

# Do Babies Matter?

## Mary Ann Mason

**Professor and Co-Director Berkeley Law Center on Health Economic and Family Security (CHEFS)**

Mary Ann Mason's scholarship spans children and family law, policy and history. Recent works have focused on working families, in particular the issues faced by the surging numbers of professional women in law, medicine and the academic world. Her most recent book (co-authored with her daughter Eve Mason Ekman) is *Mothers on the Fast Track: How a New Generation Can Balance Family and Careers* (Oxford: 2007).

From 2000 to 2007, she served as the first woman Dean of the Graduate Division at UC Berkeley, with responsibility for nearly 10,000 students in more than 100 graduate programs. During her tenure, she championed diversity in the graduate student population, promoted equity for student parents, and pioneered measures to enhance the career/life balance for all faculty. Her research findings and advocacy have been central to ground-breaking policy initiatives, including the ten-campus "UC Faculty Family Friendly Edge" and the nationwide "Nine Presidents" summit on gender equity at major research universities. Her first book on work and family was *The Equality Trap* (1988).

Among her other books are two major works on child custody, *From Father's Property to Children's Rights: A History of Child Custody in America* (Columbia:1994) and *The Custody Wars: Why Children are Losing the Legal Battles and What We Can Do About It* (Basic:1999). She also co-edited (with Arlene Skolnick and Steve Sugarman) *All Our Families: New Policies for A New Century* (Oxford 2000, 2003) and with Paula Fass, *An American Childhood* (NYU:2000).

### *Education:*

B.A. (cum laude) Vassar College  
Ph.D (American History), The University of Rochester  
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# **DO BABIES MATTER?**

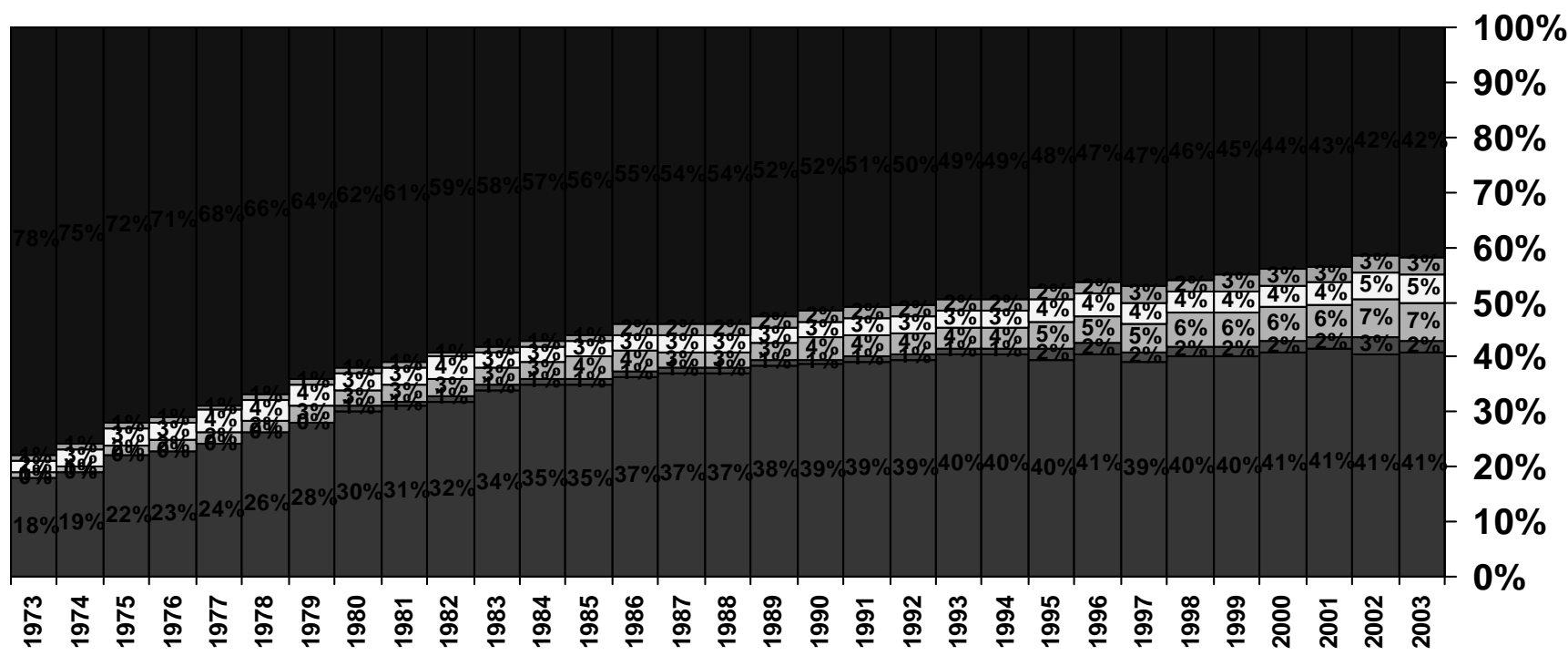
## **Lake ArrowHead**

October 16, 2008

**Mary Ann Mason**

**University of California, Berkeley**

# PhD Recipients from U.S. Universities (U.S. Citizens only)



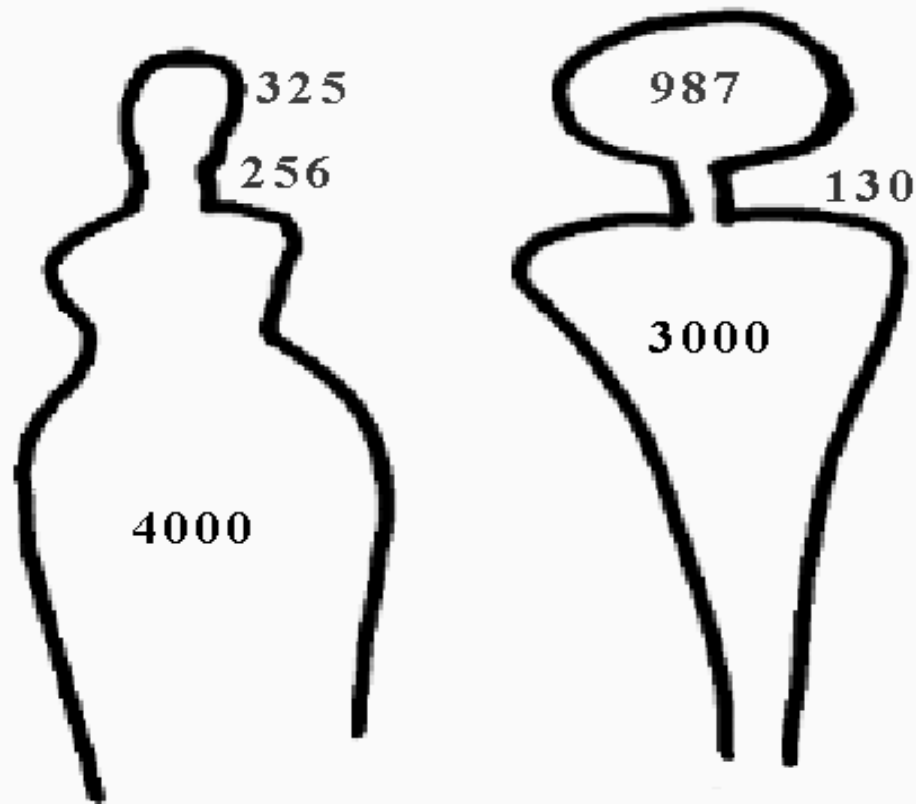
Source: NSF, Survey of Earned Doctorates, taken from Webcaspar.

Source: UCOP, "Long Range Planning Presentation," before the Board of Regents, September 2002

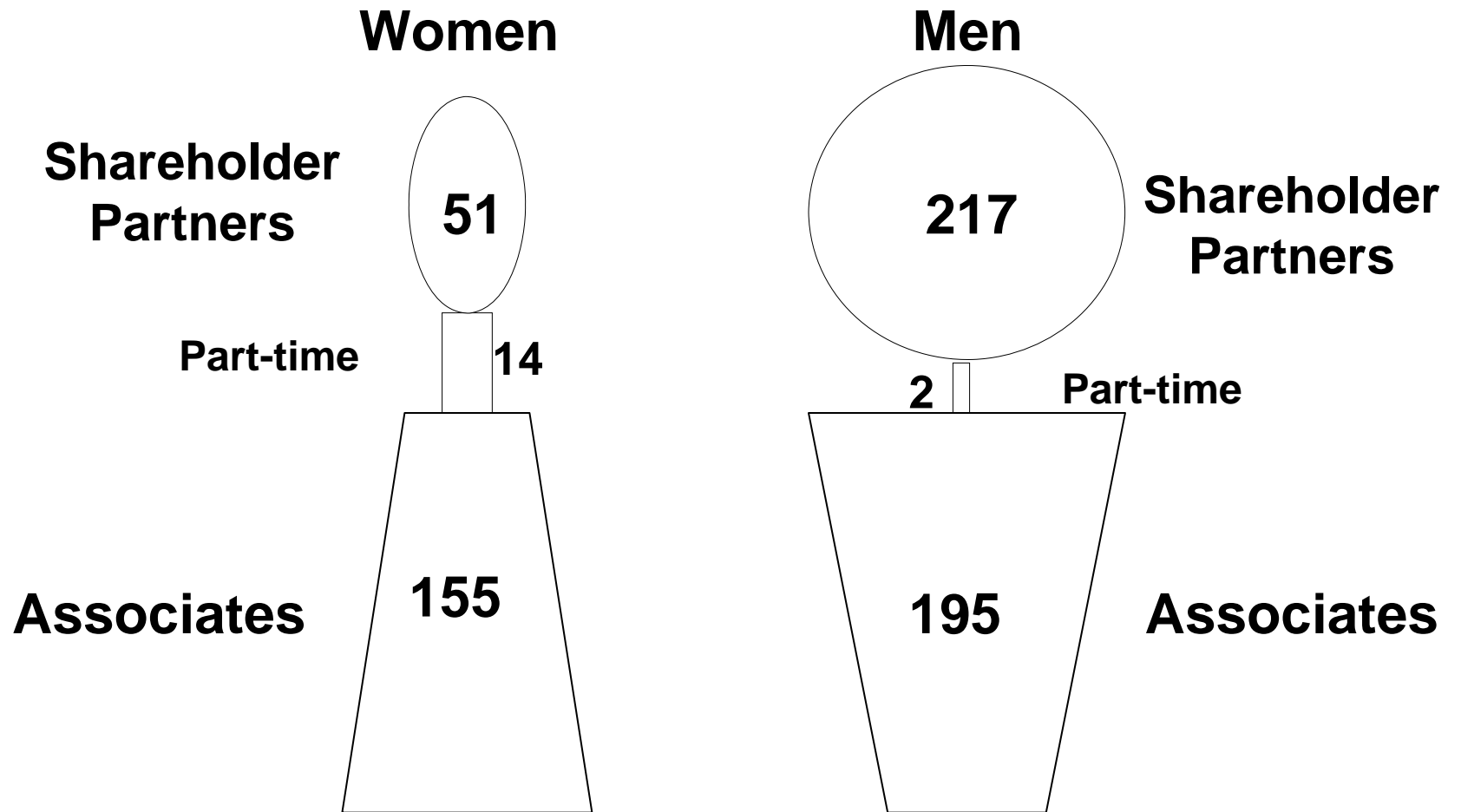
Do Babies Matter project funded by the Alfred P. Sloan Foundation.  
 Mary Ann Mason, UC Berkeley; Marc Goulden, UC Berkeley; Nick Wolfinger, University of Utah

# University of California, Berkeley

(2002)



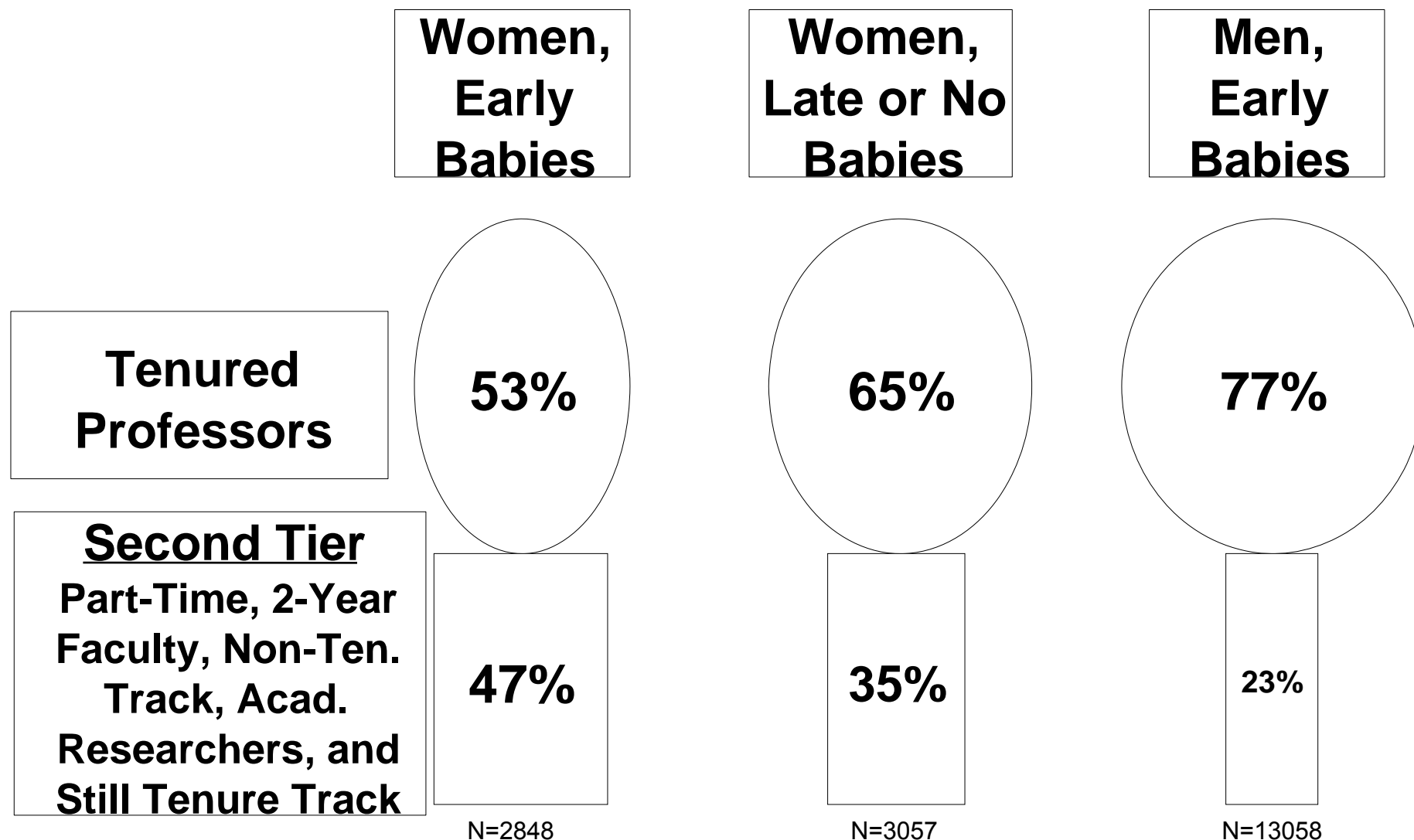
# Large San Francisco Law Firm



# **Survey of Doctorate Recipients (SDR)**

- **A national biennial longitudinal data set of PhD recipients' post-degree employment experiences funded by the NSF and others, 1973 to present (NEH funded the Humanities, 1977-1995).**
- **Includes a ~10% sub-sample of PhD recipients drawn from the Survey of Earned Doctorates (SED) each year -- and individuals are resurveyed until they reach age 76, leave the country, or refuse to participate (over 160,000 individuals have participated).**
- **Response data is weighted based on sampling design and re-weighted each survey cycle, based on attrition (e.g. gender, ethnicity) to reflect US PhD population.**
- **Starting in 1979 and 1981, respondents were asked about their marital status (1979) and the number of children (1981) living in their household (under 6, 6-18, etc.).**
- **Arguably the best employment dataset in the country.**

