ADVANCEing STEM Careers for Women at MTSU

Campus Climate Survey & Focus Group Results (STEM)

November 2015

MIDDLE TENNESSEE STATE UNIVERSITY

Welcome

- Brad Bartel – PI
- Wandi Ding – Co-PI
- Jackie Eller – Co-PI
- Judith Iriarte-Gross – Co-PI
- Karen Petersen – Co-PI
- Gretchen Webber – Research Associate
- Michael Hein – Evaluator
- Denielle Meyerink – Graduate Assistant

MIDDLE TENNESSEE STATE UNIVERSITY

What We Know

- Literature, in general:
  - Women's representation in STEM fields remains disproportionate to men's even though considerable effort has been made to change this
  - Men attain higher ranks and at a faster rate than women
  - Stereotypes (STEM is for men) and gender biases (however subtle or covert) still exist that impact women's experiences and mobility within academic STEM fields

MIDDLE TENNESSEE STATE UNIVERSITY

What We Know – Con't

- – Women report lower start-up funds, less access to equipment and a lower sense of inclusion & recognition from other faculty
- – Contrast the above with the strong and positive predictor of promotion success based in collaborations in research and publication as well as research support and advancement opportunities
  - • May contribute to attrition?
- – Equal time working but differences in how time is spent and valued between women and men ➔ traditional trajectory
  - • Teaching (workload), mentoring and advising, service
  - • Research (42% vs. 27% of time)
  - • Household and family responsibilities
  - • Childcare time gaps
  - • Leadership

MIDDLE TENNESSEE
STATE UNIVERSITY

What We Know – Con't

– Absence of role models and mentors – particularly those who encourage a range of paths to success

- May contribute to perception that criteria for full are ambiguous

- Limits interaction with "those in power"

– Research as to hiring preferences is in disagreement ➔ What is the vision of the "ideal worker" and how does one reach this?

MIDDLE TENNESSEE
STATE UNIVERSITY

Our Study

- MTSU was awarded an NSF ADVANCE Catalyst grant to study ways in which to improve the recruitment, retention and promotion of women in STEM fields (aerospace, agribusiness and agriscience, biology, chemistry, computer science, concrete industry management, economics, engineering technology, geosciences, mathematical sciences, physics and astronomy, political science and international relations, psychology, sociology and anthropology.)
  - Campus survey – emphasized resource allocation, evaluation processes, compensation, climate, and work-life balance
  - Focus groups
  - Done in conjunction with COHRE, an internal and an external advisory board

**MIDDLE TENNESSEE STATE UNIVERSITY**

Topics Discussed Today

- General Satisfaction
- Hiring (Negotiation Outcomes)
- Resource Allocation
- The Evaluation Process
- The Climate for Women
- Work/Life Issues

Data—STEM Faculty at MTSU

- Tenure Track /Tenured STEM Faculty by Department, Rank, and Gender
- STEM Faculty Promotion
- STEM Faculty Hiring
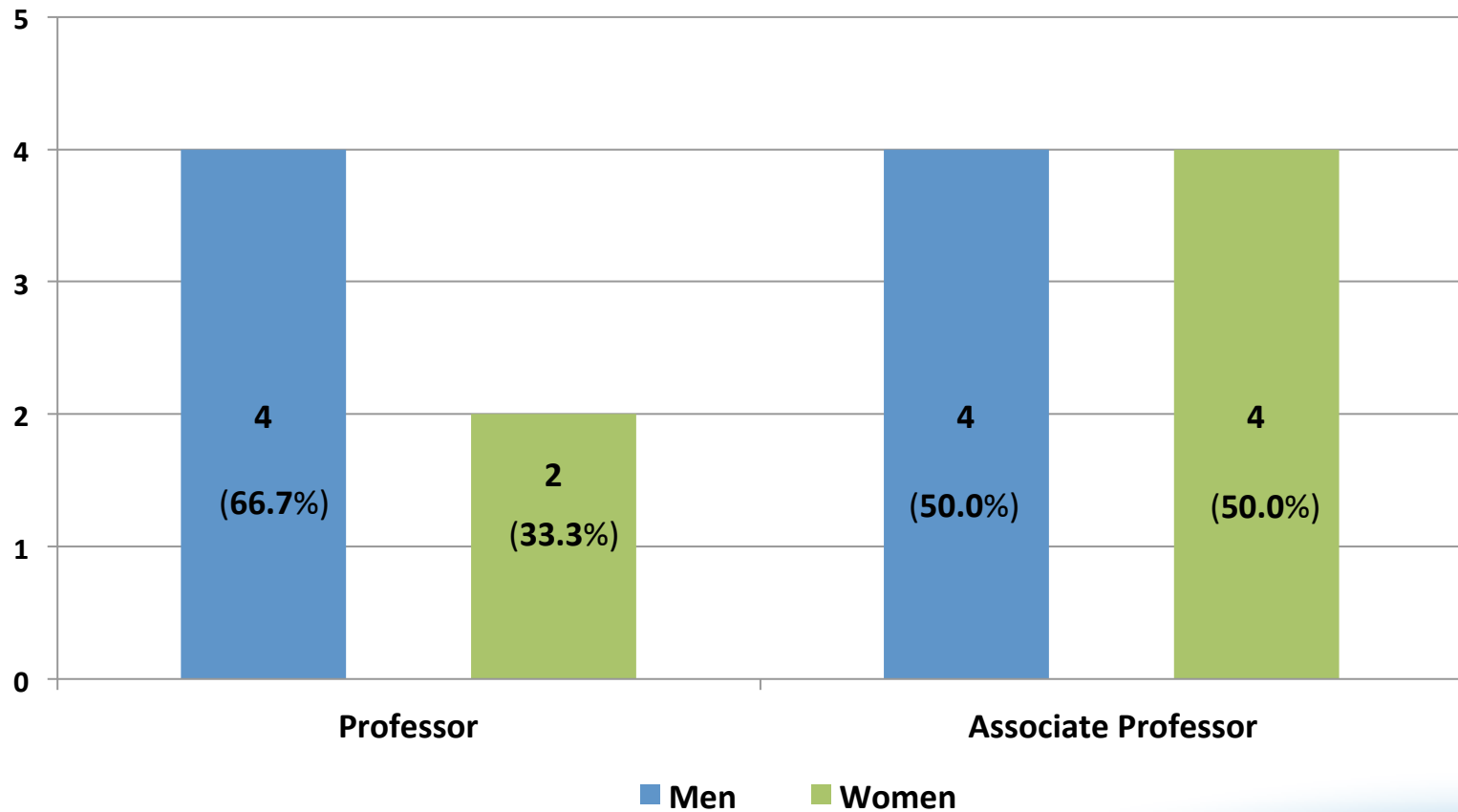- STEM Faculty Start-Up Funds

