses needed. The following provides a summary of the results of those thematic areas deemed most important to the ADVANCE at Brown program (overall satisfaction, workload, perceptions of climate and opportunities, mentoring, perceptions of tenure and promotion, and life outside of Brown). Results are examined overall, by broad discipline, for women only by broad discipline, and finally within STEM only by gender.

Overall Satisfaction

In general, just over three-quarters (75.1%) of regular faculty at Brown indicate they are “somewhat satisfied” or “very satisfied” being a faculty member at Brown. This varies slightly by discipline. Those faculty members in the social and behavioral sciences (SBS) are least satisfied (66.0%), whereas those in the Humanities indicate higher levels of satisfaction (80.6%). Among women only, over 80 percent (82.2%) of women in STEM are satisfied being faculty members at Brown, but only 59.0% of SBS women faculty indicate the same. Isolating those faculty only in the STEM fields, women indicated higher rates of satisfaction than men STEM faculty members (74.8% for men v. 82.2% for women). However, these observed differences are not statistically significant.

Figure 2. Level of Satisfaction with Resources and Service – All Faculty



Faculty members were also asked how satisfied they were with the resources Brown provides to “support your research and scholarship” and “support your teaching” (Figure 2). Overall, faculty indicated more satisfaction with the level of support for teaching (72.0% satisfied) as compared to research and scholarship (57.7%), with little if any variation by broad discipline. When examining the responses from women faculty only, there are some differences by discipline for overall satisfaction with support for teaching. SBS women are less likely to indicate satisfaction (59.0%) as compared to STEM women faculty (71.1% satisfied) and women faculty in the Humanities (73.6%). However, this difference is not statistically significant. A slightly different picture emerges from the examination of only STEM faculty. While there is little difference

between men and women STEM faculty in satisfaction with support for teaching, there is some disparity by gender regarding satisfaction with research and scholarship support. Less than half (46.7%) of STEM women faculty indicate they are satisfied with the level of research support they receive, as compared to almost two-thirds of STEM men (60.2% are satisfied). Furthermore, 40% of STEM women faculty indicated they were either “very dissatisfied” or “somewhat dissatisfied” with the resources provided to them by Brown for their research and scholarship.

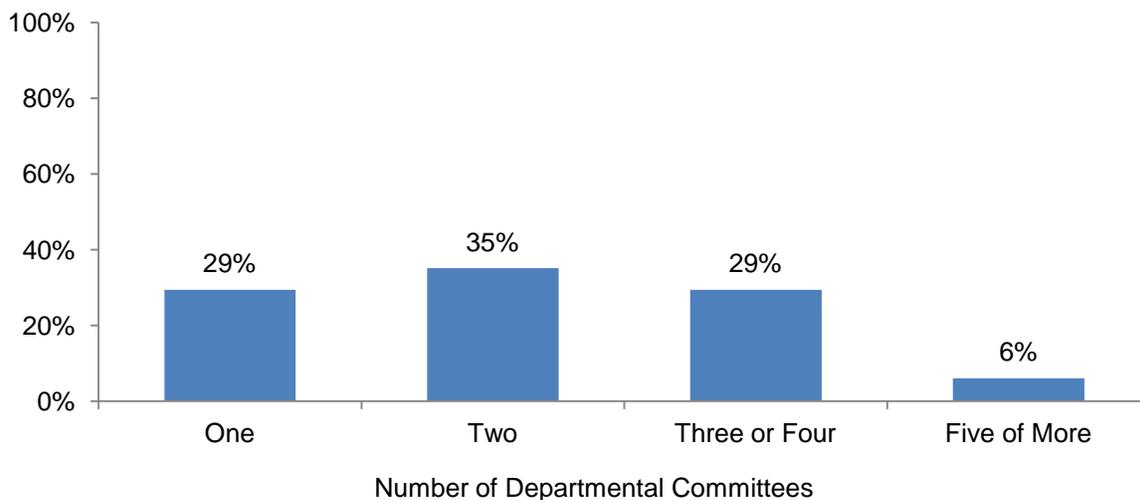
Some of this level of dissatisfaction may be a reflection of faculty’s general dissatisfaction with the time available to them for scholarly work and committee and administrative responsibilities (Figure 3). Overall, less than half (45.7%) of faculty report they are satisfied with the time available for scholarly work and just over one-third (36.2%) report they are very dissatisfied or somewhat dissatisfied. Similar results are seen for satisfaction with committee and administrative responsibilities, with just under half (44.3%) reporting they are satisfied and slightly less than one-quarter indicating some level of dissatisfaction (22.7%). In general, SBS faculty indicate the highest levels of dissatisfaction with the time available for scholarly work (43.7%) and committee and administrative responsibilities (37.3%). This is compared to STEM faculty, where only one-quarter (25.9%) indicate some level of dissatisfaction with time for scholarly work and less than one-third (15.9%) report dissatisfaction with committee and administrative responsibilities. These differences by broad discipline in both of these areas is statistically significant ($p < .01$). Among women faculty only, there is little to no difference in rates of satisfaction/dissatisfaction by discipline for time available for scholarly work. Overall, about half (STEM 40.5% - SBS 56.8%) of women in each of the three broad disciplines indicates some level of dissatisfaction and around a quarter report being satisfied (28.8% Humanities – 27.0% SBS). However, there is a statistically significant difference for women by broad discipline with regards to level of satisfaction with committee and administrative responsibilities; significantly more SBS women faculty report being dissatisfied (45.9%), as compared to only 21.4% of STEM women faculty and 17.3% of women faculty in the Humanities ($\chi^2(df=3) = 10.145, p = .038$).

