# Marriage and Baby Blues: Re-defining Gender Equity 

By Mary Ann Mason and Marc Goulden
In August 2000 I became the first woman Graduate Dean at the University of California, Berkeley, and greeted a class of 2,500 new graduate students, more than half of whom were women. Berkeley is representative of major research universities across the nation. It offers a full range of PhD programs ranging from Bioengineering to Film Studies, 95 in all, conferring more doctorates than any other university in the world. Its 11 major professional graduate schools represent almost all the professions; from law and public health through journalism and business administration. Law alone registers more than 250 new students each fall.

This was a moment of achievement hoped for by the women of my generation who had struggled to open the gates. Graduate professional and academic degrees represented the gatekeepers to the high-status maledominated occupations. Achieving these degrees, we believed, would lead to professional and economic equality. Once a critical mass of women was allowed to enter the "fast track," the power balance between men and women would naturally be achieved in boardrooms, courtrooms and university classrooms.

The sharp and relentless increase in women's participation in graduate education over the past 30 years is a striking national trend. Fewer than $10 \%$ of doctorates and professional degrees in most fields were granted to women in the 1960's. Now, women are about half of the student bodies in most law schools, medical schools and at least half of all doctoral programs in the social sciences and humanities. Even in the male trenches of the physical sciences and engineering, their numbers have grown dramatically.

Does the persistent steady climb in all disciplines and the dramatic rise in all professional schools over the last 30 years indicate that women are on a winning trajectory? Are women at last achieving equality in the fast track professions?

Too soon, my enthusiasm was tempered by a familiar reality check. Looking around at the senate faculty meeting that marks the beginning of the academic new year, I saw, as usual, only a few women's faces. As a long time faculty member, I was accustomed to this sight. At Berkeley, only 25\% of the tenure track (those who have achieved tenure or who are eligible for tenure) faculty are women and that number has been stagnant for about a decade. A quick calculation of the recent rate of change indicated that women will have to wait until the year 2087 to comprise half of the ladderrank faculty at UC Berkeley.

## University of California, Berkeley



Our search for better information to help us understand women why women were advancing so slowly first led us to the incredibly rich Survey of Doctorate Recipients (SDR). The SDR is perhaps the best life course employment database in the U.S., following more than $160,000 \mathrm{PhD}$ recipients across all disciplines throughout their career, until they reach age 76. With surveys every two years since 1973, the SDR provides a full picture of how career and family gains and losses are balanced over life. The scope of the SDR is similar to the famous longitudinal clinical trials like the Nurses' Health Survey or the Framingham Heart Survey. Following a

[^0]huge population for years allows researchers to isolate specific factors and, with a great deal of certainly, to predict their importance.

We chose to follow the effect of family formation since we could clearly measure this factor. Other, more diffuse issues of gender discrimination may be important, but are not possible to measure with this kind of database. Soon we began to call our pursuit the "DO BABIES MATTER" project. The name stuck because it strikes at the heart of the matter that feminists have often preferred to skirt. It also touches a nerve for young women entering the fast track who wonder what compromises they will have to make in order to accommodate both career and family. It allows us to address the question my women graduate students always ask me. "Is there a good time to have a baby?

## Do babies matter in achieving career success?

At first we examined the effect of family formation on achieving tenure for both men and women. In the academic world this is the prize that assures a secure career. However, tenure is an all or nothing victory; losers must leave the university. Normally this event occurs after a five to seven year intense probationary period, where new assistant professors are scrutinized continuously, following the receipt of the PhD or a postdoctoral position. It is in this intense period that an academic must make his or her mark in publications, teaching, and service. Standards may differ somewhat across colleges and universities but, for all, tenure is the make-or-break point.

After months of preparing and analyzing the data, we found, not surprisingly, that babies do matter. They matter a great deal - and the timing of babies matters too. What was surprising is that the differential patterns for women and men are almost identical whether they hold PhDs in the humanities, social sciences, or hard sciences. The patterns also hold true across the spread of four-year institutions, from large research universities like Berkeley through small liberal arts colleges.
> * Overall, men with "early" babies are $38 \%$ more likely than women with "early" babies to achieve tenure.

[^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

By our definition, an "early baby" is one who joins the household at any point up to five years after his or her parent completes a PhD (this includes all the student years). The average age for receiving a PhD is 33 . Many professors do not secure tenure under the age of 40 . These busy career building years as graduate student, assistant professor and, in some fields, postdoctoral fellow are also the most likely reproductive years, particularly for women. These are the years when the fast track and the reproductive track are on a collision course.


* Preliminary results based on Survival Analysis of the Survey of Doctorate Recipients (a national biennial longitudinal data set funded by the National Science Foundation and others, 1979 to 1995). Percentages take into account disciplinary, age, ethnicity, PhD calendar year, time-to-PhD degree, and National Research Council academic reputation rankings of PhD program effects. For each event (PhD to TT job procurement, or Associate to Full Professor), data is limited to a maximum of 16 years. The waterline is an artistic rendering of the statistical effects of family and gender.
*Women with early babies leave academia before obtaining their first tenure track job.
The largest leak in the pipeline between receipt of the Ph.D. and tenure occurs before obtaining the first position. This leak is disproportionately composed of women who have early babies. Their decision may be to take a few years off before returning to tenure track position, but our research indicates that there very little re-entry into the pipeline.


