

SUMMATIVE EXTERNAL EVALUATION:

**UNH UNBIASED: LEADERSHIP DEVELOPMENT AND POLICY CHANGE TO
PROMOTE INSTITUTIONAL TRANSFORMATION**

NSF GRANT NO. 1209189

**OCTOBER 19, 2018
(REVISED NOVEMBER 30, 2018)**

Submitted By:

Mariko Chang Consulting, Inc.

Mariko Chang, PhD
Erika Krajcovicova, MPP
Sadie Davis, MPP

www.mariko-chang.com

TABLE OF CONTENTS

1. EXECUTIVE SUMMARY.....	1
2. INTRODUCTION	5
2.1. Organization of the Report.....	5
2.2. Overview of UNH ADVANCE	5
3. EVALUATION OBJECTIVES AND METHODS	7
3.1. Evaluation Period and Objective.....	7
3.2. Evaluation Methods and Data.....	7
4. EVIDENCE OF IMPACT.....	8
4.1. <i>Goal 1</i> : Increase the representation of STEM faculty women at all ranks through changes in recruitment and retention policies and practices.	8
4.1.1. Initiative 1.1: Search Committee Training.....	8
4.1.1.1 Evidence of Impact: Participant Feedback.....	9
4.1.1.2 Evidence of Impact: Interviews.....	10
4.1.1.3 Evidence of Impact: Applicant Pool Data.....	11
4.1.1.4 Evidence of Impact: Climate Survey Data	13
4.1.1.5 Speaking Up to Bias Workshop	15
4.1.1.6 Evidence of Impact: Participant Feedback.....	16
4.1.1.7 Sustainability	19
4.1.2. Initiative 1.2: Increase the number of female faculty at the senior level through both promotion of existing mid-level faculty and targeting of new hires at the senior level, as possible.....	19
4.1.2.1. Visiting STEM Women Scholars Program	19
4.1.2.2. Women Faculty Development.....	20
4.1.2.3. Promotion and Tenure Policy Alignment.....	23
4.1.2.4. Evidence of Impact: Hires, Tenure, and Promotion	24
4.1.2.5. Sustainability	29
4.2. <i>Goal 2</i> : Improve support and department-level climate for STEM faculty women through increased department chair professional development and assessments, and formal mentoring policies and practices.	29
4.2.1. Initiative 2.1: Chair Professional Development.....	29
2.2.1.1 Evidence of Impact: Participant Feedback.....	30
2.2.1.2 Evidence of Impact: Interviews.....	32
2.2.1.3 Evidence of Impact: Social Science Research.....	33
2.2.1.4 Sustainability	33
4.2.2. Initiative 2.2: Formal Mentoring Program.....	33
2.2.2.1 Evidence of Impact: Participant Feedback.....	34
2.2.2.2 Evidence of Impact: Interviews.....	38
2.2.2.3 Sustainability	38
4.3. <i>Goal 3</i> : Conduct a wage equity analysis and recommend any policy changes that might be indicated.....	38

4.4. <i>Goal 4</i> : Develop more flexible workplace policies that support career advancement for STEM faculty women.	39
4.5. <i>Goal 5</i> : Create and maintain campus-wide awareness of the issues addressed and policy changes made under the ADVANCE IT initiative.....	39
4.6. <i>Goal 6</i> : Conduct a longitudinal field experiment to assess Goal 2 by investigating the impact of department chair professional development on department-level climate at UNH.	40
5. EVIDENCE OF INSTITUTIONAL CHANGE.....	42
5.1. Transtheoretical Model of Institutional Change	42
5.1.1 Precontemplation, Contemplation, and Preparation Stages.....	42
5.1.2 Action and Maintenance Stages.....	44
6. CONCLUSION.....	46
7. APPENDIX.....	49

1. EXECUTIVE SUMMARY

The University of New Hampshire (UNH) is completing the final year of its NSF-funded ADVANCE IT grant, “UNH Unbiased: Leadership Development and Policy Change to Promote Institutional Transformation.” The overall mission of the project was to initiate sustainable institutional transformation in order to increase the number, retention, and success of female STEM faculty by empowering them to succeed. The grant period was October 1, 2012 (award date), through the one-year, no-cost extension, which ended on September 30, 2018.