MIDDLE TENNESSEE
STATE UNIVERSITY

Tenure Track/Tenured STEM Faculty by Gender, Fall 2014

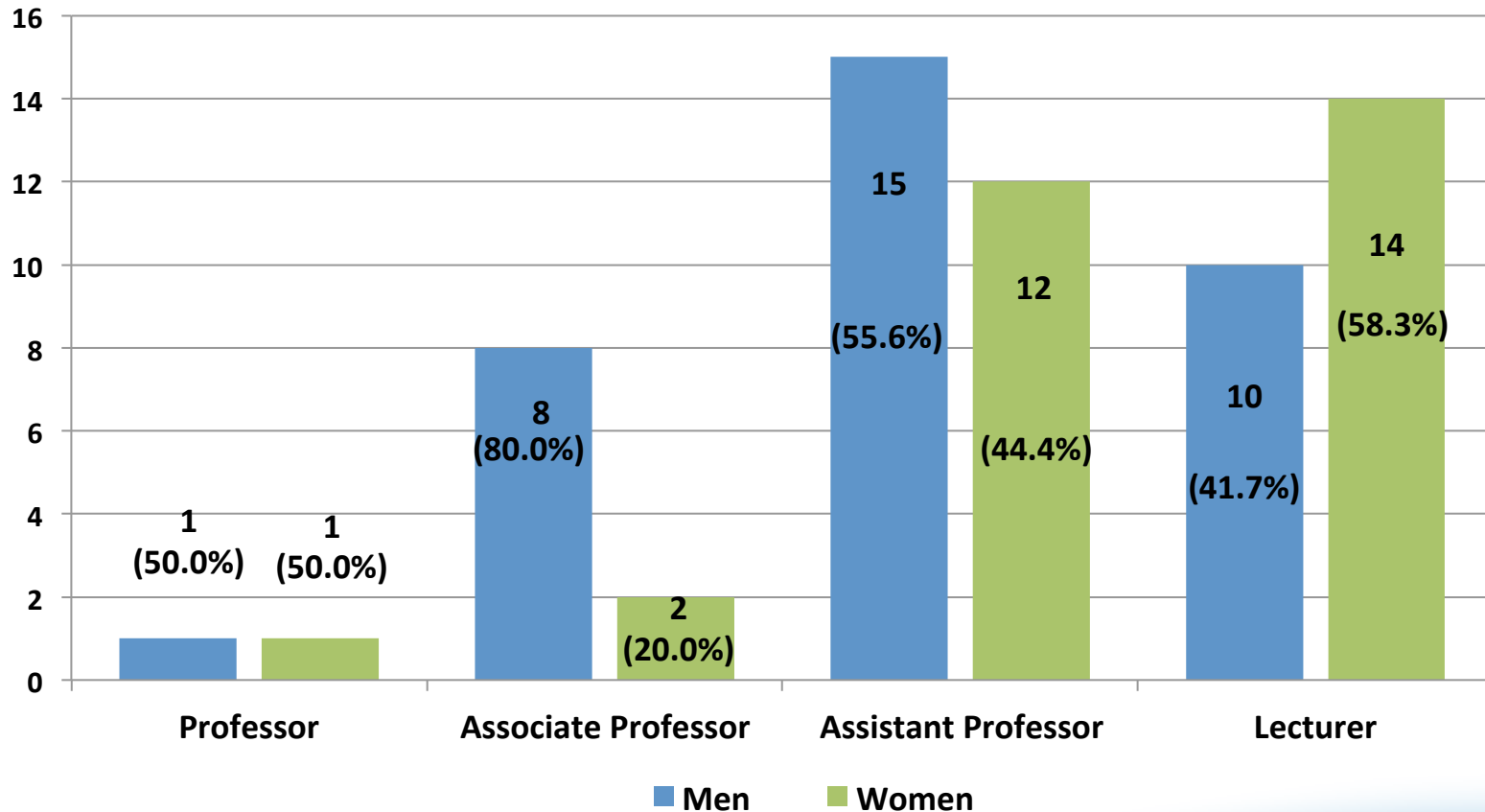**MIDDLE TENNESSEE STATE UNIVERSITY**
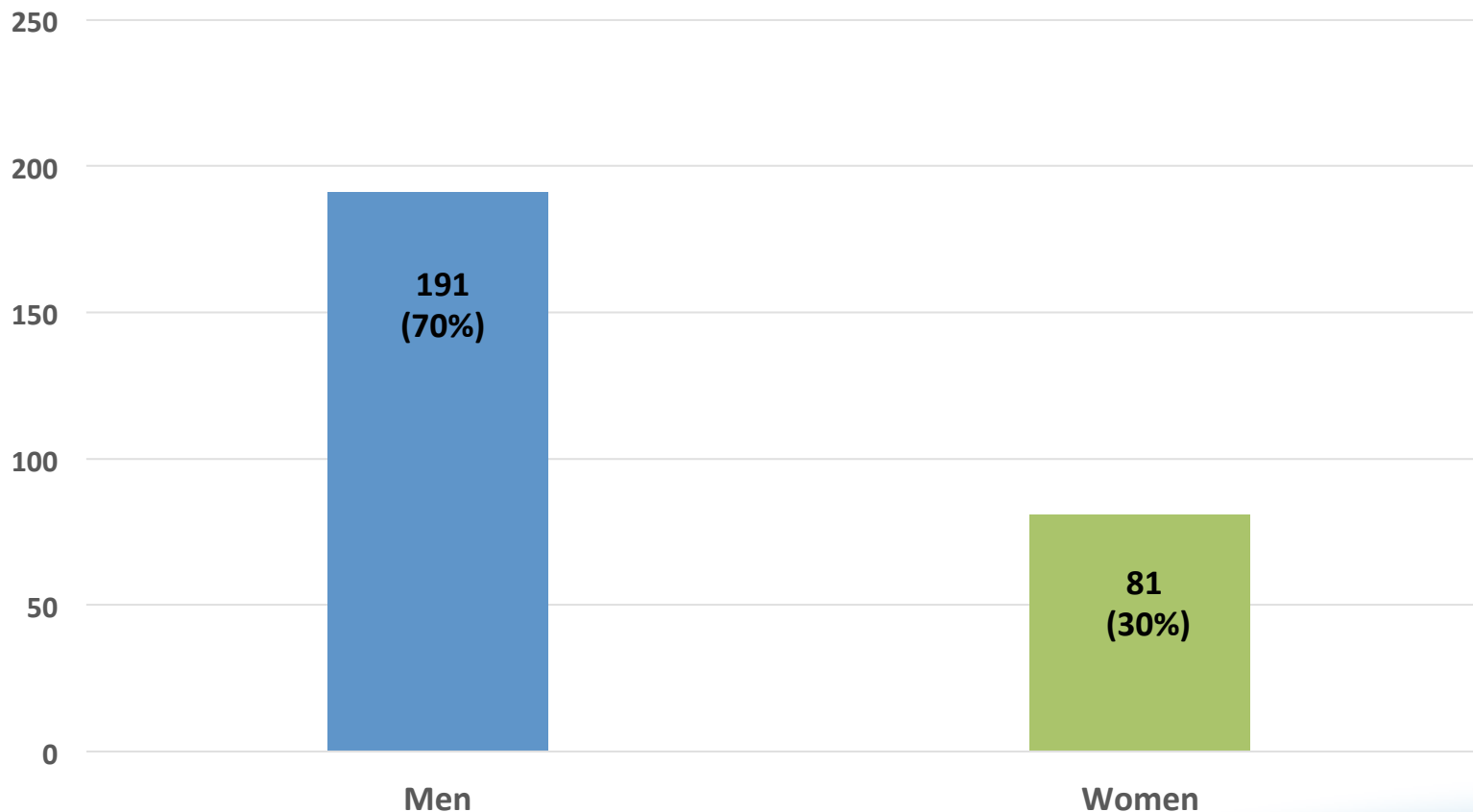
