



P O L I C Y B R I E F

Status of Women in Academia

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Executive Summary

In collaboration with the Institute of Public Policy (IPP) and the University of Missouri's Status of Women Committee (SWC), the following policy brief illustrates several key trends in the experiences of women on university campuses. A phenomenon known as the "leaky pipeline" describes the discrepancy between the number of women receiving PhDs and the number of women eventually working in academia, most notably as tenure-track professors. This brief will focus on three barriers that contribute to this phenomenon: burdens on research productivity, overburdening academic housework, and biased teaching conditions.

Utilizing both information from the University of Missouri and a review of relevant literature, a set of best practices and recommendations for the university system, department dean or chair, and the individual will be offered. The intention is to work towards a greater understanding of the institutional experiences of women and underrepresented faculty at the University of Missouri.

Literature Review

Salary Equity Study

According to the 2018-2019 American Association of University Professors (AAUP) report, **women faculty are still paid on average about 81.6% of what men faculty are paid**, which did grow from 80.8 percent in 2008-2009.¹ The AAUP report attributes much of this difference to unequal distribution in terms of faculty rank and institution type. Gender differences in salary, which AAUP has tracked since the 1970s, have indicated incredibly slow growth. While the total number of women in full-time faculty positions has grown by 24.8 percent in the last 10 years, women are still underrepresented at the highest paying universities and in the highest paying ranks, indicating that much of the aggregated data has not changed for women in the last 10 years.

In 2015, the University of Missouri contracted a third-party source to conduct a salary equity survey that measured unexplained wage gaps for women and minority faculty, controlling for rank, research productivity, years of experience, departmental affiliation, and academic position. They found no significant unexplainable campus-wide gender or ethnicity/race pay gap, even though on average, according to the data from 2014-2015 for the University of Missouri, the gender wage gap was about \$16,000 or 15% below the average salary for men faculty. A 15% wage gap also persisted for underrepresented (defined as non-white and non-Asian) faculty as compared to non-underrepresented faculty. Both gaps were largely attributed to explainable

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factors that were controlled for in the study such as research productivity, rank, and all of the other previously listed controls in which white male faculty exhibit higher measures on average. However, faculty duties do not only encompass research production. University faculty members are also required to invest large portions of their time in teaching and academic service, both factors left out of and not mentioned in the salary equity study, but elements that research indicates disproportionately burden women and underrepresented faculty and could contribute to disparities in rank and especially research productivity. So, it might be necessary to add other measures into the research to better see the whole picture, such as expected amount of research output, which might affect different groups in various ways. Additionally, the salary equity survey only measures where faculty are currently, which doesn't examine differences in individual experiences and setbacks that have possibly contributed to differences in research productivity, rank, and academic position.

