

## Do Babies Matter (Part II)? Closing the Baby Gap

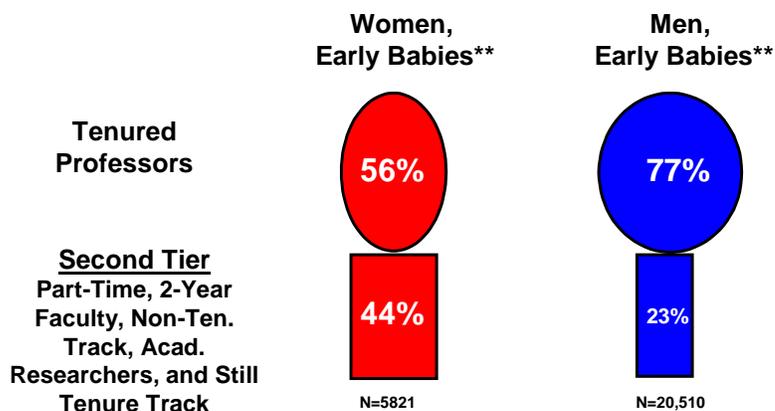
*Research suggests that having a family may slow the career progress of women faculty. But does achieving academic success first leave time for children later?*

By Mary Ann Mason and Marc Goulden

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Even though women make up nearly half of the PhD population, they are not advancing at the same rate as men to the upper ranks of the professoriate; many are dropping out of the race. [Our first "Do Babies Matter?" article](#), published in the November-December 2002 issue of *Academe*, examined the effect of family formation on academic careers. We reported, not surprisingly, that babies do matter for men and women PhDs working in academia. They matter a great deal, especially their timing. We found that men with "early" babies—those with a child entering their household within five years of their receiving the PhD—are 38 percent more likely than their women counterparts to achieve tenure (see figure 1). Moreover, the pattern of tenure achievement for women and men stayed almost identical in the humanities, social sciences, and hard sciences. It also held true across four-year institutions, from large research universities to small liberal arts colleges.

**Figure 1: Who Gets Tenure\***



\*PhDs from 1978-1984 who are working in academia 12 to 14 years out from PhD.

\*\*Early Babies=1 or more child entering the household prior to 5 years post-PhD.

Source: Survey of Doctorate Recipients. Sciences, 1979-1999, Humanities, 1979-1995

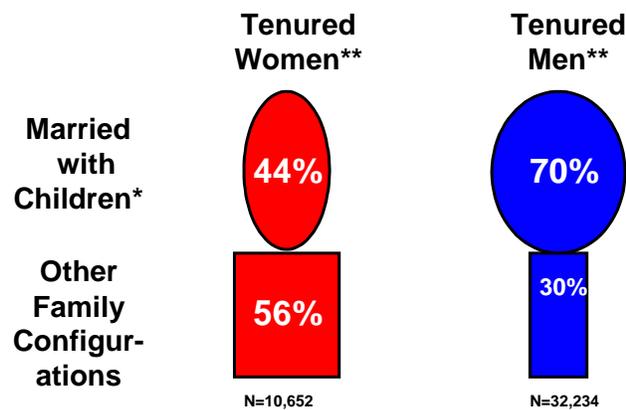
At that time, we had not yet studied the effect of careers on family formation. Now we turn the evidence on its head to ask what happens to the men and women who secure that first assistant professor job before becoming parents. Will they still have a baby? The

short answer: men do, but women don't. "Married with children" is the success formula for men, but the opposite is true for women, for whom there is a serious "baby gap."<sup>1</sup>

For this study and our previous one, we used the incredibly rich Survey of Doctorate Recipients (SDR).<sup>2</sup> It is perhaps the best life-course employment database in the United States. A biennial weighted, longitudinal study, it follows more than 160,000 PhD recipients across all disciplines until they reach age seventy-six. The scope of the SDR is similar to famous longitudinal clinical trials such as the Nurses' Health Study and the Framingham Heart Study. Tracking a huge population for years allows researchers to isolate specific factors and, with a great deal of certainty, to determine their importance.

Using the SDR data set, we analyzed the life courses of PhD recipients, including their decisions about marriage and fertility, to determine whether an academic career affects family formation. We found that careers matter: the life trajectories of tenured women differ from those of tenured men (see figure 2).

