# SCHOOL OF PUBLIC HEALTH FACULTY CONSULTATIVE COMMITTEE
# FACULTY WORK LIFE SURVEY 2009 REPORT

## BACKGROUND

The School of Public Health (SPH) Faculty Consultative Committee (FCC) conducted a survey in early spring 2009 to measure SPH faculty perceptions of divisional climate, planning, leadership, performance, support, satisfaction, and burnout. The objectives of this survey were to measure these aspects of quality of work life among the SPH faculty and thereby to help the FCC and each division in the SPH identify issues that each may need to address. The FCC hopes to repeat this survey every other year to track changes in work related issues over time.

The FCC, along with the SPH Dean, Associate Deans, and Division Heads, worked to develop this survey based on an initial draft developed by the FCC. Concepts to measure were drawn from concepts identified in organizational research as important correlates of organizational processes (e.g., climate measures such as psychological safety, helping, inclusiveness, conflict, and constructive conflict)[1], organizational justice (distributive, procedural, and interactional fairness)[2], burnout[3], and satisfaction. The FCC also identified other areas that they felt were likely to be of interest to the faculty, such as divisional support of work activities, performance evaluation criteria, planning and leadership. The draft survey was reviewed with the SPH Deans and Division Heads. The survey was cognitively tested in advance by administering it to the FCC members and was refined based on their comments and responses. A PDF file showing the survey questions as administered is posted with this report at the FCC web site, www.sph.umn.edu/sphfcc/home.html.

The administration of this survey to the SPH faculty took place during the Spring semester, 2009 via SurveyMonkey. A list of all SPH faculty with emails was obtained from the Dean's office. All SPH faculty at the levels of Assistant Professor, Associate Professor, and Full Professor (except for adjunct faculty, the Dean, and Division Heads) received an invitation to take this survey via email. Three faculty opted out because they had requested SurveyMonkey to exclude them from on-line surveys. Three reminder emails were made to non-respondents to encourage response. Table 1 shows the response rates. Not all items will have the same number of responses because most items included a Don't Know/Not Applicable category, and respondents could refuse to answer any question.

**Table 1: Response Rates**

| Division | Sampled | Responded | Percent |
|---|---|---|---|
| Biostatistics | 17 | 16 | 94.1 |
| Environmental Health Sciences | 19 | 17 | 89.5 |
| Epidemiology & Community Health | 47 | 35 | 74.5 |
| Health Policy & Management | 29 | 21 | 72.4 |
| School of Public Health | 1 | 1 | 100 |
| Total | 113 | 90 | 79.6 |

There are 118 Faculty (adjuncts were not included). The dean and division heads were excluded, leaving 113. 3 opted out of Survey Monkey (their division is unknown), leaving 110 available to respond.

1 Kozlowski, S. W. J. and D. R. Ilgen. 2006. "Enhancing the Effectiveness of Work Groups and Teams." Psychological Science in the Public Interest 7(3): 77-124.

2 Cropanzano R, Bowen DE, Gilliland SE. The Management of Organizational Justice. Academy of Management Perspectives (2007); 34-48.

3 Maslach, C. and S. E. Jackson. 1981. "The Measurement of Experienced Burnout." Journal of Occupational Behaviour 2(2): 99-113.

To maximize confidentiality and reduce the likelihood that individual respondents could be identified, a number of steps were taken. First, background measures were limited to division, level, and gender. Second, no identifying data was captured by SurveyMonkey (e.g., email id, IP address). Third, the survey was administered by SPH Electronic Communications Director Mark Engebretson in the Dean's office and he maintains the only copy of the data. Fourth, the analysis was done by emailing Stata programs to Mark to run and he would then send the aggregate results that did not identify individuals back to the FCC. Fifth, the policy was adopted to not execute analyses where the number of faculty in a cell would be low (e.g., interacting division with gender with level).

## METHODS

The data were checked for overall validity by checking frequency distributions and cleaned (setting Don't Know/Not Applicable responses to missing).

Most work life concepts (Constructive Controversy, Conflict, Help, Psychological Safety, Inclusiveness, Fairness, Planning Process, Plans, Leadership, Work/Life, Satisfaction with Position, Satisfaction with Performance, Time for Activities, Burnout) were assessed using several ordinal-scale items in the survey. One overall scale for each concept was then created as the average of each respondent's responses to the items related to that concept. An average is created for every respondent who responded to at least one item for that concept. Cronbach's alpha was used to measure this overall scale's reliability (the internal consistency of the items making up the scale). If the items measure the same concept, then the items should be highly correlated – respondent responses to each item in a scale should be similar, i.e., there should be internal consistency of the items in the scale. A value of alpha greater than 0.70 is often used as a criterion for reliability.[4] Stata's alpha procedure was used for calculating Cronbach's alpha with the generate option being used to obtain the average of the items.

The numerical results for each scale shown below correspond to the constructed continuous scales, not to the original ordinal item scales. If a respondent answered 2, 3, 2 to the items measuring constructive controversy, the measure for constructive controversy for respondent is (2+3+2)/3=7/3= 2.33. This report presents the items that measured each concept, histograms and means of the constructed scales by division, level, and gender, analysis of variance for tests for differences between divisions, level, and gender, and selected graphs of the means.

The means tables show the Cronbach's alpha for scales constructed from items, raw scale means by group (they are not adjusted for the other groups' effects), the p-value for the overall ANOVA, and the p-value for each group effect. P-values shown are adjusted for the other effects included in the ANOVA. The mean-based analyses were done using analysis of variance (Stata's ANOVA) with effects for Gender, Level, and Division. Within group standard deviations were examined to confirm that the assumption of constant variance was not violated. P-values shown are not adjusted for multiple testing.

The histograms were done using Stata's histogram command. The comparison of frequency distributions across divisions (to get at division differences in the shapes of the histograms) was done by cross-tabulating the quintile of the scale with division and computing a chi-square test of independence.

The graphs of means by division show the average within each division of the scale measured.

[4] http://en.wikipedia.org/wiki/Cronbach's_alpha

## SUMMARY

While there were not significant differences by gender for most responses, across divisions and by level two major patterns emerged.

Responses by level (Assistant, Associate, and Full Professor) indicated that Associates' feel less supported in general, and are more apprehensive about career performance than Assistant and Full Professors.

The second clear pattern had to do with divisional differences in climate, performance evaluation and support. In particular, HPM had significantly lower means when it came to valuing professional service, community service, community based participatory research, academic advising, research thesis advising, helping and mentoring colleagues, and collaborating within the division.

For those that study teams, organizations that have faced considerable restructuring over a number of years tend to see the formation of fault lines, or an in-group / out-group phenomenon.[5] It is this effect that can lead to responses falling into two or more distinct categories, reflecting a measure of the intensity of feelings regarding collaborative work. Questions in this survey pertaining to perceptions of distributive fairness and what criteria positively affect annual evaluations have reflected this phenomenon within divisions, most notably HPM and EHS (see Figures 6 and 16).

Some responses, notably the scales pertaining to leadership, strategic planning, strategic process, and distributive fairness, had a bi-modal distribution, rendering the group means a less reliable measure.

Overall, each division indicated that activities related to finding funding (i.e. writing grants) and writing peer-reviewed research were more highly valued and supported than were activities related to teaching, such as advising and new course development.

## SCALES FOR CLIMATE & DISTRIBUTIONAL FAIRNESS

Six scales were constructed, each from several items, to measure aspects of climate and fairness. In constructing these scales, the following numerical values were assigned to each item: 1=Strongly disagree, 2=Somewhat disagree, 3=Somewhat agree, 4=Strongly agree.

1) Constructive Controversy (In the past twelve months, how much do you agree with the following statements about collaboration and help in your division? I feel that; Scale: Strongly disagree, Somewhat disagree, Somewhat agree, Strongly agree)
   a) faculty in my division collaborated constructively to resolve academic and teaching issues.
   b) faculty in my division collaborated constructively to resolve administrative issues.
   c) when conflict between faculty in my division arose, the faculty communicated civilly and respectfully about the conflict.
2) Conflict (In the past twelve months, how much do you agree with the following statements about collaboration and help in your division? I feel that; Scale: Strongly disagree, Somewhat disagree, Somewhat agree, Strongly agree)
   a) personality clashes were evident among the faculty in my division.

[5] For the development of the concept of faultlines, see Lau DC, Murnighan JK. Demographic diversity and faultlines: The compositional dynamics of organizational groups. Academy of Management Review. 1998;23(2):325-340. While this article focuses on demographic composition, the argument generalizes to the argument that any social attribute, such as membership in a merging unit, can be the source of faultlines.

b) there was conflict about research quality or priorities among the faculty in my division.
c) there was conflict about performance evaluation criteria among the faculty in my division.
d) there was conflict about academic programs among the faculty in my division.

3) Help (In the past twelve months, how much do you agree with the following statements about collaboration and help in your division? I feel that; Scale: Strongly disagree, Somewhat disagree, Somewhat agree, Strongly agree)
   a) I can easily obtain help related to research from other faculty in my division.
   b) I can easily obtain help related to teaching from other faculty in my division.
4) Psychological Safety (In the past twelve months, how much do you agree with the following statements about your bringing up issues IN A FACULTY MEETING in your division? I feel that; Scale: Strongly disagree, Somewhat disagree, Somewhat agree, Strongly agree)
   a) I could bring up concerns up with my work-related duties.
   b) I could bring up concerns with time pressures associated with grant writing and funding responsibilities.
   c) I could bring up issues such as disrespectful communication among faculty members.
   d) I could bring up issues such as poor teaching or advising.
   e) It was safe to suggest new research ideas/approaches to other faculty.
5) Inclusiveness (In the past twelve months, how much do you agree with the following statements about the issues you brought up to your division's faculty? I feel that the issues I brought up; Scale: Strongly disagree, Somewhat disagree, Somewhat agree, Strongly agree)
   a) were taken into account in my division's decision-making.
   b) had an impact on my division's organization and work processes.
   c) were addressed by my division adequately.
   d) had an impact on my division's educational programs.
6) Fairness (In the past twelve months, how much do you agree with the following statements about fairness in your division?; Scale: Strongly disagree, Somewhat disagree, Somewhat agree, Strongly agree)

   Distributional
   a) my compensation and support fairly reflected my research contribution to my division.
   b) my compensation and support were fair compared with other faculty in my division.
   c) faculty compensation and support in my division fairly reflected the contribution of each faculty member to the division.
   d) the division's performance evaluation process fairly valued my contribution to the division.

| Table 2. Cronbach's alpha, P-values, and Average Scores for Climate & Distributional Fairness Scales | | | | | | |
|---|---|---|---|---|---|---|
| | **Constr. Contr.** | **Conflict** | **Help** | **Psych. Safety** | **Inclusive** | **Distrib. Fairness** |
| **Alpha** | 0.89 | 0.79 | 0.82 | 0.90 | 0.92 | 0.88 |
| **Overall p-value** | 0.0002 | <0.0001 | 0.11 | 0.82 | 0.22 | 0.03 |
| **Biostatistics** | 3.26 | 2.38 | 3.31 | 2.94 | 2.94 | 3.00 |
| **Environmental Health Sciences** | 3.21 | 2.03 | 3.12 | 3.01 | 2.94 | 2.72 |
| **EPI & Community Health** | 3.37 | 2.22 | 3.31 | 2.93 | 3.05 | 3.08 |
| **Health Policy & Management** | 2.28 | 3.12 | 2.98 | 2.88 | 2.46 | 2.29 |
| **p-value** | 0.0001 | <0.0001 | 0.50 | 0.64 | 0.15 | 0.008 |
| **Assistant** | 3.41 | 2.00 | 3.46 | 2.92 | 3.06 | 2.93 |
| **Associate** | 3.07 | 2.50 | 3.03 | 2.80 | 2.72 | 2.69 |
| **Full** | 3.01 | 2.50 | 3.30 | 3.03 | 3.00 | 3 |
| **p-value** | 0.27 | 0.02 | 0.12 | 0.70 | 0.24 | 0.15 |
| **Female** | 3.16 | 2.38 | 3.03 | 2.79 | 2.96 | 2.76 |
| **Male** | 3.03 | 2.41 | 3.40 | 2.96 | 2.83 | 2.89 |
| **p-value** | 0.96 | 0.81 | 0.03 | 0.42 | 0.55 | 0.34 |
| 1-Strongly disagree, 4-Strongly agree. | | | | | | |

