



W I S E L I

Women in Science & Engineering Leadership Institute
University of Wisconsin-Madison

**Perceived Benefits of and Barriers to Interdisciplinary
Research at the UW-Madison:**

**Evidence from the 2006 *Study of Faculty Worklife at the
University of Wisconsin-Madison***

*Report submitted to WID steering committee by Jennifer Sheridan, Research Director, Women in
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October 31, 2006*

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Perceived Benefits of and Barriers to Interdisciplinary Research at the UW-Madison: Evidence from the 2006 *Study of Faculty Worklife at the University of Wisconsin-Madison*

Executive Summary

In fall 2006, the WID Steering Committee commissioned WISELI to run a special tabulation of results from the 2006 *Study of Faculty Worklife at the University of Wisconsin-Madison*, a faculty survey implemented in spring 2006 that received a 55.7% response rate, to investigate the working environments and satisfaction of faculty who collaborate with other faculty outside of their own departments at the UW-Madison. The analyses compared (1) currently collaborating faculty with (2) faculty who have not collaborated in the past three years, and (3) faculty who had collaborated in the past three years but are no longer collaborating across departments. This last group—those who “stopped” collaborating—may give clues as to some barriers to interdisciplinary collaboration at UW-Madison. The main findings of these analyses, including possible recommendations for the Steering Committee’s consideration, include:

For faculty from all divisions:

- Most currently collaborating faculty are happy and satisfied with their experiences at the UW-Madison. They express more satisfaction with their resources, the tenure process, their departmental climate, and their jobs and careers. They also report significantly less isolation on the UW-Madison campus compared to all other faculty. Faculty who have stopped collaborations in the past three years, in contrast, are among the most unhappy faculty in these areas. The UW-Madison should continue to support this longstanding tradition of interdisciplinary work as a way to attract and retain talented faculty.
- Access to internal funding for research is one area that may be a barrier to interdisciplinary research, as current collaborators are satisfied with their internal funding, while those who have stopped collaborating are not. Providing more internal funding for interdisciplinary research through the WID should help alleviate some of the funding issues for these collaborators.
- Access to colleagues who give career advice may be another barrier faced by some faculty who collaborate with others outside their departments, as those who have stopped collaborating indicate significantly less satisfaction in this area, and are also more likely to indicate they have had inadequate mentoring throughout the tenure process. The WID may wish to consider a mentoring program within the WID that would coach faculty, especially junior faculty, on how to use their interdepartmental collaborative work to enhance their research programs and therefore their personal careers at UW-Madison.

For faculty in the biological and physical sciences:

- Faculty in the natural science departments within the College of Letters & Science (L&S) report lower rates of interdepartmental collaboration than faculty in other

schools. While more investigation into the reasons for this difference is warranted, the WID might consider ways to enhance the participation of L&S faculty in the natural sciences in interdisciplinary research.

- Current collaborators are significantly less likely to agree that they have adequate lab space; however, as this is not a complaint of those who have stopped collaborating, this may not be a limiting factor to collaboration for biological and physical scientists. Another interpretation of the finding is that lab space is only needed for the duration of an interdisciplinary collaboration. More investigation into this issue is needed.
- Interdepartmental collaborators in the biological and physical sciences do appear to have issues regarding their work/life balance. Not only are they younger, more likely to report having school-aged children in their homes, and report more often having a spouse or partner in the labor force, they also report significantly reduced levels of satisfaction with their work/life balance. In order to attract and retain the highly productive and motivated individuals who engage in interdepartmental collaborations, the WID might consider ways that they can help to reduce the work/life conflicts of participating faculty.

For faculty in the social studies and arts & humanities:

- Interdepartmental collaborators in these disciplines tend to be more senior, tenured professors. The WID might consider whether junior faculty in these disciplines might also make a contribution to interdisciplinary efforts, and find ways to include more of them.
- Research/studio space may be a factor that limits participation in interdepartmental collaboration for faculty in these disciplines, as current collaborators are satisfied with their lab space, while those who have stopped collaborating are significantly less satisfied than others.

The findings and conclusions expressed in this report are based on cross-sectional data, and thus no definitive causal inferences may be made. The recommendations in this report may therefore be somewhat speculative; however, they are submitted with good faith to the WID Steering Committee in an effort to assist in the design of the most productive interdisciplinary working environment possible.

Perceived Benefits of and Barriers to Interdisciplinary Research at the UW-Madison: Evidence from the 2006 Study of Faculty Worklife at the University of Wisconsin-Madison

In September 2006, the steering committee of the Wisconsin Institutes for Discovery commissioned a special tabulation of results from the *2006 Study of Faculty Worklife at the University of Wisconsin-Madison* survey, implemented in spring 2006. The analysis proposed to answer five main questions:

1. What are the characteristics of faculty who say they collaborate or have collaborated in the past with colleagues outside of their departments?
2. Do faculty who collaborate outside of their departments indicate a satisfaction with the campus resources available to them (e.g., equipment and supplies, sufficient office/laboratory space, sufficient internal funding, etc.)?
3. Do faculty who collaborate outside of their departments indicate greater or lesser satisfaction with the tenure process than other faculty?
4. How do faculty who collaborate outside of their departments perceive their treatment within their departments—do their colleagues respect them and their research? Do they feel like they “fit”?
5. How satisfied are collaborating faculty with their jobs and their careers at UW-Madison? Are they more likely to indicate an intention to leave the UW? What are the reasons they give for leaving/staying?

One goal of the Wisconsin Institutes for Discovery (WID) is to provide a research environment that will stimulate and enhance scientific discoveries by facilitating interdisciplinary research. By understanding the elements of the current UW-Madison environment that positively promote interdisciplinary research, the WID steering committee can enhance these elements in the WID. Similarly, if barriers to interdisciplinary research are uncovered, the WID steering committee can recommend changes to the research environment, both within the WID and within the UW-Madison more generally, to remove these barriers and thus take the strong tradition of interdisciplinary research already present at the UW-Madison to the next level.

Introduction

The 2006 Study of Faculty Worklife at the University of Wisconsin-Madison

The *Study of Faculty Worklife at UW-Madison* survey was conceived of in 2001, as an element of the proposed ADVANCE project at UW-Madison. The ADVANCE project was funded (WISELI, the Women in Science & Engineering Leadership Institute, is the research center that was formed to centralize all ADVANCE activities), and development of the survey instrument began in 2002 with in-depth interviews of 26 women faculty in the biological and physical sciences. Their comments formed the basis of an instrument designed to investigate gender differences in workplace experiences of faculty in biological and physical sciences. In late 2003, just before the instrument was to be fielded, the Office of the Provost requested that the survey be sent to all faculty in all divisions, and funded the additional costs associated with the expansion of the survey. This survey was

implemented from February through June of 2003, and received a 60.2% response rate.

In 2006, as proposed in the original ADVANCE grant, WISELI re-surveyed the faculty in order to evaluate the impact of the ADVANCE grant on campus, and document any changes that occurred between 2003 and 2006. The 2006 instrument was nearly identical to the 2003 instrument. The survey was again extended to UW-Madison faculty in all divisions through the contributions of the Office of the Provost. It was in the field from February through April of 2006, and received a 55.7% response rate.

The two surveys in 2003 and 2006 now provide the UW-Madison campus with a rich source of faculty attitude data. The datasets are reasonably representative of the faculty at large, with some exceptions. As is common in most surveys, women tended to respond at higher rates than men, and response rates also varied quite widely across schools and colleges, with the Law School and School of Business showing the lowest response. In the 2003 survey, women faculty of color responded at the same or higher rates as majority faculty women, and men faculty of color tended to respond at lower rates, particularly Asian males. In 2006, all faculty of color (men and women, all racial/ethnic groups) tended to respond at lower rates than their majority counterparts, and in contrast to their high participation in the 2003 survey. Aside from these differences, response was quite consistent across measurable demographic characteristics of the faculty (see <http://wiseli.engr.wisc.edu/initiatives/survey/results/facultypre/resprates/summary.htm>, and also Appendix 2, for more detail.) Faculty in the Biological and Physical Sciences (both men and women) responded above the 50% rate in both the 2003 and 2006 surveys. The response rate in the

Social Studies division was nearing 60% in both surveys. See Appendix 2 for a summary of response rates from the 2006 survey.

In the analyses that follow, we will investigate differences among faculty based on their response to the item:

Do you currently collaborate, or have you collaborated *in the past three years*, on research with colleagues...

Check all that apply.	Currently collaborate?		Collaborated in the past 3 years?	
	Yes	No	Yes	No
Outside your department, but on the UW-Madison campus?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

We will consider three groups. The first is comprised of faculty who say they currently collaborate with colleagues outside their departments, but on the UW-Madison campus (N=663, “current”). The second group will be faculty who are neither currently collaborating, nor have they collaborated in the past three years (N=431, “none”). The third group of faculty includes those who are not currently collaborating, but had been collaborating outside their departments in the past three years (N=120, “stopped”). Responses of biological and physical science faculty will be analyzed separately from responses of social studies and arts & humanities faculty. For a list of departments in each divisional category, see <http://wiseli.engr.wisc.edu/initiatives/survey/results/facultypre/deptlist.htm>. Detailed results of all analyses are reported in Tables 1 through 21 in Appendix 3. T-tests were performed to test for significant differences in outcomes among the three groups of collaborators: “Current”, “None”, and “Stopped.” In the figures highlighted in this report, an asterisk (*) denotes a significant t-test at the $p < .05$ level, and a tilde (~) denotes a marginally significant t-test at $p < .10$. All of the figures appearing in this report are reproduced full-size in Appendix 4.

It is important to highlight the cross-sectional nature of these data. We cannot

ascertain causation in any of the findings contained in this report; these are correlations only. When significant differences are found among the three groups—current collaborators, no collaborations, and stopped collaborating—and some outcome measure, we will often need more in-depth data to really understand the relationship. Certainly some characteristics of the working environment might be affecting the three groups differently, but it is also possible that faculty who are in those groups vary on some individual characteristics that we did not measure which could also cause the observed relationship.

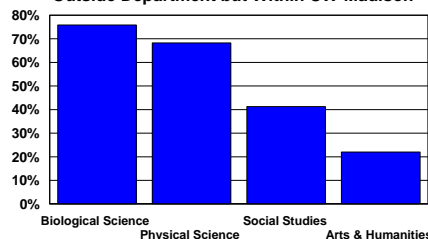
A final caveat: our measures of interdepartmental collaboration are merely proxies for interdisciplinary research collaborations on the UW-Madison campus. Certainly, faculty within a department are not homogenous, and some departments employ faculty with different intellectual backgrounds. These faculty may be collaborating with their departmental colleagues and still be doing interdisciplinary research, but these relationships would not be counted as “current collaborations” in the coding scheme used for this study. Similarly, faculty collaboration with others outside the department might not be an interdisciplinary collaboration, as it is certainly possible that two faculty in different departments could be working in the same field. Nonetheless, we believe that interdepartmental collaborations are the best proxy measure of interdisciplinary research available at this time, compared to intradepartmental collaboration or inter-institutional collaborations. Perhaps a future *Study of Faculty Worklife at the UW-Madison* could ascertain this question more precisely.

Results

Question 1: What are the characteristics of faculty who collaborate across departments?

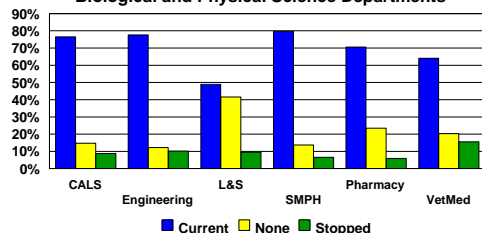
There is not a great deal of difference between faculty who collaborate and those who don't on the observable demographic variables we have at our disposal. In the biological and physical sciences, biological science faculty are significantly more likely to collaborate outside their departments compared to physical science faculty, and physical science faculty are significantly more likely to have never collaborated than are biological science faculty.

Figure 1.
Percent of Faculty Indicating Current Collaboration Outside Department but Within UW-Madison



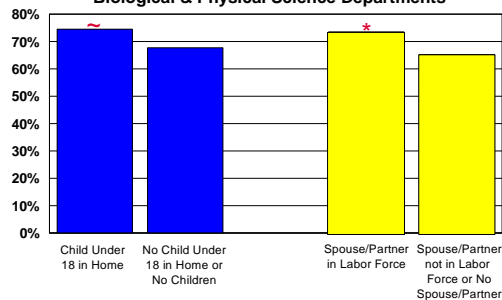
When broken down by school within the biological and physical sciences, we see that the College of Letters and Sciences (L&S) has the lowest rates of interdepartmental collaboration. Less than half of faculty in L&S report that they are currently collaborating outside of their departments, while in all other schools housing biological and physical science departments, at least 60% of faculty report collaborating, and in the School of Medicine and Public Health (SMPH), almost 80% of faculty report such collaborations.

Figure 2.
Distribution of Interdepartmental Collaborators
Biological and Physical Science Departments



Interestingly, collaborators in the biological and physical sciences are more likely to have children in their homes and to have a spouse/partner in the labor force than are non-collaborators. This result is partially attributable to age, and working in a biological science department. In the biological and physical sciences, it tends to be the younger faculty who report cross-departmental collaborations, and overall, biological science faculty tend to have more children than faculty in other divisions (see results from *2003 Study of Faculty Worklife*.) The marginally significant result for having children in the home disappears when age of faculty member is controlled, and the significant effect of having a spouse/partner in the labor force disappears when division is controlled. Nonetheless, attention to work/life balance issues may be important if we would like to encourage interdisciplinary research.

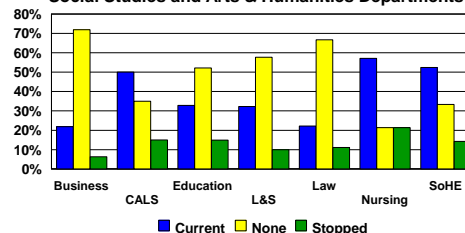
Figure 3.
Family Characteristics of Current Collaborators
Biological & Physical Science Departments



In the social studies and arts and humanities departments, it is clear that social studies faculty are more likely to collaborate with others outside their departments compared to their arts & humanities colleagues. Social

Studies departments in CALS, SoHE, and Nursing appear to foster the highest rates of interdepartmental collaboration.

Figure 4.
Distribution of Interdepartmental Collaborators
Social Studies and Arts & Humanities Departments



Interestingly, the opposite pattern with respect to age seems to appear in these divisions, with the untenured faculty indicating they are significantly more likely to have never collaborated than tenured faculty, and tenured faculty more likely to have collaborated in the past and stopped. Indeed, in social studies/arts & humanities divisions, younger faculty indicate they have never collaborated more often than older faculty. Faculty who indicated they are not U.S. citizens report significantly lower rates of interdepartmental collaboration than their U.S. citizen counterparts, and no intervening variable could be found that explains this discrepancy. No significant differences with regard to family variables appeared, except that social studies/arts & humanities faculty who stopped collaborating in the past three years were more likely to indicate they had a spouse/partner in the labor force, indicating a possible barrier to participation among these faculty. A new question was added to this analysis in response to this discovery: Do faculty who are currently collaborating with others outside their departments report less satisfaction with their work/life balance?

In all divisions, faculty with formal appointments in more than one department are significantly more likely than others to indicate they collaborate with faculty outside their primary departments, a not unexpected finding.

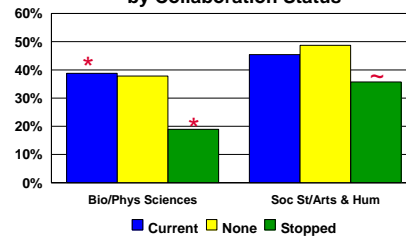
Question 2: Interdepartmental collaboration and satisfaction with institutional resources

Overall, faculty who are currently collaborating appear to be more happy with their access to resources—equipment, space, internal funding, support, and colleagues—than their counterparts who have either never collaborated, or have stopped collaborating in the past three years. In all divisions, high levels (over 75%) of collaborating faculty say they have needed equipment, sufficient office space, colleagues on campus who do similar research, and colleagues who give career advice when needed; often the level of agreement for collaborating faculty is significantly higher than that for other faculty.

In contrast to the high levels of institutional resources reported by current collaborators, and even non-collaborators, those who have ended an interdepartmental collaboration in the past three years report significantly lower satisfaction in several areas, compared to other faculty. In the cases where relatively high levels of satisfaction with a resource exists among currently collaborating faculty, and relatively low levels of satisfaction with the same resource for the stopped collaborating faculty, we can investigate areas that might be considered “barriers” to interdisciplinary collaboration among the UW-Madison faculty.

One such area that immediately stands out is access to internal funding. Almost 40% of current collaborators agree they have enough internal funding to conduct their research, whereas only 19% of those who stopped collaborating agree.

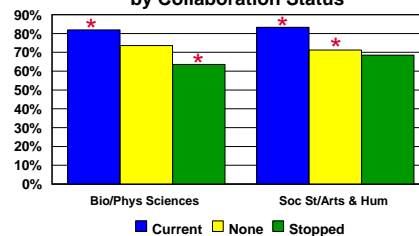
Figure 5.
Enough Internal Funding to Conduct Research,
by Collaboration Status



A similar pattern emerges for social studies and arts and humanities faculty, with those who stopped collaborating indicating significantly lower agreement that they have adequate internal funding to do their research. Similar, though not as strong, patterns emerge when faculty are asked whether they have the equipment they need to do their research; these two items are undoubtedly related.

Similarly, currently collaborating faculty in all divisions report very high satisfaction with both their access to colleagues on campus who do similar research, and also their access to colleagues who can give career advice or guidance when needed.

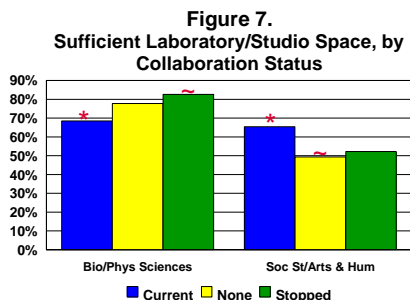
Figure 6.
Colleagues Who Give Career Advice/Guidance,
by Collaboration Status



This last item, in particular, may be a very important factor in helping support the interdisciplinary work of faculty, as it indicates that those who have good mentoring relationships can successfully maintain their collaborations and progress in their careers (see Question 5 below), while those without this kind of mentoring support find their collaborations ending.

A different pattern of results emerges when faculty are asked whether they have

adequate lab space to do their research. Among biological and physical science faculty, fewer current collaborators indicate they have adequate lab space, compared to their non-collaborating counterparts.