Obstacles to Research Productivity

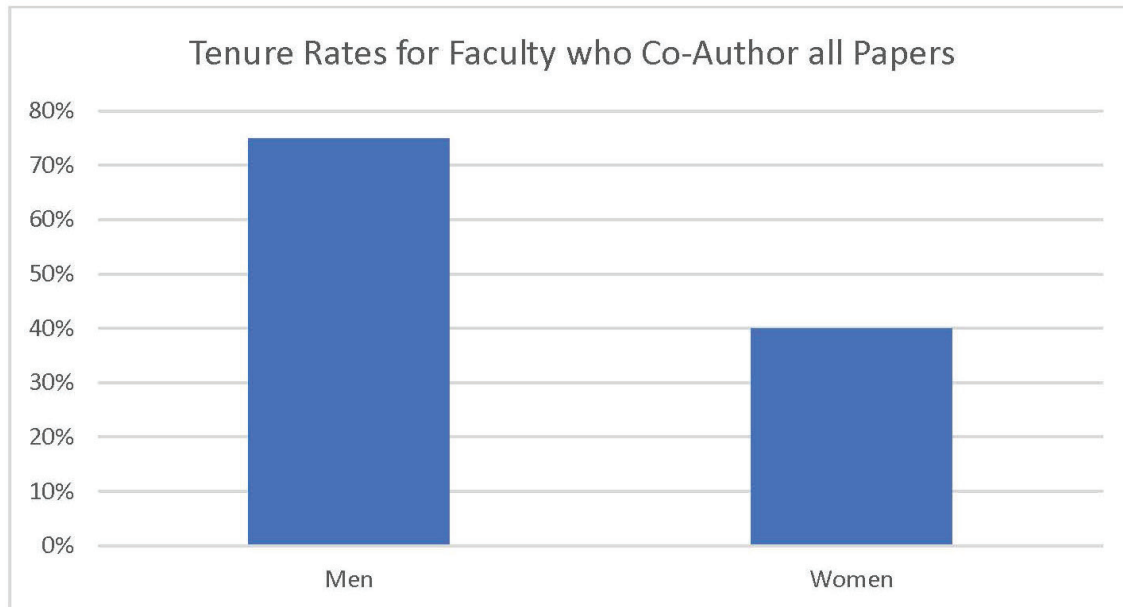
Women faculty face a number of obstacles when trying to publish their research, oftentimes leading to situations in which women faculty publish research less than men faculty.³ Women faculty, due to increased burdens of teaching and service, contribute to a lower proportion of research articles than the percentage of academic faculty they make up, with a few exceptions.⁴

Obstacles to research productivity include:

- Women faculty differ in terms of academic job assignments. They are more likely to be in less research-heavy positions, such as adjunct or non-tenure track (NTT) positions.⁵ Significantly, the 2018-2019 AAUP report indicates that the percentage of overall NTT faculty has increased across all institution types.⁶

- Women professors who co-author papers might face a longer road to gaining tenure in contrast to women who single-author many of their papers. Co-authoring a paper is correlated with a 7.7% chance of gaining tenure for men, but only a 2% chance for women, serving as an extra burden for a woman moving through the tenure process.⁷

Figure 1. Tenure Rates for Co-Authors⁸



The research seems to suggest that **creating more opportunities for research may not resolve disparities as women receive less recognition for the research they do publish.** For instance, when co-authoring papers, women are less likely to be listed first or last, placements that carry greater prestige.⁹ When women faculty do earn those prestigious placements in a co-authored work, their research is often cited less, as indicated by a study looking at national and international scientific collaborations.¹⁰ Additionally, there are large gaps in funding for research, a phenomenon that can be at least partially attributed to women faculty receiving less positive assessments in their role as a principal investigator, especially in scientific research, which can hurt future research endeavors.¹¹ In contrast, another study found that men and women faculty, specifically in medical research, acquire federal funding at similar levels, but there are inequities in terms of research productivity and overall impact that puts women faculty at a disadvantage.¹²

Overburdened by Academic Housework

While studies indicate that women faculty often publish less research, they are often contracted into more academic housework, a term that indicates the chores of academic service such as coordinating meetings, planning events, etc., an endeavor that could be taking them away from research and placing undue burdens on their time and energy.^{13, 14}

Academic housework could be functioning as a glass ceiling to reaching full professor status.

Generally, women are less likely to be promoted to full professor and the process, if it occurs, takes a longer time.¹⁵ Research indicates that women faculty are asked to volunteer more and are more likely to say yes to tasks with low promotability, slowing down their move up the academic ladder.¹⁶ It can often be difficult for women and underrepresented faculty to say no to service, with experiences

indicating that women and underrepresented faculty who do say no to serving on committees are often pressured into service. Additionally, faculty of color, especially women of color, might be asked to serve as the sole representative for their race or gender, a phenomenon that might be pushing women of color into service earlier than other faculty.¹⁷ Furthermore, women in Political Science in this study, are more likely to be tapped for lower level service, but less likely to be asked to be department chairs, committee chairs, or to lead academic programs, positions that might be met with greater recognition.¹⁸ Women faculty are instead more likely to participate in the less recognized areas of relational service such as mentoring students, providing career guidance, and offering social support.¹⁹ While this takes up a significant amount of time, it is not officially recognized by the university and it does not have a place on a faculty member's CV.