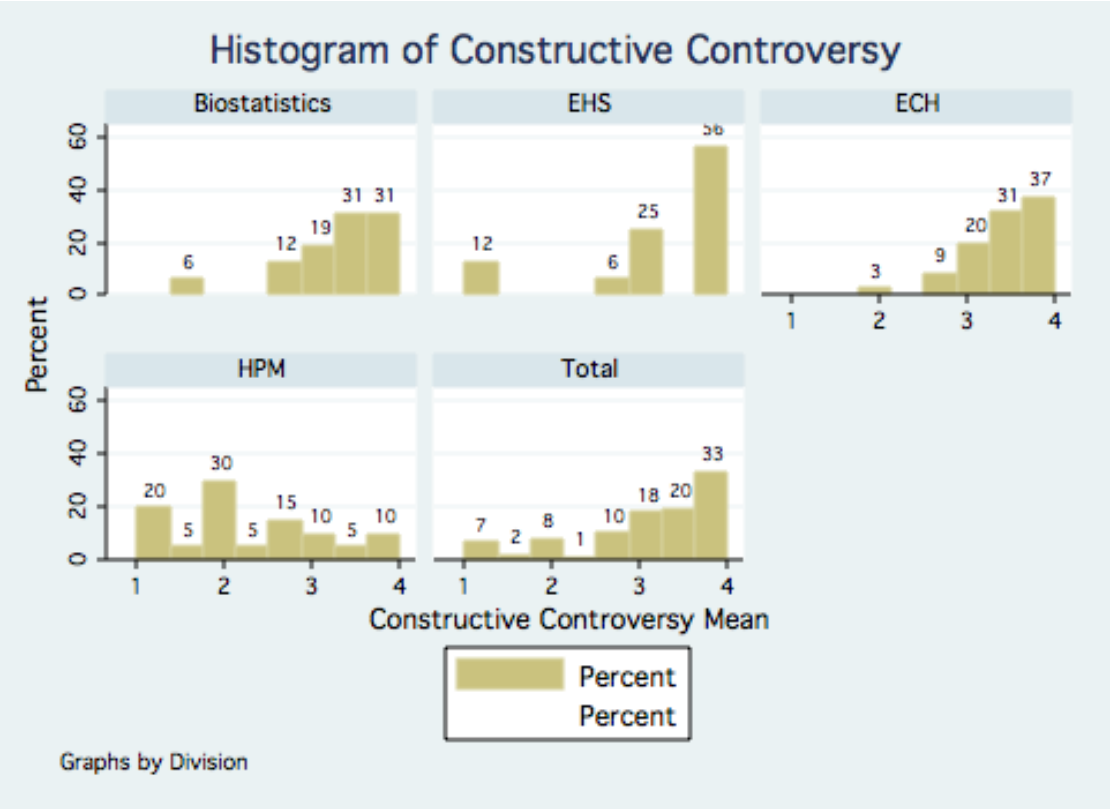


**Figure 1: Pearson chi2(12) = 33.9085 Pr = 0.001**

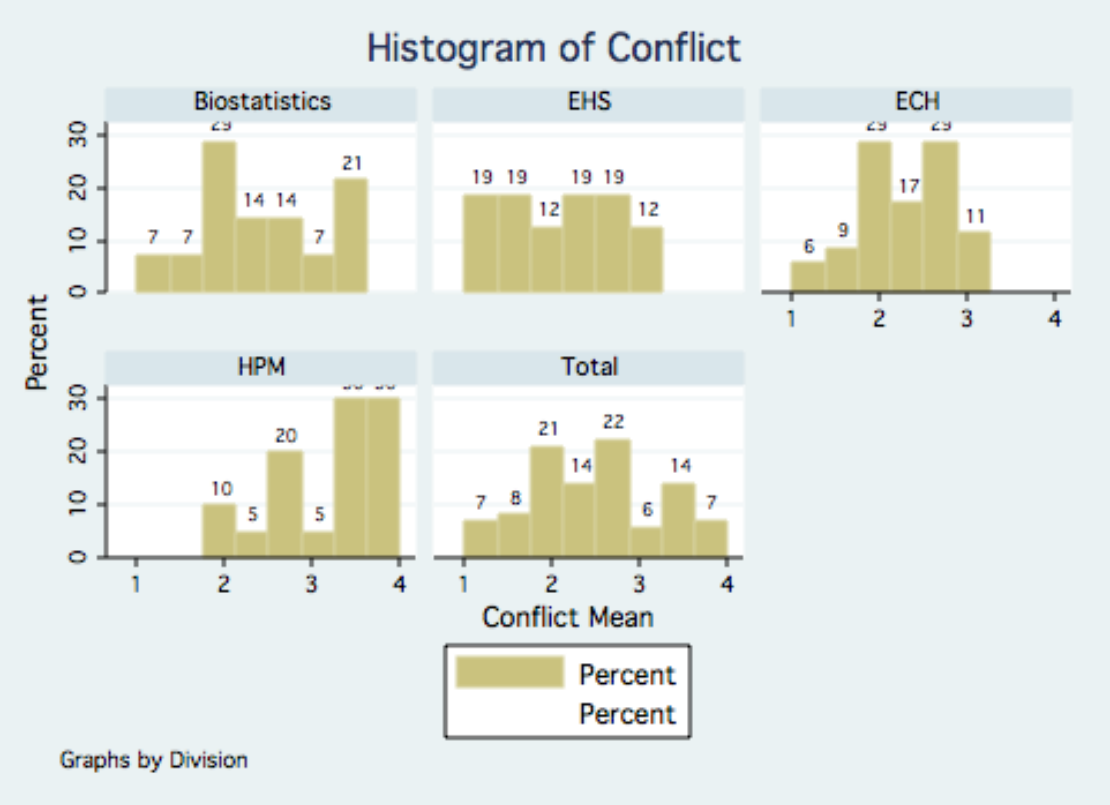


**Figure 2: Pearson chi2(12) = 37.0130 Pr = 0.000**

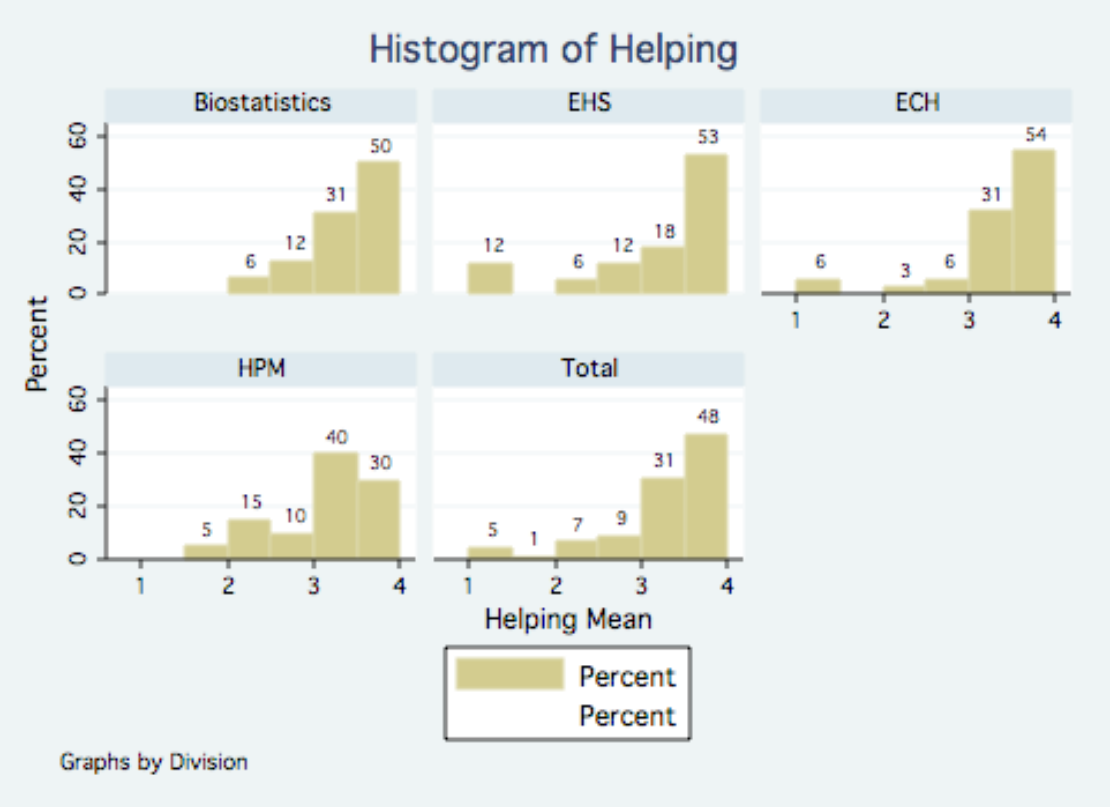


**Figure 3: Pearson chi2(9) = 5.6229 Pr = 0.777**

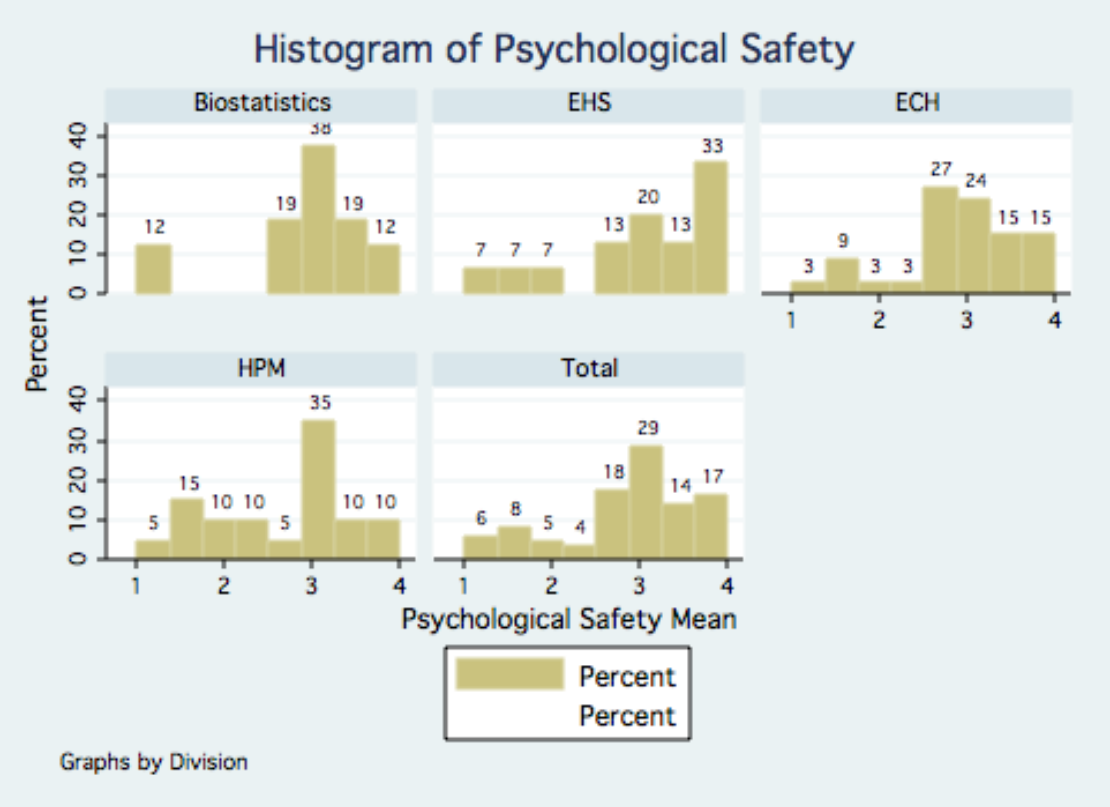


**Figure 4: Pearson chi2(12) = 14.0506 Pr = 0.297**

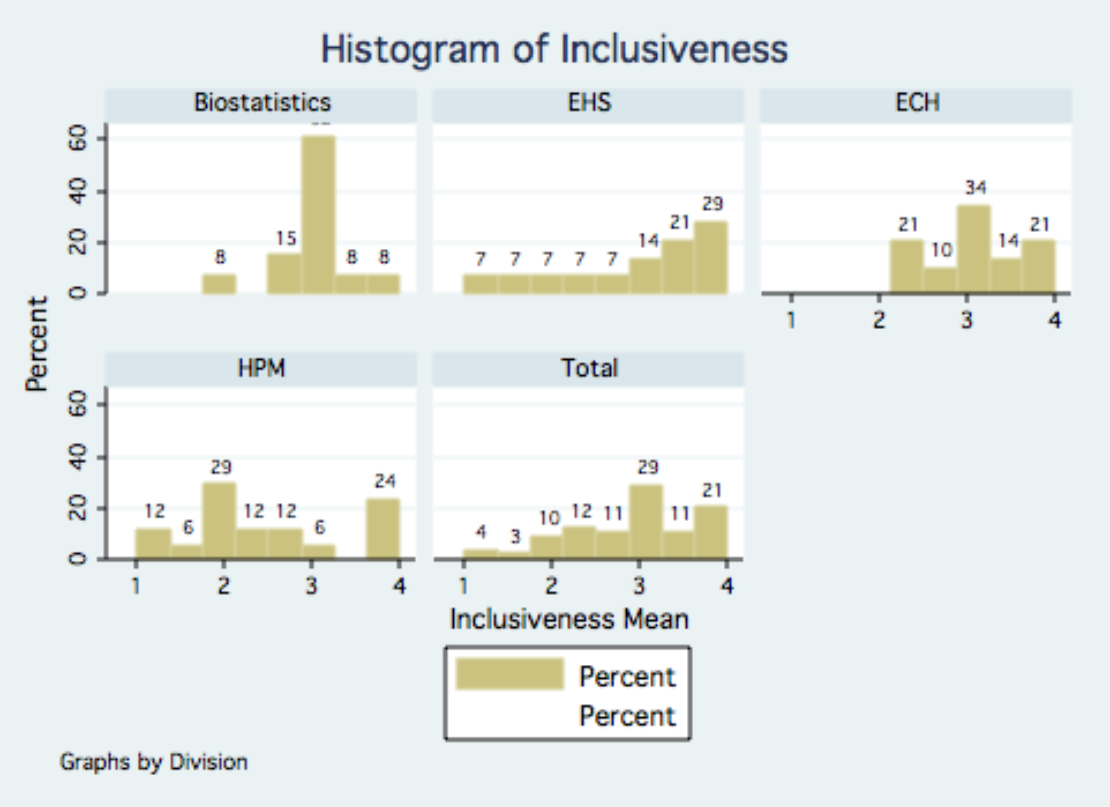


**Figure 5: Pearson chi2(12) = 21.2667 Pr = 0.047**

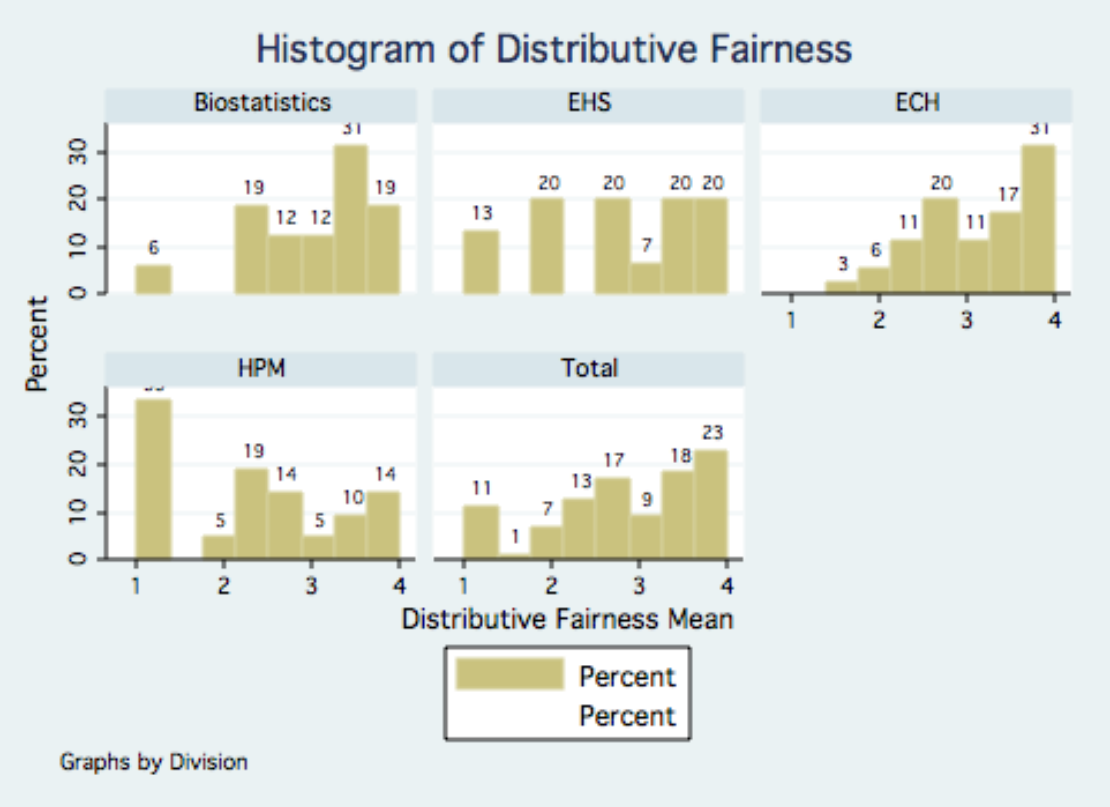


**Figure 6: Pearson chi2(12) = 14.1647 Pr = 0.290**

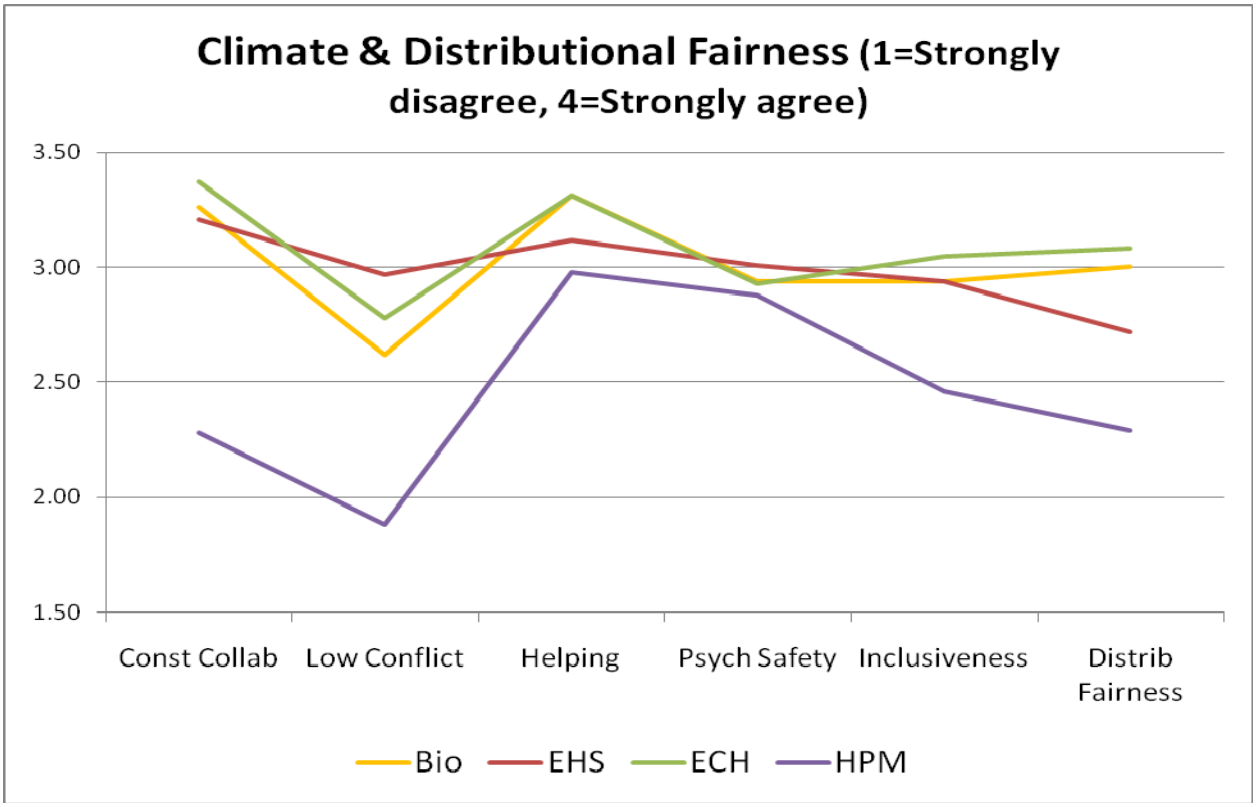

Figure 7: Average scores for each climate and fairness scale by Division. Conflict has been reverse coded to be Low Conflict for graphing purposes.

### SCALES FOR PLANNING AND LEADERSHIP

Three scales were constructed, each from several items, to measure aspects of planning and leadership. In constructing these scales, the following numerical values were assigned to each item: 1= Terrible, 2=Very Poor, 3=Poor, 4=Good, 5=Very Good, 6=Excellent.

The response rate for the planning process and plan questions were lower than other response rates, perhaps because some divisions do not have (or their faculty do not think they have) formal processes or a written plan. The number of responses by item are listed below in parentheses. The table below shows the number of responses by item for each division.

1) Division's Planning Process: Thinking about the last time your division conducted strategic planning, how good do you feel your division's STRATEGIC PLANNING PROCESSES were for (Scale: Terrible, Very Poor, Poor, Good, Very Good, Excellent)
   a) (66) research
   b) (69) education
   c) (60) community relationships