Workload

Following the section on overall satisfaction, faculty were asked specifically about their current workload. Overall, most faculty indicated they were very active in service commitments to both the university and to their discipline (Figure 3). Slightly more than one-third (35.1%) of all

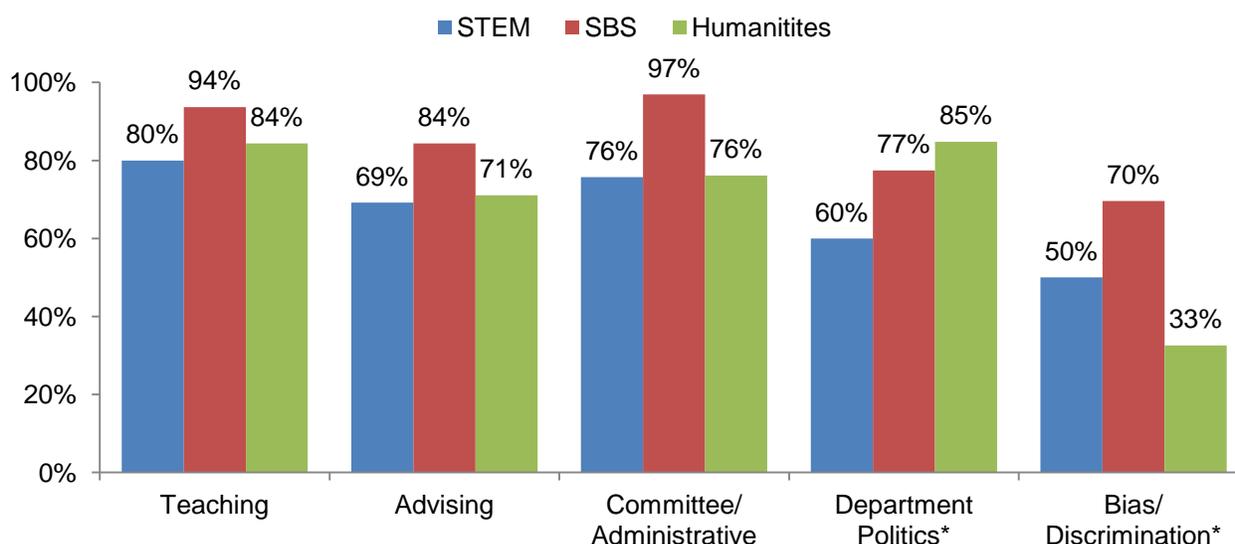
faculty indicate they served on two departmental committees (formal and ad hoc, excluding thesis committees) during the 2010 calendar year. Another 35.4% of faculty served on three or more departmental committees. Fewer faculty indicated they served on multiple other university committees or external committees or board related to your discipline (e.g. accreditation, editor of a journal, officer of a professional association). One-third (33.7%) of faculty indicated they served on two or more university committees and just over half (51.7%) served on two or more external committees during 2010. There were no significant differences in number of committees served by broad academic field, by gender, or by gender within the STEM fields only.

Figure 3. Amount of Department Committee Service – All Faculty



In addition of specific aspects of their workload, faculty were also asked about current sources stress during the past twelve months. The largest source of stress indicated by most faculty were teaching responsibilities; 80% of all faculty considered this an “extensive” or “somewhat” source of stress. Faculty were least likely to report bias/discrimination/unfairness in procedures as a source of stress (68.9% responded “not at all”).

Figure 4. Sources of Workload Stress for Women Faculty in Last 12 Months



*Indicates statistical significance at $p < .10$

While similar results appear across all broad academic disciplines, some slight, but important, differences do emerge when examining these sources of stress among women only and within STEM. Figure 4 shows the percent of women faculty by broad discipline who indicated a particular aspect of their workload was either “somewhat” or an “extensive” stress for them over the past twelve months. Overall, women in the STEM fields indicate lower levels of stress as compared to their peers on these particular aspects, with teaching responsibilities being the largest stressor (80.0%). STEM women faculty were the least among their peers to indicate bias/discrimination/unfairness in procedures was a source of stress (50.0%). Women faculty in the social and behavior sciences indicated the highest levels of stress in almost all aspects as compared to their peers. Teaching responsibilities (93.7%) and committee and/or administrative responsibilities (96.7%) were the largest stressors for most SBS women faculty. Among women faculty, those in the Humanities were most likely to respond that departmental or campus politics were a source of stress during the past year (84.8%). In addition, the differences among women faculty by broad academic discipline for departmental or campus politics is statistically significant ($\chi^2(df=4) = 8.416, p = .077$). These differences are also statistically significant for bias/discrimination/unfairness as well ($\chi^2(df=4) = 14.430, p = .006$).

Two additional results are noteworthy. Among STEM faculty only, there is a statistically significant difference between men and women regarding advising responsibilities as a source of

stress. While half of all men STEM faculty indicated that this was “not at all” a source of stress, almost 70% of women STEM faculty indicated it was “somewhat” or an “extensive” source of stress ($\chi^2(df=2) = 5.269, p = .072$). There are also statistically significant differences by gender among STEM faculty for the aspect of bias/discrimination/unfairness in procedures. While fewer than one-quarter of men indicated this was a source of stress (20.4%), half of all STEM women indicated it was either “somewhat” or an “extensive” source of stress (50.0%) ($\chi^2(df=2) = 11.981, p = .003$).

