

Perceptions of Climate and Connectivity Among UNL STEM Faculty

Insights from STEM faculty at UNL from 2008



**Julia McQuillan, Christina Falci and
Mary Anne Holmes**



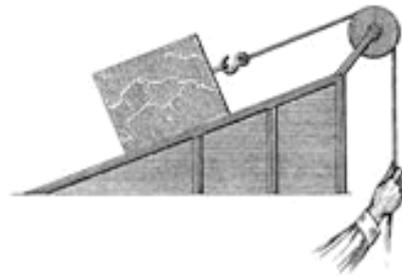
DATE: April 19, 2010
TIME: 11:30 AM — 1:00 PM

UNIVERSITY OF
Nebraska.
Lincoln

Goal:

Find changes to help UNL institutionalize ways to:

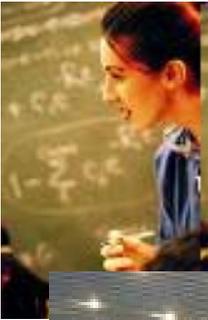
- increase women faculty in STEM departments
- increase women faculty in STEM leadership positions



Why?



- These are the goals of the NSF grant
- And:
 - More perspectives = better research
 - More students = more STEM workers



....save the world?



How can survey data help?

- Just one of many sources of data
- Evidence based decision making
 - Is UNL similar to peer institutions?
 - Are men always better off than women?
 - Should we focus on assistant, associate or full professors first?





Comparisons to Peer Institutions that did the CHOACHE survey

University of Illinois at Urbana-Champaign,
University of Iowa, Iowa State University,
University of Kansas, Ohio State University



COACHE

- Collaborative on Academic Careers in Higher Education
 - Co-PIs: Cathy Trower, Kiernan Matthews, Harvard Graduate School of Education
 - Usually surveys pre-tenure faculty in all departments.
We're unique.
 - Survey of academics about academic issues and life

Parts of the COACHE Survey

1. Demographic Information

2. Tenure & Promotion Clarity & Reasonableness

3. Nature of the Work: Satisfaction with time allocation, quality of support services, teaching & research loads

4. Policies & Practices: Importance and effectiveness of work-life policies and professional development

5. Climate, Culture and Collegiality

6. Global Assessments





This set of items addresses various aspects surrounding tenure and promotion in your department.	Not Applicable	Very clear	Fairly clear	Neither	Fairly unclear	Very unclear	Decline
19. I find the tenure <i>process</i> in my department to be...	<input type="radio"/>						
20. I find the tenure <i>criteria</i> (what things are evaluated) in my department to be...	<input type="radio"/>						
21. I find the tenure <i>standards</i> (the performance threshold) in my department to be...	<input type="radio"/>						
22. I find the <i>body of evidence</i> that will be considered in making my tenure decision to be...	<input type="radio"/>						
23. My sense of whether or not I will achieve tenure is...	<input type="radio"/>						



Caveats

Highlights – details available upon request



Small Sample sizes

UNL men	= 28	Peer men	= 188
UNL women	= 9	Peer women	= 26



UNL no different from Peers

(Pre-tenure Stem)

- Clarity of the tenure process
- Satisfaction with aspects of teaching
- Satisfaction with work in general
- Supports for work/life balance
- Sense of fit
- Intellectual vitality



UNL Advantage

(Pre-tenure Stem)

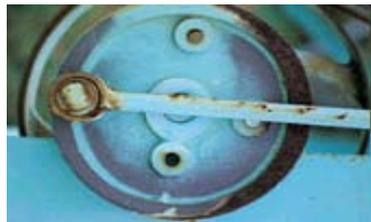
- Clarity of tenure expectations about being a member of a broader community (♀)
- Tenure decisions are based on performance
- Academic Freedom
- Assistance for grant proposals



Best at UNL

(Pre-tenure STEM)

UNL Advantage	Best Aspect	UNL Proportion	Peer Proportion	UNL Rank	Peer Rank
.26	Academic Freedom	.29	.03	1	20
.15	Assistance for grant proposals	.20	.05	4	12
.03	Cost of Living	.26	.23	2	2
-.03	Opportunities to collaborate with colleagues	.14	.17	6	4
-.05	Support of Colleagues	.14	.19	5	3
-.06	Quality of Colleagues	.20	.26	3	1



UNL Disadvantage (Leverage?)

- Clarity of tenure expectations as a scholar and as a citizen of a broader community ♂
- Reasonableness of tenure expectations as a teacher, advisor, colleague, citizen of broader community ♂
- Compensation, personal interaction ♂
- Child care effectiveness (*all*)



Part 2:

Focusing on Gender

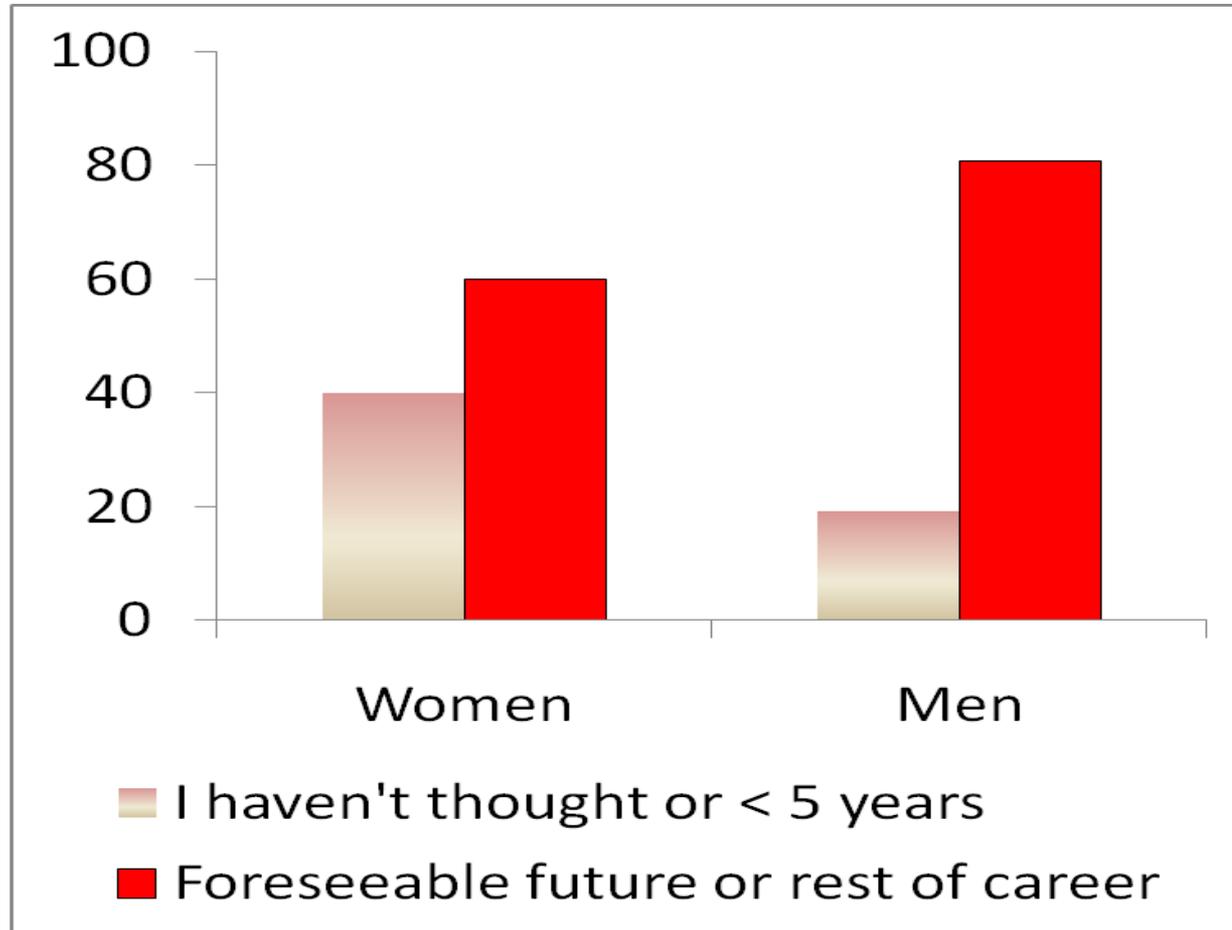
Then Gender and Rank



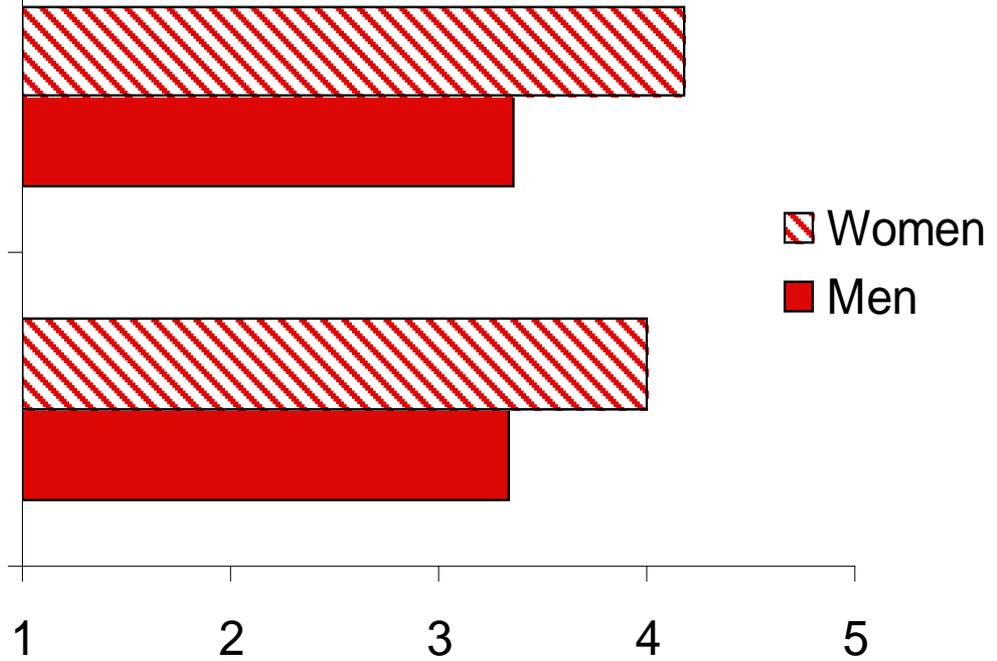
All Ranks
Only UNL



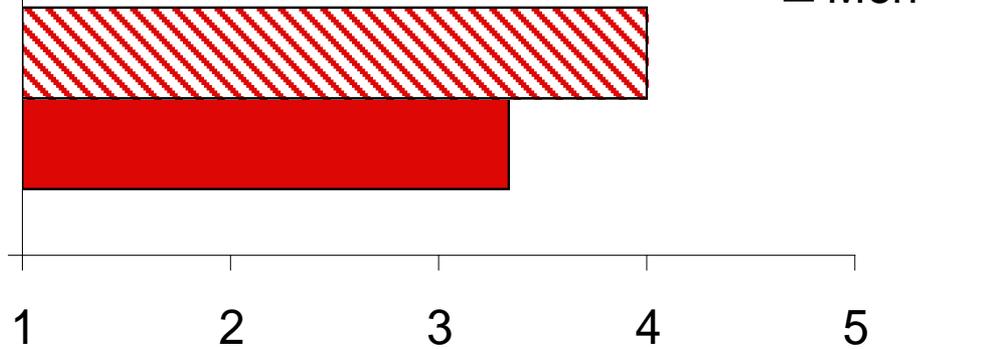
Gender and Organizational Commitment



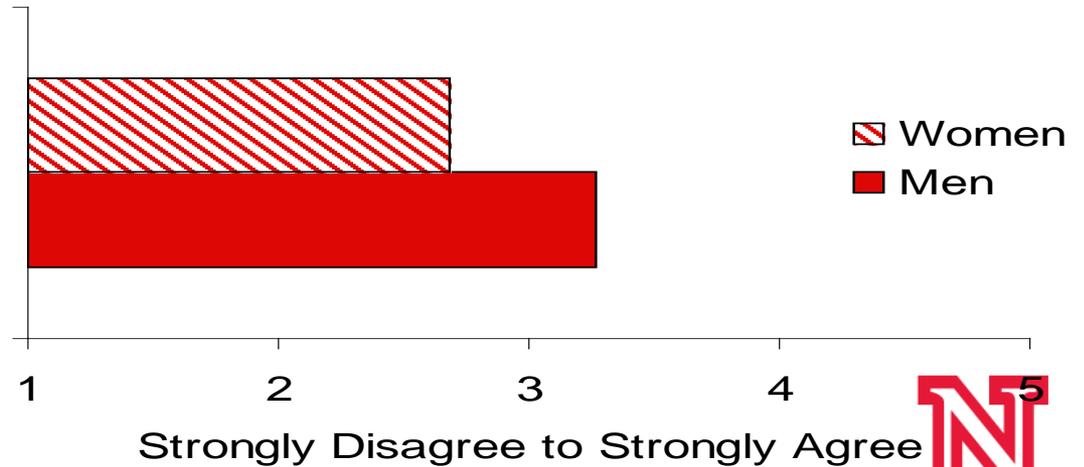
Importance of policy for success:
spouse/partner hiring



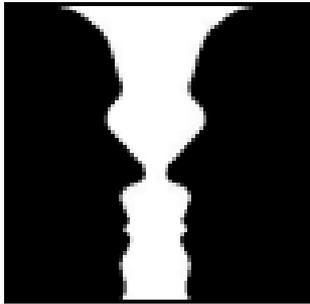
Importance of policy for success:
paid and unpaid personal leave



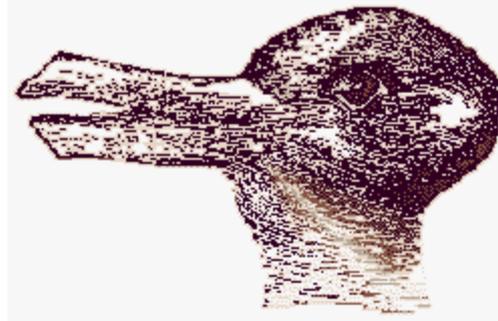
My institution
helps to make
family/career
compatible



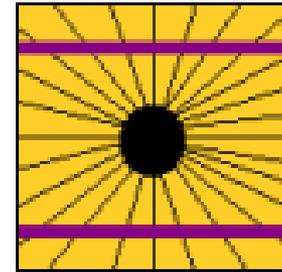
What do you see?



A. Faces or
Vase?



B. Rabbit or a
Duck?



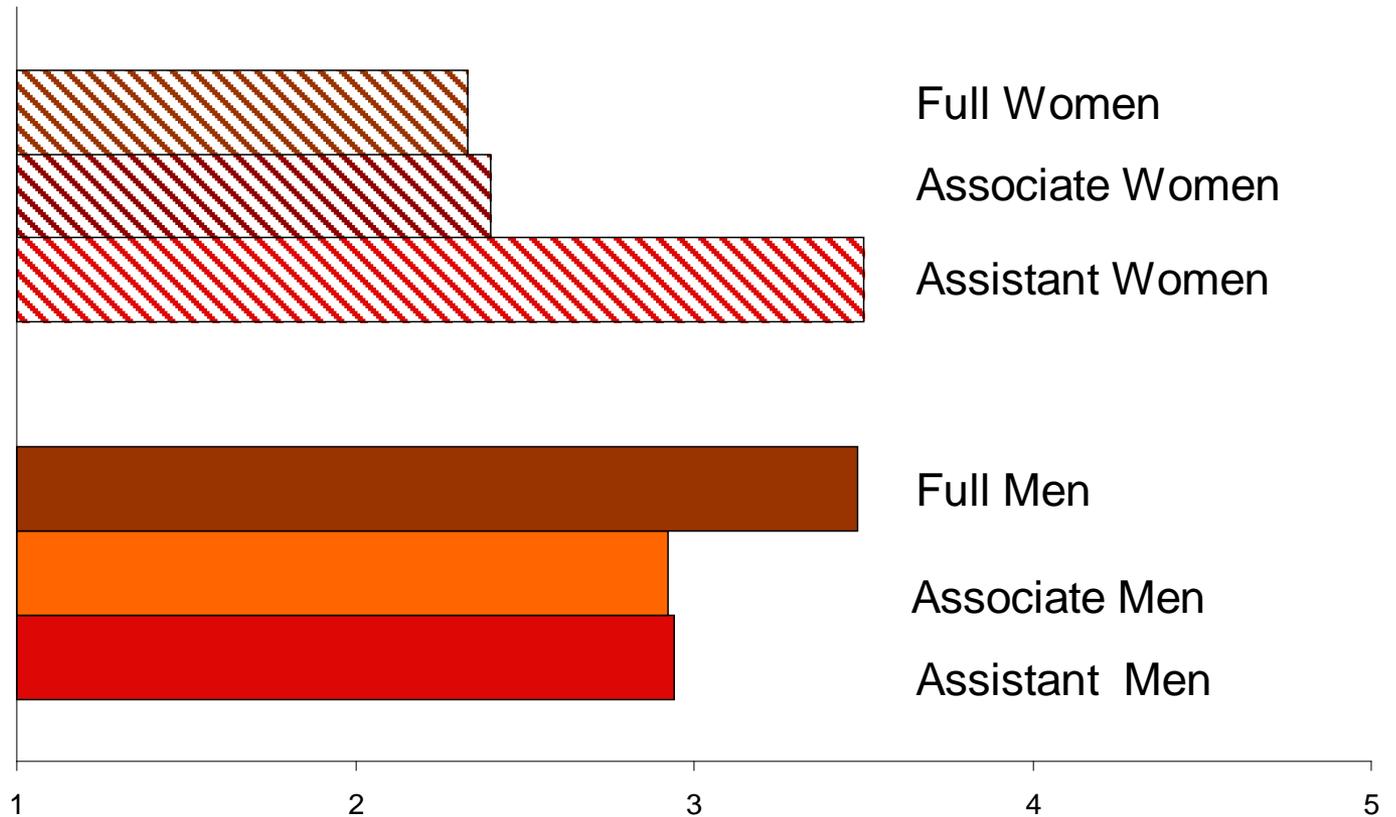
C. Straight or
crooked lines?

“Seeing” depends upon rank

- Good news:
 - Pre-tenure women tend to be more positive than all other groups
- Troubling new:
 - Full Professor women tend to be more negative than all other groups



**My
Institution
Helps
Make
Family and
Career
Compatible**



Strongly Disagree to Strongly Agree

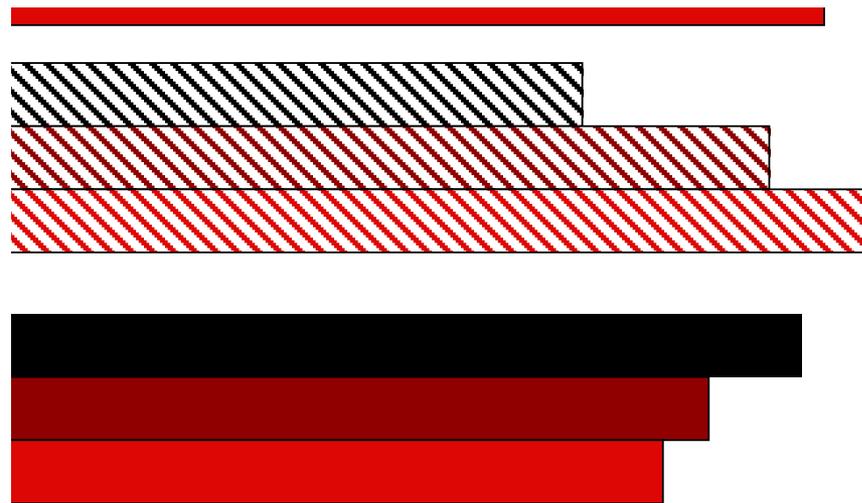
■ Assistant ▨ Associate ■ Full



His and Her time by Rank



Very UNsatisfied Very satisfied



Full Women
Associate Women
Assistant Women
Full Men
Associate Men
Assistant Men

Satisfaction with
the way you spend
your time



CLARITY of tenure process as a:
colleague
campus citizen
a member of the broader community

♀ Perceptions of clarity *decreased* as rank increased ↓

♂ Perceptions of clarity *increased* as rank increased ↑



The End...