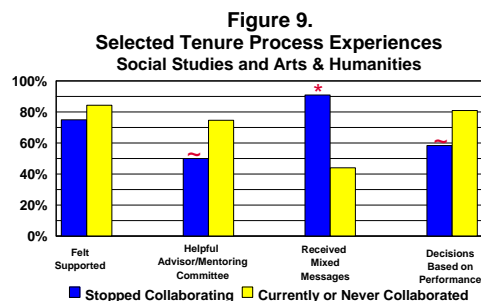
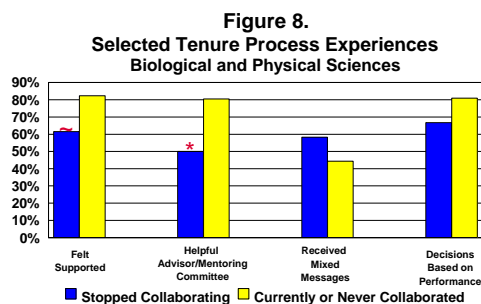
At the same time, among those faculty who stopped collaborating in the past three years, significantly more indicated that they had adequate lab space than other faculty. This seems to indicate that while lack of lab space is an issue for currently collaborating faculty in the biological and physical science divisions, it may not be the determining factor in whether a collaboration continues. Another interpretation is that while an interdepartmental collaboration is in process there is a heightened need for lab space; once the relationship ends, the need for extra space disappears. More study is needed to understand these findings.

The opposite pattern for satisfaction with space emerges for the social studies and humanities faculty, where significantly more collaborating faculty indicate they have adequate lab space, compared to non-collaborating faculty. In these divisions, access to adequate lab/studio space may be an issue in developing interdepartmental research collaborations.

Question 3: Interdepartmental collaboration and satisfaction with the tenure process

For analyses of satisfaction with the tenure process, only junior faculty and tenured faculty within three years of their tenure

decision are included in the analyses (N=351). Currently collaborating faculty in all divisions report the same or higher satisfaction with all of the elements of the tenure process the survey inquired about, compared to their non-collaborating peers. Thus, it is the experiences of those who stopped collaborating that may be instructive in examining the barriers that might exist for junior faculty who begin a research collaboration across departmental lines at UW-Madison. The faculty who have stopped collaborating tend to have more negative responses on all of the items compared to their peers. Some of the items which illustrate this most clearly include “I feel/felt supported in my advancement to tenure,” “My senior advisor/mentor committee is/was very helpful to me in working toward tenure,” “I have received mixed messages about the requirements for tenure from senior colleagues,” “and “Tenure decisions are based primarily on performance, rather than on politics, relationships, or demographics.”



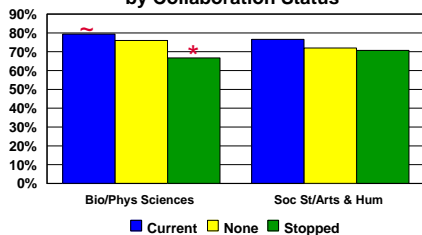
These items taken together might indicate that for some junior faculty who initiate interdisciplinary research collaborations, the work is not entirely valued within their

departments and they are having difficulty getting good mentoring advice on how best to ensure that their interdisciplinary work is valued in their tenure application. Of course, other factors such as unmeasured characteristics of the faculty who have stopped collaborating may also explain this correlation.

Question 4: Interdepartmental collaboration and satisfaction with departmental climate

Faculty in all divisions who collaborate with colleagues outside their own departments tend to experience as good as a departmental climate, or better, than other faculty. They are treated with the same levels of respect (by colleagues, students, staff, and their chairs); they are satisfied with their informal departmental interactions (e.g., not feeling excluded, not having unwritten rules about departmental interactions, not reluctant to bring up issues, and work is recognized) at about the same level as other faculty; their “fit” and isolation in the department are about the same; and their ability to participate in departmental decision-making is similar. The overall impression of climate for collaborating faculty is “positive” slightly more often than non-collaborating faculty.

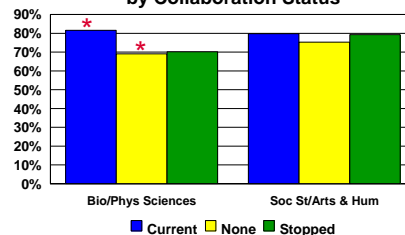
Figure 10.
Climate in Primary Department Rated “Positive”,
by Collaboration Status



In general, collaboration outside of one’s department seems to have very little effect, or a slightly positive effect, on how a faculty member experiences his or her departmental climate.

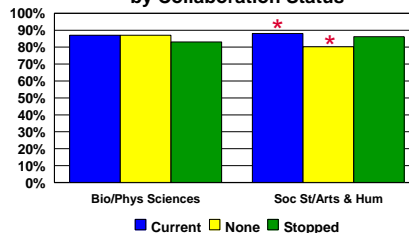
However, there are one or two places where significant differences did emerge between collaborating faculty, or faculty who have stopped collaborating, and others, and they are in the important area of *colleagues’ valuation of research*. These differences are in a positive direction for current collaborators. In biological and physical science departments, faculty currently collaborating with colleagues outside their department agreed significantly more often that “colleagues value my research,” and those who have not collaborated or stopped collaborating reported about the same agreement to that item.

Figure 11.
Agree that “Colleagues Value My Research”,
by Collaboration Status



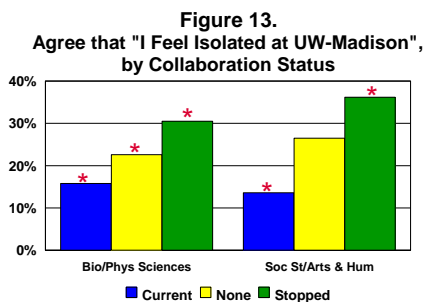
In social studies and arts & humanities departments, the “colleagues value my research” item was similar across groups, but currently collaborating faculty found that their departmental colleagues “solicit my opinion on work-related matters” more often than other faculty; this result is not related to tenure status.

Figure 12.
Agree that “Colleagues Solicit My Opinion”,
by Collaboration Status



We also asked a question about perceptions of isolation at the UW-Madison overall. Collaborating faculty in all divisions report significantly less isolation at UW-Madison than other faculty, and faculty who have

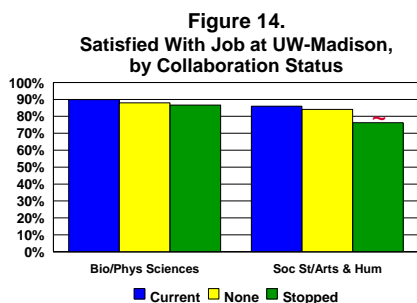
stopped collaborating in the past three years report the most isolation at UW-Madison.



It seems clear that interdepartmental collaborations, such as those that the WID will foster, are good for faculty and good for the overall climate at UW-Madison. Enhancing those collaborations should be a campus priority.

Question 5: Interdepartmental collaboration and faculty job and career satisfaction

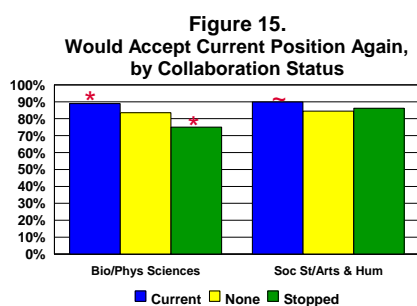
Collaboration with colleagues outside one's department but at UW-Madison is very slightly correlated with higher job and career satisfaction in all divisions. In the biological and physical sciences this relationship is not significant yet it is consistent, while in the social studies/arts & humanities divisions the differences do begin to reach statistical significance.



The factors that faculty cite most often as contributing to and detracting from their satisfaction at UW-Madison do not vary appreciably by collaboration status. For all faculty, having good colleagues and good students is the main reason they are happy at UW-Madison, and having poor access to

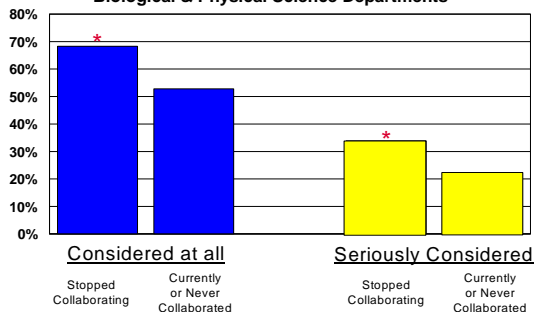
resources and a low salary most detract from their satisfaction here.

Another way to measure job satisfaction is to ask whether a respondent would accept his/her job again, knowing what they know now. Faculty who collaborate in all divisions report more often that they would accept their current position again compared to faculty who are not currently collaborating, and are also more likely to indicate that they would strongly recommend their department.



When collaborating relationships across departments end, however, there seems to be a reverse of feeling. Faculty who have ended collaborating relationships in the past three years report lower job and career satisfaction, are less likely to say they would accept their current positions or would strongly recommend their departments to new hires. They are also highly likely to indicate that they have considered leaving the UW-Madison in the past three years—almost 70% of these faculty have considered leaving the UW in the past three years and about one-third report that they “quite” or “very” seriously considered leaving.

Figure 16.
Considered Leaving UW-Madison in Past 3 Years
Biological & Physical Science Departments



Further analysis of this tendency for faculty who have stopped interdepartmental collaborating relationships to consider leaving the UW was analyzed using logistic regression models. A number of variables were investigated to discover whether they had mediating effects on the intention to leave UW-Madison. Two variables were found to be important mediating factors: having enough internal funding to conduct research, and having colleagues who give career advice when needed. Once these variables were controlled, the odds of intending to leave (either at all, or seriously) were not significantly different from other faculty.

Finally, we examined the factors that faculty themselves cite as the reasons contributing to their decisions to stay at UW-Madison, and to leave. (Only faculty who said they had considered leaving in the past three years responded to these open-ended items.) Low salary was the most-cited reason for leaving in all divisions, with poor resources and not feeling appreciated cited next most often. Very few mentions of any reason except low salary was cited in this section; thus differences in the second- and third-most-cited reasons are not likely to be important. Family and colleagues are the most-cited reasons for staying, regardless of collaboration status.

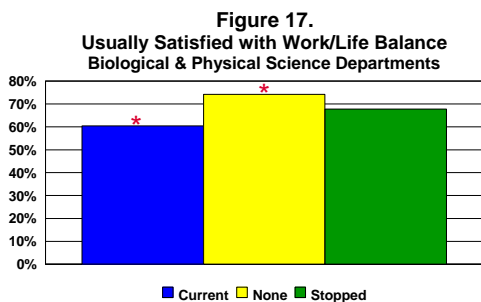
Question 6: Interdepartmental collaboration and satisfaction with work/life balance

Balancing personal and professional life is certainly an issue for women faculty, but more and more often this issue is surfacing for men faculty as well, as newer generations of men are more likely to have a spouse/partner in the labor force and are more likely to devote time and attention to childcare and household management than was true for previous generations. Thus, a university that can assist faculty in successfully managing both their personal and professional lives will accrue a large advantage in recruiting and retaining talented faculty regardless of gender.

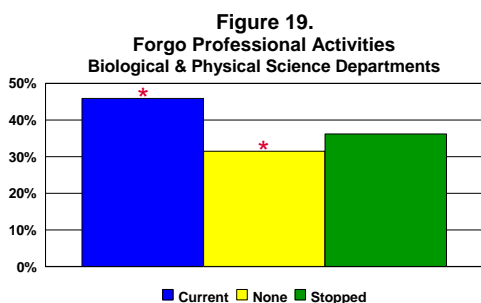
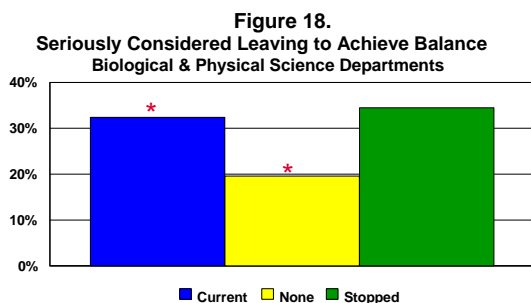
The finding that biological and physical science faculty who currently collaborate are more likely to have school-aged children in their homes, and also more likely to have a spouse/partner in the labor force, prompted an additional set of analyses to discover whether these collaborating faculty were having more difficulties balancing their personal and professional lives compared to their non-collaborating peers. For faculty in biological and physical sciences, the short answer appears to be “yes.” Faculty in social studies and arts & humanities disciplines who collaborate outside their departments did not respond differently than their non-collaborating colleagues on any of our eleven items measuring work/life balance satisfaction. Biological and physical science faculty who are currently collaborating, on the other hand, show significantly higher levels of dissatisfaction with their work/life balance.

Faculty who currently collaborate outside their departments report significantly less often than others that they are “usually

satisfied with the way in which I balance my professional and personal life.”



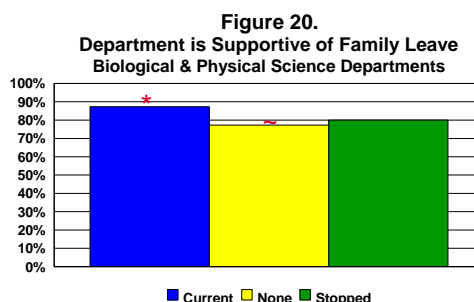
They report significantly *more* often that “I have seriously considered leaving UW-Madison in order to achieve better balance between work and personal life,” and “I often have to forgo professional activities because of personal responsibilities.”



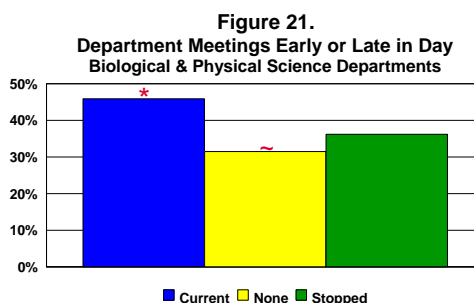
The faculty who have stopped collaborating in the past three years respond to these items somewhere between the current collaborators and the non-collaborators, which lends some evidence to the importance of the balance issues for the faculty who collaborate across departmental boundaries in biological and physical sciences.

Departments seem to be doing what they can to help faculty achieve balance, as currently collaborating faculty in biological and

physical sciences agree as often with their other colleagues on a number of items measuring the responsiveness of departments to work/life issues. They say their departmental colleagues are supportive of work/life balance, it is not difficult to adjust their schedules, their department communicates the options for having a baby, and that faculty with children are not perceived as being less committed to their careers in about the same proportions as their non-collaborating colleagues. Collaborating faculty actually report more often than others that their department is supportive of family leave.



The one area where departments might assist biological and physical science faculty with their work/life balance issues is in the scheduling of department meetings. Currently collaborating faculty report significantly more often than others that “department meetings frequently occur early in the morning or late in the day.” This is often problematic for faculty with children, as these meetings interfere with family time and/or with childcare arrangements.



Summary and Conclusions

We used the *2006 Study of Faculty Worklife at the University of Wisconsin-Madison*, a faculty survey implemented in spring 2006 that received a 55.7% response rate, to investigate the working environments and satisfaction of faculty who collaborate with other faculty outside of their own departments at the UW-Madison. This analysis was undertaken in an effort to understand the benefits of and barriers to interdisciplinary research within the UW-Madison environment, in order to enhance these collaborations within the WID. In addition to understanding the demographics of the faculty who choose to engage in these interdepartmental collaborations, we investigated the satisfaction of faculty with regards to institutional resources, the tenure process, departmental climate, job and career satisfaction, and work/life balance. The main findings of these analyses for faculty from all divisions are:

- Faculty in biological science departments are the most likely to collaborate with faculty outside their own departments, and faculty in arts & humanities departments are the least likely.
- Most currently collaborating faculty are quite happy and satisfied with their experiences at the UW-Madison. They express more satisfaction with their resources, the tenure process, their departmental climate, and their jobs and careers.
- Faculty who have stopped collaborations in the past three years, in contrast, are among the most unhappy faculty in these areas. The biggest areas where significant differences occur include: Access to internal funding for

research and access to colleagues who give career advice.

- UW-Madison faculty who are currently collaborating report significantly less isolation on the UW-Madison campus compared to all other faculty, in all divisions.

Some of the major findings are specific to only the biological and physical sciences:

- Faculty in Letters & Science departments have lower rates of interdepartmental collaboration than faculty in other schools.
- Some faculty who collaborate outside their departments may not be receiving good mentoring and career advice for incorporating those collaborations into their research portfolios and tenure cases, possibly leading to a cessation of these collaborations.
- Current collaborators are significantly less likely to agree that they have adequate lab space; however, as this is not a complaint of those who have stopped collaborating, this may not be a limiting factor to collaboration for biological and physical scientists.
- Interdepartmental collaborators do appear to have issues regarding their work/life balance. Not only are they younger, more likely to report having school-aged children in their homes, and report more often having a spouse or partner in the labor force, but they also report significantly reduced levels of satisfaction with their work/life balance.

Findings specific to the social studies and arts & humanities faculty include:

- The College of Agricultural and Life Sciences, School of Nursing, and School of Human Ecology appear to have the

highest rates of interdepartmental collaboration.

- Interdepartmental collaborators in these disciplines tend to be more senior, tenured professors.
- Research/studio space may be a factor that limits participation in interdepartmental collaboration for faculty in these disciplines.

Some of the specific recommendations that emerge from this analysis include:

- The UW-Madison should continue its tradition of interdepartmental collaboration among faculty. Current collaborators are happier on most measures of satisfaction in the *2006 Study of Faculty Worklife* survey.
- More investigation of the environment that encourages/discourages interdepartmental collaboration in the College of Letters & Sciences may be warranted. Controlling for affiliation with L&S explains the discrepancy in current collaboration between faculty in the biological and physical sciences.
- The WID may wish to consider a mentoring program within the WID that would coach faculty, especially junior faculty, on how to use their interdepartmental collaborative work to enhance their research programs and therefore their personal careers at UW-Madison. In cases where this research is not well-accepted within the department, the WID might consider how to intervene.
- In order to attract and retain the highly productive and motivated individuals who engage in interdepartmental collaborations, the WID might consider ways that they can help to reduce the work/life conflicts of participating faculty.

- Increasing access to internal research funding through the WID should in itself encourage and maintain interdepartmental collaborative relationships.
- The question of the importance of lab space for faculty in different divisions needs more investigation.

The findings and conclusions expressed in this report are based on cross-sectional data, and thus no definitive causal inferences may be made. The recommendations in this report may therefore be somewhat speculative; however, they are submitted with good faith to the WID Steering Committee in an effort to assist in the design of the most productive interdisciplinary working environment possible.

