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Constrained Choices: A View of Campus Service Inequality From Annual Faculty Reports

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ABSTRACT

Time is a valuable resource in academic careers. Empirical evidence suggests women faculty spend more time in campus service than men. Yet some studies show no difference when relevant variables are included. The primary source of data for most workload studies is cross-sectional surveys that have several weaknesses. This study investigated campus service inequality and factors that predict it at 1 research university using a novel and more comprehensive source of data - annual faculty reports. The investigation was guided by Kanter's work on the role of power and representation and Lewis and Simpson's rereading of Kanter's work to focus on gender, power, and representation. The authors examined 1,146 records of faculty campus service during 2 years. In both years, women faculty reported more total campus service than men while controlling for race, rank, science, technology, engineering, and mathematics (STEM), and the critical mass of women in a department. When considering levels of service, women reported higher numbers of service activities at the department and university levels. Women in male-dominated fields tended to have service workloads more like their peers and less like women in non-STEM fields. The article concludes with considerations regarding implications for organizing practices that maintain inequity between men and women in campus service.

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KEYWORDS

Annual faculty reports; faculty service; gender equity

As faculty progress in their careers, their work is most often assessed as a set of outcomes (e.g., research publications, grants awarded, teaching evaluations, numbers of students graduated, committees; Britton, 2000; O'Meara, 2011; Park, 1996; Tierney & Bensimon, 1996). When differences are observed in their records, the narrative most often focuses on personal choices made and capabilities (Lewis & Simpson, 2010, 2012; Gutiérrez y Muhs, Niemann, González, & Harris, 2012). The routine and everyday backdrop within which faculty experience their organizations and make choices is often obscured. This is particularly true for campus service, which is also the most understudied faculty role though it is consequential for shared governance and faculty professional growth and careers (Kezar & Lester, 2009; Neumann & Terosky, 2007; O'Meara, 2016).

In this study, we brought contexts and backdrops such as gender, career stage, discipline, and critical mass into full view as we strove to gain a better understanding of academic labor, in particular campus service, and what shapes faculty choices regarding campus service. We examined whether there were differences between research university faculty in campus service workload by using a novel and comprehensive source of data—annual faculty reports. We used Kanter's (1977) theory of tokenism and the dynamics of numerical advantage and disadvantage and Lewis and Simpson's (2010, 2012) poststructural rereading of Kanter to understand how gender interacts with numerical advantage and disadvantage to shape women faculty visibility, invisibility, and power as they relate to campus service participation. Using a quantitative research design, we investigated the presence of campus service inequality and factors that predict campus service inequality at one research university. We examined whether a division of campus service labor could be predicted by the following factors: gender, rank, science, technology, engineering, and mathematics (STEM), and critical mass of women faculty. Though it is important to examine professional outreach and disciplinary service, the purpose of this study was to focus on institutional, on-campus service, while defining campus service broadly as "contributions that support a campus's mission, operations, and cultural life" (Neumann & Terosky, 2007, p. 283). We further categorized campus service as occurring for one's department, college, or university; another department/college; or as faculty mentoring.

This study makes two important contributions to the literature. First, this study examined the presence of gender inequality in campus service using a rarely used—and in many ways superior—data source. We outline strengths of our data source in the Methodology section. Second, our framing of the issue moves beyond characterization of the role of women in campus service as the inevitable product of systematic oppression and powerlessness. We took up Hart's (2016) recommendation to wrestle with the contradictions women faculty face with regard to campus service. We examined campus service participation as a series of constrained choices made by women faculty. Critical mass of women faculty in a field, discipline, rank, and social contexts embedded with gender stereotypes can constrain choices by normalizing the responses of some faculty as inevitable and exposing the responses of others as illegitimate (Britton, 2000; Lewis & Simpson, 2010, 2012). Understanding campus service workload inequity is critical because research has identified gendered divisions of labor as central to women faculty's lower retention rates, longer time to promotion to full professor, and greater career dissatisfaction (Acker & Armenti, 2004; Acker & Feuerverger, 1996; Clark & Corcoran, 1986; Misra, Lundquist, Holmes, & Agiomavritis, 2011; Park, 1996). However, campus service can also be a route to power, a site for strategic resistance, and a source of satisfaction for those not recognized in



other ways (Baez, 2000; Bird, Litt, & Wang, 2004; Griffin, 2013; Griffin, Bennett, & Harris, 2013; Kiyama, Lee, & Rhoades, 2012; O'Meara, 2015).

Literature review

Though service is still an understudied area of academic labor (Neumann & Terosky, 2007), research on faculty service responsibilities has grown in the past few decades with a significant portion of the literature addressing campus service workloads. Studies have shown that gender (Acker & Armenti, 2004; Misra et al., 2011; O'Meara, 2016), race/ethnicity (Baez, 2000; Griffin, Pifer, Humphrey, & Hazelwood, 2011), career stage (Misra et al., 2011; Neumann & Terosky, 2007), and institutional type (Porter, 2007; Tierney & Minor, 2003) influence campus service participation. In regards to gender, the vast majority of evidence, from both quantitative and qualitative studies, indicates that women faculty spend more work time on campus service than do men faculty (Acker & Armenti, 2004; Barrett & Barrett, 2011; Bird et al., 2004; Carrigan, Quinn, & Riskin, 2011; Clark & Corcoran, 1986; Hart & Cress, 2008; Link, Swann, & Bozeman, 2008; Misra et al., 2011). Research exploring reasons for this difference has shown that women faculty are asked to engage in campus service more often to add diversity to committees because they are more likely to say yes when asked, are perceived to be good at service work, and have orientations toward and commitments to the activities being pursued (O'Meara, 2016; Padilla, 1994; Tierney & Bensimon, 1996; Turner, 2002). Despite the pattern of women faculty reporting more campus service than men faculty, some studies have revealed few significant differences in the number of hours men and women faculty spend on campus service when controlling for variables such as rank, discipline, and institutional type (Bellas & Toutkoushian, 1999; Mitchell & Hesli, 2013; Porter, 2007; Singell & Lillydahl, 1996). Conflicting results are due to studies using different methods (e.g., interviews vs. cross-sectional surveys), some quantitative studies not controlling for relevant variables, and studies not accurately capturing different kinds of campus service.

Research has also shown that faculty rank plays a key role in campus service participation because expectations change from one faculty rank to another. Assistant professors in research universities are generally somewhat protected from campus service because they are trying to earn tenure and research counts most for tenure (Fairweather, 1996; Trower, 2012). Associate professors, on the other hand, tend to be overloaded (Misra et al., 2011; Neumann & Terosky, 2007; Trower, 2012; Ward, 2003). Rank may also play a role in saying yes or no to a service request. Some faculty may feel vulnerable in saying no because they are of a lesser rank than the colleague asking them (Acker & Armenti, 2004; Tierney & Bensimon, 1996). Rank is not neutral, however, because women faculty are less represented in higher ranks at

research universities and more women faculty than men faculty leave their academic positions before achieving higher rank (Perna, 2005). Moreover, women faculty are more likely to hold non-tenure-track positions where teaching and campus service are emphasized (Perna, 2005; Xu, 2012).