Perceptions of Climate and Opportunities

Brown faculty were asked their level of agreement or disagreement with a series of questions assessing the overall climate in their department and Brown, including feelings of being valued, relationship with department chair, and feelings of exclusion based on race/ethnicity, gender, and sexual orientation. Overall, about three-quarters of faculty who responded to the survey indicated they agreed their colleagues valued their research/scholarship (76.1%), valued their contributions to teaching (76.7%), and valued their service and administrative contributions (71.9%). Little differences were observed when the data were examined by broad discipline, among women faculty only, or among men and women within the STEM departments. Notable differences are detailed below.

As compared to faculty in the STEM fields or Humanities, SBS faculty were significantly less likely to agree with the statement “my colleagues value my contributions to teaching.” Less than two-thirds (62.6%) of SBS were in agreement with the statement, as compared to 77.2% of STEM faculty and 85.4% of Humanities faculty. This difference is statistically significant ($\chi^2(df=6) = 18.505, p = .005$). When comparing only women faculty, SBS women faculty are even less likely to feel valued with regards to their teaching contributions; slightly more than half (58.6%) of SBS faculty agreed with the statements, as compared to 70.0% of STEM women faculty and 84.1% of women faculty in the Humanities. However, this difference is not statistically significant.

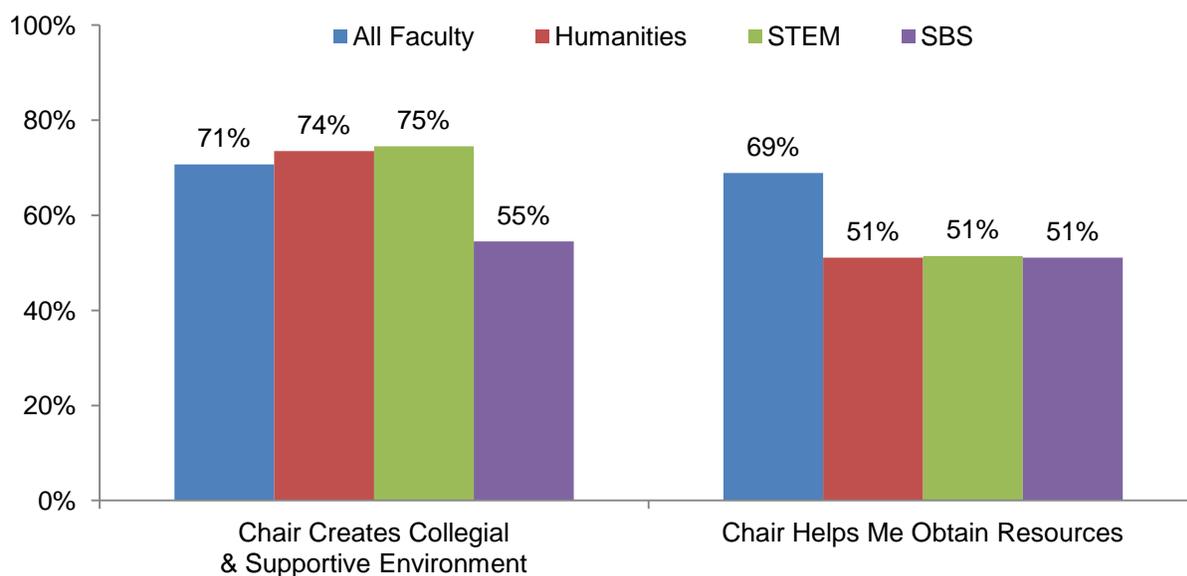
There are also statistically significant differences among women and men faculty in the STEM fields. As a whole, men STEM faculty are far more likely to agree their research and scholarship, as well as their service contributions, are valued by their colleagues than women STEM faculty. Whereas almost 90% (86.2%) of all men STEM faculty agree their research and scholarship are valued by their colleagues, only 60% of women STEM faculty are in agreement

($\chi^2(df=2) = 12.586, p = .002$). With regards to value of service and administrative contributions, STEM women and men are in agreement in similar rates (70.6% for men and 66.7% for women), but far more STEM women faculty report they disagree with the statement (17.9% as compared to 7.3%). Furthermore, more men STEM faculty reported they “neither agree or disagree” with the statement (21.1%) than women STEM faculty (10.3%). These differences by gender for STEM faculty are also marginally statistically significant ($\chi^2(df=3) = 7.619, p = .055$).

Faculty were also asked to agree or disagree with a series of statements regarding their department chair and departmental climate. There were many statistically significant differences among broad disciplines, among women faculty only, and between women and men in the STEM fields. Overall, SBS faculty, especially women SBS faculty, and women, as compared to men, in the STEM fields were least likely to be in agreement with many of these statements. Important results are highlighted below and each difference that is described is statistically significant ($p < .10$) unless otherwise noted.

Two statements prompted faculty directly about their department chair (Figure 5). The first stated, “My chair/director/dean creates a collegial and supportive environment.” Slightly less than three-quarters (70.69%) of faculty were in agreement with this statement and slightly less than one-fifth disagreed with the statement (17.5%). Differences were most pronounced when examining the data by broad discipline. Whereas almost three-quarters of faculty in the Humanities (73.5%) and STEM fields (74.5%) were in agreement, only 54.5% of SBS faculty agreed their chair/director/dean creates a collegial and supportive environment. Furthermore, SBS women were the least likely to report agreement with this statement. As compared to STEM women faculty (62.5%) and women faculty in the Humanities (72.1%), only 37.9% of SBS women agreed their chair creates a positive or supportive environment.