*Report submitted to WID steering committee
by Jennifer Sheridan, Research Director,
Women in Science & Engineering
Leadership Institute (WISELI)
October 31, 2006*

Appendix I: Survey Items, 2006 Study of Faculty Worklife at UW-Madison

Main collaboration item:

14. Do you currently collaborate, or have you collaborated **in the past three years**, on research with colleagues...

Check all that apply.	Currently collaborate?		Collaborated in the past 3 years?	
	Yes	No	Yes	No
a. In your primary department?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Outside your department, but on the UW-Madison campus?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
c. Off the UW-Madison campus?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Resource items:

13. How much do you agree or disagree with the following statements about the resources available to you?

Circle one number on a scale of 1 to 4. Circle NA if the statement does not apply to you.	Agree Strongly 1	Agree Somewhat 2	Disagree Somewhat 3	Disagree Strongly 4	NA
a. I have the equipment and supplies I need to adequately conduct my research.	1	2	3	4	NA
b. I receive regular maintenance/upgrades of my equipment.	1	2	3	4	NA
c. I have sufficient office space.	1	2	3	4	NA
d. I have sufficient laboratory/studio space.	1	2	3	4	NA
e. I receive enough internal funding to conduct my research.	1	2	3	4	NA
f. I receive the amount of technical/computer support I need.	1	2	3	4	NA
g. I have enough office support.	1	2	3	4	NA
h. I have colleagues on campus who do similar research.	1	2	3	4	NA
i. I have colleagues or peers who give me career advice or guidance when I need it.	1	2	3	4	NA
j. I have sufficient teaching support (including T.A.s).	1	2	3	4	NA
k. I have sufficient clinical support.	1	2	3	4	NA

Tenure Items:

8. Please indicate your level of agreement with the following statements regarding your experience with the tenure process in your primary unit or department.

Circle one number on a scale of 1 to 4. Circle NA if the statement does not apply to you.	Agree Strongly 1	Agree Somewhat 2	Disagree Somewhat 3	Disagree Strongly 4	NA
a. I am/was satisfied with the tenure process overall.	1	2	3	4	NA
b. I understand/understood the criteria for achieving tenure.	1	2	3	4	NA
c. The requirements/standards for tenure (e.g., level of scholarship, teaching requirements, and service requirements) are reasonable.	1	2	3	4	NA
d. I receive/d feedback on my progress toward tenure.	1	2	3	4	NA
e. I feel/felt supported in my advancement to tenure.	1	2	3	4	NA
f. I receive/d reduced responsibilities so that I could build my research program.	1	2	3	4	NA
g. I was told about assistance available to pre-tenure faculty (e.g., workshops, mentoring).	1	2	3	4	NA
h. My senior advisor/mentor committee is/was very helpful to me in working toward tenure.	1	2	3	4	NA
i. I have received mixed messages about the requirements for tenure from senior colleagues.	1	2	3	4	NA
j. I feel there is/was a strong fit between the way I do/did research, teaching and service, and the way it is/was evaluated for tenure.	1	2	3	4	NA
k. Tenure decisions are based primarily on performance, rather than on politics, relationships or demographics.	1	2	3	4	NA

Departmental Climate Items:

19. How much do you agree or disagree with the following statements about your interactions with colleagues and others in your primary department/unit? Please answer using the department or unit that you consider to be your primary department or unit.

Circle one number on a scale of 1 to 4 for each statement.		Agree Strongly 1	Agree Somewhat 2	Disagree Somewhat 3	Disagree Strongly 4
a.	I am treated with respect by colleagues.	1	2	3	4
b.	I am treated with respect by students.	1	2	3	4
c.	I am treated with respect by staff.	1	2	3	4
d.	I am treated with respect by my department chair.	1	2	3	4
e.	I feel excluded from an informal network in my department.	1	2	3	4
f.	I encounter unwritten rules concerning how one is expected to interact with colleagues.	1	2	3	4
g.	I am reluctant to bring up issues that concern me about the behavior of my departmental colleagues for fear it might affect my reputation or advancement.	1	2	3	4
h.	Colleagues in my department solicit my opinion about work-related matters (such as teaching, research, and service).	1	2	3	4
i.	In my department, I feel that my research is considered mainstream.	1	2	3	4
j.	I feel that my colleagues value my research.	1	2	3	4
k.	I have to work harder than my departmental colleagues to be perceived as a legitimate scholar.	1	2	3	4
l.	I do a great deal of work that is not formally recognized by my department.	1	2	3	4
m.	I feel like I "fit" in my department.	1	2	3	4
n.	I feel isolated in my department.	1	2	3	4
o.	I feel isolated on the UW campus overall.	1	2	3	4

20. How much do you agree or disagree with the following statements about your participation in the decision-making process in your primary department/unit?

Circle one number on a scale of 1 to 4 for each statement.		Agree Strongly 1	Agree Somewhat 2	Disagree Somewhat 3	Disagree Strongly 4
a.	I feel like a full and equal participant in the problem-solving and decision-making.	1	2	3	4
b.	I have a voice in how resources are allocated.	1	2	3	4
c.	Meetings allow for all participants to share their views.	1	2	3	4
d.	Committee assignments are rotated fairly to allow for participation of all faculty.	1	2	3	4
e.	My department chair involves me in decision-making.	1	2	3	4

Job & Career Satisfaction Items:

22. How satisfied are you, in general, with your job at UW-Madison? *Circle one.*

Very Satisfied Somewhat Satisfied Somewhat Dissatisfied Very Dissatisfied
1 2 3 4

23. How satisfied are you, in general, with the way your career has progressed at the UW-Madison? *Circle one.*

Very Satisfied Somewhat Satisfied Somewhat Dissatisfied Very Dissatisfied
1 2 3 4

26. What factors *contribute most* to your satisfaction at UW-Madison? _____

27. What factors *detract most* from your satisfaction at UW-Madison? _____

Job & Career Satisfaction Items (Continued):

28. Have you considered leaving UW-Madison in the past three years?

- ☐ a. Yes —→ **Go to question 29**
☐ b. No —→ **Go to question 32**

29. How seriously have you considered leaving UW-Madison? *Circle one.*

Not very seriously Somewhat seriously Quite Seriously Very seriously

1 2 3 4

30. What factors contributed to your consideration to **leave** UW-Madison? _____

31. What factors contributed to your consideration to **stay** at UW-Madison? _____

Work/Life Balance Items:

43. Please indicate how much you agree or disagree with the following statements about balancing your personal and professional lives.

Circle one number on a scale of 1 to 4. Circle NA if the statement does not apply to you.		Agree Strongly 1	Agree Somewhat 2	Disagree Somewhat 3	Disagree Strongly 4	NA
a.	I am usually satisfied with the way in which I balance my professional and personal life.	1	2	3	4	NA
b.	I have seriously considered leaving UW-Madison in order to achieve better balance between work and personal life.	1	2	3	4	NA
c.	I often have to forgo professional activities (e.g., sabbaticals, conferences) because of personal responsibilities.	1	2	3	4	NA
d.	Personal responsibilities and commitments have slowed down my career progression.	1	2	3	4	NA
e.	Working long hours is an important sign of commitment in my department.	1	2	3	4	NA

44. Please indicate how much you agree or disagree with the following statements regarding your department/unit's support of family obligations. If you have an appointment in more than one department or unit, please answer the following questions using the department or unit that you consider to be your primary department or unit.

<i>Circle one number on a scale of 1 to 4. Circle NA if the statement does not apply to you.</i>	Agree Strongly 1	Agree Somewhat 2	Disagree Somewhat 3	Disagree Strongly 4	Don't Know	NA
a. Most faculty in my department are supportive of colleagues who want to balance their family and career lives.	1	2	3	4	DK	NA
b. It is difficult for faculty in my department to adjust their work schedules to care for children or other family members.	1	2	3	4	DK	NA
c. Department meetings frequently occur early in the morning or late in the day.	1	2	3	4	DK	NA
d. The department communicates the options available for faculty who have a new baby.	1	2	3	4	DK	NA
e. The department is supportive of family leave.	1	2	3	4	DK	NA
f. Faculty who have children are considered to be less committed to their careers.	1	2	3	4	DK	NA

Table RR2. Response to *Study of Faculty Worklife at the University of Wisconsin-Madison*, Selected Characteristics

Demographic Variable	Respondents		Non-Respondents	
	N	Percent	N	Percent
Division (Individual)				
Biological Sciences	390	55.2%	316	44.8%
Physical Sciences	257	51.8%	239	48.2%
Social Studies	336	58.0%	243	42.0%
Humanities	219	52.3%	200	47.7%
Division (Departmental)*				
Biological Sciences	438	55.5%	351	44.5%
Physical Sciences	235	51.5%	221	48.5%
Social Studies	334	57.3%	249	42.7%
Humanities	195	52.3%	178	47.7%
School/College*				
BUS	33	42.9%	44	57.1%
CALS	172	60.4%	113	39.6%
EDUC	75	52.8%	67	47.2%
ENGR	96	51.9%	89	48.1%
L&S	468	53.1%	414	46.9%
LAW	18	45.0%	22	55.0%
MED	206	53.8%	177	46.2%
MISC	16	64.0%	9	36.0%
NURS	14	66.7%	7	33.3%
PHARM	17	54.8%	14	45.2%
SOHE	23	65.7%	12	34.3%
VETMED	64	68.1%	30	31.9%
Science Department*				
Science	638	53.8%	548	46.2%
Non-Science	564	55.6%	450	44.4%
Rank				
Assistant Professor	297	55.2%	241	44.8%
Associate Professor	183	51.4%	173	48.6%
Professor	722	55.1%	589	44.9%
Tenured				
No	297	55.2%	241	44.8%
Yes	905	55.1%	738	44.9%
Gender				
Male	808	51.9%	749	48.1%
Female	394	62.9%	232	37.1%
Heritage Code				
Black	24	46.2%	28	53.8%
Asian	70	36.5%	122	63.5%
Native American	8	72.7%	3	33.3%
Hispanic	41	54.7%	34	45.3%
Other	1059	57.2%	792	42.8%
Race/Ethnicity				
Nonwhite	143	43.3%	187	56.7%
White/Missing	1059	57.2%	792	42.8%
Citizenship				
U.S. Citizen	1088	56.3%	846	43.7%
Not U.S. Citizen	114	46.0%	134	54.0%
Cluster Hire				
Yes	56	49.1%	58	50.9%
No	1146	54.7%	949	45.3%
Multiple Appointment				
Yes	224	60.5%	146	39.5%
No	978	53.2%	861	46.8%
Department Chair				
Yes	79	71.8%	31	28.2%
No	1123	54.2%	949	45.8%

* See <http://wiseli.engr.wisc.edu/initiatives/survey/results/facultypre/deptlist.htm> for definitions.

Table 1. Sample Sizes of Collaboration Variables

	All Faculty		Biological & Physical Sciences		Social Studies & Arts & Humanities	
	N	%	N	%	N	%
All Faculty	1,231	100.0%	680	100.0%	531	100.0%
Currently Collaborating	663	54.6%	477	71.0%	179	34.2%
Not Currently Collaborating	551	45.4%	195	29.0%	344	65.8%
No Collaboration in Past 3 Years	431	35.5%	135	20.1%	285	54.5%
Ever Collaborated	783	64.5%	537	79.9%	238	45.5%
Stopped Collaborating	120	9.9%	60	8.9%	59	11.3%
Currently or Never Collaborated	1,094	90.1%	612	91.1%	464	88.7%

* indicates $p < .05$; ~ indicates $p < .10$.

** Some Ns might not add to total due to missing data on collaboration or department variables.

Table 2. Distribution of Collaborators Across Schools/Colleges, By Division

	All Faculty, All Divisions		Biological & Physical Sciences		Social Studies & Arts & Humanities	
	N	%	N	%	N	%
School of Business	32		N/A	N/A	32	
Currently Collaborating	7	21.9%	N/A	N/A	7	21.9%
No Collaboration in Past 3 Years	23	71.9%	N/A	N/A	23	71.9%
Stopped Collaborating	2	6.3%	N/A	N/A	2	6.3%
CALS + Nelson Institute	176		136		40	
Currently Collaborating	124	70.5%	104	76.5%	20	50.0%
No Collaboration in Past 3 Years	34	19.3%	20	14.7%	14	35.0%
Stopped Collaborating	18	10.2%	12	8.8%	6	15.0%
School of Education	75		8		67	
Currently Collaborating	30	40.0%	8	100.0%	22	32.8%
No Collaboration in Past 3 Years	35	46.7%	0	0.0%	35	52.2%
Stopped Collaborating	10	13.3%	0	0.0%	10	14.9%
College of Engineering	98		98		N/A	N/A
Currently Collaborating	76	77.6%	76	77.6%	N/A	N/A
No Collaboration in Past 3 Years	12	12.2%	12	12.2%	N/A	N/A
Stopped Collaborating	10	10.2%	10	10.2%	N/A	N/A
Letters & Sciences	469		137		331	
Currently Collaborating	174	37.1%	67	48.9%	107	32.3%
No Collaboration in Past 3 Years	249	53.1%	57	41.6%	191	57.7%
Stopped Collaborating	46	9.8%	13	9.5%	33	10.0%
Law School	18		N/A	N/A	18	
Currently Collaborating	4	22.2%	N/A	N/A	4	22.2%
No Collaboration in Past 3 Years	12	66.7%	N/A	N/A	12	66.7%
Stopped Collaborating	2	11.1%	N/A	N/A	2	11.1%
School of Medicine & Public Health	212		212		N/A	N/A
Currently Collaborating	169	79.7%	169	79.7%	N/A	N/A
No Collaboration in Past 3 Years	29	13.7%	29	13.7%	N/A	N/A
Stopped Collaborating	14	6.6%	14	6.6%	N/A	N/A
School of Nursing	14		N/A	N/A	14	
Currently Collaborating	8	57.1%	N/A	N/A	8	57.1%
No Collaboration in Past 3 Years	3	21.4%	N/A	N/A	3	21.4%
Stopped Collaborating	3	21.4%	N/A	N/A	3	21.4%
School of Pharmacy	17		17		N/A	N/A
Currently Collaborating	12	70.6%	12	70.6%	N/A	N/A
No Collaboration in Past 3 Years	4	23.5%	4	23.5%	N/A	N/A
Stopped Collaborating	1	5.9%	1	5.9%	N/A	N/A
School of Human Ecology	21		N/A	N/A	21	
Currently Collaborating	11	52.4%	N/A	N/A	11	52.4%
No Collaboration in Past 3 Years	7	33.3%	N/A	N/A	7	33.3%
Stopped Collaborating	3	14.3%	N/A	N/A	3	14.3%
School of Veterinary Medicine	64		64		N/A	N/A
Currently Collaborating	41	64.1%	41	64.1%	N/A	N/A
No Collaboration in Past 3 Years	13	20.3%	13	20.3%	N/A	N/A
Stopped Collaborating	10	15.6%	10	15.6%	N/A	N/A

* indicates $p < .05$; ~ indicates $p < .10$.

** Some Ns might not add to total due to missing data on collaboration or department variables.

Table 3a. Characteristics of Collaborators Across Departments at UW-Madison (2006)

	Biological & Physical Science Departments			
	N	Currently Collaborate	Never Collaborated	Stopped Collaborating
Total	672	71.0%	20.1%	8.9%
Female	170	70.6%	20.6%	8.8%
Male	502	71.1%	19.9%	9.0%
Faculty of Color	50	78.0%	14.0%	8.0%
Majority Faculty	622	70.4%	20.6%	9.0%
Untenured	173	71.1%	21.4%	7.5%
Tenured	499	66.9%	19.6%	9.4%
Biological Science Department	435	75.9%	* 15.9%	* 8.3%
Physical Science Department	237	62.0%	27.9%	10.1%
Not Citizen	69	71.0%	21.7%	7.3%
Citizen	603	71.0%	19.9%	9.1%
Cluster Hire	28	78.6%	14.3%	7.1%
Not Cluster Hire	644	70.7%	20.3%	9.0%
Multiple Appointment	108	88.0%	* 9.3%	* 2.8%
Single Appointment	559	67.8%	22.0%	10.2%
Non-Mainstream Research	241	70.5%	19.9%	9.5%
Mainstream Research	415	72.8%	18.8%	8.4%
Age 29-50	330	72.4%	20.3%	7.3%
Over Age 50	337	69.7%	19.6%	10.7%
Child Under 18 at Home	322	74.5%	~ 17.7%	7.8%
Older Children or No Kids	350	67.7%	22.3%	10.0%
Spouse/Partner in Labor Force	441	73.5%	* 17.9%	8.6%
Not in Labor Force or Single	164	65.2%	23.8%	11.0%

* indicates $p < .05$; ~ indicates $p < .10$.

Table 3b. Characteristics of Collaborators Across Departments at UW-Madison (2006)

	Social Studies and Arts & Humanities Departments			
	N	Currently Collaborate	Never Collaborated	Stopped Collaborating
Total	523	34.2%	54.5%	11.3%
Female	223	34.1%	55.2%	10.8%
Male	300	34.3%	54.0%	11.7%
Faculty of Color	54	35.2%	46.3%	18.5%
Majority Faculty	469	34.1%	55.4%	10.5%
Untenured	133	31.6%	63.2%	5.3%
Tenured	390	35.1%	51.5%	13.3%
Social Studies Department	332	41.3%	48.8%	9.9%
Arts & Humanities Department	191	22.0%	64.4%	13.6%
Not Citizen	55	18.2%	69.1%	12.7%
Citizen	468	36.1%	52.8%	11.1%
Cluster Hire	27	33.3%	59.3%	7.4%
Not Cluster Hire	496	34.3%	54.2%	11.5%
Multiple Appointment	114	45.6%	39.5%	14.9%
Single Appointment	406	31.0%	58.9%	10.1%
Non-Mainstream Research	217	34.1%	54.4%	11.5%
Mainstream Research	298	34.2%	55.0%	10.7%
Age 29-50	248	34.3%	56.9%	8.9%
Over Age 50	272	34.2%	52.6%	13.2%
Child Under 18 at Home	234	35.9%	53.4%	10.7%
Older Children or No Kids	289	32.9%	55.4%	11.8%
Spouse/Partner in Labor Force	345	35.1%	51.6%	13.3%
Not in Labor Force or Single	93	33.3%	59.1%	7.5%

* indicates $p < .05$; ~ indicates $p < .10$.

Table 4a. Satisfaction with Equipment, Space, and Internal Funding (2006)

	Biological & Physical Science Departments				
	Equipment		Space		Internal Funding
	Have Needed Equip. (N=648)	Equip. Regularly Maintained (N=608)	Sufficient Office Space (N=671)	Sufficient Lab Space (N=553)	Enough Internal Funding (N=610)
All Faculty	81.8%	51.3%	82.3%	71.4%	36.7%
Currently Collaborating	82.4%	52.1%	81.2%	68.5% *	38.8% *
Not Currently Collaborating	80.0%	47.8%	84.4%	79.4%	31.7%
No Collaboration in Past 3 Years	83.2%	49.1%	85.0%	77.8%	37.8%
Ever Collaborated	81.5%	51.4%	81.4%	69.9%	36.6%
Stopped Collaborating	73.2% ~	45.3%	83.1%	82.6% ~	18.9% *
Currently or Never Collaborated	82.6%	51.6%	82.0%	70.2%	38.6%

* indicates $p < .05$; ~ indicates $p < .10$.

