# Gender, Work Time, and Care Responsibilities Among Faculty 

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#### Abstract

This study explores how faculty at one research-intensive university spend their time on research, teaching, mentoring, and service, as well as housework, childcare, care for elders, and other long-term care. Drawing on surveys and focus group interviews with faculty, the article examines how gender is related to time spent on the different components of faculty work, as well as on housework and care. Findings show that many faculty report working more than 60 hours a week, with substantial time on weekends devoted to work. Finding balance between different kinds of work (research, teaching, mentoring, and service) is as difficult as finding balance between work and personal life. The study further explores how gendered care giving, in particular being a mother to young children, is related to time spent on faculty work, controlling for partner employment and other factors. Men and women devote significantly different amounts of time to housework and care giving. While men and women faculty devote the same overall time to their employment each week, mothers of young children spend less time on research, the activity that counts most toward career advancement.


KEY WORDS: children; faculty jobs; gender; work-family conflict; working time; working parents.

## INTRODUCTION

Women remain underrepresented as faculty members relative to their representation among doctorates, and are less likely to attain tenure and promotion or gain access to leadership positions relative to men of their cohorts (Currie et al., 2002; Gatta and Roos, 2004; Glayzer-Raymo, 2001; Mason and Goulden, 2004a, b; Monroe et al., 2008). Relative to men, faculty women also earn lower salaries, receive fewer discretionary funds, and receive fewer internal grants (Roos and Gatta, 2009). What explains these different

[^0]outcomes? Do men allocate more time to the work that leads to jobs and promotion? Do caregivers make different decisions about time allocation?

In this article, we explore how faculty at one research-intensive university spend their time on research, teaching, mentoring, and service, as well as housework, childcare, care for elders, and other long-term care. Drawing on surveys and focus group interviews with faculty, we examine how gender is related to time spent on the different components of faculty work, as well as on housework and care. We further explore how gendered care giving, in particular being a mother to young children, is related to time spent on faculty work, controlling for partner employment and other factors.

All faculty recognized that research productivity is most highly valued by the university; however, research time was most likely to be sacrificed by mothers of young children. Care responsibilities appear to play a role in women faculty members' allocation of time. While heavy care responsibilities are usually short in duration, as with preschool children or with elderly parents in their final years, care responsibilities may have lasting effects on faculty careers.

## THE GENDERED ORGANIZATION OF FACULTY WORK

Academic employment requires long work weeks for most full-time faculty, even though these hours tend to be more flexible than other careers (Bailyn, 2003; Gatta and Roos, 2004; Gunter and Stambach, 2003; Jacobs and Winslow, 2004a,b). Jacobs and Winslow (2004b:147) find that, nationally, professors work more than 50 hours a week, significantly more than other professionals or managers, with work hours increasing significantly since 1992. This is, in part, because universities are "greedy institutions," making extensive claims on their members, expecting undivided attention and exclusive loyalty (Coser, 1974; Suitor et al., 2001).

Over the work week, faculty also must balance a wide variety of tasks (research, teaching, mentoring, and service), although there is inherent ambiguity in how these responsibilities are valued. Indeed, faculty responsibilities may be evaluated differently, based on type of college, discipline, and career stage (Austin and Gamson, 1983). As such, faculty face intense pressures, due to strain from juggling a myriad of responsibilities (Acker and Feuerverger, 1996).

Work-life issues exist for all faculty members, as childcare, eldercare, housework, and personal lives must be balanced with a demanding professional career. The American Association of University Professors (2001) Statement of Principles on Family Responsibilities and Faculty Work notes: "The lack of a clear boundary in academic lives between work and family has, at least historically, meant that work has been all pervasive, often to the detriment of family." Faculty work often moves between "the workplace and the home, between weekdays and weeknights, and between the working week and
weekends, holidays, and vacations" (Drago and Colbeck, 2003:2). These issues may be exacerbated by the growth of web-based communication (Jacobs, 2004). Yet while work-life pressures affect all faculty, the bleed between employment and family life may operate in gendered ways because both universities and families are gendered.

Universities are gendered organizations. Gendered organizations tend to reflect assumptions of workers unfettered by care-giving responsibilities that are deeply embedded in the logic of the organization, its arrangement of the work week, its forms of evaluations, and its expectations for workers' larger career trajectories (Acker, 1990, 2006; Currie and Thiele, 2001; Currie et al., 2002; Ferree and Martin, 2005; Gatta and Roos, 2004; Gerson, 2009; Hearn, 2001; Hochschild, 1994; Martin, 1996; Martin and Meyerson, 1998; Morley, 2006; Perna, 2001a,b, 2005; Winslow, 2010). For example, long work hours reflect an assumption of an "ideal worker" (Williams, 2000) who has a "fulltime wife at home fulfilling the roles of childcare worker, eldercare provider, maid, launderer, and chef, among other duties" (Gatta and Roos, 2004:124).

By positioning men's lives as normative, women's lives become marginalized; women who have care-giving responsibilities do not "fit" into the university (Currie et al., 2002). As Hochschild (1994:126) argues, "the classic profile of an academic career is cut to the profile of the traditional man with his traditional wife." This leads to unrealistic expectations for faculty who do not fit this "ideal worker" assumption (Acker, 2006; Gale, 1997; Hochschild, 1994; Martin and Meyerson, 1998).

Women remain disproportionately less likely than men to earn academic jobs, tenure, and promotion (Currie et al., 2002; Ginther and Hayes, 2003; Ginther and Kahn, 2004; Glayzer-Raymo, 2001; Hochschild, 1994; Metcalfe and Slaughter, 2008; Misra et al., 2011; Nettles et al., 2000; Perna 2001a,b, 2005; Wolfinger et al., 2009). As Currie et al. (2002:40) contend, "despite the increase of women in the workplace and in higher education over the last twenty-five years, their continuing underrepresentation in senior management and the senior levels of academia remains marked." Yet, even as women have enlarged their numbers among the faculty, work hours for academics have been increasing over time (Jacobs and Winslow, 2004b). Jacobs (2004:4) suggests that "the long and growing hours expected of full-time professors are one reason" why women have made less progress entering the academy than other professions.

Universities are gendered organizations and so are families, which may differentiate the experience of faculty work for men and women academics. This is because "changes in the work domain will be short-lived and limited in their impact if they are not accompanied by equally substantial changes in the allocation of tasks and responsibilities at home" (Martin and Meyerson, 1998:312). Despite important changes over the last few decades, employed women continue to spend more time on housework and care for family members than do employed men (Bianchi et al., 2007).

Conflicts between time spent on employment and care may be particularly intense for woman academics (Suitor et al., 2001). This may play out in a variety of ways, including women having fewer family attachments than men. For example, women academics are less likely to marry than are men academics; women academics are also less likely than men to have children and tend to delay having children (Astin and Milem, 1993; Drago and Colbeck, 2003; Jacobs, 2004; Jacobs and Winslow, 2004a,b; Mason and Goulden, 2004a, b; Perna, 2005).

