

# **Do Babies Matter: Redefining Gender Equity in the Academy**

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**Presented by Marc Goulden at PAESMEM conference at Stanford, June 22, 2004**

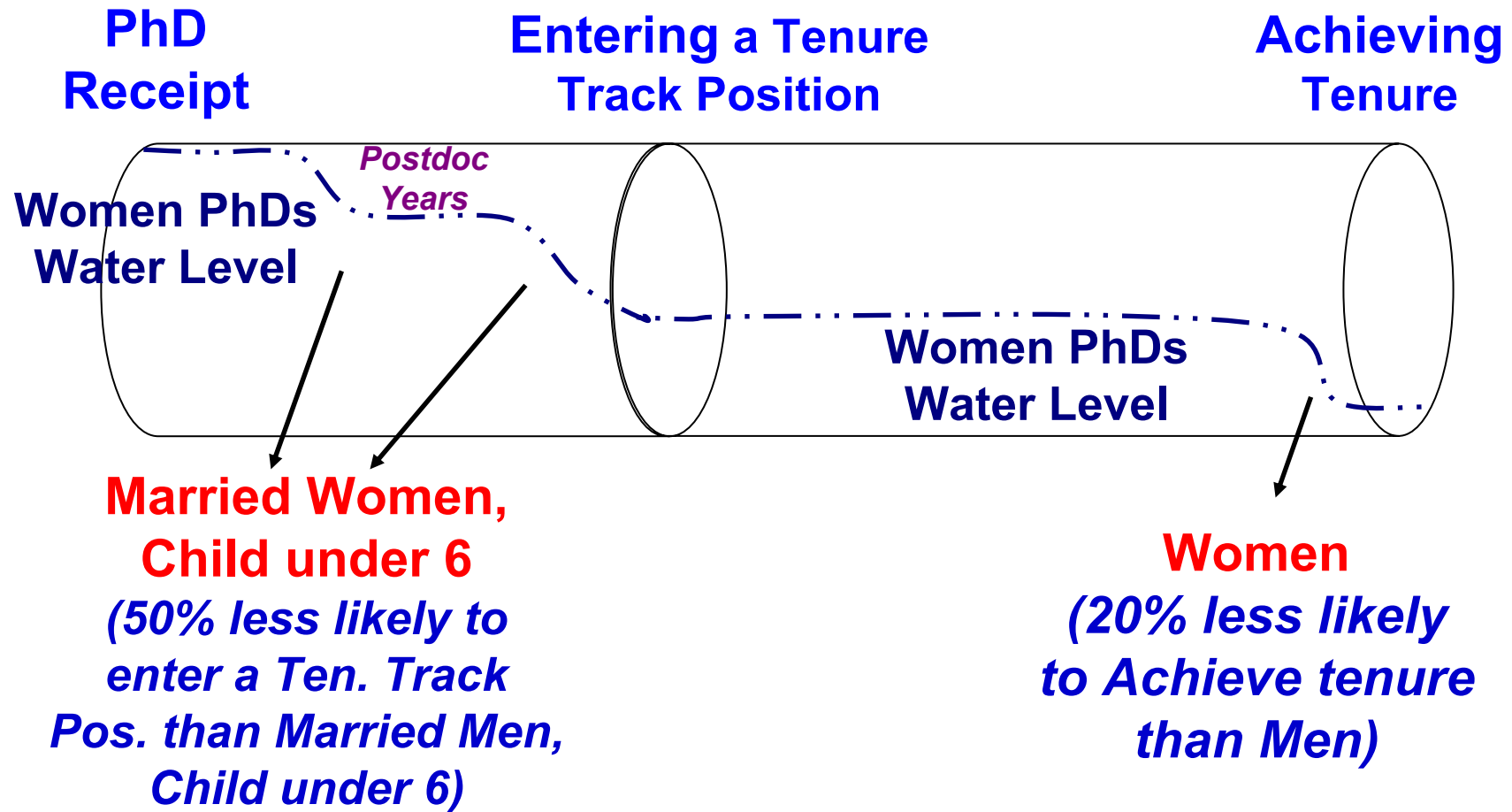
# **Problems in the Pipeline to Tenure**

**Assessing Family Formation Effects on the  
Tenure Rates of Men and Women PhDs**

# Survey of Doctorate Recipients (SDR)

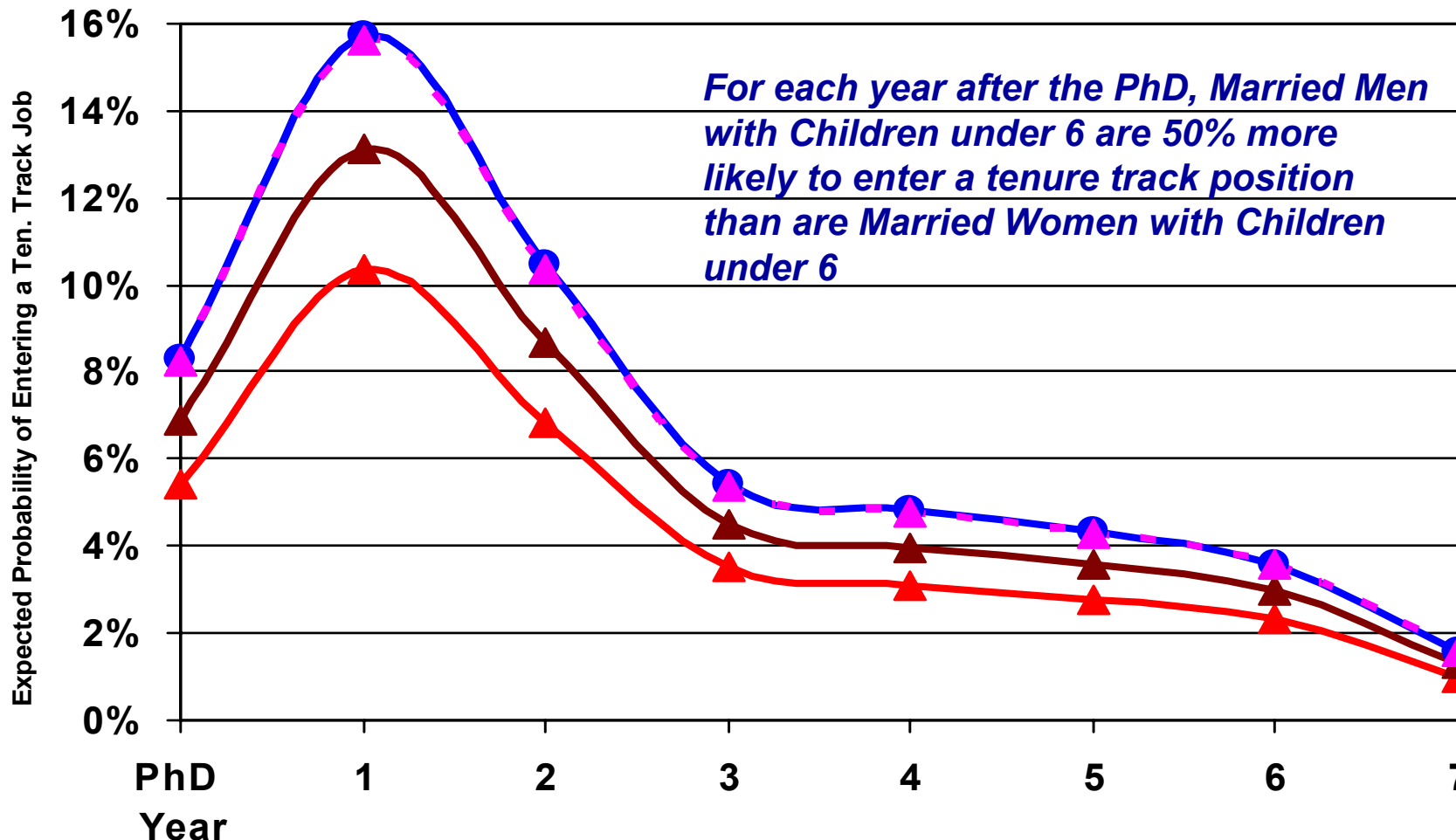
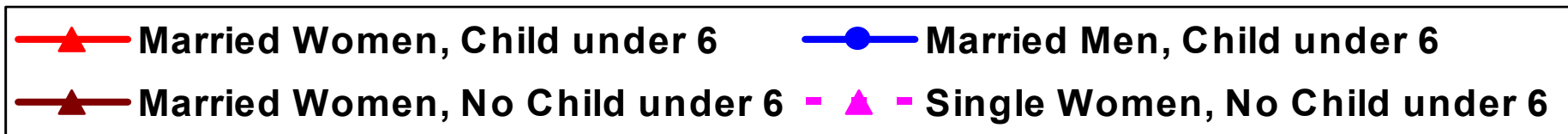
- **A national biennial longitudinal data set of PhD recipients' post-degree employment experiences** funded by the National Science Foundation and others, 1973 to present (NEH funded the Humanities 1977 to 1995).
- Includes roughly **a 10% sub-sample of PhD recipients** drawn from the Survey of Earned 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 reweighted 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.