Table 4b. Satisfaction with Equipment, Space, and Internal Funding (2006)

	Social Studies and Arts & Humanities Departments				
	Equipment		Space		Internal Funding
	Have Needed Equip. (N=511)	Equip. Regularly Maintained (N=488)	Sufficient Office Space (N=523)	Sufficient Lab Space (N=182)	Enough Internal Funding (N=502)
All Faculty	80.0%	58.2%	74.8%	57.1%	46.2%
Currently Collaborating	78.0%	55.2%	75.8%	65.4% *	45.4%
Not Currently Collaborating	80.7%	59.8%	74.0%	50.0%	46.4%
No Collaboration in Past 3 Years Ever Collaborated	84.1% *	61.2%	76.3%	49.3% ~	48.7%
	74.6%	54.6%	72.6%	62.5%	43.0%
Stopped Collaborating	63.6% *	52.7%	62.7% *	52.2%	35.7% ~
Currently or Never Collaborated	81.7%	58.9%	76.2%	57.7%	47.4%

* indicates $p < .05$; ~ indicates $p < .10$.

Table 5a. Satisfaction with Support and Availability of Colleagues (2006)

	Biological & Physical Science Departments					
	Support				Colleagues	
	Sufficient Tech/Comp. Support (N=665)	Sufficient Office Support (N=665)	Sufficient Teaching Support (N=550)	Sufficient Clinical Support (N=164)	On Campus, Similar Research (N=652)	Give Career Advice When Needed (N=643)
All Faculty	68.1%	64.4%	55.6%	68.3%	81.1%	78.8%
Currently Collaborating	68.4%	63.5%	53.9%	69.4%	84.1% *	81.9% *
Not Currently Collaborating	67.7%	65.6%	59.8%	65.0%	72.9%	70.5%
No Collaboration in Past 3 Years	71.2%	65.9%	67.3% *	72.0%	76.9%	73.6%
Ever Collaborated	67.5%	63.6%	52.7%	67.6%	82.0%	80.0%
Stopped Collaborating	60.0%	65.0%	43.1% ~	53.3%	64.3% *	63.6% *
Currently or Never Collaborated	69.1%	64.0%	57.0%	69.8%	82.6%	80.2%

* T-test between groups significant at $p < .05$.

Table 5b. Satisfaction with Support and Availability of Colleagues (2006)

	Social Studies and Arts & Humanities Departments					
	Support				Colleagues	
	Sufficient Tech/Comp. Support (N=513)	Sufficient Office Support (N=515)	Sufficient Teaching Support (N=487)	Sufficient Clinical Support (N=48)	On Campus, Similar Research (N=512)	Give Career Advice When Needed (N=508)
All Faculty	75.6%	64.7%	54.4%	54.2%	82.0%	75.0%
Currently Collaborating	75.6%	62.4%	56.9%	47.1%	88.6% *	83.3% *
Not Currently Collaborating	75.2%	65.5%	53.0%	60.0%	78.3%	70.7%
No Collaboration in Past 3 Years	75.6%	67.5%	53.6%	60.0%	80.1%	71.2% *
Ever Collaborated	74.9%	60.8%	55.1%	50.0%	83.9%	79.8%
Stopped Collaborating	72.7%	55.9%	50.0%	60.0%	69.1% *	68.5%
Currently or Never Collaborated	75.6%	65.5%	54.8%	54.8%	83.4%	75.9%

* T-test between groups significant at $p < .05$.

** Insufficient number of cases.

Table 6a. Satisfaction with Tenure Process at UW-Madison

	Biological & Physical Science Departments											
	N	Satisfied Overall	Understood Criteria	Reasonable Requirements	Received Feedback	Felt Supported	Received Reduced Resp'ties	Told About Assistance	Helpful Advisor/Mentoring Committee	Received Mixed Messages	Strong Fit Job and Tenure	Decisions Based on Performance
All Faculty	182	73.2%	79.1%	77.1%	85.5%	80.3%	65.5%	87.5%	77.9%	45.3%	66.2%	78.7%
Currently Collaborating	137	75.8%	79.6%	77.9%	87.7%	83.2%	68.2%	85.7%	80.6%	45.7%	68.1%	82.2%
Not Currently Collaborating	43	68.6%	79.1%	76.2%	80.5%	72.5%	60.5%	92.9%	70.7%	43.9%	63.9%	71.4%
No Collaboration in Past 3 Years	30	69.6%	80.0%	86.2%	82.1%	77.8%	63.3%	96.7% *	79.3%	37.9%	65.2%	73.9%
Ever Collaborated	150	75.0%	79.3%	75.7%	86.7%	81.3%	66.9%	85.5%	78.0%	46.8%	67.4%	80.8%
Stopped Collaborating	13	66.7%	76.9%	53.9%	76.9%	61.5% ~	53.9%	83.3%	50.0% *	58.3%	61.5%	66.7%
Currently or Never Collaborated	167	74.8%	79.6%	79.4%	86.7%	82.3%	67.3%	87.7%	80.4%	44.3%	67.6%	80.9%

* indicates $p < .05$; ~ indicates $p < .10$.

Table 6b. Satisfaction with Tenure Process at UW-Madison

	Social Studies and Arts & Humanities Departments											
	N	Satisfied Overall	Understood Criteria	Reasonable Requirements	Received Feedback	Felt Supported	Received Reduced Resp'ties	Told About Assistance	Helpful Advisor/ Mentoring Committee	Received Mixed Messages	Strong Fit Job and Tenure	Decisions Based on Performance
All Faculty	169	82.4%	87.6%	81.2%	87.3%	83.9%	63.5%	86.7%	73.3%	47.0%	73.3%	78.8%
Currently Collaborating	54	84.8%	92.6%	85.2%	89.1%	86.5%	60.8%	88.2%	82.4%	~ 46.2%	72.9%	79.3%
Not Currently Collaborating	112	80.8%	85.7%	79.6%	86.1%	82.1%	63.8%	85.7%	68.2%	47.7%	73.7%	79.0%
No Collaboration in Past 3 Years	100	81.8%	88.0%	79.2%	87.6%	83.0%	62.4%	87.0%	70.5%	42.9%	75.9%	81.8%
Ever Collaborated	66	82.5%	87.9%	84.9%	86.2%	84.4%	63.5%	85.7%	76.2%	54.0%	70.0%	75.4%
Stopped Collaborating	12	72.7%	66.7%	83.3%	75.0%	75.0%	75.0%	75.0%	50.0%	~ 90.9%	* 58.3%	58.3%
Currently or Never Collaborated	154	82.8%	89.6%	81.3%	88.2%	84.3%	61.8%	87.4%	74.7%	44.0%	74.8%	80.9%

* indicates $p < .05$; ~ indicates $p < .10$.

Table 7a. Treated With Respect in the Workplace

	Biological & Physical Science Departments				
	N	Colleagues	Students	Staff	Department Chair**
All Faculty	675	93.3%	96.3%	97.5%	91.0%
Currently Collaborating	476	93.3%	96.4%	97.3%	90.9%
Not Currently Collaborating	194	93.3%	95.9%	97.9%	91.3%
No Collaboration in Past 3 Years	134	94.0%	94.8%	98.5%	90.6%
Ever Collaborated	535	93.1%	96.6%	97.2%	91.1%
Stopped Collaborating	60	91.5%	98.3%	96.6%	93.0%
Currently or Never Collaborated	610	93.4%	96.1%	97.5%	90.8%

* indicates $p < .05$; ~ indicates $p < .10$.

Table 7b. Treated With Respect in the Workplace

	Social Studies and Arts & Humanities Departments				
	N	Colleagues	Students	Staff	Department Chair**
All Faculty	529	89.2%	95.7%	96.2%	90.3%
Currently Collaborating	178	92.1% ~	96.6%	94.4%	92.6%
Not Currently Collaborating	344	87.7%	95.1%	97.1%	88.9%
No Collaboration in Past 3 Years	285	87.9%	96.1%	96.8%	89.0%
Ever Collaborated	237	90.7%	94.9%	95.3%	91.7%
Stopped Collaborating	59	86.4%	89.8%	98.3%	88.7%
Currently or Never Collaborated	463	89.6%	96.3%	95.9%	90.4%

* indicates $p < .05$; ~ indicates $p < .10$.

Table 8a. Informal Departmental Interactions

	Biological & Physical Science Departments				
	N	Excluded	Unwritten Rules	Reluctant To Bring Up Issues**	Work Not Recognized
All Faculty	671	29.4%	31.6%	23.4%	60.1%
Currently Collaborating	475	28.8%	32.2%	23.0%	62.0%
Not Currently Collaborating	192	31.9%	30.0%	24.5%	56.0%
No Collaboration in Past 3 Years	134	29.6%	27.8%	23.3%	53.8%
Ever Collaborated	532	29.7%	32.5%	23.3%	61.9%
Stopped Collaborating	59	37.3%	35.1%	25.9%	61.0%
Currently or Never Collaborated	608	28.9%	31.3%	23.2%	60.2%

* indicates $p < .05$; ~ indicates $p < .10$.

Table 8b. Informal Departmental Interactions

	Social Studies and Arts & Humanities Departments				
	N	Excluded	Unwritten Rules	Reluctant To Bring Up Issues**	Work Not Recognized
All Faculty	524	34.5%	44.3%	34.0%	64.3%
Currently Collaborating	177	29.3% ~	42.3%	33.1%	66.1%
Not Currently Collaborating	342	37.9%	45.1%	34.5%	63.5%
No Collaboration in Past 3 Years	284	37.8%	45.0%	35.9%	62.6%
Ever Collaborated	236	31.6%	43.1%	31.8%	66.5%
Stopped Collaborating	59	38.6%	45.6%	27.6%	67.8%
Currently or Never Collaborated	459	34.6%	44.0%	34.9%	64.0%

* indicates $p < .05$; ~ indicates $p < .10$.

Table 9a. Colleagues' Valuation of Research

	Biological & Physical Science Departments				
	<u>N</u>	<u>Solicit Opinions</u>	<u>"Mainstream"</u>	<u>Colleagues Value My Research</u>	<u>Work Harder/ Legitimate Scholar**</u>
All Faculty	667	86.7%	63.6%	78.4%	30.9%
Currently Collaborating	473	87.1%	64.0%	81.6% *	30.4%
Not Currently Collaborating	190	85.8%	61.4%	69.4%	32.6%
No Collaboration in Past 3 Years	131	87.0%	61.9%	69.1% *	34.6%
Ever Collaborated	531	86.6%	63.6%	80.4%	30.2%
Stopped Collaborating	59	83.1%	60.3%	70.2%	28.1%
Currently or Never Collaborated	603	87.1%	63.6%	79.0%	31.3%

* indicates $p < .05$; ~ indicates $p < .10$.

Table 9b. Colleagues' Valuation of Research

	Social Studies and Arts & Humanities Departments				
	<u>N</u>	<u>Solicit Opinions</u>	<u>"Mainstream"</u>	<u>Colleagues Value My Research</u>	<u>Work Harder/ Legitimate Scholar**</u>
All Faculty	524	83.6%	58.2%	77.6%	33.5%
Currently Collaborating	177	88.1% *	58.0%	79.8%	33.1%
Not Currently Collaborating	341	81.2%	57.8%	76.0%	33.7%
No Collaboration in Past 3 Years	283	80.2% *	58.2%	75.3%	33.1%
Ever Collaborated	235	87.7%	57.5%	79.7%	34.1%
Stopped Collaborating	58	86.2%	56.1%	79.3%	36.8%
Currently or Never Collaborated	460	83.3%	58.1%	77.0%	33.1%

* indicates $p < .05$; ~ indicates $p < .10$.

Table 10a. Isolation and "Fit"

	Biological & Physical Science Departments			
	<u>N</u>	<u>"Fit" in Department</u>	<u>Isolated in Department</u>	<u>Isolated at UW-Madison</u>
All Faculty	672	80.8%	25.2%	18.5%
Currently Collaborating	474	81.5%	24.2%	15.8% *
Not Currently Collaborating	192	78.5%	28.6%	25.0%
No Collaboration in Past 3 Years	133	78.8%	26.7%	22.6%
Ever Collaborated	533	81.1%	25.1%	17.5%
Stopped Collaborating	59	78.0%	32.8%	30.5% *
Currently or Never Collaborated	607	80.9%	24.7%	17.3%

* indicates $p < .05$; ~ indicates $p < .10$.

Table 10b. Isolation and "Fit"

	Social Studies and Arts & Humanities Departments			
	<u>N</u>	<u>"Fit" in Department</u>	<u>Isolated in Department</u>	<u>Isolated at UW-Madison</u>
All Faculty	524	73.2%	30.2%	23.5%
Currently Collaborating	177	75.6%	26.7%	13.6% *
Not Currently Collaborating	341	71.9%	32.3%	28.2%
No Collaboration in Past 3 Years	283	73.5%	31.1%	26.5% *
Ever Collaborated	235	72.7%	29.5%	19.2%
Stopped Collaborating	58	63.8% ~	37.9%	36.2% *
Currently or Never Collaborated	460	74.3%	29.4%	21.5%

* indicates $p < .05$; ~ indicates $p < .10$.

Table 11a. Departmental Decision-Making

	Biological & Physical Science Departments					
	N	Full & Equal Participant	Voice in Resource Allocation	All Can Share Views at Meetings	Committee Assignments Rotated	Chair Involves**
All Faculty	667	76.2%	63.9%	85.6%	72.8%	72.6%
Currently Collaborating	470	76.2%	64.9%	85.7%	73.9%	72.8%
Not Currently Collaborating	191	75.9%	61.1%	84.8%	70.1%	72.0%
No Collaboration in Past 3 Years	132	76.5%	61.4%	85.6%	71.1%	69.5%
Ever Collaborated	529	76.0%	64.4%	85.4%	73.2%	73.4%
Stopped Collaborating	59	74.6%	60.3%	83.1%	67.8%	77.6%
Currently or Never Collaborated	602	76.3%	64.1%	85.7%	73.3%	72.1%

* indicates $p < .05$; ~ indicates $p < .10$.

** Respondents who are Dept. Chairs are not included in analysis.

Table 11b. Departmental Decision-Making

	Social Studies and Arts & Humanities Departments					
	N	Full & Equal Participant	Voice in Resource Allocation	All Can Share Views at Meetings	Committee Assignments Rotated	Chair Involves**
All Faculty	526	73.5%	65.0%	82.7%	76.0%	76.2%
Currently Collaborating	178	75.0%	65.5%	81.5%	75.0%	78.7%
Not Currently Collaborating	343	72.5%	64.4%	83.0%	76.6%	74.4%
No Collaboration in Past 3 Years	284	72.5%	62.7%	83.4%	77.0%	73.8%
Ever Collaborated	236	74.4%	67.4%	81.4%	74.9%	78.4%
Stopped Collaborating	59	72.4%	72.9%	81.0%	74.6%	77.4%
Currently or Never Collaborated	461	73.5%	63.8%	82.7%	76.3%	75.7%

* indicates $p < .05$; ~ indicates $p < .10$.

** Respondents who are Dept. Chairs are not included in analysis.

Table 12a. Departmental Climate: General

	Biological & Physical Science Departments				
	N	Postitive Climate**	Negative Climate**	Climate for Women is Good	Climate for Faculty of Color is Good
All Faculty	614	77.5%	6.5%	84.0%	76.1%
Currently Collaborating	434	79.4%	~ 6.8%	83.4%	77.1% *
Not Currently Collaborating	179	73.2%	6.2%	85.1%	72.9%
No Collaboration in Past 3 Years	125	76.0%	4.8%	85.8%	79.2%
Ever Collaborated	488	78.0%	7.1%	83.4%	75.2%
Stopped Collaborating	54	66.7%	* 9.3%	83.3%	60.0% *
Currently or Never Collaborated	554	78.6%	6.3%	83.9%	77.5%

* indicates $p < .05$; ~ indicates $p < .10$.

** "Positive climate" indicates respondents who say their departmental climate is positive or very positive (vs. very negative, negative, or mediocre.) "Negative climate" indicats respondents who say their departmental climate is negative or very negative.

Table 12b. Departmental Climate: General

	Social Studies and Arts & Humanities Departments				
	N	Postitive Climate**	Negative Climate**	Climate for Women is Good	Climate for Faculty of Color is Good
All Faculty	493	73.3%	10.0%	83.6%	65.3%
Currently Collaborating	168	76.6%	6.5% *	82.1%	69.7%
Not Currently Collaborating	319	71.8%	11.9%	84.3%	63.2%
No Collaboration in Past 3 Years	263	72.0%	11.9%	84.0%	64.7%
Ever Collaborated	223	75.0%	8.0%	83.0%	66.1%
Stopped Collaborating	58	70.7%	12.1%	85.5%	56.5%
Currently or Never Collaborated	431	73.7%	9.9%	83.3%	66.6%

* indicates $p < .05$; ~ indicates $p < .10$.

** "Positive climate" indicates respondents who say their departmental climate is positive or very positive (vs. very negative, negative, or mediocre.) "Negative climate" indicats respondents who say their departmental climate is negative or very negative.

Table 13a. Satisfaction with UW-Madison

	Biological & Physical Science Departments		
	N	Satisfied** With Job	Satisfied** With Career Progression
All Faculty	677	89.4%	85.5%
Currently Collaborating	477	89.9%	86.6%
Not Currently Collaborating	193	87.6%	82.4%
No Collaboration in Past 3 Years	133	88.0%	84.2%
Ever Collaborated	537	89.6%	85.7%
Stopped Collaborating	60	86.7%	78.3%
Currently or Never Collaborated	610	89.5%	86.1%

* indicates $p < .05$; ~ indicates $p < .10$.

** "Very" or "Somewhat" satisfied, vs. "Very" or "Somewhat" dissatisfied.

Table 13b. Satisfaction with UW-Madison

	Social Studies and Arts & Humanities Departments			
	N	Satisfied** With Job	Satisfied** With Career Progression	
All Faculty	527	83.7%	82.7%	
Currently Collaborating	178	86.0%	88.1%	*
Not Currently Collaborating	343	82.8%	79.9%	
No Collaboration in Past 3 Years	284	84.1%	80.6%	
Ever Collaborated	237	83.5%	85.2%	
Stopped Collaborating	59	76.3%	76.3%	~
Currently or Never Collaborated	461	84.8%	83.5%	

* indicates $p < .05$; ~ indicates $p < .10$.