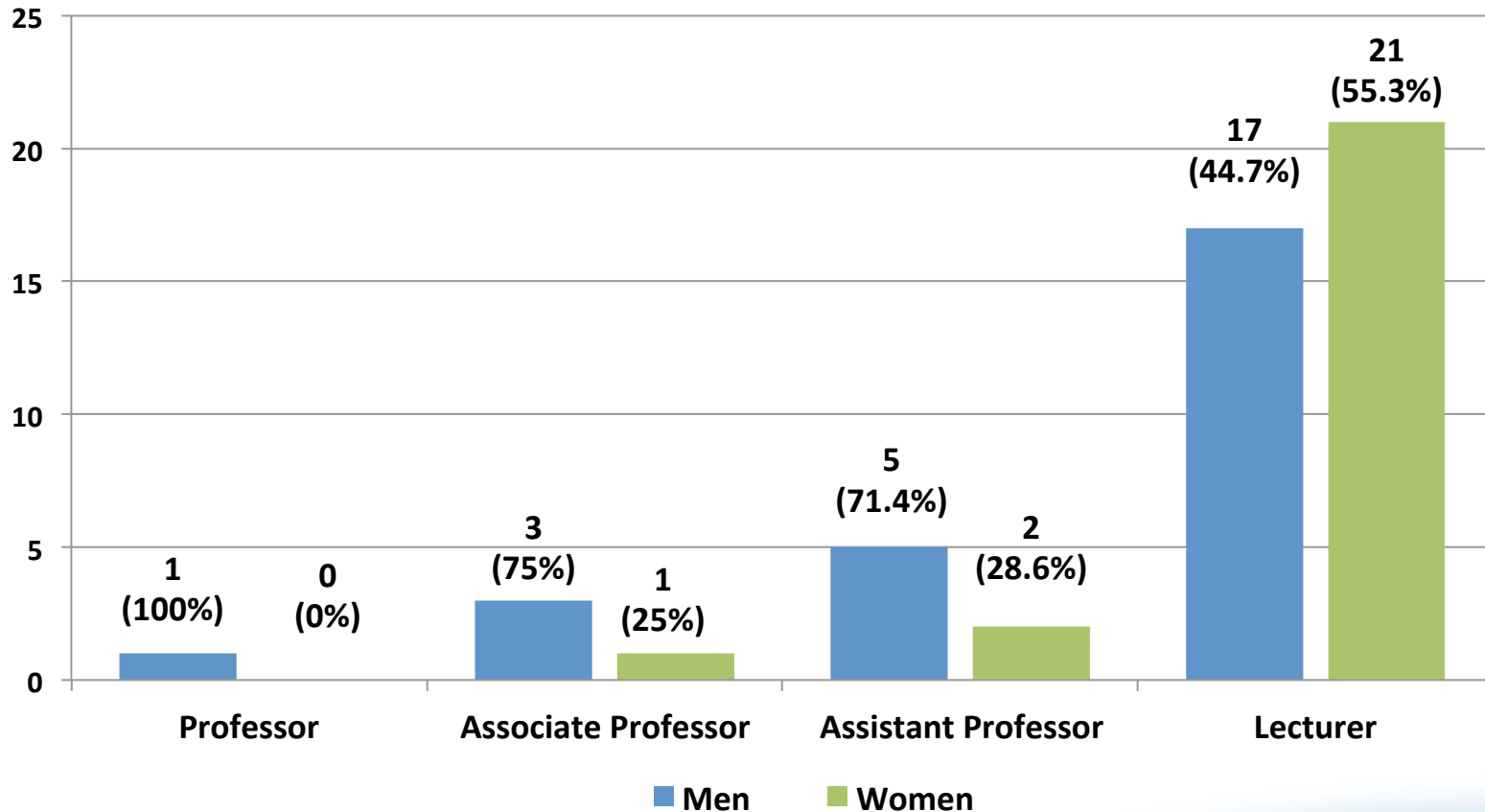Tenure Track/Tenured STEM Faculty by Rank & Gender, Fall 2014
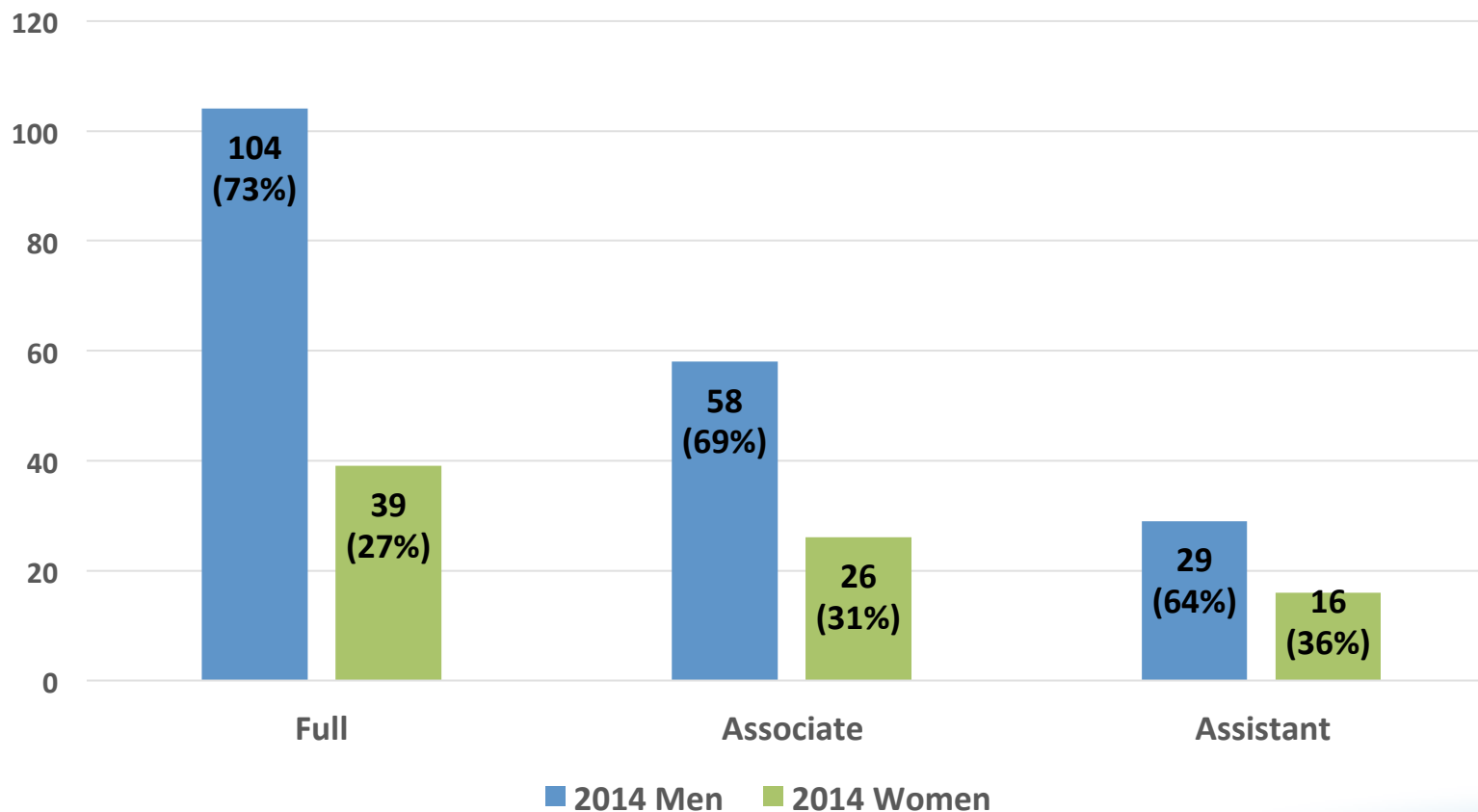
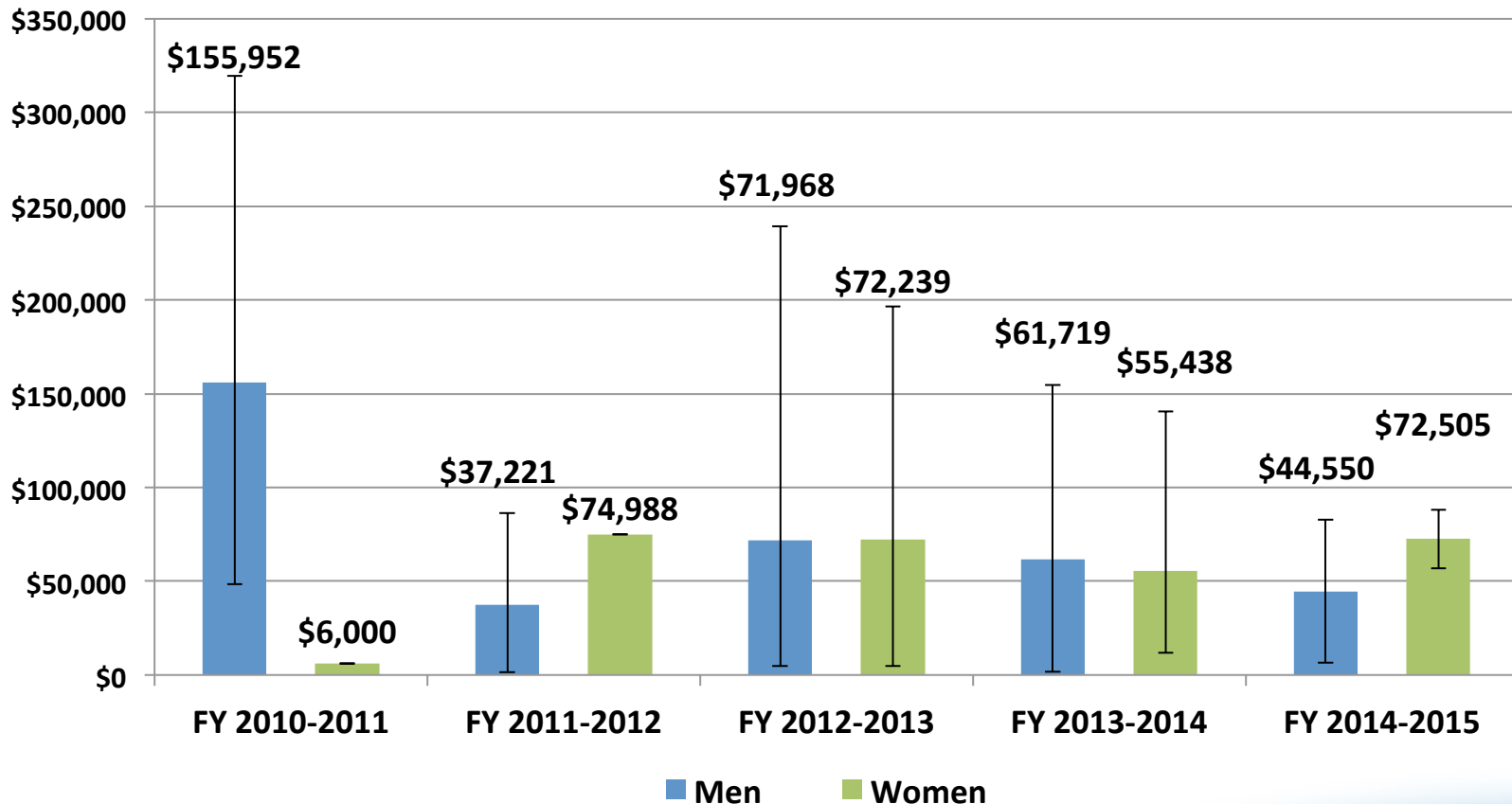# 2014-2015 STEM Faculty Promotions by Gender & Rank