# Leaks in the Pipeline to Tenure\*



\*Results are based on discrete-time event history analysis of the *Survey of Doctorate Recipients* (a national biennial longitudinal data set funded by the National Science Foundation and others, 1979 to 1995) in the Sciences, Social Sciences, and Humanities. The analysis takes into account broad disciplinary differences, 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 TT job to Tenure), data is limited to a maximum of 16 years. The waterline is an artistic rendering of the statistical effects of family and gender. Note: The use of NSF Data does not imply the endorsement of research methods or conclusions contained in this report.

# Leaks in the Pipeline: PhD to Tenure Track Position



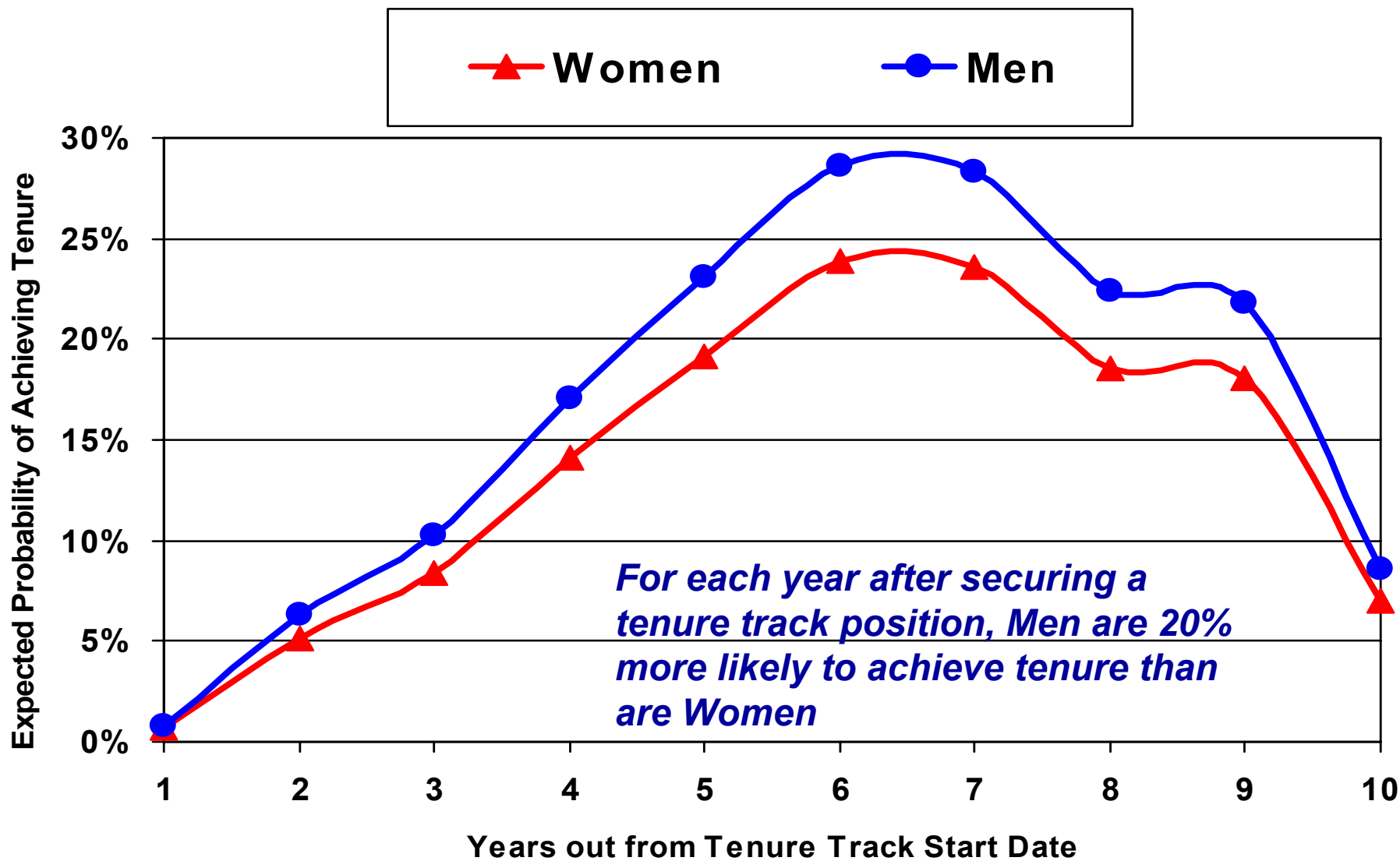
Years out from PhD Receipt

N=30,568

Source: Survey of Doctorate Recipients, Sciences and Humanities, 1981 to 1995.

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

# Leaks in the Pipeline: Tenure Track to Tenure



**N=10,845**

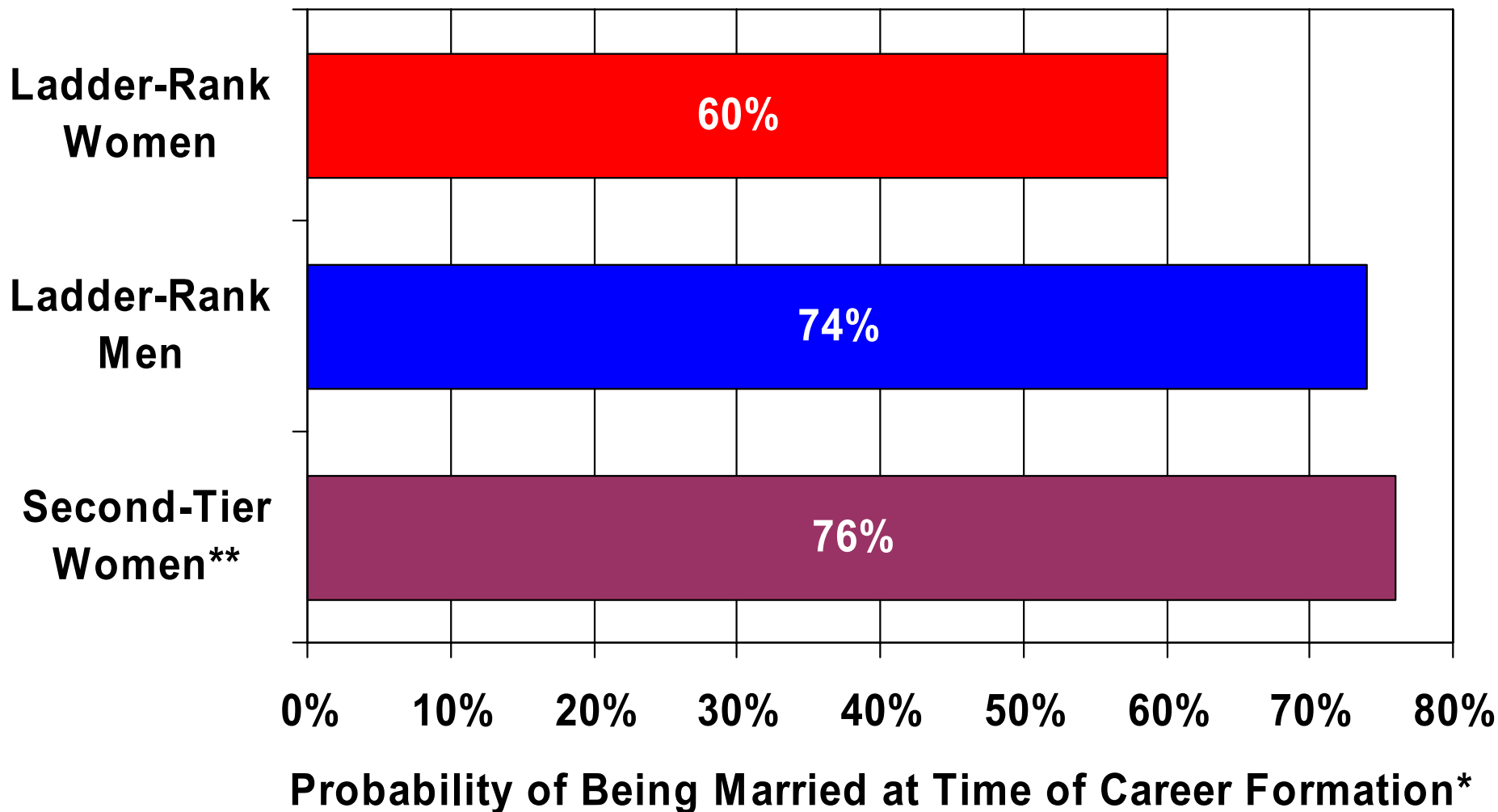
Source: Survey of Doctorate Recipients, Sciences and Humanities, 1981 to 1995.