** "Very" or "Somewhat" satisfied, vs. "Very" or "Somewhat" dissatisfied.

**Table 14a. Top Three Factors Contributing To/Detracting From Satisfaction at UW-Madison
Biological & Physical Science Departments**

Top 3 Factors <i>Contributing to</i> Satisfaction at UW-Madison			# of Mentions*	Top 3 Factors <i>Detracting From</i> Satisfaction at UW-Madison			# of Mentions*
<i>Currently Collaborating</i>				<i>Currently Collaborating</i>			
1st	Colleagues/Collaborators		135	1st	Poor resources (money/support)		67
2nd	Students		78	2nd	Low salary		39
3rd	Good resarch program/opportunities/variety		70	3rd	Lack of support from state/legislature		39
<i>No Collaboration in Past 3 Years</i>				<i>No Collaboration in Past 3 Years</i>			
1st	Colleagues/Collaborators		31	1st	Low salary		16
2nd	Students		22	2nd	Lack of support from state/legislature		14
3rd	Autonomy		19	3rd	Poor resources (money/support)		13
<i>Stopped Collaborating</i>				<i>Stopped Collaborating</i>			
1st	Colleagues/Collaborators		9	1st	Poor resources (money/support)		6
2nd	Students		8	2nd	Low salary		5
3rd	Autonomy		7	3rd	Budgetary issues		5

* A respondent may mention more than one reason for any given question.

**Table 14b. Top Three Factors Contributing To/Detracting From Satisfaction at UW-Madison
Social Studies and Arts & Humanities Departments**

Top 3 Factors <i>Contributing to</i> Satisfaction at UW-Madison			# of Mentions*	Top 3 Factors <i>Detracting From</i> Satisfaction at UW-Madison			# of Mentions*
<i>Currently Collaborating</i>				<i>Currently Collaborating</i>			
1st	Colleagues/Collaborators		60	1st	Low salary		51
2nd	Students		28	2nd	Poor resources (money/support)		34
3rd	Lab/space/equipment/resources/support		27	3rd	Budgetary issues		17
<i>No Collaboration in Past 3 Years</i>				<i>No Collaboration in Past 3 Years</i>			
1st	Colleagues/Collaborators		82	1st	Low salary		57
2nd	Students		61	2nd	Poor resources (money/support)		48
3rd	Lab/space/equipment/resources/support		46	3rd	Graduate student support		20
<i>Stopped Collaborating</i>				<i>Stopped Collaborating</i>			
1st	Colleagues/Collaborators		13	1st	Low salary		13
2nd	Students		13	2nd	Poor resources (money/support)		12
3rd	Lab/space/equipment/resources/support		8	3rd	Lack of support from state/legislature		7

* A respondent may mention more than one reason for any given question.

Table 15a. Recommend Department

	N	Biological & Physical Science Departments			
		Would Accept Current Position Again		Would Strongly Recommend My Department	Would NOT Recommend My Department
All Faculty	668	86.7%		65.6%	3.2%
Currently Collaborating	468	88.9%	*	67.3%	2.4%
Not Currently Collaborating	193	80.8%		61.3%	5.2%
No Collaboration in Past 3 Years	133	83.5%		65.2%	3.8%
Ever Collaborated	528	87.3%		65.7%	3.0%
Stopped Collaborating	60	75.0%	*	52.5%	8.5%
Currently or Never Collaborated	601	87.7%		66.8%	2.7%

* indicates $p < .05$; ~ indicates $p < .10$.

** "Very" or "Somewhat" satisfied, vs. "Very" or "Somewhat" dissatisfied.

Table 15b. Recommend Department

	Social Studies and Arts & Humanities Departments			
	N	Would Accept Current Position Again	Would Strongly Recommend My Department	Would NOT Recommend My Department
All Faculty	520	86.5%	64.2%	4.8%
Currently Collaborating	178	89.9%	~ 69.7%	3.4%
Not Currently Collaborating	342	84.8%	61.2%	5.3%
No Collaboration in Past 3 Years	284	84.5%	62.7%	5.7%
Ever Collaborated	236	89.0%	65.8%	3.4%
Stopped Collaborating	59	86.2%	54.2%	~ 3.4%
Currently or Never Collaborated	462	86.6%	65.4%	4.9%

* indicates $p < .05$; ~ indicates $p < .10$.

** "Very" or "Somewhat" satisfied, vs. "Very" or "Somewhat" dissatisfied.

Table 16a. Ever Considered Leaving UW-Madison

	Biological & Physical Science Departments		
	N	Considered Leaving Past 3 years	Seriously Considered Leaving**
All Faculty	666	54.4%	23.4%
Currently Collaborating	469	54.6%	23.9%
Not Currently Collaborating	192	53.1%	22.0%
No Collaboration in Past 3 Years	132	46.2% *	16.7% *
Ever Collaborated	528	56.2%	25.0%
Stopped Collaborating	60	68.3% *	33.9% *
Currently or Never Collaborated	601	52.8%	22.3%

* indicates $p < .05$; ~ indicates $p < .10$.

** "Very" or "Quite" seriously considered leaving, vs. "Somewhat", "Not very", or never considered leaving at all.

Table 16b. Ever Considered Leaving UW-Madison

	Social Studies and Arts & Humanities Departments			
	N	Considered Leaving Past 3 years	Seriously Considered Leaving**	
All Faculty	522	63.8%	33.3%	
Currently Collaborating	176	65.7%	34.1%	
Not Currently Collaborating	340	62.5%	32.7%	
No Collaboration in Past 3 Years	282	60.6%	29.8%	~
Ever Collaborated	234	67.3%	37.2%	
Stopped Collaborating	58	71.9%	46.6%	*
Currently or Never Collaborated	458	62.6%	31.4%	

* indicates $p < .05$; ~ indicates $p < .10$.

** "Very" or "Quite" seriously considered leaving, vs. "Somewhat", "Not very", or never considered leaving at all.

**Table 17a. Top Three Factors Contributing to Decision to Stay/Leave UW-Madison
Biological & Physical Science Departments**

Top 3 Factors Contributing to <i>Staying at</i> UW-Madison			# of Mentions*	Top 3 Factors Contributing to <i>Leaving</i> UW-Madison			# of Mentions*
<i>Currently Collaborating</i>				<i>Currently Collaborating</i>			
1st	Family		70	1st	Low salary		65
2nd	Colleagues/Collaborators		45	2nd	Poor resources (money/support)		30
3rd	Good research program/opportunities		23	3rd	Satisfaction/don't feel appreciated		27
<i>No Collaboration in Past 3 Years</i>				<i>No Collaboration in Past 3 Years</i>			
1st	Colleagues/Collaborators		7	1st	Low salary		15
2nd	City of Madison/State of Wisconsin		7	2nd	Satisfaction/don't feel appreciated		6
3rd	Family, Enjoy job, No attractive outside offer (tie)		6 (each)	3rd	Tenure and promotion		6
<i>Stopped Collaborating</i>				<i>Stopped Collaborating</i>			
1st	Family		6	1st	Low salary		6
2nd	Colleagues/Collaborators		6	2nd	Tenure and promotion		5
3rd	Plan to leave		4	3rd	High work load, research opportunities, administration, climate (tie)		4 (each)

* A respondent may mention more than one reason for any given question.

**Table 17b. Top Three Factors Contributing to Decision to Stay/Leave UW-Madison
Social Studies and Arts & Humanities Departments**

Top 3 Factors Contributing to <i>Staying at</i> UW-Madison			# of Mentions*	Top 3 Factors Contributing to <i>Leaving</i> UW-Madison			# of Mentions*
<i>Currently Collaborating</i>				<i>Currently Collaborating</i>			
1st	Family		27	1st	Low salary		61
2nd	Colleagues/Collaborators		27	2nd	Poor resources (money/support)		21
3rd	Quality of life		12	3rd	Satisfaction/don't feel appreciated		12
<i>No Collaboration in Past 3 Years</i>				<i>No Collaboration in Past 3 Years</i>			
1st	Family		31	1st	Low salary		67
2nd	Colleagues/Collaborators		30	2nd	Poor resources (money/support)		22
3rd	No attractive outside offer		23	3rd	Colleagues		17
<i>Stopped Collaborating</i>				<i>Stopped Collaborating</i>			
1st	Family		9	1st	Low salary		16
2nd	Colleagues/Collaborators		9	2nd	Satisfaction/don't feel appreciated		5
3rd	City of Madison/State of Wisconsin		7	3rd	Wanted change/new opportunities		4

* A respondent may mention more than one reason for any given question.

Table 18. Effects of Climate Variables on Intention to Leave for Faculty Who Stopped Collaborating

	Model 0		Model 1		Model 2	
	Odds Ratio	Std. Err.	Odds Ratio	Std. Err.	Odds Ratio	Std. Err.
Stopped Collaborating	1.9	(0.289) *	1.5	(0.307)	1.3	(0.315)
Have Enough Internal Funding			0.5	(0.173) *	0.5	(0.178) *
Have Colleagues Who Give Advice					0.7	(0.213) *
Intercept	1.1	(0.082)	1.5	(0.111) *	2.1	(0.202) *
-2 Log Likelihood	903.491		799.602		769.029	
df	1		2		3	

Logistic regression models: Reported are the odds of considering leaving the UW-Madison in past three years.

* indicates $p < .05$; ~ indicates $p < .10$.

Table 19. Effects of Climate Variables on Serious Intention to Leave for Faculty Who Stopped Collaborating

	Model 0		Model 1		Model 2	
	Odds Ratio	Std. Err.	Odds Ratio	Std. Err.	Odds Ratio	Std. Err.
Stopped Collaborating	1.8	(0.292) *	1.4	(0.316)	1.4	(0.331)
Have Enough Internal Funding					0.7	(0.219) ~
Have Colleagues Who Give Advice			0.5	(0.214) *	0.5	(0.225) *
Intercept	0.3	(0.098) *	0.5	(0.187) *	0.5	(0.205) *
-2 Log Likelihood	713.381		670.097		609.085	
df	1		2		3	

Logistic regression models: Reported are the odds of seriously considering leaving the UW-Madison in past three years.

* indicates $p < .05$; ~ indicates $p < .10$.

Table 20a. Balancing Personal and Professional Life

	Biological & Physical Science Departments					
	N	Usually Satisfied	Seriously Considered Leaving UW-Madison	Forgo Professional Activities	Career Progression Slowed	Long Hours Sign of Commitment in Dept.
All Faculty	672	63.8%	30.1%	42.1%	39.2%	60.6%
Currently Collaborating	475	60.4% *	32.4% *	45.9% *	39.5%	59.0%
Not Currently Collaborating	191	72.3%	24.1%	33.0%	38.4%	64.7%
No Collaboration in Past 3 Years	132	74.2% *	19.6% *	31.5% *	38.2%	63.5%
Ever Collaborated	534	61.2%	32.6%	44.8%	39.4%	60.0%
Stopped Collaborating	59	67.8%	34.5%	36.2%	39.0%	67.2%
Currently or Never Collaborated	607	63.4%	29.6%	42.7%	39.2%	60.0%

* indicates $p < .05$; ~ indicates $p < .10$.

** Respondents who are Dept. Chairs are not included in analysis.

Table 20b. Balancing Personal and Professional Life

	Social Studies and Arts & Humanities Departments					
	N	Usually Satisfied	Seriously Considered Leaving UW-Madison	Forgo Professional Activities	Career Progression Slowed	Long Hours Sign of Commitment in Dept.
All Faculty	526	57.4%	38.5%	39.6%	49.8%	61.5%
Currently Collaborating	178	53.4%	37.1%	41.4%	44.5%	65.1%
Not Currently Collaborating	341	59.8%	39.1%	38.6%	52.1%	59.5%
No Collaboration in Past 3 Years	282	60.3%	38.2%	37.7%	50.9%	57.6% ~
Ever Collaborated	237	54.4%	38.6%	41.7%	47.8%	65.9%
Stopped Collaborating	59	57.6%	43.1%	42.9%	57.9%	68.4%
Currently or Never Collaborated	460	57.6%	37.8%	39.1%	48.5%	60.5%

* indicates $p < .05$; ~ indicates $p < .10$.

** Respondents who are Dept. Chairs are not included in analysis.

Table 21a. Departmental Support of Family Obligations

	Biological & Physical Science Departments						
	N	Supportive Colleagues	Difficulty Adjusting Schedules	Early or Late Meetings	Knows Options for Baby	Supports Family Leave	Kids= Less Committed
All Faculty	656	80.4%	36.7%	39.9%	63.1%	84.8%	14.1%
Currently Collaborating	467	80.8%	37.0%	42.6% *	63.7%	87.3% *	12.8%
Not Currently Collaborating	183	79.2%	36.2%	33.9%	60.6%	78.1%	17.4%
No Collaboration in Past 3 Years	126	80.5%	33.6%	32.5% ~	61.2%	77.3% ~	12.9%
Ever Collaborated	524	80.3%	37.5%	42.0%	63.3%	86.4%	14.3%
Stopped Collaborating	57	76.4%	41.1%	36.8%	59.4%	80.0%	27.5% *
Currently or Never Collaborated	593	80.8%	36.3%	40.5%	63.2%	85.2%	12.8%

* indicates $p < .05$; ~ indicates $p < .10$.

Table 21b. Departmental Support of Family Obligations

	Social Studies and Arts & Humanities Departments						
	N	Supportive Colleagues	Difficulty Adjusting Schedules	Early or Late Meetings	Knows Options for Baby	Supports Family Leave	Kids= Less Committed
All Faculty	515	81.7%	30.8%	36.9%	74.3%	88.3%	16.3%
Currently Collaborating	332	81.4%	32.5%	37.5%	73.9%	85.5%	16.9%
Not Currently Collaborating	176	82.1%	29.8%	36.8%	73.9%	89.6%	16.0%
No Collaboration in Past 3 Years	277	81.9%	28.8%	37.2%	75.0%	89.8%	15.3%
Ever Collaborated	231	81.9%	33.0%	36.8%	72.6%	86.4%	17.5%
Stopped Collaborating	55	83.3%	34.7%	34.6%	68.6%	88.9%	19.6%
Currently or Never Collaborated	453	81.7%	30.3%	37.3%	74.6%	88.0%	15.9%

* indicates $p < .05$; ~ indicates $p < .10$.

Figure 1.
Percent of Faculty Indicating Current Collaboration
Outside Department but Within UW-Madison

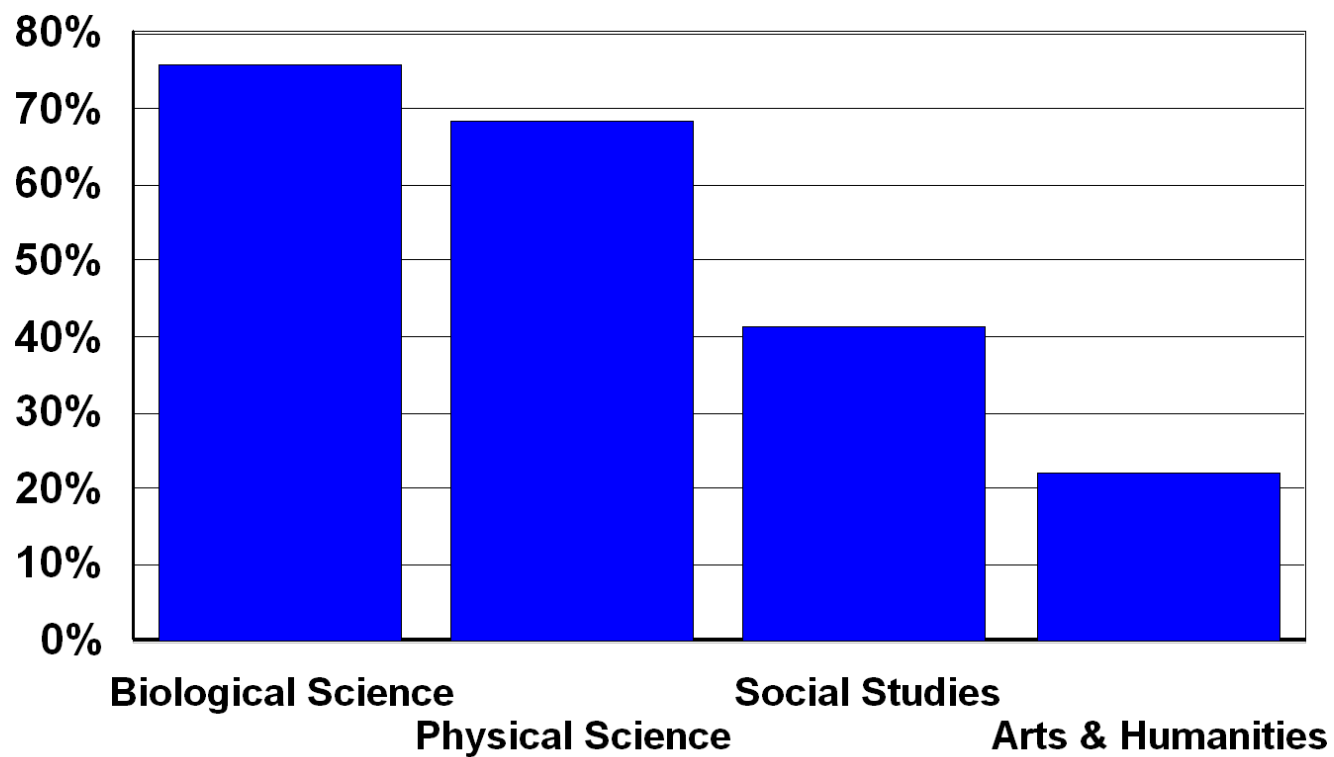


Figure 2.
Distribution of Interdepartmental Collaborators
Biological and Physical Science Departments