# Heads and Necks of Science PhD Recipients\*

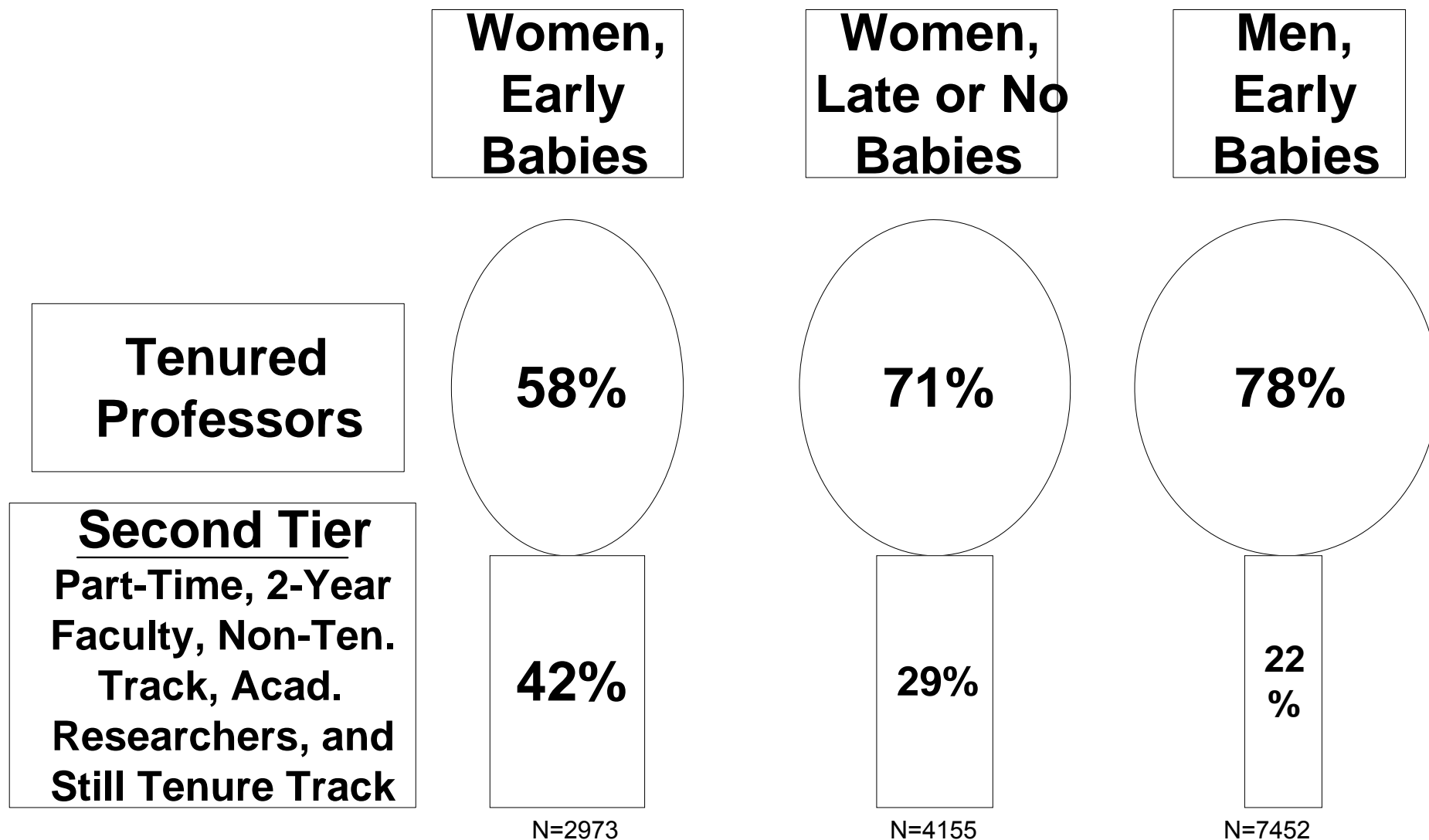


**\*PhDs from 1978-1984 Who Are Working in Academia 12 to 14 Years Out from PhD**

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

Note: The use of NSF Data does not imply the endorsement of research methods or conclusions contained in this report.

# Heads and Necks of Humanities and Social Science PhDs\*



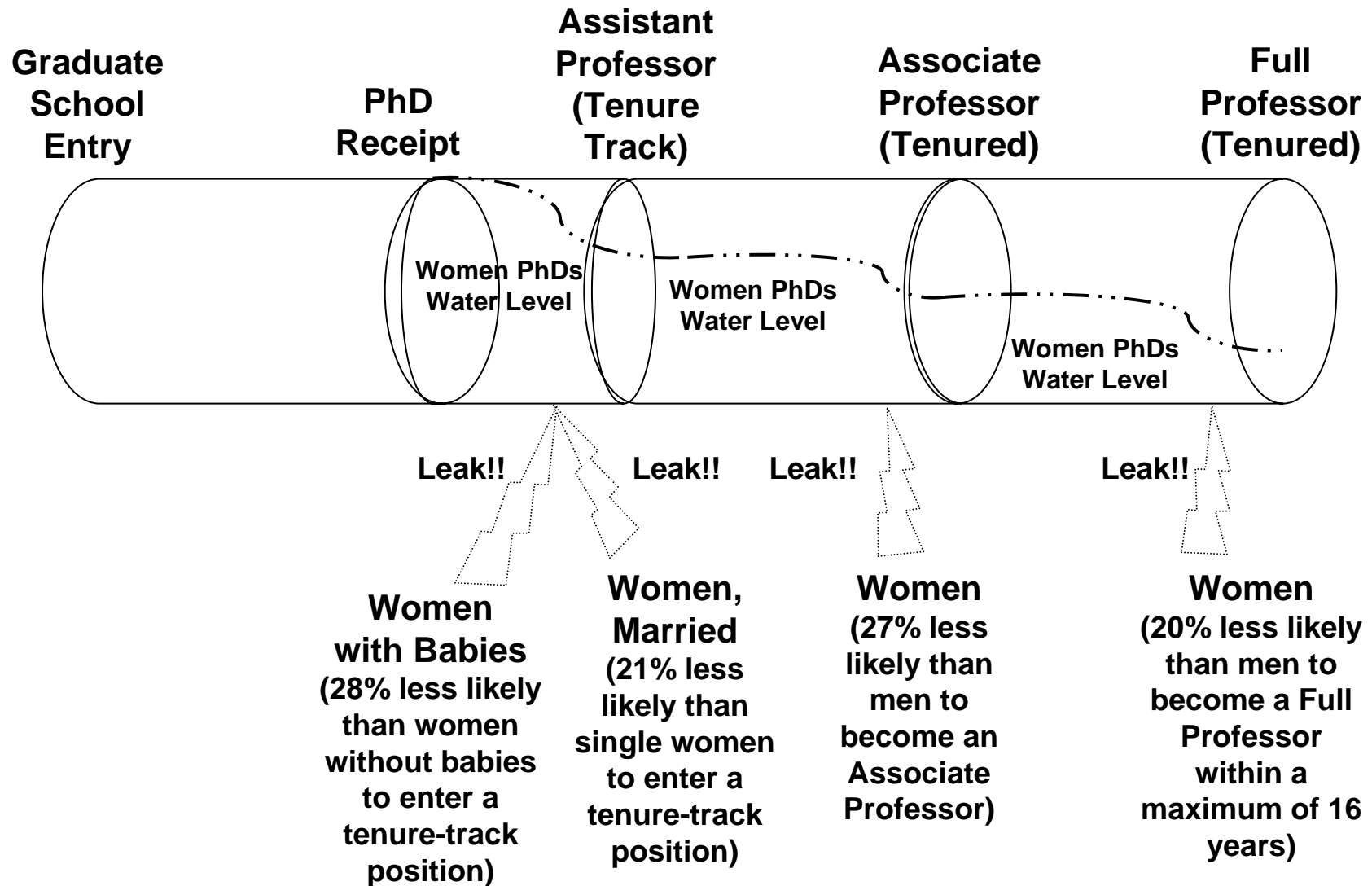
**\*PhDs from 1978-1984 Who Are Working in Academia 12 to 14 Years Out from PhD**

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

Note: The use of NSF Data does not imply the endorsement of research methods or conclusions contained in this report.



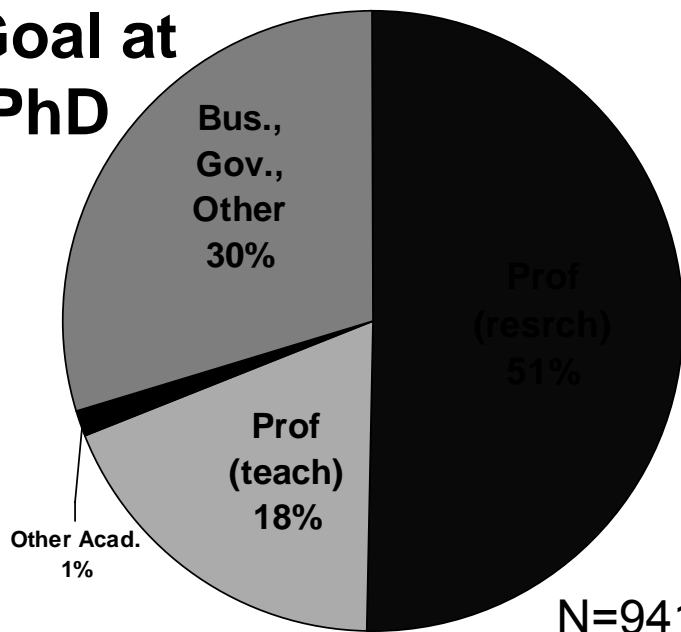
# Leaks in the Academic Pipeline for Women\*



\* 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.