2013-14 STEM Faculty Hires by Gender & Rank

2014-15 STEM Faculty Hires by Gender & Rank

Average Start-Up Funds for STEM Positions by Gender

MIDDLE
TENNESSEE
STATE UNIVERSITY

Data Collection–Survey

- Overview of the Survey Process
  - Instrument Development
  - Distribution
- Response Rate
  - Sample vs. Population

Data Collection–Focus Groups

- May - June 2015 conducted two focus groups.

- 16 faculty: 7 Professors, 5 Associate Professors, 4 Assistant Professors.

- Questions covered topics that emerged from the online survey results informed by literature.

MIDDLE TENNESSEE STATE UNIVERSITY

Survey–Overall Satisfaction & Salary

Have you ever considered leaving MTSU?
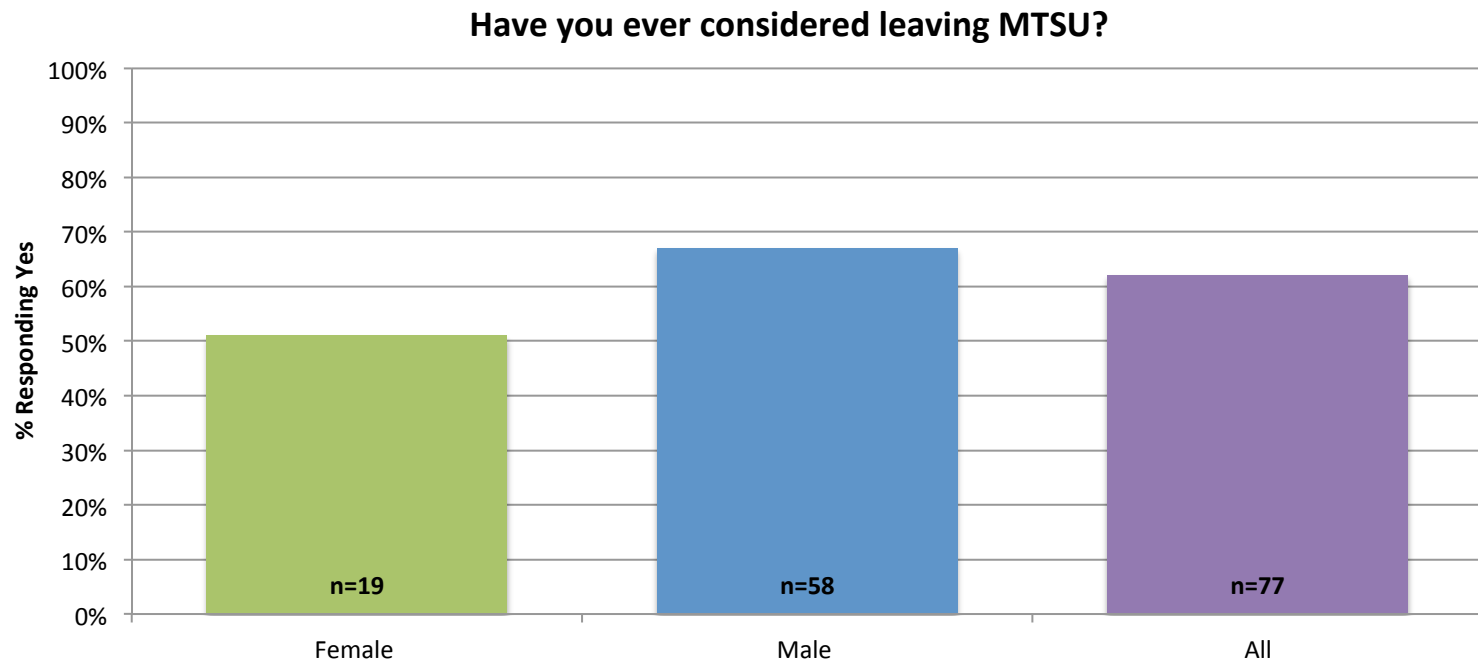
53% cite salary as a reason they considered leaving

43% cite climate

14% cite poor fit in department

Open-ended responses: workload, promotion/advancement, overall funding environment, leadership, family

MIDDLE
TENNESSEE
STATE UNIVERSITY

Focus Groups–Overall Satisfaction

- Overall, broad MTSU climate is considered adequate. However, there are important faculty concerns:
    - Resource Allocation
    - Tenure and Promotion Processes
    - Service Work
- Morale could be better.
- Productivity is important, no push for lower standards in order to be successful.