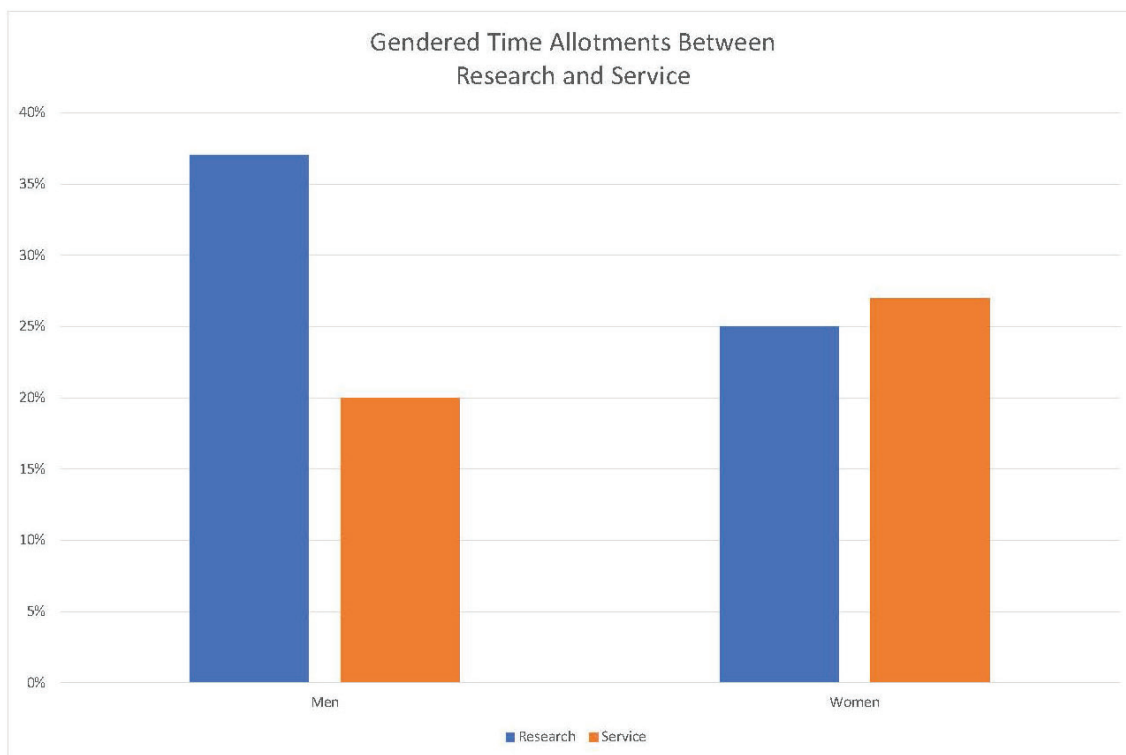


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Evidence suggests that this gendered time allocation, such as that highlighted in the following chart, leads to lower job satisfaction and higher turnover rates for senior women, a distinction that does not affect men.²⁰

Figure 2. Gendered Time in Research and Service²¹



Teaching/Job Performance

Teaching, like academic housework, can be more demanding for women, especially women of color, who are often disproportionately given teaching-heavy assignments.²² Teaching and teaching evaluations can pose a number of barriers:

- Women of color, on average, spend disproportionately more time in the classroom, an environment that can potentially become hostile towards them.²³ Despite their credentials and their position of authority as the class's professor, in a qualitative study, women describe gendered racism in classroom interactions with their students who challenged their professor's authority, competency, and scholarly expertise.
- Women faculty are more likely to receive increased demands from students than male faculty and students assume their request will be granted.²⁴ When men faculty are open and accessible, it is seen as a plus to them as instructors.²⁵
- Student evaluations of teaching (SET) are biased against women instructors even when it comes down to a seemingly objective measure such as how fast the instructor returns class assignments.²⁶ Similar studies also found indicators of a bias against faculty of color in student evaluations.²⁷

University of Missouri

After looking at literature regarding overall experiences of women and underrepresented academic faculty, the next logical step was to examine how these findings play out at the University of Missouri. Using primary information from the Salary Equity Survey, Campus Climate Survey, and analysis from the Status of Women Committee, the following section presents a localized picture of the experience of women faculty at the University of Missouri.