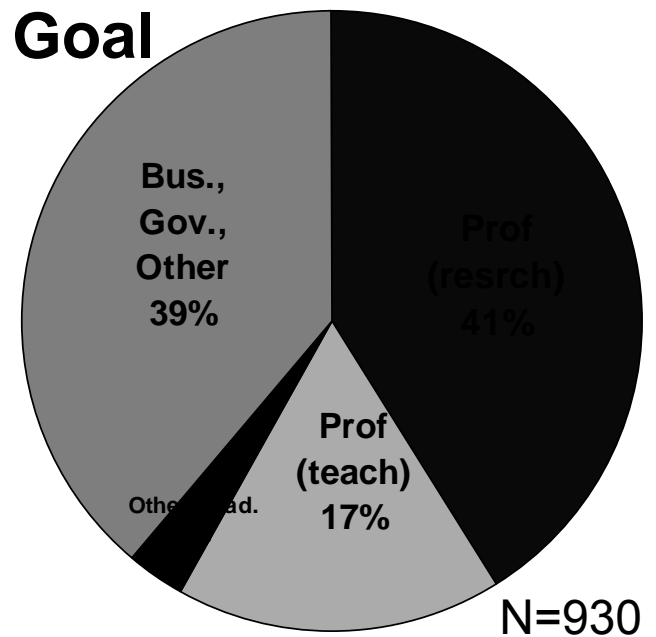
## Career Goal at Start of PhD

### Men



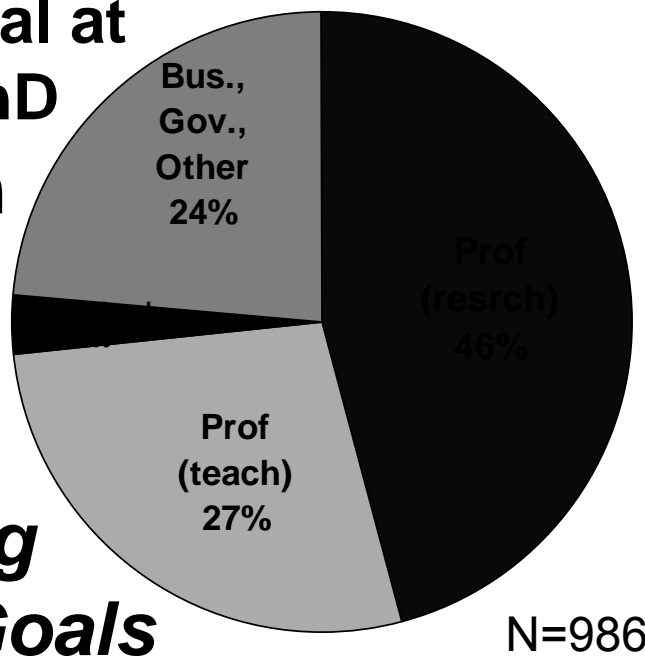
## Current Goal

### Men



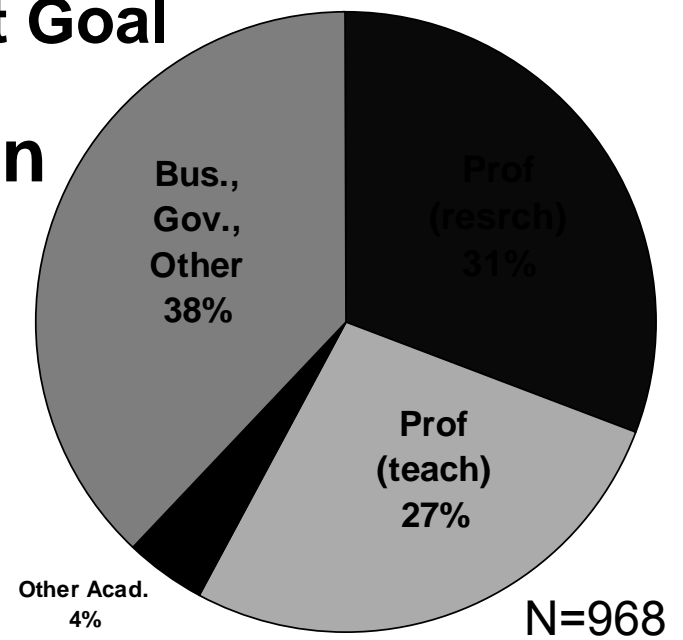
## Career Goal at Start of PhD

### Women



## Current Goal

### Women



## *Changing Career Goals*

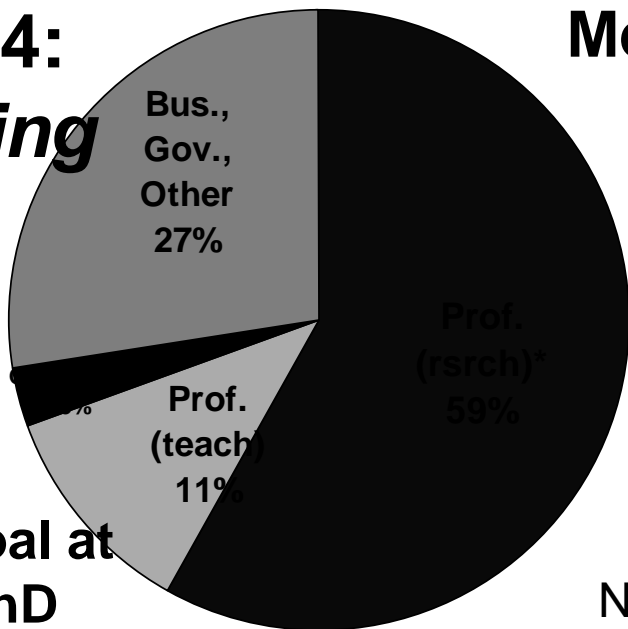
**Figure 4:  
Changing  
Career  
Goals**

**Men**

**UC PhD  
Students:  
New Parents  
Paid Off  
Federal  
Grants at  
Birth/Adopt.**

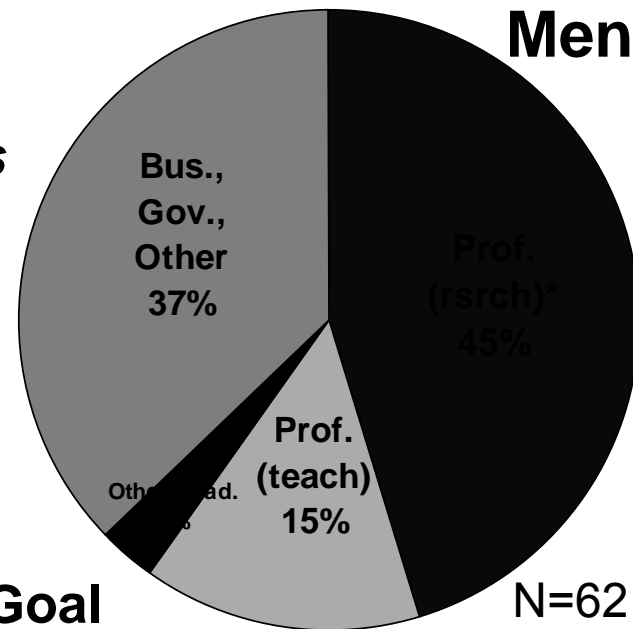
**Men**

**Career Goal at  
Start of PhD**



N=62

**Current Goal**



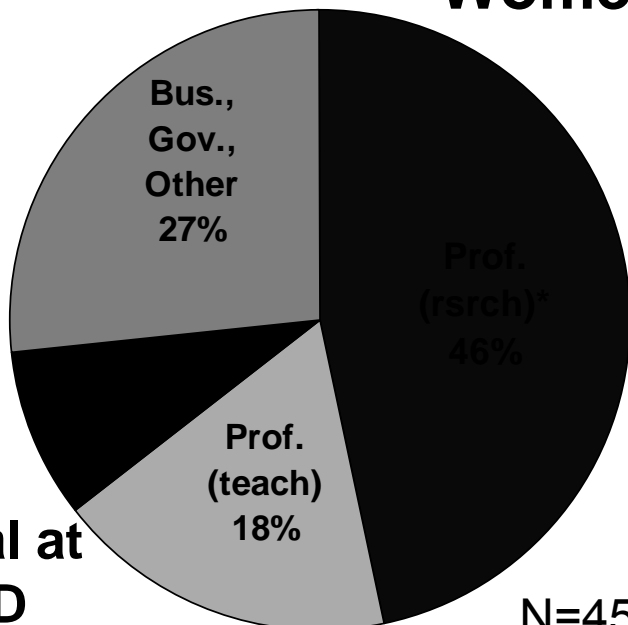
N=62

*\*Professor w.  
Research  
Emphasis*

**Women**

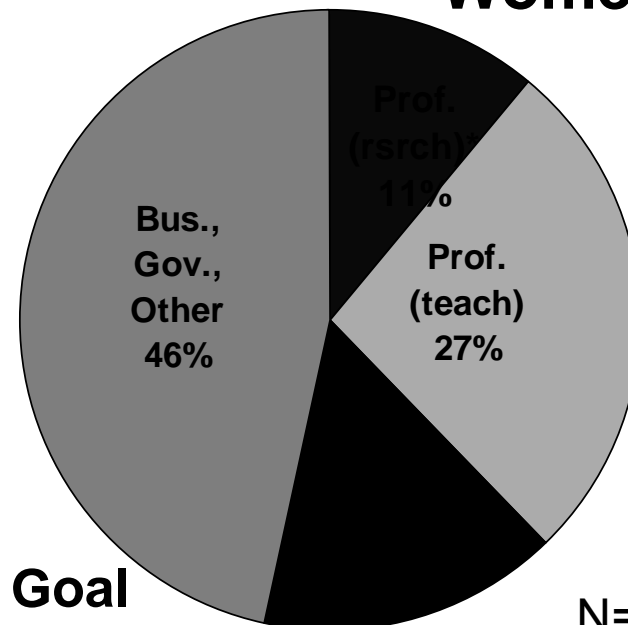
**Women**

**Career Goal at  
Start of PhD**



N=45

**Current Goal**



N=45

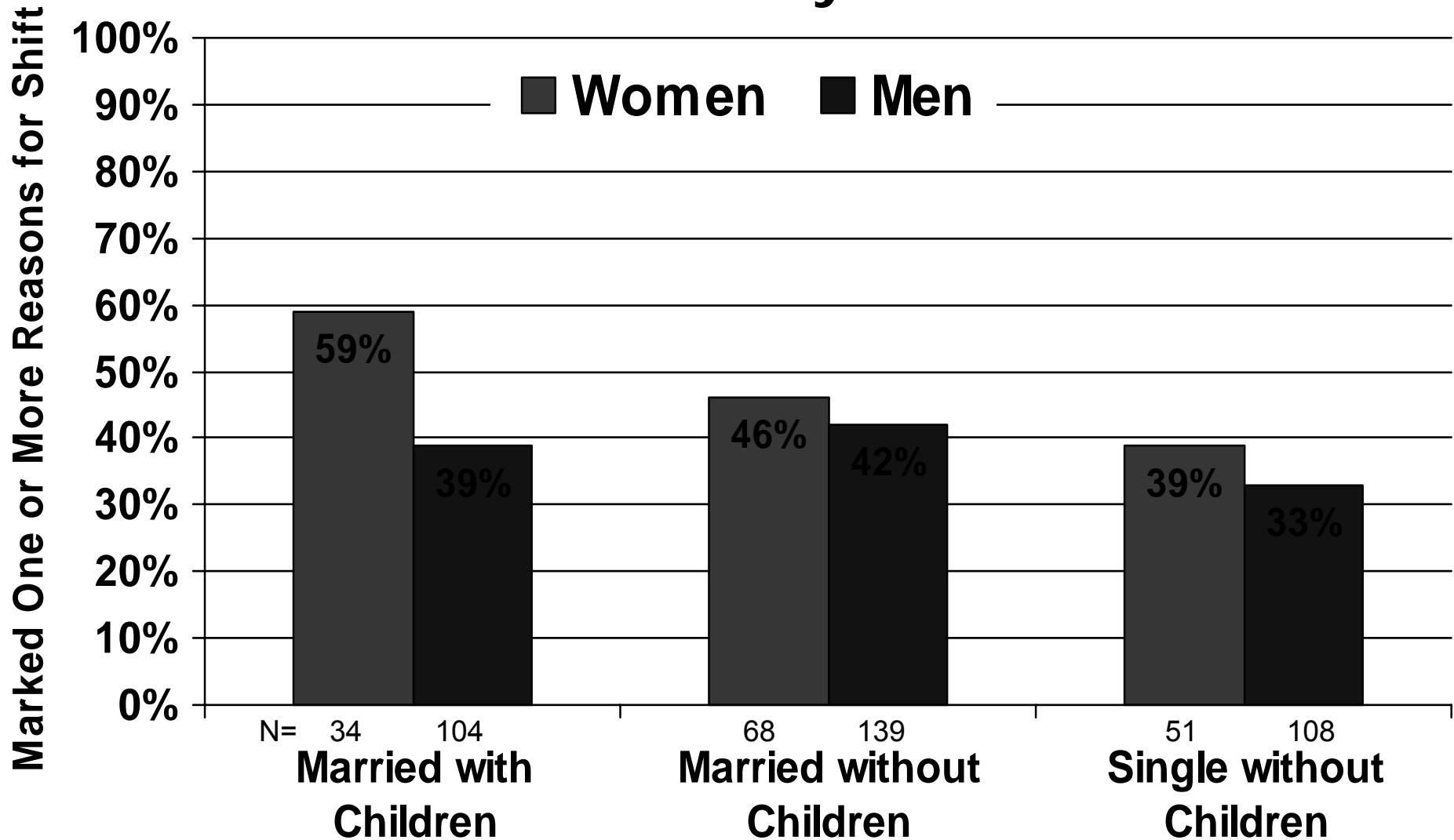
## *Shifting Career Goal away from Professor with Research Emphasis*

<i>% Citing Factor As "Very Important*" in Career Goal Shift</i>		<b>Women</b>	<b>Men</b>
<b>1</b>	<b>Other life interests</b>	<b>48%</b>	<b>35%</b>
<b>2</b>	<b>Issues related to children</b>	<b>46%</b>	<b>21%</b>
<b>3</b>	<b>Negative experience as PhD student</b>	<b>46%</b>	<b>44%</b>
<b>4</b>	<b>Professional activity too time consuming</b>	<b>45%</b>	<b>35%</b>
<b>5</b>	<b>Geographic location Issues</b>	<b>40%</b>	<b>28%</b>
<b>6</b>	<b>Feelings of isolation/alienation as PhD student</b>	<b>35%</b>	<b>31%</b>
<b>7</b>	<b>Spouse/partner issues or desire to marry</b>	<b>32%</b>	<b>22%</b>
<b>8</b>	<b>Bad job market</b>	<b>30%</b>	<b>29%</b>
<b>9</b>	<b>Job security</b>	<b>29%</b>	<b>29%</b>
<b>10</b>	<b>Career advancement issues</b>	<b>27%</b>	<b>34%</b>
<b>11</b>	<b>Other career interests</b>	<b>27%</b>	<b>23%</b>
<b>12</b>	<b>Monetary compensation (e.g. salary, benefits)</b>	<b>23%</b>	<b>31%</b>

## ***Shifting Goal away from Professor with Research Emphasis: Selected Quality-of-Life Related Explanations by UCB Men & Women Doctoral Students***