MIDDLE TENNESSEE STATE UNIVERSITY

Survey–Negotiation Outcomes

How (un)satisfied were you with the outcome of your negotiations for the following items:
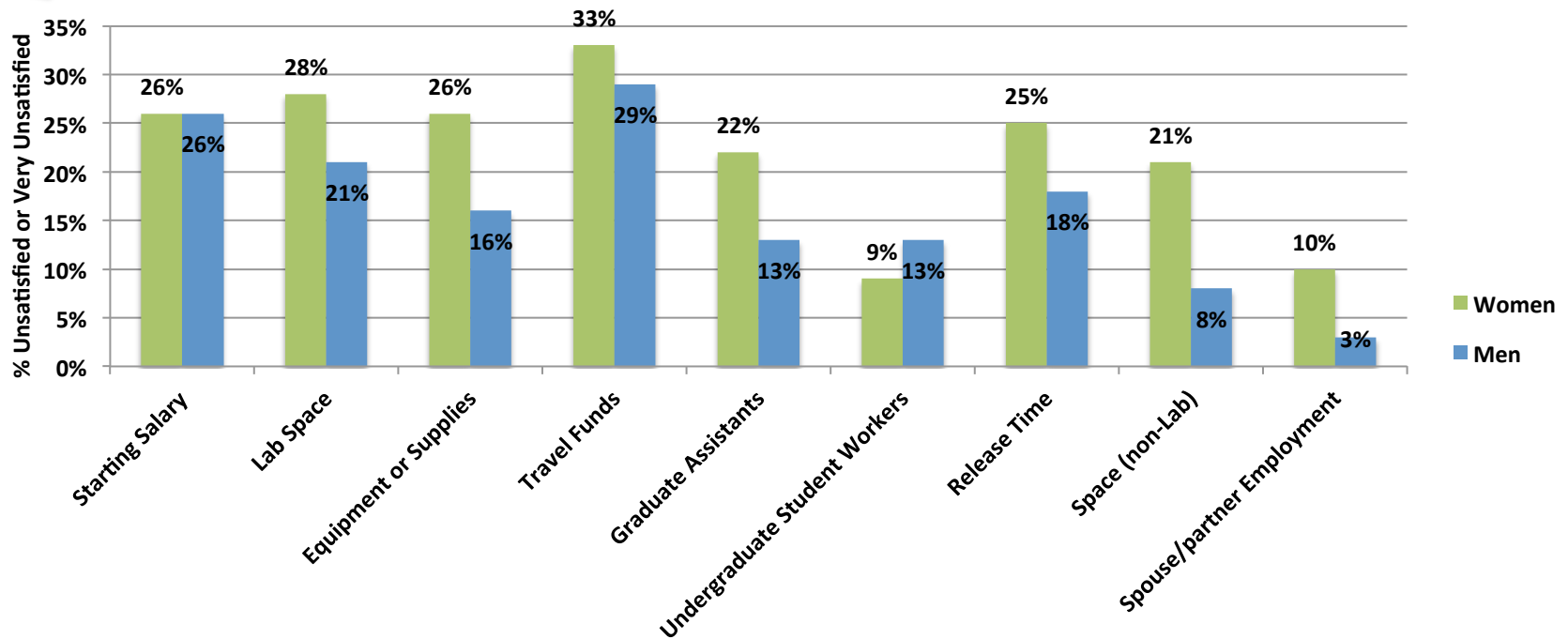
Men and women negotiate at about the same rate, but women are unsatisfied with the outcome of negotiation more often.

MIDDLE TENNESSEE STATE UNIVERSITY

Survey–Resource Allocation

Agree or Disagree?: Resources are allocated fairly
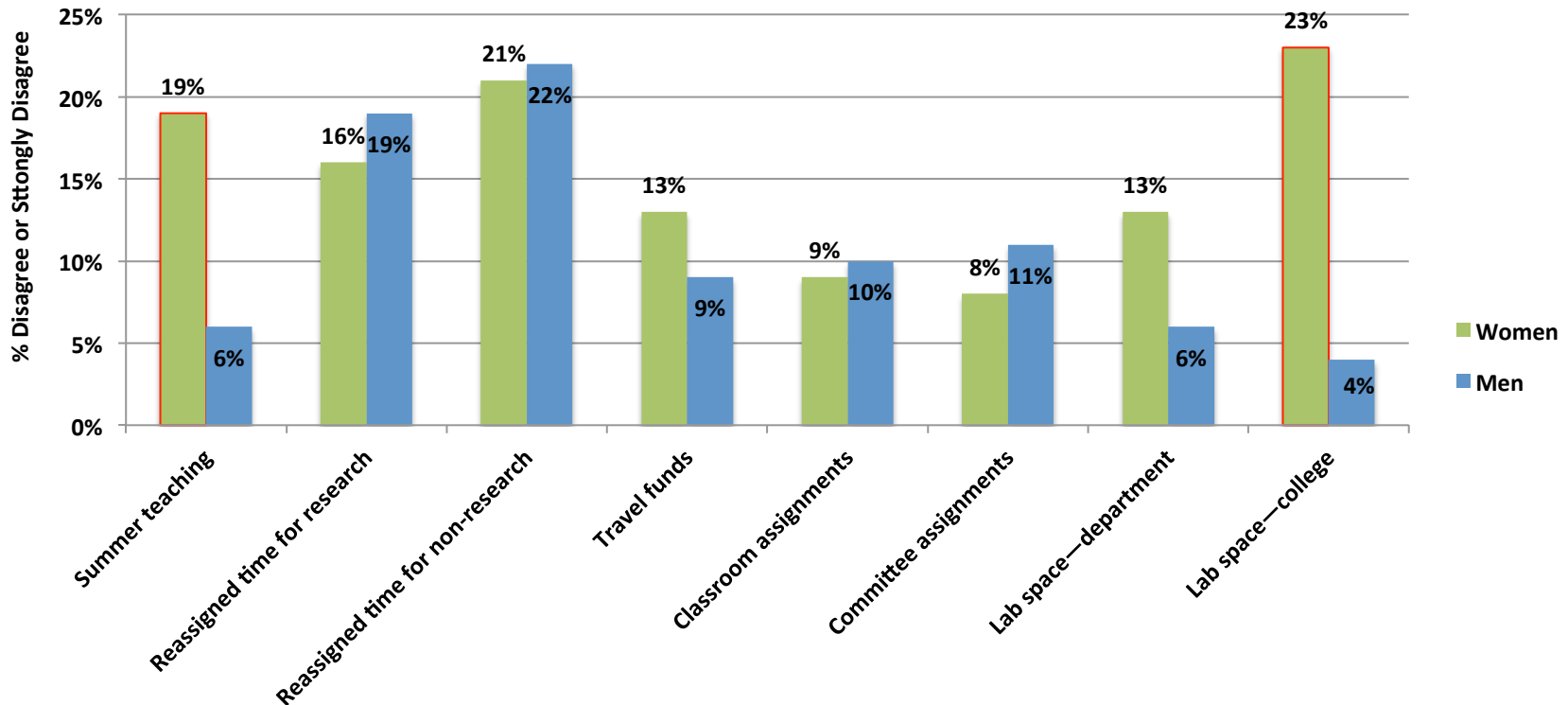
Women less likely to perceive the allocation of resources as fair (particularly summer teaching and lab space (college level)).

MIDDLE TENNESSEE STATE UNIVERSITY

Focus Groups–Resource Allocation

- Resources broadly are a concern.
- General lack of resources to support faculty at the level of research expectations that exist today.

MIDDLE TENNESSEE
STATE UNIVERSITY

Focus Groups–Resource Allocation

Requesting resources--differences between women and men.

Participant: Resource allocation in my department is kind of like the squeaky wheel gets the grease so whoever asks first or asks most forcefully usually gets it so.

Participant: you have some of the guys who ALWAYS ask whether they need it or not. because we just don't ask as much . . . one thing I've noticed is that females aren't as apt to ask [for resources]. And so I found that I had to kind of combat that.

