Abstract

Existent research about the lives of faculty reveals persistent inequalities between female and male faculty. Given this, our project seeks to trace the workplace practices within which mid-career women and men faculty carry out their careers. The overarching question we address is how women and men construct their scientific careers in the context of gender. How do women and men differ in their career trajectories? How do the conditions of the workplace shape these trajectories, and how are these gendered?

By reporting on qualitative interviews with 50 tenured female and male STEM faculty members at a large Midwestern research university, we identify gendered pathways of career development, which we argue can contribute to the disengagement of female faculty within departments and the university and a disadvantaged career pathway.

The data revealed three institutional practices undergird faculty career pathways: (a) integration into career networks; (b) access to resources; and (c) the distribution of labor in the department and institution. We argue these practices are gendered, men in STEM disciplines are more likely than their female counterparts to benefit from the advantages of greater resource access, network collaboration and labor responsibilities focused on their own research productivity. This institutional advantage puts men on the normative pathway of academic success, whereas women follow a fluctuating pathway.

Analyses like these provide insight into the specific strategies women (and men) need to employ to navigate the academic landscape -- especially as that landscape continues to favor the normative career (ideal scientist) model.

Findings

Networks

When I started I was the only woman in the department .... The guys just wouldn't tell you things for whatever reason. They may tell each other things. They did not pass a whole lot onto me, but I had some colleagues in other departments which sort of helped me out. (full professor, female)

- Network relationships circulate informal resources—such as information about research and funding opportunities, or inside information about departmental matters, collegiality, and support
- Women in our study consistently reported fewer networks within the institution and less daily interaction with colleagues about their work, which in turn limited their access and opportunity to new initiatives and rewards
- Women reported their networks were most often with family members, staff, and friends with whom they found support

Resources

I am struggling with very old equipment. My equipment is 11 years old and it has serious problems but it costs $2,300,000 to replace. So, I am pretty.net supported. So, I want to keep a research program, I need funding and I need to move. I need to replace my equipment and there is no way to do that but move. (associate professor, female)

- Resources are the various aspects of the academic work environment that, when present, can facilitate scientific work and, when absent, can act as a barrier to scholarly productivity in scientific work
- Access or exclusion from resources is a powerful institutionalized mechanism that can shape the career pathway for a long time
- Access to networks and to resources often reinforce each other. If, for instance, members have rich and diverse professional networks, those networks often facilitate access to resources

Division of Labor

I was being asked to teach my fifth new course and I was hired with another faculty member at the same time who was male and he had taught two new courses. So, I made up a list of all the junior faculty and I was already the highest number of new courses along with another male colleague in a different division. I then approached my division head about this and was told that I was just part of being a junior faculty. (associate professor, female)

- One of the most valuable resources faculty members bring to bear on their academic career is their own time, and thus the manner in which time is distributed and distributed in academia warrants its own discussion
- Women are disadvantaged first by being placed on committees in order to ensure representation but they are too often penalized for that service in the promotion and tenure process, which magnifies the problem by continuing to reduce the number of women faculty available for such committee work the next time around

Institutional practices create disadvantages for women, even if the women’s paths eventually lead to the same outcome (e.g., promotion to full professor, publication or other scholarly recognition).

Discussion

Data collected in this research project helps to better understand the pathways that men and women take on the road to promotion in STEM. Research across the country has shown that there is a persistent inequality between female and male faculty. The overarching question we sought to answer is how women and men construct their careers in the context of this gender disparity in the faculty.

The ADVANCE research shows that women are less satisfied than men in their careers, feel more gender inequality, feel heavy workplace conflicts, and take longer to achieve promotion to the rank of professor. We look forward to further studies that support these findings and perhaps begin to tie together quantitative data on career outcomes for women and men with additional qualitative analyses that examine the negotiations around pathways leading to outcomes of career success.

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