This report describes the summative evaluation of grant-related activities and impacts for each of the grant’s main objectives. The summative evaluation incorporated both quantitative and qualitative data collected by the project team, internal evaluator, and external evaluator during the grant period.

1.1. Goals and Key Impacts

Goal 1: Increase the representation of STEM faculty women at all ranks through changes in recruitment and retention policies and practice.

Key activities under this goal included search committee training and faculty professional development:

- GEAR UP (Gender Equity and Recruitment of Underrepresented People) educated faculty about biases and microaggressions and provided tools for faculty to address these issues in the search process.
- The Visiting STEM Women Scholars Program allowed participants the opportunity to engage in networking and to build research collaborations with UNH senior women faculty in STEM and SBS disciplines.
- Building Blocks for Your Career professional development workshops were offered on topics such as writing proposals, building a research lab, and mentoring graduate students.

Key Impacts for Goal 1:

- Faculty believe that search committees are now more aware of unintentional biases and are better equipped to discuss them. Faculty who participated in GEAR UP search committee trainings were even more likely to agree.
- UNH faculty who hosted Visiting STEM Women Scholars have engaged in new grant proposal collaborations and developed new networks as a result of the experience.
- Career development workshops for women faculty provided more than 100 attendees with useful information about how to advance toward their career goals.
- Women are increasingly represented on the UNH STEM and SBS faculty. The percentage of women among STEM faculty has increased from 21% at baseline to 28% in Year 6; the percentage of women among SBS faculty has increased from 36% to 44%. Increases were greatest in STEM at the assistant professor (32% to 43%) and full professor (10% to 18%) ranks, and in SBS at the associate professor rank (36% to 54%).

- Although new hires at the senior level have been rare during the ADVANCE grant period, all full professors hired during this period were men (four in STEM and one in SBS). Among associate professors in STEM, 29% of new hires were women. (No associate professors were hired in SBS during this period.) There was more gender balance in hiring at the rank of assistant professor, where women made up 41% of new hires in STEM and 50% in SBS.
- Recommendations for department promotion and tenure guidelines were approved by the Faculty Senate in 2015, and a Faculty Senate subcommittee is working to address issues of accountability and institutionalization.

Goal 2: Improve support and department-level climate for STEM faculty women through increased department chair professional development and assessments, and formal mentoring policies and practices.

Key activities under this goal included training and professional development programs for chairs and early-career faculty:

- Trainings through Advancing Chairs as Leaders (ACL) and its predecessor, Reaching Excellence in Academic Leadership (REAL), have sought to (a) increase department chairs' awareness of implicit assumptions and unconscious biases and their effect on decision making, and (b) help chairs develop skills and tools to overcome their own biases or assumptions.
- Pathways to Tenure workshops have covered topics relevant to early-career faculty, such as navigating your department, college, and university; work-life balance; mentoring best practices; and creating a visible presence in your field.

Key Impacts for Goal 2:

- Department chairs benefitted from professional development workshops. Of the participants who completed evaluations, 93% rated the REAL and ACL trainings as useful in helping to facilitate a positive climate for faculty, particularly for women.
- The Pathways to Tenure program has helped assistant professors gain valuable knowledge on topics such as seeking career advice, the promotion and tenure process, and UNH's tenure clock extension and family leave policies.

Goal 3: Conduct a wage equity analysis and recommend any policy changes that might be indicated.

Key Impacts for Goal 3:

- Two wage equity studies were conducted during the grant period, and gender differences were found in both years. The UNH ADVANCE team shared the findings with deans, together with a list of faculty and estimated residuals.

Goal 4: Develop more flexible workplace policies that support career advancement for STEM faculty women.