MIDDLE
TENNESSEE
STATE UNIVERSITY

Survey–Evaluation Processes
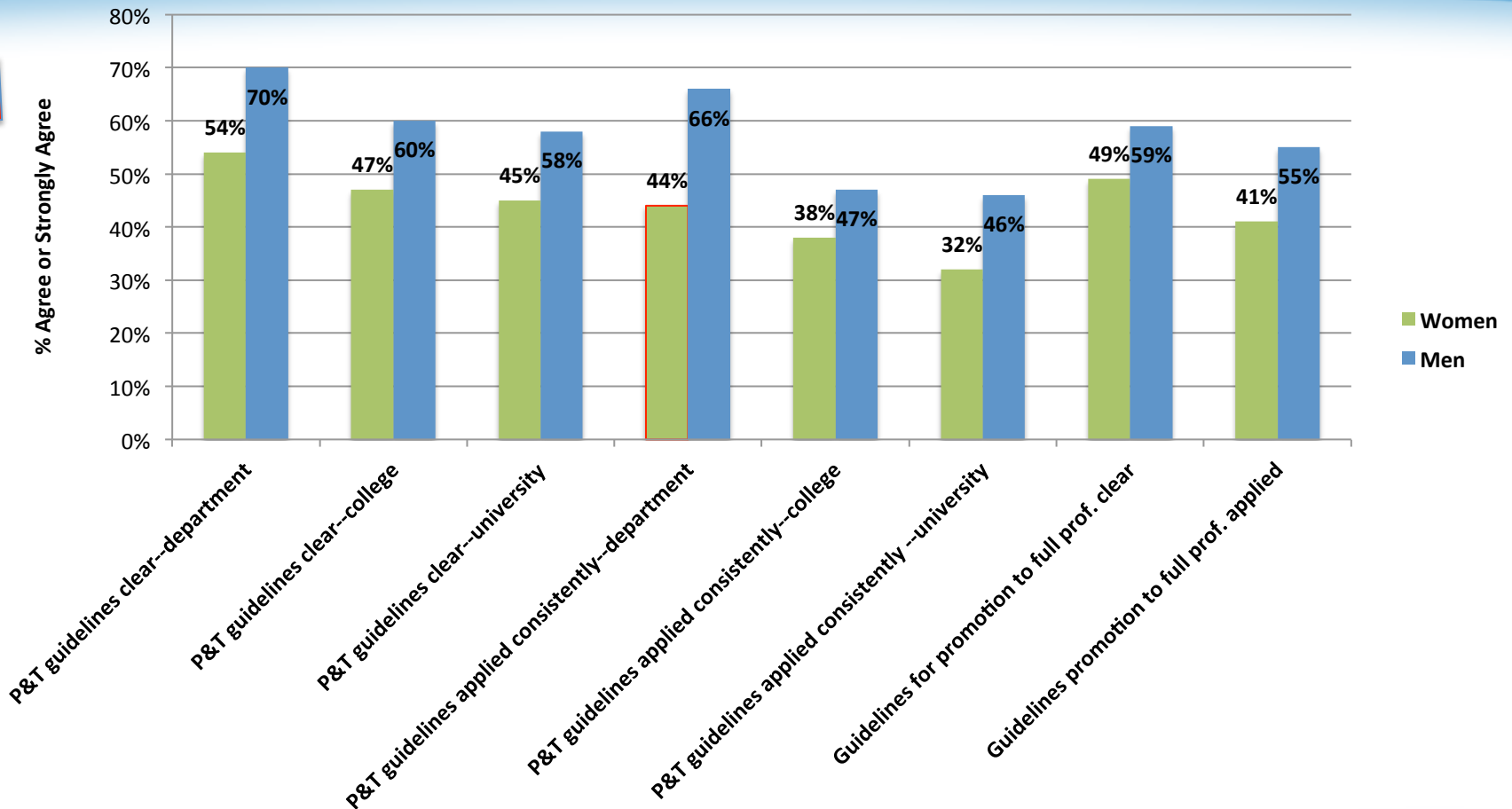
Women are less likely to believe the process is clear & consistent at all levels.

Multiple themes impact STEM women faculty success.

- Teaching loads vary depending on program teaching requirements, but it is unclear how these assignments are distributed.

  Participant: I don't know that there are written guidelines.

  Participant: I think there's preferable guidelines because I had a conversation about it.

MIDDLE TENNESSEE STATE UNIVERSITY

Focus Groups–Tenure and Promotion

- College T&P Committee composition makes a difference in how decisions turn out, which creates concern about fairness and transparency.

  Participant: I am on my college committee now . . .here I am evaluating people from a bunch of different departments where I don't really know their stuff. And so I'm relying on [someone from other department] that I turn to [to advocate].

  Participant: I've been on those [college] committees, often times and I've said somebody explain this to me.

Focus Groups–Tenure and Promotion

- Work expectations in T&P decisions reflect a narrow norm, modeled on traditional work trajectories that men have followed more than women because of gendered caregiving arrangements.
- IMPORTANT: This is not advocating for lower work productivity.
- Varied work trajectories can impact evaluation.

  Participant: The department specifically talked about my research record and it specifically talked about the gap in my research record... because I took maternity leave. And I feel like there is nothing that I could have done service or research that would have addressed that. … the human resources department tells you that you cannot do any work during that time.

MIDDLE TENNESSEE STATE UNIVERSITY

Focus Groups–Tenure and Promotion (Service)

- Service does not count, particularly for tenure review or promotion to full professor.

    Participant: I think women are drawn into service roles more in the department. And that can drain your time, your ability to think, but you're asked to do those things a whole lot more, recruiting for the department.

    Participant: I almost did not get promoted. It was [concern over] research. [Service] didn't count in my department.

Focus Groups–Tenure and Promotion (Service)

- Low value for service manifests in multiple ways:
  - Women report that men often refuse or say no, where women will be more likely to say yes.
  - Women report that students come to them more often for help which takes up a lot of time
    - Results in spending time with advising, counseling on personal problems, curriculum issues, or career questions. They don't see men faculty doing the same.
  - Women volunteer or feel pressure to volunteer so spend more time doing non-research work.

MIDDLE TENNESSEE STATE UNIVERSITY

Focus Groups–Tenure and Promotion (Service)

Service work impedes promotion to full professor.

- Tenured faculty are expected to perform more service than they did as tenure track faculty. These service work requirements are critical in running departments, yet service work performed as associates at mid-career is not seen as furthering their path toward full professor.

- In some cases, faculty applied for full professor, were turned down and said they would not try again for promotion.

- Need tenured faculty to teach, advise, work with graduate students (as applicable), serve on department and university committees, but if they produce less research because of it then they feel punished in their attempts to move to full professor.

MIDDLE TENNESSEE STATE UNIVERSITY

Focus Groups–Tenure and Promotion (Service)

Seeking gender (and racial) representation on committees is challenging when there are too few women and minorities in the organization.

*Participant: [whether it's] recruiting for the department or you're asked to sit on a committee because you're the token female that has to sit on a committee, so those things can drain on your time.*

Participant: if you're a woman or a minority [you are in demand]. We have 2 (minority) professors in our department, [they] are on every committee and I know they don't appreciate it.

MIDDLE TENNESSEE STATE UNIVERSITY

Focus Groups–Tenure and Promotion (Service)

- Gender diversity on committees, while positive in spirit, intensifies the service expectation for STEM women faculty because there are fewer women in STEM, and especially fewer minority faculty.

- Results in often over burdening select faculty. Their research productivity can be impacted, which in turn impairs career mobility.

- Important for committees to have broad representation of faculty, so this represents a conundrum for STEM disciplines in particular. Committee assignments need to be sensitive to this dilemma.