**Figure 2: Married with Children\***



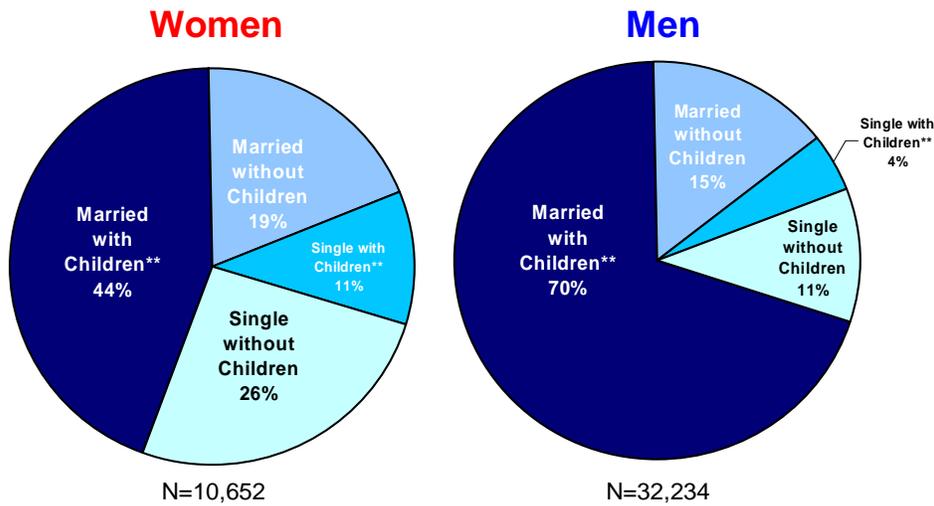
\*Currently married and had a child in household at any point post PhD to 12 years out.

\*\*PhDs from 1978-1984 Who Are Tenured 12 Years out from PhD

Source: Survey of Doctorate Recipients. Sciences, 1979-1999, Humanities, 1979-1995

Only one in three women who takes a fast-track university job before having a child ever becomes a mother. Women who achieve tenure are more than twice as likely as their male counterparts to be single twelve years after earning the PhD (see figure 3). And, as figure 4 indicates, women who are married when they begin their faculty careers are much more likely than men in the same position to divorce or separate from their spouses. Women, it seems, cannot have it all—tenure and a family—while men can.

**Figure 3: Family Status of Tenured Faculty\***

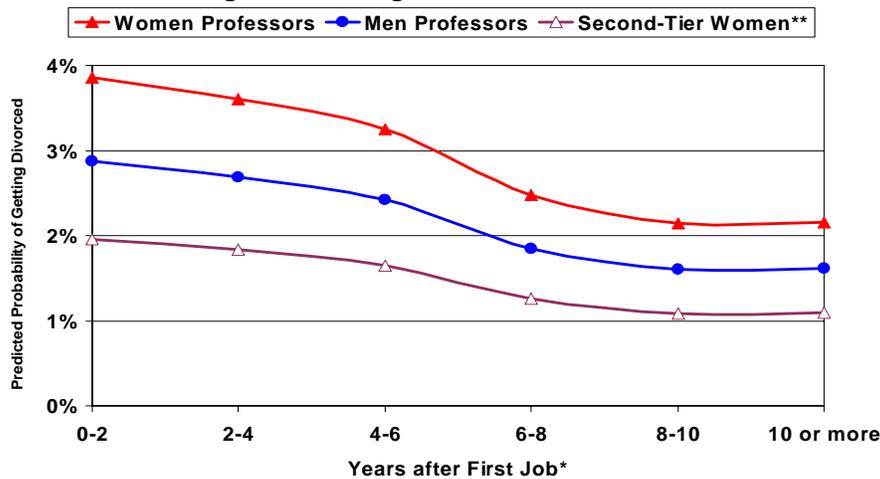


\*PhDs from 1978-1984 who are tenured 12 years out from PhD.  
 \*\*Had a child in the household at any point post PhD to 12 years out.  
 Source: Survey of Doctorate Recipients. Sciences, 1979-1999, Humanities, 1979-1995

On the other hand, the "second tier" of women PhDs—those who are not working or who are adjunct, part-time, or "gypsy" scholars and teachers—looks very different. Second-tier women have children and experience marital stability much like men who become professors.