In addition to investigating differences in the number of hours faculty spend on campus service and factors that may influence these decisions, research has also explored the types of campus service in which faculty engage. These studies revealed that women faculty are more likely to engage in kinds of campus service that are less prestigious and more time-consuming (Misra et al., 2011; Mitchell & Hesli, 2013; Twale & Shannon, 1996). Rank can also become a factor in determining the committees on which a faculty member serves. For example, full professors may have access to high-profile and more valued service roles (Tierney & Bensimon, 1996; Ward, 2003).

Understanding whether or not gender differences in service workload exist and how they play out is important because inequalities in service workload can impact a faculty member's career. Studies have shown that time spent on service and teaching takes away from research and a faculty member's ability to publish and produce other research products (Fairweather, 1996; Fox, 1992; Jacobs & Winslow, 2004; Link et al., 2008). Because research is valued more in academic reward systems than is service, especially at research universities, spending more time on service can be problematic for women faculty members (Acker & Feuerverger, 1996; Fairweather, 1996; Park, 1996; Ward, 2003). This is particularly the case in STEM careers where publication productivity is crucial (Carrigan et al., 2011; Fox, 1992). Moreover, research has shown that heavy service loads for associate professors are linked to longer time to advancement to full professor (Misra et al., 2011; Stout, Staiger, & Jennings, 2007). In addition, perceptions of unfair campus service workloads have been linked to intentions to leave the institution, as well as to decreased satisfaction, productivity, organizational commitment, and professional growth (Daly & Dee, 2006; Neumann & Terosky, 2007; Rosser, 2004). Thus, those interested in increasing the retention and advancement of women faculty and faculty of color have called for studies to make any inequities in workload, such as differences in campus service, apparent and to consider potential remedies (Baez, 2000; Barrett & Barrett, 2011; Hart, 2016; Pyke, 2014; Winslow, 2010).

Conceptual framework

We were guided by Kanter's (1977) influential work Men and Women of the Corporation and Lewis and Simpson's (2010, 2012) poststructural rereading of Kanter to underscore how gender interacts with representation in organizations to foster experiences of visibility, invisibility, and power. Kanter's and Lewis and Simpson's (2010, 2012) work shaped our analysis of the existing

literature, helped us identify factors that are important to consider when investigating campus service workloads, and helped us to make meaning of the findings of our study. In this section, we briefly introduce Kanter's and Lewis and Simpson's (2010, 2012) work, explain how this theory is relevant to work on gender in organizations and faculty service, and how it can be used to understand women faculty's choices and experiences related to campus service. We conclude by highlighting the factors important to consider in research on campus service that are grounded in Kanter's and Lewis and Simpson's (2010, 2012) understanding of gendered organizations.

Kanter's (1977) pioneering text on the dynamics of organizational behavior presented a theory of tokenism and the dynamics of numerical advantage and disadvantage. Kanter found that when a group, such as men, is in the majority, they become the "dominants" and control how work processes, like division of labor, occur. In groups that are "skewed" (characterized by a predominance of one social type with a ratio of 85 to 15), the minority group occupies the position of "token." Dominant group priorities and beliefs set up a situation of "role entrapment" where the token—in this case, women faculty in tenure-track positions at research universities—are steered into work roles that support the dominant group but do not lead to their own advancement. In addition, tokens are often blocked from organizational recognition and thus find satisfaction through work activities such as service or institutional housekeeping that provide social recognition (Kanter, 1977).

Kanter's (1977) concept of "role entrapment" is consistent with subsequent feminist organizational analysis revealing how divisions of labor place men faculty in locations of greater organizational power and women faculty in more vulnerable, peripheral, or undervalued positions (Acker, 1990, 2012; Avent-Holt & Tomaskovic-Devey, 2012; Britton, 2000). For example, in many organizations, women managers engage in what is widely defined as organizational housekeeping and men managers engage in problem solving, visioning, and strategic planning (Ely & Meyerson, 2000). In a university setting, this dynamic is evident when institutional housekeeping and campus service activities are defined as "women's work" and are devalued in academic reward systems (Acker & Armenti, 2004; Bird et al., 2004; Clark & Corcoran, 1986; Park, 1996). Although work activities, such as campus service, could become a route to power if they are visible, considered relevant to pressing problems, require discretion, are not routine, and straddle the boundaries or occur outside the home unit (Kanter, 1977), research suggests much of the campus service in which women faculty are engaged does not meet these requirements (Misra et al., 2011; Mitchell & Hesli, 2013; Park, 1996).

Kanter's (1977) work has been criticized for not seeing gender itself as a framework of analysis (Alvesson & Billing, 1992; Lewis & Simpson, 2012; Yoder, 2002; Zimmer, 1988). While Kanter drew attention to the gender of organizational members, her main point was that differences between organizational members were due to differences in representation and power (Savage & Witz, 1992). By this logic, when women employees are in the majority in occupations dominated by women, men should have the same work challenges of entrapment. However, subsequent research has shown that men librarians, nurses, and teachers experience enhanced career opportunities and "glass elevators" despite their token status (Simpson, 2004; Williams, 1993). Thus, Kanter's ability to help us understand faculty service participation is limited by a failure to draw on gender as an explicit framework of analysis (Lewis & Simpson, 2012).

Lewis and Simpson (2012) used a poststructural lens to reread Kanter's (1977) work and tease out gender as a construct itself within the analysis of power and representation. Poststructuralism conceives an organization, like a university, as "socially situated practice with individuals involved in socially situated activities" (Lewis & Simpson, 2012, p. 144). Significant in this view is the possibility of resistance. Lewis and Simpson (2012) highlighted how relationships between men and women in organizations involve strategies and counter strategies of power. This leads to a complex play of gendered processes of visibility and invisibility. Lewis and Simpson (2012) acknowledged that, as Kanter (1977) pointed out, heightened visibility and practices of surveillance can push women into gendered stereotypes defined by men. In addition, the invisibility of men's values, practices, and privileges, which are accepted as the norm, contribute to the maintenance of men's dominance. Minorities such as women are judged against these norms, which leads to their exclusion. Because the oppressed are not completely powerless though, acts of resistance challenge these norms and men's dominance. Dominant groups counter to preserve the norms and their privilege and power. Thus, Lewis and Simpson (2012) described norms as "sites of insecurity and struggle" (p. 148).