MIDDLE TENNESSEE STATE UNIVERSITY
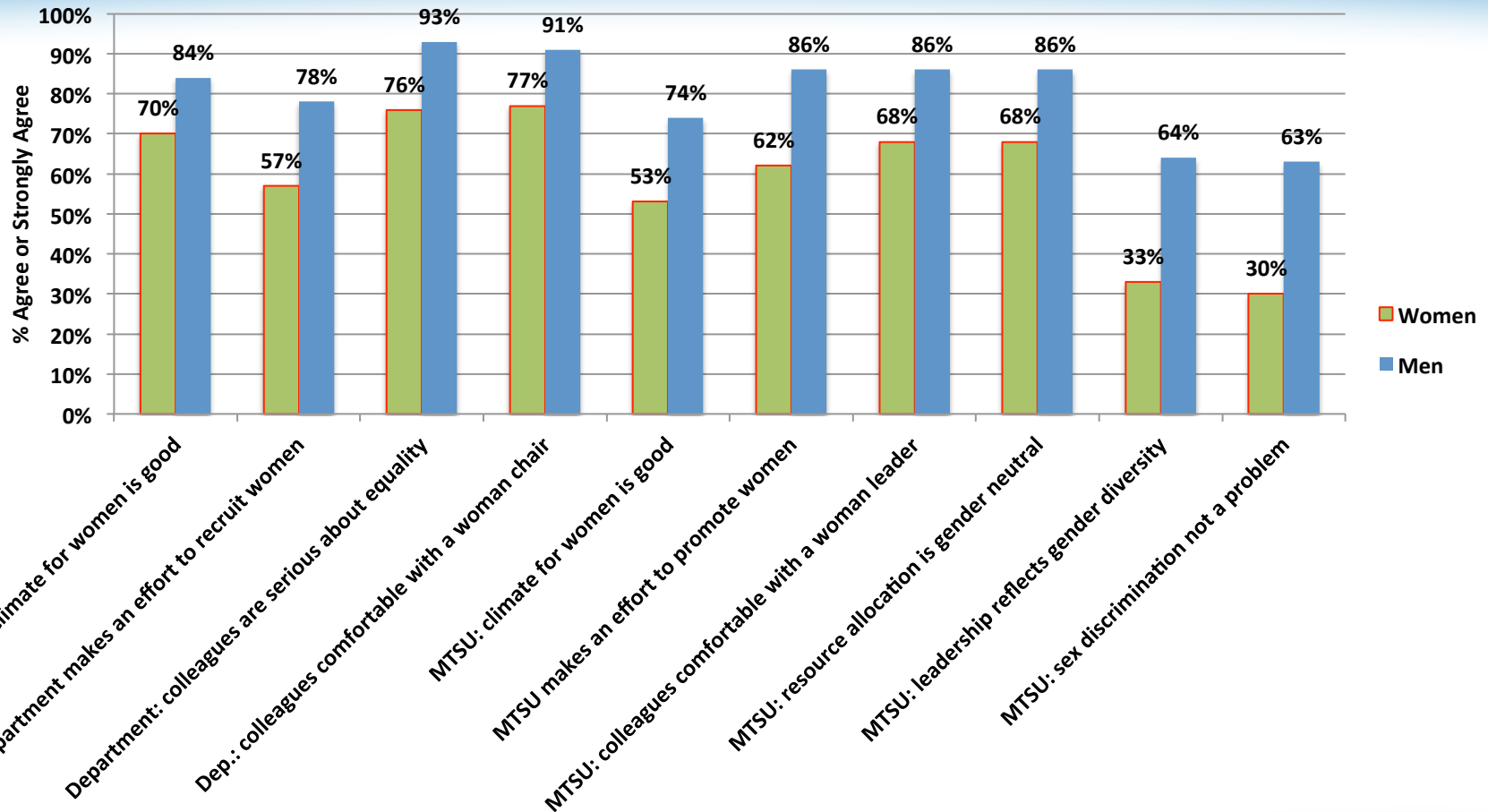
Survey–Climate

Men far more likely to agree with positive statements about the climate for women at MTSU.

MIDDLE
TENNESSEE
STATE UNIVERSITY

Survey–Climate
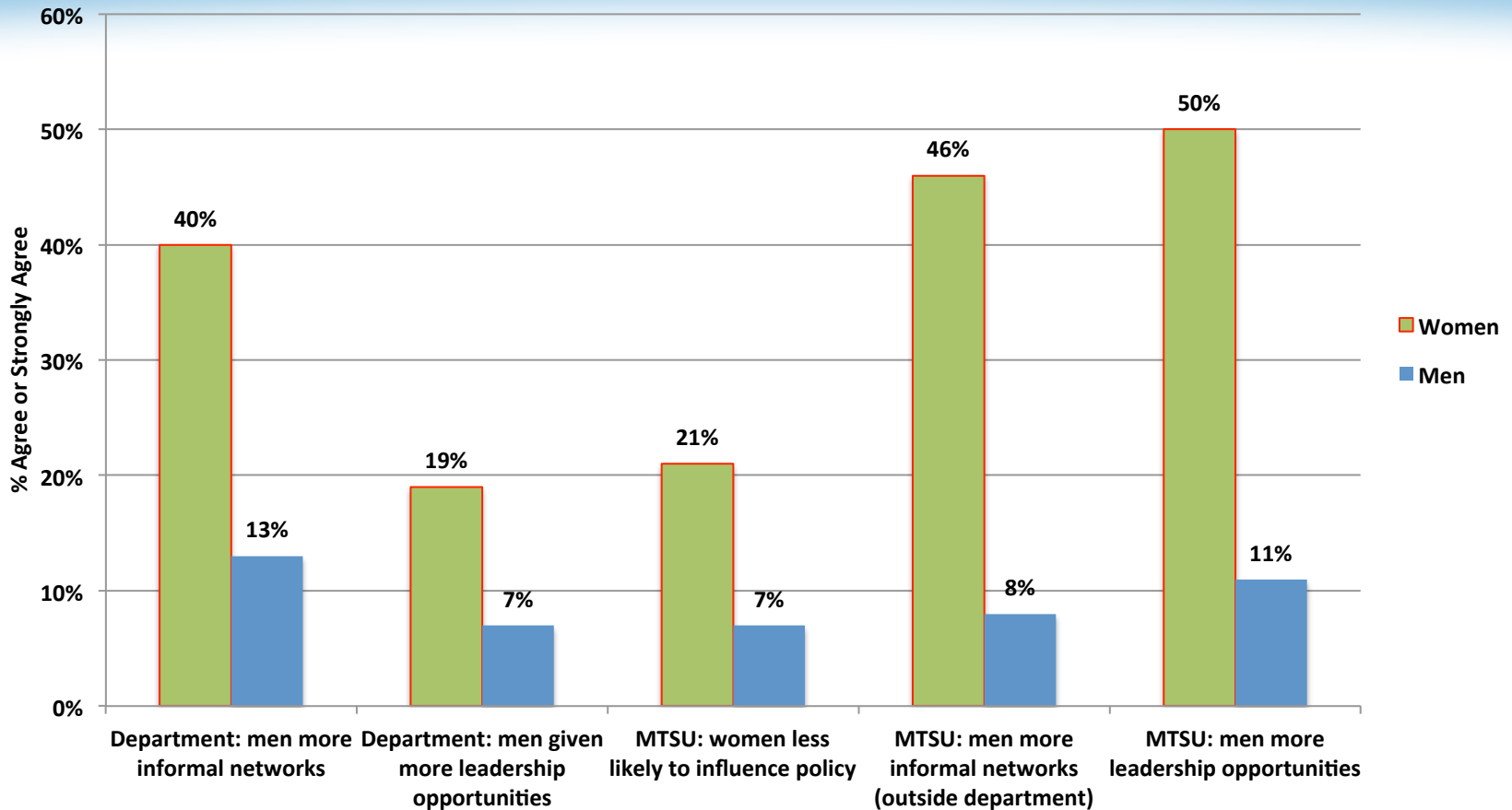
Women far more likely to agree with negative statements about the climate for women at MTSU.

Focus Groups–Climate

- Low expectations exist regarding a supportive climate because their experiences in male-dominated graduate schools, other universities, and disciplines has inured them to a variety of slights.

  Participant: I've been in [STEM Discipline] . . . for 30 years I've been in male dominated areas, so I guess nothing phases me anymore.

  Participant: When I came it was just [name] in the department, the only female in the department. But I came with very little expectation that there was going to be a lot of female role models.

  Participant: So, I came with very little expectation. ..nothing really bothered me.

MIDDLE TENNESSEE
STATE UNIVERSITY

Focus Groups–Climate

- Departments are a blend of faculty who have been here a long time and faculty who have come more recently.

- Work and life expectations have changed over the past 30+ years.

  - More women have entered the workplace;

  - More men seeking time with their families;

  - Younger generations seeking more flexibility in their work lives.

- Ways of working have shifted.

MIDDLE TENNESSEE STATE UNIVERSITY

Focus Groups–Climate

- STEM women faculty may not be perceived as productive if they do not adhere to what was once considered a typical schedule.

  Participant: When I first got here there was some of the older [male faculty] who would go to lunch together and . . .I don't have a lot of time because I have kids and I would rather eat in my office.

  Participant: In my department, it almost categorizes into kind of the old school older men who get there at the same time every day, work the X amount of hours, and leave at the same time and don't do all the extra as some of us do. Versus, I'm going to be here till 6 I'm not going to come in until 8:30.