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

# **Alone in the Ivory Tower**

**Assessing the Effect of Academic Careers on  
Family Formation of Men and Women PhDs**

# Married at Time of Career Formation\*



\*Time of career formation is defined as 0 to 3 years post-PhD.

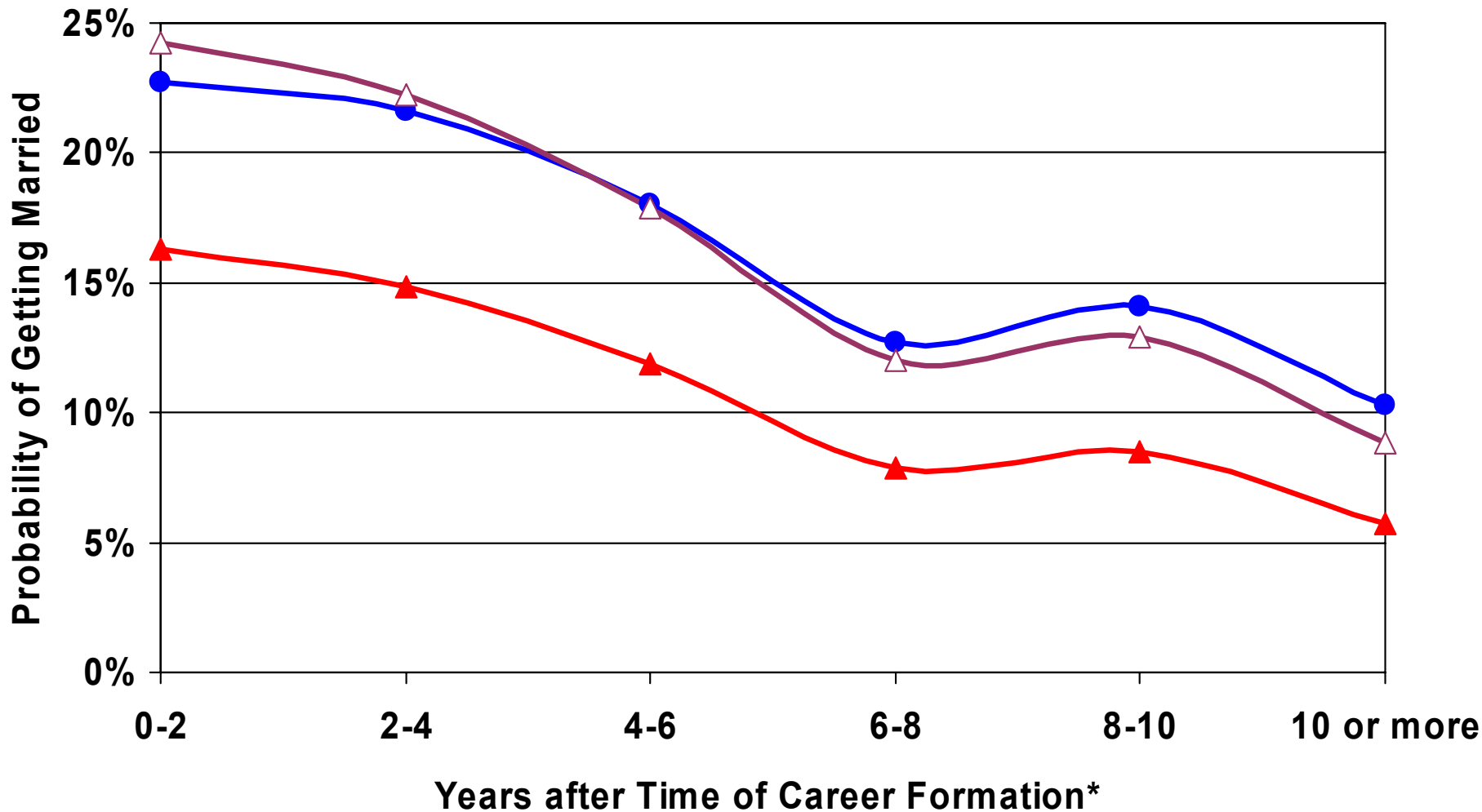
\*\*Non-Tenure Track, Part Time, or Not Working.

Source: SDR Science and Humanities Survey, 1981-1995. PhD recipients 1978-1994.