   d) (62) faculty professional development
2) Division's Plans: How good do you feel your division's STRATEGIC PLANS are for (Scale: Terrible, Very Poor, Poor, Good, Very Good, Excellent)
   a) (69) research
   b) (71) education
   c) (64) community relationships
   d) (63) faculty professional development
3) Leadership (In the past twelve months, how good of a job do you feel your division's leadership has done leading your division's activities in; Scale: Terrible, Very Poor, Poor, Good, Very Good, Excellent)
   a) education
   b) research
   c) overall

**Table 3. Number of Responses to Planning Items by Division**

| | Bio | EHS | ECH | HPM |
|---|---|---|---|---|
| **N Overall** | 16 | 17 | 35 | 21 |
| **Planning Process** | 15 | 11 | 23 | 19 |
| **Plans** | 14 | 12 | 27 | 17 |
| Stata's alpha procedure "does not use casewise deletion. A score is created for every observation for which there is a response to at least one item." | | | | |

| Table 4. Cronbach's alpha, P-values, and Average Scores for Planning & Leadership Scales | | | |
|---|---|---|---|
| | **Division's Planning Process** | **Division's Plans** | **Leadership** |
| **Alpha** | 0.96 | 0.94 | 0.94 |
| **Overall p-value** | 0.26 | 0.05 | 0.19 |
| **Biostatistics** | 4.29 | 4.34 | 4.84 |
| **Envir. Health Sciences** | 3.80 | 3.92 | 4.04 |
| **EPI & Community Health** | 3.95 | 4.11 | 4.70 |
| **Health Policy & Mgmt.** | 3.47 | 3.12 | 3.91 |
| **p-value** | 0.60 | 0.12 | 0.17 |
| **Assistant** | 4.57 | 4.60 | 4.86 |
| **Associate** | 3.58 | 3.58 | 4.34 |
| **Full** | 3.92 | 3.96 | 4.45 |
| **p-value** | 0.05 | 0.03 | 0.34 |
| **Female** | 3.80 | 3.93 | 4.56 |
| **Male** | 4.03 | 3.92 | 4.40 |
| **p-value** | 0.59 | 096 | 0.63 |
| 1=Terrible, 6=Excellent | | | |