Key Impacts for Goal 4:

- Several important policies were updated as part of a new five-year faculty contract, including a revision to the tenure clock extension policy, parental leave as an employee benefit that allows both parents to take leave rather than sharing the benefit between them, and allowance of modified duties upon approval by the dean or chair.
- The human resources website hosts a list of resources developed by the UNH ADVANCE team to help faculty find child care and elder care as well as other important information.
- A parent support network provides parents an opportunity to connect and share resources.

Goal 5: Create and maintain campus-wide awareness of the issues addressed and policy changes made under the ADVANCE IT initiative.

Key Impacts for Goal 5:

- The UNH ADVANCE website has been kept up to date with policy changes, resources, and information related to program goals.
- The ADVANCE team disseminated climate survey findings highlighting topics such as work–life balance, bias intervention, and the promotion and tenure process.

Goal 6: Conduct a longitudinal field experiment to assess Goal 2 by investigating the impact of department chair professional development on department-level climate at UNH.

Key Impacts for Goal 6:

- The Research Committee is analyzing the impact of department chair professional development on climate at UNH and will disseminate findings shortly. Related research by the Research Committee has resulted in presentations and publications.
- The findings from research on bystander intervention formed the basis of a successful proposal for an NSF ADVANCE Partnership grant.
- The interactive theater component of UNH ADVANCE was expanded to industry and lab mentors as part of an INCLUDES grant.

1.2. Evidence of Institutional Transformation

Using the Transtheoretical Model of Change, data drawn from interviews document how UNH progressed through five stages of change. Although not all change was uniform across all dimensions, units, or individuals, UNH progressed through the early stages of change (Precontemplation, Contemplation, and Preparation) during the beginning of the grant period, and through the final two stages of change (Action and Maintenance) during later grant years.

1.3. Sustainability

Several programs will be sustained through 2023 by a memorandum of understanding (MOU) signed by the interim provost. Among these are the GEAR UP Faculty Search Committee Training and Bystander Intervention Training, which will continue to be administered by ADVANCE program staff; Advancing Academic Leaders (AAL), an expansion of the Advancing Chairs as Leaders program, which will operate out of the Office of Engagement and Faculty Development; and the Pathways to Tenure workshops. A long-term institutional home has not yet been identified for the Pathways to Tenure workshops, GEAR UP, or the Bystander Intervention training.

Per the MOU, UNH ADVANCE will continue in its current space in Diamond Library; support for program management, research assistance, and programmatic expenses will continue through 2023.

A university-wide climate survey of faculty, staff, and students is being planned. The UNH ADVANCE co-PI, Dr. Christine Shea, has been asked to chair the Climate Survey Committee.

There are currently no plans to continue the Visiting STEM Women Scholars Program or the Building Blocks for Your Career workshops. The UNH Research Development Office continues to offer workshops, however, and may address these topics in future programming.

1.4. Recommendations and Conclusion

While UNH ADVANCE has led a successful institutional transformation effort, the responsibility remains with UNH to ensure its impacts are sustained and even expanded. The following efforts are recommended to help in that effort:

- Resist complacency and continue to support ongoing efforts and measures of accountability;
- Work to institutionalize UNH ADVANCE goals and activities;
- Continue to use data as a tool for institutional reflection and excellence;
- Continue to disseminate related research;
- Seek strategies to build systems of accountability;
- Incorporate non-tenure track faculty into institutional transformation efforts; and
- Leverage the success of UNH ADVANCE to increase UNH's ability to promote other forms of faculty diversity.

In conclusion, UNH has made meaningful changes to its policies and practices to support institutional transformation in order to increase the number, retention, and success of female STEM faculty. With continued support and accountability, these changes are likely to be sustained and integrated into the fabric of the institution.

2. INTRODUCTION

2.1. Organization of the Report

This report describes the final summative evaluation of the University of New Hampshire (UNH) ADVANCE Institutional Transformation (ADVANCE IT) grant. Divided into several sections, the report begins with an overview of major project goals (in the current section), followed by a description of evaluation objectives and methods in Section 3. Section 4 outlines the main summative impacts from activities undertaken during the grant period for each of the grant’s key objectives, integrating evaluation findings conducted by the internal and external evaluators. Section 5 highlights evidence of cultural and organizational change at UNH. The report ends with a summary of key accomplishments, program sustainability, and recommendations.