Figure 5. Climate Created by Departmental Chair – By Broad Discipline



These differences continue in regards to agreement with the following, “My chair/director/dean helps me obtain the resources that I need.” Less than two-thirds (60.4%) of faculty were in agreement with this statement and more than one-quarter (26.1%) were in disagreement with the statement. Both STEM (51.4%) and SBS (51.1%) faculty were more likely to agree that their chair helps them obtain resources than those faculty in the Humanities (68.9%). Women in the STEM fields are the least likely to agree (37.5%) with the statement, as compared to other women faculty (50.0% of SBS women and 70.5% of women in the Humanities). Of additional interest is the level of disagreement with the statement. Almost half of all women in the STEM fields (42.5%) disagree that their chair helps them obtain the resources they need. There are also noteworthy differences among men and women faculty in the STEM fields. Women are far less likely to be in agreement (37.5%) with the statement than men STEM faculty (56.5%).

While almost three-quarters (73.6%) of all faculty agreed they had a “voice in the decision-making that affects the direction of my department,” there were significant differences by broad academic discipline and gender with the STEM fields. While not statistically significant, it is interesting to note that SBS and STEM faculty were both less likely to agree (69.6% and 68.5% respectively) with almost a quarter (22.5%) of SBS faculty disagreeing, they had a voice in their department as compared to faculty in the Humanities (81.6% in agreement). There are also clear, and statistically significant, differences among women and men STEM faculty regarding having a “voice” in their departments. While almost three-quarters of men STEM faculty were in

agreement (72.2%) and only 12.0% were in disagreement, over a quarter (27.5%) of STEM women faculty disagreed that they have voice in the department and only fewer than two-thirds (62.5%) were in agreement

In regards to feelings of fairness with allocation of assignments and the equity and transparency of procedures, SBS faculty, especially women, as compared to all other groups, were least likely to respond positively. While almost three-quarters (70.4%) of all faculty agreed with the statement, “my department’s procedures are fair and equitable to all,” only 37.9% of women SBS faculty agreed with the statement, with almost half (48.3%) indicating disagreement. Similarly, whereas almost two-thirds of all faculty agreed with the statement, “my department’s procedures are transparent and open for discussion,” over half (51.7%) of all SBS women faculty disagreed with this statement. Women SBS faculty were also most likely to report disagreement with the statement, “my department’s allocation of committee assignments are fair and equitable to all” (50.0% disagreed with the statement, 32.1% agreed). As compared to SBS women faculty, STEM women faculty appear to fare better in regards to fairness and equity in their departments. However, upon further examination, STEM women faculty report significantly lower levels of agreement and higher levels of agreement as compared to their male counterparts. Slightly more than half (55%) of STEM women agreed their department’s procedures were transparent and open for discussion as compared to 70.4% of men STEM faculty. Likewise, far few women STEM faculty indicated that allocation of committee assignments were fair and equitable for all (45.0% STEM women and 65.1% STEM men).

A final set of statements measured feelings of exclusion based on race/ethnicity, gender, or sexual orientation. While there were few remarkable differences between the broad academic fields or among women, there were several statistically significant different among women and men in the STEM fields. Almost a quarter (22.5%) of women STEM faculty indicated they felt “excluded from an informal network in my department,” as compared to only 15% of men. There are striking differences in responses between men and women STEM faculty in regards to the following statement, “I have to work harder than some of my colleagues to be perceived as a legitimate scholar.” Less than 10% of men agreed with this statement as compared to almost half of all women respondents in the STEM fields (45.0%). Finally, women and men differed in their agreement and disagreement with the following, “I feel the climate and opportunities for female faculty at Brown are at least as good as those for male faculty.” Half of

all women STEM faculty disagreed with this statement (as compared to 13.9% of men) and over two-thirds (67.6%) of men agreed with the statement (40.0% of women agreed).

Mentoring

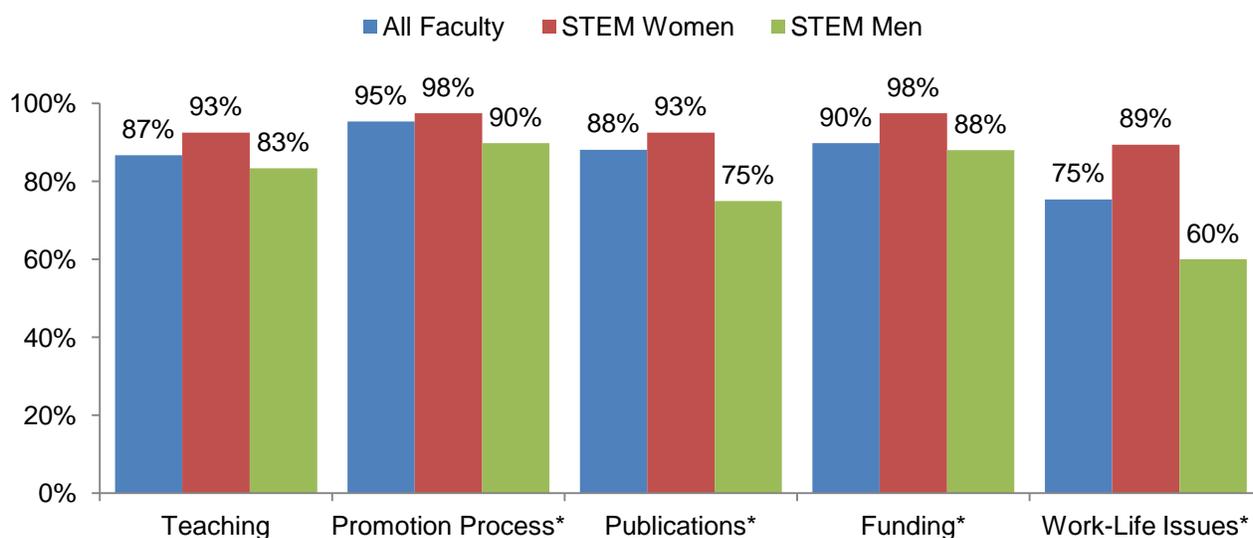
Faculty were asked a series of questions regarding experiences with mentoring at Brown. Two-thirds (66.6%) of all faculty responded they served either formally or informally as a mentor for another faculty member at Brown. Of those who indicated they served as a mentor, one-third (35.4%) served through a formal program. While it appears being a mentor is a common experience for all faculty, there is a significant difference with regards to serving as a mentor through a formal program by broad discipline. Those faculty in the STEM fields (31.7%) and SBS faculty (30.0%) show higher levels of formal mentoring than faculty in the Humanities (19.8%). This difference is statistically significant ($\chi^2(df=6) = 19.082, p = .004$).