Dynamics of visibility and invisibility impact women's choices and behaviors as they strive to succeed in organizations dominated by men (Lewis & Simpson, 2012). Lewis and Simpson (2012) described three interrelated processes in which women and other minorities engage: revelation, exposure, and disappearance. Revelation refers to revealing and challenging normative practices and discourses. These actions can, however, attract retribution and expose women as outsiders. Thus, revelation is closely linked to exposure, a process where women are rendered visible and thus exposed. Negative aspects of heightened visibility have been well documented in the literature; however, some women have used visibility and exposure strategically to benefit individually or to challenge normative practices and to effect change. Because of the increased vulnerability of being exposed and visible, some women may opt for withdrawal, which refers to performing in a way that allows one to disappear and be invisible. Withdrawal can also be strategically used to separate from damaging stereotypes of women and to find ways to assimilate to (men's) norms and thus succeed in the organization. In each of these processes, women can make choices—but their choices are shaped and constrained by the gendered social and organizational contexts of their organizations (Acker, 1990; Smith, 1990).

Kanter's (1977) work on tokenism and role entrapment and Lewis and Simpson's (2012) work on power, visibility, and invisibility are helpful in framing possible outcomes of a study on gender differences in campus service and understanding why women faculty may engage in more campus service. For example, Kanter's work and subsequent related work (Carrigan et al., 2011; Xu, 2008) hypothesized that work activities of women in research universities would be related to the critical mass of other women faculty in their department. Lewis and Simpson (2012) noted that being in a field with a low critical mass of women makes women highly visible and likely to try to assimilate into the norms of the dominant group. One way to do so would be to match one's work priorities and behavior as closely to those of men colleagues as possible (Lewis, 2006). In the case of tenure-track faculty in research universities, this means to prioritize research and engage in the same amount and no more campus service than men colleagues. In fact, Xu (2012) found women faculty in disciplines dominated by men spend more time on research and have lighter teaching loads than women faculty in fields where there is a greater percent of women faculty. Thus, campus service participation is likely to be similarly affected by the nature of expectations within specific disciplines and the presence of women faculty in that discipline; these two factors are connected (Carrigan et al., 2011; Xu, 2012).

However, even within fields dominated by men such as STEM, women faculty spend more time than men faculty on service, undergraduate teaching, and mentoring, while men faculty spend more time per week on research (Bird et al., 2004; Link et al., 2008; Misra et al., 2011; Winslow, 2010). This dynamic can be understood by considering the strong expectations for women faculty to act as "academic mothers" and to be helpful, agreeable, and service-oriented (Tierney & Bensimon, 1996). As noted earlier, women faculty are typecast as good at institutional housekeeping and are therefore asked more often to engage in campus service (Mitchell & Hesli, 2013; Park, 1996). Ridgeway (2013) found that women faculty experience backlash when they act in ways perceived to conflict with this gendered expectation. Just saying "no" is not simple (Pyke, 2014) as research has suggested that women faculty who say "no" to work requests can be perceived as cold, selfish, and not team players (Benard & Correll, 2010; Rudman & Phelan, 2008). Thus, self-preservation may lead women faculty to agree to more campus service than their peers who are men. Moreover, higher-status groups, such as men within research universities, may be considered by administrators to be more deserving of rewards such as protection from too much campus service



(Krefting, 2003). Ridgeway and Correll (2004) observed that in "less scripted social relational processes" (p. 525) like campus service participation, gendered cultural beliefs such as "women are good at service" become especially salient in shaping behavior.

Women faculty may also engage in more campus service out of resistance to the dominant group norms. Research has shown that women faculty engage in race- or gender-related campus service out of a desire to contribute to the common welfare of academic programs and to support constituencies that are important to them (Baez, 2000; Griffin et al., 2011; Hart, 2016). Through their participation in campus service, women faculty can expose and challenge the values of the power structure that assumes service is unimportant (Thomas & Davies, 2005).

Viewing these potential responses through the lens of Lewis and Simpson's (2007) framework, we see how they all fit within a gendered organization. Power is preserved and concealed by those in the dominant group. In the case of campus service, those in the dominant culture set the norms for campus service. From the margins, women faculty can resist those norms and reveal the privileges that men have in not being expected to serve as often or as well in this role—or just as importantly, they can prioritize service as an alternative to the norms of the dominant group. Inevitably though, such resistance will cause them to be exposed as different than the dominant group. This exposure as "other" can have negative career consequences with their department colleagues. Lewis and Simpson (2012) referred to such consequences as erasure and disappearance wherein faculty are posed as "other" and distanced from colleagues, encouraged to fade from view or leave.

In conclusion, Kanter's (1977) work helps us see that campus service participation is likely to be shaped by numbers—especially as it relates to the presence of women faculty in a discipline and disciplinary norms. However, Lewis and Simpson's (2012) work helps us see campus service participation as also related to efforts to assimilate and to advance and to resist and challenge dominant norms, as well as the consequences of doing so for faculty careers. This framing further allows us to see how women's intersectional identities as assistant professors, as STEM women faculty, and as women in disciplines with high percentages of women faculty shape choices and constraints that women faculty experience as they interact with dominant norms around campus service (Barrett & Barrett, 2011; Carrigan et al., 2011; Tierney & Bensimon, 1996).

To understand the role of gender representation and other related factors shaping campus service participation, we explored annual faculty reports, within a single research institution hereafter named Land Grant University (LGU). The research question guiding this study was: Are there differences by gender, rank, STEM versus non-STEM, or critical mass of women faculty



in the college in the total amount of campus service activities faculty performed or the level of campus service activity?

Research design

We conducted a quantitative study using Poisson log-linear regression analyses. Because service activities represent count, non-negative data, to perform the analyses, we used Poisson regression, also known as log-linear regression. Poisson regression is appropriate for analyses on data with count variables (Beaujean & Morgan, 2016; Coxe, West, & Aiken, 2009). Count variables are represented by non-negative, integer values and typically follow positively skewed distribution (Cameron & Trivedi, 1998).

Regression techniques help to find consistent patterns in large sets of data, make statistical inferences, test hypotheses, and extrapolate findings to greater populations (Cohen, Cohen, West, & Aiken, 2003; J. Fox, 2008). We conducted a regression analysis to model relationships between a continuous dependent variable (i.e., amount of campus service activities) and independent variables (i.e., gender, race, rank, field, and critical mass) and to determine effects of each predictor on the outcome.

This quantitative study is part of a larger study of faculty work environment and faculty experiences by gender, race, and career stage at LGU, a public research university. LGU received a National Science Foundation ADVANCE grant to support the retention and advancement of women and underrepresented minority faculty. The social science research team for the ADVANCE project used case-study methods (Yin, 2014) to collect an extensive amount of data, including qualitative interviews, work environment survey responses, and faculty retention and advancement data to understand equity issues in faculty work environment. The issue of campus service was one area of data collection, amid this larger study of factors shaping work environment.