2.2. Overview of UNH ADVANCE

UNH just completed its five-year, NSF-funded ADVANCE IT grant, “UNH Unbiased: Leadership Development and Policy Change to Promote Institutional Transformation.” The project was granted a one-year, no-cost extension through September 2018.

The overall mission of the UNH ADVANCE project was to initiate sustainable institutional transformation to increase the number, retention, and success of primarily STEM women faculty by empowering them to succeed and establishing quick-action ability for retention.¹ Working within the Office of the Provost, the project sought to transform UNH by engaging faculty and institutional leadership to improve the university climate through increased fairness, transparency, and clarity of recruitment, retention, and promotion and tenure policies and practices.

The program was conceptually guided by the congruence model, which views organizations as open systems and examines context, people, processes, culture, and structure to understand undesirable organizational outcomes. The grant built on UNH’s strategic plan and other university-wide initiatives focusing on inclusive excellence, promotion and tenure, curricular change, advancement of individual scholarship through external funding, and advancement of interdisciplinary research teams. UNH ADVANCE had six transformational goals:

Goal 1: Increase the representation of STEM faculty women at all ranks through changes in recruitment and retention policies and practice.

Initiative 1.1. Search committee training.

Initiative 1.2. Increase the number of female faculty at the senior level through both promotion of existing mid-level faculty and targeting of new hires at the senior level, as possible.

Goal 2: Improve support and department-level climate for STEM faculty women through increased department chair professional development and assessments, and formal mentoring policies and practices.

¹ In the project goals, the term “STEM” includes social and behavioral sciences (SBS).

Initiative 2.1. Department chair professional development.

Initiative 2.2. Establish formal mentoring policy.

Goal 3: Conduct a wage equity analysis and recommend any policy changes that might be indicated.

Goal 4: Develop more flexible workplace policies that support career advancement for STEM faculty women.

Goal 5: Create and maintain campus-wide awareness of the issues addressed and policy changes made under the ADVANCE IT initiative.

Goal 6: Conduct a longitudinal field experiment to assess Goal 2 by investigating the impact of department chair professional development on department-level climate at UNH.

A quasi-experimental design tested the following hypotheses:

Hypothesis 1: There will be a significant gender difference in baseline measures of perceived departmental climate and degree of influence such that female STEM faculty will perceive a more negative climate and less ability to influence departmental decisions than male STEM faculty.

Hypothesis 2: Baseline institutional data will reveal significantly higher male-to-female ratios in every college (except Health and Human Services) at senior ranks and compared to national averages.

Hypothesis 3: There will be no significant gender difference in faculty's perceived departmental-level climate and degree of influence subsequent to the implementation of department chair professional development programs.

Hypothesis 4: There will be a significant reduction in male-to-female ratios in the STEM disciplines at senior ranks subsequent to the implementation of department chair professional development programs.

3. EVALUATION OBJECTIVES AND METHODS

3.1. Evaluation Period and Objective

This final summative evaluation covers the duration of the grant period, from October 1, 2012 (award date), through the one-year, no-cost extension, which ended on September 30, 2018. The objective of the summative evaluation was to assess how well the project achieved its intended outcomes, including the impact of project activities on gender equity in STEM at UNH, intellectual merit, and broader impacts.

3.2. Evaluation Methods and Data

The evaluation incorporated both quantitative and qualitative data derived from the following sources:

Interviews: As the external evaluator, Dr. Mariko Chang conducted annual site visits to UNH during the first five years of the grant to interview key stakeholders. Additional interviews were conducted by phone when they could not be scheduled during site visits. Over the grant period, a total of 175 interviews were conducted with the following stakeholders: PI, co-PIs, program coordinator, initiative committee members, provost, president, members of the Internal Steering Committee, deans, department chairs, key administrative stakeholders, participants in UNH ADVANCE programming, and male and female STEM/SBS faculty.²

Observation: Over the course of the grant period, Dr. Chang observed several gatherings and programs, such as Internal Steering Committee meeting, the kickoff event, leadership retreat, and a GEAR UP workshop. She also participated in annual External Advisory Board meetings.