Research and Salary Equity at MU

Study results found that three factors contributed to salary inequity across the university:

- administrative experiences
- faculty rank
- research productivity.

At this time, the SWC recommends that the university pay attention to addressing the discrepancies in these three areas in order to work on closing the gender and racial pay gap. The 2016-2017 SWC report²⁸ —recommended re-administering the faculty equity survey every five years. The concern is that women with a lower proportion of research in their academic appointment may be compensated less on average. Future studies could examine graduate research assistantships in order to more accurately gauge how early gender inequity in research begins. Additionally, in the 2019 Collaborative on Academic Careers in Higher Education (COACHE) survey, the majority of responses to benchmarks were relatively even across gender lines, with the exception being the benchmark for promotion to full professorship in which women had a lower rating of this standard. The study also found lower ratings on benchmarks from minority faculty.²⁹ Further feedback to this regard can be found in comments from the 2016 Campus Climate survey.

On the campus climate survey, participants noted this inequity:³⁰

- "A woman pointed out to management that males were receiving higher pay and better opportunities/projects. She was then denied for promotion and not given a clear path for how to be promoted".
- "...When it came time for promotion, all things equal, I tried to negotiate for a higher salary and was shut down before I could even present a case...later when he [her male co-worker] was up for the same promotion, he got...more than I did. The explanation is that he negotiated better."

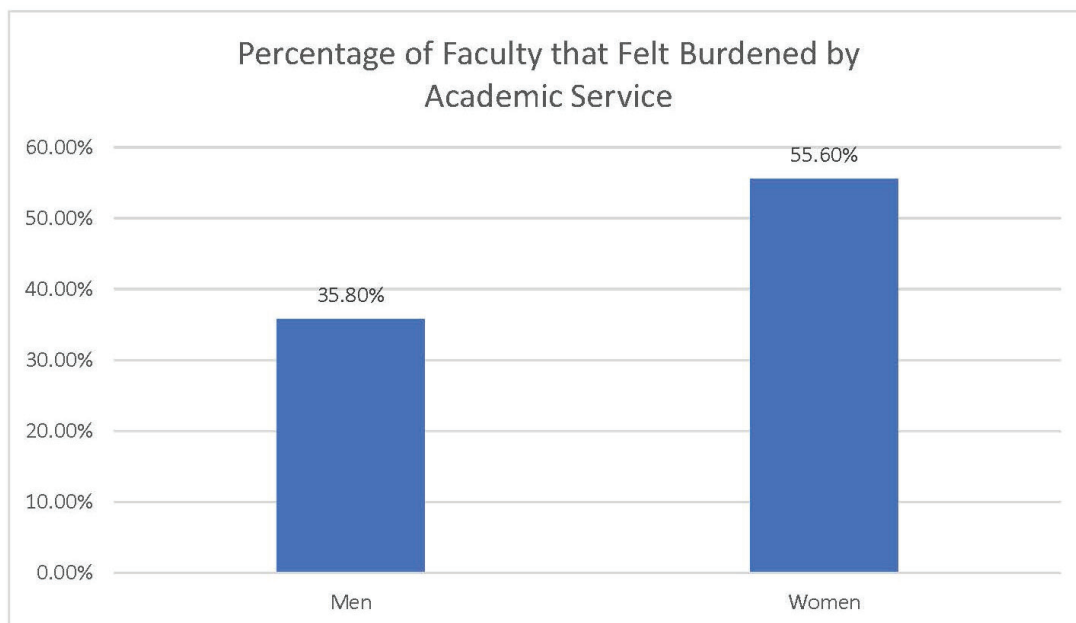
Academic Housework at MU

There were several indicators in the 2016 Campus Climate Survey results³¹ —that point to an inequity in academic housework performed at the University of Missouri.