....And the beginning

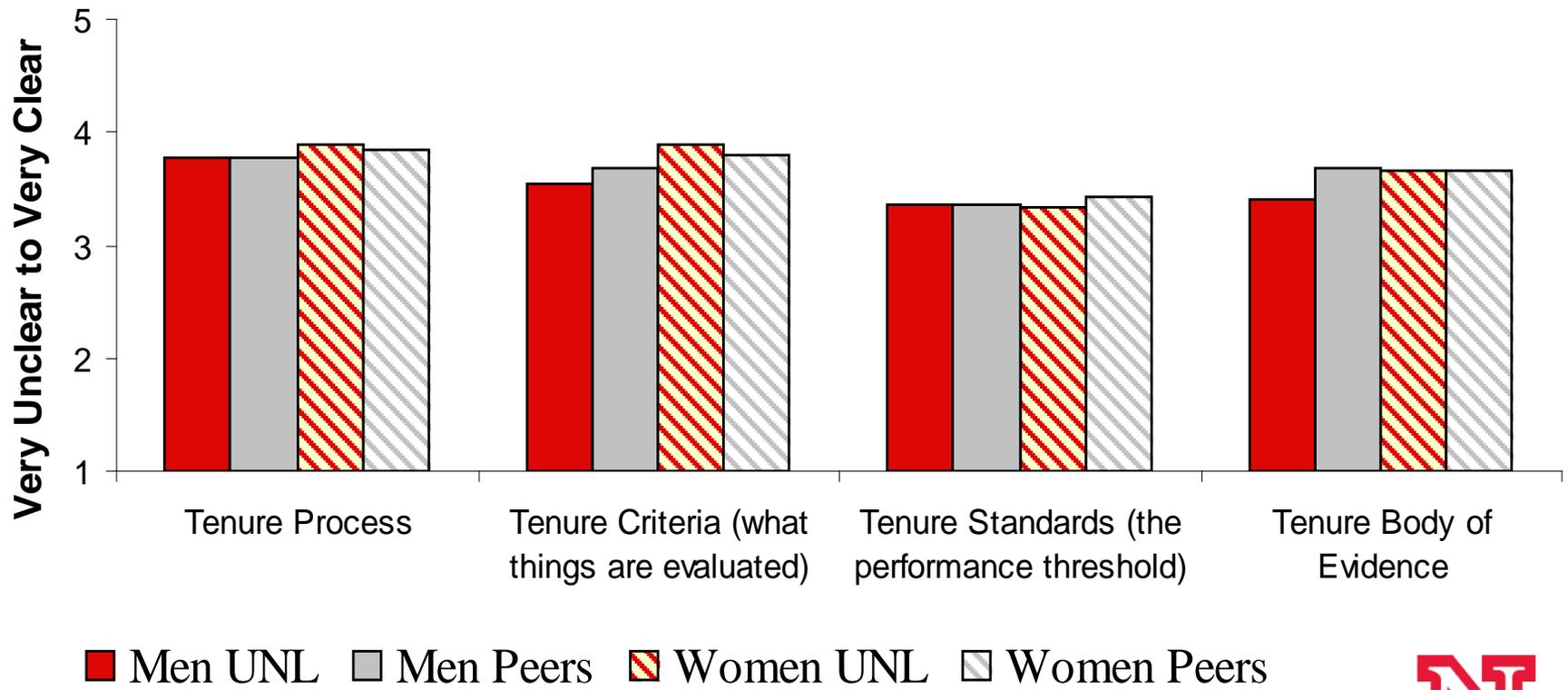
What should we do next?

Thanks to Jim Lewis!



Clarity of the tenure process....

No differences



Is what's expected in order to earn tenure clear to you regarding your performance as:

... a scholar (e.g., research and creative work)?

...a teacher?

...an advisor to students?

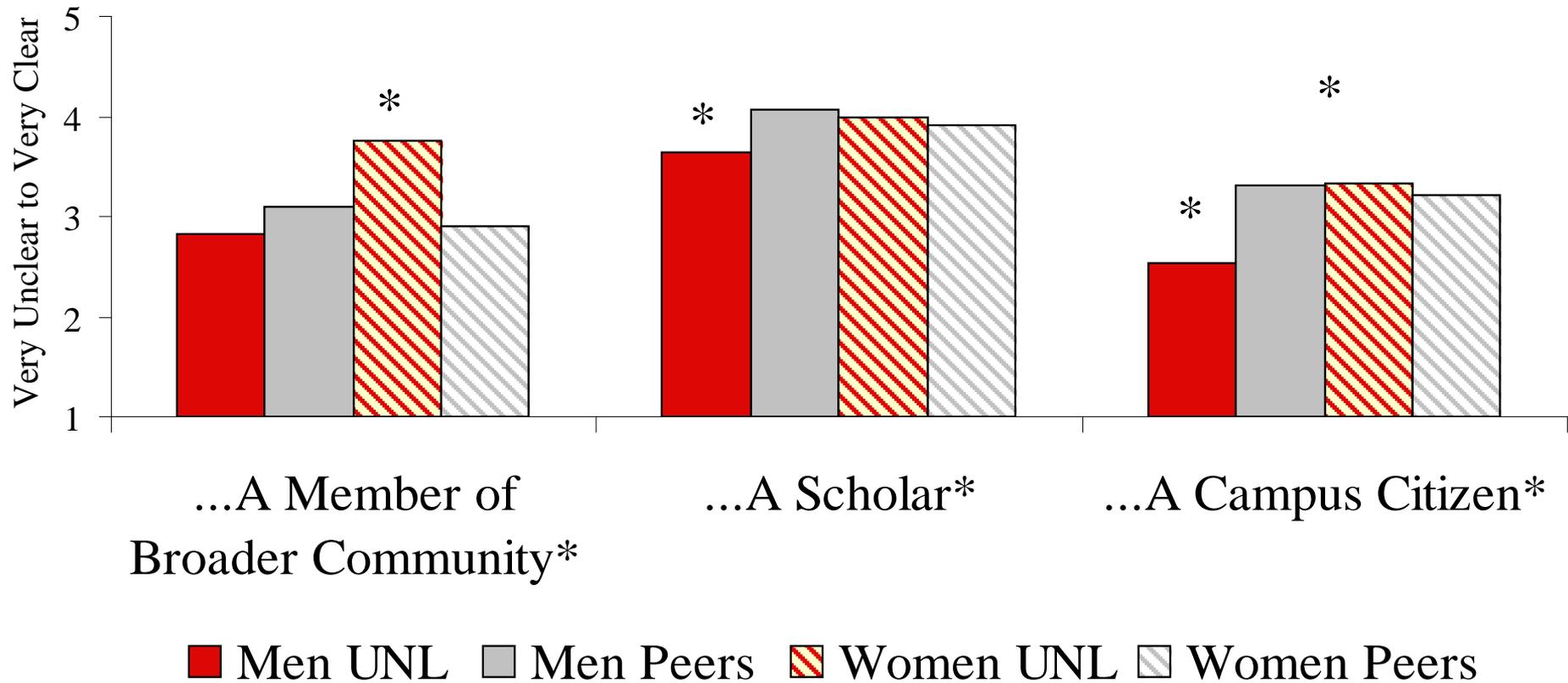
...a colleague in your department

...a campus citizen?

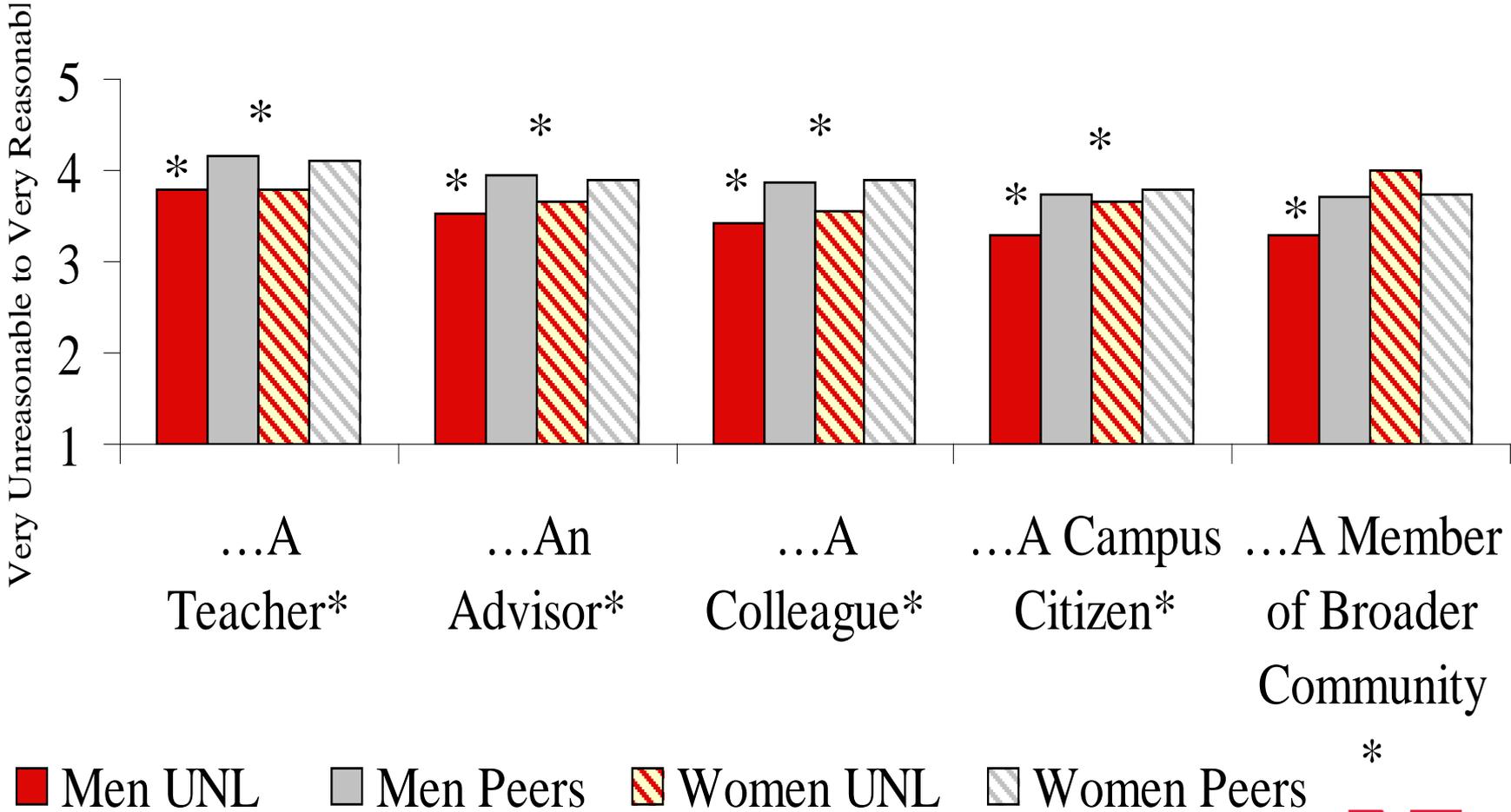
...a member of the broader community (e.g., outreach)?