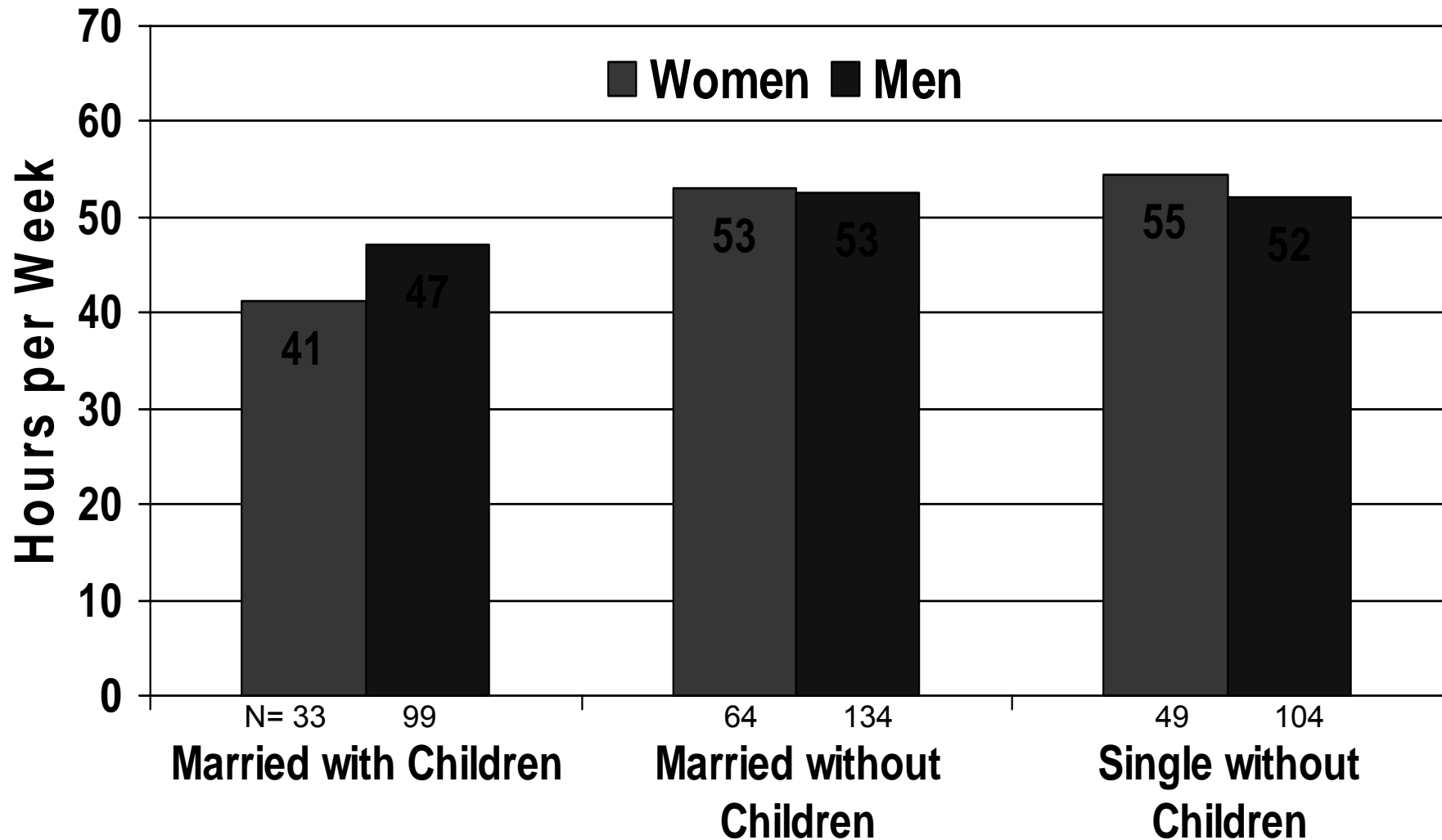
- ***“I feel unwilling to sacrifice a healthy family life and satisfying personal life to succeed in academics, and thus industrial options have become more appealing.”***
- ***“Fed up with narrow-mindedness of supposedly intelligent people who are largely workaholic and expect others to be so as well.”***
- ***“I look at the lives of the professors I see every day, and I want to emulate none of them.”***
- ***“I really want to be a mom. This seems like an extremely difficult goal to align with the goal of being a faculty member at a top university in engineering.”***
- ***“Since beginning my doctoral work, I have become convinced that very few, if any, female professors are able to have stable, fulfilling family lives of the sort that I wish for (a stable marriage and children).”***
- ***“Academia is not very supportive of women. There are challenges at every step of the way in terms of having to make choices. I want to be able to have a family, have children and enjoy being a mother and wife which are close to impossible when one chooses academia. The clock is ticking and it does not stop for anything or anyone.”***

# Percentage of UCB Postdocs Who Indicated a Career Goal Shift Away from Academia\*



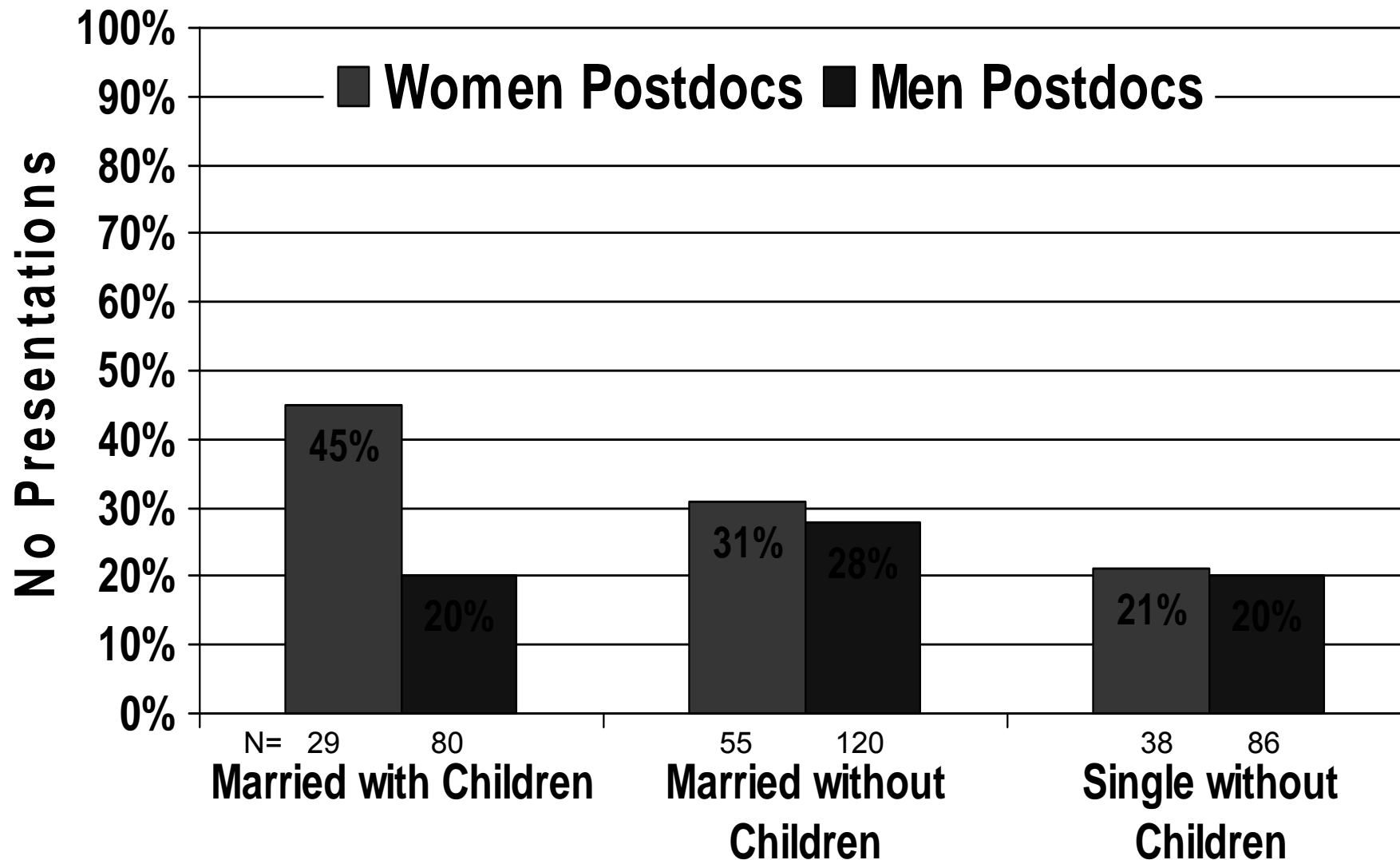
\*Among all survey participants.

# Average Number of Hours Worked Each Week as a Postdoc



Source: UC Berkeley and LBNL Postdoc Survey, 1999. Conducted by Maresi Nerad, Joe Cerny, and Linda McPheron.

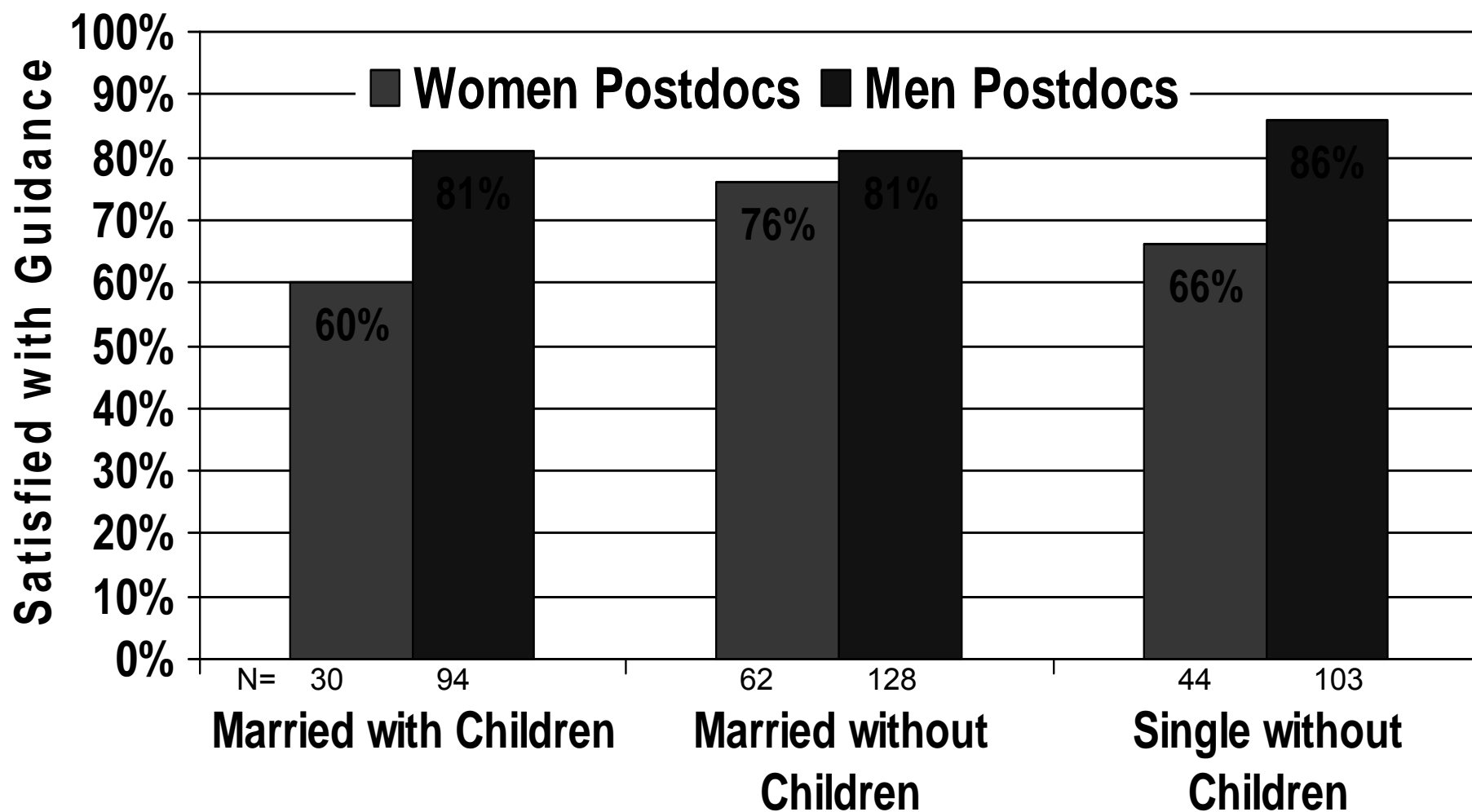
# No Presentations at Conferences in the Last Year



Source: UC Berkeley and LBNL Postdoc Survey, 1999. Conducted by Maresi Nerad, Joe Cerny, and Linda McPherson.

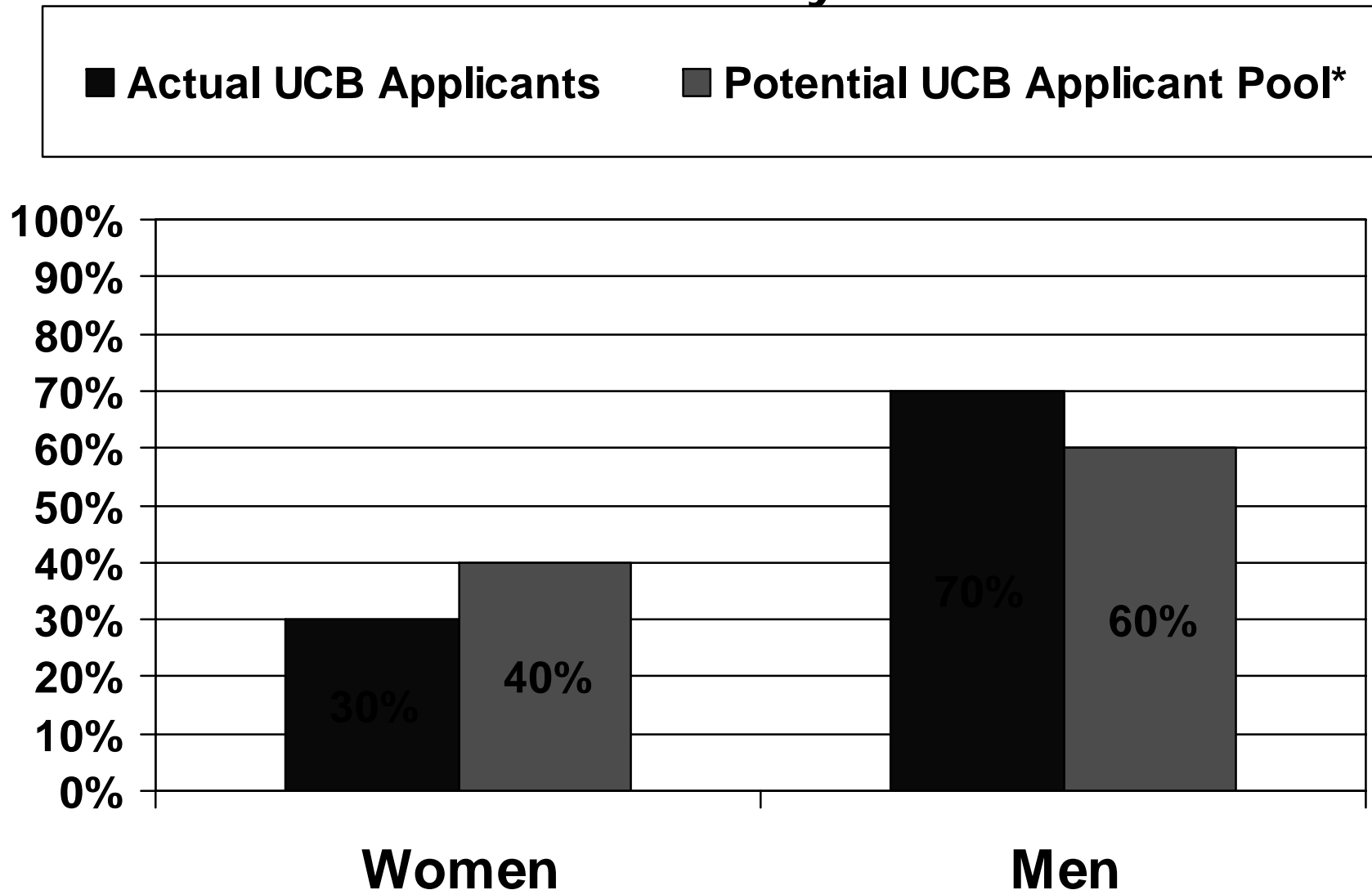


# “Very Satisfied” or “Satisfied” with Quality of Guidance Received from Postdoc Sponsor\*



\*“Do Not Know” excluded.