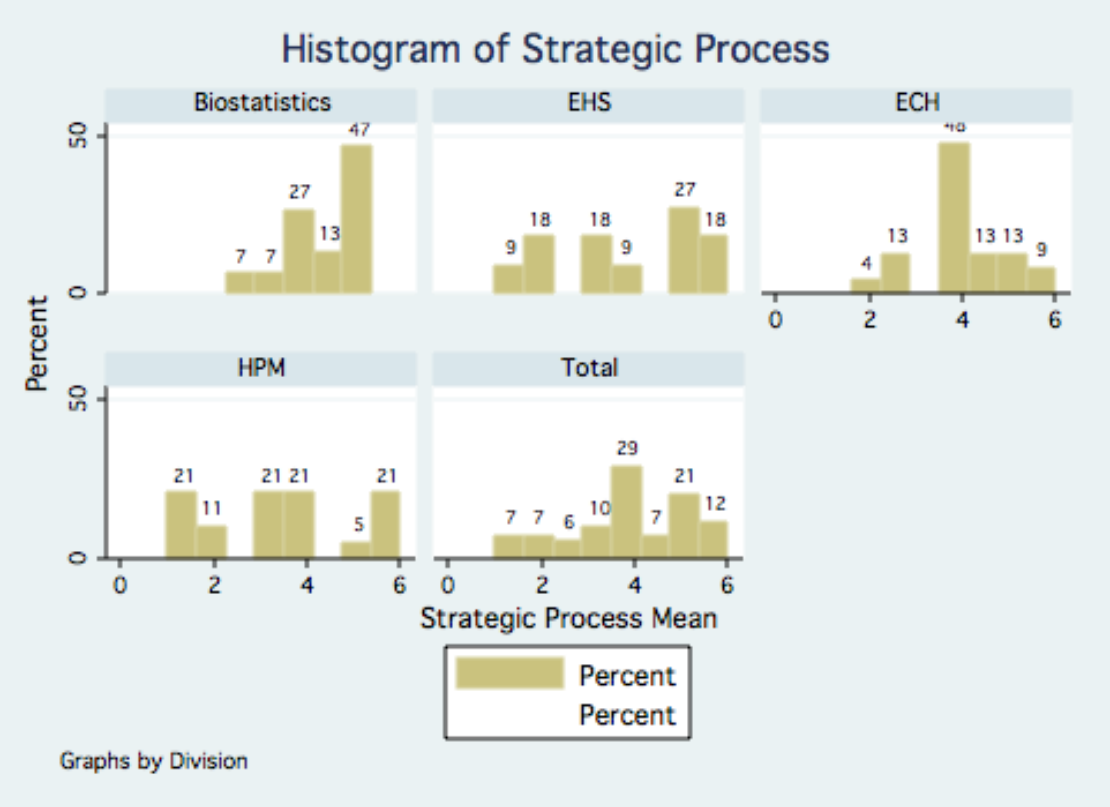


**Figure 8: Pearson chi2(12) = 18.6039 Pr = 0.099**

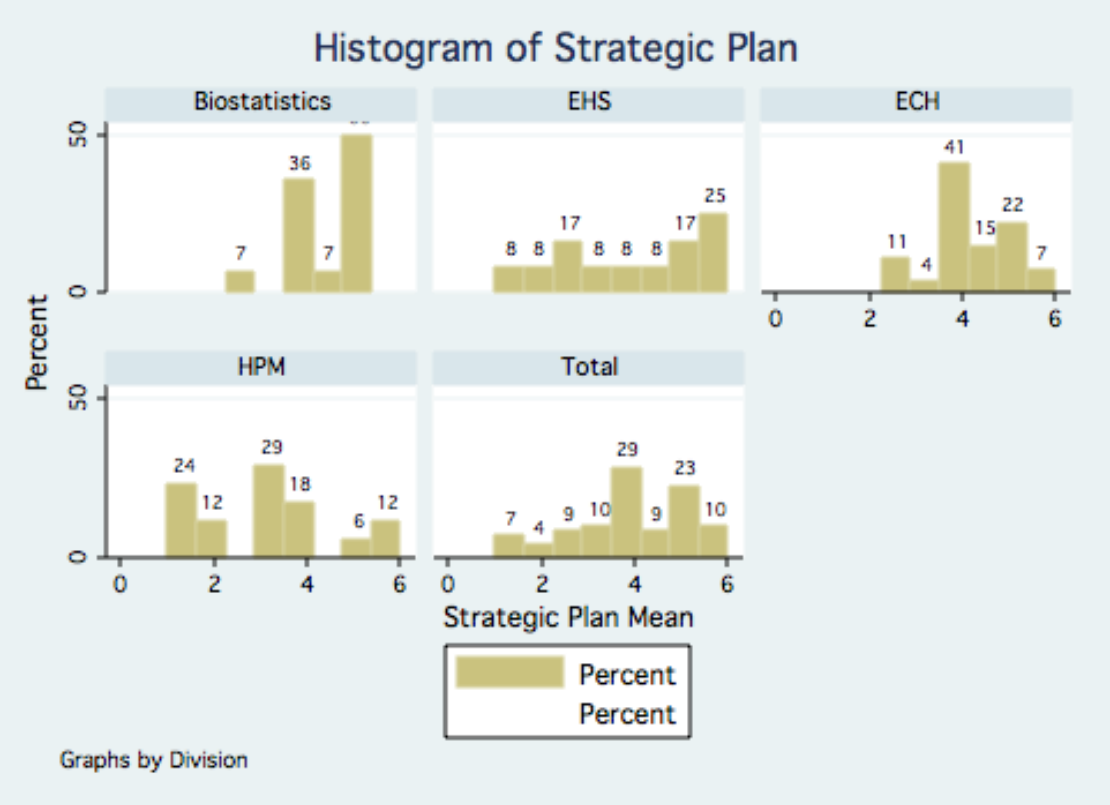


**Figure 9: Pearson chi2(12) = 26.5491 Pr = 0.009**

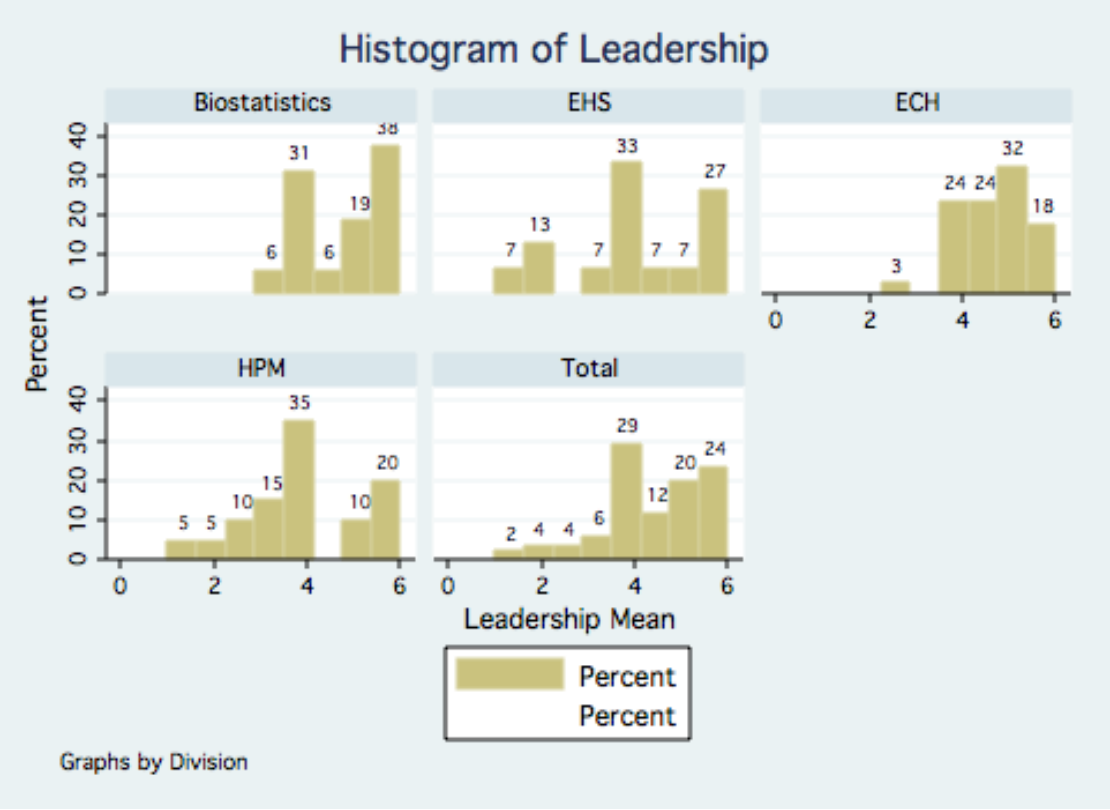


**Figure 10: Pearson chi2(12) = 31.6581 Pr = 0.002**

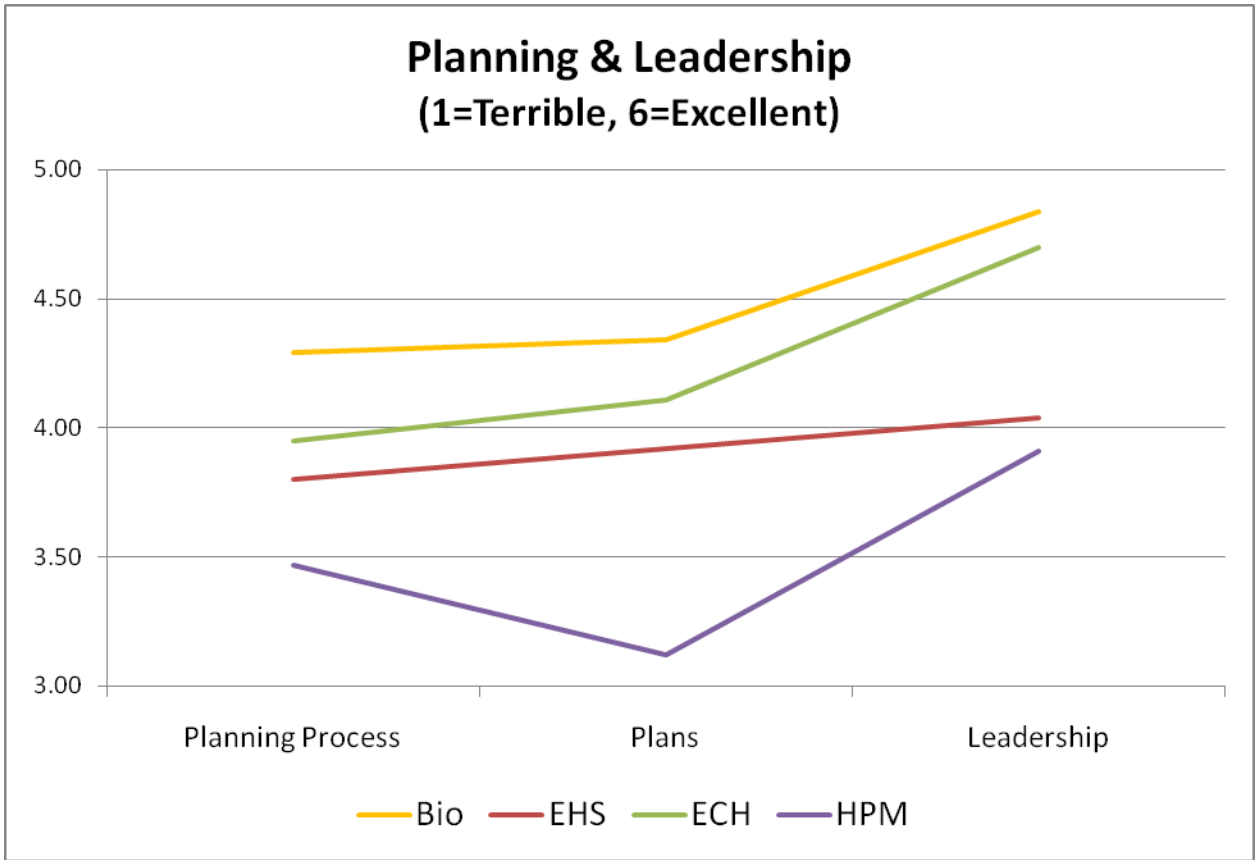


**Figure 11. Average scores for each planning and leadership scale by Division.**

### SCALES FOR SATISFACTION

Three scales were constructed, each from several items, to measure aspects of worklife and satisfaction. In constructing these scales, the following numerical values were assigned to each item, as appropriate for the item: 1=Strongly disagree, 2=Somewhat disagree, 3=Somewhat agree, 4=Strongly agree; 1=Very dissatisfied, 2=Somewhat dissatisfied, 3=Somewhat satisfied, 4=Very satisfied.

1) Work life (In the past twelve months, how much do you agree with the following statements?; Scale: Strongly disagree, Somewhat disagree, Somewhat agree, Strongly agree)
   a) The amount of work required for me as a faculty member interfered with my home and/or family life.
   b) I made changes to my family activities/plans due to my work-related duties.
   c) I made changes to my work-related activities due to my family/spouse/partner demands.
   d) I had to postpone my work-related activities due to demands on my time at home.
2) Satisfaction (Overall, how satisfied are you with; Scale: Very dissatisfied, Somewhat dissatisfied, Somewhat satisfied, Very satisfied)
   a) Satisfaction with position
      i) Your position in your division
      ii) Your position in the School of Public Health
   b) Satisfaction with performance
      i) Your performance in your division
      ii) Your performance in your profession

iii) Your performance in the School of Public Health

| Table 5. Cronbach's alpha, P-values, and Average Scores for Worklife and Satisfaction Scales | | | |
|---|---|---|---|
| | **Worklife** | **Satisfaction with Position** | **Satisfaction with Performance** |
| **Alpha** | 0.79 | 0.8 | 0.84 |
| **Overall p-value** | 0.09 | 0.05 | 0.05 |
| **Biostatistics** | 2.45 | 3.16 | 3.23 |
| **Environmental Health Sciences** | 2.88 | 2.88 | 3.31 |
| **EPI & Community Health** | 2.57 | 3.31 | 3.16 |
| **Health Policy & Management** | 2.43 | 2.93 | 3.33 |
| **p-value** | 0.20 | 0.09 | 0.87 |
| **Assistant** | 2.65 | 3.29 | 3.24 |
| **Associate** | 2.74 | 2.92 | 3.01 |
| **Full** | 2.31 | 3.38 | 3.56 |
| **p-value** | 0.05 | 0.02 | 0.007 |
| **Female** | 2.56 | 3.14 | 3.17 |
| **Male** | 2.56 | 3.15 | 3.31 |
| **p-value** | 0.35 | 0.79 | 0.84 |
| 1=Very dissatisfied, 4=Very satisfied. | | | |