Do the clarity of particular tenure expectations differ? Some...



Do perceptions of the reasonableness of tenure differ? **Yes**



“I have received consistent messages from tenured faculty in my department about the requirements for tenure.”

Not significantly different

“In my opinion, tenure decisions here are made primarily on performance-based criteria rather than on non-performance-based criteria.”

UNL = 4.19 >* PEER = 3.73



Next: NATURE OF THE WORK

The survey asked:

“The next set of items explores your day-to-day activities as a faculty member. Please indicate your level of satisfaction or dissatisfaction with the following aspects of your work”



Are there differences with satisfaction in aspects of *teaching*?

NO



...Level of courses

...Number of courses



...Degree of influence over students

...Discretion over course content



...Number of students



Are there differences with satisfaction with aspects of *work in general*?



NO

...Way you spend your time

...Number of hours a week



...Amount of time on research

...The amount of external funding expected to find



...Influence over the focus of research



Next: Importance & Effectiveness of Policies & Practices

The screenshot shows a web browser window with the address bar displaying `http://hr.unl.edu/policies/`. The page header features the UNL logo and the text "UNIVERSITY OF NEBRASKA-LINCOLN". A search bar is located in the top right corner. Below the header is a navigation menu with the following items: UNL, Business & Finance, Human Resources, and Policies. The main content area is divided into six columns of links:

- Employment & Compensation**
 - Current Opportunities
 - Job Seekers FAQ
 - Hiring Managers Toolbox
 - Salary Administration
 - Student Employee Wages (PDF)
- Benefits**
 - Retirement
 - Insurance Overview
 - Medical Insurance
 - Life Insurance (Employer Provided)
 - Life Insurance (Voluntary)
 - Additional Insurance Options
 - Health Care Reimbursement Account
 - Dependent Day Care Reimbursement Account
 - Employee & Dependent Scholarship Program
 - Risk Management
- Employee Relations**
 - New Employee Orientation
 - Child Care
 - Crisis Leave
 - Family/Medical Leave
 - Professional Training & Development
 - Employee Services/Discounts
 - Service Awards
 - Reduction In Force
 - Grievance Policy
- EAP (Employee Assistance Program)**
 - Services Provided
 - Eligibility & Confidentiality
 - Schedule an Appointment
 - Info for Supervisors
 - FAQ
 - Work and Family Life Topics
 - Support Group for Adult Children with Aging Parents
- Organization Development**
 - What is Org Dev?
 - Services Offered
 - Building a Committed and Effective Workforce
- Policies, Forms & Programs**
 - Policies
 - Training & Development
 - Holiday Schedule
 - Employee & Dependent Scholarship Program
 - College Savings Plan
 - Employee Services
 - Service Awards

Below the navigation menu, there is a section titled "Selected HR Policies" with a list of links:

- Funeral
- Civil
- Military
- Administrative
- Crisis
- Family Medical Leave
- Medical Maternity Leave

On the right side of the page, there are two news items:

- Feb 23rd Individualized Retirement Counseling (Fidelity) NEBRASKA UNION
- Feb 23rd Individualized Retirement Counseling (TIAA-CREF) NEBRASKA EAST UNION

The browser's taskbar at the bottom shows several open applications, including Microsoft Office, IZarc, and a book titled "Book1". The system tray indicates the time is 6:01 PM and the battery level is at 64%.



“Regardless of whether the following policies and practices currently apply to your institution,

please rate *how important or unimportant each would be to your success.*

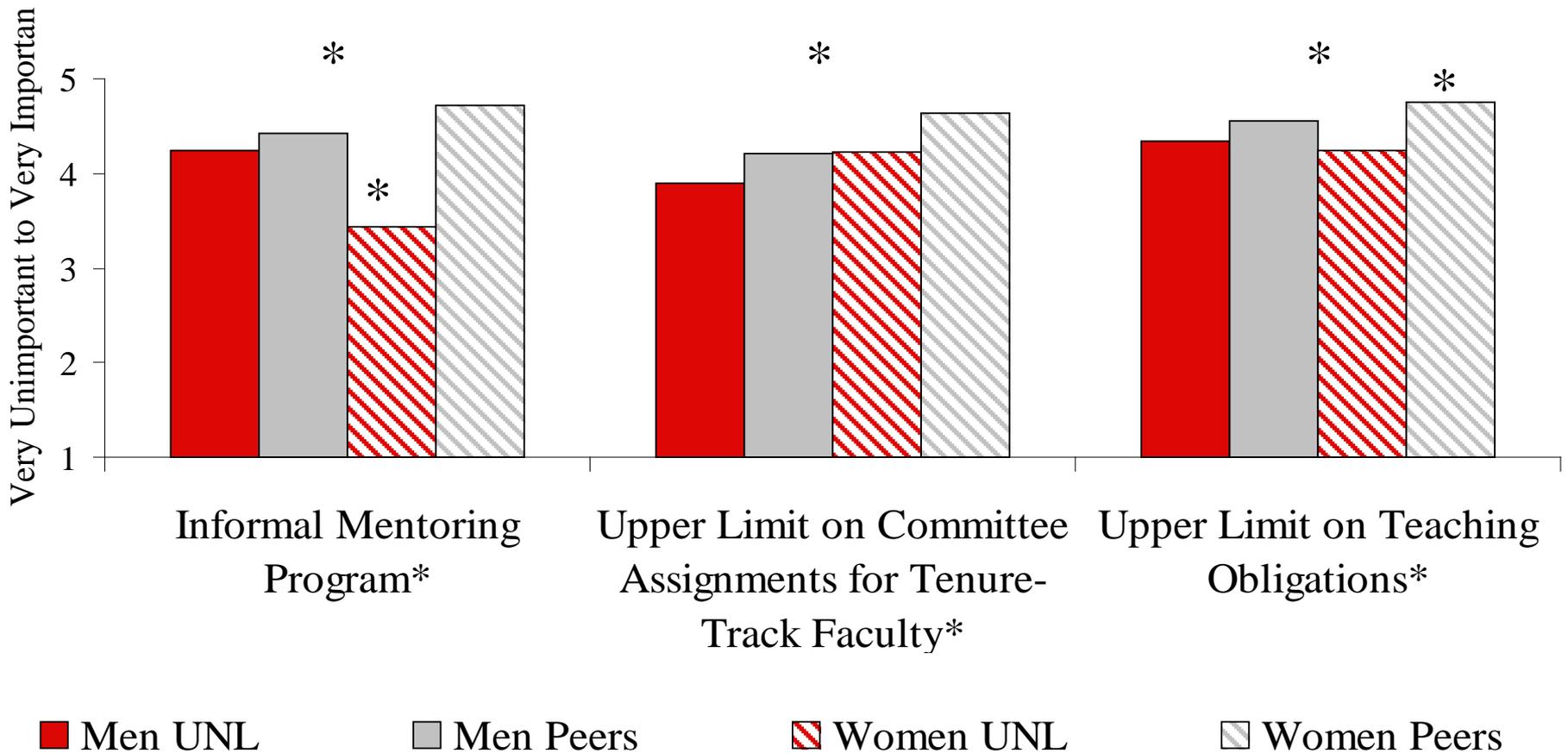
Then rate *how effective or ineffective each has been at your institution.*”

Examples of Policies:

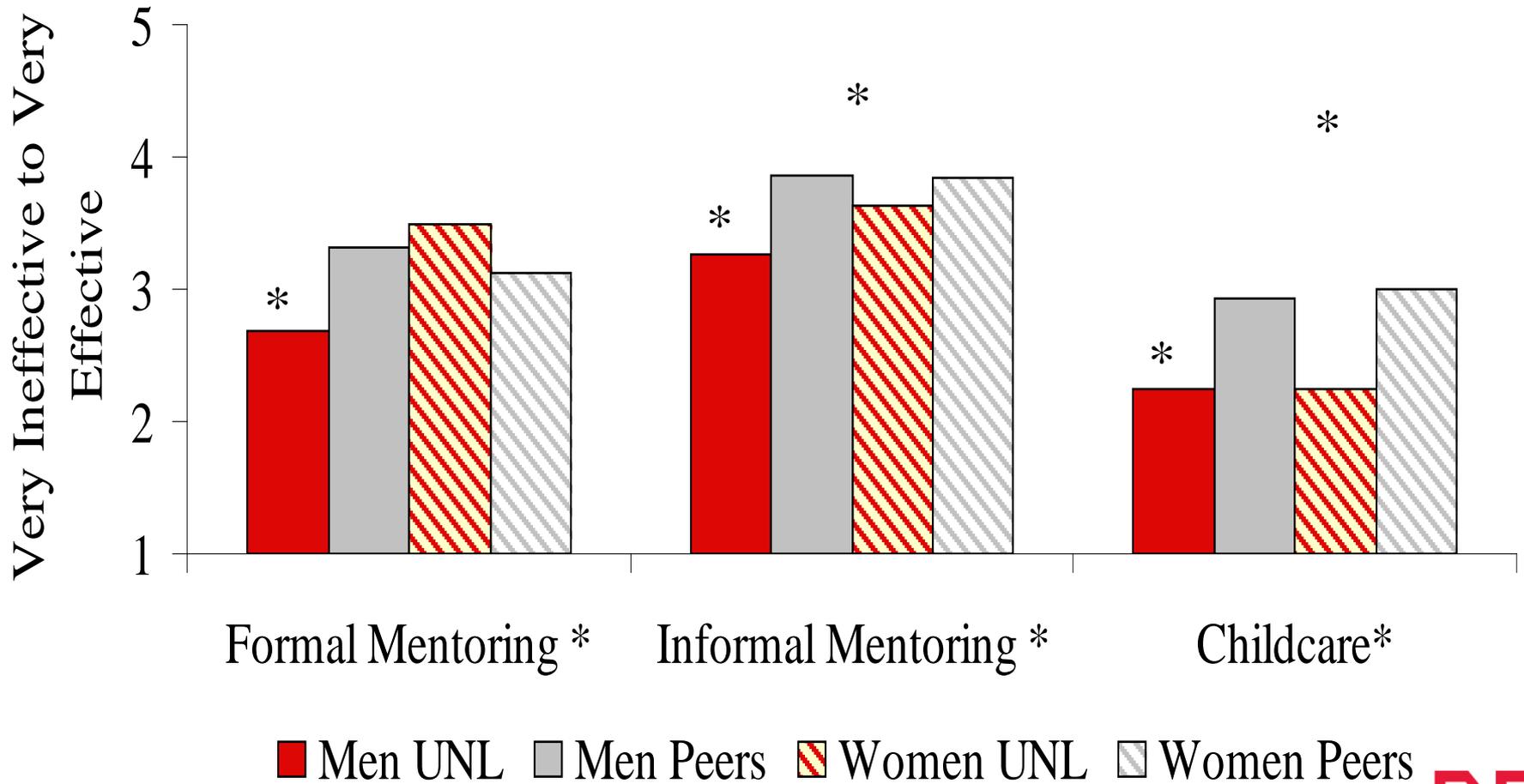
- Upper limit on committee & teaching assignments
- Formal /informal mentoring program
- Performance reviews
- Spousal/partner hiring; child care; housing assistance, stop-the-clock
- Support for externally funded grants
- Assistance with or peer review of teaching
- Paid or unpaid leave
- Travel funds



Importance of policies: which differ?



Effectiveness of policies: which differ?



Do perceptions of supports for work/life balance and tenure track (TT) differ? **No**

- **Institutional Support for**
 - having children and TT
 - raising children and TT
- **Colleague Support for**
 - for having children and TT
 - raising children and TT
- **Colleagues' Respect for**
 - personal work & responsibilities



Satisfaction with Climate, Culture and Collegiality

Differences between UNL and Peers



Compensation
& benefits *



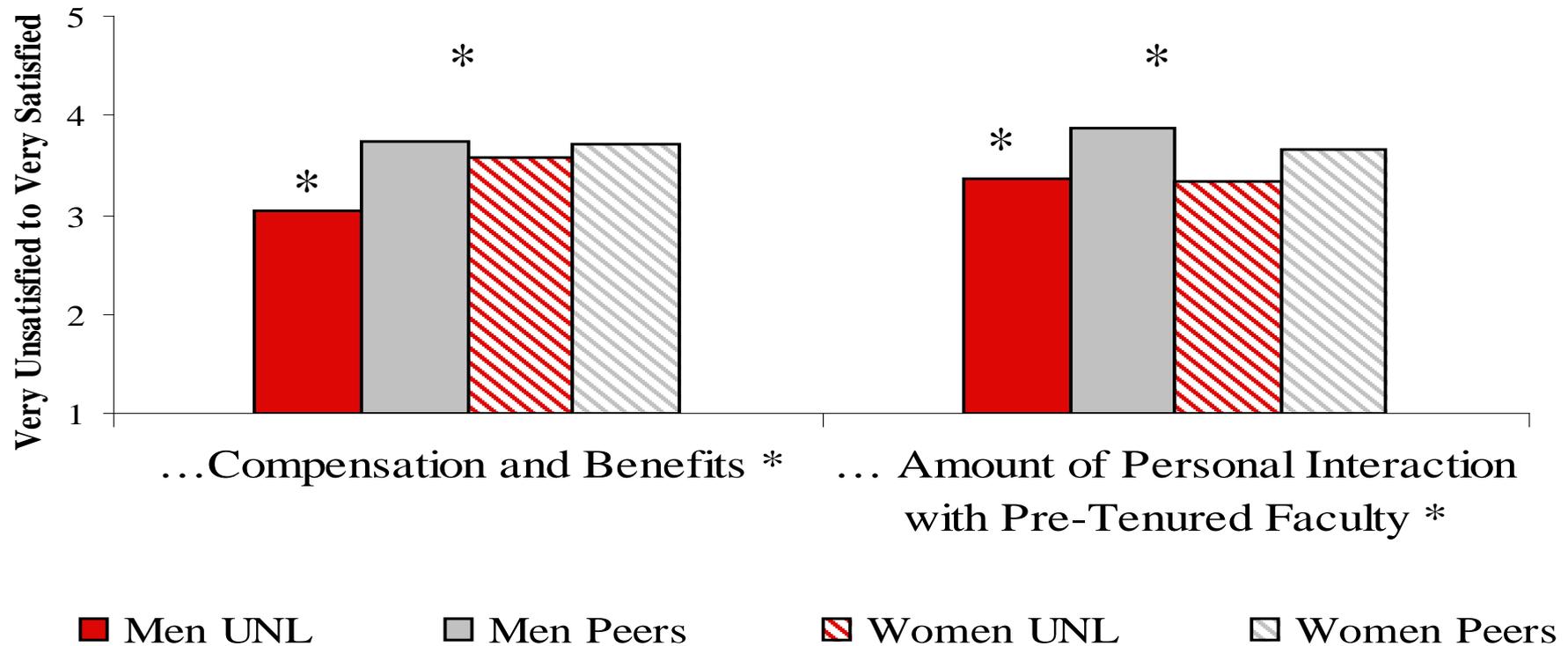
Amount of personal
interaction with pre-
tenured faculty *

No differences between UNL and Peers

- Professional interaction with *pre*-tenured faculty
- Balance professional & personal/family time
- Fairness of immediate supervisor
- Interest tenured faculty take in your career
- Opportunities to collaborate with tenured faculty
- Professional & personal interaction with *tenured* faculty



Are there differences in satisfaction on any aspects?



No differences between UNL and Peer faculty on...

... how well they "fit" (e.g., sense of belonging, comfort level) in their department.



... ..the intellectual vitality of tenured faculty in their department



GLOBAL SATISFACTION:

“Finally, we ask you to make some overall assessments about your department and your institution as a place to work.

Please check the two (and only two) best aspects about working at your institution.”





Academic freedom	Assistance for grant proposals	My sense of “fit” here
Support of colleagues	Spousal/partner hiring program	Quality of colleagues
Opportunities to collaborate	Cost of living	Support for professional development
Quality graduate students	Geographic location	Manageable pressure to perform
Quality undergraduates	Diversity	<i>Promotion</i> requirements in general
Quality of facilities	Presence of others like me.	<i>Promotion</i> criteria clarity
Compensation	Teaching load	<i>Promotion</i> process clarity
Support for teaching	Protections from service/assignments	<i>Tenure</i> criteria clarity
Availability/quality of childcare	Commute	Other (Please specify):
<i>Tenure</i> process clarity	Research requirements for <i>tenure</i>	Other (Please specify):
Childcare policies/practices	<i>Tenure</i> requirements in general	There are no positive aspects.
Support for research (e.g., leave)	Research requirements for <i>promotion</i>	



UNL STEM Faculty compared to Peers

UNL Rank	Best Aspects	Proportion Selected - UNL	Proportion Selected - Peer	Peer Rank	
1	Academic freedom	.29	.03	20	-19
2	Cost of living	.26	.23	2	0
3	Quality of Colleagues	.20	.26	1	2
4	Assistance for grant proposals	.20	.05	12	-8
5	Support of colleagues	.14	.19	3	2
6	Opportunities to collaborate with colleagues	.14	.17	4	2



Summary: How are UNL STEM assistant professors better, worse, or no different from Peer STEM assistant professors?

Clarity and reasonableness of tenure

- UNL < PEERS clarity for community, scholar, campus citizen
- UNL < PEERS reasonableness of teacher, advisor, colleague, campus citizen, member broader community
- UNL > PEERS tenure based on performance-based criteria

Satisfaction with teaching and general work situation:

- UNL = PEERS

Policies and Procedures

- UNL < PEERS importance of informal mentoring, upper limit on committees, and upper limit on teaching obligations
- UNL < PEERS effectiveness of formal mentoring, informal mentoring, child care
- UNL = PEERS on work/life balance & tenure track