## * Single mothers are more successful than married mothers.

This finding contradicts everything we think we know about single mothers. We believe single mothers have less income and fewer helping hands. How can a mother alone handle the long work hours and stress of the early years as a professor?

## * Women with late babies do as well as women without children.

Late mothers - those who begin motherhood more than five years post-PhD - enjoy a better record of achieving tenure than women with early babies. Presumably most women who have babies later in their career have already achieved job security. However, these later mothers are few in number and they are likely to have only one child

* For men, being married with young children is the dominant mode of success; for women, it is not.

The majority of women who achieve tenure are not married with children 12 years out from the PhD ; in contrast, the clear majority of men who achieve tenure are married with children.

## * Men who have "early babies" do very well. In fact, they do better than all others, including single men and women.

Babies matter for men as well, but in the opposite way. Marriage and children provide a distinct boost for men, just as they provide a clear penalty for women.

After we had noted the departure of mothers from the tenure track, we asked, "What happens to mothers who drop out, or are forced out of the tenure track race?"

## * A high percentage of mothers slide into the second tier, the part-time, adjunct and lecturer corps; the "gypsy scholars" of the university world.

An unintended consequence of the feminization of graduate education appears to be the rapid development of the "second tier"; the marginally employed. We know two facts about this dynamic segment: more than $50 \%$ of all undergraduate courses are now taught by these temporary instructors, and this swelling labor force is disproportionately composed of mothers. We also know that this second tier, composed largely of low-paid women, is a growth sector in all professions, e.g., the hourly contract lawyer and the independent business consultant.

A life story was emerging. We were beginning to understand the effects of family formation on the career lives of men and women. Married women with children were departing or being forced out of academia, often into the second tier. Single mothers did better than one would expect and single women without children did best. Married men were marching at the head of the pack in getting a job and getting tenure. The advice commonly given to wait until tenure before having a child proved true. Since the average age at tenure is almost 40, this advice has obvious biological drawbacks.

## DOES CAREER SUCCESS AFFECT FAMILY FORMATION?

Our study, like all others, counted success in terms of the professional goal reached. We had examined the effect of family formation on career but we had not studied the opposite; the effect of career on family formation. Now we turned the data on its head and asked, "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 for women.

*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 without children ever become mothers.
* Women who achieve tenure are far more likely than men who achieve tenure to be single $\mathbf{1 2}$ years out from the $\mathbf{P h D}$ - more than twice as likely.


## * If married, women are significantly more likely than men to experience divorce or separation.

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 women who have left the race and are the adjunct, part-time and "gypsy scholars" look very different. They look more like men. Second-tier women have children and experience marriage stability much like men who become professors. Women, it appears, cannot have it all, while men can.

Of course, not all women want children or marriage. As one of my faculty colleagues 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 measures only married and not married.

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 these crucial life decisions.

To investigate further this and other work and family issues, we surveyed the entire ladder-rank faculty of the UC system, about 8,700 in
number. We received a high response rate (over $50 \%$, with more than 4,400 respondents) indicating that this is clearly of importance to many faculty. Among the many significant responses we received on a wide range of questions, the following clear statement was made consistently across all nine campuses.

* Women faculty were more than twice as likely as men faculty to indicate they had fewer children than they wanted-a full $38 \%$ of women said so in comparison to $18 \%$ of men.

Familial Loss for UC Ladder-Rank Faculty


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

While not exactly a "smoking gun" this report suggests the career/children tradeoff that successful women make is not without regret for many.

This survey also allowed us to see, at a snapshot in time, the child bearing patterns of men and women faculty.

## The Baby Lag for UC Women Faculty in Pursuit of Tenure



As you can see women more often than men have children at an earlier age, and then perhaps attend graduate school later. During the Assistant Professor years, however, they have a much lower rate of childbirth than men do. There is only one period of time, a brief burst in the sixth and seventh years, just after getting tenure, we might assume, that women's rates of childbirth are again almost as high as are those of men. This relative rise quickly falls off, presumably because of the aging phenomenon. Men continue to have children and, in fact, experience a brief burst of revived fertility at middle age. The principal story of this fertility analysis is that women never catch up.