LGU is in many respects a typical public research university. It is highly selective in terms of admissions, serves approximately 37,000 students (roughly 70% undergraduate), and engages in extensive research activity, with more than \$500 million in research expenditures. Women faculty make up 32% of tenure-track/tenured faculty overall, roughly 46% of assistant professors, 35% of associate professors, and 23% of full professors. Of all women tenure-track faculty, 28% are women faculty of color. Institutional research conducted at LGU revealed that women faculty were significantly more likely to resign pretenure, but there were no significant differences in advancement rates for women and men faculty who applied for promotion. There was, however, a significant difference in average years to advancement among faculty who were promoted to full professor (9.2 years for women vs. 7.9 years for men). In terms of administrative leadership, 29% of department chairs (n = 16) were women. In STEM areas, 19% (n = 6) of department chairs were women. A faculty work environment survey conducted in 2011, 2013, and 2015 showed women faculty were less satisfied than men faculty with time spent on campus service versus time spent on research. There were no universitywide reward system guidelines regarding the amount or kinds of campus service that faculty were expected to perform or uniform ways across departments of ensuring equitable campus workloads between faculty. These arrangements were made locally in departments (if at all) and between administrators and individual faculty for campuswide appointments.

Data and sample

Once a year, LGU faculty submit an annual accounting of their research, teaching/mentoring, and service activities through an online university report. These reports are required by state mandate, are used by departments to assign merit pay, and are considered in promotion and tenure and post-tenure review processes. Administrators use these data routinely to understand such outcomes as average number of advisees, participation in various service activities, and average number of faculty research publications. Faculty report data are public data that are submitted to the institution and are reported to the state each year. This research involved secondary data analysis with noninformed consent. Data were provided from university administrators with appropriate access after institutional review board (IRB) approval was granted. Data for this research project were unidentified. Rather than names, numerical indicators with gender, 1 race, rank, and college descriptors were used, which allowed for analysis of files in aggregate. The research design of this project was determined by the IRB to be of minimal risk based on an appropriate riskbenefit ratio and determination that risks were minimized.

Annual faculty report data are a valuable and unique data source for understanding faculty service commitments. They provide three advantages over commonly used sources for campus service data such as the National Study of Postsecondary Faculty (NSOPF) conducted by the National Center for Education Statistics (see studies drawing on the NSOPF Faculty Questionnaire survey data from 1993, 1999, and 2004 by Carrigan et al., 2011; Porter, 2007; Winslow, 2010; and Xu, 2008). First and foremost, LGU faculty activity reports are formal reports of faculty work. LGU faculty understand that reports are public data reported to the state and are not anonymous, and like a curriculum vitae, they are scrutinized by several levels of review, such as department chairs, personnel committee members, deans, and institutional research administrators. Those reviewing the reports can verify faculty members' reports, and submitting inaccurate information could be perceived as an ethical violation. Research from organizational management and psychology suggests this kind of accountability serves a normative



function (Curcio & Lynch, 2016; Dominick, Reilly, & Mcgourty, 1997; Erez, Lepine, & Elms, 2002). When taking national surveys where responses are anonymous, faculty may feel less normative pressure to report campus service accurately.

Second, LGU faculty activity reports were collected to record and measure campus service activities more precisely. LGU faculty had access to the system 9 months of the year and could store and update information up until submission. For most national faculty surveys, faculty submit responses once a year during a 15- to 25-min period and do not have the opportunity to record and correct responses more than once before submission. Also, NSOPF questions used in most previous faculty workload studies ask for estimates of hours spent on different work activities with broad categories, sometimes lumping service with "other activities." For example, the NSOPF service data presented in Carrigan et al. (2011), Porter (2007), Winslow (2010), and Xu (2008) were based on questions asking faculty to estimate how many hours per week they spent on work in four broad categories: "instruction with undergraduates, instruction with graduate and first-professional students, research, and other activities like administration, professional growth, service, and other activities not related to teaching or research" (Cataldi, Bradburn, Fahimi, & Zimbler, 2005, p. 42). In this study, we were able to look at service committees separately from other nonteaching or nonresearch activities and differentiate the service activities by their type: university, college, department, for another university department, and faculty mentoring.

Third, LGU faculty activity report data provide for better gender comparisons at the institutional level because they were standardized within the same context to a greater extent than is possible with most national surveys. For example, when LGU faculty listed that they participated in the University Senate, it was the same University Senate for everyone. In addition, the LGU faculty report form asked faculty to assign an administrative unit from a dropdown menu to each service activity, which was further associated with a predetermined level for each service activity. Because the institutional context was held constant, faculty had similar contexts present in assigning a level and office to each activity. Such common contexts are less present in NSOPF and other national surveys wherein two faculty members noting they served on a curriculum committee in different universities could describe very different activities (e.g., one could be a learning outcomes assessment committee and the other a committee to approve new courses). Thus, there is an advantage to studying this issue locally where committees have widely recognized names and more similar time commitments and where appropriate levels and associated divisions are clearer.

For this study, we analyzed 2 consecutive years of faculty annual reports, 2012 and 2013 of LGU tenure-track faculty (assistants, associates, and full professors), while specifically focusing on the question about campus service activities. We analyzed annual faculty report data from 98% of LGU tenuretrack/tenured faculty (see Table 1 for respondent demographics). About 2% of LGU tenure-track/tenured faculty did not complete this document in each year because they were retiring or resigning. Deans and department chairs were excluded because the intent was to understand the average faculty member's campus service commitments, not those of individuals in leadership roles. For the purpose of verifying patterns of gender differences, we decided to use 2 years of data. We had to exclude the faculty activity reports of faculty from 2 of the 12 LGU academic colleges, the College of Social and Behavioral Sciences and the College of Architecture, because these colleges took part in an experimental trial of a new reporting system in 2013 and did not complete reports with the same kinds of data. To have consistent comparable data across time, we eliminated these two colleges from both years of the analysis. Thus, the respondents are the same group of faculty in both years. Note that we performed the same exact analysis on the two groups, 10 colleges and 12 colleges in 2012, and found the same pattern across these two groups, meaning that the two analyses revealed the same significant differences and the same level of significance. The exclusion of 2 colleges, thus, did not alter the demographics substantially. The numbers by rank varied some between the two groups; however, it did not affect the results: The analyses with the two groups yielded the same significant differences.