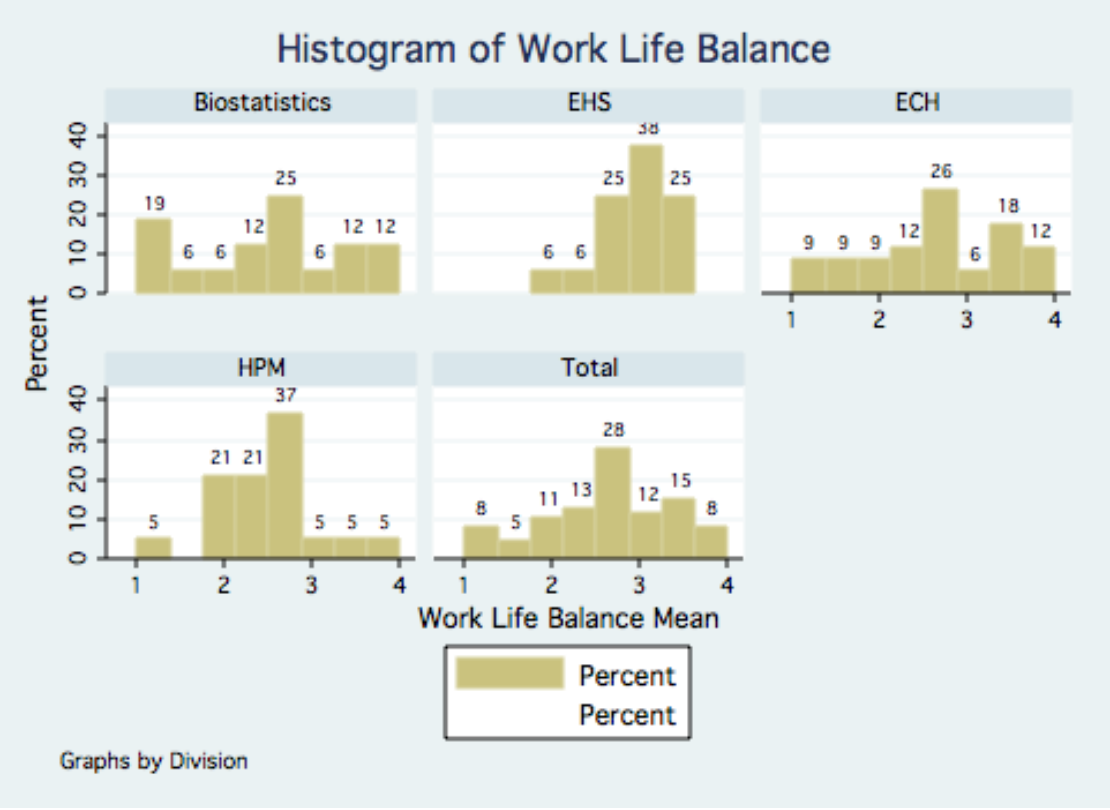


**Figure 12: Pearson chi2(12) = 16.1343 Pr = 0.185**

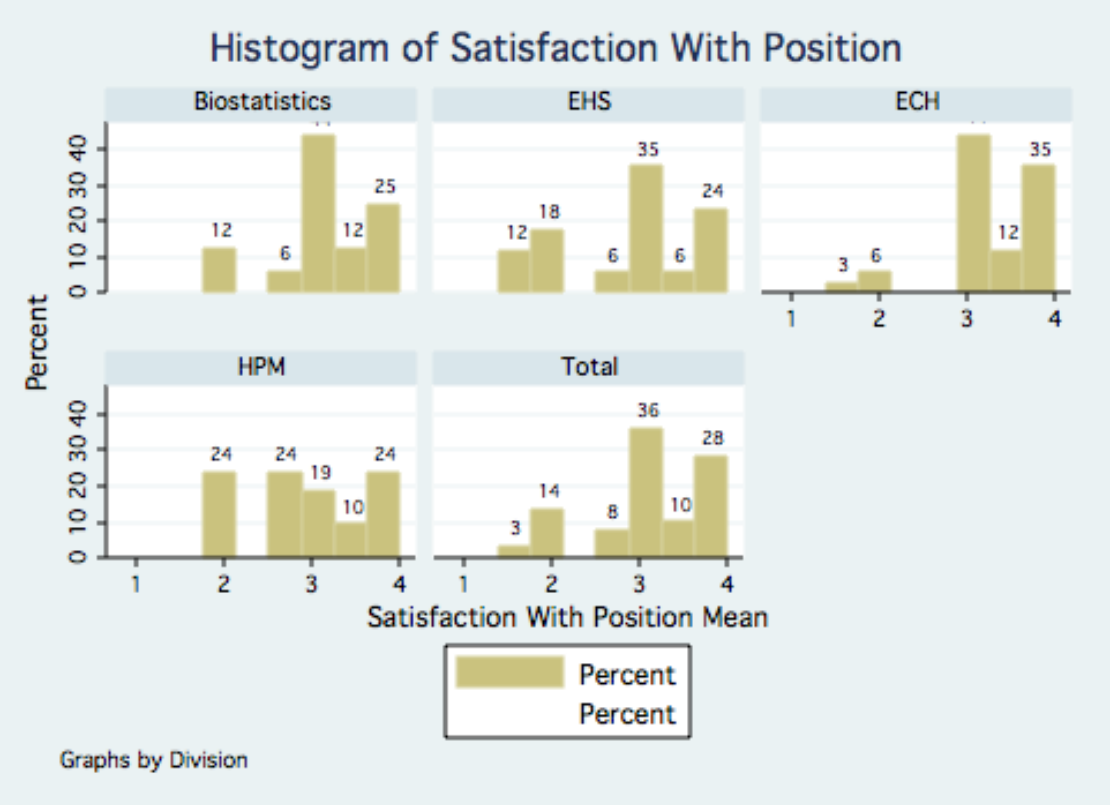


**Figure 13: Pearson chi2(6) = 12.5231 Pr = 0.051**

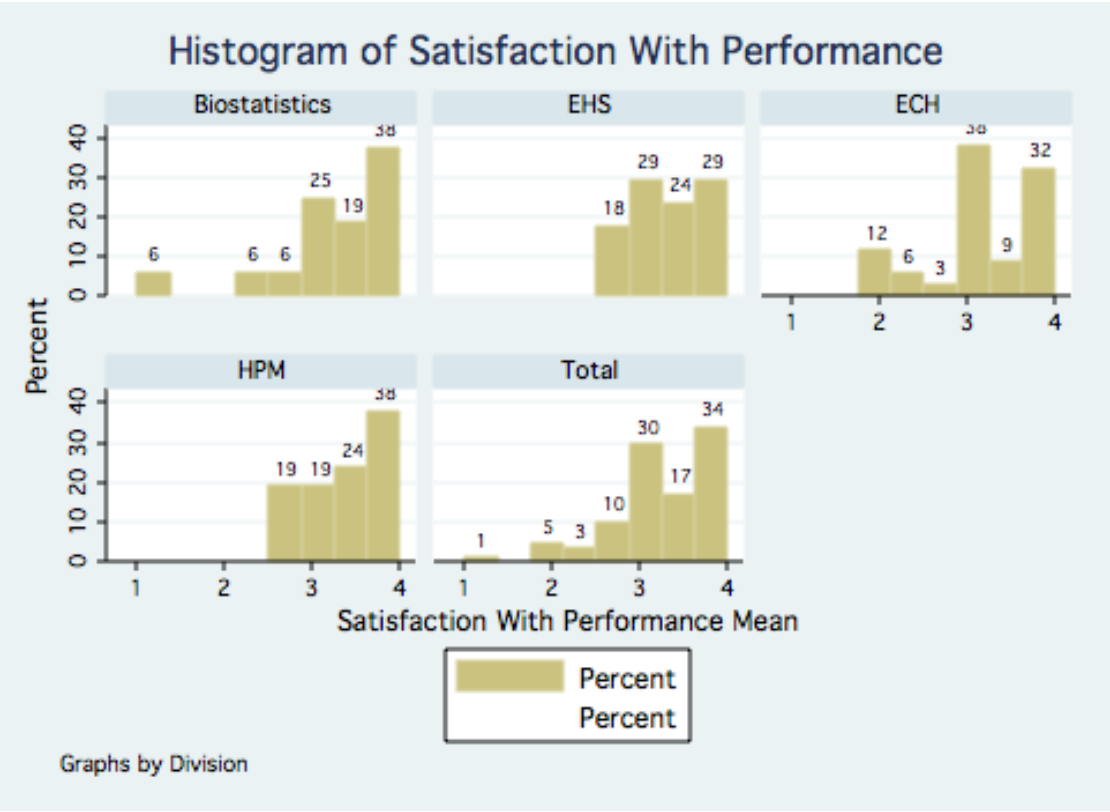


**Figure 14: Pearson chi2(6) = 3.9368 Pr = 0.685**

### SCALES FOR TIME FOR ACTIVITIES

Factor analysis showed that the items for time for activities grouped into two scales – time for students and time for research. In constructing these scales, the following numerical values were assigned to each item: 1=Strongly disagree, 2=Somewhat disagree, 3=Somewhat agree, 4=Strongly agree.

1) Time for Activities (In the past twelve months, how much do you agree with the following statements about the amount of time you had for research and teaching activities in your division? I feel that I had adequate time; Scale: Strongly disagree, Somewhat disagree, Somewhat agree, Strongly agree)
   a) Time for students
      i) to advise students.
      ii) to prepare for classes.
      iii) to assess student work and provide feedback.
   b) Time for research
      i) to write grants
      ii) to work on funded research
      iii) to work on unfunded research
      iv) to develop new research ideas
      v) to develop interdisciplinary work
      vi) to do cutting edge research

**Table 6. Cronbach's alpha, P-values, and Average Scores for Time For Activities Scales**

| | Time for Students | Time for Research |
|---|---|---|
| **Alpha** | 0.91 | 0.91 |
| **Overall p-value** | 0.99 | 0.55 |
| **Biostatistics** | 2.79 | 2.47 |
| **Environmental Health Sciences** | 2.78 | 2.37 |
| **Epidemiology & Community Health** | 2.71 | 2.44 |
| **Health Policy & Management** | 2.68 | 2.44 |
| **p-value** | 0.98 | 0.88 |
| **Assistant** | 2.83 | 2.57 |
| **Associate** | 2.66 | 2.20 |
| **Full** | 2.77 | 2.59 |
| **p-value** | 0.86 | 0.14 |
| **Female** | 2.62 | 2.34 |
| **Male** | 2.83 | 2.52 |
| **p-value** | 0.51 | 0.58 |
| 1-Strongly disagree, 4=Strongly agree. | | |

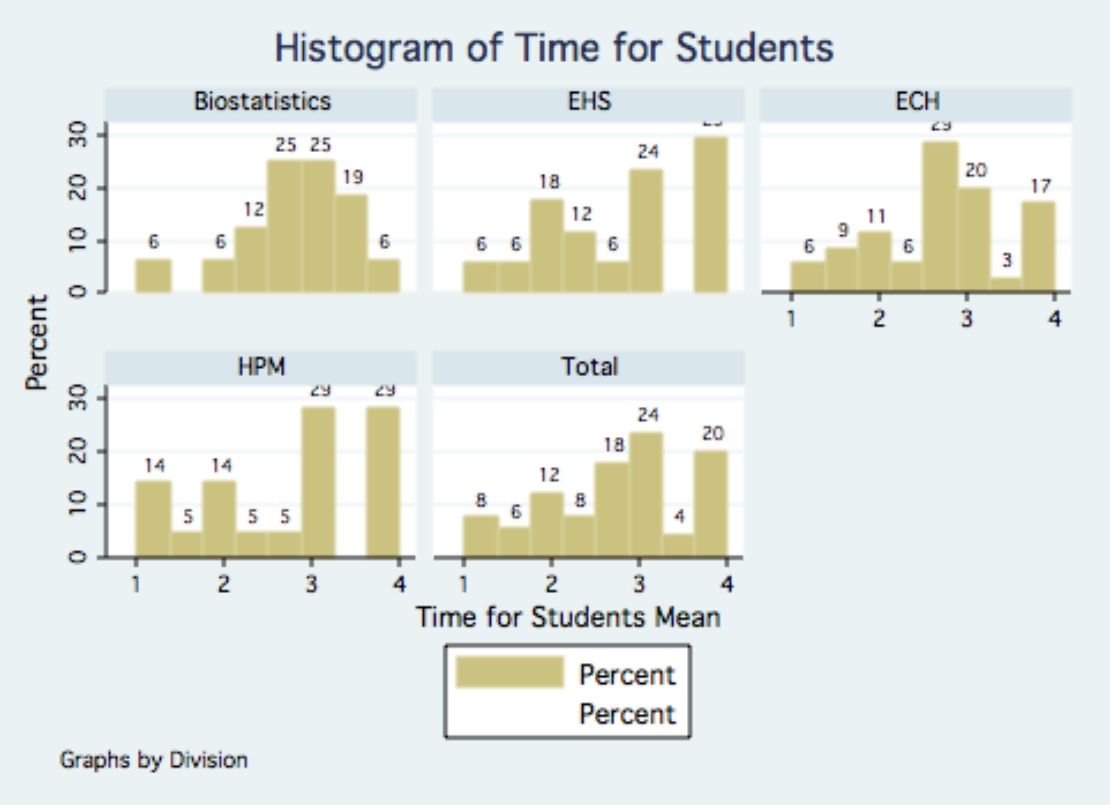


**Figure 15: Pearson chi2(12) = 10.1339 Pr = 0.604**

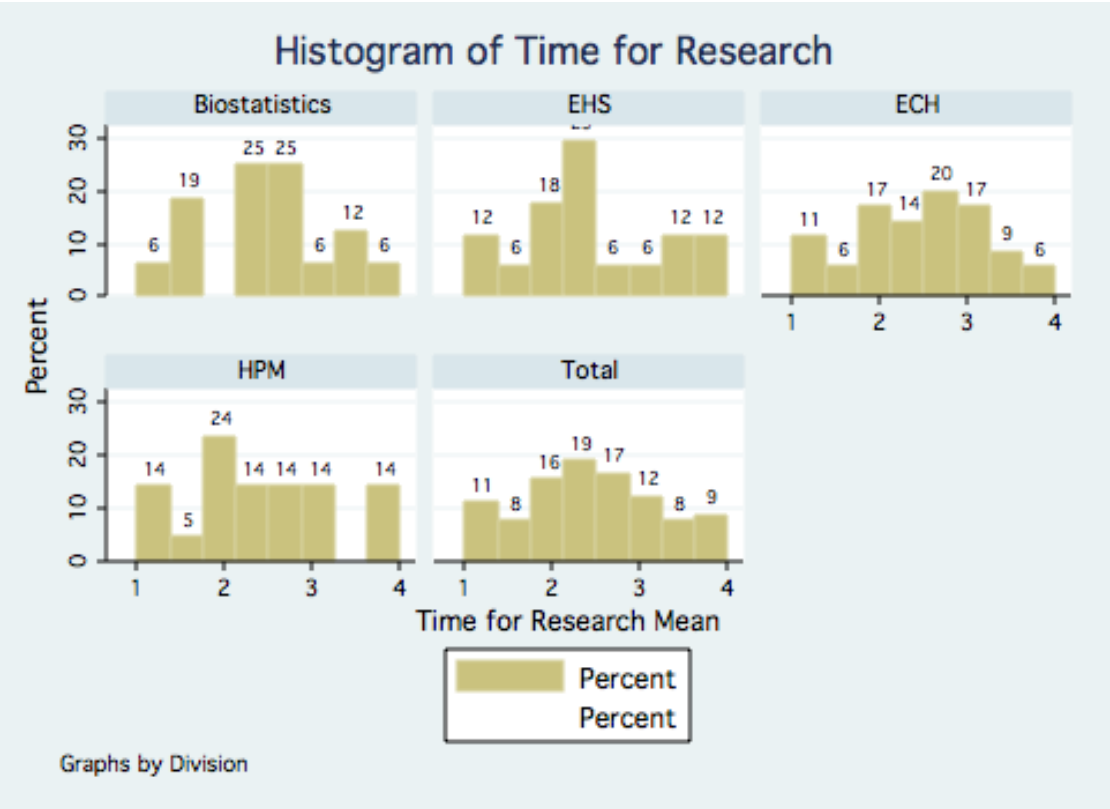


**Figure 16: Pearson chi2(12) = 8.8198 Pr = 0.718**

## SUPPORT ITEMS

Specific areas of support given to faculty were of interest, hence these items were not grouped nor combined into a single scale. In computing means, the following numerical values were assigned to each item: 1=Strongly disagree, 2=Somewhat disagree, 3=Somewhat agree, 4=Strongly agree.