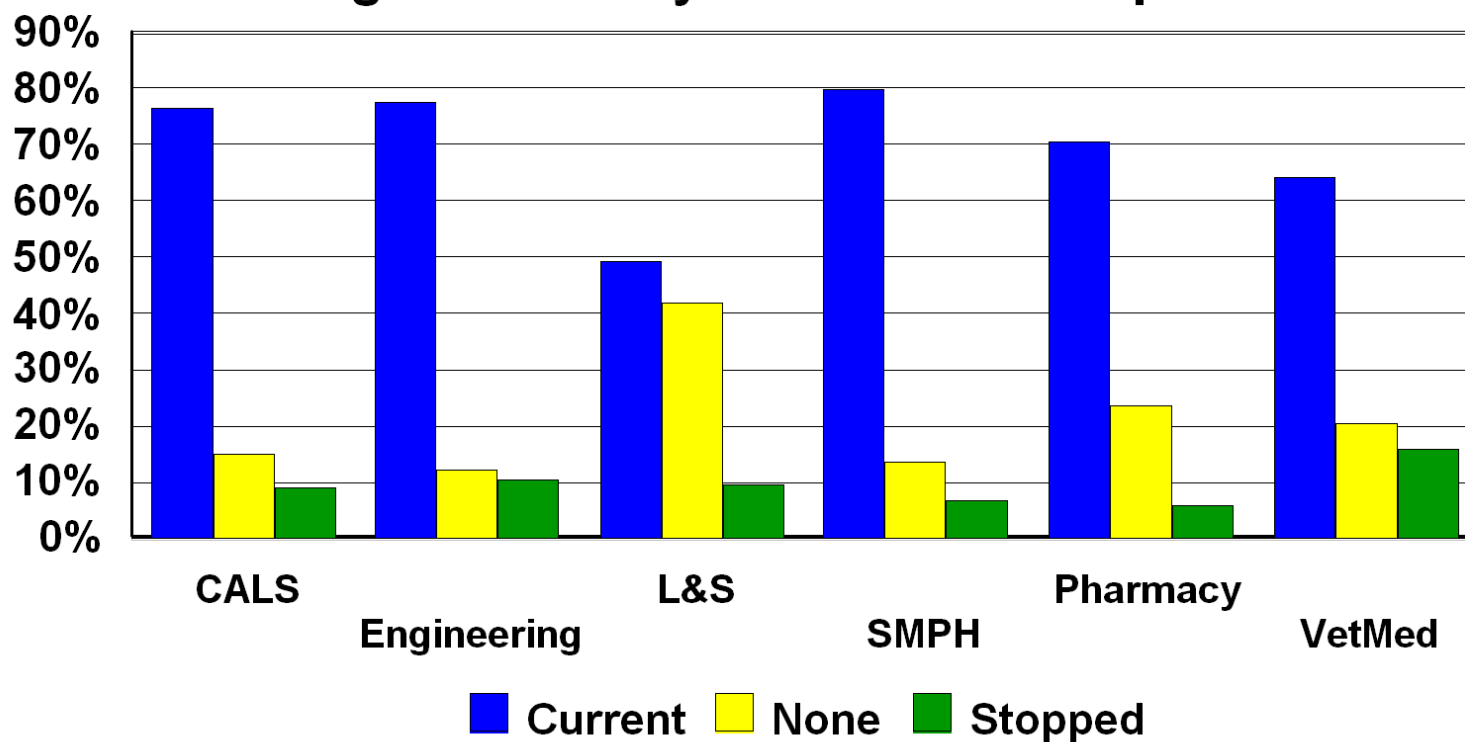


Figure 3.
Family Characteristics of Current Collaborators
Biological & Physical Science Departments

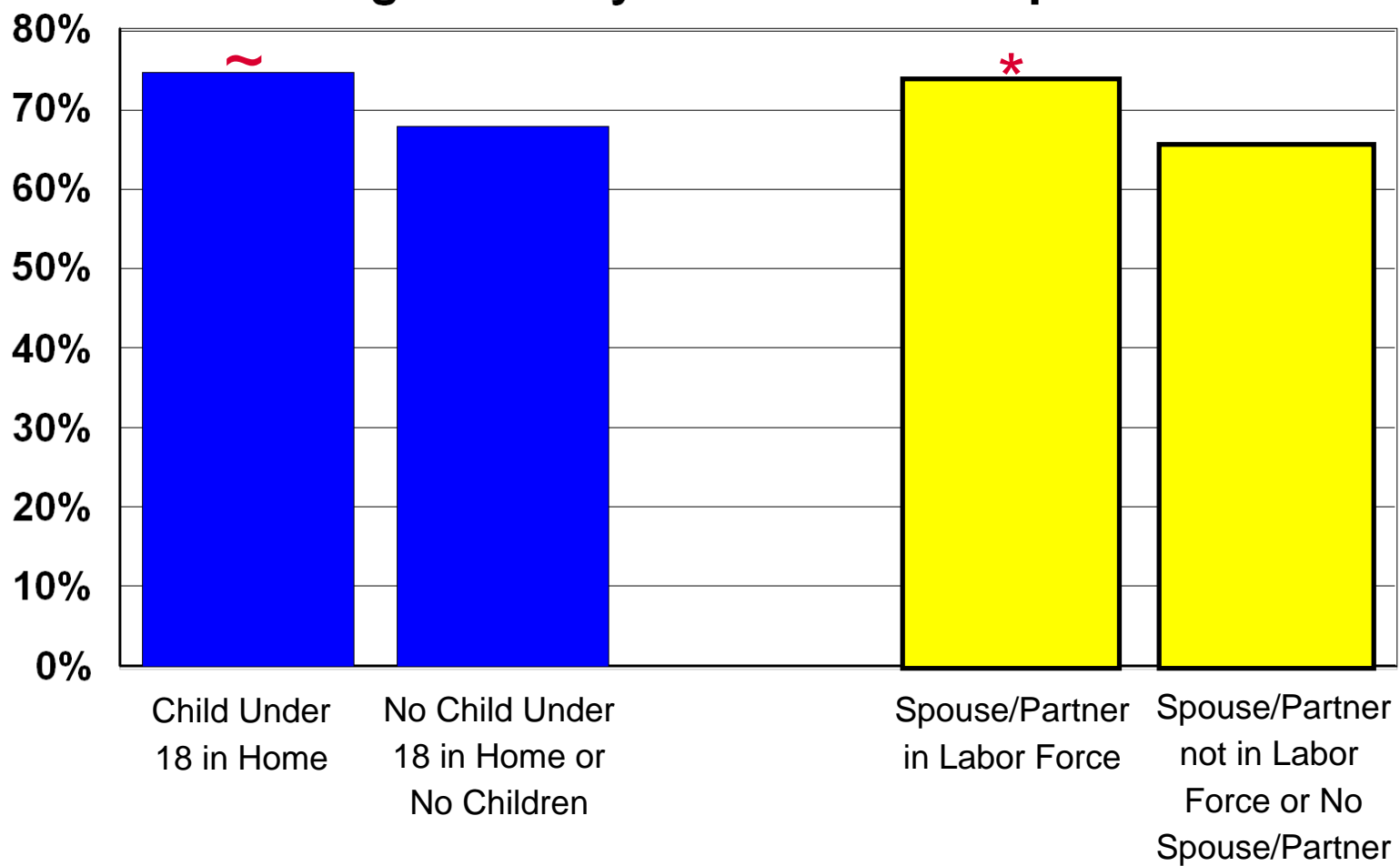


Figure 4.
Distribution of Interdepartmental Collaborators
Social Studies and Arts & Humanities Departments