Department-level service included service that faculty completed within their home department, such as admissions committees and department promotion and tenure committees. College-level service included work for the Dean's Office or a center affiliated with the school or college. Universitylevel service included work for the higher administration units, such as the Office of the Provost, the President's Office, the Graduate School, or the Office of Undergraduate Studies. The "other unit"-level service included service for a college or school other than the faculty member's primary tenure home. Mentoring-level service included individual faculty member

Table 1. Faculty activity report respondent demographics.

		Percent (n = 1,146)
Respondents		Women	Men
By rank	Assistant professors	46.9% (<i>n</i> = 90)	53.1% (n = 102)
	Associate professors	36.7% (n = 153)	63.3% ($n = 264$)
	Full professors	21.2% (n = 114)	78.8% (n = 423)
By race	Faculty of color ^a	37.8% (n = 105)	62.2% (n = 173)
	White faculty	28.3% (n = 229)	71.7% ($n = 580$)
	Race not reported	39.7% (n = 23)	60.3% (n = 35)

Note. Demographic data are self-reported to human resources offices upon hire.

^aFaculty of color refers to noninternational American Indian/Alaskan Native, Asian American, Black/African American, Hispanic, and Two or More Races.



Table 2. Types of service activities included in each level.

Department	College	University	Other unit	Mentoring
Home department	Dean's office or a center affiliated with the school or college	Higher administration units	College or school other than the faculty member's primary tenure home	Individual faculty member mentoring
Admissions committees, department promotion and tenure committees, salary committee, human relations and welfare committee, general academic affairs committee, faculty search committee, director of graduate/ undergraduate studies, scheduling officer, department council	Long-term service college awards, faculty service award committee, associate dean for faculty affairs and graduate programs, faculty director of the international programs, research center director, dean's advisory committee, strategic planning committee, college council	Provost search committee, University Senate, president's commission on ethnic minority issues, scholarship selection committee, associate deans' graduate programs committee, advisory committee, deans' review committee, university sustainability council, conflict of interest committee	University honor boards, joint research institute executive committee, national professional organization grant proposal review panel member, undergraduate honors thesis committee member, special facility search committee, diversity committee, admissions committee	Mentoring junior faculty members; mentoring faculty on portfolio development

mentoring. For a more detailed description of types of service activities included in each level, refer to Table 2.

Data analysis

To understand differences based on critical mass of women in the college, we used Xu's (2012) critical mass groupings for percentages of women faculty. Group 1 included colleges that had 1% to 24% women tenure-track/tenured faculty, Group 2 included colleges with 25% to 49%, and Group 3 included colleges with 50% to 74% (Table 3). There were no colleges with percentages of women faculty more than 75%. Log-linear Poisson regression analyses were conducted to estimate the effect of gender on the number of service activities reported by LGU faculty, while controlling for race, rank, STEM discipline, and critical mass of women. Gender was self-reported and treated as a binary variable, because the human resources system only provided two options. Interaction effects were entered into regression models one at a time to test for significant interactions with gender, while controlling for race, rank, STEM discipline, and critical mass. When significant interactions appeared, separate Poisson regression models were run by group.



Table 3. College groupings by critical mass of women.

College/school	Percent
Group 1	
Engineering	13.1
Computer, mathematics, and natural sciences	16.0
Public policy	16.7
Group 2	
Business and management	31.0
Agriculture and natural resources	37.0
Journalism	40.0
Public Health	41.2
Arts and humanities	45.8
Information studies	46.7
Group 3	
Education	61.0

Findings

Findings from log-linear Poisson regression analyses revealed significant gender differences in the number of reported campus service activities. In both years, gender was a significant predictor of the number of campus service activities at the department level, university level, and across all levels, while controlling for other variables in the models, with women faculty being more likely to report higher numbers of service activities (Tables 4 and 5).

Gender and STEM differences

Across both years, non-STEM women faculty consistently reported participating in more service activity than did non-STEM men faculty. In non-STEM departments, in both years, women faculty reported more service activities than men faculty at the department level: The odds of women faculty reporting service activities were 34.3% higher than the odds of men faculty in 2012, Exp(B) = 1.343, Wald = 15.527, df = 1, p < .001, and 32.4% higher in 2013, Exp(B) = 1.324, Wald = 22.390, df = 1, p < .001. Additionally, in 2012, non-STEM women faculty were more likely to report a higher number of service activities than were STEM women faculty across all levels, Exp(B) = 1.376, Wald = 54.098, df = 1, p < .001.

Across both years, STEM women faculty were less likely than non-STEM women faculty to report service activities at the department level: The odds of STEM women faculty reporting service activities were 30.1% lower than the odds of non-STEM women faculty reporting service activities in 2012, Exp(B) = 0.699, Wald = 6.423, df = 1, p = .011, and they were 26.6% lower in 2013, Exp(B) = 0.734, Wald = 4.994, df = 1, p = .025. Additionally, in 2013, the odds of STEM women faculty reporting service activities were 23.2% lower than the odds of non-STEM women faculty reporting service activities across all levels, Exp(B) = 0.768, Wald = 6.533, df = 1, p = .010.

Table 4. Summary of log-linear regression analyses by level of service activities, 2012.

	Department	ent	College	ارا	Universit	ty	Other unit	jį	Mentorin	gı	Across all l	all levels
	Odds ratio	SE	Odds ratio	SE								
Women	1.226**	0.05	1.042	0.08	1.725***	0.08	1.298	0.22	1.370	0.21	1.266***	0.03
Faculty of color	0.976	0.05	1.103	0.08	0.775**	0.09	1.617*	0.21	0.952	0.23	0.962	0.04
Full professor	1.164*	0.07	1.265*	0.12	2.137***	0.15	1.847	0.32	4.277**	0.44	1.294***	0.02
Associate	1.200**	90.0	1.341*	0.11	2.064***	0.15	1.344	0.33	3.004*	0.44	1.330***	0.05
STEM	1.037	0.07	0.709**	0.12	1.021	0.13	2.167**	0.28	1.554	0.28	0.967	0.05
CMG 3	1.075	0.10	0.977	0.18	0.814	0.21	1.447	0.55	3.536**	0.46	1.019	0.08
CMG 2	1.064	0.07	0.973	0.13	0.986	0.13	2.084**	0.28	3.299***	0.31	1.096	0.02
Constant	1.773	0.10	0.701	0.18	0.294	0.21	0.023	0.48	0.010	0.57	2.813	0.08
	-	:		, ()								

Referent groups: assistant professors and critical mass group (CMG) 1. $^*p < .05. ^{**}p < .01. ^{***}p < .001.$

Note. National Science Foundation ADVANCE criteria defined science, technology, engineering, and mathematics (STEM) as fields of study funded by NSF. This included three STEM colleges (the College of Computer, Mathematical, and Natural Sciences, the School of Engineering, and the College of Information Studies) and the additional departments: Agricultural & Resource Economics, Animal & Avian Sciences, Nutrition & Food Science, Environmental Science & Technology, Linguistics, Kinesiology, and Plant Science &

Landscape Architecture.