Data on Applicant Pool, Finalists, Offers Made, and Hires: Data on the gender composition of applicant pools, finalists, offers made, and hires for faculty searches from 2006 to 2018 were provided by the UNH Affirmative Action and Equity Office.

Climate Survey Data: Selected findings from the annual UNH ADVANCE faculty climate surveys (2013–2017) were provided to the external evaluator by the research team.

Institutional Data: Department-level data on STEM and SBS faculty composition—including the number of faculty by rank and gender—as well as other ADVANCE Indicators Toolkit data were provided by the UNH ADVANCE team.

Program Documentation: Records of participation (attendance at events, etc.) were kept by the UNH ADVANCE team and provided to the external evaluator. Other documentation, such as annual reports, program communications, and program outputs, were also made available.

² Certain individuals (e.g., the co-PIs, administrators) were interviewed multiple times during the grant period. Hence, the total number of individuals interviewed is less than the total number of interviews.

4. EVIDENCE OF IMPACT

4.1. *Goal 1: Increase the representation of STEM faculty women at all ranks through changes in recruitment and retention policies and practices.*

Goal 1 contained two initiatives:

Initiative 1.1. Search committee training.

Initiative 1.2. Increase the number of female faculty at the senior level through both promotion of existing mid-level faculty and targeting of new hires at the senior level, as possible.

4.1.1. Initiative 1.1: Search Committee Training

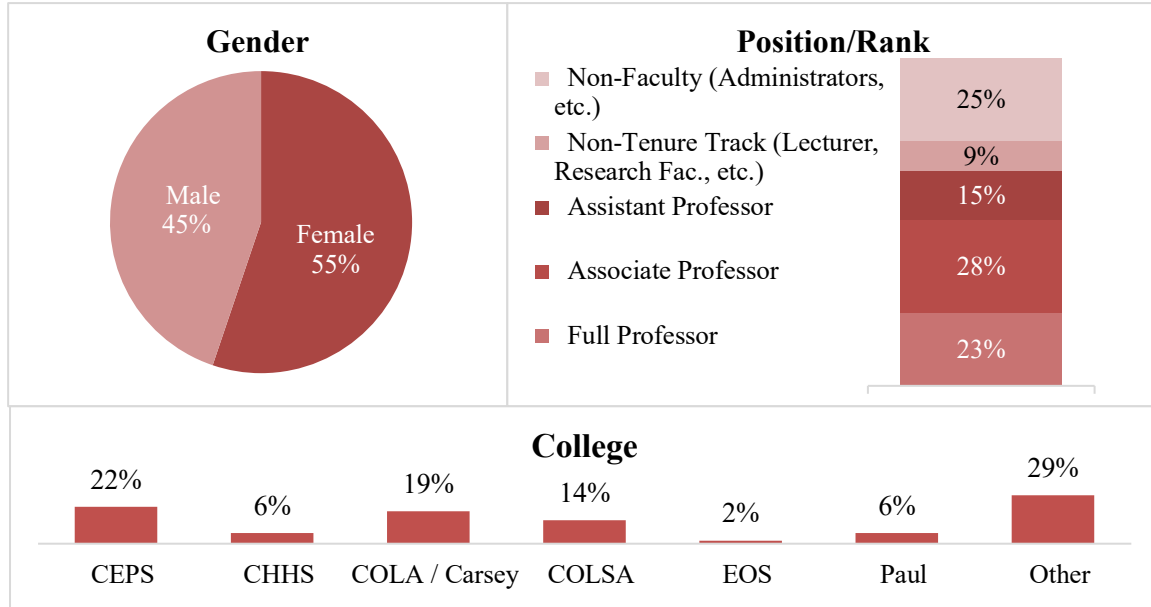
In Year 2 of the grant, UNH ADVANCE developed GEAR UP (Gender Equity and Recruitment of Underrepresented People) training for faculty search committees. Over the course of five years (Years 2–6), 10 GEAR UP trainings were held. The centerpiece of GEAR UP workshops is the interactive theater depicting a faculty search process. This is designed to assist workshop participants in recognizing unconscious biases and understanding that microaggressions result from putting these biases into action. Resources for search committees were provided at the trainings and are available on the UNH ADVANCE website.