Regarding divorce, second-tier women are more successful than anyone, at least in the early years after earning a PhD. On a year-to-year basis, the chances that a tenure-track woman will divorce are twice those of a second-tier woman and around 50 percent more than those of a male colleague in a tenure-track position (see figure 4).

**Figure 4: Getting Divorced after First Job\***



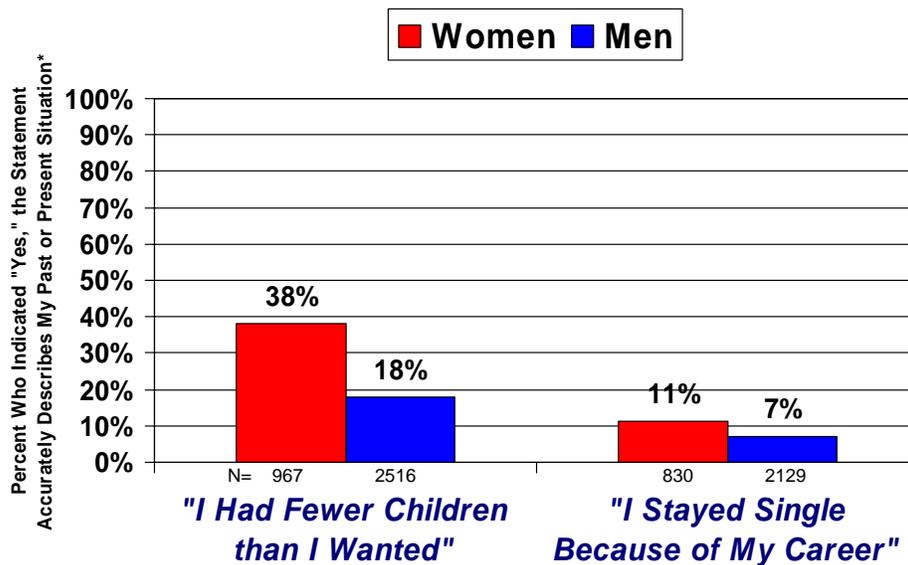
\*For individuals who were married at time of first job, first SDR survey 0-3 years post-PhD.  
 \*\*Non-tenure track, part time, or not working.  
 Source: SDR Science and Humanities Survey, 1981-1995. PhD recipients 1978-1992 .

Of course, not all women want children or marriage. As one faculty colleague put it, "Motherhood would only keep me from my passion: science." And many men and women enjoy partnerships not revealed by this traditional survey, which inquires only about marriage.

One cannot know what goes on in the thousands of minds represented by a single data point. The decision-making process is individualistic, and many factors beyond the scope of the SDR influence crucial life decisions. To further investigate this issue and others related to work and family, we surveyed the entire ladder-rank faculty of the University of California system.<sup>3</sup> More than 50 percent of the faculty—4,400 individuals out of about 8,700—responded. This high response rate shows that these issues are important to faculty.

One consistent finding across all nine campuses was that women were more than twice as likely as men to indicate that they had fewer children than they had wanted—a full 38 percent of women said so compared with 18 percent of men (see figure 5).<sup>4</sup> While not exactly a "smoking gun," this report suggests that the tradeoff successful women make between careers and children is not without regret for many.

**Figure 5: Familial Loss for UC Ladder-Rank Faculty**



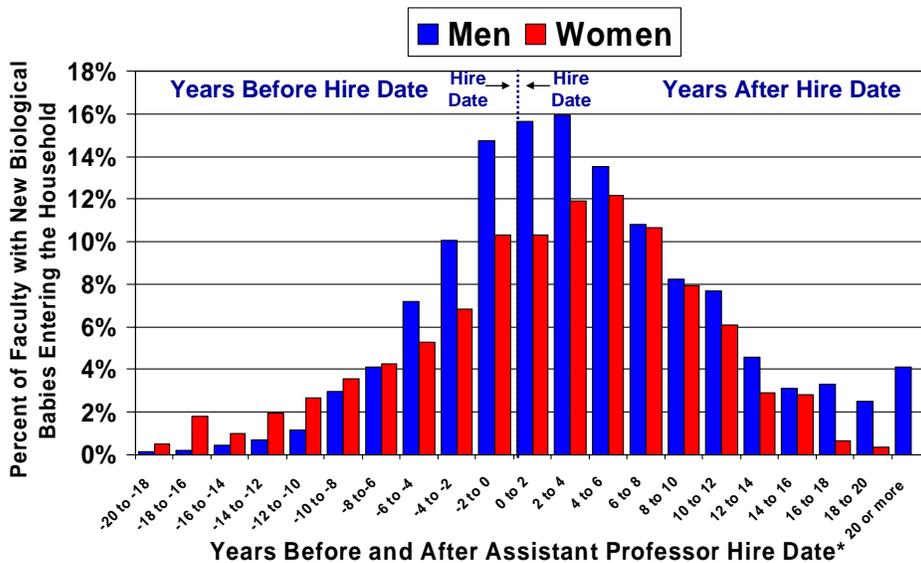
\* "Not Applicable" has been excluded and "No," "Partially Accurate," and "Not Sure" have been grouped.