Table 5. Summary of log-linear regression analyses, by level of service activities, 2013.

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	Department	ent	College	ا.م	University	ty	Other unit	iit	Mentoring	βι	Across all levels	svels
	Odds ratio SE	SE	Odds ratio	SE	Odds ratio	SE	Odds ratio	SE	Odds ratio	SE	Odds ratio	SE
Women	1.266***	0.05	1.126	0.17	1.401***	0.08	0.791	0.20	1.304	0.20	1.266***	0.03
Faculty of color	0.920	0.05	1.055	0.07	0.674***	0.09	1.605**	0.18	1.232	0.20	0.915*	0.04
Full professor		90.0	1.284*	0.08	1.901***	0.14	0.890	0.23	9.904***	0.59	1.134**	0.05
Associate		90:0	1.341**	0.11	1.651***	0.14	0.577*	0.25	7.930**	0.59	1.130*	0.05
STEM	1.058	0.07	0.813	0.11	1.218	0.12	1.083	0.27	1.387	0.27	1.001	0.05
CMG 3		0.10	1.048	0.12	1.344	0.18	1.478	0.42	2.509*	0.42	1.225**	0.08
CMG 2	1.049	0.07	1.099	0.18	1.166	0.12	1.191	0.27	2.136**	0.28	1.135*	0.05
Constant	1.926	0.10	0.627	0.12	0.332	0.19	0.135	0.38	0.007	69.0	3.171	0.07

Referent groups: assistant professors and critical mass group (CMG) 1. Note. STEM = science, technology, engineering, and mathematics. * p<.05. ** p<.01. *** p<.001.

However, STEM men faculty service performance showed a reverse pattern. Across the 2 years, STEM men faculty were more likely than non-STEM men faculty to report service activities at the department level: The odds of STEM men faculty reporting a service activity were 23.4% higher than the odds of non-STEM men faculty reporting a service activity in 2012, Exp (B) = 1.234, Wald = 6.970, df = 1, p = .008, and they were 25.6% higher in 2013, Exp(B) = 1.256, Wald = 7.767, df = 1, p = .005.

STEM faculty overall reported less service activity than did non-STEM faculty at the college level and more at the other unit level in 2012. There were no differences revealed between STEM and non-STEM faculty in 2013. To ensure that department size was not shaping STEM versus non-STEM gender differences, we included department size into the log-linear regression analysis and compared STEM and non-STEM departments in three categories: low (< 10 faculty members), medium (10-30 faculty members), and high (> 30 faculty members) department sizes. STEM departments were found to be generally larger than non-STEM departments. However, the analysis of interaction between STEM affiliation and department size did not reveal substantial differences in service between STEM and non-STEM departments; in other words, STEM versus non-STEM was shaping faculty campus service independent of department size.

Gender and critical mass differences

Log-linear regression showed significant gender differences in critical mass groupings. We had three groups: Group 1 with 1% to 24% women, Group 2 with 25% to 49% women, and Group 3 with 50% to 74% women. In 2012, women faculty in Group 2 were more likely than men faculty to report a higher number of service activities at the department level, Exp (B) = 1.312, Wald = 5.107, df = 1, p < .001, and across all levels, Exp (B) = 1.360, Wald = 51.461, df = 1, p < .001. Additionally, in 2012 in Group 1, the odds of reporting a service activity at the university level for women faculty were 91.5% higher than the odds for men faculty reporting a service activity, Exp(B) = 1.915, Wald = 10.143, df = 1, p < .001. Interestingly, men faculty in the fields with greater representation of women faculty were more likely to engage in service activity than were men faculty in units with a smaller percentage of women faculty. In 2012, men faculty in Group 3 were more likely than men faculty in Group 1 to report a service activity at the department level, Exp(B) = 1.394, Wald = 5.107, df = 1, p < .024, and across all levels, Exp(B) = 1.301, Wald = 5.621, df = 1, p = .018. Yet the opposite was not true for women faculty. That is, women faculty in fields with greater representation of women faculty were not more likely to engage in service than women faculty in units with a small percentage of women faculty.



Gender and rank differences

Log-linear regression showed that in both years, rank was a significant predictor of the number of service activities at the college, university, and mentoring levels and across all levels, while controlling for other variables in the model (Tables 4 and 5). Both full and associate professors were more likely than assistant professors to report a higher number of service activities at these levels. Additionally, in 2012, full and associate professors were more likely than assistant professors to report a higher number of service activities at the department level. The analysis also revealed significant interactions between rank and gender. In both years, women full professors were more likely than women assistant professors to report service at the university and other unit levels and across all levels. The odds for women full professors to report service at the university level were 4.53 times higher than the odds for women assistant professors to report service at the university level in 2012, Exp(B) = 4.530, Wald = 41.501, df = 1, p < .001, and the odds were 2.83 times higher in 2013, Exp(B) = 2.835, Wald = 27.232, df = 1, p < .001. The odds for women full professors to report service at the other unit level were 4.25 times higher than the odds for women assistant professors in 2012, Exp(B) = 4.253, Wald = 4.870, df = 1, p = .027, and the odds were 3.01 times higher in 2013, Exp(B) = 3.013, Wald = 5.274, df = 1, p = .022. Women full professors were 52.1% more likely than women assistant professors to report service activities across all levels in 2012, Exp(B) = 1.521, Wald = 28.110, df = 1, p < .001, and they were 26.2% more likely in 2013, Exp(B) = 1.262, Wald = 10.115, df = 1, p = .001.

Additionally, in 2012, women associate professors were more likely than women assistant professors to report service at the university and other unit levels and across all levels. The odds of reporting service at the university level for women associate professors were 2.52 times higher than the odds for women assistant professors, Exp(B) = 2.522, Wald = 15.211, df = 1, p < .001; women associate professors were also 3.98 times more likely to report service at the other unit level, Exp(B) = 3.984, Wald = 4.718, df = 1, p = .030; and women associate professors were 38.2% more likely to report service across all levels, Exp(B) = 1.382, Wald = 18.233, df = 1, p < .001.

In both years, women full professors were more likely than men full professors to report service activities at the university level and across all levels. At the university level, the odds for women full professors to report service increased by a multiplicative factor of 2.95 compared with the odds of men full professors in 2012, Exp(B) = 2.953, Wald = 88.282, df = 1, p < .001, and the odds increased by a factor of 2.34 in 2013, Exp(B) = 2.339, Wald = 58.991, df = 1, p < .001. Across all levels, the odds for women full professors were 40.6% higher than the odds for men full professors in 2012, Exp(B) = 1.406, Wald = 41.395 df = 1, p < .001, and they were 47.2% higher



in 2013, Exp(B) = 1.472, Wald = 55.705, df = 1, p < .001. Women full professors were also more likely than men full professors to report service activities in 2013 at the mentoring level, Exp(B) = 1.694, Wald = 4.004, df = 1, p = .045.