While the experience of being a mentoring is common among faculty, as would be expected, the experience of being a mentee is less common. Slightly more than one-quarter (26.1%) of faculty indicated they had one or more formal mentors though programs administered by the university, whether or not the programs were mandatory. Overall, most mentees found their mentors to be helpful, but formal mentors that were chosen by the mentee themselves were reportedly more helpful (74.7% reported helpful) than those who were assigned to the mentee (53.8% reported helpful). There are no significant differences in the mentee experience by broad discipline or gender. However, there are differences with regards to feelings of adequate mentoring. Almost one half of all faculty (42.6%) reported they do not feel they have received adequate mentoring while at Brown. Faculty in the Humanities indicate highest levels; 50% of all Humanities faculty reported they do not feel they have received adequate mentoring as compared to STEM faculty (38.3%) and SBS faculty (34.9%). This is also reflected in the responses by Humanities faculty regarding whether they believe they have been mentored in a comparable manner to their peers. While less than one-third (31.0%) think they have been mentored less than peers, almost 40% of Humanities faculty report the same (38.5% as compared to 29.0% of STEM faculty and 25.0% of SBS faculty). There are no notable differences by gender.

All faculty were asked to what extent they agreed or disagreed with a series of statements regarding the value of mentoring at Brown and within their discipline as well as the importance of specific aspects of mentoring. An overwhelming majority (85.0%) of all faculty agreed that

“good mentoring is important to the success of most faculty members.” While this level of agreement was similar for faculty across disciplines and among women, there was a statistically significant difference by gender among STEM faculty. Slightly less than three-quarters (73.0%) of men STEM faculty agreed that mentoring was important, almost all (95.0%) of women STEM faculty were in agreement ($\chi^2(df=4) = 19.575, p = .001$). While most faculty were in agreement that good mentoring is important for success, less than one-third (32.4%) agree that “Brown places a high priority on quality mentoring.” However, faculty were more likely to agree (44.0%) that their department, in particular, places a high priority on quality mentoring and their discipline or field values mentoring (42.8%) than Brown as a whole.

Figure 6. Importance of Specific Aspects of Mentoring (% in Agreement)



*Indicates statistical significance at $p < .10$

Faculty were asked to agree or disagree with a series of questions regarding the importance of specific aspects of mentoring. As indicated in Figure 6, the majority of faculty were in agreement with all these aspects (e.g. “Mentoring about teaching is important”) and there were few significant differences by broad discipline (exceptions include promotion and publications). However, there are many statistically significant differences by gender among STEM faculty. For each of the aspects (with the exception of teaching), women were significantly more likely to be in agreement than men. The most notable of these differences occurs with the statement regarding work-life issues. Less than half (60.0% of STEM men faculty agreed “mentoring about work-life issues is important”) as compared almost 90% (89.4) of STEM women faculty.

These differences between women and men faculty in the STEM fields carries on to the last pair of statements regarding the need for mentors to “assist mentees in establishing a balance between teaching, research, and service responsibilities” (84.2% of women and 60.0% of men agree this was important) and “help mentees set goals” (84.3% of women in agreement compared to 66.0% of men). All of the above observed differences were statistically significant ($p < .05$).

Tenure and Promotion

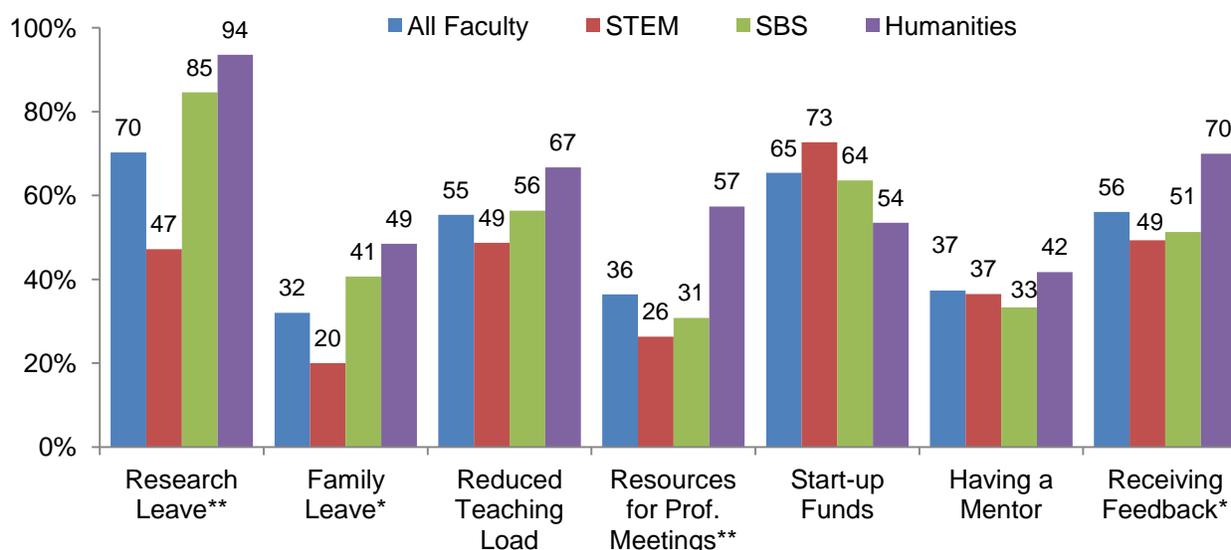
Following the section on mentoring, faculty were asked a series of questions regarding the clarity of the tenure and promotion process. Almost two-thirds of faculty “somewhat” (38.2%) or “strongly” (27.1%) agreed with the following : “Do you agree that the criteria for tenure are clearly communicated?” A similar level of agreement is observed across each of the broad disciplines, among all women, and among both men and women in the STEM fields. Differences do occur, especially among broad academic disciplines, regarding how appropriately certain criteria are valued in the tenure process. While fewer than 10% (8.8%) of faculty in the STEM fields indicated that research/scholarly work was “somewhat” or “very overvalued” in the tenure process, almost a quarter of all SBS faculty (22.1%) and Humanities faculty (23.9%) indicated research/scholarly work was overvalued in the tenure process ($\chi^2(df=8) = 20.060, p = .010$). Regarding this same criteria, almost a quarter (22.2%) of women STEM faculty indicated research/scholarly work was overvalued, as compared to less than 10% (6.8%) of men STEM faculty ($\chi^2(df=3) = 13.575, p = .004$).