# The Pool Problem at UC Berkeley: Ladder Rank Faculty



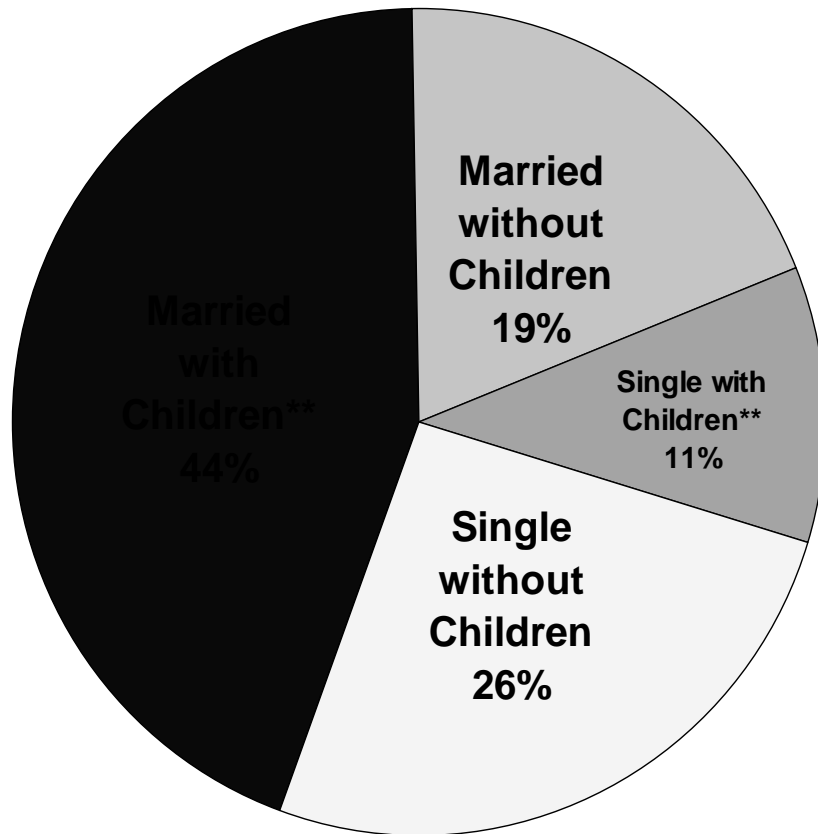
\*Data prepared by Angelica Stacy, Associate Vice Provost for Faculty Equity, UCB. *Potential UCB Applicant Pool* is derived from NCES data on PhD degrees granted in 2000, cut to a selected group of top-ranked graduate institutions and cut to relevant disciplinary fields for UCB.

# Major Findings: Family → Career

- Overall, men with “early babies” are 38% more likely than women with “early babies” to achieve tenure.
- Women with “early babies” leave academia before obtaining their first tenure track job.
- Single mothers are more successful than married mothers.
- Women with “late babies” do as well as women without children.
- Having no babies at all is the dominant success mode for women.
- Men who have “early babies” do very well. In fact, they do better than all others, including single men and women.
- A high percentage of mothers slide into the second tier, the part-time, adjunct and lecturer corps: the “gypsy scholars” of the university world.
- Many women change their career course in graduate school or as postdocs because of family concerns.

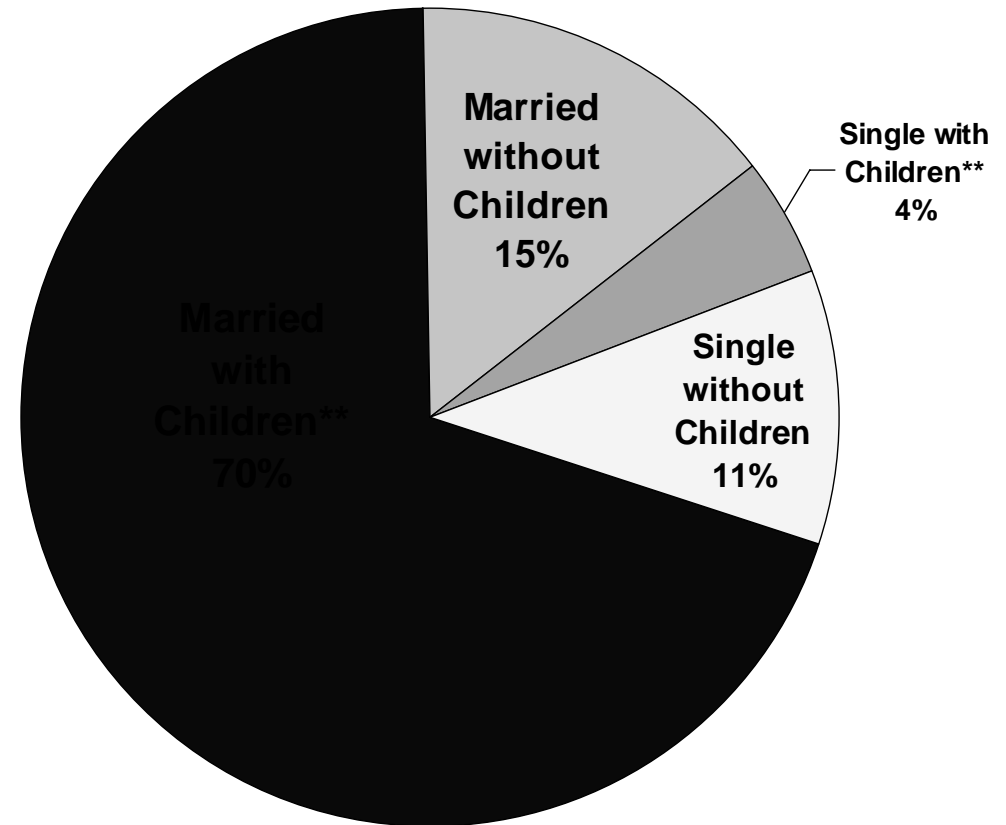
# Family Status of Tenured Faculty, All Fields\*

## Women



N=10,652

## Men



N=32,234

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

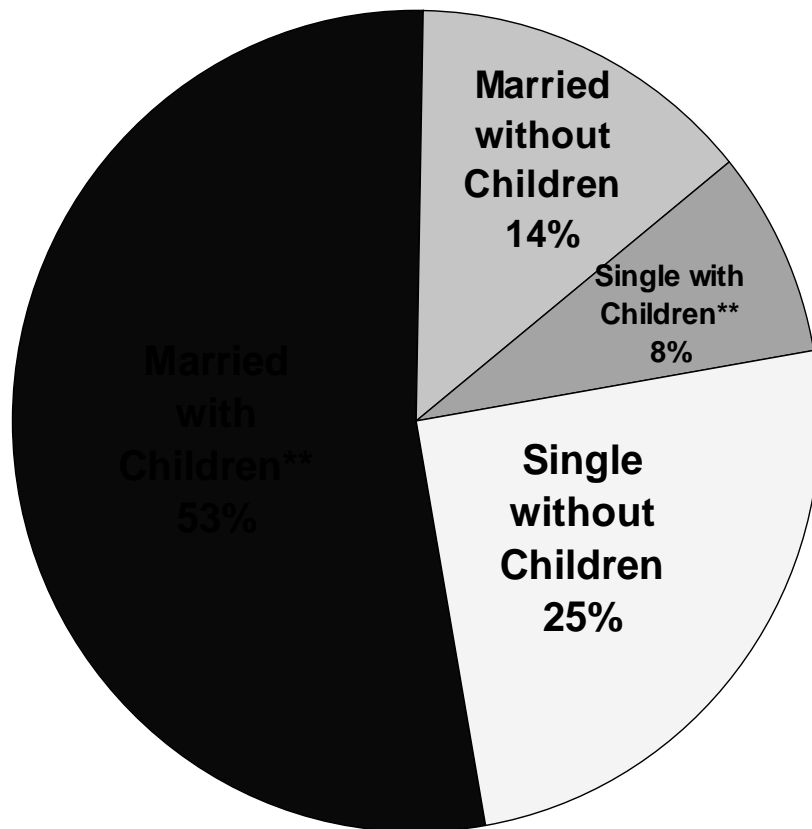
\*\*Had a child in the household at any point post PhD to 12 years out.

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

Note: The use of NSF Data does not imply the endorsement of research methods or conclusions contained in this report.

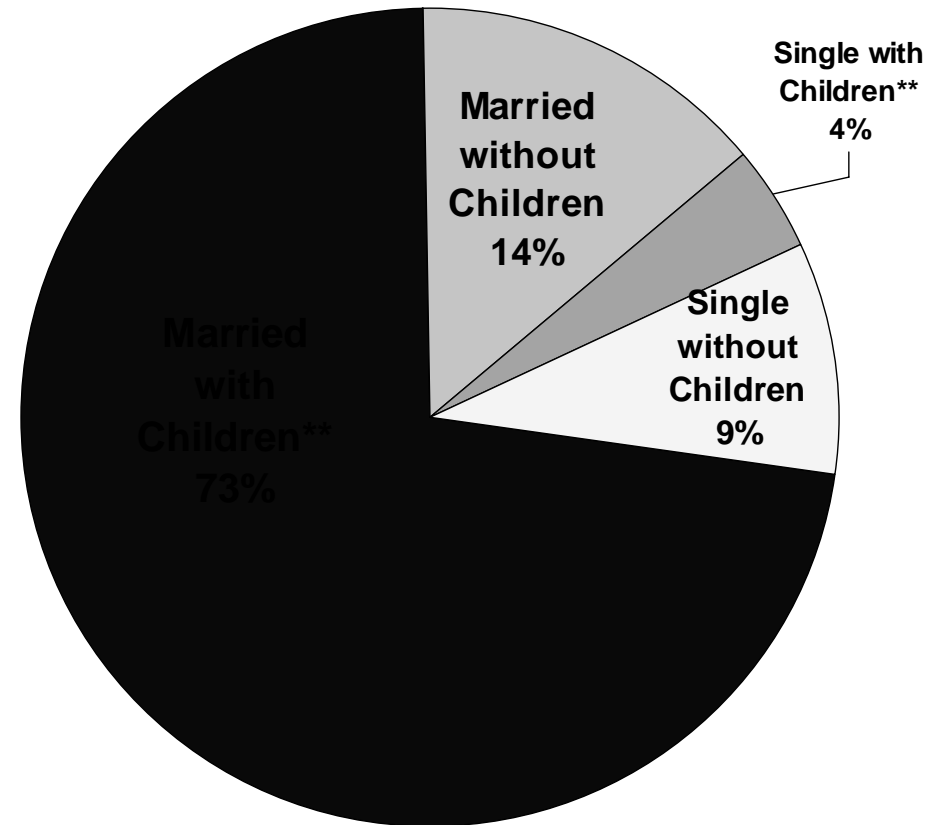
# Family Status of Tenured Faculty in the Sciences\*

## Women



N=3109

## Men



N=19,074

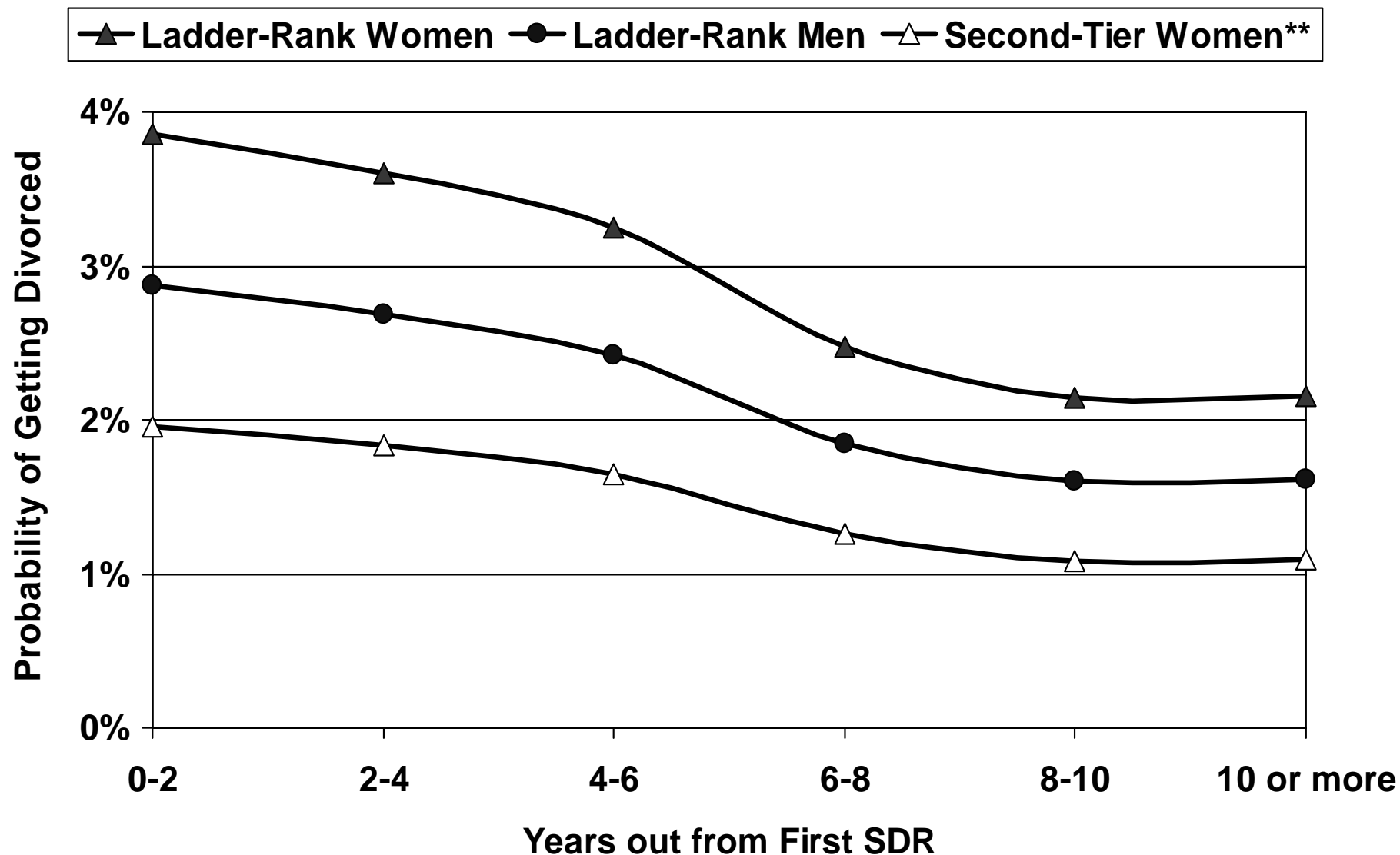
\*PhDs from 1978-1984 Who Are Tenured 12 Years out from PhD in STEM & Bio. Sciences.