MIDDLE TENNESSEE STATE UNIVERSITY

Focus Groups–Climate

- Informal networks are important for
  - Sharing information
  - Developing collaborative opportunities
  - Building personal relationships
- Different ways of working can result in women being excluded.

> *Participant: We've got some of those old-school guys that are here from 8-4:30, they take an hour and a half lunch and they're walking around with a coffee in their hand and they go and visit everybody. I [arrive] at 8:30, work my tail off, eat my lunch while checking email and leave. [Being] here, it's being productive with your time.*

MIDDLE TENNESSEE STATE UNIVERSITY

Focus Groups–Climate

- There is concern about lack of women in leadership, specifically at the highest levels of administration.

- Faculty who have been at the university for over 5-7 years felt like they had seen better representation of women at the top tier in years past. While no one knew the inside details of what occurred, they discussed that from the outside it appears that women in high level positions do not last long.

MIDDLE TENNESSEE STATE UNIVERSITY

Focus Groups–Climate

Participant: I've heard among our faculty, male and female, saying that they've noticed the change [in fewer women at the top echelons]. And that routinely now, as positions come open they're more likely to be filled with males than females. . . I feel like once you have a situation where the group of people that are part of that inner cabinet are predominately male, then it [women in leadership] falls off the radar some ways. It's not an intentional bias to exclude women but [without] women present or not enough women present, it becomes more subtle. Having a seat at the table allows you [as women] to help in mentoring other females and when there's nobody there at the table to help bring that across, [that is a problem].

Participant: well who decides who fills these positions anyway? I mean we're not privy to these conversations right?

Focus Groups–Climate

- On-going concern that a woman in a high level position faces additional scrutiny on her performance as compared to a man.
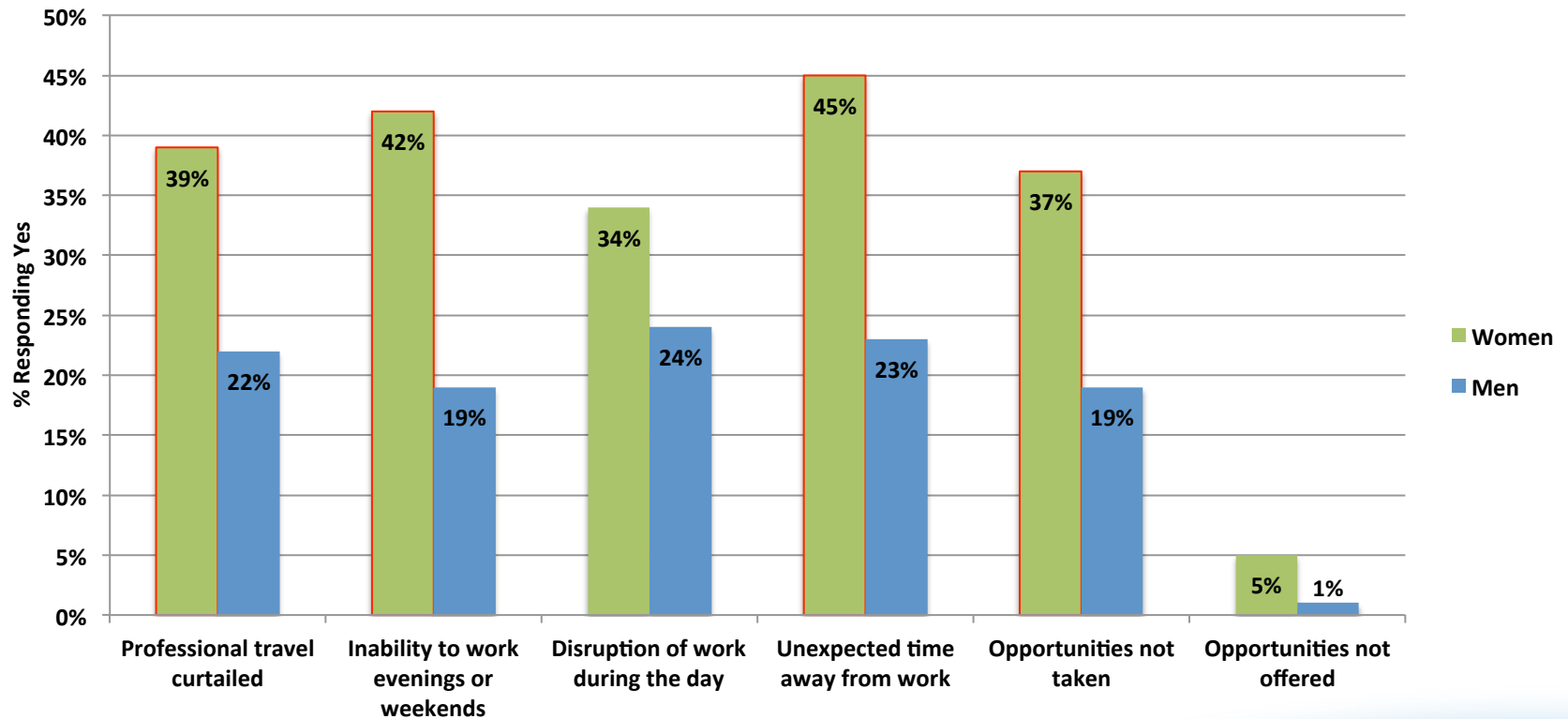
  Participant: I think it's a very broad perception though that if a woman in a leadership position especially in academia, she is representing [all] women. A man, in a leadership position in academia, he is representing a leader in academia, and not his gender.

  Participant: Because it makes everybody look bad, because [if the women] don't succeed and then [reaction is] so "we're not going to put a woman in there now".

  Participant: To be perceived as professional you have to be more 'manlike.' I was actually told this in graduate school.

MIDDLE TENNESSEE STATE UNIVERSITY

Survey—Work-Life Balance

Professional life has been affected in the following ways during the past five years due to children:

Category	Women	Men
Professional travel curtailed	39%	22%
Inability to work evenings or weekends	42%	19%
Disruption of work during the day	34%	24%
Unexpected time away from work	45%	23%
Opportunities not taken	37%	19%
Opportunities not offered	5%	1%

MIDDLE
TENNESSEE
STATE UNIVERSITY

Focus Groups–Gender Expectations

- STEM women faculty are sensitive to being viewed as lacking commitment to their work if they share their personal lives.

  Participant: you can't talk about your kids, and I actually had someone tell me that they purposely lowered their voice and they changed the way they dressed and they did better. They were given more leadership.

  Participant: I purposely have to not talk about my kids at work. And detach myself from them.

  Participant: I think that in general it is perceived badly to be able to talk about your kids, because then you're not perceived as professional.

Focus Groups–Gender Expectations

- STEM women faculty are committed to their jobs, and spend considerable time and effort to be productive.
  - They experience stress in trying to juggle multiple and often competing expectations.
  - They manage their responsibilities by eating lunch at their desks, cutting back on some socializing, and being very focused on work productivity.
- It is important to recognize a variety of paths to success, which can improve and support retention and promotion of STEM women faculty.

MIDDLE TENNESSEE STATE UNIVERSITY

Summary

- Presented data on current faculty that shows commonly occurring university profiles, but disproportionate % of faculty by gender, by rank & gender, by gender & promotions as well as hires

MIDDLE TENNESSEE STATE UNIVERSITY

Summary (con't)

- Key points from survey and focus groups
  - <u>Gender differences</u>
    - in considerations for leaving MTSU;
    - with salary and workload negotiations;
    - perception of fairness of resource allocation;
    - the clarity & consistency of T&P processes and policies;
    - work expectations and the value of service;
    - evaluations of the climate.

Next Steps

- Further Analysis & Recommendations
  - Policy Review
    - T & P policy for departments/colleges
    - Others?
  - Cultural Change
    - Campus climate
  - Comprehensive Written Report
  - Conference

MIDDLE TENNESSEE STATE UNIVERSITY

Beyond Catalyst?

- Institutional Transformation
  - Comprehensive change
  - Research on gender equity

- PLAN (Partnerships for Learning and Adaptation Networks)
  - Adaptation and implementation