While differences are observed for scholarly work, there are no statistically significant differences by broad academic discipline or gender with regards to the appropriateness of teaching contributions being valued in the tenure process, service to Brown, professional reputation, fit with the department’s mission, and obtaining grants/funding. The majority of faculty indicated each of these criteria were “valued appropriately” (ranging from 73.4% for fit with the department’s mission to 47.0% for teaching contributions). There are, however, observed differences between academic disciplines with regards to the appropriate value of departmental service, collegiality, and assessment by your peers outside of Brown.

Almost half of SBS (42.3%) and Humanities (48.9%) faculty indicated that departmental service was either “somewhat undervalued” or “very undervalued” appropriately in the tenure process. This is compared to less than one-quarter (24.1%) of faculty in the STEM fields. A similar

pattern appears with regards to collegiality. Faculty in the Humanities (38.1%) were more likely than those STEM (23.5%) and SBS (21.9%) faculty to indicated collegiality was undervalued in its appropriateness in the tenure process. Finally, faculty in the Humanities were more likely to indicate that assessment of your peers outside of Brown were overvalued in regards to that criteria's appropriateness in the tenure process. SBS (28.6%) and STEM (17.0%) faculty were less likely to indicate the same. Each of the above observed differences were statistically significant at the $p < .05$ level.

Figure 7. Practices to Enhance Ability of Junior Faculty to Get Tenure – By Broad Discipline



*Indicates statistical significance at $p < .10$ level

**Indicates statistical significance at $p < .05$ level

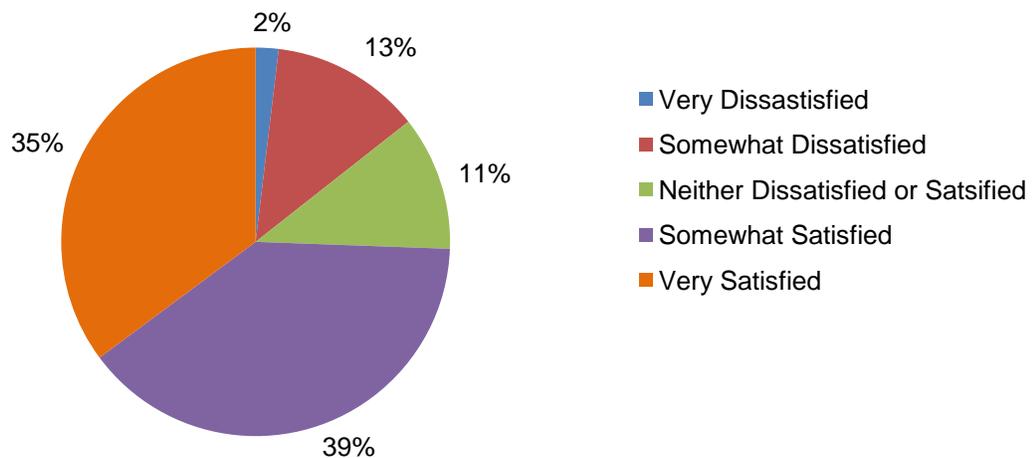
Faculty were also asked “to what extent do the following practices enhance the ability of a junior faculty member to get tenure” (Figure 7). Family leave, reduced teaching load, and having a mentor were similar valued across academic disciplines and gender as enhancing the ability of a junior faculty member to get tenure. Almost one-third (32.0%) of faculty indicated family leave enhanced the ability to get tenure “to a great extent.” Over half (55.4%) of all faculty agreed a reduced teaching load would enhance the ability to get tenure to a great extent, while only slightly more than one-third (37.3%) indicated having a mentor enhanced the ability of junior faculty to get tenure “to a great extent.” However, there were statistically significant differences across broad academic disciplines regarding the importance of research leave and resources for attending professional meetings. While almost three-quarters of all faculty (70.3%) indicated research leave would enhance the ability of a junior to get tenure, less than half of STEM faculty

(47.2%) and almost all (84.6%) of SBS and Humanities (93.6%) faculty indicated the same. Varying distributions are also observed with regards to resources for attending professional meetings. While only one-third (36.4%) of all faculty indicated this would enhance junior faculty's ability to get tenure "to a great extent," over half (57.4%) of Humanities faculty indicated the same (26.3% for STEM and 30.8% for SBS). Having generous start-up funds was an important criteria for all faculty (65.4% indicated it helped "to a great extent"), women faculty in the STEM and SBS fields (80.0% each) were more likely to indicated the same, as compared to humanist women faculty (47.8%) ($\chi^2(df=2) = 6.009, p = .050$). Finally, more than half of all faculty indicated receiving regular feedback enhances the ability of a junior faculty member to get tenure "to a great extent," women STEM faculty were far more likely to indicate the same (75.0%) as compared to their male counterparts (40%) ($\chi^2(df=2) = 7.326, p = .026$).