\*\*Had a child in the household at any point post PhD to 12 years out.

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

Note: The use of NSF Data does not imply the endorsement of research methods or conclusions contained in this report.

# Getting Divorced after the First SDR\*



\*For individuals who were married at first post-PhD SDR survey. PhD recipients 1978-1992.

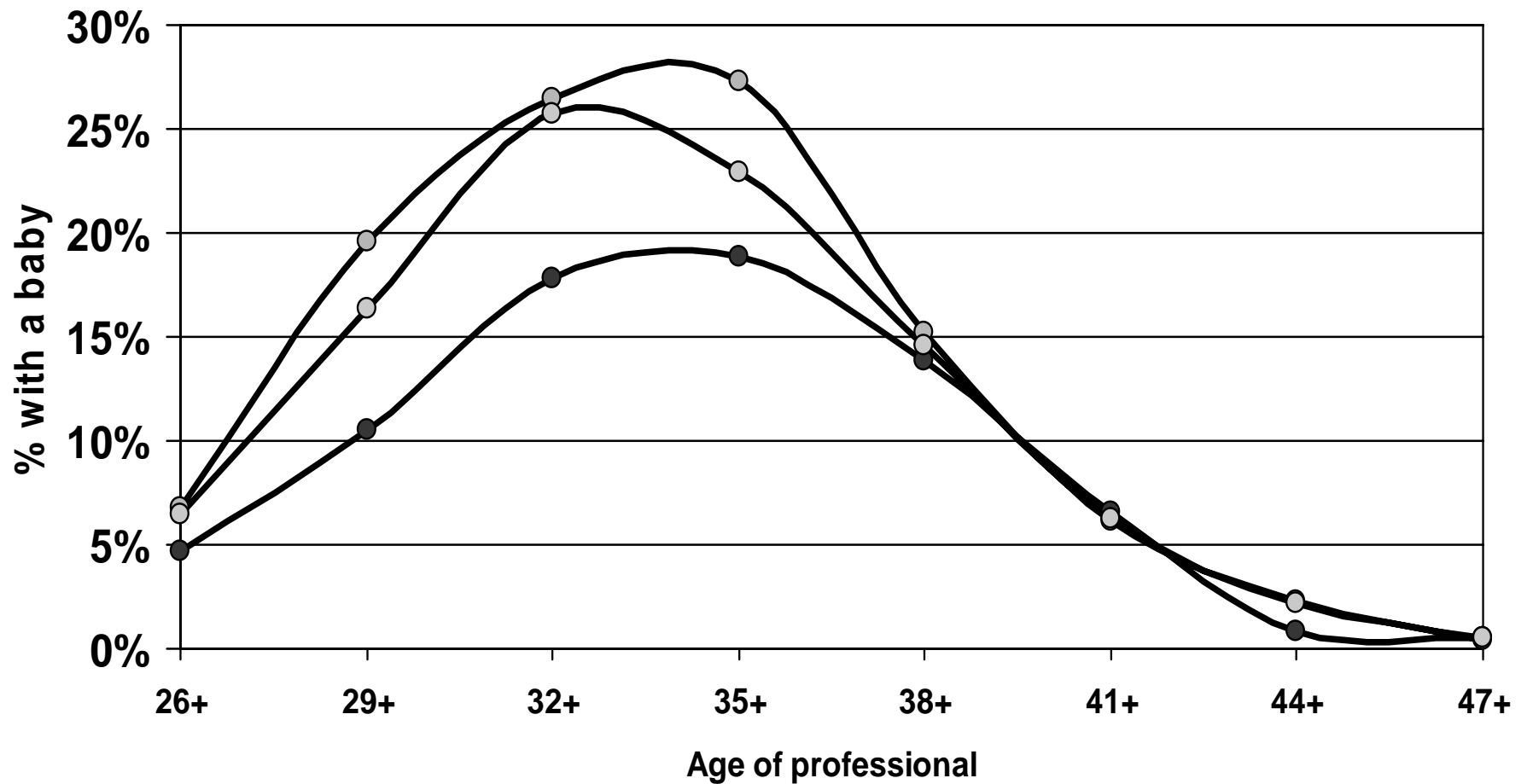
\*\*Non-Tenure Track, Part Time, or Not Working.

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

Note: The use of NSF Data does not imply the endorsement of research methods or conclusions contained in this report.

# Women Fast-Track Professionals with Babies\* in the Household, by Age of Professional

● Women Faculty  
 ○ Women Doctors  
 ○ Women Lawyers



\*Children, Ages 0 or 1 in Household.

Source: Census 2000, Pums 5% sample.

# Major Findings: Career → Family

- Only one in three women without children who takes a fast-track university job ever become mothers.
- Women who achieve tenure are far more likely than men who achieve tenure to be single 12 years out from the PhD — more than twice as likely.
- If married, women are significantly more likely than men to experience divorce or separation.
- Women faculty were more than twice as likely as men faculty to indicate they wished they could have had more children — a full 38% of women said so in comparison to 18% of men.



## **UC Work and Family Survey: History and Response Rates**

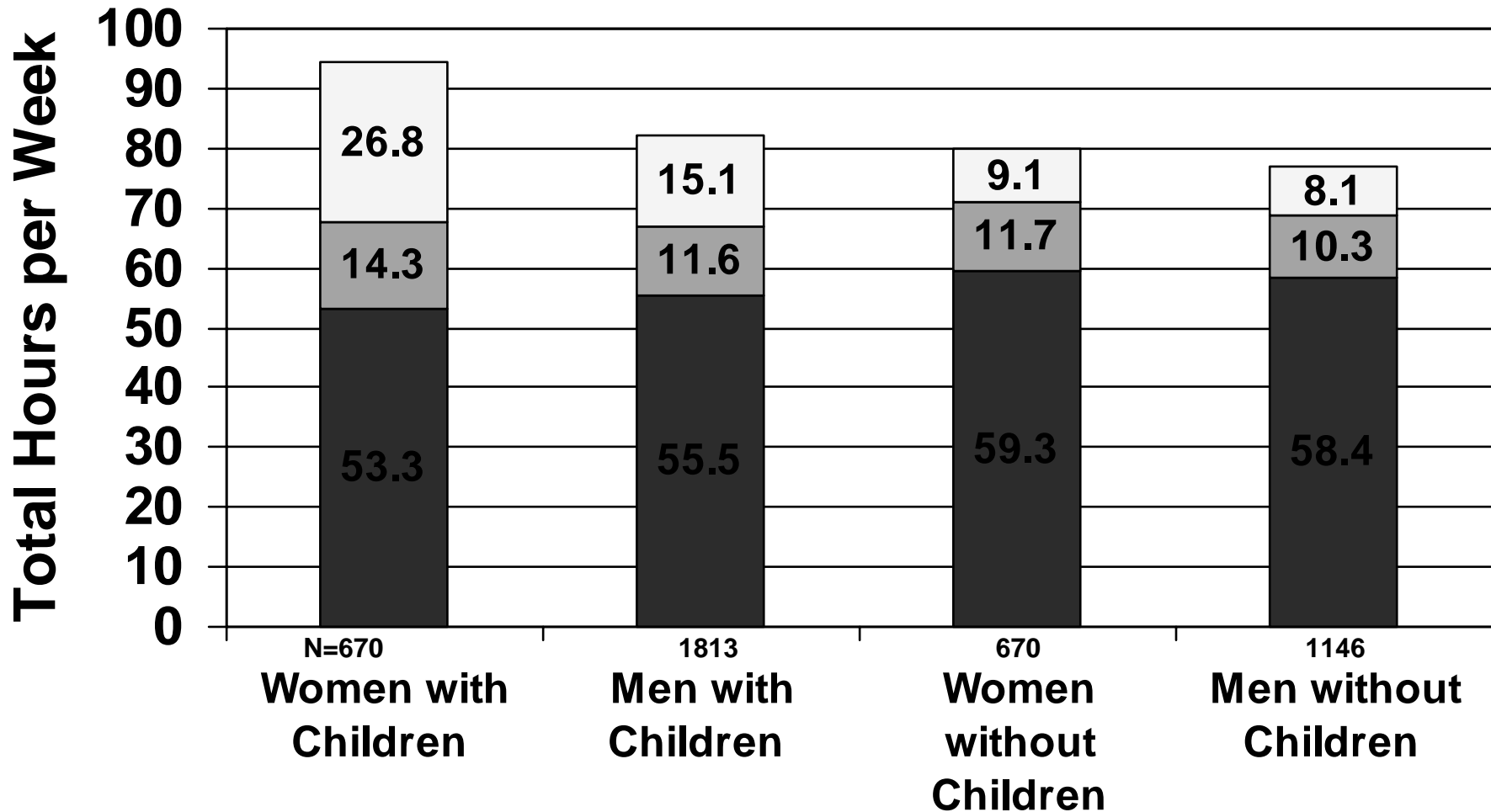
- Designed to assess the effectiveness of UC's existing family friendly policies (as of July 1988) for ladder-rank faculty.
- UC Berkeley surveyed in Fall 2002. All other (except Merced) campuses surveyed in Spring-Summer 2003.

<b>UC campus</b>	<b># Responses</b>	<b># Surveyed</b>	<b>Response Rate</b>
<b>Berkeley</b>	<b>743</b>	<b>1,351</b>	<b>55%</b>
<b>Davis</b>	<b>820</b>	<b>1,385</b>	<b>59%</b>
<b>Irvine</b>	<b>445</b>	<b>910</b>	<b>49%</b>
<b>Los Angeles</b>	<b>788</b>	<b>1,758</b>	<b>45%</b>
<b>Riverside</b>	<b>367</b>	<b>663</b>	<b>55%</b>
<b>San Diego</b>	<b>472</b>	<b>998</b>	<b>47%</b>
<b>San Francisco</b>	<b>188</b>	<b>357</b>	<b>53%</b>
<b>Santa Barbara</b>	<b>374</b>	<b>802</b>	<b>47%</b>
<b>Santa Cruz</b>	<b>262</b>	<b>481</b>	<b>54%</b>
<b>Total</b>	<b>4,459</b>	<b>8,705</b>	<b>51%</b>