Faculty mothers have lower tenure rates and higher levels of part-time or nontenure line positions than either men faculty or childless women faculty (Drago and Colbeck, 2003; Ginther and Kahn, 2004; Hochschild, 1994; Jacobs and Winslow, 2004a,b; Mason and Goulden, 2002, 2004a,b; Perna, 2005; Wolfinger et al., 2004, 2009). The timing of fertility often means that bearing and raising children conflict directly with the pressured tenure-track years for academics (Hochschild, 1994; Jacobs, 2004; Jacobs and Winslow, 2004a, b; Mason and Goulden, 2004a,b; Wolfinger et al., 2009). While recent research suggests that younger cohorts of faculty men also face work-life conflict (American Council for Education, 2005; Lundquist and Misra, 2011), academic fathers may experience privilege due to their status as caregivers (Drago and Colbeck, 2003). Fathers of young children are most likely to secure ten-ure-track jobs, compared to all other groups, with mothers least likely to secure tenure-track jobs (Mason and Goulden, 2004a,b; Wolfinger et al., 2009). Faculty work time also intrudes on care for aging parents or partners and sick family members and friends (Gatta and Roos, 2004).

Several studies have focused attention on how parenthood affects academics' careers. Wolfinger et al. (2009) argue that women with young children are much more likely to be employed as contingent faculty or leave the labor force than are women without young children or men with young children. Women with young children are also more likely to remain off the tenure track. Perna similarly finds that fathers are more likely to hold a tenure-line position (2001b), and that parenthood positively predicts tenure status for men, but not for women (2005).

Some previous studies have explored time allocations to employment, finding that family status is related to time spent on work hours (see, e.g., Lareau and Weininger, 2008). Jacobs and Winslow (2004a) note that married and single parents with children spend fewer hours working than singles without children, although these effects are stronger for women than for men. Suitor et al. (2001) show that fathers spend significantly more time than mothers on research, while mothers spend more time on household labor and childcare. However, Suitor et al. (2001) do not control for partner characteristics-making it difficult to know whether these differences reflect differences in how families are structured (e.g., men may be more likely to have partners who are not employed). Winslow (2010) similarly finds that men with children spend more time on research, while women with children spend less. She argues that this finding "may offer support for advantages accruing to those who fit the ideal worker norm" (Winslow, 2010:788).

Overall, our review of the existing literatures leaves us with the following theoretical expectations. We expect to find that women academics in our sample spend more time than men academics on housework and care responsibilities, such as care for young children, care for elders, and care for other adults in need of long-term care, controlling for other factors. We also expect that men and women academics in our sample will work long hours, and that, depending on their parental status, their employment hours may be split differently between the different elements of faculty work, including research, teaching, mentoring/advising, and administrative responsibilities to the university and their larger disciplines. Specifically, we expect that mothers of young children may spend less time than fathers or childless women on research.

Our study focuses on only one institution, but it adds to previous studies due to the fairly comprehensive nature of our survey data. For example, our study includes many measures that appear in the National Survey of PostSecondary Faculty (NSOPF), an excellent nationally representative data source that has been used to investigate gendered patterns in the academy (Jacobs, 2004; Jacobs and Winslow, 2004a,b; Mason and Goulden, 2002, 2004a; Perna, 2001a,b, 2005; Winslow, 2010). Yet, while the NSOPF collects data on faculty time spent on work-related activities, it includes very little information about family, and no data about care responsibilities or time spent on care giving (one approach has been to impute the presence of children based on information about household size). The University of California Faculty Work and Family Survey (University of California Family Friendly Edge, 2003) includes care-giving data, but does not look at time spent on the different components of professional work (research, teaching, mentoring, and service), or include detailed information about partners (Mason and Goulden, 2004b). Finally, Suitor et al. conducted a comprehensive survey of faculty at one large southeastern university in 2000; they did include measures of time spent on different components of professional work and on household labor; however, they do not include detailed information about partner's employment. Our study is, therefore, the only that we know of that includes detailed data about time spent on the different components of professional work, caregiving responsibilities, and partner employment. Before describing our data and methods in more detail, we provide a little background about the university where the study took place.

## BACKGROUND

We conducted our research at the University of Massachusetts, Amherst, a large, research-intensive university with more than 20,000 students, and more than 1,000 faculty. Most departments on the campus have graduate programs, and tenure-stream faculty have teaching loads of approximately two courses a semester, although there is variation by department and college. Tenure and promotion decisions are based on faculty contributions in
research, teaching, and service. Faculty must be rated "excellent" in two of the three areas, although research carries substantial weight in tenure decisions. Indeed, university policy notes that "the faculty member must have a record of achievement sufficient to have gained substantial recognition on and off campus from scholars or professionals in his or her field; and must show significant potential for continuing professional achievement" (Office of the Provost, 2000:3)

The Massachusetts Society of Professors, an active union that includes both tenure-stream faculty and lecturers, represents the faculty. The union's role is to "safeguard academic freedom and due process" (Massachusetts Society of Professors, 2011). The union engages in bargaining regarding salaries, work conditions, and workload. Bargaining usually occurs every three years, although this may vary, depending on contract length. The union also serves as an advocate for individual faculty; faculty may grieve a range of issues, including workload, tenure and promotion decisions, and/or hostile environments. The union also advocates regarding the university's state budget vis-à-vis the state legislature and the board of trustees for the public university system. Yet, the institution has faced the loss of faculty due to state budget cuts.

At one time, universities made little attempt to address work-family conflict (Hochschild, 1994); however, more recently universities, in part as an attempt to recruit and retain more diverse faculty, have adopted a range of policies. At the time of this research, the University of Massachusetts had in place substantial work-life policies, including one semester of paid parental leave for both parents after the birth or adoption of a young child, paid leaves for care of ill family members (5-day, 30-day, and semester-long leaves), automatic extensions of one year toward tenure for childbirth, adoption, and elder care (faculty may choose to come up for tenure earlier), child-care subsidies for new assistant professors, and flexible spending accounts (pretax health-care and child-care accounts that reduce federal and state tax liabilities). The union developed a campaign for a paid semester of parental leave in 2001 and the administration agreed to adopt this policy. In the following round of contract negotiations, the union asked for the development of a joint committee, staffed by administrators and faculty, oriented toward developing work-life policies. This committee worked together to develop the remaining policies; since the time of the research, the university has also adopted a partner hire policy.