Work and Family Balance

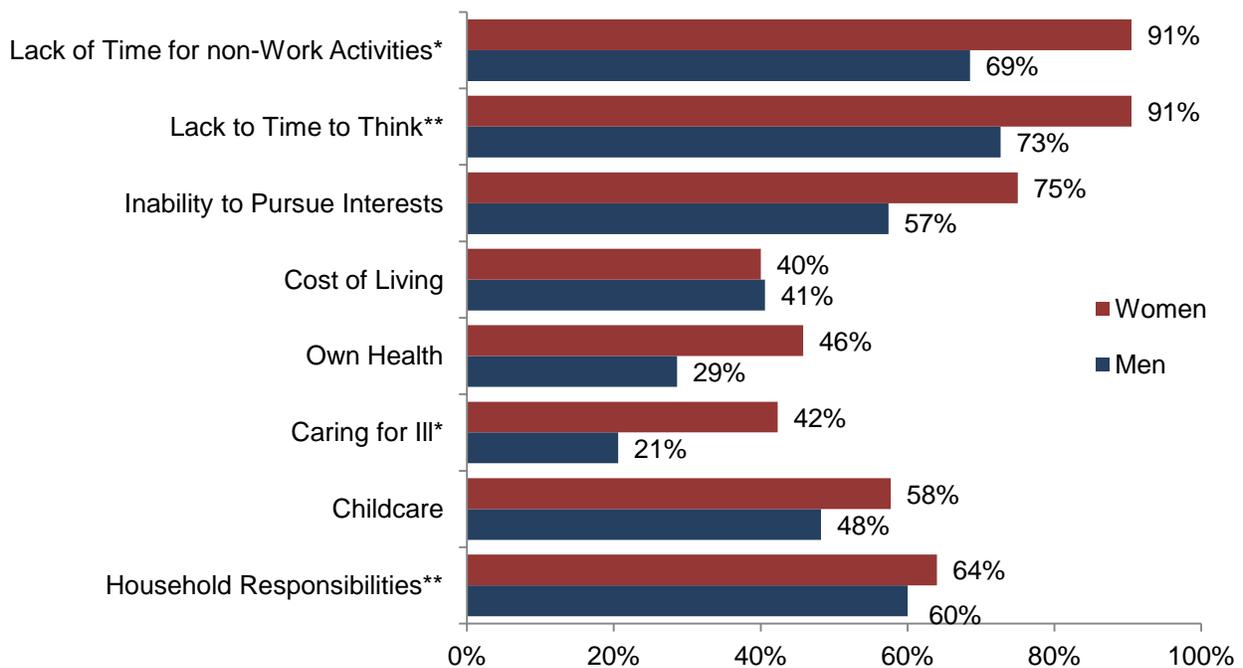
The final section of the Brown University Faculty Climate Survey obtained a variety of information regarding faculty's life outside of Brown. Three-quarters (74.5%) of all faculty indicated they were "somewhat" or "very" satisfied with their life outside of Brown and only 14.4% indicated they were dissatisfied. There were no significant differences across academic discipline and gender with regards of satisfaction. There were, however, a few notable differences with regards to sources of stress over the past twelve months.

Figure 8. General Satisfaction with Life Outside of Brown – All Faculty



Most faculty indicated that “lack of time to think and reflect” (78.7%) as well as “lack of time for non-work activities” (80.6%) were “somewhat” or “extensive” sources of stress over the past twelve months. Among faculty in the STEM fields, the stress of lack of time to think and reflect is more pronounced for women. Over 90% (90.5%) of women indicated this was a source of stress as compared to less than three-quarters (72.7%) of men STEM faculty ($\chi^2(df=2) = 7.358, p = .025$). There is also a significant gender differences among faculty in the STEM fields with regards to stress associated with managing household responsibilities. Two-thirds (66.2%) of all faculty indicated this was somewhat or an extensive source of stress, far more women STEM faculty members indicated the same (75.0%) as compared to men STEM faculty (60.0%). The only other remarkable difference among these outside stresses is for “cost of living,” Faculty in the Humanities (64.5%) are far more likely to indicate that cost of living has been somewhat or an extensive source of stress over the past twelve months as compared to STEM (40.4%) and SBS (43.2%) faculty.

Figure 9. Sources of Stress Regarding Life Outside of Brown – STEM Faculty Only



*Indicates statistical significance at $p < .10$ level

**Indicates statistical significance at $p < .05$ level

Childcare was also indicated as a source of stress for almost half (48.5%) of all faculty members over the past twelve months. Overall, almost three-quarters of all faculty have children (28.7%

indicated they do not have children). The median number of children is two (36.0% of faculty have children) and few have more than three children. While the distribution of children appears somewhat similar across academic disciplines, there is one notable exception. STEM faculty are more likely than their peers to have two children (48.2%) as compared to only a quarter each of SBS (28.8%) and Humanities (24.5%) faculty ($\chi^2(df=6) = 17.640, p = .007$). However, this distribution of children is not uniform among STEM faculty. Women STEM faculty are far more likely to report no children (42.1%) as compared to men STEM faculty (12.9%) ($\chi^2(df=3) = 19.100, p = .000$).