The desired learning outcomes for GEAR UP were to:

- increase participants' ability to recognize biases in themselves and others, and to understand how biases operate and what their negative impacts are;
- assist participants in developing strategies to eliminate such biases and in improving search committee processes;
- increase the number of women and underrepresented faculty, both in STEM and more widely; and
- report successes from which others can learn.

During the grant term, 319 people attended GEAR UP trainings. Women made up 55% of total participants, and most faculty participants were associate professors or professors (Figure 1). Participants were drawn from all STEM and SBS colleges, with the largest proportion coming from the College of Engineering and Physical Sciences (CEPS) and the College of Liberal Arts (COLA).

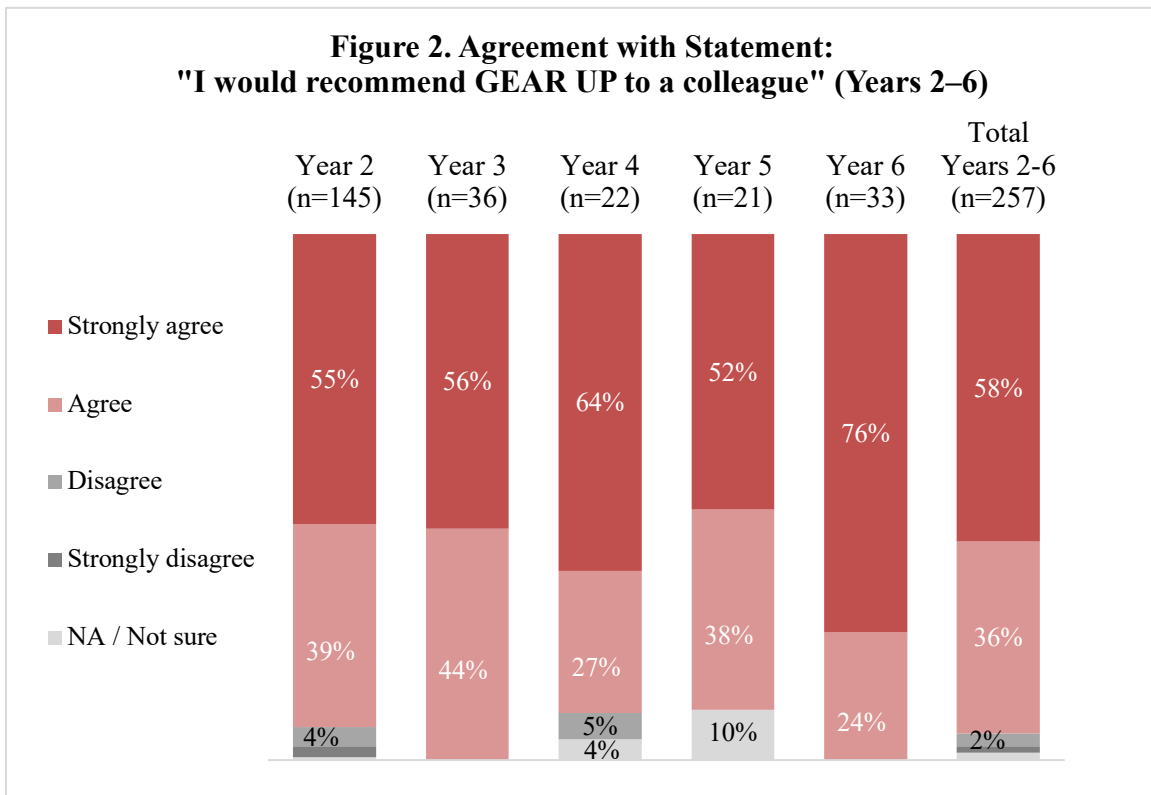
Figure 1. Characteristics of GEAR UP Workshop Participants (Years 2–6)



Note: N = 315. Characteristics of four participants in Year 5 were not available.