# Getting Married after Time of Career Formation\*

▲ Ladder-Rank Women ● Ladder-Rank Men ▲ Second-Tier Women\*\*

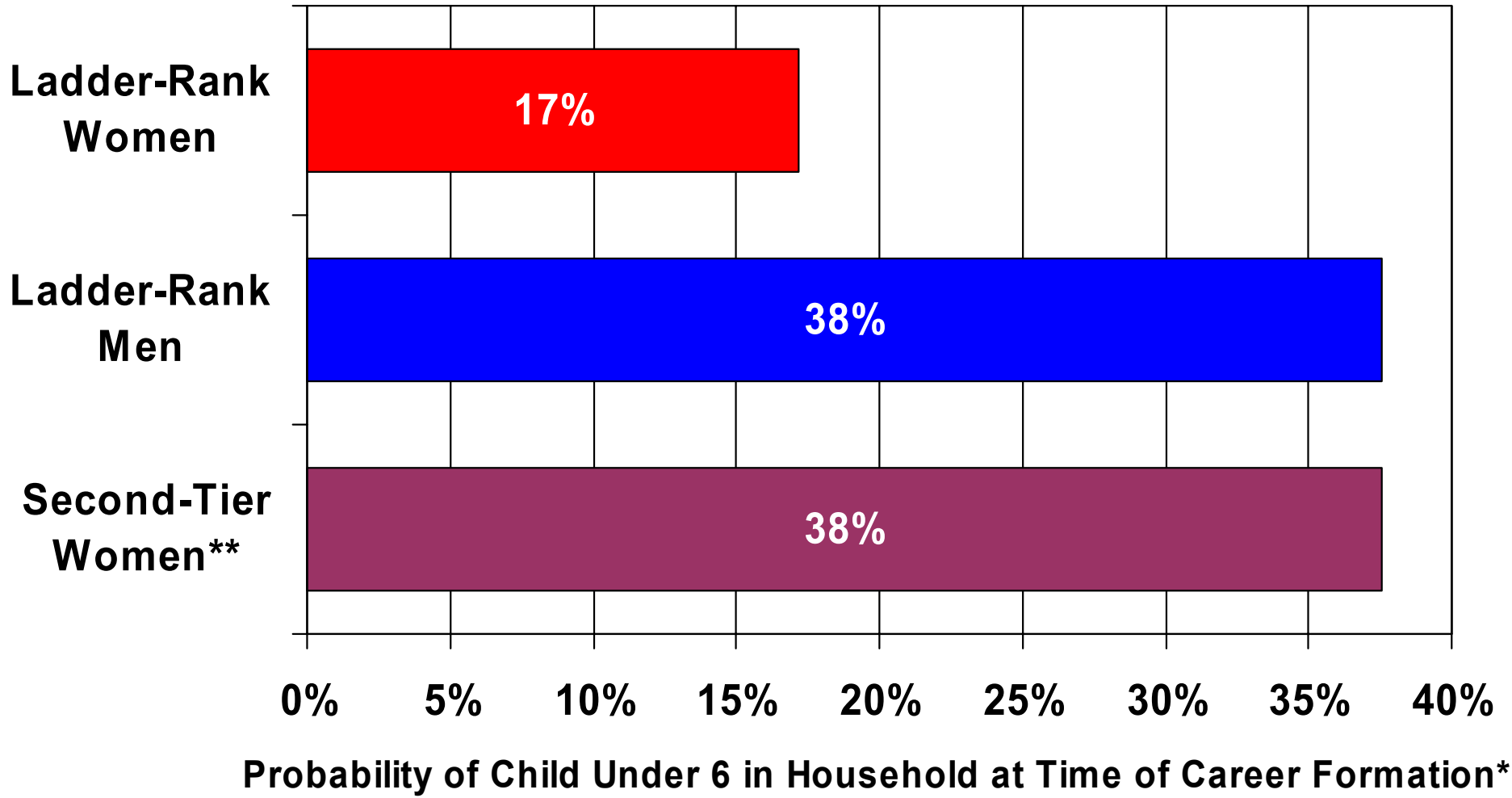


\*For individuals who were single at time of career formation, 0-3 years post-PhD.

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

Source: SDR Science and Humanities Survey, 1981-1995. PhD recipients 1978-1992 .

# Child under 6 at Time of Career Formation\*

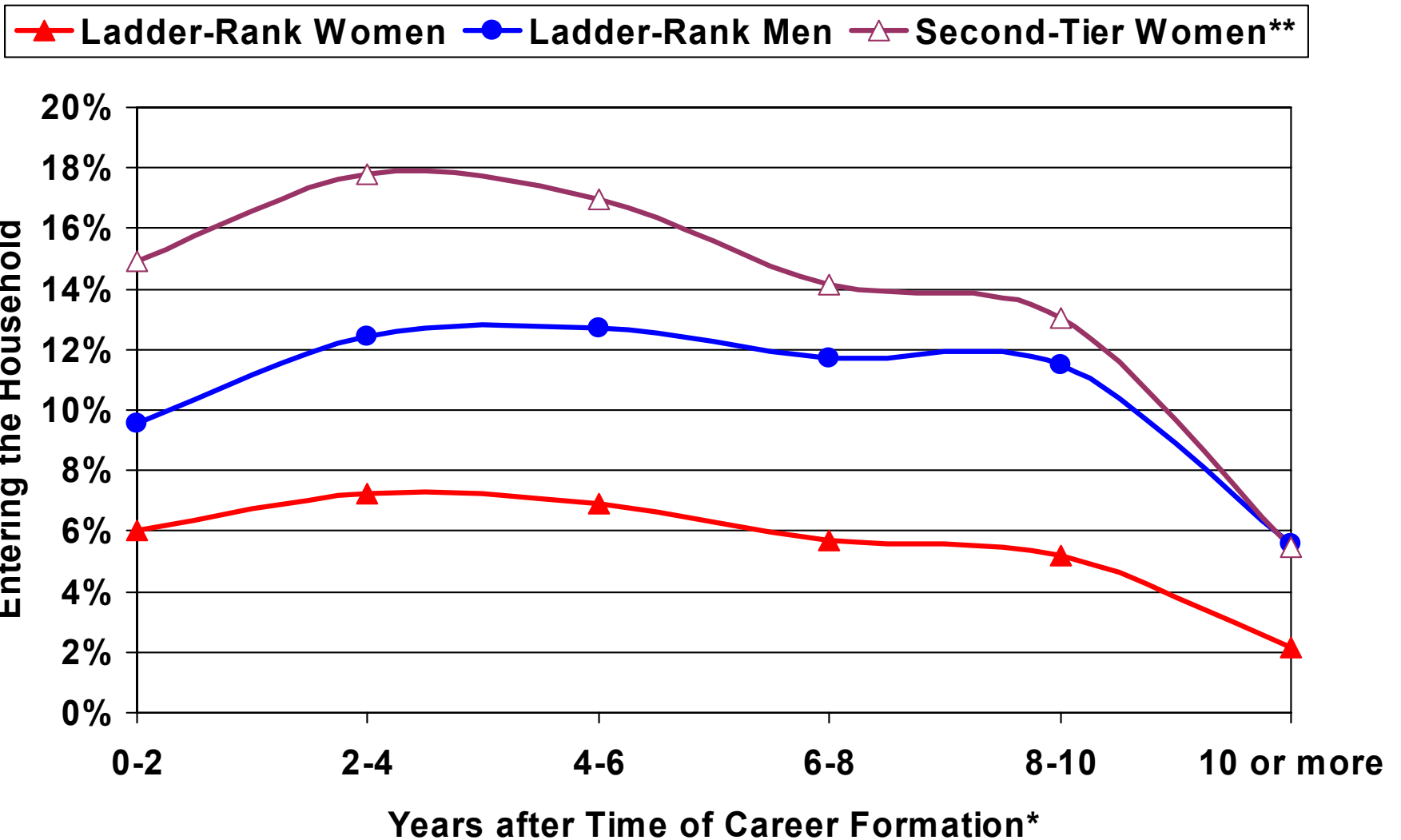


\*Time of career formation is defined as 0 to 3 years post-PhD.

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

Source: SDR Science and Humanities Survey, 1981-1995. PhD recipients 1978-1994.