On the whole, of the faculty who do have children, almost half have children younger than 18 (48.9%); with many having children younger than five (11.9%), between the ages of five and twelve (18.3%). While faculty report a variety of childcare arrangements (care provided by a spouse or relative, a nanny or babysitter, or a childcare center), many faculty members report extraordinary difficulty locating appropriate childcare. Over two-thirds (67.5%) of all faculty who have children under the age of 18 indicated it was “somewhat” or “very difficult” to locate appropriate childcare. This was especially true among women in the STEM fields. As compared to slightly more than half of men (59.3%), four-fifths of STEM women reported difficulty in locating appropriate care ($\chi^2(df=2) = 7.054, p = .029$). Unfortunately, this survey did not ask respondents about the specific barriers to finding appropriate childcare.

The final few questions asked respondents about their spouse or domestic partner. Overall, most faculty reported having a spouse (77.8%) or a domestic partner (8.8%). Of those who indicated they had a spouse or domestic partner, slightly more than one-quarter (28.8%) also indicated their spouse/partner worked or studied at Brown and almost half (47.2%) reported their spouse/partner had problems finding an appropriate job in the area around Brown. However, despite problems locating a job, almost half of all faculty are “somewhat” or “very” satisfied with Brown’s spouse/domestic partner benefits with only slightly more than one-quarter indicating some level of dissatisfaction (27.6%).

Conclusion

The above report summarizes the 2011 Brown University Climate Survey for the ADVANCE at Brown Program. While the full survey included many different subtopics and numerous questions, this report only focused on those topic areas and questions deemed of most interest to the ADVANCE at Brown Program. These topic areas included general work satisfaction and

workload, perceptions of tenure and promotion, mentoring, and work-family balance. Additionally, this report only examined the survey data by broad academic disciplines (STEM, SBS, and Humanities), for only women faculty by broad academic discipline, and by gender among only STEM faculty. While further analyses by academic rank, gender, and broad academic discipline may have yielded important and interesting results, analyses of this type could not be completed to due small sample sizes (e.g. there are few STEM women full professors). However, due to the adequate response rates, the findings of this report are highly generalizable to the entire, non-medical school, tenured and tenure-track faculty at Brown in the early Spring of 2011. Overall, these results provide an important glimpse into the environment and experiences of faculty and have the ability to direct the administration on the continuation and formation of future faculty-focused programs and policies.

On the whole, Brown University faculty are satisfied with their positions at Brown and with their current workloads. Many report their department is a “good fit” for them. Faculty report active research and scholarship, teaching, and service agendas and overall feel supported by their institutions, departments, and peers. The faculty also appear to be active either mentoring or being mentored, both formally and informally, and the general sentiment is that mentoring is important for tenure and promotion success. But, as expected from busy academics, many faculty reported significant stress regarding family-work balance, especially related to locating childcare. Unfortunately, this survey did not collect data on the barriers to accessing appropriate childcare. Regardless of these stressors outside of Brown, many report being somewhat or very satisfied with their non-academic lives.

Important and interesting results emerge when the data are examined by broad academic discipline. Overall, it appears faculty in the Humanities generally feel more satisfied and supported by their departments and peers, but are less satisfied with the clarity of the tenure and promotion process. Humanists indicated a different set of practices that would help junior faculty get tenure, than their STEM and SBS peers. This is notable and should be further examined by administrators as it appears the criteria that are important to Humanists may be significantly different and that tenure and promotion criteria cannot be standardized across academic disciplines.

In general, SBS faculty, as compared to their peers, appear to be less satisfied with being a faculty member at Brown and on the whole report higher levels of work related stress including

adequate time for scholarship and committee responsibilities. SBS faculty also indicated significant issues of feeling inadequately supported for their teaching contributions by their peers, and that the environment created by their department chairs is not as supportive and collegial as their peers. These issues are even more pronounced among SBS women faculty, which should be noted by administration.

On many of the topics included in this report, STEM faculty, especially women STEM faculty, fall somewhere between their SBS and Humanist peers. In many respects they appear more like their Humanist peers, especially with regards to climate and opportunities. In other ways, they resemble their SBS peers, such as with tenure and promotion perceptions. What is most notable throughout this report is the significant difference between STEM women and men faculty in their experiences at Brown. As compared to STEM men faculty, women faculty in the STEM fields are less likely to report feeling their research and scholarship are valued. They are also more likely to report feeling as though they have a voice in decision-making. While women STEM faculty, by comparison to SBS women faculty, fare better with regards to fairness and equity in their departments, they are more likely than their male STEM counterparts to feel excluded from informal networks and report they feel they need to work harder than their peers.

Overall, data from this campus-wide study show many commonalities, but also many varied experiences, especially by broad academic discipline and by gender within the STEM fields. Future administrative efforts that attempt to boost global satisfaction and climate need to focus on the experience of SBS faculty, especially SBS women faculty, as their current experiences appear significantly different, and more negative, than their female peers. Likewise, attention should also be directed at the varied needs of Humanities faculty, especially in terms of their needs for attaining tenure and promotion. Finally, while STEM women appear to be faring well in comparison to their female counterparts in the SBS and Humanities fields, the differences between women and men STEM faculty on many of their topics included in this report need to be further examined by administration. The experiences of all STEM faculty are not the same. Gender appears to matter and despite efforts towards equality, gender bias still exists in the STEM fields at Brown University.