Finally, in 2012, the odds for women associate professors to report service activities at the other unit level increased by a multiplicative factor of 2.73 compared with the odds for men associate professors, Exp(B) = 2.734, Wald = 8.016, df = 1, p = .005. However, in 2013, women assistant professors were less likely than men assistant professors to report service at the other unit level, Exp(B) = 0.248, Wald = 9.066, df = 1, p = .003.

Limitations

Despite the strengths of annual faculty reports as a data source, there were limitations to our study. First, we chose not to include an analysis of results by race in this article. We recognize that the intersectional nature of faculty identities (e.g., a woman who is an assistant professor of color in STEM) is critical to understanding campus service (Griffin et al., 2011; Stewart & McDermott, 2004; Turner, 2002). However, there was not sufficient space to carefully interpret race and gender intersections alongside our other foci. Although we reported demographics and controlled for race in our analysis, we decided to present our campus service findings by race and ethnicity in subsequent work where fuller discussion is possible. Second, our data source did not allow for us to go back to participants to understand their time commitment to various service activities or to find out the origins of each campus service activity (e.g., whether faculty were asked or volunteered). Third, our data source very likely missed much additional "hidden service" that faculty complete that they are not encouraged to report in annual faculty reports such as informal as opposed to formal mentoring or extra department "housework" not captured in annual reporting. Fourth, this data source does not capture the quality of faculty members' service work; some may have performed outstanding service while others did very little. Fifth, we categorized campus service into levels of service (e.g., department, college, university, other unit, mentoring) to understand the degree to which women faculty might be engaged in service that provided career benefits. However, we could have instead examined campus service by type of work (e.g., admissions, curriculum development, faculty evaluation). Subsequent work on our part will explore the gendered nature of campus service content. Despite these limitations, faculty activity reports are arguably the most comprehensive picture we can gain of faculty campus service activities short of time-diary studies and direct observations, which typically have smaller sample sizes.



Discussion and implications

In considering the contexts and backdrops against which faculty campus service might be examined, gender clearly shaped the experience of campus service at LGU. In both years, women faculty reported more total campus service than men faculty while controlling for race, rank, STEM, and critical mass of women in college. Women faculty also reported higher numbers of service activities at the department and university levels and across all levels. Women full professors were doing more than men full professors at the university and all levels; the findings were similar for associate professors. Thus, our findings with this data source are consistent with the general literature, which has shown women faculty spend more time on campus service in research and doctoral universities than do men faculty (Acker & Armenti, 2004; Acker & Feuerverger, 1996; Clark & Corcoran, 1986; Link et al., 2008; Misra et al., 2011; Park, 1996).

Gender representation and how it shapes work behavior complicate the issue. Our findings, in part, are consistent with previous studies of critical mass that have shown that women faculty in fields dominated by men tend to have workloads more like their male peers (Carrigan et al., 2011; Xu, 2012). For example, in both years, STEM women faculty reported fewer service activities than did non-STEM women faculty at the department level and across all levels in 2013. Yet, at the university level, women faculty from fields dominated by men were more likely to be engaged in service. The intersection of gender and critical mass thus shaped service involvement, but it shaped it differently at different levels of service.

Our findings related to rank were consistent with previous research and suggest protection of assistant professors but a heavy service workload for women associate professors (Misra et al., 2011; Modern Language Association, 2009; Neumann & Terosky, 2007). Women associate professors also had longer times to advancement than did men associate professors at LGU. Although a number of factors were likely to influence longer time to advancement, previous research suggests campus service is a contributing factor (Misra et al., 2011; Terosky, O'Meara, & Campbell, 2014).

One other finding is more difficult to interpret. We found few gender differences in college-level campus service. From the perspective of career advancement and women faculty being visible as the "other", this was good news. On the other hand, because many college service positions are elected, campus service could facilitate some degree of career advancement, making women faculty more visible as leaders. Further research is needed to understand the differences between college-level and department- and universitylevel service in how service is assigned, taken up by faculty who volunteer, and rewarded.

Returning to our theoretical framework, Kanter (1977) and Lewis and Simpson (2010, 2012) provided insight into the constrained choices women faculty face with regard to campus service. Women faculty's greater participation in campus service can be read as "role entrapment" (Kanter, 1977) as campus service is the least recognized faculty work in research universities (Bird et al., 2004; Britton, 2000; Fairweather, 1996), is widely considered unskilled (Hart, 2016), and is not prioritized by the ideal worker in a research university (Britton, 2000). Research has shown women faculty are expected to be engaged in campus service via gender stereotypes (Hart, 2016), are asked more often (Mitchell & Hesli, 2013), and may receive backlash if they do not conform to expectations (Rudman & Phelan, 2008), thereby creating a constrained choice. Lewis and Simpson (2012), however, reminded us that women faculty have choices, though constrained. For example, women faculty may engage in revelation and resistance, meaning they may choose to engage in campus service to challenge normative practices of work priorities in research universities in spite of possible negative career consequences and even retribution (Lewis & Simpson, 2012). Lewis and Simpson (2012) suggested that sometimes actors make choices to emphasize activities that go counter to dominant norms to challenge the status quo and reveal privileges of men. Some of the LGU women faculty members' campus service activities were likely related to commitments women faculty held to specific issues and groups (Antonio, 2002; Baez, 2000; Griffin et al., 2011; Neumann & Terosky, 2007; Park, 1996; Umbach, 2006). In some cases, the difference in campus service participation may thus represent conscious choices women faculty made to prioritize work activities they valued and wanted to see recognized within their institution. This finding is similar to findings that women faculty spend more time on teaching preparation and use high-impact practices at greater rates than do peer men faculty (Eagan & Garvey, 2015), despite research being valued more than teaching in reward systems (O'Meara, 2011).

Women faculty's choices related to campus service could also be influenced by a desire to be invisible, as typical in withdrawal (Lewis & Simpson, 2012). The fact that we found women faculty more engaged in campus service in departments with a critical mass of women and that STEM women faculty's campus service looked more like STEM men than non-STEM women is evidence of a tendency or desire on the part of women faculty to assimilate, blend in, and otherwise incorporate into local norms.

Finally, women faculty could also agree to engage in more campus service than colleagues to show leadership and advance in their career—in other words, to use the added exposure to their benefit (Lewis & Simpson, 2012). However, most campus service (see Table 2 for kinds of service activities) is not likely to meet the characteristics of a "route to power" (Kanter, 1977). Only a small percent of campus service activities would be considered work that is extraordinary (as opposed to routine), allows for individual discretion, provides visibility outside of one's unit in roles widely considered to be important across constituencies, and offers the chance to demonstrate leadership (Clark & Corcoran, 1986; Glazer-Raymo, 2008; Hart, 2016).