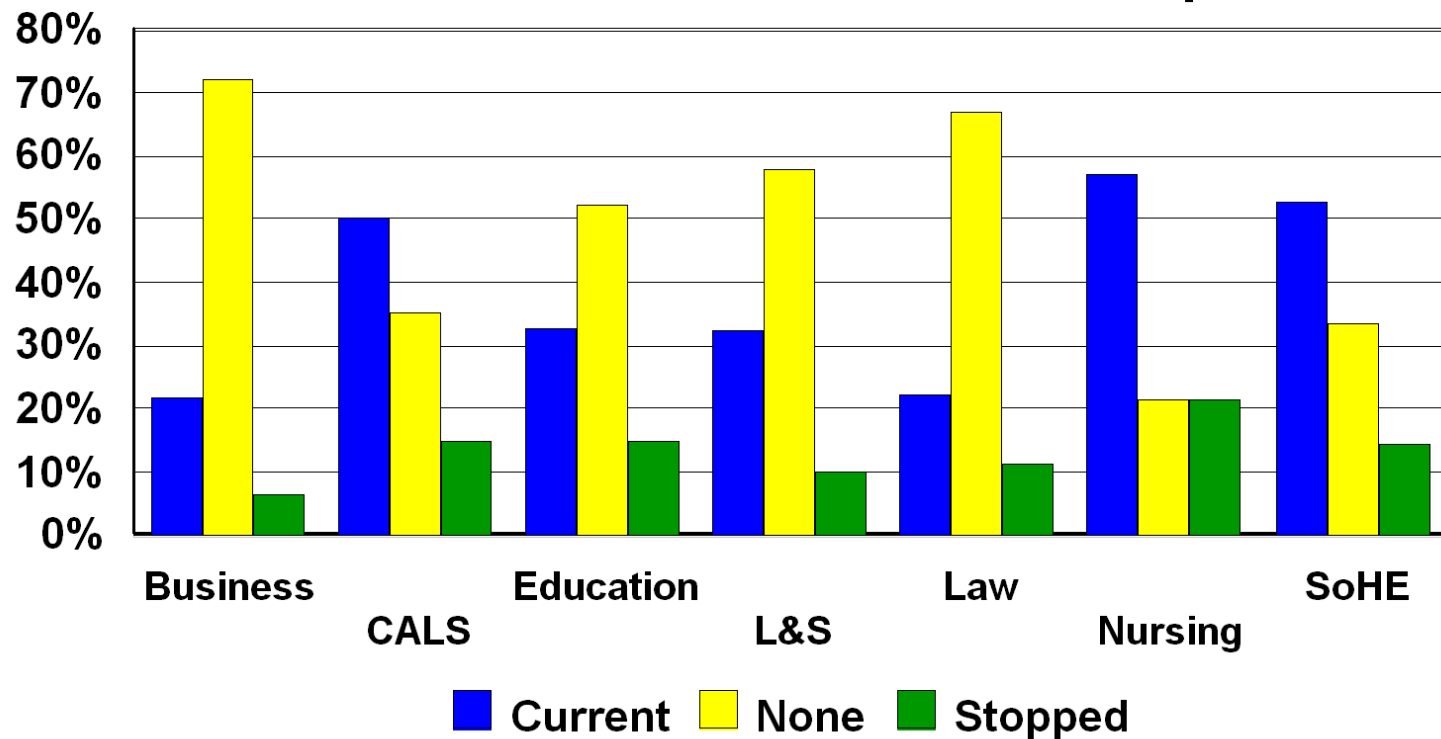


Figure 5.
Enough Internal Funding to Conduct Research,
by Collaboration Status

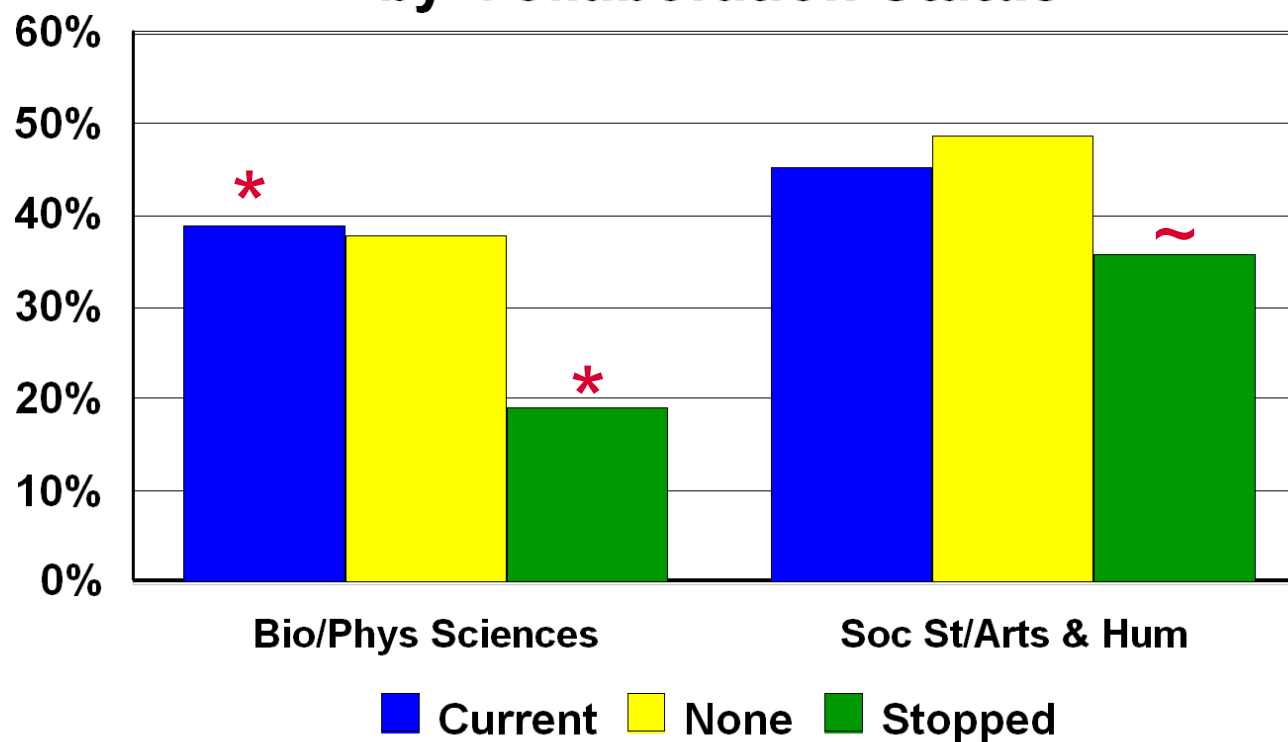


Figure 6.
Colleagues Who Give Career Advice/Guidance,
by Collaboration Status

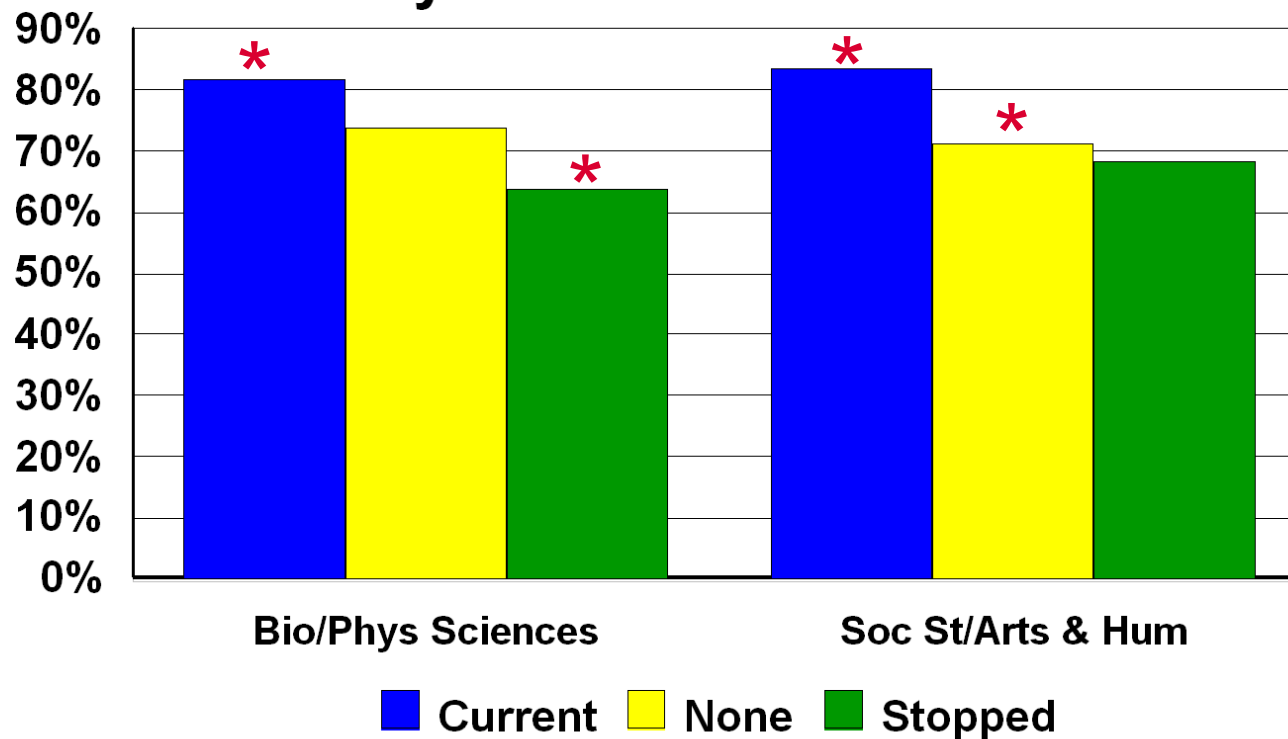


Figure 7.
Sufficient Laboratory/Studio Space, by
Collaboration Status

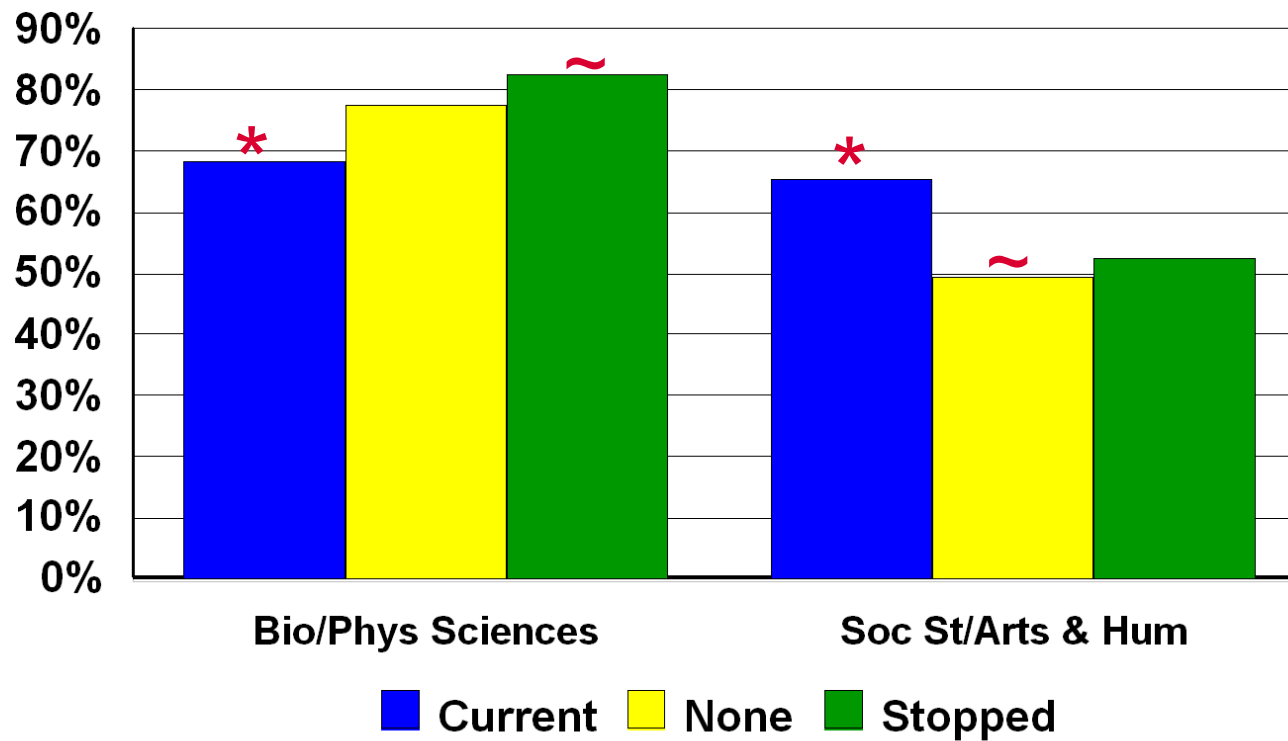


Figure 8.
Selected Tenure Process Experiences
Biological and Physical Sciences

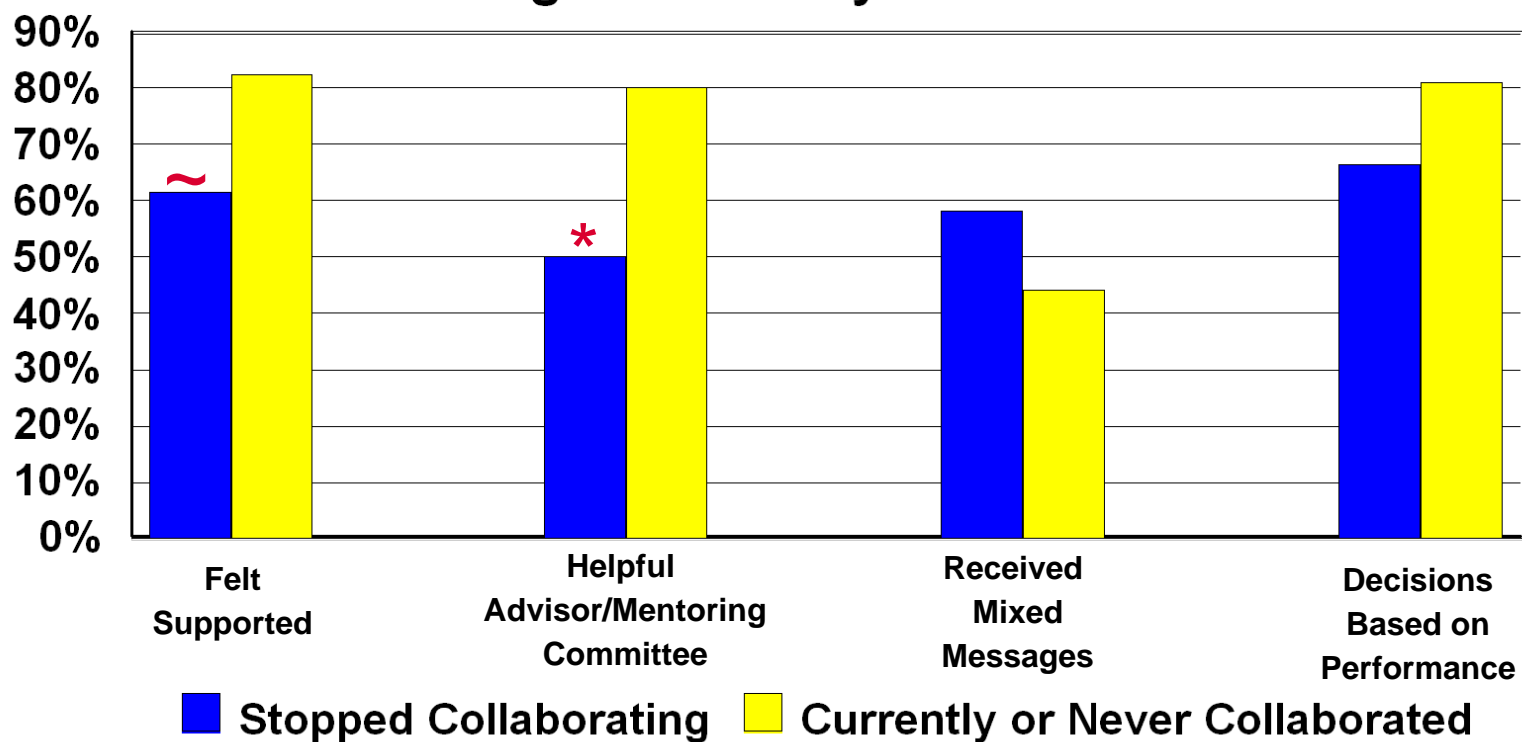


Figure 9.
Selected Tenure Process Experiences
Social Studies and Arts & Humanities

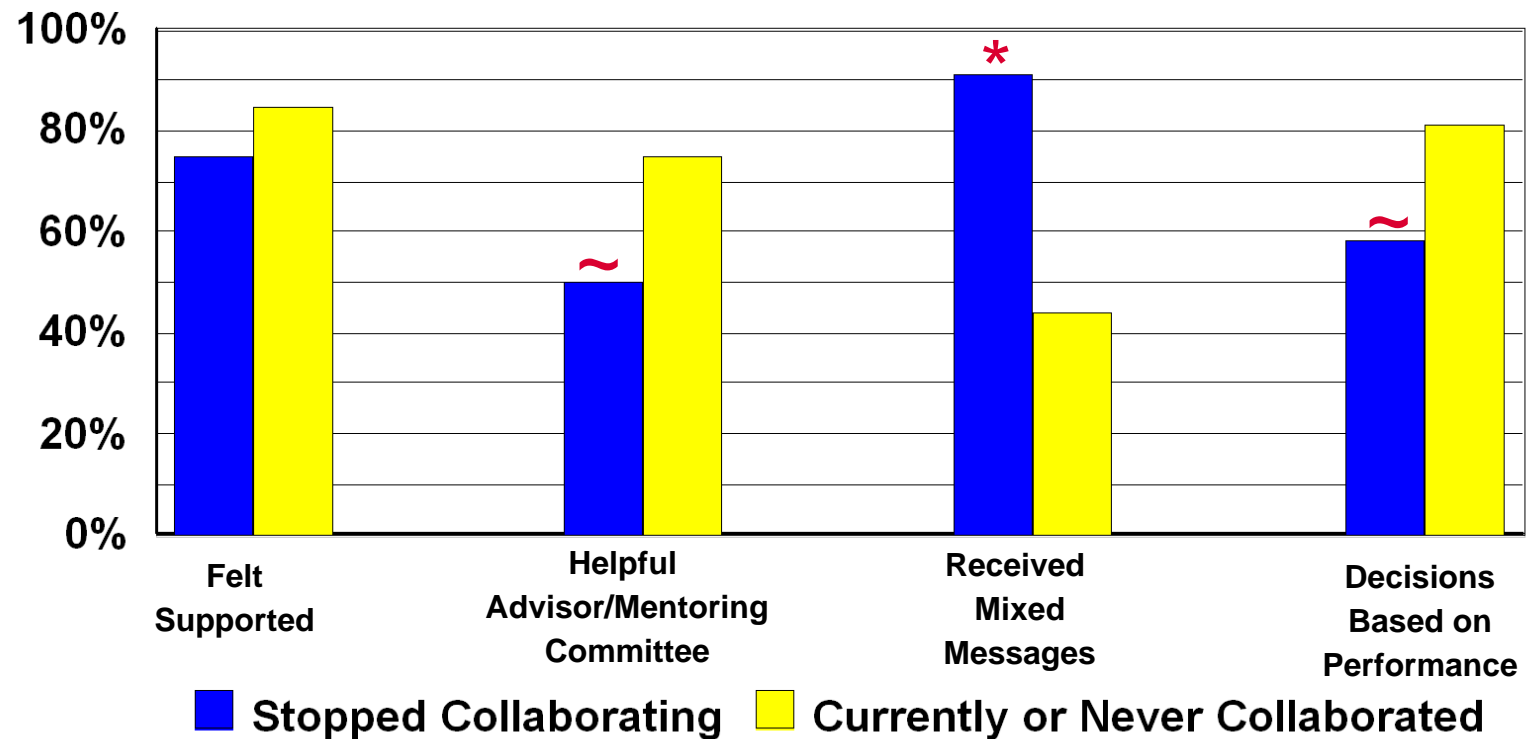


Figure 10.
Climate in Primary Department Rated "Positive",
by Collaboration Status