# Having a Child After Time of Career Formation\*

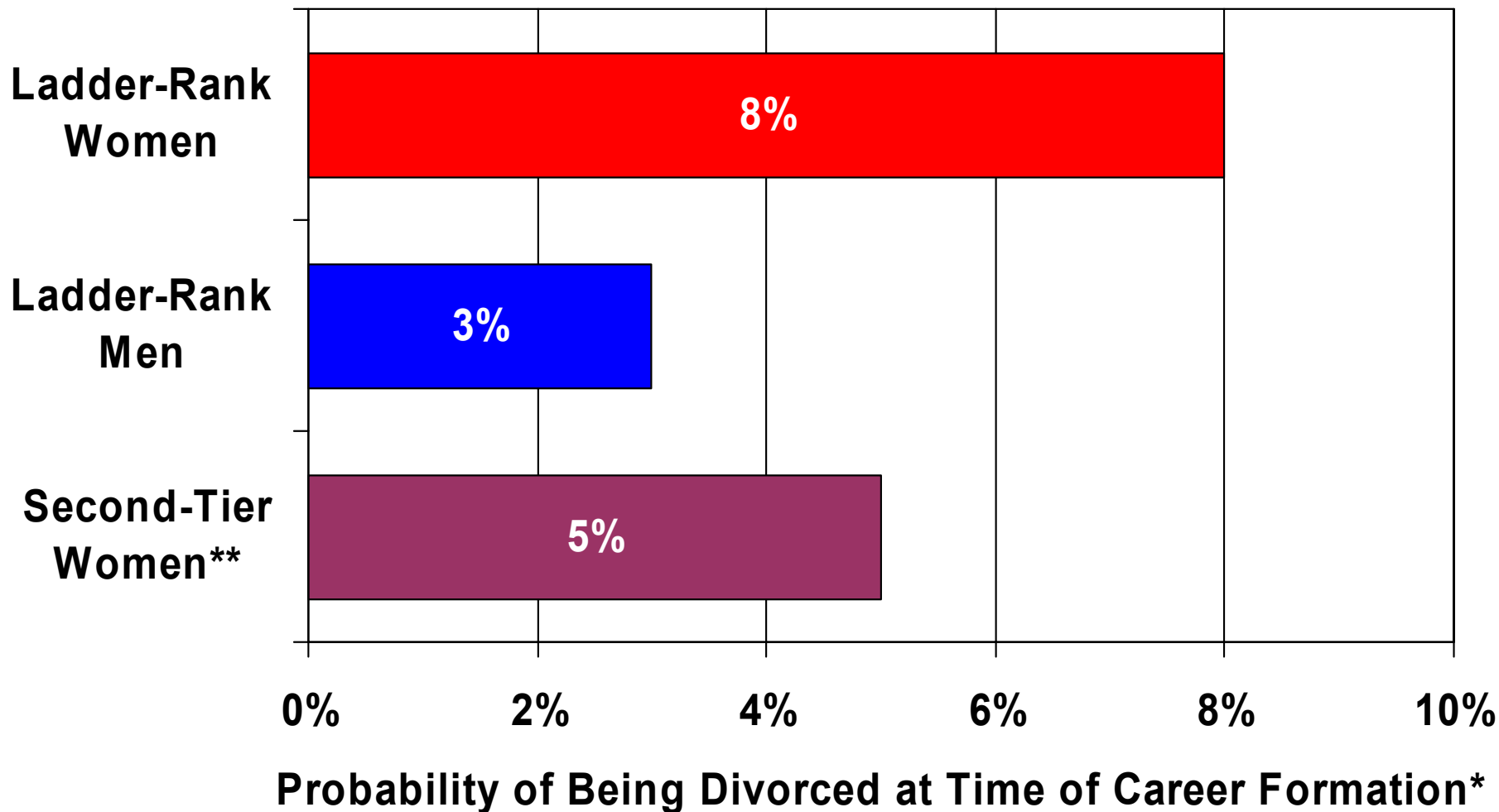


\*For individuals who had no child under 6 in household at time of career formation, 0-3 years post-PhD.

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

Source: SDR Science and Humanities Survey, 1981-1995. PhD recipients 1978-1994.

# Divorced at Time of Career Formation\*



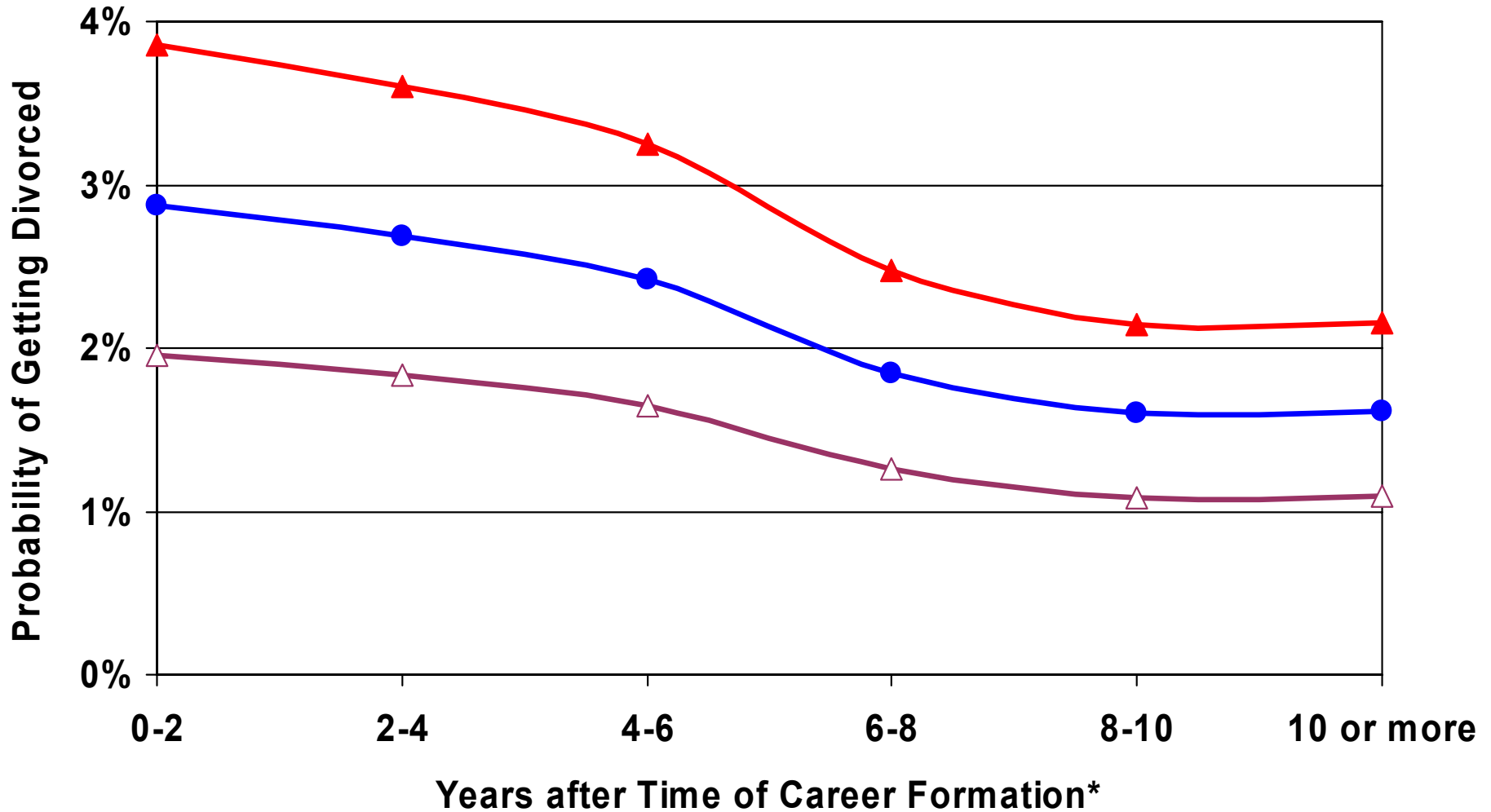
\*Time of career formation is defined as 0 to 3 years post-PhD.

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

Source: SDR Science and Humanities Survey, 1981-1995. PhD recipients 1978-1994.