Satisfaction

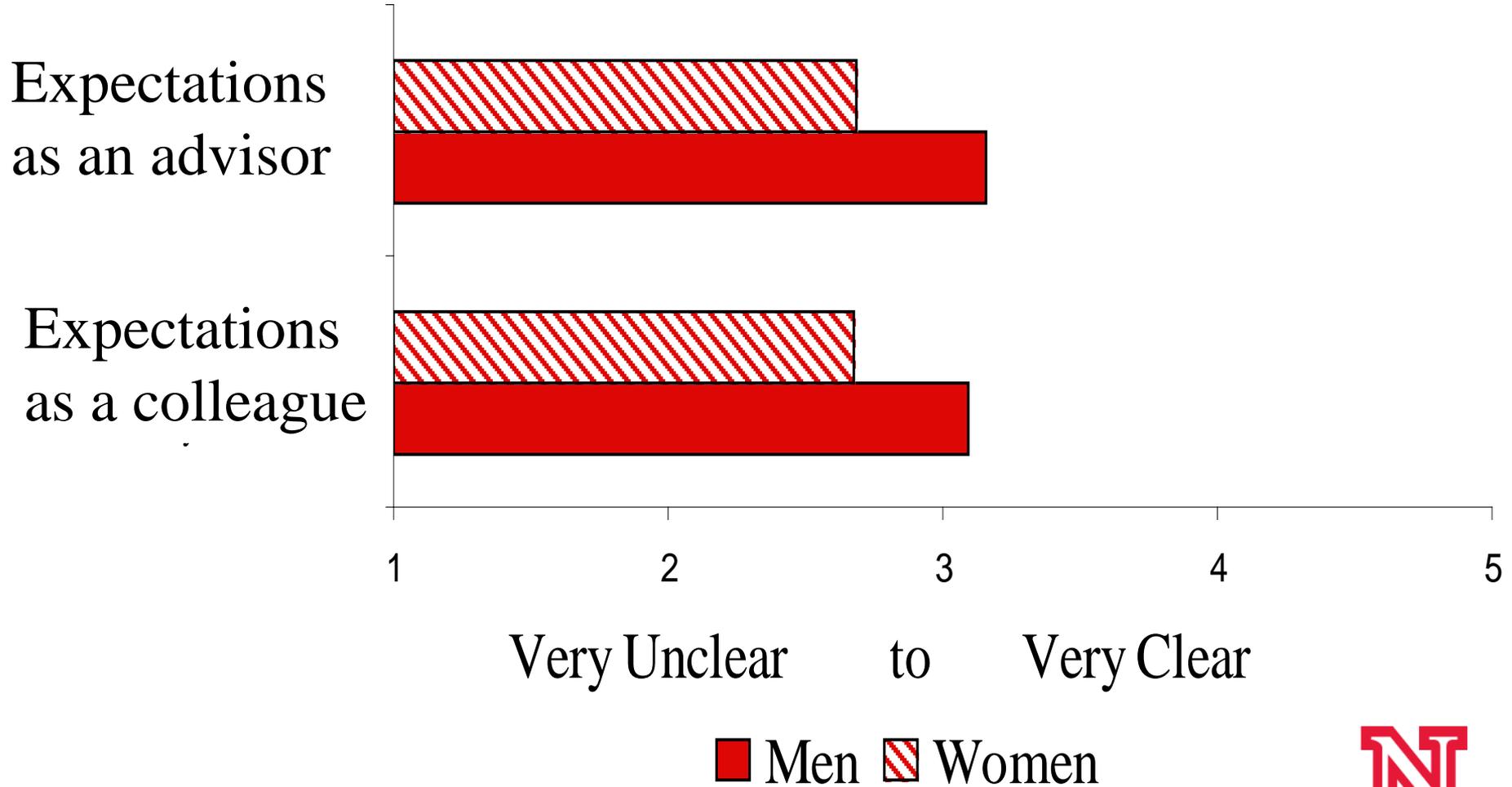
- UNL < PEERS on compensation/benefits & personal interaction with pre-TT

Global satisfaction

- UNL = PEERS on sense of fit and intellectual vitality
- UNL > PEERS best aspects academic freedom and assistance for grant proposals
- UNL < PEERS best aspect “sense of fit”



Expectations for tenure that differ by gender

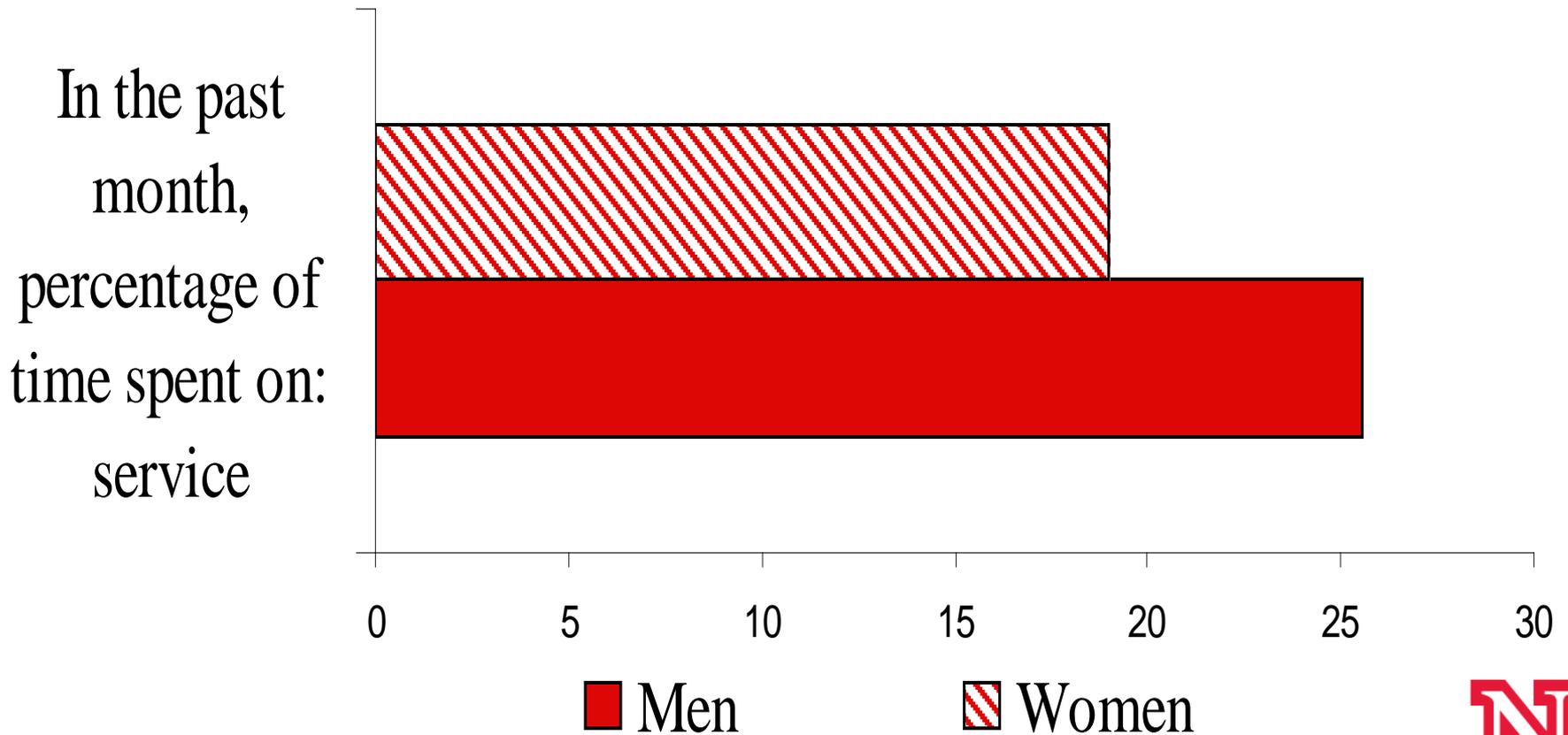


Future plans

“Assuming you have or will achieve tenure, how long do you plan to remain at your institution?”

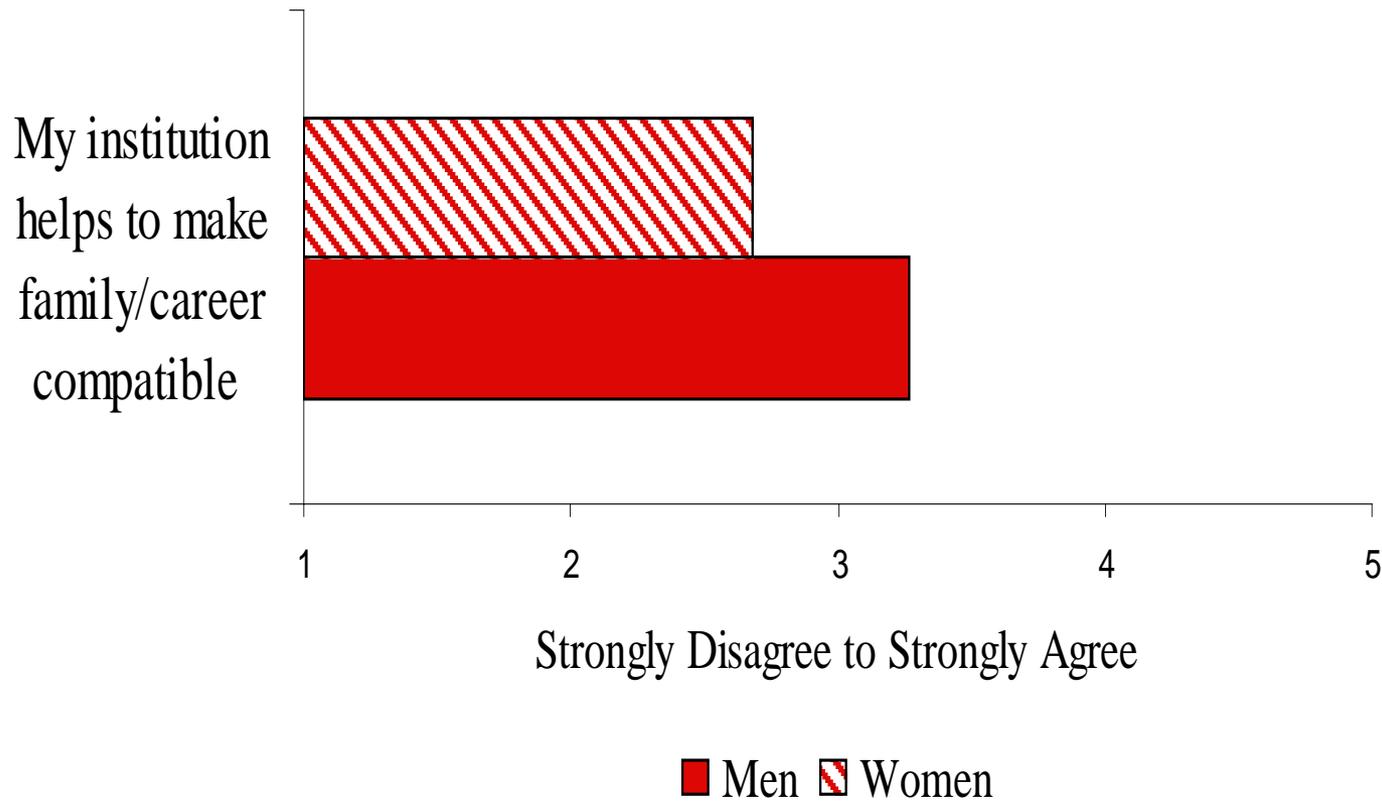


Percentage time on service differs by gender





Men are more likely to see the institution as helping to make family and career compatible



Summary: How does gender matter?