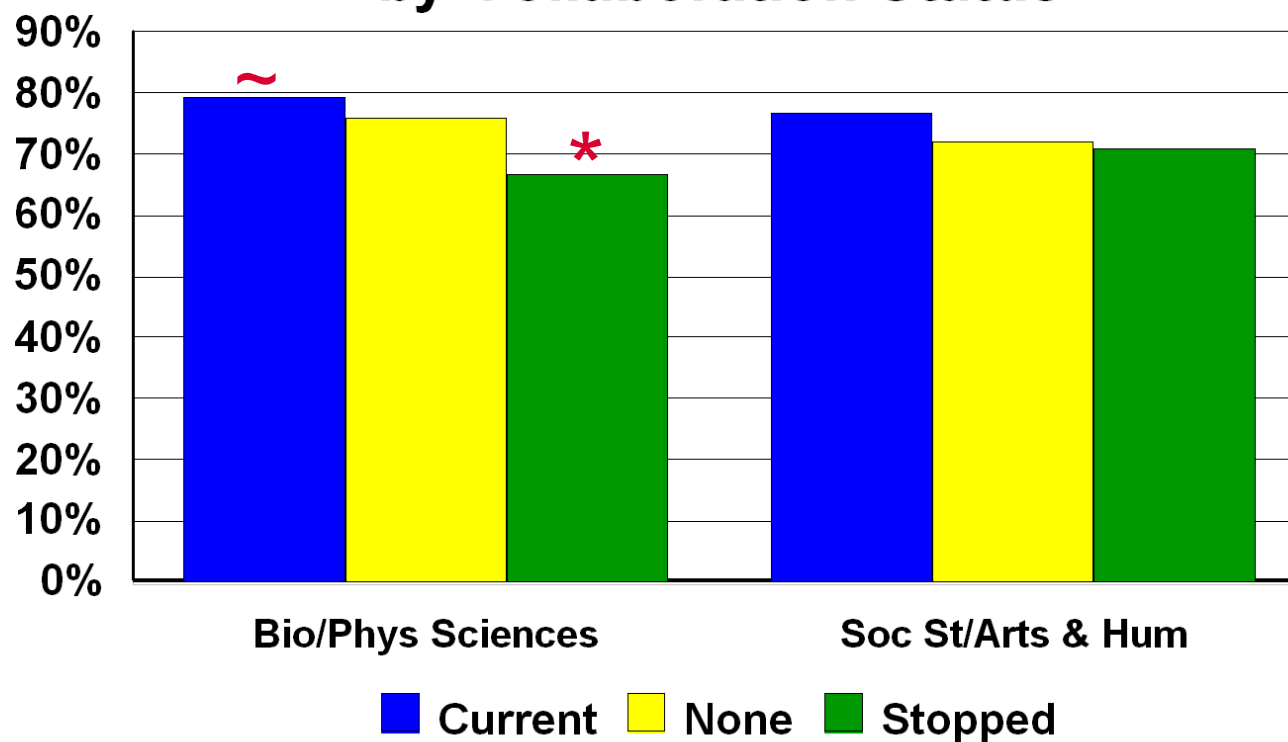


Figure 11.
Agree that "Colleagues Value My Research",
by Collaboration Status

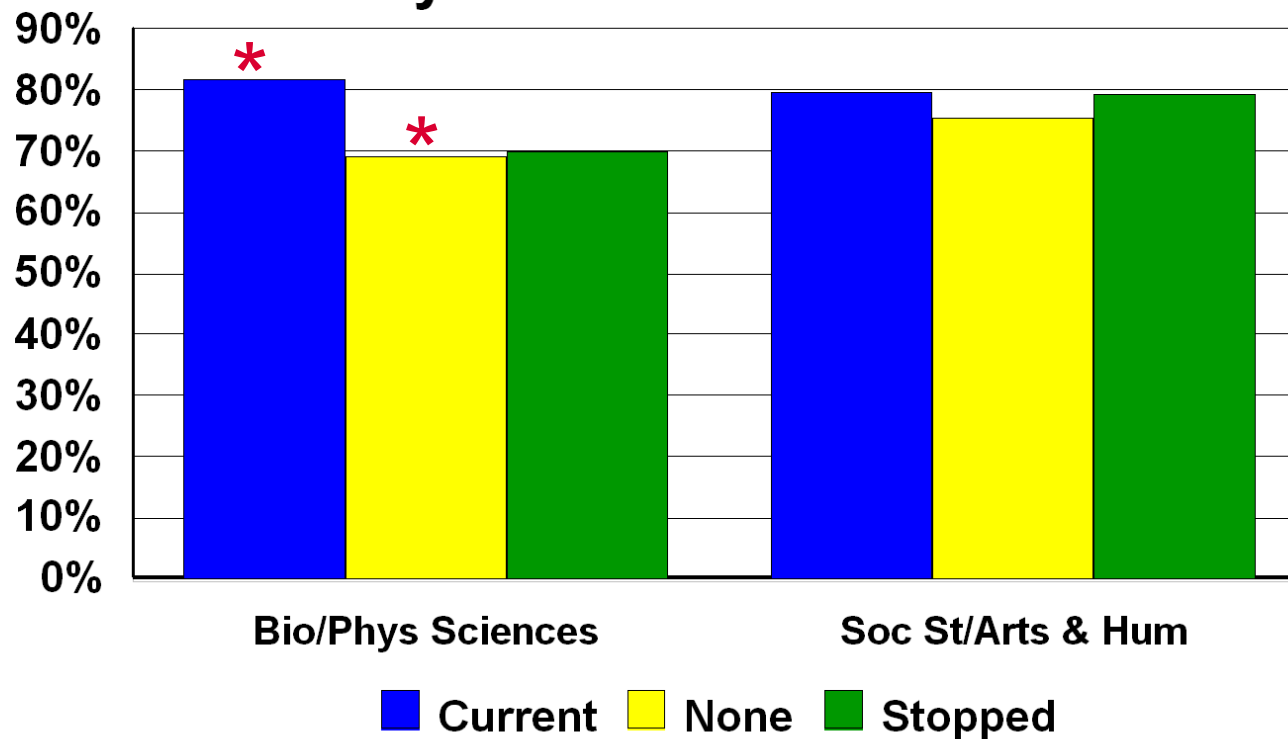


Figure 12.
Agree that "Colleagues Solicit My Opinion",
by Collaboration Status

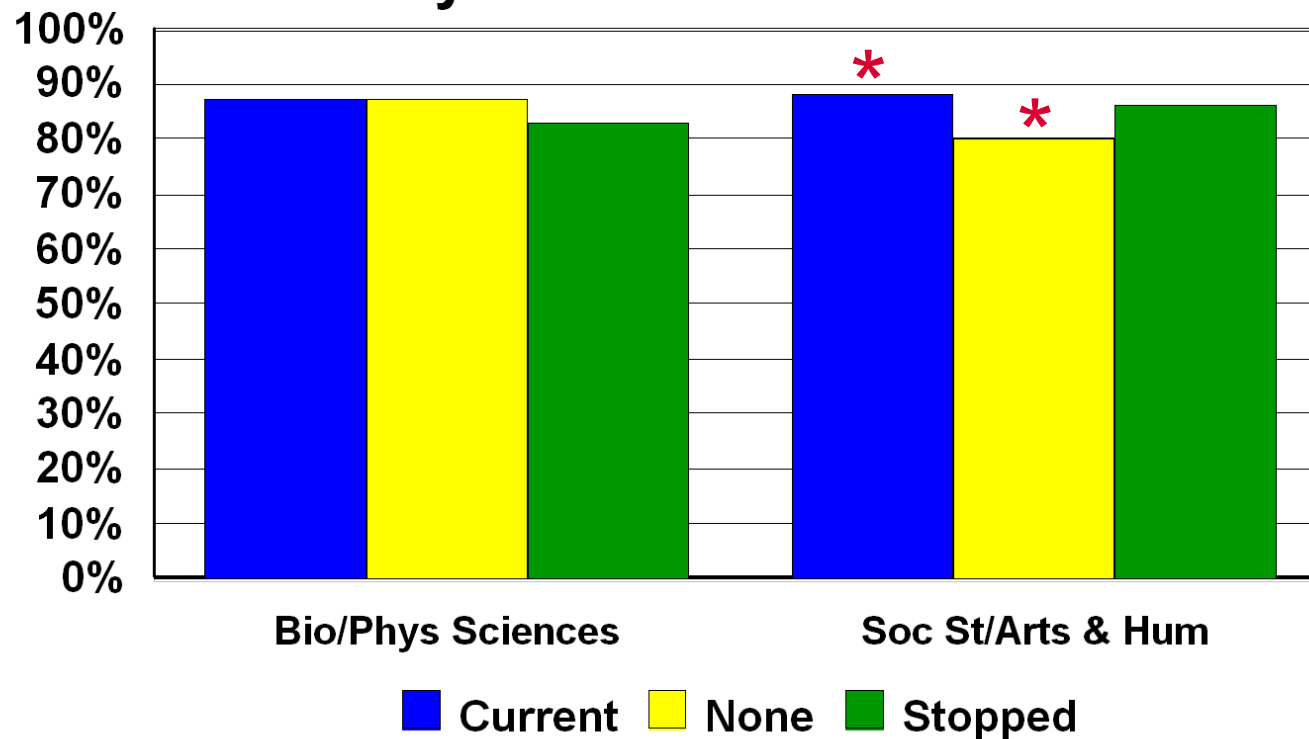


Figure 13.
Agree that "I Feel Isolated at UW-Madison",
by Collaboration Status

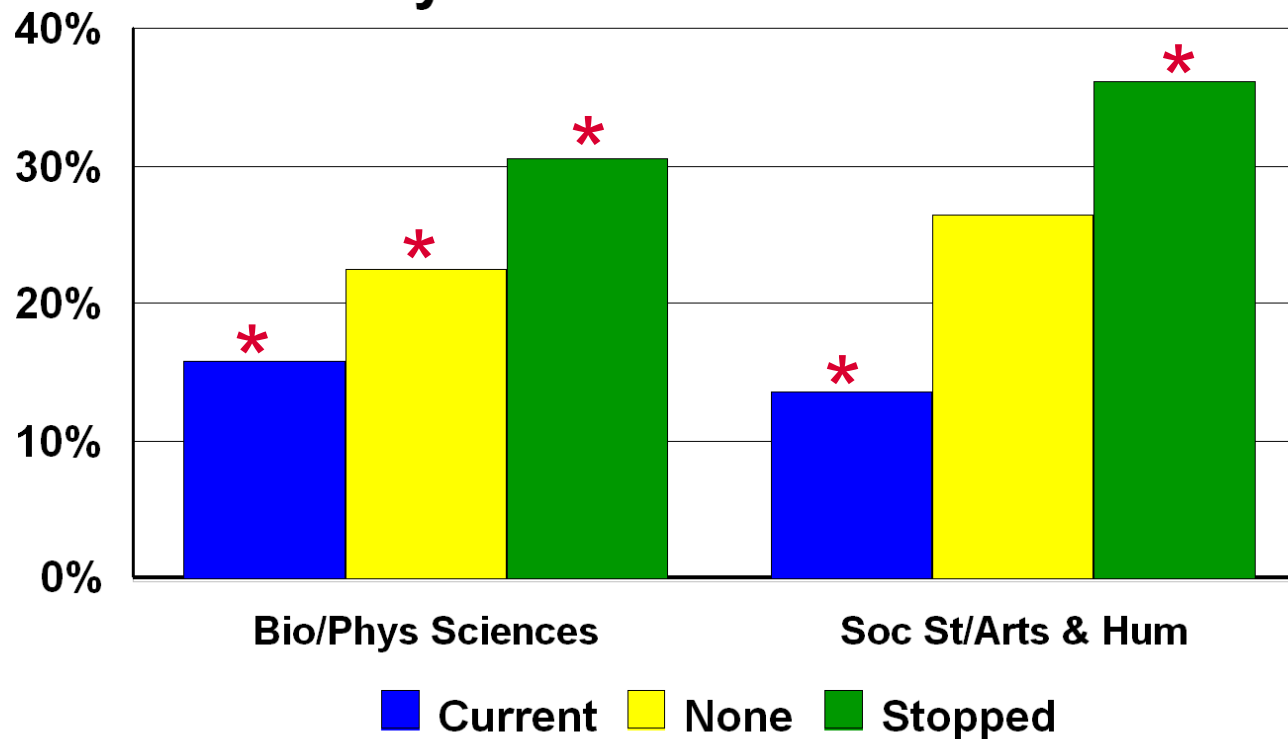


Figure 14.
Satisfied With Job at UW-Madison,
by Collaboration Status

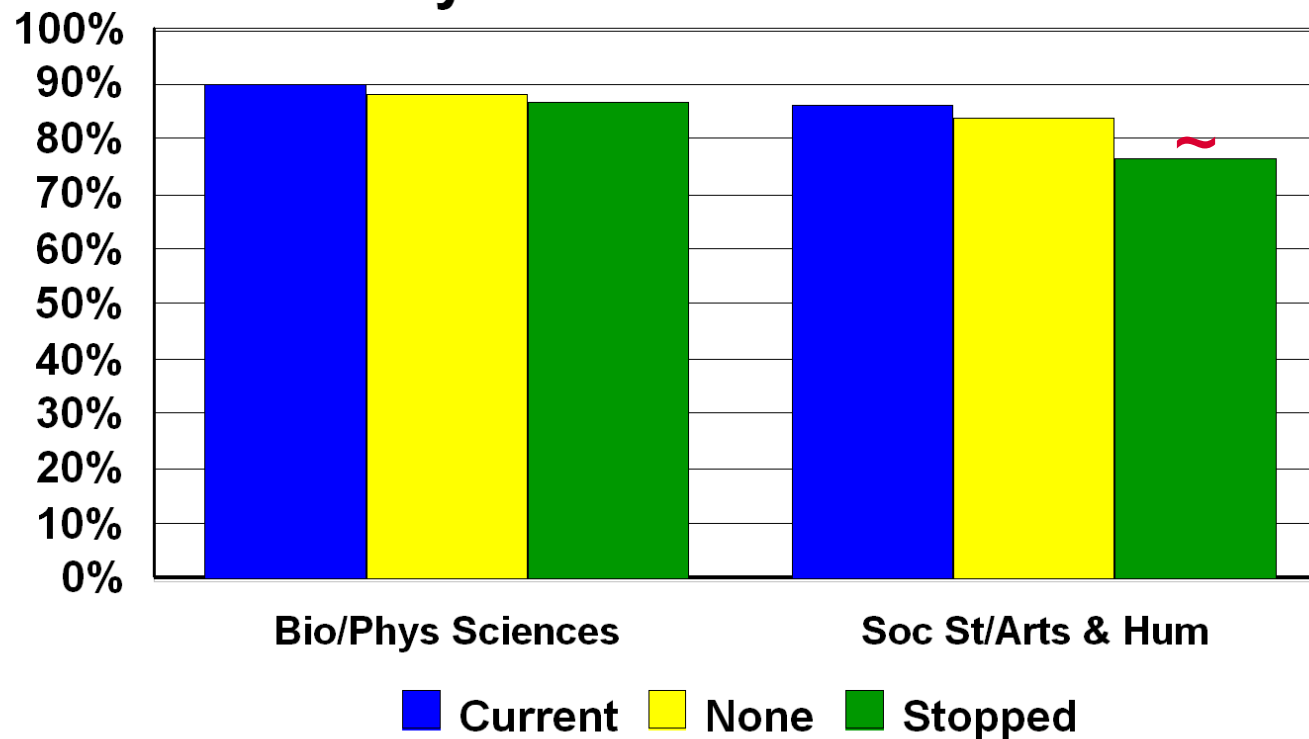


Figure 15.
Would Accept Current Position Again,
by Collaboration Status

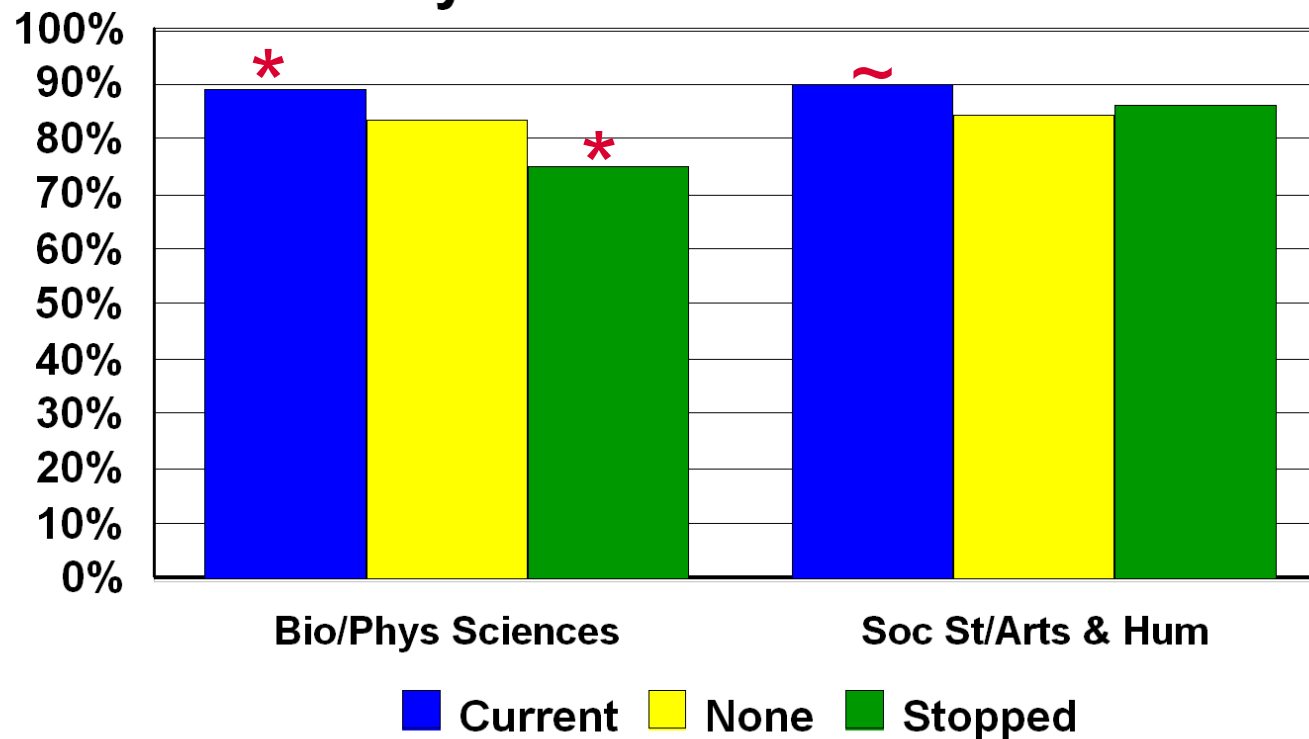


Figure 16.
Considered Leaving UW-Madison in Past 3 Years
Biological & Physical Science Departments

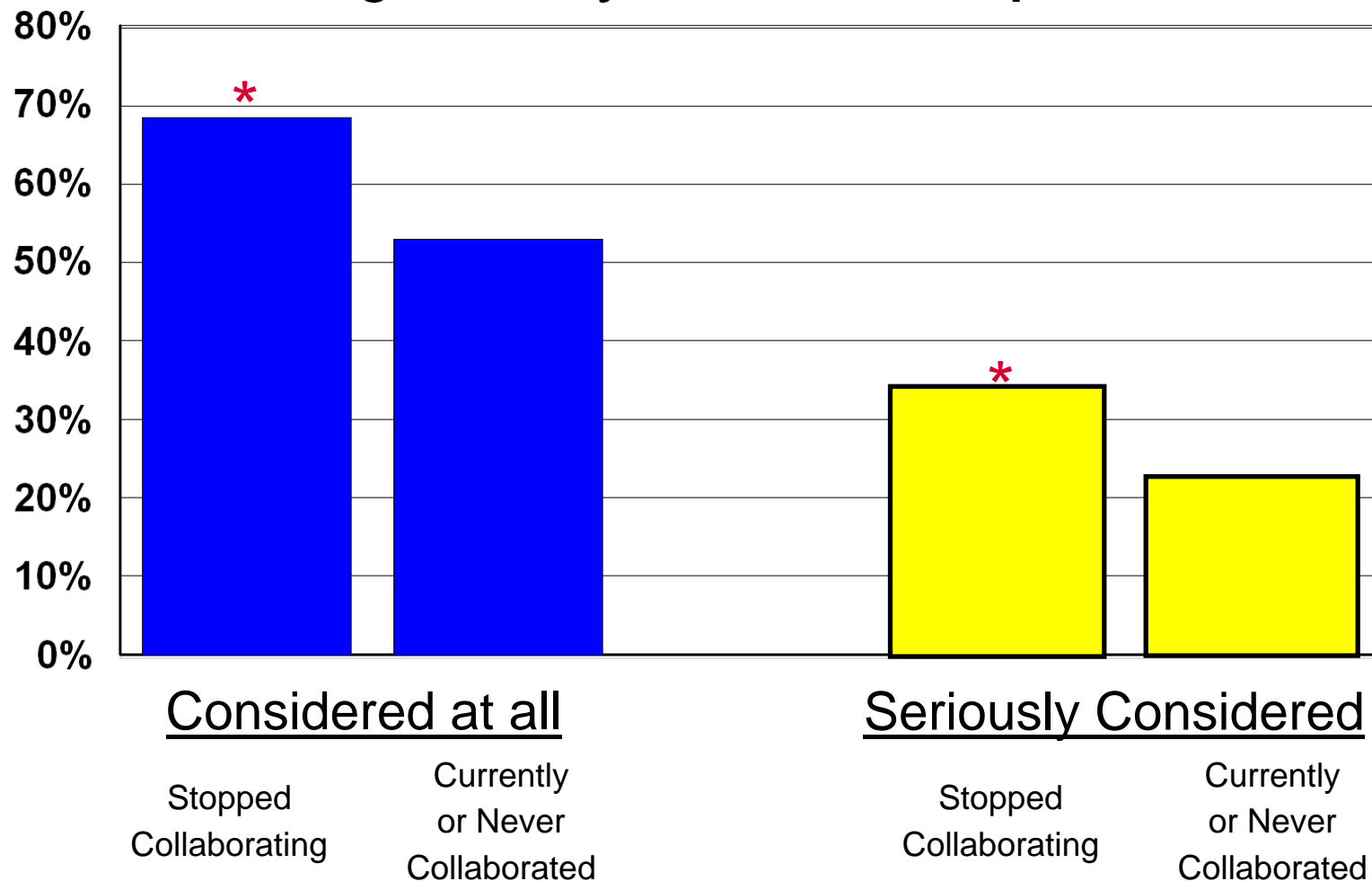


Figure 17.
Usually Satisfied with Work/Life Balance
Biological & Physical Science Departments



Figure 18.
Seriously Considered Leaving to Achieve Balance
Biological & Physical Science Departments



Figure 19.
Forgo Professional Activities
Biological & Physical Science Departments

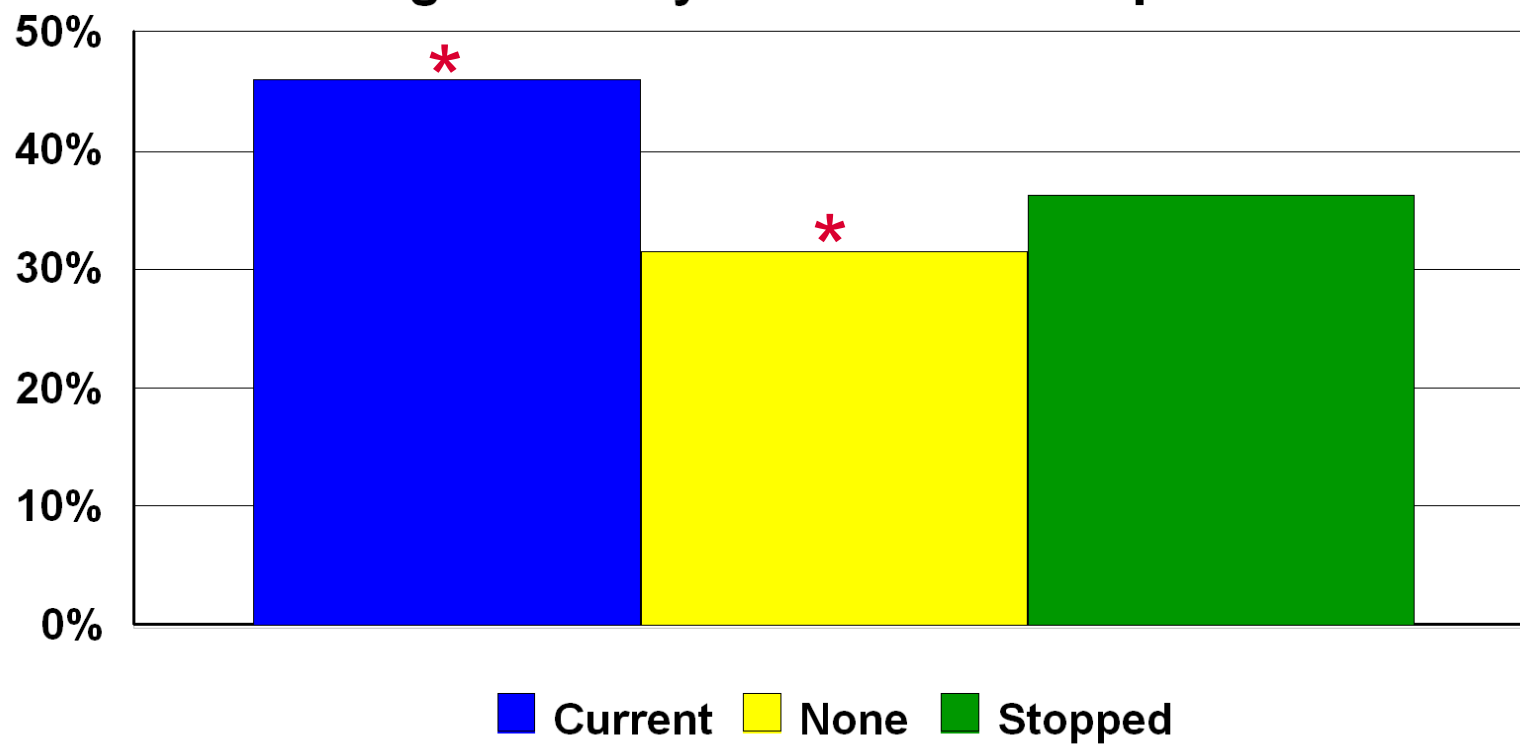


Figure 20.
Department is Supportive of Family Leave
Biological & Physical Science Departments

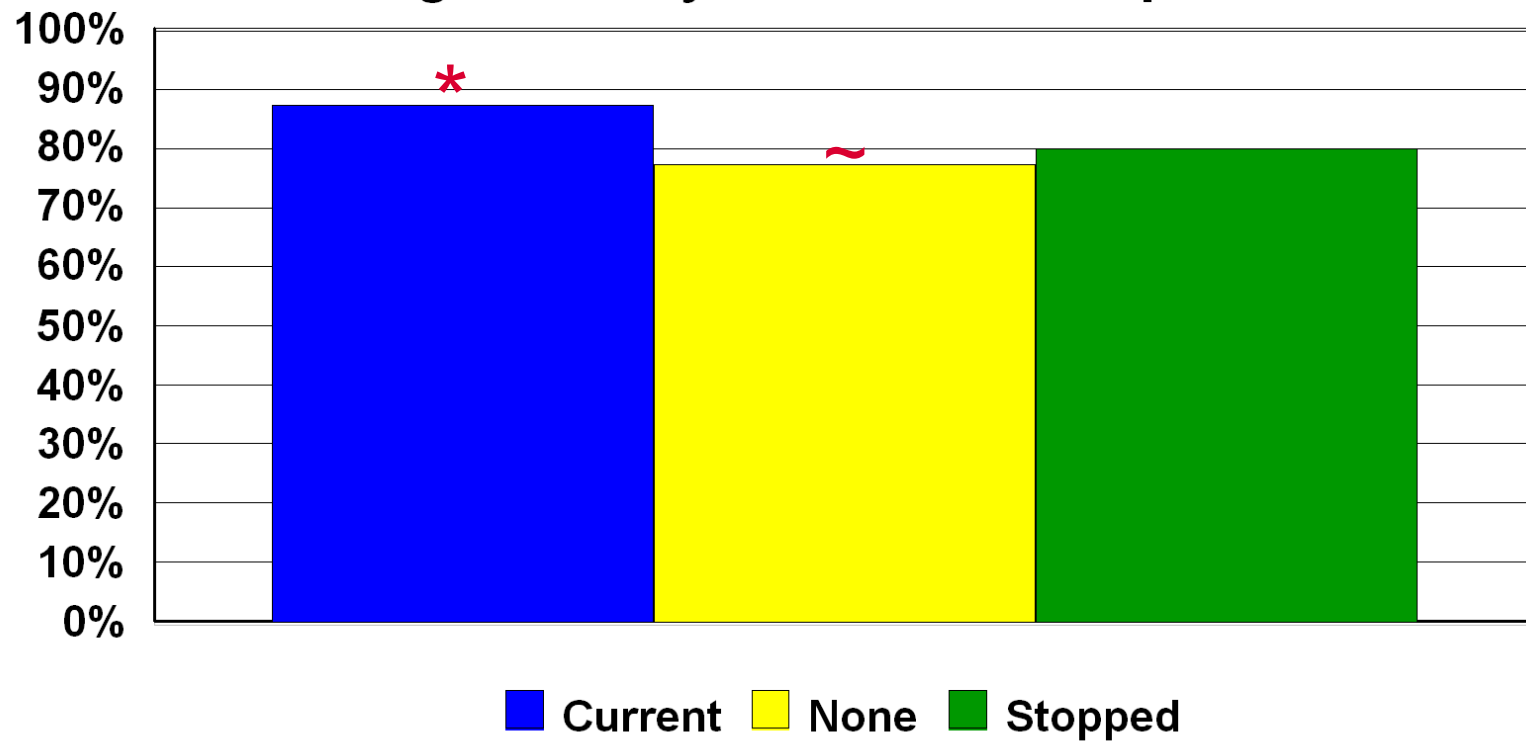


Figure 21.
Department Meetings Early or Late in Day
Biological & Physical Science Departments