# Everybody is Very Busy

*(UC Faculty, All Fields)*

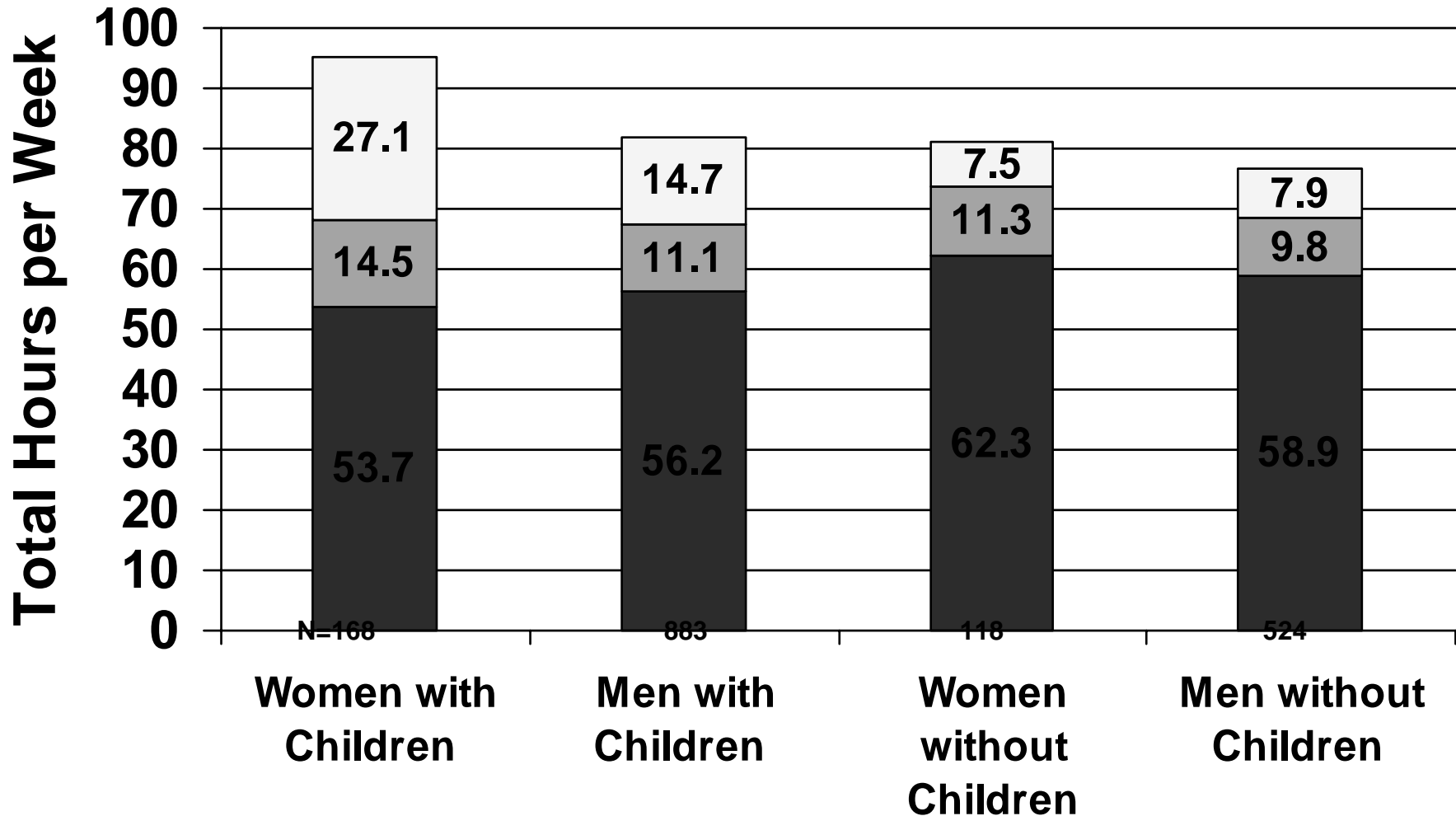
■ Professional ■ Housework □ Caregiving



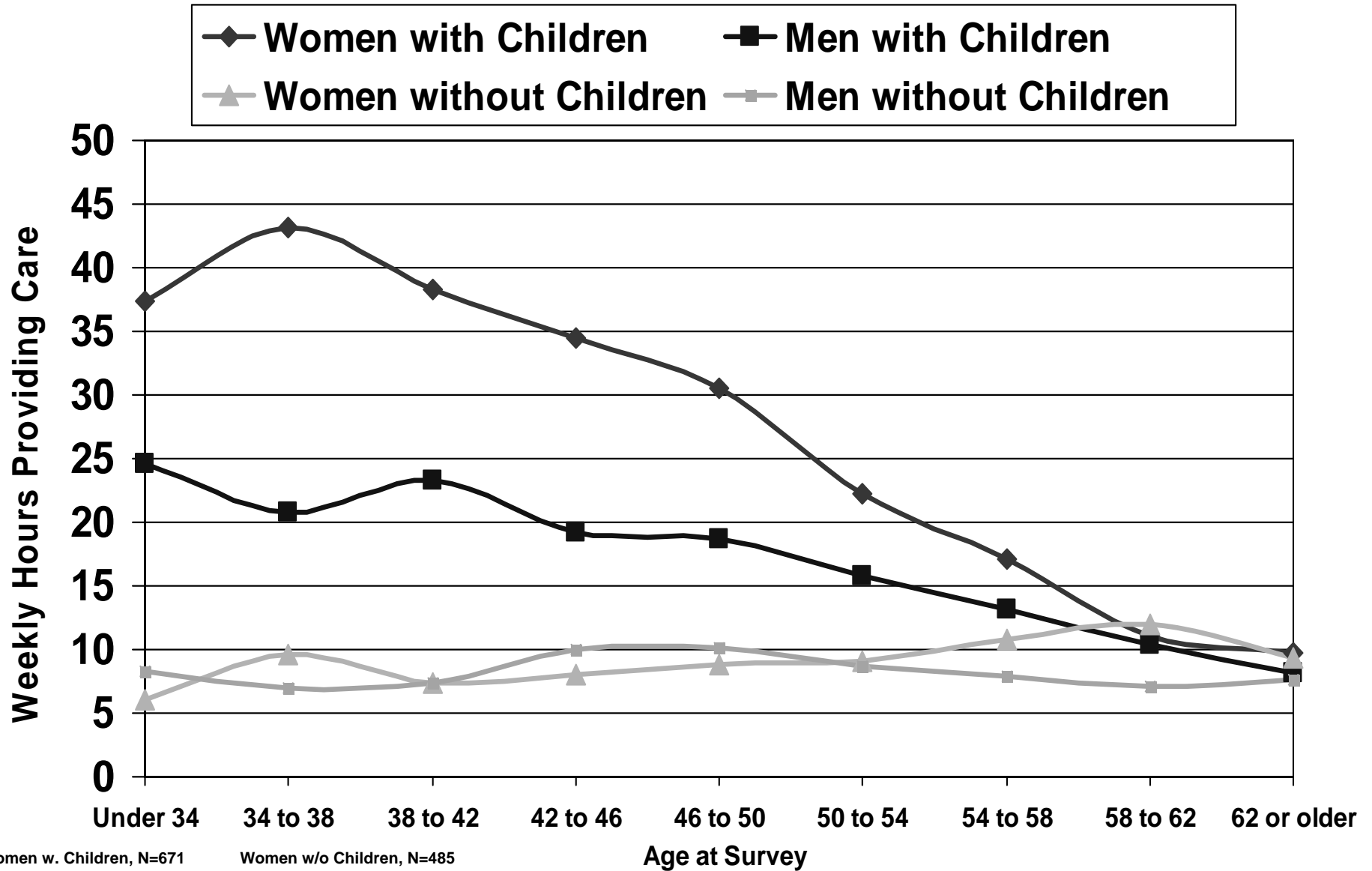
# Everybody is Very Busy

*(UC Faculty in the Sciences)*

■ Professional ■ Housework □ Caregiving



# UC Faculty's Average Hours Per Week Providing Care by Gender, Children, and Age at Survey

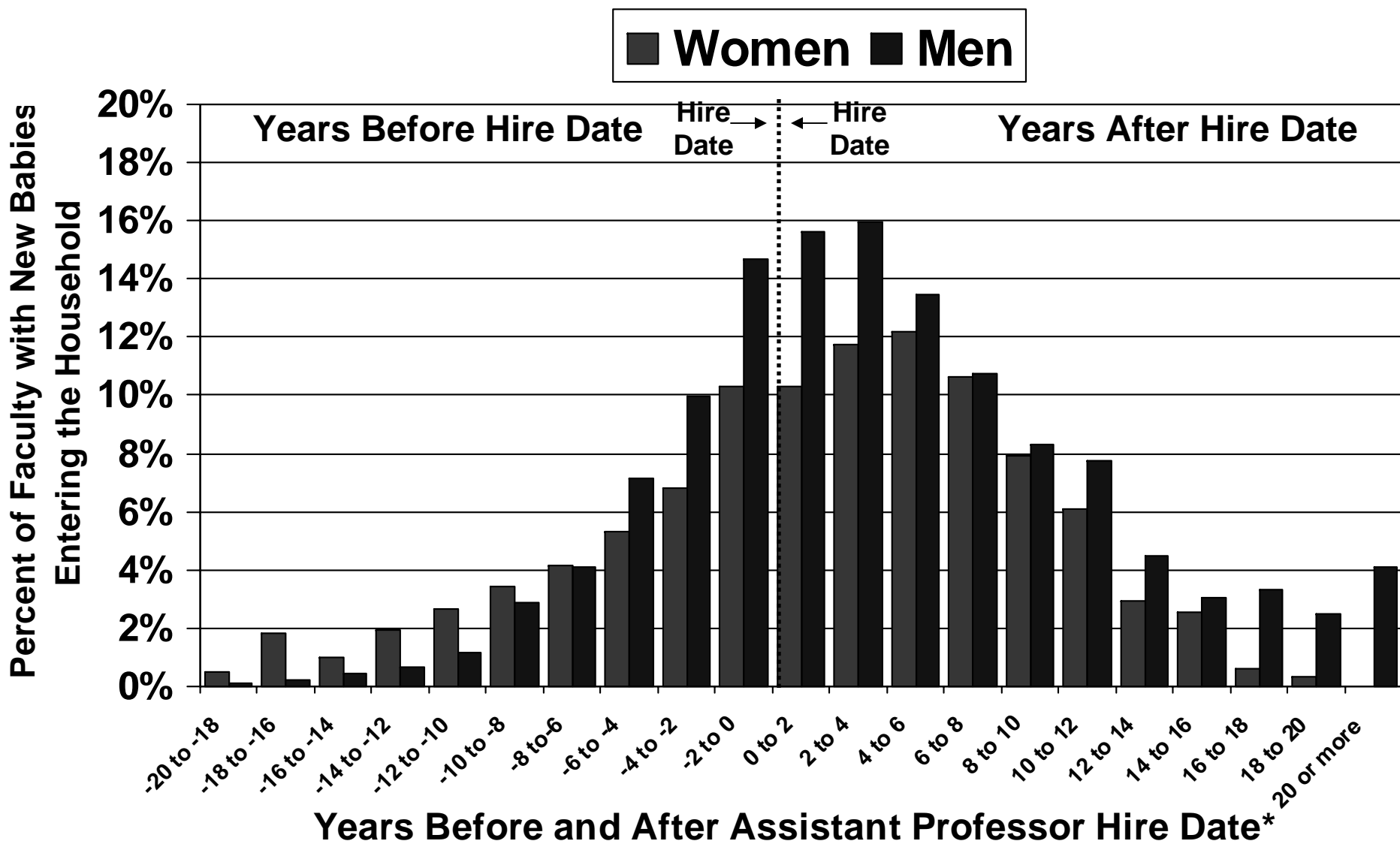


Women w. Children, N=671  
Men w. Children, N=1796

Women w/o Children, N=485  
Men w/o Children, N=1108

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

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



N=2339 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>).

# The Baby Lag for UC Women Faculty in Pursuit of Tenure in the Sciences\*



N=1164 Men  
265 Women

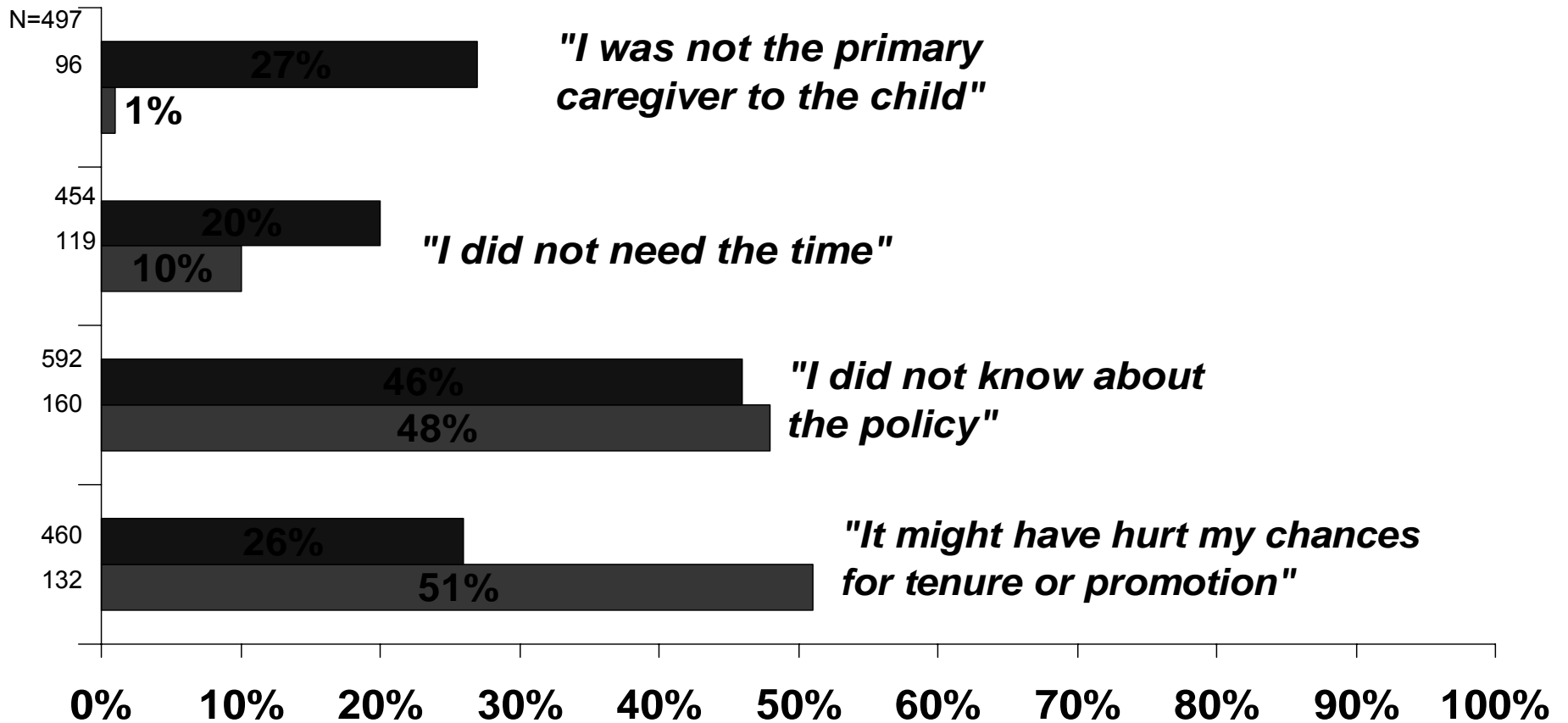
\*\*Year 0 represents Assistant Professor Hire Date

\*Includes STEM & Bio. Science.

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

# Major Reasons Eligible UC Parents Did Not Use ASMD (Active Service Modified Duties)

■ Women ■ Men



## Percent Citing Factor As a Major Reason for Not Using ASMD

Source: Mason, Mary Ann, Angelica Stacy, and Marc Goulden. 2003. "The UC Faculty Work and Family Survey." (<http://ucfamilyedge.berkeley.edu>). Please note: these questions were based on Robert Drago's Mapping Project Survey Instrument (<http://lsir.la.psu.edu/workfam/facultysurvey.htm>).

# **New Family Friendly Initiatives for UC Berkeley Ladder-Rank Faculty**

- **Active Service-Modified Duties (ASMD) — Provides teaching relief for parents with “substantial” caregiving responsibilities for a newborn or new adoptee: two semesters/quarters for birth mothers. Funded centrally to defray the cost to departments. *An entitlement.***
- **Tenure-Clock Stoppage — Adds one year extension to the tenure clock for tenure-track faculty parents with “substantial” caregiving responsibilities for a newborn or new adoptee (one year per birth/adoption event, with a two-year cap). *An entitlement.***
- **Flexible Part-time Option — To allow tenure-track faculty, pre- and post-tenure, to go from full- to part-time as life needs arise (i.e. caregiving responsibilities). Would encourage departments to take into account part-time status in advancement decisions. *Under review.***
- **School for Chairs — Promotes the use of family friendly policies, resources and benefits. *Soon to be launched.***



# Creating a Family Friendly Department: Chairs and Deans Toolkit

UC Faculty Family Friendly Edge  
Excerpts:

## Legal case examples

- In a tenure-denial lawsuit involving a reported tentative settlement of \$495,000, the provost at the University of Oregon allegedly told another professor that the mother's decision to "stop the clock" was a "red flag;" the department chair also wrote in a memo that she "knew as a mother of two infants, she had responsibilities that were incompatible with those of a full-time academician." [ref: Joan C. Williams, 2004. "Hitting the Maternal Wall," *Academe*, 90(6)8-12.]