As a result of this setting, we expect that our findings will present a fairly optimistic rendering of work-life balance among faculty. Yet, as Acker (2006:457) argues: "The use of family-friendly policies, primarily by women when they have young children ... may increase gender inequalities in organizations." And as Hochschild (1997) suggests, work-family policies may not be taken up in the ways we might expect by professional workers, who may prefer to be at work when pressures at home are so high. Indeed, parental leave policies have been differentially taken up, with men less likely to use them
(Lundquist and Misra, 2011). Yet, the existence of these policies may make it easier for faculty to balance care giving and paid employment, making our analyses conservative tests of how care giving affects faculty work time.

## METHODS

Data were collected as part of a study commissioned by the Joint Admin-istration-Massachusetts Society of Professors Work-Life committee. To best understand the experience of faculty, we used both surveys and focus group interviews. (Data collection is documented in detail in Templer [2009].) Survey data were collected in November 2008 and February 2009 (periods when classes were in session) through a web-based survey, complemented by a paper survey sent through campus mail. Although the e-mail request initially came from the faculty union (Massachusetts Society of Professors), deans and department chairs also promoted survey participation. Seven-hundred-twenty people (out of 1179 faculty members) started the surveys (a $61 \%$ response rate), but only 349 faculty completed surveys (a $30 \%$ response rate). ${ }^{3}$ We focus our analyses on the 349 completed surveys, although we recognize that the attrition in our survey is problematic; the survey was very long, and many respondents dropped off when they reached the detailed work-time questions. We compare the sample that answered to the population and found it to be relatively representative. Men are somewhat underrepresented and women are somewhat overrepresented in our sample; women and men compose $53 \%$ and $45 \%$ of the sample, respectively. ${ }^{4}$ Many survey respondents are parents; there is no institutional data regarding parenthood status among the population, so we do not know if this is representative. By rank, our sample is relatively similar to the population. Assistant professors are overrepresented; full professors are slightly underrepresented; and lecturers are underrepresented, with part-time lecturers much less likely to respond than full-time lecturers. Representation is relatively even by college; however, engineering and natural science faculty are slightly underrepresented, while social science faculty are slightly overrepresented.

The survey included time-use measures for professional and personal activities, with special attention to care-giving responsibilities broadly defined as time spent caring for children or elders or other long-term care (see the Appendix for the list of activities included in each category of time use). Many activities, such as mentoring, might be viewed as crossing categories; we provided guidelines so that faculty would report meeting with research assistants

[^1]Table I. Descriptive Statistics: Means and Standard Deviations for Independent Variables

|  | $\begin{gathered} \mathrm{All} \\ N \stackrel{ }{=} 335 \end{gathered}$ |  | $\begin{gathered} \text { Men } \\ N=156 \end{gathered}$ |  | Women$N=179$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean | $S D$ | Mean | $S D$ | Mean | $S D$ |
| Parent of child < 12 | 0.37 | (.48) | 0.38 | (.48) | 0.36 | (.48) |
| Age | 47.5 | (10.3) | 49.5 | (10.8) | $46.2^{* * *}$ | (9.8) |
| Part time | 0.04 | (0.19) | 0.02 | (.14) | $0.05{ }^{*}$ | (.23) |
| Ph.D. | 0.84 | (.35) | 0.87 | (.33) | 0.84 | (.36) |
| White | 0.79 | (.40) | 0.84 | (.36) | 0.78 | (.41) |
| Partnered | 0.85 | (.34) | 0.90 | (.30) | 0.82 ** | (.39) |
| Partner full time | 0.70 | (.45) | 0.58 | (.49) | 0.80 *** | (.39) |
| Lecturer | 0.17 | (.37) | 0.15 | (.36) | 0.18 | (.38) |
| Assistant | 0.25 | (.436) | 0.18 | (.38) | $0.32^{* * *}$ | (.47) |
| Associate | 0.23 | (.42) | 0.23 | (.42) | 0.26 | (.44) |
| Full | 0.28 | (.45) | 0.39 | (.49) | 0.19 *** | (.39) |
| Liberal arts/honors | 0.23 | (.41) | 0.22 | (.41) | 0.24 | (.43) |
| Education | 0.04 | (.21) | 0.03 | (.17) | . 06 | (.25) |
| Natural sciences | 0.25 | (.43) | 0.37 | (.48) | . $15^{* * *}$ | (.35) |
| Engineering | 0.03 | (.18) | 0.04 | (.20) | . 02 | (.15) |
| Management | 0.04 | (.20) | 0.06 | (.24) | . 03 | (.16) |
| Nursing | 0.02 | (.13) | 0.01 | (.08) | 0.03 | (.16) |
| Public health | 0.06 | (.24) | 0.03 | (.17) | $0.09{ }^{* *}$ | (.28) |
| Social science | 0.21 | (.41) | 0.18 | (.39) | 0.25 | (.43) |
| Total work time | 65.82 | (15.65) | 65.29 | (14.52) | 65.88 | (16.12) |
| Time on research | 19.96 | (12.88) | 21.00 | (12.11) | $18.55{ }^{*}$ | (12.56) |
| Time on teaching | 20.94 | (11.55) | 20.22 | (10.81) | 21.52 | (11.97) |
| Time on mentoring | 8.81 | (6.83) | 8.25 | (6.84) | 9.18 | (6.64) |
| Time on service | 14.05 | (10.26) | 14.43 | (10.79) | 14.22 | (9.96) |
| Time on housework | 12.10 | (7.18) | 11.17 | (5.90) | 13.06*** | (7.92) |
| Time on Childcare | 13.02 | (18.09) | 10.35 | (13.67) | $15.22{ }^{* *}$ | (20.88) |
| Time on elder/long-term care | 1.30 | (3.72) | 1.31 | (4.14) | 1.35 | (3.44) |

Note: If marked, gender difference statistically significant. ${ }^{*} p<.1 ;{ }^{* *} p<.05 ;{ }^{* * *} p<.01$.
as research, while commenting on a student's independent paper as mentoring. Respondents were asked to provide weekly time-use estimates for professional and personal activities for the five-day workweek ( 120 hours) and for the weekend ( 48 hours). We asked them to provide us with data for the preceding week or, if that week was atypical, a typical week. ${ }^{5}$

We analyze the data using multivariate regressions to identify the factors that are associated with higher levels of time spent on employment, housework, and care. Table I summarizes the descriptive statistics for the independent variable and dependent variable outcome measures we use in the bivariate figures and multivariate regressions presented below. We are particularly interested in how gender and parenting young children influence time allocations. However, we control for a number of factors that may also be affecting time spent on work, housework, and care (Jacobs and Winslow, 2004b).