Source: Mason, Mary Ann, Angelica Stacy, and Marc Goulden. 2003. "The UC Faculty Work and Family Survey." (<http://ucfamilyedge.berkeley.edu>).

This survey also allowed us to look more closely at the child-bearing patterns of men and women faculty members. The average age for receiving a PhD is thirty-three. Many professors do not secure tenure before they are forty. The busy career-building years as a graduate student, an assistant professor, and, in some fields, a postdoctoral fellow are important reproductive years, particularly for women. These are the years when the fast track and the reproductive track are on a collision course.

Figure 6 traces the percentage of men and women who have a child each year before and after their date of hire as an assistant professor. The figure suggests that women are more likely than men to have children at an earlier age and perhaps attend graduate school later. During the assistant professor years, however, women have newborns enter their homes at a much lower rate than men. During only one period—a brief burst in the sixth and seventh years of being a professor, just after getting tenure, we might assume—does the rate at which women have children approach that of men. Women are likely to be in their late thirties at this point. This relative rise quickly falls off, presumably because of aging. Men continue to have children and, in fact, experience a brief increase of revived fertility at middle age. The principal story of this fertility analysis is that women never catch up. The "baby gap" widens.

**Figure 6: The Baby Lag for UC Women Faculty in Pursuit of Tenure**



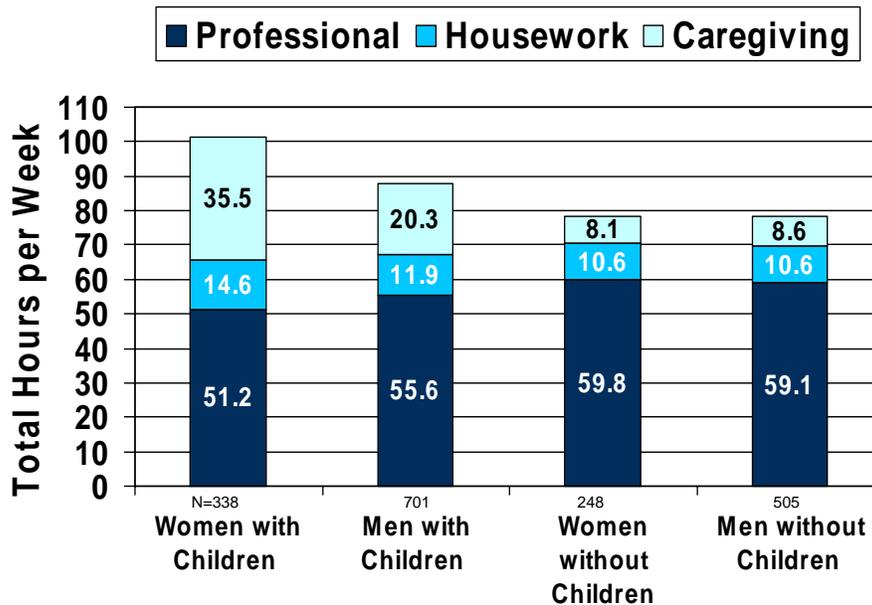
N=2340 Men  
982 Women

\*Year 0 represents assistant professor hire date

Source: Mason, Mary Ann, Angelica Stacy, and Marc Goulden. 2003. "The UC Faculty Work and Family Survey." (<http://ucfamilyedge.berkeley.edu>).