## Faculty quotes about negative responses from chairs to requests for family accommodations

- *"I want to emphasize that the greatest source of work-related stress in relation to having a child has been the hostility and recalcitrance of my chair who announced that he thought of ASMD as a 'special privilege' and who fought it all the way."* – Female faculty member

# Graduate Student Parent Resources at UC Berkeley

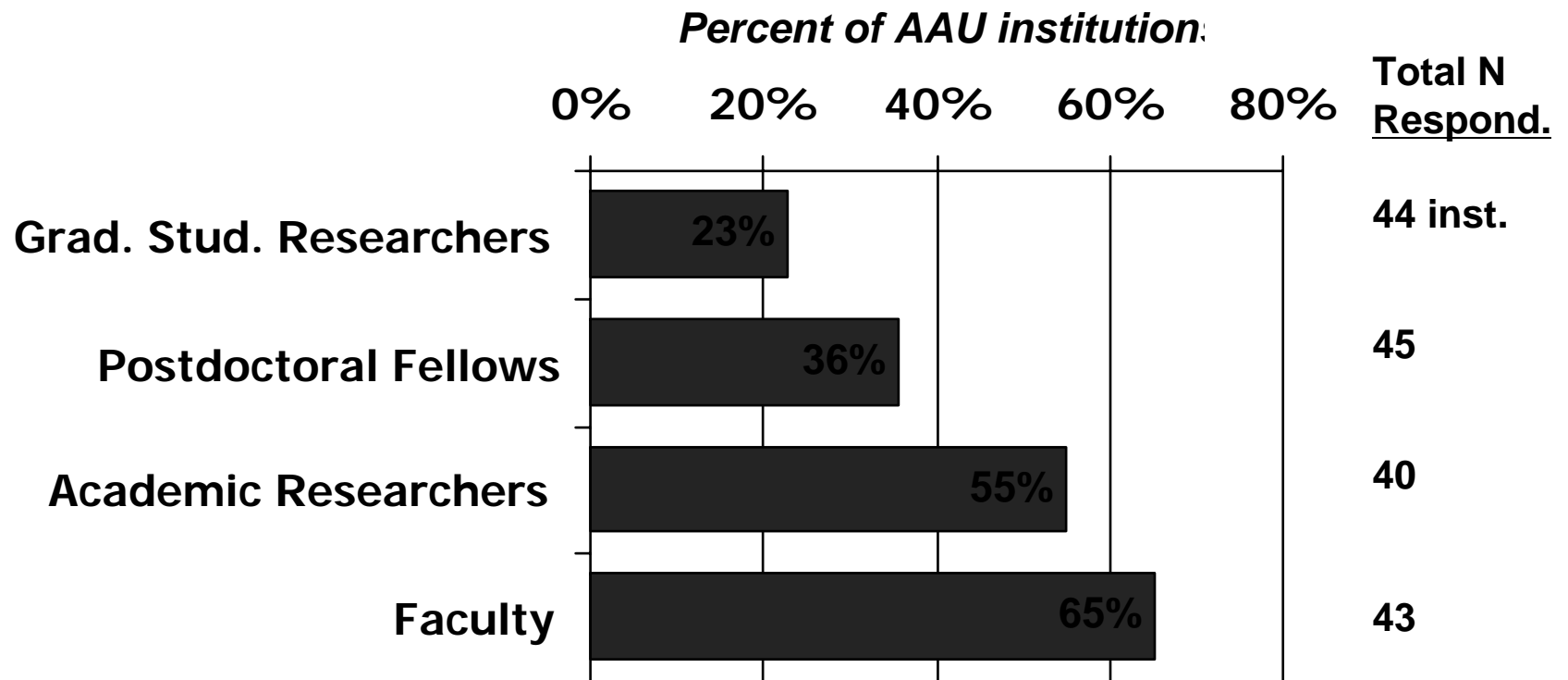
## New Initiatives

- Paid Childbirth Leave (approved February 2007)
- Expanded infant/toddler/preschool slots in a new Child Development Center (opened January 2007)
- UC Families: an online newsletter and resource for students, staff, and faculty at all UC campuses who seek to balance academic goals or careers with family life. See <http://parents.berkeley.edu/ucfamilies>
- 'Stopping the Clock': Extensions to academic milestones (preliminary exams, qualifying exams, Normative Time completion)

## Continuing Initiatives

- **Family Student Housing** (two large complexes)
- **Children's Center & Family Resource Center** (located in Family Housing)
- **Student Parent Center** (located in Student Center)
- **Breastfeeding Support Program** (Student Health Center & campus locations)
- **Graduate Student Parent Grant** (funded by Graduate Division, administered by Financial Aid Office)

**AAU Survey (preliminary finding) : Which of the following best describes your institution's policy regarding paid maternity leave for (1) graduate student researchers, (2) postdoctoral scholars, (3) academic researchers (non-faculty) , and (4) faculty who bear a child?**



***A written policy exists that entitles individuals who bear a child to paid maternity leave (vs. all other responses)***

## Figure 15: A New Model for the Next Generation in Academia: Part 1

### CURRENT MODEL AND ASSUMPTIONS

Academia is typically either a full-time or no-time pursuit, particularly for those on fellowships or grants.

The appropriate career trajectory for successful academics is linear and without breaks – from doctoral years, to postdoctoral, to pre-tenure, and full professor ranks.

Academic “stars” move through the ranks very quickly.

There is no good time to have children.

Having children, particularly for women, is often equated with less seriousness and drive in academia.

### NEW MODEL AND ASSUMPTIONS

→ Men and women can shift to part-time status or temporarily elongate timelines over their life course without penalty.

→ Many men and women will want or need to temporarily take time out from their academic life for caregiving – for children or other dependents – re-entry is supported.

→ Academic “stars” are those who produce the most important or relevant work – faster is not necessarily better.

→ Throughout the career path any time is fine to have children because there is a full array of resources to support academics.

→ There is no stigma associated with having children, nor negative career consequences, and the culture is broadly supportive of academics who do.

# ucfamilyedge.berkeley.edu

## The UC Faculty Family Friendly Edge

An initiative for Ladder-Rank Faculty at the University of California,  
funded by the Alfred P. Sloan Foundation



[The UC Faculty Family Friendly Edge](#) | [The Sloan Grant](#) | [Initiatives](#) | [Resources](#) | [Participate](#) | [Contact Info](#)



### The UC Faculty Family Friendly Edge: turning a problem into UC's competitive advantage

The UC Faculty Family Friendly Edge is an initiative designed to develop and implement a comprehensive package of innovative work-family policies and programs for ladder-rank faculty in the UC system. The Faculty Family Friendly Edge will promote the recruitment and retention of the best and the brightest, help all members of the university community achieve their fullest potential as scholars and teachers, and greatly contribute to the continued excellence of the University of California.

- > [Learn More about the UC Faculty Family Friendly Edge](#)
- > [Download a Copy of the UC Faculty Work and Family Survey Presentation \(PPT\)](#)
- > [Download a Copy of the UC Faculty Work and Family Survey](#)

### Major Initiatives

The UC Faculty Family Friendly Edge includes policies, programs, services and benefits to support faculty and their families... all types of families. These options and programs are continuously under improvement and expansion. Here are some examples:

- Up to one semester reduced duties (ASMD active service-modified duties) for new parents with substantial care-giving responsibilities.
- Stopping the tenure clock to allow time for care of a newborn or newly adopted child under five.
- A flexible part-time option for ladder-rank faculty with substantial familial caregiving responsibilities.
- Parental leave (unpaid) for up to one year to care for a child (including a child of either spouse or domestic partner).
- One year unpaid leave to care for self or a sick

### What's New?

- > [Academe Do Babies Matter II article by Mason & Goulden](#)  
[PDF with figures](#)
- > [Annals Marriage and Baby Blues article by Mason & Goulden](#)
- > [Chronicle of Higher Education reports on UC Family Friendly Edge Project](#)
- > [Chronicle of Higher Education holds online colloquy with Mary Ann Mason, How Babies Alter Careers for Academics](#)
- > [UC Faculty Work and Family Survey Presentation \(PPT\)](#)
- > [Academe Do Babies Matter article by Mason & Goulden PDF with figures](#)
- > [An Advisory Committee to UC Family Friendly Edge is Named \(DOC\)](#)

### What's Happening @ Local Campuses:

Go to...

**UC President  
Robert C. Dynes**  
(1/27/2004)

*"I am pleased to carry on the important work initiated by President Atkinson to promote gender equity and to develop more family friendly policies for ladder-rank faculty."*

# MOTHERS ON THE FAST TRACK



How a New Generation  
Can Balance Family and Careers

MARY ANN MASON and EVE MASON EKMAN

by MARY ANN MASON and EVE MASON EKMAN

Publication Date: May 31, 2007

Oxford University Press, USA Hardcover: 272 pages

In the past few decades the number of women entering graduate schools has been skyrocketing, while the number of women reaching the top rung of the corporate and academic worlds has remained relatively stagnant. Why are so many women falling off the fast track?

In this timely book, Mary Ann Mason traces the career paths of the first generation of ambitious women who started careers in science, academia, law, medicine, business, and the media in large numbers in the 1970s and '80s. ...

Along with her daughter, an aspiring journalist, Mason has written a guide for young women who are facing the tough decision of when -- and if -- to start a family. It is also a guide for older women seeking a second chance to break through to the next level, as Mason herself did in academia. ...

The result is a roadmap of new choices for women facing the sobering question of how to balance a successful career with family.

Read more at

<http://www.grad.berkeley.edu/deans/mason/index.shtml>

Article to appear in The Chronicle of Higher Education, October 13, 2008

## Do Babies Matter in Science?

A true measure of gender equity in academe would look at both the career and family outcomes of female Ph.D.'s

By MARY ANN MASON

Federal investigators for Title IX, the law that forbids sexual discrimination in education, have only recently discovered that there might be a problem for women in science.

As The Chronicle first reported in 2006, investigators for the National Science Foundation, the National Aeronautics and Space Administration, and the Department of Energy have been inspecting several campuses for potential Title IX violations in mathematics, science, and engineering departments. This past summer, The New York Times revisited the issue in a July 15 story and found that, "So far, these Title IX compliance reviews haven't had much visible impact on campuses beyond inspiring a few complaints from faculty members."

Evidence of the problems women face pursuing careers in academic science shouldn't be hard to find.

Look around the campus of any large research university. In most humanities and social-science disciplines, departments are blooming with female graduate students where there would have been few 30 years ago. But in math, engineering, and the physical sciences, the numbers remain embarrassingly low. In 2006, women received 28 percent of the doctorates awarded in the physical sciences, including computer science and math, and only 20 percent of those awarded in engineering. But that is great progress compared with 20 years ago when the numbers were often too small to register statistically.

The great loss is the absence of women on the faculty in those fields, because those are the women who have walked the whole walk. Only 10 percent of faculty members in physics are women, the American Institute of Physics found in 2005, a study that prompted the Title IX investigation. Less than half of the women who earn Ph.D.'s. in these challenging fields continue through to positions in academic research.

So far, as the Times article reported this summer, scientists seem to be telling Title IX investigators that the problem is not so much discrimination as disinterest. While proponents of women in science say there is evidence of discrimination in certain fields, the article said,

"the quality of that evidence is disputed. Critics say there is far better research showing that on average, women's interest in some fields isn't the same as men's."

Some researchers quoted in the article found that "information technology workers (more often men) especially enjoyed manipulating objects and machines, whereas workers (more often women) in other occupations preferred dealing with people." Susan Pinker in her book, *The Sexual Paradox*, argues that "the campaign for gender parity infantilizes women by assuming that they don't know what they want." She said her interviews with women who abandoned successful careers in science and engineering convinced her that they chose other careers because they lost interest in science.

I would invite Title IX investigators to talk directly to graduate students and postdocs in the sciences and math to find out what discrimination looks like.

You will find women like Jennifer Mitchell, a Ph.D in neuroscience and a postdoc at the University of California at Berkeley. When Eve Mason Ekman (my daughter) and I interviewed Mitchell for our 2007 book, *Mothers on the Fast Track* Mitchell told us, "I don't think I'll ever do a tenure-track job, and people were very upfront about that when I had my child."

You'll also find women like Sherry Towers, a particle physicist and a postdoctoral fellow, who had a baby and was effectively blacklisted by her adviser (*The Chronicle*, November 11, 2005). When she was pregnant, she said, her adviser refused to write a letter of recommendation for her unless she returned to work almost immediately. She did return, and he still refused. She received no interviews for any of the positions to which applied.

Discrimination against job candidates who are pregnant or have children is a very real part of gender discrimination. Some scientists may believe that women who have families cannot be serious scientists because academic science demands exclusive attention to research. But they do not hold the same beliefs about male scientists with kids. In fact, research shows that male scientists are far more likely to have children than female scientists; two years after their Ph.D.'s, nearly 50 percent of men, but only 30 percent of women, had children.

Women in science and math learn that truth early on. When I was dean of the graduate division at Berkeley, my staff members and I studied thousands of graduate students and faculty members to learn more about the effects of family formation on the careers on Ph.D.'s. Our project -- "Do Babies Matter?" -- traced the career tracks of academic men and women through their doctoral years to retirement; we found firm evidence that the lack of



family-friendly policies turns both men and women, but far more often the women, away from careers in academic research.

That is true across all disciplines, but more notably in the physical sciences, technology, engineering, and mathematics, where the number of women is small to begin with.

Women who do pursue careers in academic science pay a high price for playing the game. Nationally, "married with children" is the academic-success formula for men, but the opposite is true for women, for whom there is a serious "baby gap." Among scientists who achieved tenure, 72 percent of the men are married with children as opposed to only 50 percent of women. Is that gender equity?

Federal investigators, when counting heads, shouldn't just consider the number of women who have succeeded in academic research. A true measure of gender equity in academe would look at both the career and family outcomes of female Ph.D.'s. We call that 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.>

Investigators need to ask not only how many women are professors and deans relative to their male counterparts, they also need to ask how many women with children are in high places compared with men with children. Viewing the situation in that way reveals that women have much further to go to achieve gender equity than we think.

Subtle maternal discrimination is difficult to deal with, but concrete initiatives, such as parental leave, child care, and other supports at both the student and faculty levels would go far in reducing this unnecessary loss.

Mary Ann Mason is a professor and co-director of the Berkeley Law Center for Health, Economic and Family Security (CHEFS). She will write regularly on work and family issues for our Balancing Act column. She invites readers to send in questions or personal concerns about those issues, and she will answer your questions in a future column. E-mail your comments to [careers@chronicle.com](mailto:careers@chronicle.com) or to [mamason@law.berkeley.edu](mailto:mamason@law.berkeley.edu).