

This project is funded by the National Science Foundation under cooperative agreement EHR0811123. The opinions expressed here are solely those of the authors and do not represent the official position of NSF.

## Outline

- Literature
- Background
- Methods
- Findings
- Recommendations


## Academic Service: A gendered pattern

- Female faculty complete a disproportionate share of service work (Misra et al 2011; Carrigan et al 2011; Park 1996; Porter 2007)
- This is especially true at large, research oriented institutions (Misra et al 2011; O'Connor et al 2012; Porter 2007)
- The gender gap in service is especially pronounced in traditionally male-dominated fields, like science, technology, engineering and mathematics (STEM) (Carrigan et al 2011; Blackwell et al 2009)

CEOS/ADVANCE COMPREHENSIVE
EQUITY AT OHIO STATE

## Explaining the Academic Service Gap

- Women serve more often than men because they may enjoy student interaction and organizational service more (Park 1996; Porter 2007)
- Women may be better at service work because of their superior interpersonal skills (Park 1996)

CEOS/ADVANCE
COMPREHENSIVE
EQUITY AT OHIO STATE

## Explaining the Academic Service Gap

- Women and minorities are asked to serve more often (Park 1996; Porter 2007; Carrigan et al 2011)
- Many women and minorities feel an obligation to contribute to service work, even if they don't enjoy it (Park 1996; Porter 2007; Misra et al 2011)

CEOS/ADVANCE

## Academic Service and Bias

- Additionally, implicit biases may mean that female faculty are more often assigned to traditional "women's work" (Park 1996; Porter 2007;
Misra et al 2011; Bagilhole 1993)
- This is supported when looking at the prominence of committees to which women are often assigned (Porter 2007; O’Connor et al 2012; Carrigan et al 2011)

CEOS/ADVANCE

## Impact of Current Literature

- Several recommendations have been adopted by many institutions of higher education:
- Unit heads are encouraged to be cautious about assigning women and minorities to committees
- Promotion and Tenure processes can be altered to recognize extraordinary service commitment
- Women faculty are trained to say no to some service requests


## BACKGROUND

## The Ohio State Context

- 2008, Project CEOS initiated:
- NSF ADVANCE Institutional Transformation grant
- Provided 4 core programs to 3 STEM colleges
- Workshops for deans and chairs
- Peer mentoring for women in STEM
- Entrepreneurship workshops for women faculty
- Action Learning Teams in STEM colleges


## Project CEOS Deans \& Chairs Training

- Administrators are supportive of the idea of diversity, but often fail to understand that biases and barriers to diversity success are present in their own units
- The OSU faculty culture survey highlights potential problem practices


## OSU Culture Survey

- First conducted in 2008 and every 3 years since
- Approximately a $47 \%$ response rate

|  | CEOS Colleges |  |  | Non-CEOS Colleges |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2008 |  | 2011 |  | 2008 |  | 2011 |  |
|  | Male | Female | Male | Female | Male | Female | Male | Female |
| Full Professor | 138 | 16 | 151 | 26 | 268 | 97 | 277 | 107 |
| Associate | 51 | 22 | 61 | 25 | 228 | 158 | 210 | 179 |
| Assistant | 36 | 26 | 40 | 21 | 143 | 174 | 124 | 162 |
| Total | 225 | 64 | 252 | 72 | 639 | 429 | 611 | 448 |

- Demonstrated wide spread dissatisfaction, particularly among female STEM faculty.


## OSU Culture Survey: Gender Gaps in Satisfaction



## OSU Culture Survey: Gender Gaps in Perceived



## RESEARCH QUESTIONS \& METHODS

If women in STEM feel more burdened by work that they struggle to have recognized as legitimate, what type of work is particularly problematic?

## OSU Culture Survey: Gendered Service

- In 2008, $90.5 \%$ of female faculty and $80.9 \%$ of male faculty reported serving on committees in the past year
- The self reported number of hours spent on committee work was higher for women than men in the STEM fields

Percentage of STEM faculty serving on committees (2008)


CEOS/ADVANCE

## Questions arose from the survey:

- How accurate and reliable is it?
- Does the pattern hold true over the course of a faculty member's career?
- Are women that get promoted to full professor somehow avoiding this service trap better than others?
- Note: U.S. academic advancement is traditionally assistant professor $\rightarrow$ associate professor $\rightarrow$ full professor


## Methods

- Dossiers of all STEM faculty promoted to full from 2005 through $2010(\mathrm{~N}=75)$
- Coded each listed committee as one of the following:
- Department or College (i.e. unit)
- University
- Student Group
- Local External
- National External
- International External
- Ad Hoc


## Methods

- Variability in how faculty recorded service on their dossiers
- In order to be conservative, each year or portion thereof that was reported for a committee was recorded as one committee-year
- Then reviewed the basic descriptive statistics, conducted t -tests on the observed gaps and ran simple correlations


## FINDINGS

Average Total Committee-Years Served by Promotion to Full Professor


Average Service Loads by Time of Promotion in CEOS Colleges


Average Service Loads by Time of Promotion in CEOS Colleges


Gender gap in total committeyears by female population in the college
M-F gap in average \# committee-

Average university service gender gap by female population in the college


## Implications \& Recommendations

1. The faculty survey methodology is sound
2. This study further supports arguments regarding a critical mass theory of diversity (Carrigan et al 2011)
3. This study suggests that we rethink the type of advice given to administrators about how to ensure equitable distribution of committee assignments

## References

Bagilhole, B. "How to Keep a Good Woman Down: An Investigation of the Roles of Institutional Factors in the Process of Discrimination against Women Academics". British Journal of Sociology of Education. 14(3); 261-274. 1993.
Blackwell, LV, Anderson Snyder, L, and Mavriplis, C. "Diverse Faculty in STEM fields: Attitudes, Performance, and Fair Treatment". Journal of Diversity in Higher Education. 2(4); 195-205. 2009.
Carrigan, C, Quinn, K and Riskin, E. "The Gendered Division of Labor Among STEM Faculty and the Effects of Critical Mass". Journal of Diversity in Higher Education. 4(3); 131-146. 2011
Misra, J, Hickes Lundquist, J, Holmes, E and Agiomavritis, S. "The Ivory Ceiling of Service Work". Academe. January-February 2011.
O’Connor, AM, Wiley Gahn, S, and Bowen, BS. "Becoming a Professor: an Analysis of Gender on the Promotion of Faculty from Associate to Full Professor". International Journal of Gender, Science and Technology. 4(1); 78-101. 2012.
Park, S. "Research, Teaching, and Service: Why Shouldn't Women's Work Count?". The Journal of Higher Education. 67(1); 46-84. 1996
Porter, S. "A Closer Look at Faculty Service: What Affects Participation on Committees?". The Journal of Higher Education. 78(5); 523-541. 2007.