1) Adequate Support: (In the past twelve months, how much do you agree with the following statements about your division's support for you? I feel that my division adequately supports me in; Scale: Strongly disagree, Somewhat disagree, Somewhat agree, Strongly agree)
   a) obtaining supplies for course development, such as purchasing books or teaching materials
   b) availability of and access to computers
   c) availability of and access to statistical or other specialized software
   d) availability of and access to word processing or presentation software
   e) travel support for professional meetings
   f) office staff support
   g) grant management (e.g., account administration)
   h) providing protected time for new course development
   i) technical support for on-line course development
   j) providing teaching assistants to support my teaching

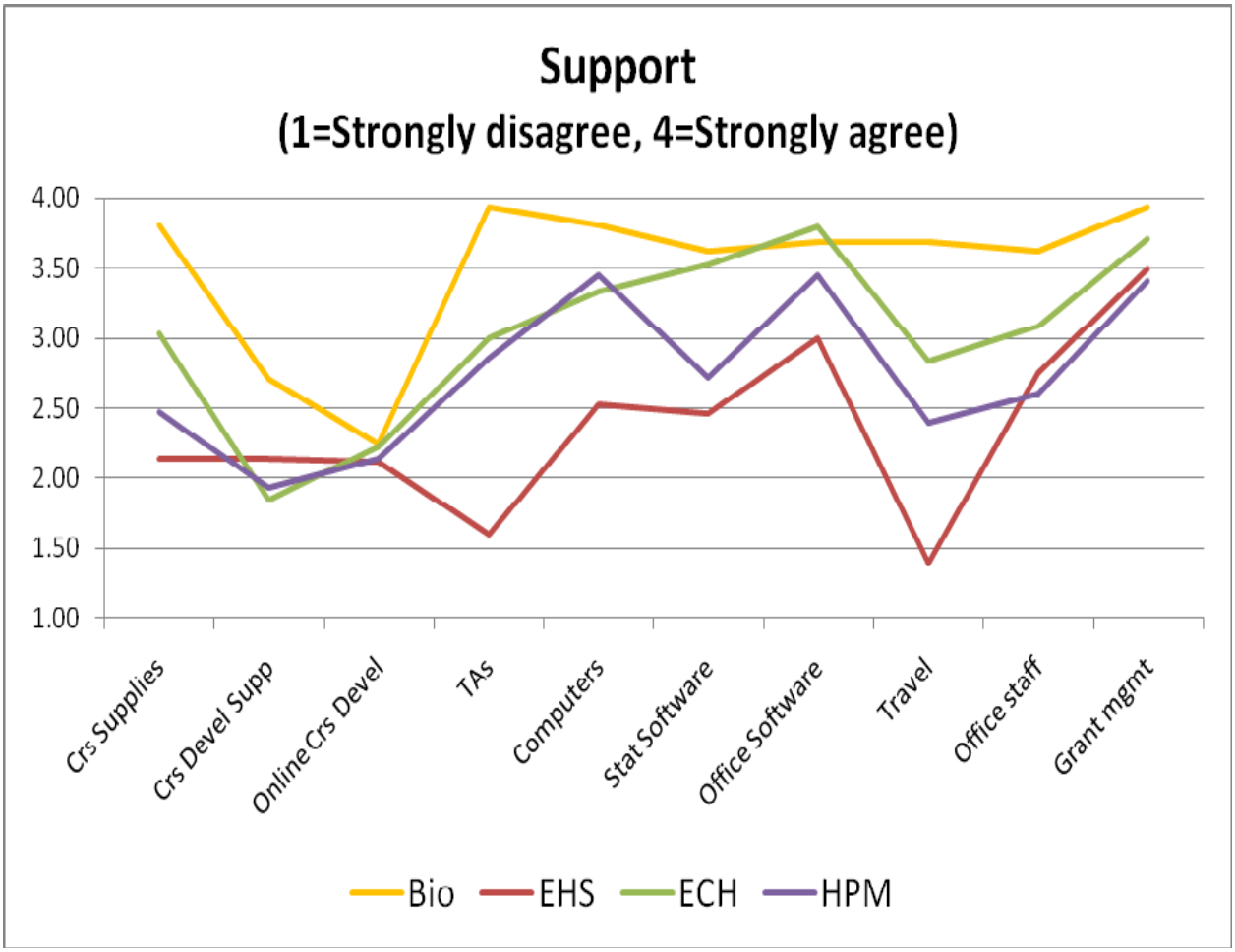


**Figure 17. Average scores for each support item by Division.**

| Table 7. Averages and p-values for Support by Division, by Rank, and by Gender | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **Overall p-value** | **Bio** | **EHS** | **ECH** | **HPM** | **p-value** | **Asst** | **Assoc** | **Full** | **p-value** | **Female** | **Male** | **p-value** |
| **Supplies for course development** | 0.0008 | 3.81 | 2.14 | 3.03 | 2.47 | 0.0001 | 3.11 | 2.90 | 2.84 | 0.76 | 2.81 | 2.98 | 0.26 |
| **New course development** | 0.009 | 2.71 | 2.14 | 1.85 | 1.93 | 0.05 | 2.06 | 1.96 | 2.44 | 0.24 | 1.72 | 2.43 | 0.04 |
| **Tech support for online course development** | 0.44 | 2.25 | 2.11 | 2.23 | 2.14 | 0.84 | 2.36 | 1.89 | 2.48 | 0.28 | 1.91 | 2.44 | 0.15 |
| **T.A.s to support teaching** | 0.0001 | 3.94 | 1.60 | 3.00 | 2.86 | <0.0001 | 3.00 | 3.11 | 2.75 | 0.51 | 3.03 | 2.95 | 0.66 |
| **Computers** | 0.002 | 3.81 | 2.53 | 3.34 | 3.45 | 0.0005 | 3.38 | 3.10 | 3.43 | 0.26 | 3.26 | 3.36 | 0.56 |
| **Statistical or other software** | <0.0001 | 3.63 | 2.46 | 3.53 | 2.72 | 0.0003 | 3.61 | 2.86 | 3.33 | 0.004 | 3.30 | 3.09 | 0.42 |
| **Word process/presentation software** | 0.06 | 3.69 | 3.00 | 3.80 | 3.45 | 0.04 | 3.75 | 3.50 | 3.48 | 0.65 | 3.72 | 3.46 | 0.37 |
| **Travel** | <0.0001 | 3.69 | 1.39 | 2.84 | 2.39 | <0.0001 | 2.90 | 2.67 | 2.56 | 0.83 | 2.91 | 2.50 | 0.13 |
| **Office staff** | 0.03 | 3.63 | 2.75 | 3.09 | 2.60 | 0.01 | 3.25 | 2.90 | 2.97 | 0.22 | 3.18 | 2.89 | 0.24 |
| **Grant management** | 0.43 | 3.94 | 3.50 | 3.71 | 3.41 | 0.20 | 3.70 | 3.73 | 3.65 | 0.96 | 3.69 | 3.63 | 0.39 |

### ITEMS FOR PERFORMANCE EVALUATION

Specific areas of performance evaluation were of interest, hence these items were not grouped nor combined into a single scale. In computing means, the following numerical values were assigned to each item: 1=Almost none, 2=A little, 3=Some, 4=A lot.

1) Annual Evaluation (In the past twelve months, how much do you feel the following criteria POSITIVELY affected your annual performance evaluation?; Scale: Almost none, A little, Some, A lot)
   a) Professional service
   b) Community Service
   c) Community based participatory research
   d) Funding level (e.g., from grants or contracts)
   e) Publishing peer reviewed research
   f) Publishing non-peer reviewed research
   g) Teaching masters level courses
   h) Teaching doctoral level courses
   i) Academic advising
   j) Research and thesis advising
   k) Helping colleagues
   l) Mentoring colleagues, formal and informal
   m) Collaborating on research or educational efforts
   n) Administrative activities (e.g., program management)

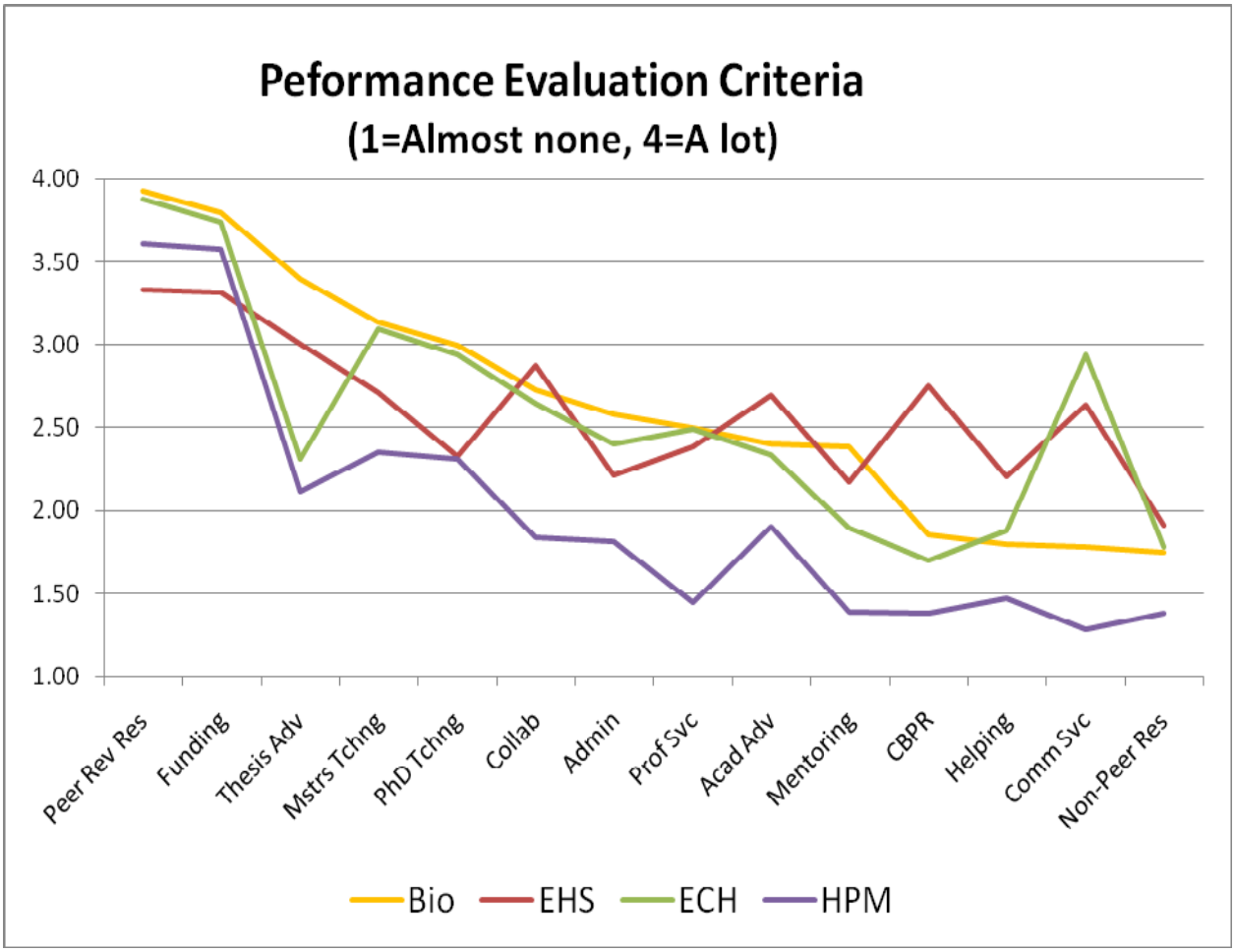


**Figure 18. Average scores for each performance evaluation criterion by Division.**

| Table 8. Averages and p-values for Performance Evaluation Items by Division, by Rank, and by Gender | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Overall p-value | Bio | EHS | ECH | HPM | p-value | Asst | Assoc | Full | p-value | Female | Male | p-value |
| **Professional service** | 0.004 | 2.50 | 2.38 | 2.49 | 1.44 | 0.002 | 2.41 | 2.03 | 2.42 | 0.06 | 2.18 | 2.30 | 0.63 |
| **Community service** | 0.0005 | 1.78 | 2.64 | 2.94 | 1.28 | 0.0002 | 2.00 | 1.69 | 2.19 | 0.05 | 1.88 | 1.95 | 0.81 |
| **CBPR** | 0.001 | 1.86 | 2.75 | 1.70 | 1.38 | 0.008 | 1.75 | 1.31 | 2.32 | 0.008 | 1.62 | 1.90 | 0.45 |
| **Funding level** | 0.04 | 3.80 | 3.31 | 3.74 | 3.58 | 0.11 | 3.36 | 3.83 | 3.74 | 0.01 | 3.68 | 3.62 | 0.94 |
| **Peer reviewed research** | 0.04 | 3.93 | 3.33 | 3.88 | 3.61 | 0.01 | 3.68 | 3.83 | 3.78 | 0.27 | 3.83 | 3.67 | 0.50 |
| **Non-peer reviewed research** | 0.16 | 1.75 | 1.91 | 1.78 | 1.38 | 0.35 | 1.93 | 1.42 | 1.95 | 0.04 | 1.63 | 1.79 | 0.89 |
| **Master's courses** | 0.08 | 3.14 | 2.71 | 3.10 | 2.35 | 0.02 | 3.22 | 2.80 | 2.84 | 0.49 | 2.91 | 2.88 | 0.72 |
| **Doctoral courses** | 0.16 | 3.00 | 2.33 | 2.94 | 2.31 | 0.11 | 3.10 | 2.50 | 2.64 | 0.36 | 2.70 | 2.65 | 0.69 |
| **Academic advising** | 0.07 | 2.40 | 2.69 | 2.34 | 1.90 | 0.05 | 2.59 | 2.13 | 2.46 | 0.09 | 2.22 | 2.47 | 0.46 |
| **Research/Thesis advising** | 0.0008 | 3.40 | 3.00 | 2.31 | 2.11 | 0.0002 | 2.64 | 2.57 | 2.56 | 0.43 | 2.37 | 2.73 | 0.19 |
| **Helping colleagues** | 0.0003 | 1.80 | 2.20 | 1.88 | 1.47 | 0.01 | 1.91 | 1.52 | 2.26 | 0.003 | 1.56 | 2.11 | 0.02 |
| **Mentoring colleagues** | 0.0001 | 2.39 | 2.17 | 1.90 | 1.39 | 0.0005 | 1.93 | 1.69 | 2.30 | 0.002 | 1.74 | 2.10 | 0.31 |
| **Collaborating** | 0.13 | 2.73 | 2.87 | 2.65 | 1.84 | 0.03 | 2.65 | 2.48 | 2.63 | 0.52 | 2.46 | 2.59 | 0.74 |
| **Administrative activities** | 0.37 | 2.58 | 2.21 | 2.40 | 1.81 | 0.21 | 2.56 | 2.14 | 2.44 | 0.25 | 2.30 | 2.31 | 0.67 |
| 1=Almost none, 4=A lot | | | | | | | | | | | | | |

## BURNOUT

Three scales were constructed, each from several items, to measure aspects of burnout. In constructing these scales, the following numerical values were assigned to each item: 1=Never, 2=Once or twice, 3=A few times, 4=A few times per week, 5=Every day.