# Getting Divorced after Time of Career Formation\*

▲ Ladder-Rank Women ● Ladder-Rank Men ▲ Second-Tier Women\*\*

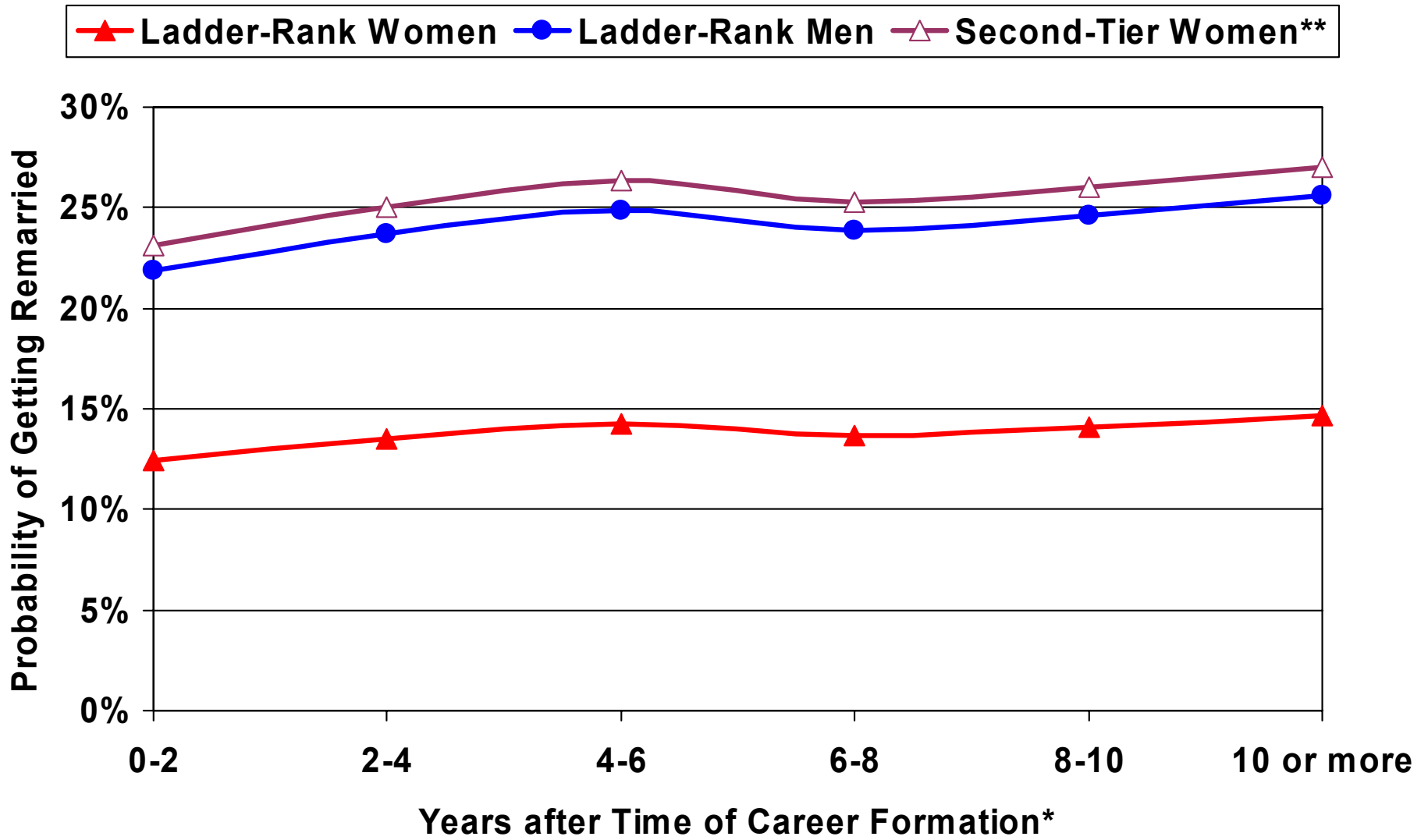


\*For individuals who were married at time of career formation, 0-3 years post-PhD.

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

Source: SDR Science and Humanities Survey, 1981-1995. PhD recipients 1978-1992 .

# Getting Remarried if Divorced at Time of Career Formation\*



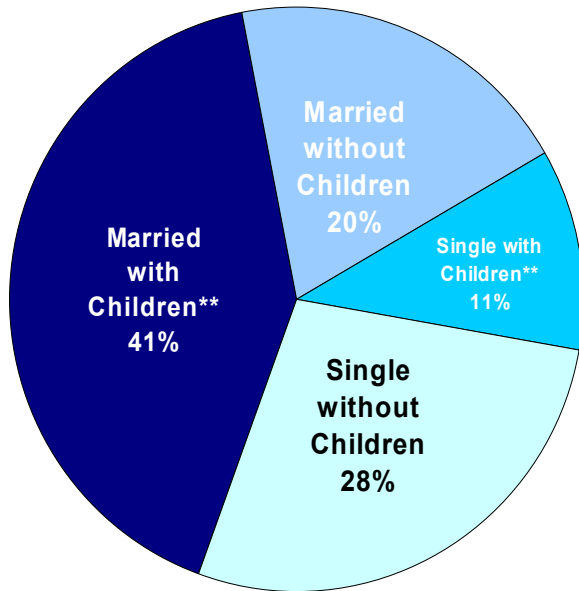
\*For individuals who were divorced at time of career formation, 0-3 years post-PhD.

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

Source: SDR Science and Humanities Survey, 1981-1995. PhD recipients 1978-1992 .

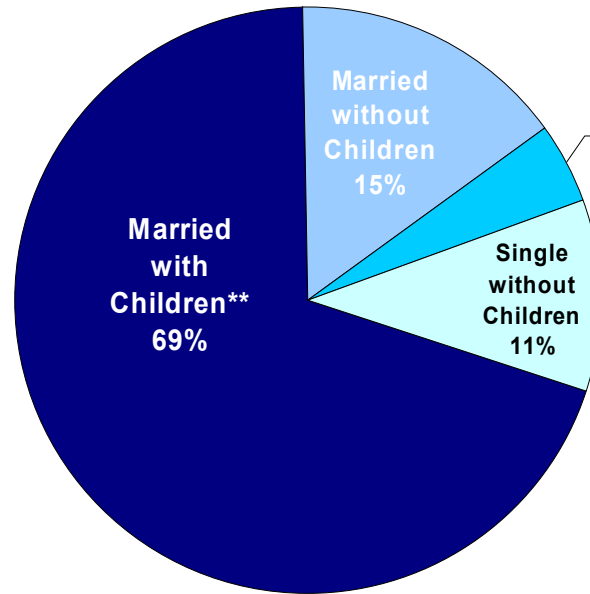
# Family Status Twelve Years out from PhD\*

## Ladder-Rank Women



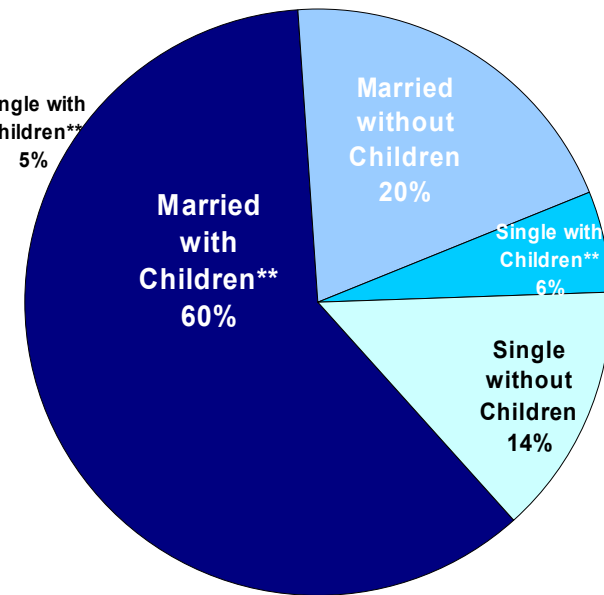
N=10,112

## Ladder-Rank Men



N=27,030

## Second Tier Women\*\*\*



N=7056

\*PhDs from 1978-1984 Who Are Ladder-Rank Faculty 12 Years out from PhD.