[^2]These controls include age, and age-squared, so that we control both for the differences between younger and older faculty members, and those who are the upper end of the distribution, as work time may change over the lifecourse. We also control for part-time work status, as this should affect time spent on employment, housework, and care. We control for Ph.D., as those without Ph.D.s may spend less time on research than other faculty. We also control for whiteness, ${ }^{6}$ in case there are differences by race; research suggests that faculty of color are called on to do more service and mentoring work than are white faculty (Antonio, 2003); people of color may also be more engaged in care work for their extended families (Sarkisian and Gerstel, 2004; Sarkisian et al., 2007). We control for rank, since faculty at different ranks may engage in different types of activities. We also control for college, as a proxy for field, since, for example, faculty in the humanities, those in management, and those in the sciences may spend their time on different activities. Finally, we include a number of measures of family status. While we focus attention on the effect of having children under 12 on employment, housework, and care time, we also control for whether the faculty member is partnered and whether the partner works full time. We believe that these factors may play a role in a faculty member's time allocations.

Table I reports significant gender differences in our measures. Women are slightly younger than men and are more likely to be working part time. Men are more likely to be partnered, while women are more likely to be partnered with a full-time worker. Men and women are equally represented as parents of children under 12, although men are significantly more likely be parents of children under 19. Assistant professors in our sample are more likely to be women; full professors are more likely to be men. Women are underrepresented in the natural science college and overrepresented in the public health college. These trends are reflected in data collected by the university about the faculty population as well. The descriptive data in Table I suggest that there is no significant difference in overall time worked, but that women faculty spend less time on research than do men. At home, however, women report spending significantly more time on housework and childcare.

In addition to the surveys, six focus group luncheons for faculty were held in April 2009. All lecturers, assistant, and associate professor faculty members were sent an e-mail invitation to participate in the focus groups; of the $100+$ faculty who responded to the invitation, 65 participated. Three of these focus groups were for nontenured faculty (lecturers or assistant), two were for associate professor faculty, and the final focus group included lecturers, assistant professors, and associate professors. Faculty from the full range of colleges attended; more women attended than men. The faculty taking part in the focus groups were self-selected and cannot be read as generalizable to the larger population. However, their comments do illustrate many of the

[^3]

Fig. 1. Reported weekly hours spent on research, teaching, mentoring, service, housework, and care, by gender and rank.
concerns identified in the survey. The focus groups discussed the challenges faced by faculty regarding work-life balance, and the types of programs, supports, or services that would be most helpful in navigating work-life balance.

## FINDINGS

## Working Time

Faculty reported spending tremendously long hours on work, with a mean of 66.4 hours/week and a median of 65 hours/week. On average, faculty worked 12 hours each weekend. Our focus group participants expressed frustration with very long hours, stating: 'Some people have jobs that finish when they leave, we don't." Yet, it is not simply that it is difficult to leave work at the office; faculty also noted that their work hours crowded out the rest of their lives. A long discussion of work hours led to the following statement: "With the faculty, it is sanctioned exploitation. Everyone knows it will happen ...." Although faculty tend to be dissatisfied with their workloads (Jacobs and Winslow, 2004a,b), they generally report being satisfied in their jobs, as did $72 \%$ of the faculty in our survey sample.

Some differences in work time and care time by gender and rank emerge, reported in Fig. 1, before controlling for other factors. ${ }^{7}$ Overall, men and women reported spending about the same number of total work hours.

[^4]Statistically significant gender differences in these trivariate models include research time for faculty of all ranks, and research, mentoring, and service time for associate faculty. Without controlling for other factors, men appear to spend more hours on their research than do women, although these differences are particularly strong for associate professors. Teaching hours are more comparable, and time spent on teaching decreases as rank increases, likely reflecting a widening repertoire of already prepped classes and, perhaps, the declining importance of student evaluations. Associate and full professors carry out more mentoring and advising, with women carrying more of the mentoring burden. ${ }^{8}$ However, lecturers, some of whom work as advisors for undergraduate programs, spend more time on advising and mentoring than do assistant professors. Finally, service hours are higher for associate and full professors, with associate women doing remarkably more service than associate men and even slightly more than full men professors and full women professors; these patterns for associate women disappear in multivariate models. Men spend more time on service for the profession (which is typically by invitation and more prestigious), while women spend more time on service to the university (findings not shown). Research makes up fewer hours in most faculty's work time than teaching, mentoring, and service, though in focus groups many reported preferring to spend more time on research. Although many focus group respondents complained that service burdens cut into research time, it also appears that much time is spent on teaching and mentoring.

Figure 1 also includes information about housework and care time. While full professors report the highest employment hours per week (before controls), they have the fewest combined hours of paid work, care, and housework per week. Clearly, when care demands recede, work-life balance, while still difficult, may be less challenging. For all ranks, women spend more time on housework and care than men. ${ }^{9}$ Associate women put in the longest day by far: 102 hours per week of paid and unpaid work.

In Table II, we present multivariate regression results predicting total employment time, and then predicting time spent on housework, childcare, and elder/long-term care separately. We look for any differences by gender and parenthood status (those with children under 12) in these models, controlling for age, part-time work status, degree, whiteness, partnered status, partner's full-time employment, rank, and college (as a proxy for field).These models are meant to explore the factors that explain overall work time, housework time, and care time.

Model 1 in Table II predicts total work time at the university. Overall, we do not explain a great deal of the variation in total work time. The factors

[^5]Table II. Multivariate Regressions Predicting Weekly Time Spent on Work Time, Housework, Childcare, or Elder/Long-Term Care

|  | Model 1 <br> Work Time | Model 2 <br> Housework Time | Model 3 <br> Childcare Time | Model 4 <br> Elder/Long-Term <br> Care Time |
| :--- | :---: | :---: | :---: | :---: |
| Women | 0.282 | $2.011^{* *}$ | $5.257^{* * *}$ | 0.111 |
| Child under 12 | $-3.790^{* * *}$ | 1.191 | $30.384^{* * *}$ | $-1.066^{* * *}$ |
| Age | 0.350 | $0.597^{*}$ | 0.007 | $0.369^{* *}$ |
| Age-squared | -0.005 | 0.001 | $-0.004^{* *}$ |  |
| Part time | $-9.139^{* *}$ | -2.780 | -0.389 |  |
| Ph.D. | 2.417 | 1.727 | 1.268 | -1.093 |
| White | -3.004 | -0.482 | -0.991 | $-1.102^{*}$ |
| Partnered | 1.099 | $2.804^{* *}$ | 0.687 | -0.629 |
| Partner FT | 3.040 | $1.464^{*}$ | 1.708 | $-0.907^{*}$ |
| Lecturer | $-6.729^{* *}$ | 1.853 | 2.429 | 0.579 |
| Assistant | -3.818 | -1.159 | 2.354 | -0.225 |
| Associate | $-6.612^{*}$ | 0.548 | 1.532 | 0.281 |
| Engineering | -1.369 | 0.870 | 2.644 | 0.202 |
| Nat. science | -1.870 | -0.427 | 1.456 | 0.148 |
| Education | -5.852 | 1.590 | 1.326 | 0.323 |
| Management | 4.082 | 1.453 | 1.553 | 1.288 |
| Nursing | 4.248 | 1.936 | 2.789 | -0.550 |
| Pub. health | -0.154 | $3.315^{* *}$ | 0.705 | 0.104 |
| Soc. science | -1.894 | -1.112 | $3.735^{* *}$ | 0.496 |
| Constant | 64.330 | -8.262 | -9.068 | -4.489 |
| $R$-square | .09 | .11 | .67 | .08 |