- Women at MU were about twice as likely to agree or strongly agree that they felt academic service was a burden for them.
- Women were more likely to say that they do more work to help their students than their colleagues do.
- Women staff were also less likely to state that they can do all of the work required of them during work hours.

The 2016-2017 SWC report³² —recommended that the university find a better way to document service requirements. Using a system such as MyVita to measure academic service and then collecting this information would be a way to further examine gender and racial disparities in the performance of academic housework.

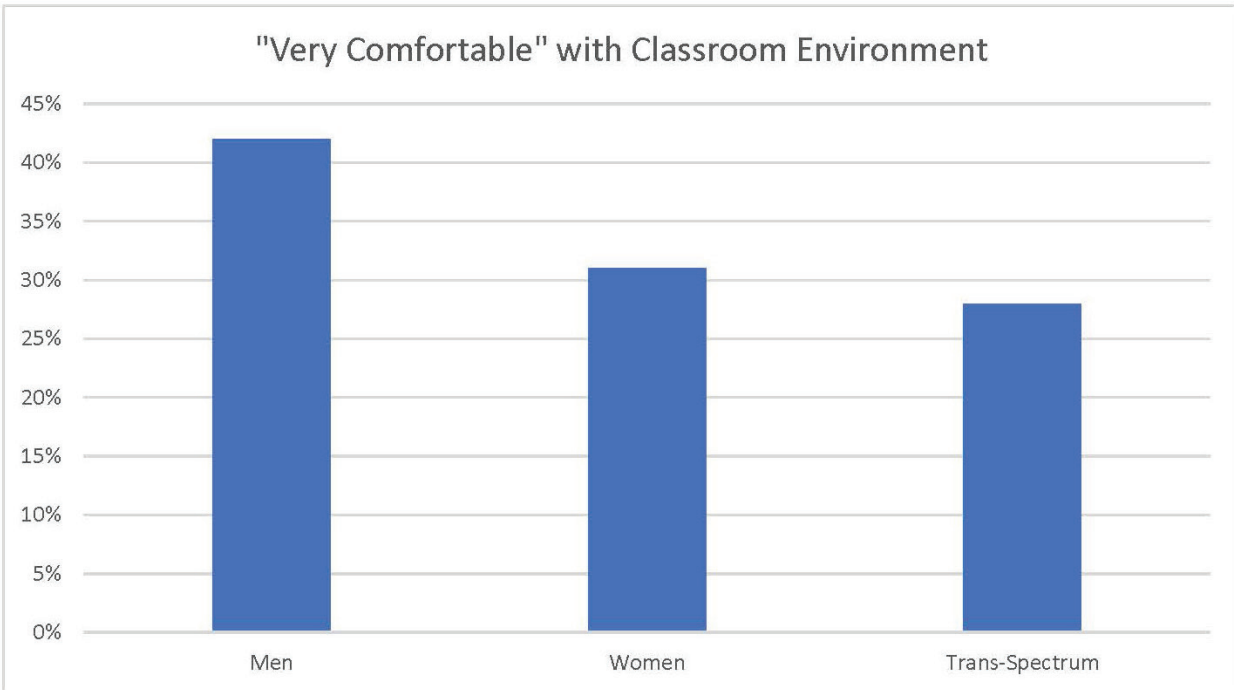
Figure 3: Faculty Service at MU³³



Teaching at MU

According to the Campus Climate Survey,³⁴ —women at MU are less likely to be comfortable with their classroom environment. An uncomfortable culture and atmosphere were noted by several women faculty and student respondents in the survey. One respondent stated that a **“Professor made comments on how women couldn’t do field work, classmates make comments about women (i.e. rape jokes) or mock other identities, etc.”**³⁵ —indicating that the classroom environment can be a volatile place for women and trans-spectrum students. Another respondent made the claim that they protect white men in the organization “...who feel they have carte blanche to dismiss and mistreat women and minorities.”³⁶

Figure 4: Gendered Perceptions of Classroom Environment³⁷



Based on the campus climate survey data, the SWC made some recommendations.³⁸ First, they recommend providing training and resources to all supervisors to ensure a more equitable culture. Next, they recommend rethinking how academic service is measured and valued at the university. Lastly, they recommend that the campus climate survey be administered on a recurring basis to more effectively evaluate progress towards an equitable climate for women and minority faculty.