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

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

# UC Work and Family Survey: History and Response Rates

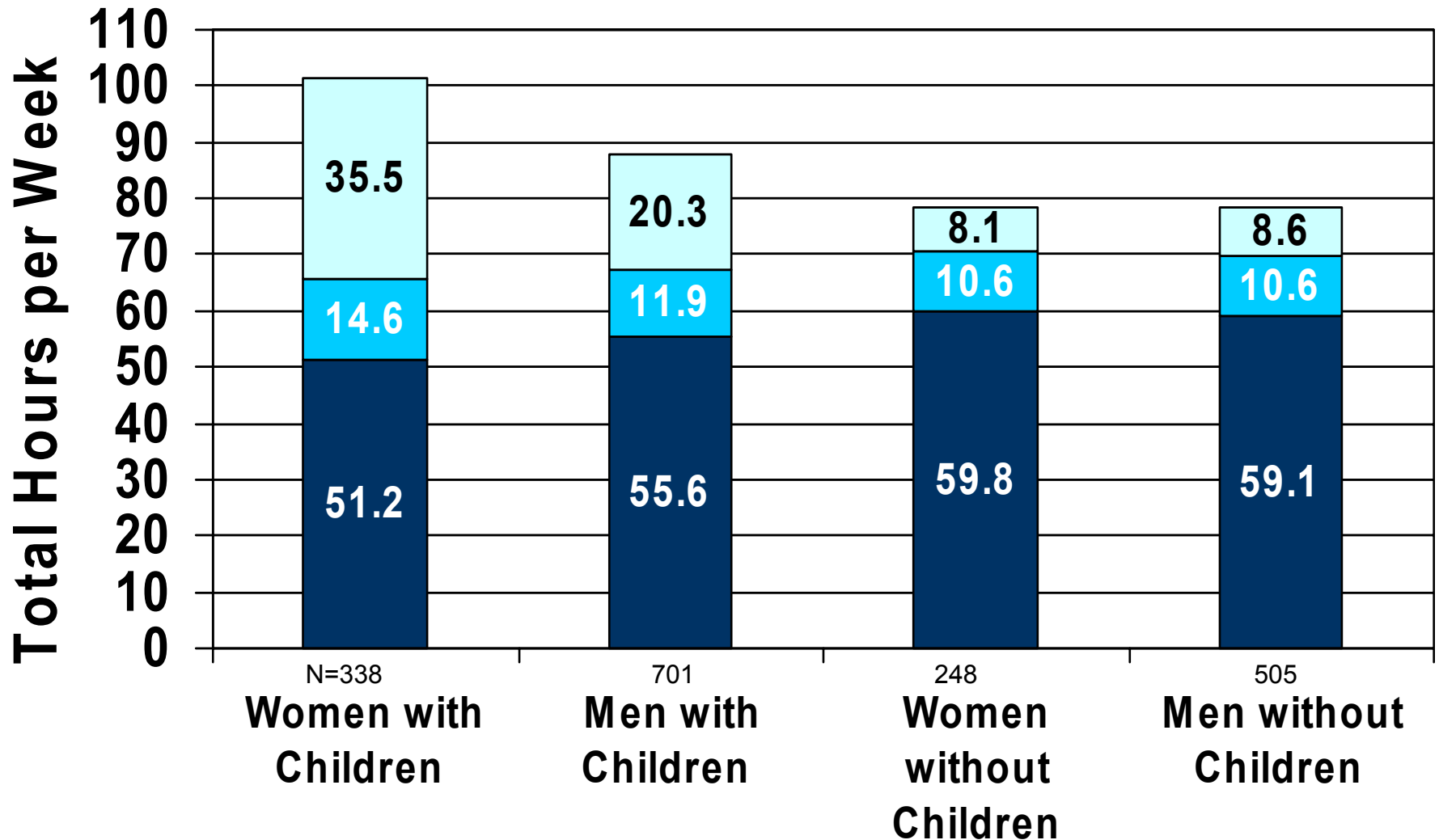
- The survey was designed to assess the effectiveness of UC's existing family friendly policies for ladder-rank faculty (implemented in July 1988). It was first conducted at UC Berkeley, Fall 2002, and was rolled-out in Spring-Summer 2003 to the other UC universities (except UCM), with President Atkinson serving as the first contact email signatory.

<b>University</b>	<b># of Responses</b>	<b># of Surveyed</b>	<b>Response Rate</b>
<b>Berkeley</b>	<b>743</b>	<b>1351</b>	<b>55%</b>
<b>Davis</b>	<b>820</b>	<b>1385</b>	<b>59%</b>
<b>Irvine</b>	<b>445</b>	<b>910</b>	<b>49%</b>
<b>Los Angeles</b>	<b>788</b>	<b>1758</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>4459</b>	<b>8705</b>	<b>51%</b>



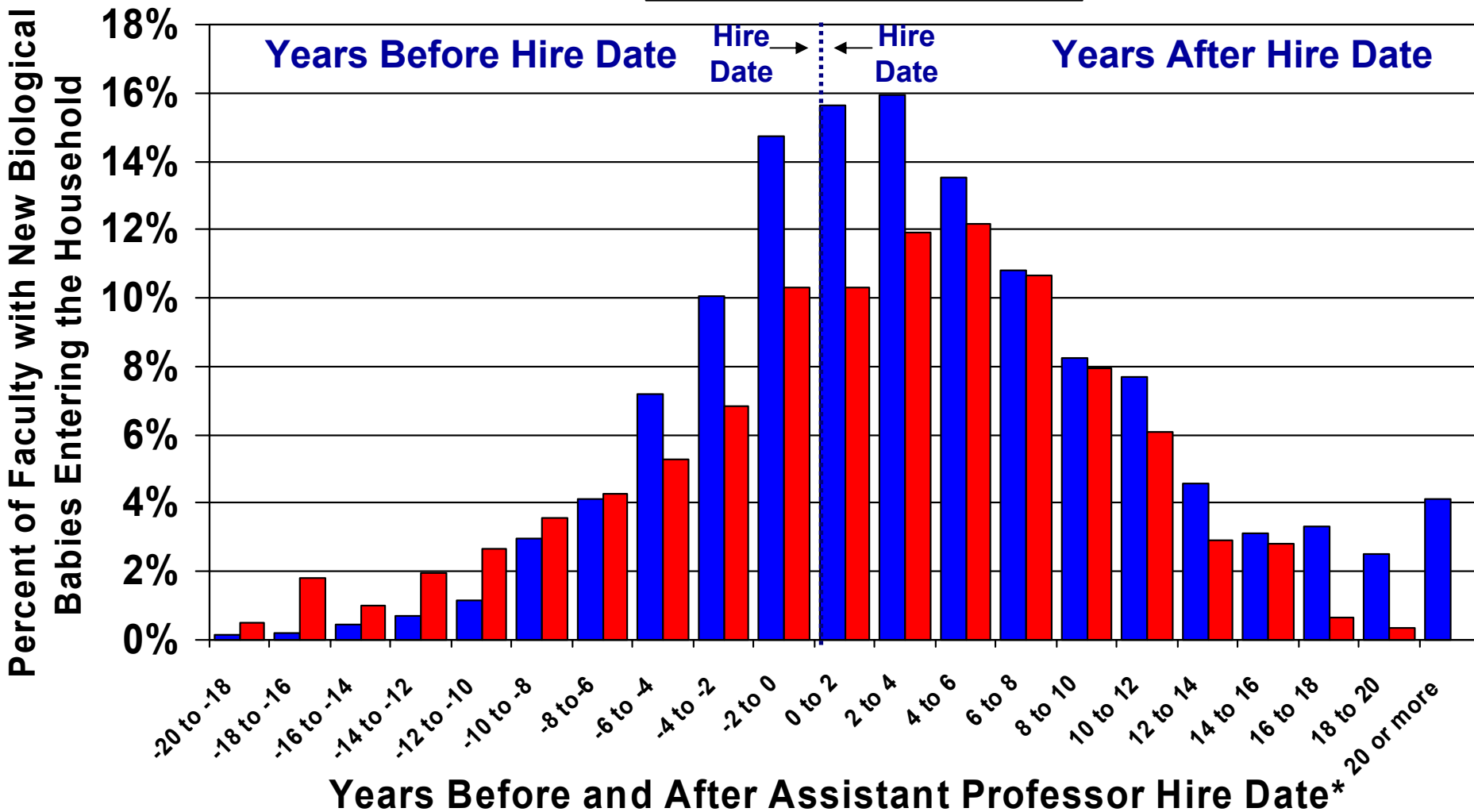
# Everybody is Very Busy (*UC Faculty, ages 30-50*)