1) Burnout (In the past twelve months, how often did you feel; Scale: Never, Once or twice, A few times, A few times per week, Everyday)
   - a) Effective
     - i) You were positively influencing the lives of others with your work.
     - ii) Your research was making significant contributions.
     - iii) Your teaching was effective.
     - iv) Your work with the community was making significant contributions.
   - b) Emotionally drained
     - i) Emotionally drained from your work on research collaborations.
     - ii) Emotionally drained from administrative activities.
     - iii) Emotionally drained from teaching.
   - c) Uncaring
     - i) You were treating some students as they were impersonal objects.
     - ii) You had become more callous towards your colleagues.
     - iii) You did not really care what happens to some students.
     - i) You did not really care what happens to some of your colleagues.

**Table 9. Cronbach's alpha, P-values, and Average Scores for Burnout Scales**

| | Effective | Emotionally drained | Uncaring |
|---|---|---|---|
| **Alpha** | 0.70 | 0.84 | 0.82 |
| **Overall p-value** | 0.04 | 0.35 | 0.16 |
| **Biostatistics** | 3.58 | 3.04 | 1.55 |
| **Environmental Health Sciences** | 3.96 | 2.82 | 1.39 |
| **Epidemiology & Community Health** | 3.46 | 3.05 | 1.46 |
| **Health Policy & Management** | 3.48 | 2.47 | 1.82 |
| **p-value** | 0.05 | 0.46 | 0.51 |
| **Assistant** | 3.66 | 2.91 | 1.29 |
| **Associate** | 3.37 | 2.92 | 1.72 |
| **Full** | 3.76 | 2.70 | 1.54 |
| **p-value** | 0.07 | 0.87 | 0.07 |
| **Female** | 3.47 | 2.08 | 1.42 |
| **Male** | 3.69 | 2.66 | 1.65 |
| **p-value** | 0.70 | 0.17 | 0.24 |
| 1=Never, 5=Every day | | | |

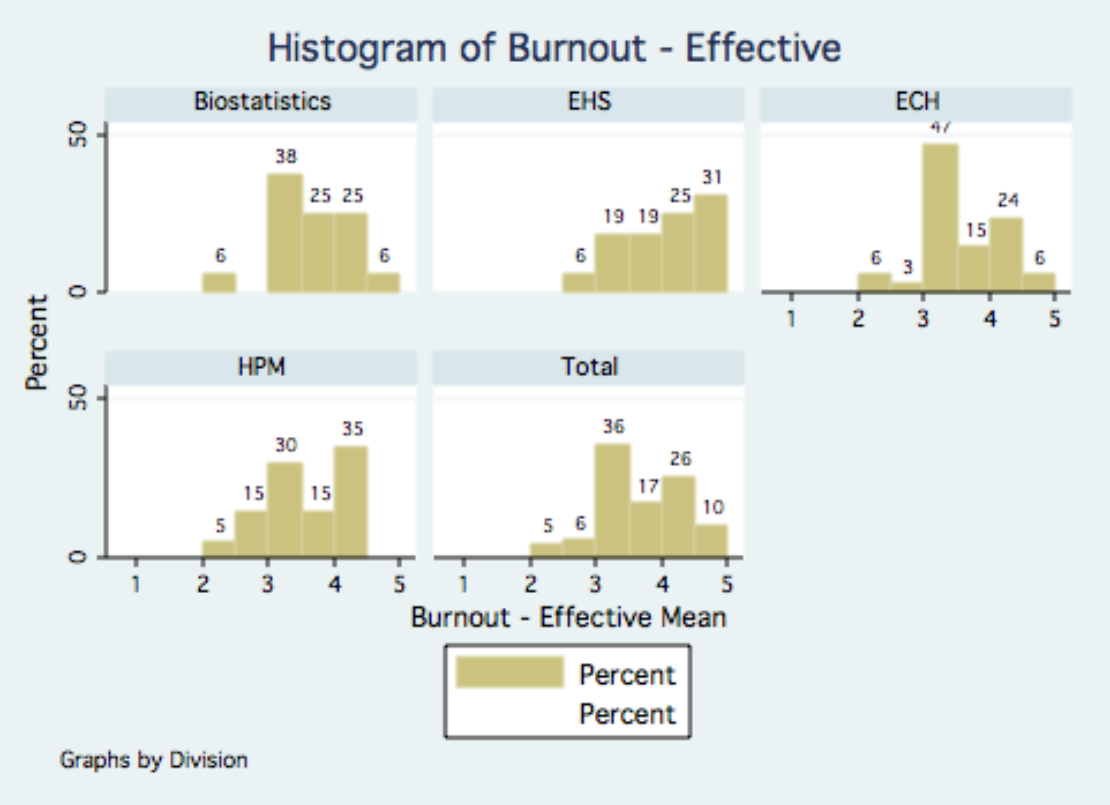


**Figure 19: Pearson chi2(12) = 12.3935 Pr = 0.415**

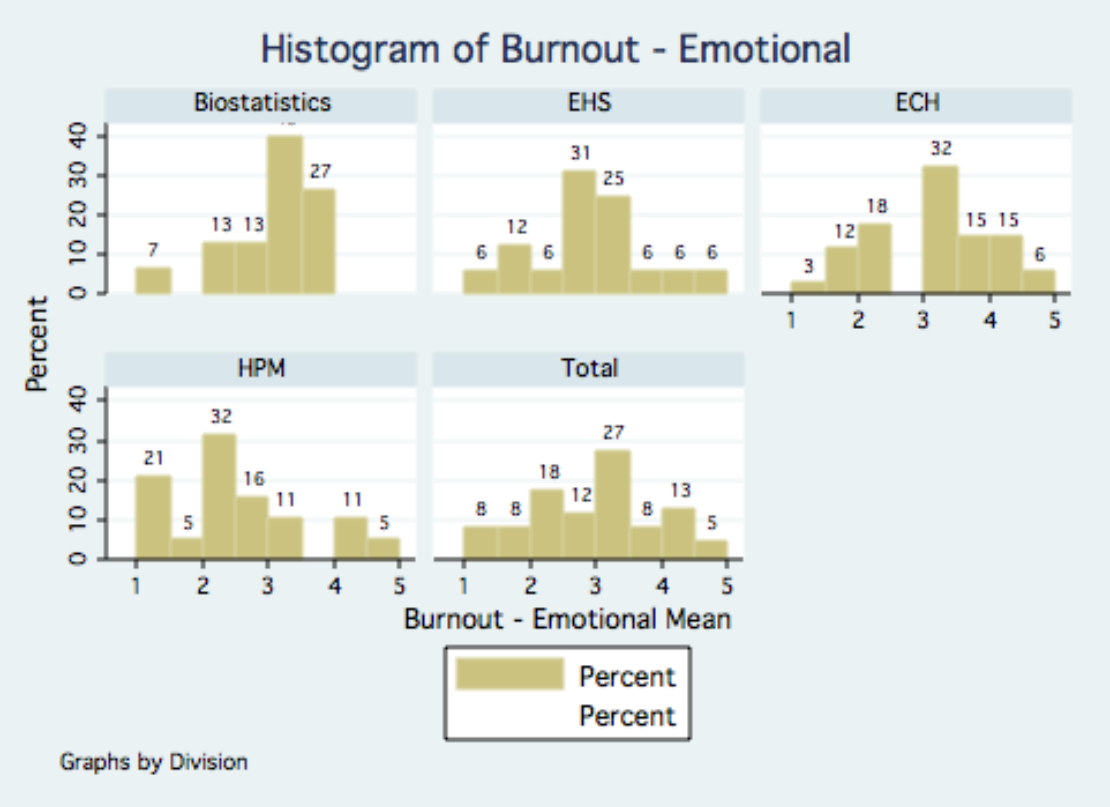


**Figure 20: Pearson chi2(12) = 14.1407 Pr = 0.292**

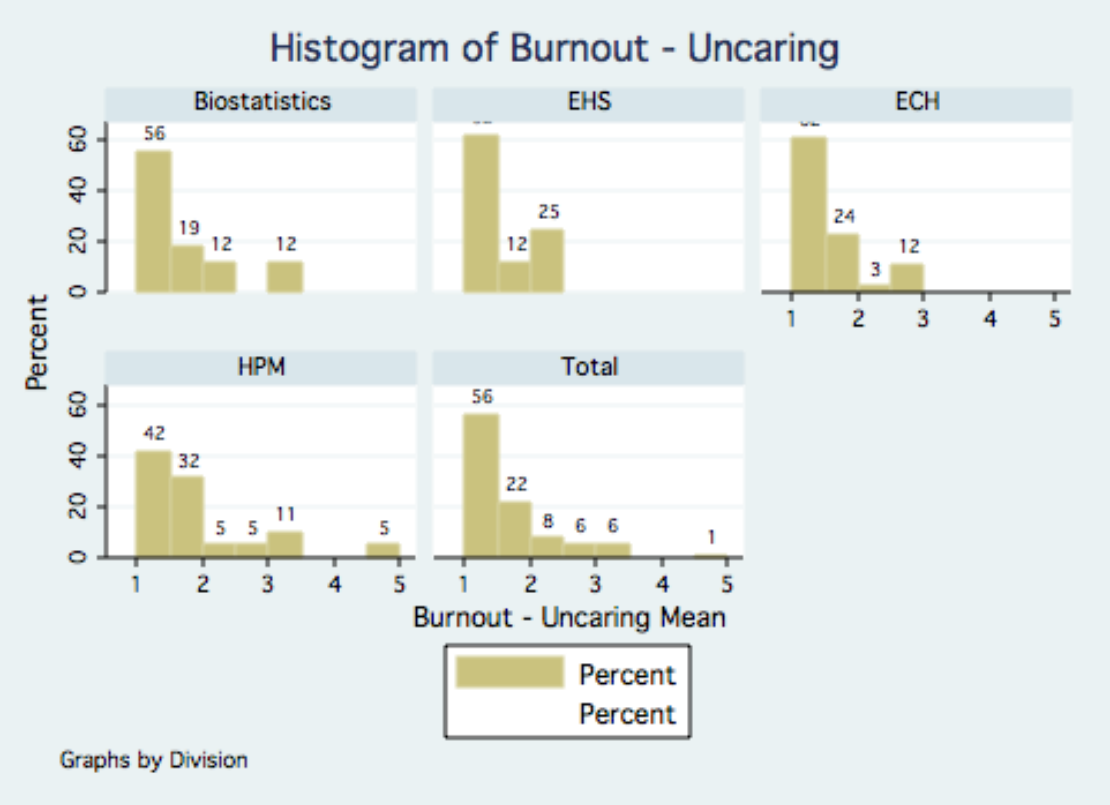


**Figure 21: Pearson chi2(12) = 6.9679 Pr = 0.860**

### ITEMS FOR WORK ACTIVITIES

Specific types of work activities were of interest, hence these items were not grouped nor combined into a single scale.