Of course, many factors influence why women do or do not have children. Yet the UC survey suggests that the time women spend on child care compared with men is important. Women between thirty and fifty with children clock over a hundred hours each week on caregiving, housework, and professional responsibilities, compared with a little more than eighty-five for men with children (see figure 7). This model is not very attractive for women who hope to succeed in academia.

Figure 7: Everybody is Very Busy (UC Faculty, ages 30-50)



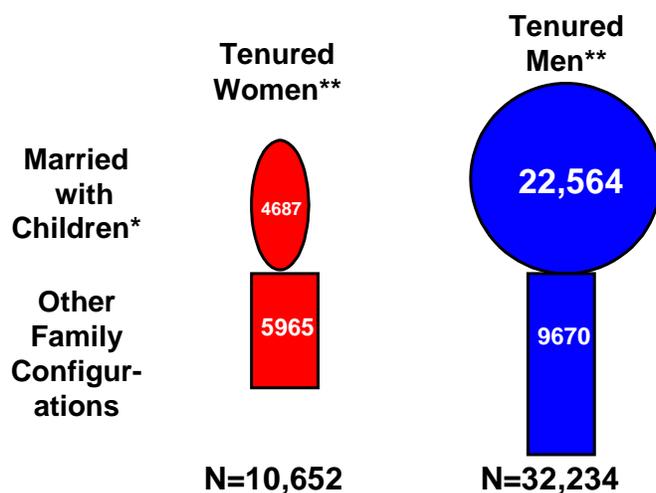
Source: Mason, Mary Ann, Angelica Stacy, and Marc Goulden. 2003. "The UC Faculty Work and Family Survey." (<http://ucfamilyedge.berkeley.edu>).

## Gender Equity and the Baby Gap

Looking at faculty members' family lives in this way suggests that gender equity in terms of family goals is even more unbalanced than it is in terms of career aspirations, raising the fundamental issue of what gender equity means. Women have changed their family formation patterns to pursue the elusive goal of equality in the workplace. Women aiming for high positions in the professional, corporate, and academic worlds neither marry nor have children in their early twenties as their mothers did. The culture has shifted to a delay mode, where a good boost up the career ladder is considered the prudent preface to starting a family. In focusing on professional outcomes as the measure of gender equality, we have failed to notice the widening gap between men and women in forming the families they want, as measured by marriage and children.

A true measure of gender equity in the academy would look at both career and family outcomes. We call this two-pronged measure the "baby gap test," because it takes into account both the gap in professional outcomes for women with children compared with men and the gap in family formation for academically successful women. We need to ask not only how many women are professors and deans relative to their male counterparts; we also need to ask how many women with children are in high places compared with men with children. Viewing the situation in this way reveals that women have much further to go than would otherwise be evident (see figure 8).

**Figure 8: The “Baby Gap Test”**



\*Currently married and had a child in household at any point post PhD to 12 years out.  
 \*\*PhDs from 1978-1984 who are tenured 12 years out from PhD

Source: Survey of Doctorate Recipients. Sciences, 1979-1999, Humanities, 1979-1995

The written responses of UC faculty to our survey provide further confirmation that the current structure of American research universities forces men and women on the fast track, but particularly women, to choose between work and family. Many faculty members reported having sacrificed time with family to demonstrate they were committed to their work. One faculty member advised, "Avoid having kids before getting tenure. I wish it wasn't so, but I had to learn it the hard way myself." Another faculty member observed, "You should know that female graduate students are telling us over and over again across the nation that they are not going to become faculty members because they do not see how they can combine work and family in a way that is reasonable."

Achieving gender equity in terms of careers and families in the academy requires a restructuring of the workplace. We now know that structural changes must be put in place to tackle some of the greatest obstacles to success for women. We also know what many of these changes must be and that they must happen during the "probationary period"—the time of maximum demand in the fast-track academic career, the years leading to tenure. They include stopping the tenure clock for childbirth, generous childbirth leaves, modified duties, and on-site child care.

Many other initiatives could also help attract women job candidates and assist them in achieving professional success and family goals. All of them, however, depend on a collective will to change the campus culture. Passive and active resistance on the part of men (and even many women) poses a serious roadblock to cultural change.