Best Practices and Recommendations

Examining relevant literature regarding experiences of women and underrepresented academic faculty helps gain more perspective. After pairing the literature review with information on experiences at the University of Missouri as represented in the 2016 Campus Climate Survey and other University sources, a more localized picture of the landscape emerged. Keeping the above information in mind, the following best practices and recommendations are presented for addressing burdens to research productivity, overburdening academic housework, and teaching bias.

Research

Campus/University System

- Recognize that there is inequity in terms of research opportunities at the University of Missouri and continue to examine the imbalances in research productivity and rank.
- Include different information in future salary equity surveys, such as research expectations upon hire and the number of classes being taught.

Departmental Chairs/Deans

- Encourage and provide time for faculty to participate in and complete research, especially keeping in mind increased time burdens on women and minority faculty.
- Ensure diverse selection committees for lectures and colloquiums in order to diversify future offerings and opportunities.

Individuals

- Work to support all colleagues and don't be afraid to provide encouragement towards them being more assertive in securing time and resources to increase research productivity.
- Become more aware of who is being cited and diversify reference sources when conducting research in the future.

Academic Housework

Campus/University System

- Examine the university culture to understand who is doing the majority of the teaching, mentoring, and supervising using systems such as MyVita.
- Consult with people in the university on best practices to encourage more equal task assignments, including department chairs and deans.
- Work towards increased recording of the gender and race/ethnicity of committee members, especially those serving on prestigious committees.

Departmental Chairs/Deans

- Recognize and document the expectations for academic service on employees. If inequity is recognized, rethink how academic service is assigned.
- Utilize the MyVita system in order to measure how much academic service each faculty member is performing and then use this information to restructure service as needed.

Individuals

- Recognizing that saying no isn't always an option, individuals should pay attention to which colleagues are taking on more academic housework.
- Work on volunteering to lighten colleagues' loads if possible or talk to a supervisor.

Teaching

Campus/University System

- Work with and encourage department chairs and deans to increase equitable practices in order to support women and minority faculty.
- Introduce a summit or training session with all department chairs that discusses teaching practices and ways to support diversity within their respective departments.

Departmental Chairs/Deans

- Pay attention to any grievances or complaints from female and minority faculty.
- Examine the teaching distribution to determine that it does not put too much pressure on a select group of people.
- Assess an individual's academic service commitments and research duties when looking at class assignments. Increasing a faculty member's teaching load when they already face significant time burdens can reinforce inequities.
- When reviewing teaching evaluations, do so with a critical lens, given the demonstrated bias in such evaluations. Consider adding a bias cue in future teaching evaluations, a small measure that research indicates could help mitigate some bias.³⁹

Individuals

- Women need to be their own self-advocate, if they are able, in wanting more time to do research or in reporting classroom issues.
- All faculty need to be willing to offer support and speak up for their colleagues if necessary.

Conclusion

Looking to recent research on women and minority faculty, three trends in inequity emerge in burdens on research productivity, overburdening academic housework, and biased teaching conditions. At the University of Missouri, these issues disproportionately affect women and minority faculty, as evidenced by information from the 2016 Campus Climate Survey, and the Status of Women Committee reports from 2016-2017 and 2017-2018. Striving towards greater equity for all staff and faculty is not simply a matter of individuals treating their colleagues more fairly. Rather, working towards alleviating the issues at hand must come from the university system and department heads first and foremost. Department heads and the university system need to recognize that these problems exist and that actions can start with their intentions and the attitude they take towards making the MU experience a better one for all students, faculty, and staff.

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