There are many reasons of course that determine why women do not have children, but the UC survey suggests that the time women spend in childcare compared to men may be important. Women with children clock about 94 hours per week between caregiving, housework, and professional responsibilities compared with a little over 80 for men with children. This is not a very attractive model for women who hope to succeed in Academia

## Everybody is Very Busy (UC Faculty)

$\square$ Professional $\square$ Housework $\square$ Caregiving


## RE-DEFINING GENDER EQUITY

This life-course view suggests that gender equity in terms of familial gains is even more unbalanced than gender equity in professional gains, raising the fundamental issue of what gender equity means in a male dominated profession. Thirty-odd years after the feminist revolution equality in the workplace is still only distantly visible. Yet women, as compared to men, have greatly changed their family formation patterns in pursuit of that elusive goal. Women aiming for high position in the professional, corporate and academic world do not 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 family formation. Meanwhile, focusing on professional outcomes as the measure of gender equality, women have failed to notice that the gap between the family outcomes of men and women, as measured by marriage and children, has greatly widened.

A true measure of gender equity in the Academy would look at both career and family outcomes. 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 relative to men. Viewed this way, we can see that women have much further to go than by our current forecasts

*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

Achieving gender equity in both professional and familial outcomes requires a re-structuring of the workplace. We now know that structural changes in the workplace which tackle some of the greatest obstacles for women must be put in place. We also know what many of these are. Many focus on the "probationary period" the period of maximum demand which occurs at the beginning of the fast track career; the years leading to tenure. These include: stopping the tenure clock for childbirth, generous childbirth leaves and on-site childcare.

There are many other initiatives which could both help attract women candidates and assist them in achieving both professional success and family goals. All of these, however, depend upon a collective will to change the campus culture. The passive and active resistance on the part of men and many women pose serious roadblocks to cultural change.

At the University of California we have initiated a Faculty Family Friendly Initiative funded by the Alfred P. Sloan Foundation which is aimed
at altering the workplace structure to accommodate families and to promote cultural change. The incentive for initiating change is to be more competitive in recruiting and retaining talented faculty; particularly women who may be the stars of their graduate program, but are reluctant to continue in Academia. Many of the features of the initiative are attractive to fathers as well as to mothers, as well as to faculty who are caring for others.

We are adding to a series of policies which already offered many important and for their time, progressive initiatives, but which have not been well utilized, in large part because of a discouraging campus culture.

Our old policies include:

## Existing Family Friendly Policies for Ladder-Rank Faculty*

- Active Service-Modified Duties (ASMD)—Ladder-rank faculty who have "substantial responsibility for the care of a newborn child or child under age five placed for adoption or foster care" may upon request be granted a temporary relief from duties (normally partial or full relief from teaching for one semester).
- Tenure-Clock Stoppage-Tenure-track faculty who have "substantial responsibility for the care of a newborn child or child under age five placed for adoption or foster care" may request a year stoppage of the tenure clock (capped at a total of 2 years).
- Paid Leave-Childbearing leave is granted on request to an academic appointee, before, during, and after she gives birth to a child. Academic Senate members on childbearing leave may receive base pay for up to six weeks. Those who need additional leave for medical circumstances may request it.
- Unpaid Leave-The Chancellor may also grant academic appointees up to one year of unpaid parental leave to care for their own child, their spouse's child, or the child of their domestic partner. If this unpaid leave is combined with childbearing leave, family and medical leave or a period of Active Service-Modified Duties, the total period may not normally exceed one year for each birth or adoption.
*All of these family friendly policies were first instituted by UC Office of the President in July, 1988.
These proposals, initiated in 1998 were considered ahead of their time. Our current faculty survey, however, found that not only are many of these proposals not in use, they are unknown to the faculty.

Our new proposals focus not just on building new features onto an existing framework, but in assuring that the entire package becomes institutionalized into the culture.

## New Proposed Elements of a Family Friendly Package for UC Ladder-Rank Faculty

- A flexible part-time option for ladder-rank faculty with substantial familial caregiving responsibilities.
- A guarantee to make high quality child care and infant care slots available to ladder-rank faculty, particularly new hires.
- An institutional commitment to assist new faculty with spousal/partner employment and other familial-related relocation or location issues.
- Reentry postdoctoral fellowships to encourage parents who have taken time off to return to the academy.
- Discounting of familial-related resume gaps in the hiring of faculty.
- An establishment of school-break childcare and summer camps.
- Emergency back-up child care programs.
- Marketing of the Family Friendly Package as a major recruitment tool.
- Building the necessary institutional mechanisms to assure success of new and existing policies (e.g. "School for Chairs," "Family Friendly Brochures," "New Faculty Orientation," "Work and Family Web Sites", etc.)
- Result-University of California will enjoy a competitive advantage in hiring and retaining the best and brightest faculty in the country, particularly women faculty.

Some of these new proposals are controversial, such as the part-time tenure track, and will take a good deal of groundwork to convince all constituencies that they are worth the time and money. They are, however, necessary strategies to assure gender equity in both professional and family goals for the next generation of academics.


[^0]:    ${ }^{1}$ Sponsored by the National Science Foundation, the National Institute of Health and others to the present for the Sciences (including social sciences); and the National Endowment for the Humanities up through 1995.

[^1]:    ${ }^{2}$ Special thanks to the Association of Institutional Researchers who provided us with a grant to conduct this research. And special thanks to Nick Wolfinger who worked with us on the Leaks in the Pipeline analysis.