■ Professional ■ Housework ■ Caregiving



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

Men Women



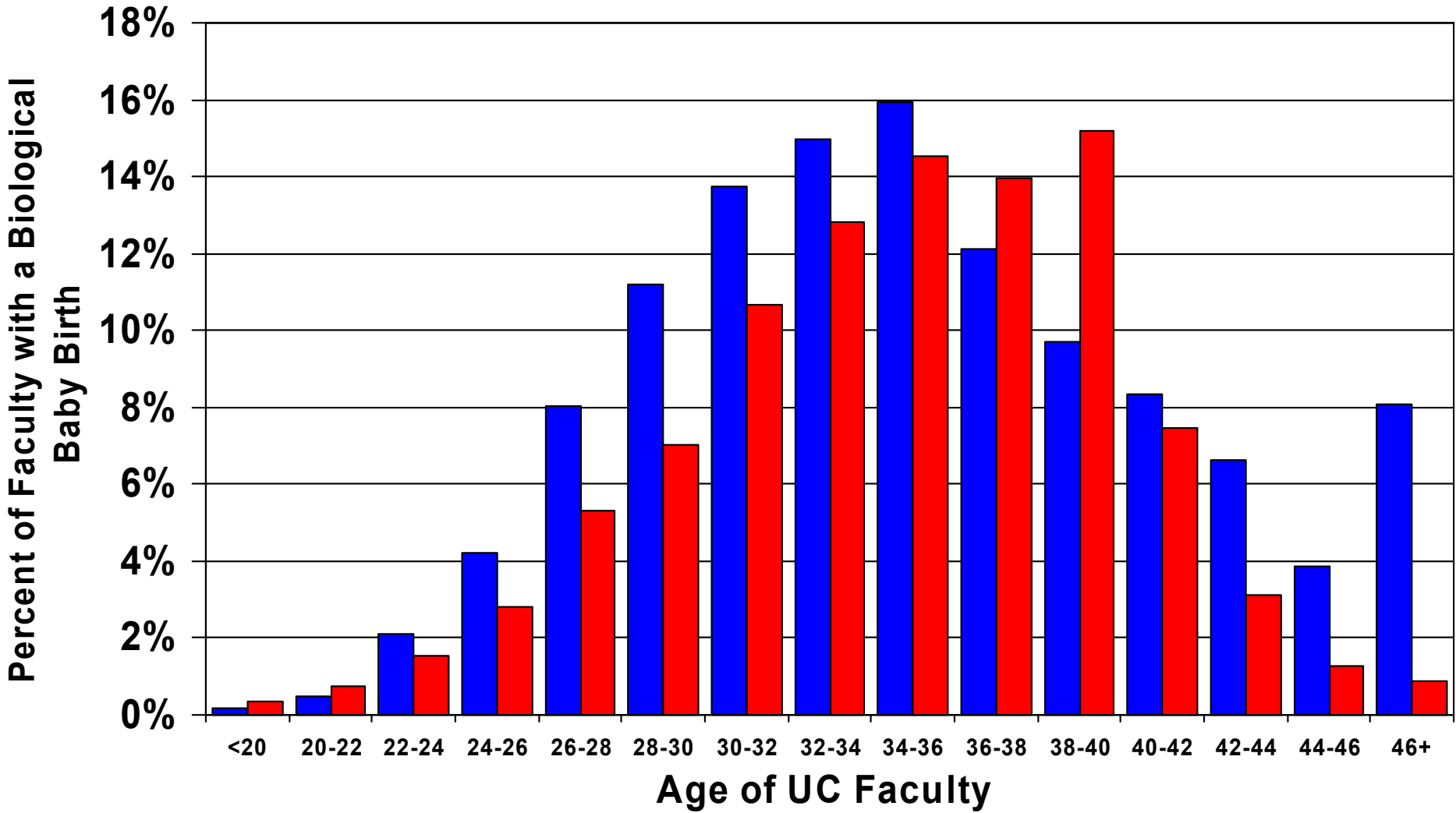
N=2340 Men

982 Women

\*Year 0 represents Assistant Professor Hire Date

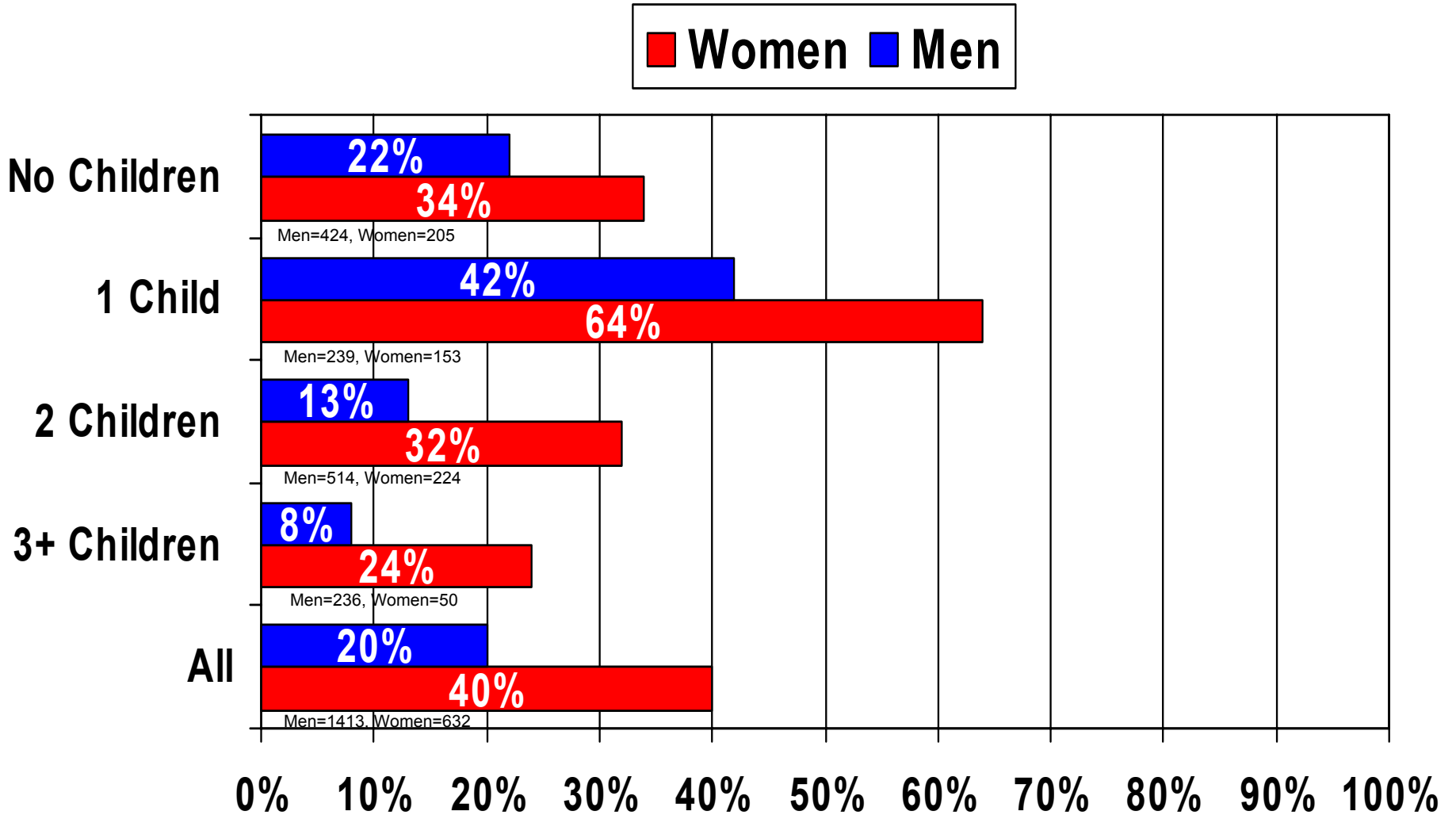
# Biological Baby Births by Age of UC Faculty

Men Women



N=2809 Men  
1095 Women

# Having Fewer Children Than They Wanted: UC Faculty, Ages 40-60, by Gender and Number of Children



Percent who indicated "Yes," "I had fewer children than I wanted"

# Sloan Grant: Developing a Family Friendly Package for UC Ladder Rank Faculty

1. Fix existing family friendly policies: **active service-modified duties, tenure clock extension.**
2. Develop a **flexible part-time option** for ladder-rank faculty which can be used as life-course needs arise.
3. Increase family friendly resources: (a) **child and infant care**, day-to-day and emergency; (b) **relocation assistance**; (c) **build necessary institutional mechanism to support policies.**
4. **Result—University of California will enjoy a competitive advantage in hiring and retaining the best and brightest faculty in the country, particularly women faculty.**

Our Website: <http://ucfamilyedge.berkeley.edu>