## Step in the Right Direction

At the University of California, with the assistance of a grant from the Alfred P. Sloan Foundation, we have begun a family-friendly initiative for faculty that aims to alter the workplace to accommodate families and promote cultural change (see box below). The university hopes the initiative will help it become more competitive in recruiting and retaining talented faculty, particularly women who may be the stars of their graduate programs but who are reluctant to continue in academia. Many of the program's features are attractive to fathers as well as mothers and will benefit faculty members who are caring for other family members, such as aging relatives.

The new initiative adds to a series of family-friendly programs already in place in the UC system. Introduced in 1988, they were progressive for their time but have had low use rates, mostly because of a discouraging campus culture. Existing policies include an active service-modified duties program that enables tenured and tenure-track faculty members with a newborn or newly adopted child to request a grant of temporary relief from duties (normally partial or full relief from teaching for one semester); a tenure-clock stoppage, which allows a tenure-track faculty member to ask that the tenure clock be stopped for a year; paid leave, which grants a leave with base pay of up to six weeks before, during, or after pregnancy; and unpaid leave of up to one year, which may be granted by the chancellor for care of one's own child or the child of one's spouse or domestic partner.

Our survey found that faculty underuse these programs for several reasons. Some programs are unknown to the faculty. Some go unused because of confusion over eligibility. And some opportunities to take advantage of the programs are waived because of the workplace climate in which they are offered: many faculty members fear that using these policies will be met with retribution. One survey respondent noted, "My chair argued that relief from teaching duties was exceptional." Another noted, "Over the course of my career, I have observed the university increasingly taking on the model of corporate culture. I am not surprised that so few of my junior colleagues have decided to have children. Graduate students pick up the signal very early: devote time to family or community at your own risk."

The new UC initiative focuses not just on building extra features onto an existing framework, but also on ensuring that the entire package becomes institutionalized into the campus culture.

Some of the new proposals, such as introducing part-time tenure-track positions, are controversial. It will take much groundwork to convince all constituencies that the changes are worth the time and money. But they are necessary to ensure gender equity-in both career and family goals-for the next generation of academics. We want to be able respond to the question, frequently asked by our women graduate students, "When is a good time to have a baby?" with a resounding, "Any time."

## Notes

1. Thanks to the Association of Institutional Researchers and the Alfred P. Sloan Foundation for funding our research, and to Nick Wolfinger and Angelica Stacy who worked with us on parts of this analysis.
2. The science portion of the Survey of Doctorate Recipients has been sponsored by the National Science Foundation (NSF), the National Institutes of Health, and others from 1973 to the present. The humanities section of the survey was sponsored by the National Endowment for the Humanities from 1977 to 1995, and then discontinued because of funding issues. The use of NSF data does not imply NSF endorsement of research methods or conclusions contained in this report.
3. Mary Ann Mason, Angelica Stacy, and Marc Goulden, "The UC Faculty Work and Family Survey," 2003. <http://ucfamilyedge.berkeley.edu>.
4. Portions of the following article were included in this article in a modified form: Mary Ann Mason and Marc Goulden, "Marriage and Baby Blues: Redefining Gender Equity In the Academy," *Annals of American Political and Social Scientist* (forthcoming).

*Mary Ann Mason is dean of the Graduate Division of the University of California, Berkeley. Marc Goulden is the division's principal analyst.*

## Proposed Additions to the University of California's Family-Friendly Package

- A flexible part-time option for tenured and tenure-track faculty that can be used for limited periods (up to five years) as life-course needs arise.
- A guarantee to make high-quality child-care slots available to tenured and tenure-track faculty, particularly new hires.
- An institutional commitment to assist new faculty members with spousal-partner employment and other family-related relocation issues.
- Re-entry postdoctoral fellowships that are designed to encourage PhDs who have taken time off from their careers to provide care to others to return to the academy.
- Discounting of family-related resume gaps in the hiring of faculty.
- Establishment of school-break child care and summer camps.
- Emergency backup child care programs.
- Adoption benefits.
- Marketing of the family-friendly package as a major recruitment tool.
- Building of the necessary institutional mechanisms to ensure the success of new and existing policies (e.g., "school for chairs," family-friendly brochures, new-faculty orientation, Web sites on work and family).

As a result of these changes, the University of California hopes to enjoy a competitive advantage in hiring and retaining the best and brightest academics in the country, particularly women faculty.