Notes: Coefficients are unstandardized. For the dummy (binary) variable coefficients, significance levels refer to the difference between the omitted dummy variable category and the coefficient for the given category. ${ }^{*} p<.1 ;{ }^{* *} p<.05 ;{ }^{* * *} p<.01$. Reference categories: rank $=$ full and college $=$ liberal arts.
associated with employment time are part-time status, number of children, and being a lecturer or an associate professor. There are no significant gender effects for overall work time: men and women appear to spend approximately the same amount of overall time on work, controlling for other factors. However, children under 12 do affect total work time: those with children under 12 work, on average, 3.8 hours less than other faculty. A number of controls also show significant relationships to work time. These findings suggest, controlling for other factors, that part-time workers are employed, on average, nine hours less a week than other faculty (as might be expected). Since full professors are the omitted category, when we control for other factors, the negative effect for lecturers and associate professors means that they spend less time working (on average seven hours less a week) than full professors, although assistant professors do not, controlling for other factors. We do not find a significant difference in total work hours by college. Gender has no significant influence on total working time.

In focus groups, discussions of total work hours often led into concern about how to set limits without negative career repercussions. Lecturers and assistant professors worried that they might lose their jobs. One assistant professor questioned: "When can you say no? ... How will this be taken? Will it
jeopardize my career?" Associate professors argued that setting limits could backfire in other ways. One noted: "If I set limits, I know it means [others] will do that extra work. I feel guilty if I say no."

We examine weekly time spent on housework in Model 2 of Table II, time spent on childcare in Model 3, and time spent on long-term care for another adult or elderly adult in Model 4. We control for the same factors as in the previous model. As Model 2 shows, unlike time spent on employment, there is a clear gender effect for time on housework, with women spending, on average, two hours more each week on housework. The presence of young children does not appear, in this sample, to be associated with higher amount of housework time, at least when controlling for the factors we include. However, when we substitute a measure of children under 19 for the measure of children under 12 , we do see a very strong and significant association; faculty with children under 19 spend, on average, two hours more a week on housework, controlling for other factors (analyses not shown). Housework time, in addition to gender and presence of children, is related to age. Older faculty spend more time (a little more than one-half hour for each additional year of age) on housework than young faculty, although this is a curvilinear effect, with the oldest faculty spending less time on housework, as indicated by the significant negative effect of age-squared. Those faculty who are partnered spend, on average, three more hours a week on housework, and this effect is even greater for those who have a partner who works full time, on average an additional one and one-half hours a week. Faculty in public health spend more time on housework, relative to faculty in humanities.

In Model 3 of Table II, we consider time spent caring for children. Here, gender has an even stronger effect, indicating that women are putting in particularly long hours caring for children, on average more than five hours more than men each week. Having a child under 12 does have a very strong (and expected) effect on child-care time, indicating a faculty member with a child under 12 spending, on average, 30 more hours a week on childcare than those without a child under 12. Faculty in the social and behavioral sciences spend almost four more hours a week on childcare, relative to humanities faculty.

In Model 4 of Table II, we consider elder care and long-term care together, in one dependent variable measuring elder/long-term care. Almost $20 \%$ of faculty were involved in providing eldercare or long-term care at the time of the survey. This number underrepresents the experience of those who have ever engaged in care. When we asked an open-ended question about whether faculty had ever experienced unexpected and intense care-giving periods, $48 \%$ reported that they had, recounting caring for elderly parents, partners, siblings, and others. Although men and women were equally likely to provide eldercare, one focus group participant argued, "[w]omen are being crunched in the middle of younger kids and aging parents," perhaps reflecting care demands, since faculty women spend more time on childcare and tend to become mothers later in the lifecourse. In an open-ended response to an eldercare question on a survey, one faculty member commented on the death
of her mother: "I was not able to balance work/family responsibilities and feel I neglected care of my mother in order to keep up with my teaching and service responsibilities. I regret it." Similarly, another faculty member recounting eldercare issues said: "Balance was a nightmare ... it was horrible and difficult, and my husband and I both kept trying to do the same amount of paid work as usual. We both were physically and emotionally exhausted and spent ...."

Both men and women are equally involved in elder and long-term care. Faculty with children under 12 spend slightly less time on elder/long-term care, on average one hour a week, controlling for other factors. We find that older faculty spend more time on this sort of care, although the squared term again indicates that the oldest faculty spend less time on elder/long-term care. Those with a partner who works full time spent almost a full hour less on elder/long-term care than those whose partners do not work full time, a somewhat puzzling finding. It may be that faculty with stay-at-home partners have more opportunity to be involved in eldercare and thus to also draw their partners into the process. We also find that white faculty spend, on average, one hour less each week on this care, controlling for other factors. When we examined this finding in more depth (in results not shown), we consistently see differences between faculty of color and white faculty. Faculty of color appear to be more involved in care giving for elders or other adults than are white faculty, which may relate to other differences between white faculty and faculty of color. For example, slightly more than one-half (55\%) of faculty of color have children of any age, compared to more than two-thirds ( $70 \%$ ) of white faculty. Faculty of color clearly face work-life tradeoffs, perhaps sacrificing childbearing for increased support of extended families.

Overall, these findings show that women faculty tend to be more "on the hook" for care and housework than men faculty, and the presence of children affects the amount of time faculty spend on both housework and, particularly, childcare. In the next section, we explore differences in time spent on the different components of faculty work, including research, teaching, mentoring, and service, and how gender and parenthood are related to employment time.

## Work-Work Balance

In the focus groups with faculty, many participants noted how difficult they found balancing "work-work," or the different demands of research, teaching, mentoring, and service. One participant voiced: "It's about finding a 'work-work' balance rather than 'work-life' balance." Because teaching occurs at appointed times, with clear deadlines for grading and preparing for courses, and service also often comes with clear deadlines, faculty felt that they often ended up prioritizing this work, even if it was not valued by colleagues. One individual noted that advising and mentoring undergraduate and graduate students is "a one-liner that goes into your AFR [annual faculty report on which merit increases are based] once a year, but it really should have more value ...