Campus service participation can, nevertheless, support women faculty's career advancement when faculty use campus service to gain access to "system knowledge," which may otherwise be unavailable to them, such as enhanced access to budget information, names and faces of senior leaders, operating data, potential mentors and sponsors outside their unit, and peer allies and alliances (Bird et al., 2004; Kanter, 1977; O'Meara, 2016). Men faculty may feel less of a need to engage in campus service to access this type of social capital as they are receiving it from other sources (O'Meara, 2016). In such cases, women faculty's engagement in more campus service can be viewed as enactment of agency to challenge the status quo, actualize priorities, and access otherwise unavailable career information and resources.

Regardless of the responses women faculty take up, it is clear they have much less control over the backdrops that shape higher levels of women faculty service. For example, women faculty cannot alone change the norms in their fields around campus service, the number of women full professors, whether their department has a critical mass of women, the likelihood that they will be asked more often to serve on committees, or the perception that they will or should say yes. Women faculty may work to shape some of these things, but rarely can they prevent them from being a backdrop to their own organizational experiences (Bird et al., 2004; Pyke, 2014). Kanter's (1977) work on token women in organizations and Xu's (2008) work on STEM work environments with a low critical mass of women faculty underscore, as our findings did, that these backdrops are complex and vary based on intersections of contexts (e.g., engineering, woman, associate professor). In all cases, women faculty make choices, but they are constrained choices.

Our findings raise implications for amending organizing practices that maintain inequity between men and women faculty in the amount and kinds of faculty campus service. Longitudinal studies of occupational segregation have shown changes in the representation of women faculty in universities are moving at a glacial speed because of faculty age, attrition of women faculty, and the lack of availability of new positions (Marschke, Laursen, Nielsen, & Dunn-Rankin, 2007). Moreover, there are limitations to the thinking that gendered divisions of labor will change automatically once more women faculty assume full professor roles. We found evidence of gender differences in campus service contributions even within full professor ranks, with the differences actually increasing from associate to full professor rank. Consequently, we see gendered divisions of labor with regard to campus service as more than a problem of rank and representation and believe that policy solutions need to attack the organizing practices



reproducing these gender differences now, rather than waiting for women faculty to reach equal representation in research universities.

Four changes to organizing practices hold promise, each aimed at reshaping the kinds of constrained choices and opportunities women faculty face with regard to campus service. Lewis and Simpson (2010, 2012) observed that privilege is sustained by keeping differential contributions invisible, concealed, and unproblematized. To make inequities visible, departments, colleges, and universities might consider creating public "service dashboards" to track and assess gender differences in the amount of service, kinds of service, or related faculty activities for accountability and equity (Kwok, 2015; O'Meara, 2016). Faculty doing more than their fair share cannot be rewarded, recognized, or provided with additional support if campus service is not accurately recorded, benchmarked against others' performances, and agreed by consensus to be worthy of acknowledgement (O'Meara, 2016). Women faculty may still be asked more often and may choose to do more campus service than men faculty, but they would make that choice with more information and could use that information to ask for greater reward, credit, or recognition.

Second, campuses could reevaluate policies regarding requirements of committee membership. Both Kanter (1977) and Lewis and Simpson (2012) observed that power is preserved by dominant groups through taken-forgranted assumptions and practices that give the dominant group advantage. An example is requiring diversity on committees, which means women faculty and faculty of color will be asked more often to serve. Diversity requirements should be used rarely and strategically (e.g., for search committees where research has shown that the representation of women faculty or faculty of color matters to the outcome of who is hired; Zinovyeva & Bagues, 2010) and need to be combined with policies that offset the additional service request of women faculty and faculty of color by taking other responsibilities off of their plate. Another example is assuming only full professors should serve on influential, powerful campuswide committees when there are fewer women full professors. Rank restrictions for higherlevel committees that provide visibility and power could be revised to only require full professor ranks when absolutely needed (e.g., campuswide promotion and tenure committees), while membership of most campuswide committees (e.g., research council, budget committee) could be offered to assistant and associate professors interested in such positions. This shift would, of course, only be advisable if women faculty traded lower-level service for higher-level service that can benefit their careers.

Third, adjustments should be made in local reward system practices to give more weight to campus service (Bird et al., 2004; Hart, 2016; O'Meara, 2016; Park, 1996; Pyke, 2014). Campus service addresses important needs of the institutions; thus, faculty should be recognized for their contributions.

While women faculty may choose to engage in some campus service because they see service as a "route to power" (Kanter, 1977), faculty who engage in more service may have less time to achieve the research productivity assumed be critical for legitimacy and success in research universities. Reconsideration of the priorities of the tenure and promotion system overall is warranted (Britton, 2000; Fairweather, 1996), but academic departments could start supporting women faculty by reforming merit pay to reflect greater credit for campus service.

Fourth, because organizational change takes time, it is important to provide support to individuals navigating gendered divisions of labor. National Science Foundation (NSF)-funded ADVANCE programs found that workshops that raise awareness of bias in service requests (especially for deans and department chairs) and provide peer support for saying "yes" and "no" strategically are influential in women faculty's advancement (Bird, 2011). Absent changes in structural and cultural organizing practices and policies, such workshops can send the message that women faculty are to blame for their higher service workload (Pyke, 2014). However, when put in place alongside structural and cultural changes, such individual professional development can ready women faculty with strategies to use when gender stereotypes dictate a higher number of requests (O'Meara, 2016; Stepnick & De Welde, 2014).

In terms of areas for new research, our primary recommendations relate to adding new comprehensive and objective data sources to study the issue of gendered faculty workloads. We advocate that state public higher education systems that have state-mandated annual reporting mechanisms consider analyzing their faculty data for gender differences and making results public to create accountability for change. We also think historical content analysis of faculty curriculum vita for differences in key campus service roles (such as undergraduate program director and graduate program director, as was studied in Misra et al., 2011), would improve understanding of the cost and effects of gender differences in campus service on such outcomes as faculty retention and time to advancement. Finally, the presence of women and men faculty in routine campus service roles versus more visible or coveted positions could be assessed for gender differences. Using these new data sources could deepen our understanding of the constrained choices women faculty face as they are asked or volunteer to participate in campus service and consider the backdrops against which such decisions are made.

Note

1. To be consistent with our conceptual framework, which focuses on gender, we used the terms women and men when analyzing and discussing our data. The data, however, did not allow faculty to directly identify gender but asked only for biological sex: male or female.



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