Expectations of tenure (advisor/colleague)

Men > Women

Organizational commitment

Men > Women

Spousal hiring and child care policies

Women > Men

Time on service (administrators?)

Men > Women

Perceptions of support for work/life

Men > Women



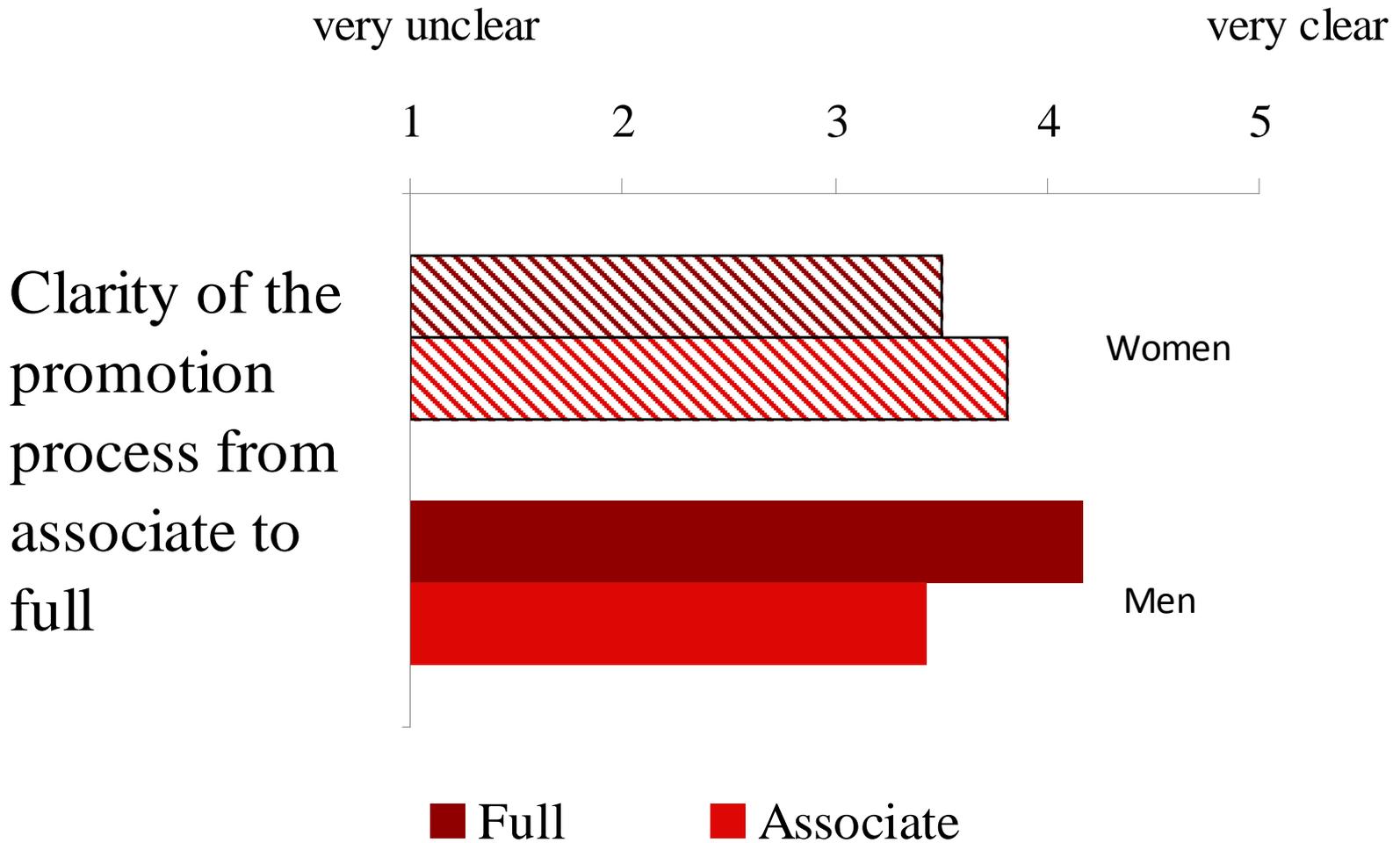
Patterns
that differ by
gender & rank



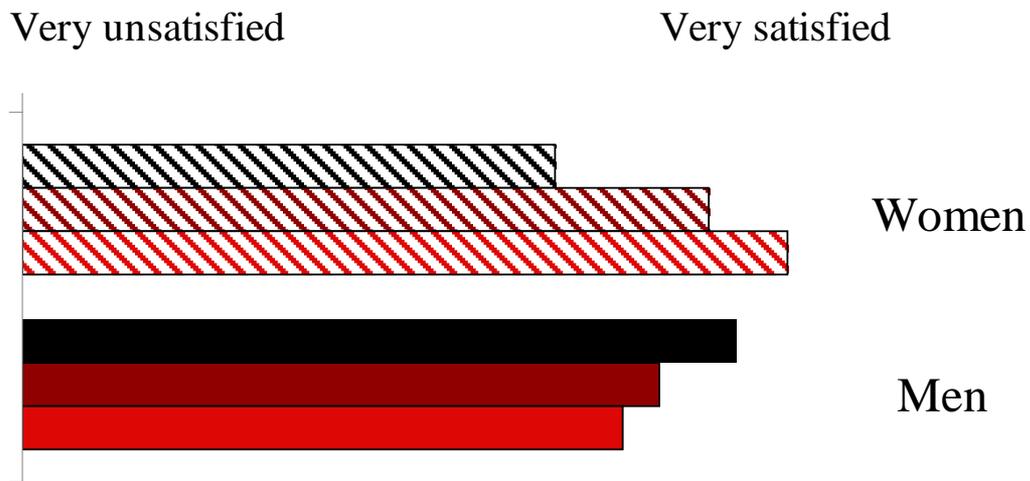
Clarity of the tenure process performance expectations:

Significant gender by rank differences





Satisfaction with the way you spend your time



■ Full ■ Associate ■ Assistant

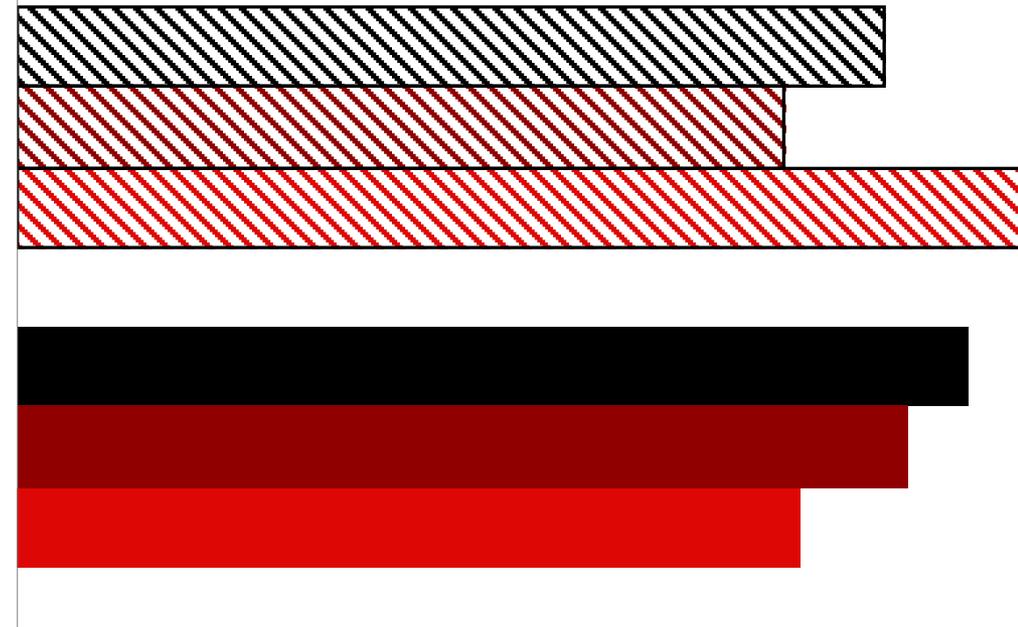


Very unsatisfied

Very satisfied

1 2 3 4 5

Opportunities
to collaborate
with pre –
tenured
faculty



Women

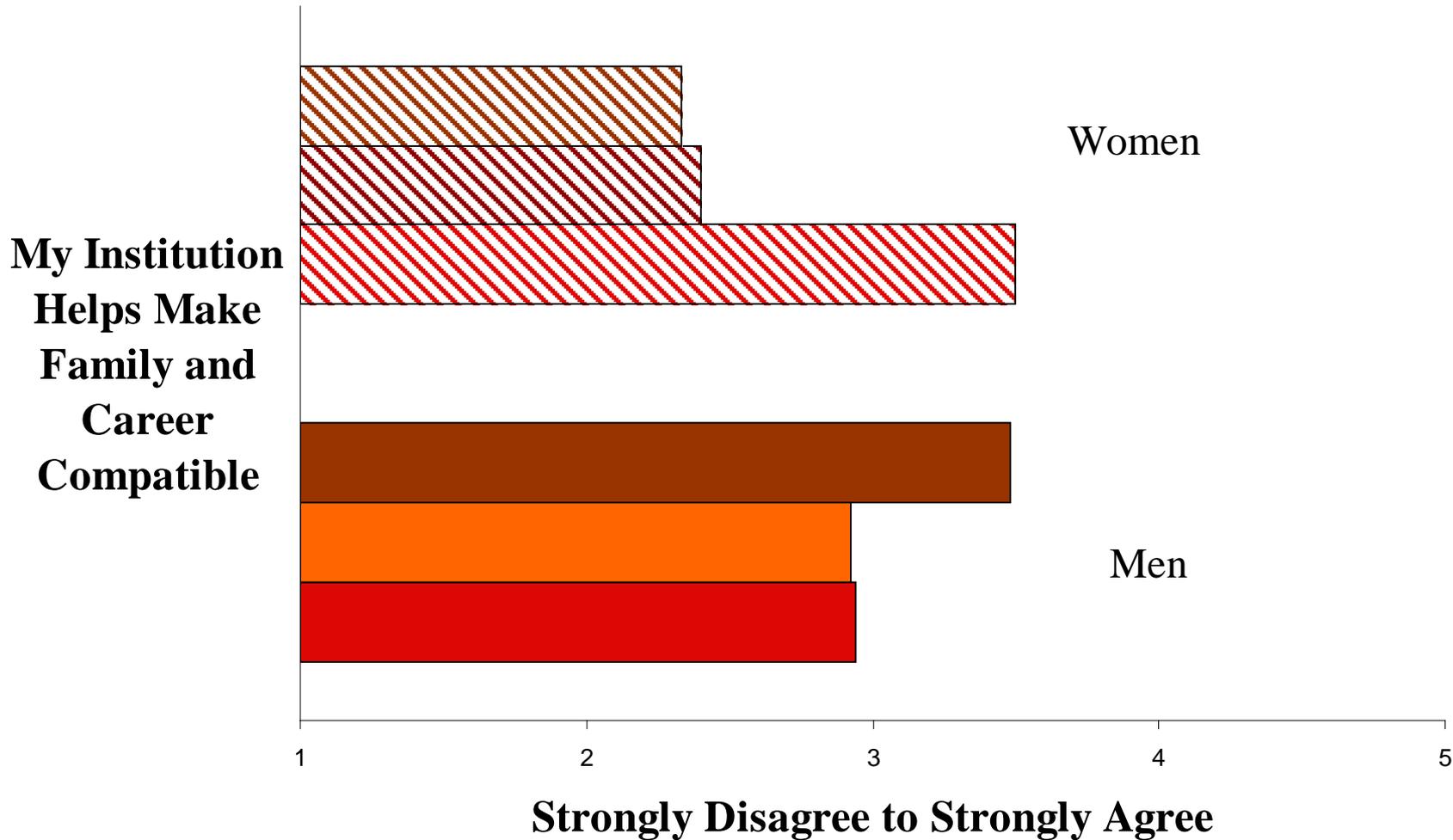
Men

■ Full

■ Associate

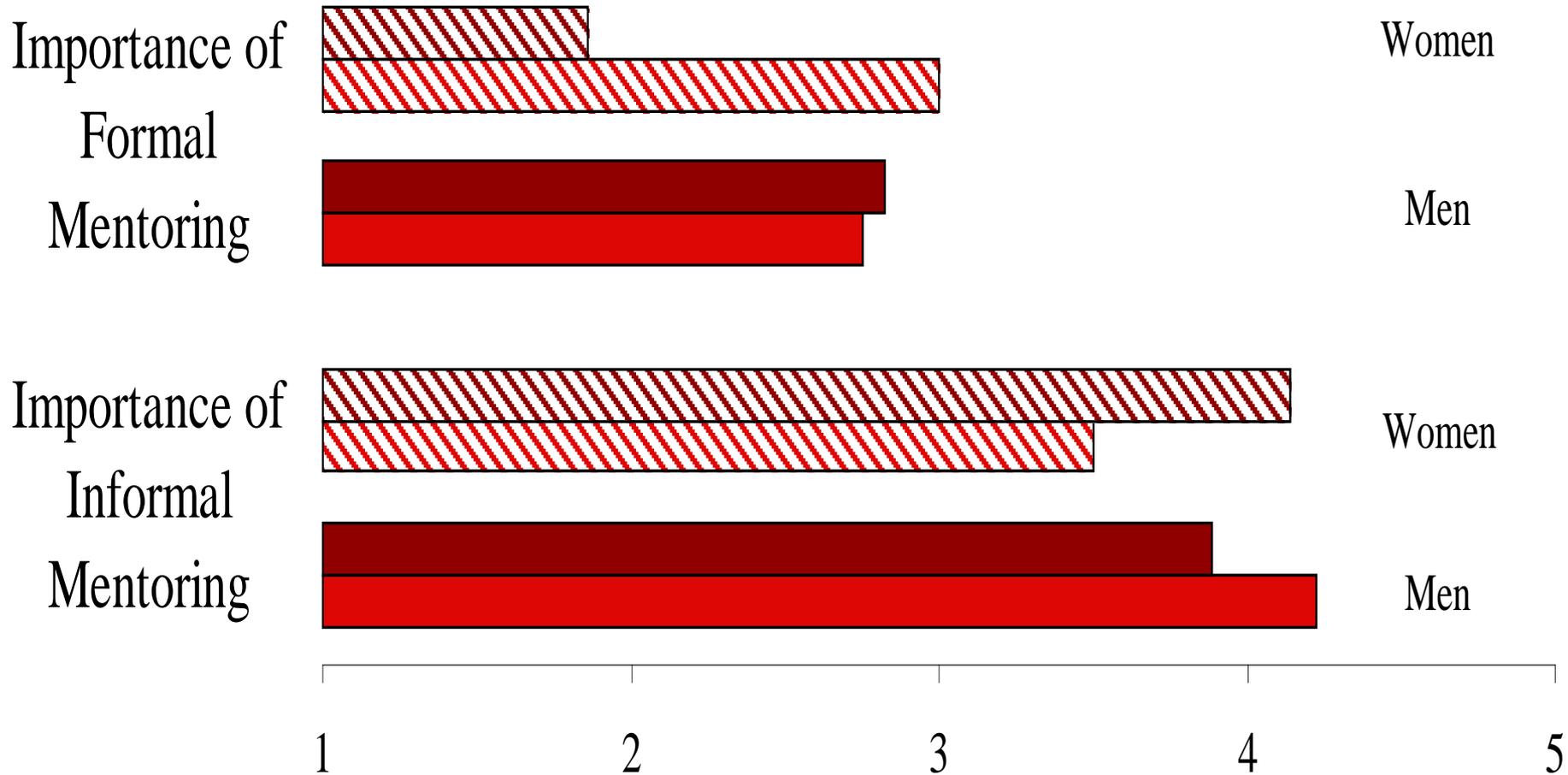
■ Assistant





■ Assistant ■ Associate ■ Full





Not very important to Very important

■ Assistant ■ Associate



Best aspects of UNL

Top 5 selected aspects by gender and rank

*the next slide can be dizzying



Best 5 Aspects of UNL

	<i>Men</i>	Women
Assistant	1 <i>Academic Freedom</i>	Opportunities to collaborate with colleagues
	2 <i>Cost of living</i>	Academic Freedom
	3 <i>Quality of Colleagues</i>	Quality of Colleagues
	4 <i>Assistance for grant proposals</i>	Spousal/partner hiring program
	5 <i>Support of Colleagues</i>	Cost of living
Associate	1 <i>Quality of Colleagues</i>	Academic Freedom
	2 <i>Cost of living</i>	Support of Colleagues
	3 <i>Academic Freedom</i>	My sense of "fit" here
	4 <i>Quality of facilities</i>	Quality of facilities
	5 <i>My sense of "fit" here</i>	Assistance for grant proposals
Full	1 <i>Quality of Colleagues</i>	Quality of Colleagues
	2 <i>My sense of "fit" here</i>	Quality of undergraduate students
	3 <i>Academic Freedom</i>	My sense of "fit" here
	4 <i>Opportunities to collaborate with colleagues</i>	Academic Freedom
	5 <i>Quality of graduate students</i>	Geographic location



Open-Ended Responses: Best about Specific Position

- Quality of core of faculty
- Variety of work
- Freedom to teach/research
- Interaction with students
- Interactions with colleagues and students



Summary

- Gender shapes faculty experiences differently in different ranks
- Shows the need to “control” for potential confounding variables.



Open-Ended Responses: Best about UNL

- Spousal hiring possibilities (not a program, but my department makes a lot of effort)
- Research & Teaching opportunities
- Support by upper administration for growth in the area of research
- Career advancement



Summary of Gender by Rank

Clarity of the tenure process

A colleague:

- Women: Assistant > Associate > Full
- Men: Full > Assistant > Associate

A campus citizen

- Women: Assistant > Associate > Full
- Men: Full > Associate Assistant

Member of a broader community

- Women: Assistant > Associate > Full
- Men: Full > Assistant > Associate

Promotion process from associate to full

- Women: Associate > Full
- Men: Full > Associate

Satisfaction with aspects of work

The number of students you teach

- Women: Associate > Assistant > Full
- Men: Full > Assistant > Associate

The way that you spend your time

- Women: Assistant > Associate > Full
- Men: Full > Associate Assistant

Opportunities to collaborate with pre-tenured

- Women: Assistant > Full > Associate
- Men: Full > Associate > Assistant

Policies and Procedures

My Institution helps make family and career compatible

- Women: Assistant > Associate = Full
- Men: Full > Assistant = Associate

Importance of formal mentoring

- Women: Assistant > Full
- Men: Assistant = Full

Importance of informal mentoring

- Women: Associate > Assistant
- Men: Assistant > Associate

Global

- Academic Freedom: All 6 groups
- Quality of Colleagues: All but associate women
- Cost of living: Assistants; Associate Men
- Assistance for grants: Assistant men, Associate women
- Support of Colleagues: Assistant men, associate women
- Opportunities collaborate: Assistant women
- Spousal/partner hiring: Assistant women
- Quality of Facilities: Associate
- My Sense of Fit here: Associate and Full
- Quality of students: Full
- Geographic Location: Full women



Thank you!
Next data collection
Spring 2011



SLIDE DESIGN © 2007.
BOARD OF REGENTS OF THE UNIVERSITY OF NEBRASKA.
ALL RIGHTS RESERVED.