Table III. Multivariate Regressions Predicting Weekly Time Spent on Research, Teaching, Mentoring, and Service

|  | Research Time |  | Teaching Time |  | Mentor Time |  | Service Time |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Model 5 | Model 6 | Model 7 | Model 8 | Model 9 | Model 10 | Model 11 | Model 12 |
| Women | -2.160 | 0.584 | 0.208 | 1.236 | 1.242 | 1.130 | 0.303 | 0.948 |
| Child < 12 | -1.808 | 2.280 | -1.296 | 0.256 | 0.256 | 0.087 | -1.933 | -0.960 |
| Mom child < 12 |  | $-7.246^{* * *}$ |  | -2.772 |  | 0.302 |  | -1.739 |
| Age | -0.204 | -0.219 | 0.795 | $0.783^{*}$ | -0.362 | -0.361 | 0.177 | 0.172 |
| Age-squared | -0.001 | 0.000 | -0.006 | -0.006 | 0.003 | 0.003 | -0.002 | -0.001 |
| Part time | -0.794 | -1.593 | -5.865* | -6.152*** | 0.547 | 0.581 | $-7.448^{* *}$ | $-7.630^{* *}$ |
| Ph.D. | 1.438 | 1.095 | 0.832 | 0.712 | $-2.131^{*}$ | -2.118* | $5.363^{* *}$ | 5.279 *** |
| White | -1.300 | -1.529 | -1.101 | -1.197 | -0.061 | -0.050 | -2.858* | -2.915** |
| Partnered | 0.349 | 0.669 | 0.874 | 0.996 | 1.302 | 1.288 | -0.116 | -0.037 |
| Partner FT | 1.140 | 1.527 | 2.019 | $2.170^{*}$ | 0.978 | 0.961 | 0.605 | 0.704 |
| Lecturer | $-9.397^{* * *}$ | -9.448*** | $6.350^{* * *}$ | $6.209^{* * *}$ | -1.931 | -1.919 | -2.793 | -2.858 |
| Assistant | -0.984 | -1.030 | 6.210 *** | $6.154^{* * *}$ | -2.553* | $-2.550^{*}$ | -4.339** | -4.348** |
| Associate | -4.383** | -4.185** | -0.563 | -0.527 | -0.196 | -0.200 | $-3.823^{* *}$ | -3.795** |
| Engineering | -1.945 | -1.638 | -7.323*** | -7.192*** | 1.502 | 1.491 | -1.575 | -1.511 |
| Nat. science | 0.841 | 0.720 | -2.614 | $-2.640^{*}$ | 0.949 | 0.953 | -1.767 | -1.787 |
| Education | -0.286 | 0.779 | -2.653 | -2.237 | 0.459 | 0.415 | -2.503 | -2.245 |
| Management | 2.741 | 2.478 | $5.235{ }^{*}$ | $5.137^{*}$ | 0.900 | 0.908 | 1.775 | 1.725 |
| Nursing | -3.264 | -3.712 | 6.169 | 5.938 | -1.333 | -1.311 | 5.824 | 5.685 |
| Pub. health | 1.191 | 0.837 | -3.826 | -3.933* | -0.682 | -0.668 | 0.459 | 0.380 |
| Soc. science | 1.203 | 1.147 | -3.841*** | $-3.833^{* *}$ | 0.276 | 0.277 | -2.056 | -2.058 |
| Research time |  |  | $-0.267^{* * *}$ | $-0.276^{* * *}$ | $-0.057^{*}$ | -0.056 | $-0.087^{*}$ | -0.093* |
| Teaching time | $-0.327^{* * *}$ | $-0.330^{* * *}$ |  |  | -0.053 | -0.052 | $-0.210^{* * *}$ | $-0.212^{* *}$ |
| Mentoring time | -0.160** | -0.153 | -0.122 | -0.120 |  |  | $0.347^{* * *}$ | $0.347^{* * *}$ |
| Service time | -0.116* | -0.121* | -0.230*** | $-0.232^{* *}$ | $0.165^{* * *}$ | $0.165^{* *}$ |  |  |
| Constant | $44.421^{* * *}$ | 42.628*** | 5.974 | 5.699 | 18.904** | 18.929** | 14.405 | 14.222 |
| $R$-square | 0.274 | 0.293 | 0.314 | 0.265 | 0.142 | 0.142 | 0.238 | 0.239 |

Notes: For the binary variable coefficients, significance levels refer to the difference between the omitted variable category and the coefficient for the given category. Reference categories: rank $=$ full and college $=$ liberal arts. Coefficients are unstandardized. ${ }^{*} p<.1 ;^{* *} p<.05$; ${ }^{* * *} p<.01$.

In January, I spent three days of writing recommendation letters for students." Faculty voiced that when faced with so many demands, they sacrificed research, as the only element of their work firmly under their own control.

Table III summarizes our findings for the multivariate regressions predicting time spent on research, teaching, mentoring, and service. Models 5, 7, 9, and 11 focus on the main effects of our variables on the components of work, while Models 6, 8, 10, and 12 explore whether gendered care giving affects these outcomes, by including an interaction between women and the presence of children under 12. In comparison to modeling total employment hours, when we focus on specific components of faculty work time (e.g., research), we explain much more of the variation. In predicting time spent on each specific work activity, we also include controls for time spent on the remaining types of work, with the assumption that time spent on teaching, for example, might affect time expended on research. These models explore the factors that explain overall employment time, and how faculty negotiate with their own "work-work" balance.

In Model 5 of Table III, we examine research time, and find that when controlling for other factors, there are no significant differences in time spent on research for men and women (although the result is close to being marginally significant, at .12). ${ }^{10}$ By rank, we find that, relative to full professors, both lecturers (nine hours a week) and associate professors (four hours a week) spend less time on their research controlling for other factors. Assistant professors and full professors do not significantly differ in time spent on research. Although it may be expected that lecturers (who are often, but not always, in jobs focused primarily on teaching) spend less time on research, it is surprising that associates, who are working toward promotion, also spend significantly less time on research. In analyses not shown, we also interacted gender with rank, and found that the negative effect of associate professor is driven by associate women; associate men spend the same amount of time on their research as others. Concerns about time spent on research were voiced consistently during our focus groups with associate professors, who primarily blamed service responsibilities for keeping them from engaging in as much research as they would like. As one argued: "Tenured faculty are seasoned researchers; if they are putting all their time into admin rather than research, it is really terrible for the university." We control for time spent on other activities, and find that in keeping with concerns about "work-work" distribution, time spent on teaching, mentoring, and service all significantly reduce the amount of time spent on research. The coefficients suggest that faculty spend .33 hour ( 20 minutes) less on research, for every hour spent on teaching; and .16 hour ( 10 minutes) and .12 (7 minutes) less on research, for every hour spent on mentoring and service, respectively.

In Model 7 of Table III, we focus on time spent on teaching, and see no differences by gender, when controlling for other factors. ${ }^{11}$ Part-time faculty spend about six hours less on teaching (likely because they have lower teaching loads), and both lecturers and assistant professors spend, on average, six hours more per week on teaching than full professors. This may be because they are still developing new preparations, or because they have higher teaching loads (e.g., for senior faculty "buying out" of courses due to administrative work and grants, or differences in teaching loads for contract and tenure-line faculty). In addition, both engineering and social science faculty spend less time on their teaching than the omitted category of humanities and fine arts/honors, while management faculty spend more time on teaching. We find that time spent on research and service reduce time spent on teaching. However, time spent on mentoring, which is closely related to teaching, does not significantly reduce time spent on teaching.