1) Work Activities (How many hours per week do you usually spend in a typical WEEK in the following work-related activities?: 0, 1 to 4, 5 to 9, 10 to 19, 20 to 29, 30 to 39, 40 or more)
   a) Scholarly writing/analysis
   b) Teaching
   c) Administration
   d) Grant writing
   e) Advising/Mentoring
   f) University/SPH Service
   g) National Professional Service

| Table 10. Averages and p-values for Work Activities Frequencies | | | | | | | |
|---|---|---|---|---|---|---|---|
| | **Scholarly writing / analysis** | **Teaching** | **Adminis-tration** | **Grant writing** | **Advising / Mentoring** | **University / SPH service** | **National professional service** |
| **Overall p-value** | 0.05 | 0.77 | 0.03 | 0.12 | 0.39 | 0.16 | 0.20 |
| **Biostatistics** | 4.71 | 3.43 | 2.62 | 2.93 | 2.57 | 2.14 | 2.08 |
| **Environmental Health Sciences** | 3.44 | 3.31 | 3.38 | 2.38 | 3.00 | 2.56 | 2.19 |
| **Epidemiology & Community Health** | 3.94 | 3.09 | 2.61 | 2.91 | 2.73 | 2.09 | 2.09 |
| **Health Policy & Management** | 4.53 | 3.32 | 2.63 | 2.44 | 2.42 | 2.00 | 2.16 |
| **p-value** | 0.07 | 0.76 | 0.05 | 0.08 | 0.13 | 0.10 | 0.94 |
| **Assistant** | 4.09 | 2.96 | 2.55 | 2.86 | 2.64 | 2.00 | 1.81 |
| **Associate** | 3.76 | 3.38 | 2.93 | 2.48 | 2.79 | 2.31 | 2.14 |
| **Full** | 4.21 | 3.25 | 2.75 | 2.89 | 2.68 | 2.14 | 2.32 |
| **p-value** | 0.24 | 0.44 | 0.64 | 0.12 | 0.84 | 0.31 | 0.07 |
| **Female** | 3.84 | 3.24 | 3.08 | 2.73 | 2.74 | 2.18 | 2.00 |
| **Male** | 4.21 | 3.23 | 2.49 | 2.71 | 2.66 | 2.14 | 2.21 |
| **p-value** | 0.16 | 0.80 | 0.01 | 0.98 | 0.84 | 0.66 | 0.19 |

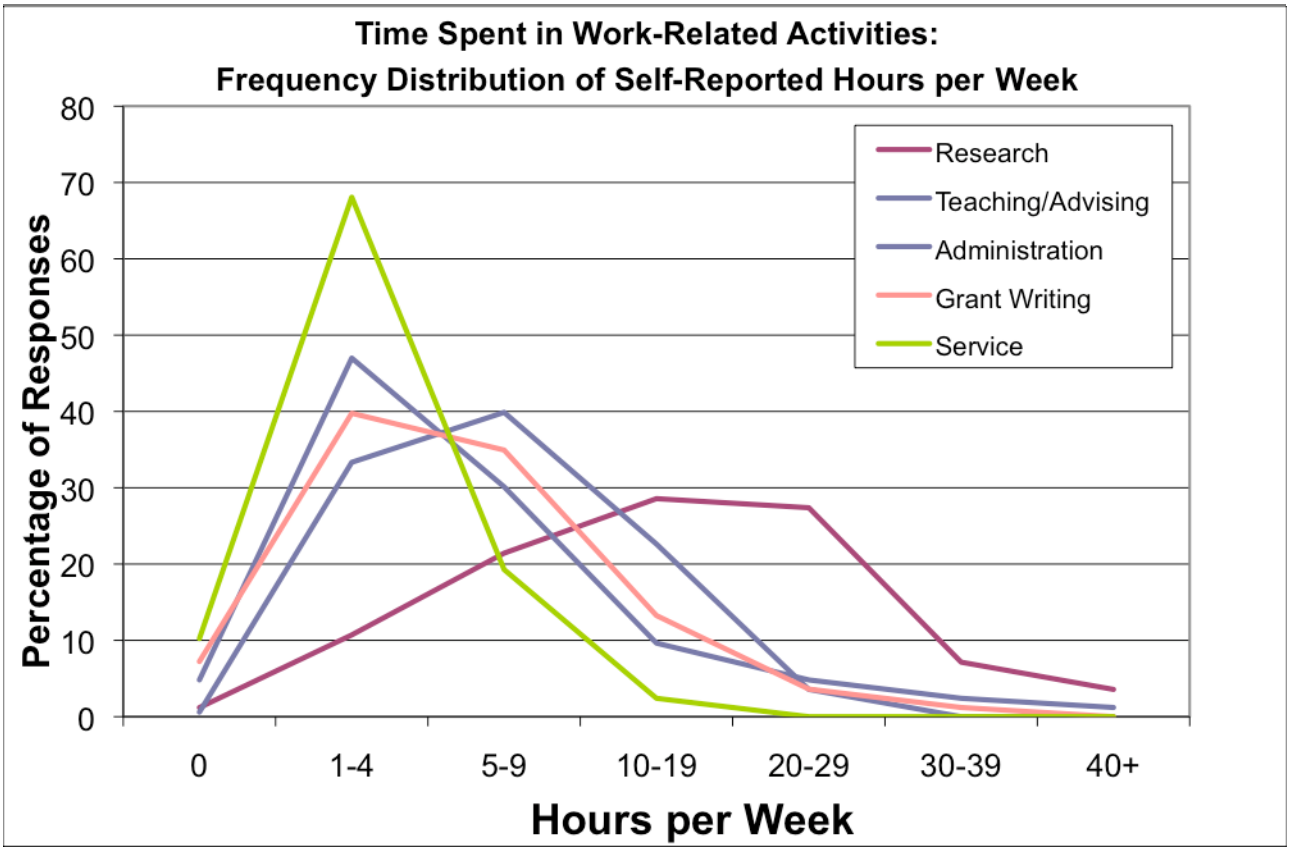


**Figure 22. Percent of responses falling within each category for hours per week by work-related activity.**

## NON-WORK ACTIVITIES

Specific types of non-work activities were of interest, hence these items were not grouped nor combined into a single scale.

1) Non-work Activities (How many hours per week do you usually spend in a typical WEEK in the following non-work related activities?: 0, 1 to 2, 3 to 4, 5 to 9, 10 to 14, 15 to 19, 20 to 29, 30 or more)
   a) Physical activity/exercise
   b) Hobbies/Interests/Recreation
   c) Volunteerism
   d) Care for children or other dependents

**Table 11. Averages and p-values for Non-Work Activities Frequencies**

| | Physical activity | Hobbies / Interests | Volunteering | Childcare / Dependents |
|---|---|---|---|---|
| **Overall p-value** | 0.06 | 0.39 | 0.05 | 0.06 |
| **Biostatistics** | 2.60 | 2.53 | 1.69 | 2.79 |
| **Environmental Health Sciences** | 3.25 | 3.00 | 1.93 | 4.81 |

| Table 11. Averages and p-values for Non-Work Activities Frequencies | | | | |
|---|---|---|---|---|
| | Physical activity | Hobbies / Interests | Volunteering | Childcare / Dependents |
| **Epidemiology & Community Health** | 2.94 | 3.00 | 1.67 | 3.21 |
| **Health Policy & Management** | 2.74 | 2.68 | 1.50 | 3.26 |
| **p-value** | 0.14 | 0.36 | 0.43 | 0.05 |
| **Assistant** | 2.64 | 2.68 | 1.43 | 4.09 |
| **Associate** | 2.77 | 2.80 | 1.48 | 3.87 |
| **Full** | 3.29 | 3.11 | 2.07 | 2.71 |
| **p-value** | 0.08 | 0.17 | 0.03 | 0.16 |
| **Female** | 2.66 | 2.84 | 1.44 | 3.95 |
| **Male** | 3.07 | 2.84 | 1.84 | 3.21 |
| **p-value** | 0.21 | 0.81 | 0.12 | 0.31 |

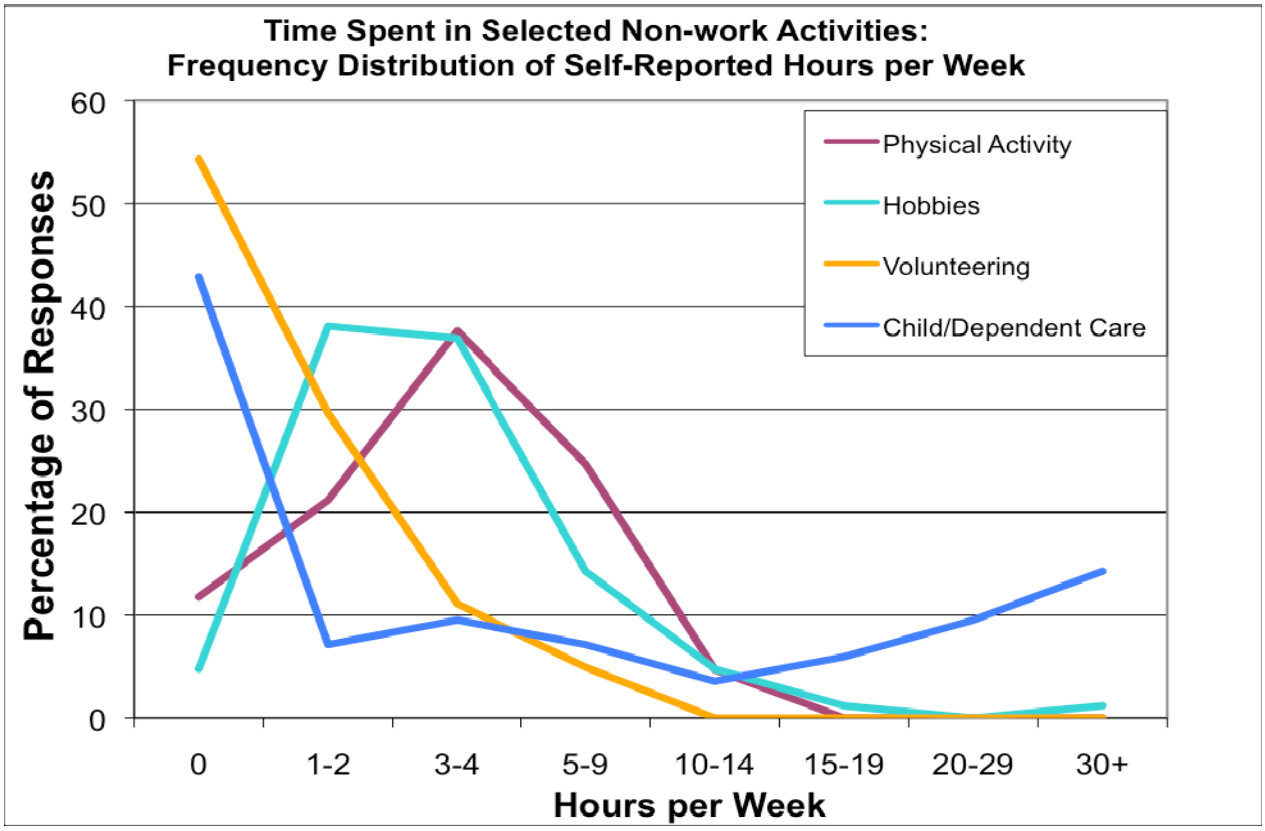


**Figure 23. Percent of responses falling within each category for hours per week by non-work-related activity.**

**Table 12. Correlations of Measures**

| | Measure | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Constructive Controversy | 1 | | | | | | | | | | | | | | | | | | |
| 2 | Conflict | -.57* | 1 | | | | | | | | | | | | | | | | | |
| 3 | Helping | .36* | -.32* | 1 | | | | | | | | | | | | | | | | |
| 4 | Psychological Safety | .46* | -.53* | .45* | 1 | | | | | | | | | | | | | | | |
| 5 | Inclusiveness | .67* | -.62* | .41* | .65* | 1 | | | | | | | | | | | | | | |
| 6 | Distributional Fairness | .46* | -.47* | .25* | .49* | .62* | 1 | | | | | | | | | | | | | |
| 7 | Strategy Process | .63* | -.58* | .43* | .66* | .70* | .59* | 1 | | | | | | | | | | | | |
| 8 | Strategic Plan | .64* | -.61* | .46* | .64* | .69* | .58* | .94* | 1 | | | | | | | | | | | |
| 9 | Leadership | .63* | -.53* | .42* | .53* | .69* | .59* | .82* | .87* | 1 | | | | | | | | | | |
| 10 | Time for Students | .26* | -.19 | .12 | .34* | .28* | .24* | .27* | .30* | .25* | 1 | | | | | | | | | |
| 11 | Time for Research | .30* | -.20 | .25* | .36* | .32* | .29* | .38* | .38* | .35* | .73* | 1 | | | | | | | | |
| 12 | Support - Administrative | .32* | -.26* | .27* | .44* | .37* | .37* | .64* | .60* | .51* | .34* | .38* | 1 | | | | | | | |
| 13 | Support - Grants | .39* | -.18 | .34* | .15 | .38* | .10 | .34* | .41* | .38* | .19 | .22* | .30* | 1 | | | | | | |
| 14 | Burnout - Effective | .13 | -.14 | .21 | .19 | .08 | .05 | .08 | .08 | -.05 | .22* | .27* | -.05 | .16 | 1 | | | | | |
| 15 | Burnout - Emotional | .08 | .01 | -.11 | -.11 | -.02 | -.12 | .01 | .04 | .00 | -.33* | -.28* | -.07 | .07 | -.06 | 1 | | | | |
| 16 | Burnout - Uncaring | -.32* | .33* | -.14 | -.37* | -.42* | -.34* | -.34* | -.34* | -.26* | -.29* | -.22* | -.23* | -.01 | -.06 | .31* | 1 | | | |
| 17 | Work-Life Balance | -.11 | .02 | -.04 | -.31* | -.20 | -.21* | -.20 | -.17 | -.15 | -.25* | -.40* | -.20 | .06 | -.09 | .30* | .39* | 1 | | |
| 18 | Satisfaction - Position | .50* | -.41* | .40* | .44* | .57* | .61* | .55* | .54* | .59* | .26* | .40* | .40* | .18 | .13 | -.13 | -.14 | -.22* | 1 | |
| 19 | Satisfaction - Performance | .13 | -.16 | .21* | .28* | .26* | .26* | .18 | .28* | .24* | .17 | .32* | .06 | .13 | .44* | -.16 | -.03 | -.17 | .50* | 1 |

* - p < .05

## NEXT STEPS

Since Division differences were shown from this survey, FCC members will encourage their own Division faculty and Division Heads to open discussion of whether there are specific aspects of Division culture that should be examined further and potentially addressed with policy or other changes. Other differences shown from this survey were based on faculty rank, which FCC as a school-wide faculty committee is in a position to discuss and examine further over the coming year. FCC invites individual faculty to submit suggestions on issues on which to focus; an anonymous comment submission box can be found on the FCC web page, www.sph.umn.edu/sphfcc/home.html.

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