[^6]In Model 9 of Table III, we examine time spent on mentoring and advising, and find very few effects on mentoring time. ${ }^{12}$ Two variables are marginally significant, those with Ph.D.s spend two hours less time mentoring and advising than faculty with other terminal degrees (such as master's degrees, law degrees, or doctorates of education), and assistant professors also appear to spend 2.5 fewer hours a week, relative to full professors, advising and mentoring students. As faculty move up in ranks, they may become more deeply involved in mentoring, particularly the time-consuming mentoring of graduate students. In addition, while time spent on research reduces time spent on mentoring, time spent on service actually boosts mentoring time. Perhaps faculty who are invested in mentoring are also more invested in service, and vice versa. Both activities may be seen as support for the department or larger institution.

Finally, in Model 11 of Table III, we explore time spent on service. ${ }^{13}$ Without question, service was the aspect of faculty jobs that focus group members complained about most. One associate professor focus group participant argued: "Academia is a whole series of bait and switch. You go to grad school because you are good in college classes and then have to switch and write a dissertation ... when you get good, you are asked to do service, something else I have never been trained to do." Another frustrated associate argued, "I didn't sign up for this [service]. I didn't get a PhD to sit in committee meetings." We did not find differences in service by gender; Nettles et al. (2000) found higher service time for women, although other studies have found no significant difference between time spent on service for men and women (Bellas \& Toutkoushian, 1999; Modern Language Association, 2009). We find that part-time faculty spend, on average, seven hours a week, significantly less on service, while Ph.D.s spend, on average, five hours more each week on service. Whites spend on average three hours less each week on service than faculty of color, controlling for other factors, a concern also noted in our focus groups. For example, in one focus group, faculty noted the difficulty caused by the need for diversity on search committees, leading to disproportionate service burdens. One respondent said: "If you are one of two women in your department ... I go on a lot of dinners." Another responded, "I get the same thing, the female Hispanic." In another focus group, a participant stated, "I'll just say it; we need a person of color on the committee, so [exploitation] is sanctioned." Interestingly enough, by rank, assistant professors and associate professors spend, on average, four fewer hours each week on service than full professors.

[^7]Many focus group participants agreed that senior colleagues try to protect assistant professors from service.

Next, we explore how these components may be affected by care-giver status by focusing on parents of children under 12. Given earlier results, we may expect that mothers of younger children are particularly affected by intensive care demands. We run the same model as in Models 5, 7, 9, and 11, but add an interaction between women and children under 12. The findings of the interactions are presented in Models 6, 8, 10, and 12 of Table III. The effect for "woman" shows the effect for being a woman without a child under 12; the effect for "child $<12$ " shows the effect for being a man with a child under 12. In both cases, neither main effect is significant for research time, teaching time, mentoring time, or service time. This means that there is no difference in time spent on research for women without children or for men with young children relative to men without children.

On the other hand, there are extremely large and significant negative effects for the interaction between woman and child under 12 on research time, as noted by the row "mother of child $<12$." Mothers of young children spend, on average, seven hours less a week on their research than other faculty. Yet, if we look across Table III, to comparable results in Models 8, 10, and 12, it is clear that the other interactions are insignificant. Therefore, mothers of young children appear to spend less time on their research each week, but spend the same amount of time as other faculty on teaching, mentoring, and service. This allocation of time may disadvantage mothers of young children. Approximately one-third of women faculty have children under 12. While not all mothers of children under 12 spend less time on research, some do. These women will not always be mothers of children under 12; women without children under 12 (either childless, currently childless, or mothers of older children) spend about the same amount of time on their research and teaching as men. Therefore, we might view this as a short-term status and one that could perhaps be mediated through additional support for research time.

Faculty mothers who are facing pressures due to small children take time out of the part of their work that may be most highly valued by the institution, their research. Our focus group data supported this sense that faculty felt that the other demands on their time required them to sacrifice their research. This strategy, while showing sensitivity to the needs of their students and colleagues, may lead to a different experience for those who face the greatest care and housework demands. As Sandra Acker (Acker and Feuerverger, 1996) has argued, women faculty may end up "doing good and feeling bad": they make significant efforts to be good citizens, teachers, and mentors, but feel frustrated that they take on these burdens when the work is not valued by the university.

There is reason to think, however, that this strategy of trading off research may be of relatively short duration, given the length of a faculty career. Young children are not young forever. Our data show a precipitous drop in child-care time as faculty age. Yet, for some faculty, the timing of care
needs and the tenure process may mean that such tradeoffs lead to negative career repercussions. Even for tenured women, it may be difficult to return to high levels of research productivity after cutting back due to care demands. Additional work-life supports may help faculty at this stage to protect their research time, while recognizing the added demands that they face.

In many focus groups, the "crunch" between employment and care was brought up, at times with differential experiences voiced by men and women. A poignant exchange occurred in our final focus group, with one assistant professor reporting his high school son's disappointment in him. He noted: "My son said, 'Dad, you are not here when I need you these last 4 years."" An assistant professor woman responded, "I do the opposite; I refuse to lose that time with my daughter, and I feel like I am slacking on my job."

Overall, these findings show that faculty are working very long hours, and these long hours extend across colleges, among both men and women, and across ranks. Second, there is a clear tradeoff in work time in what one respondent called the "work-work" balance. Time spent on service, teaching, or mentoring all reduce time spent on research, and vice versa. Yet there are relatively few differences by college in time spent on different activities, and some of the major differences across rank are not surprising, with lecturers and assistant professors spending more time on teaching and less time on mentoring. All groups report spending very long hours on employment, with particularly high service burdens for faculty of color. In addition, mothers of young children maintain high work activity while their children are young, but do so by cutting down time on their research. This may lead to negative career outcomes.

## CONCLUSIONS

It is no surprise that faculty work exceptionally long hours. Our results also support the commonly documented phenomenon that women faculty balance much higher loads of housework and care time than men. Yet despite spending less time on unpaid work, men do not appear to be working on the job for longer hours than women. One of our most compelling findings relates to the connection between motherhood and the sacrifices women make in the distribution of their "work-work" balance. Because mothers are often the ones to bear the most intensive responsibilities in the household, they are more likely than fathers (and childless faculty) to sacrifice time in order to do so. However, they do so strategically. Instead of spending less time on teaching, mentoring, or service, they cut time out of their own research. While this may ensure that students and colleagues remain unaffected by mothers' care responsibilities, research is the area that matters most for a professor's promotion and prestige in a research-intensive university such as this. Other women, those without children or with older children, or those with fewer housework and care demands, spend the same amount of time men do on research. Given
that these findings came from a university with relatively generous family policies, this may suggest that these imbalances may be even greater in less supportive environments.

These findings show that differences in work time are not simply split by gender, with men working more hours than women. They are split by gendered parenthood, with mothers of young children spending less of their work time on research than do fathers or faculty without young children. Individual-level responses to these challenges may exist, such as postponing or foregoing having children; learning time-management strategies; hiring others to provide care or housework; or finding more effective approaches to saying "no" to activities that will not lead to promotion. However, we argue that the inequalities we discover are not simply due to individual choices, but are due to structural issues reflecting gendered families and organization, such as gendered expectations around care giving and professional work and research time.

The societal norms that reproduce gender roles in the home are the more challenging to address, but a number of policies at the university level could be introduced that would lead to greater gender and care-giver diversity among senior faculty. Since sacrifices in research time are potentially detrimental to the careers of individual faculty as well as to the research institutions where they work, policies that can help faculty with high care demands remain engaged in research are crucial. In addition to paid parental leave for childbirth, policies that reduce or modify teaching and/or service requirements for faculty during intensive child or elder care-giving periods would reduce the likelihood that research will always be the first thing to be sacrificed. The ability to move between full-time status and part-time status at various stages during the tenure-line career is another potential way that care-giving time and research time could be better integrated. In addition, service and teaching goals could be made to be more compatible with those of research. For example, during periods of significant care-giving responsibilities, faculty could teach graduatelevel courses that incorporate collaborative research projects while their service responsibilities could be those that potentially dovetail with their own research or foster their professional networks (e.g., managing a speaker series). Another effective policy would be to implement affordable university-based childcare and eldercare, which would include after-school child-care programs, drop-in childcare or eldercare, and summer childcare. Such programs may help address the squeeze felt by faculty with significant care responsibilities.

In addition to policies to facilitate the integration of care-giving and research time, another alternative is rethinking the valuation of research above all else. Although it is crucial for faculty to spend time on and produce excellent research, it is also important that all faculty engage in teaching, mentoring, and service and administrative work for the institution. Faculty spend significant portions of their time on these activities, yet they count little in the way of promotion. Developing systems that recognize and reward teaching, mentoring, and service, as well as research, may help solve some of the work-work balance faculty report as so problematic.

Overall, this research provides us with a way to understand why gender inequalities in academic careers persist, and evidence for how we can move forward to mediate these inequalities thoughtfully and successfully. Rather than simply understanding differences in work time as gendered, we must develop models of how care responsibilities and gender intersect. In addition, by understanding gendered care giving as the source of the inequalities that persist, we can develop better models for university policies and support for the future.

## APPENDIX

We used stylized questions, which are still the most widely used form of time-use data collection since they are more affordable than time-dairy or beeper studies. In time-diary or beeper studies, respondents report what they were doing at a given time, making the data more reliable, but these methods are prohibitively expensive. Stylized questions provide respondents with a fixed set of categories (e.g., "Last week-or in a typical week, if last week was not typi-cal-how much time did you spend on research, teaching, and mentoring?"). We maximized reliability by providing a discrete list of activities for each category of time use.

- Research includes reading, writing, meeting with research assistants or collaborators, presenting at conferences, practicing, performing, directing, or composing.
- Teaching includes teaching undergraduate or graduate courses or independent studies, teaching preparation, grading, emailing, and office hours.
- Mentoring includes assisting with senior theses, serving on student committees, reading and commenting on papers, advising, emailing, and writing letters of recommendation.
- Service for the university includes serving on committees, attending meetings, emailing, organizing or participating in workshops or forums, mentoring and advising other faculty members, participating in faculty senate, and holding union leadership positions.
- Service to the professional discipline includes reviewer for professional journal, press, or foundation/agency, editor for professional journal, serving on peer-review panels and associational committees, attending meetings, emailing and organizing conferences or workshops, application of expertise, technology transfers, and clinical work.
- Service, broadly defined, includes both service to the university and service to the professional discipline.
- Housework includes time spent on housework and home maintenance (shopping, cooking, cleaning, laundry, paying bills, and home repair).
- Childcare includes meeting the needs of or spending time with children and teenagers under the age of 18 .
- Eldercare includes providing physical care and emotional support, and spending time and assisting with daily living tasks, finances, transportation, or housekeeping, for adults age $65+$.
- Other long-term care includes providing physical care and emotional support, and spending time and assisting with daily living tasks, finances, transportation, or housekeeping, for a family member or friend between the ages of 18 and 65 .


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[^1]:    ${ }^{3}$ This response rate is average for a web-based survey (Shih and Fan, 2008). Demographic questions were placed at the end of the survey, so we do not know how the demographics of those who completed the survey differs from those who did not.
    ${ }^{4}$ The campus-wide gender composition of total faculty is $38 \%$ women and $61 \%$ men. The fact that women are overrepresented in survey response is consistent with other campus studies that address work-family balance (Suitor et al., 2001).

[^2]:    ${ }^{5}$ It is possible that, due to social desirability, faculty overestimated their work time (Jacobs, 2004). Yet, we have no evidence to suggest that there were biases based on gender or care-giver status in these estimations, and believe that our analyses hold.

[^3]:    ${ }^{6}$ Our sample included 51 people of color: 12 African Americans, 10 Latino/as, 20 Asian Americans, 1 Native American, and 8 "other." Given these small numbers, rather than analyzing our data by racial groups, we look at differences between whites and nonwhites.

[^4]:    ${ }^{7}$ Because of the small number of transgendered respondents in the sample, we present results by gender by focusing on only those who categorized themselves as men or women.

[^5]:    ${ }^{8}$ Mentoring and teaching might be viewed as caring labor of another sort, as might service to the university (Acker and Feuerverger, 1996; Hochschild, 1994; Park, 1996). However, we do not theorize or analyze care in these ways here.
    ${ }^{9}$ In their report on work hours at a large research institution, Suitor et al. (2001) report similar findings, with women's household time greatly overshadowing men's, leading to women's having substantially longer days.

[^6]:    ${ }^{10}$ When we run interactions of gender with each of the independent variables, to explore whether these effects differ for men and women, we do find significant differences for associate men and women, and for part-time men and women, with women associates and part-time women spending less time on research than all other groups. There are no other differences by gender.
    ${ }^{11}$ When we run interactions of gender with each of the independent variables, we find no significant differences.

[^7]:    12 When we run interactions of gender with each of the independent variables, we find no significant differences.
    ${ }^{13}$ When we run interactions of gender with each of the independent variables, we find significant differences between men and women faculty, depending on whether their partners work full time. Here, women who have partners who do not work full time and men who have partners who work full time spend more time on service; women who have partners who work full time spend less time on service. We also find that women lecturers spend less time on service than all other groups. There are no other significant differences.