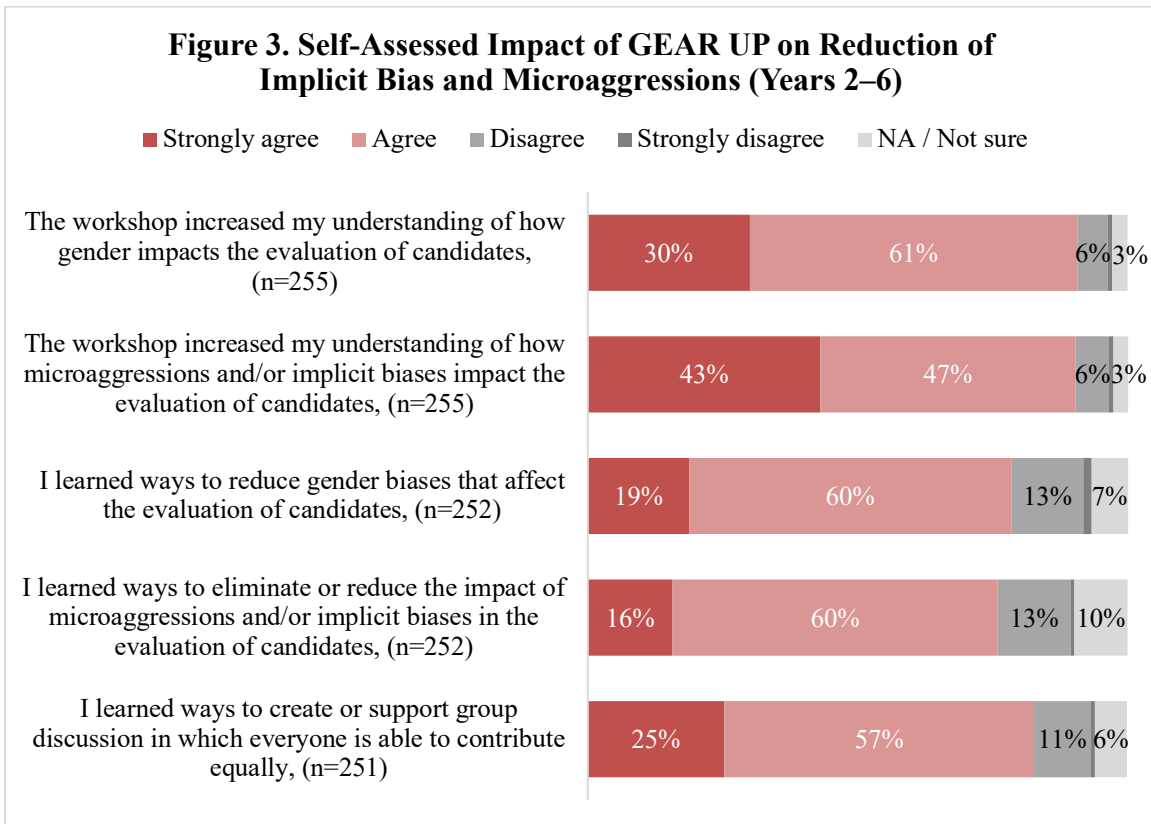
4.1.1.1 Evidence of Impact: Participant Feedback

Participants were asked to fill out a paper feedback form at the end of each workshop. Across workshops held during the grant term, 81% of participants answered some or all questions. The workshops received a very positive evaluation overall (Figure 2), with



94% of participants overall agreeing that they would recommend GEAR UP to colleagues; most (58%) agreed strongly.

The majority of participants agreed or strongly agreed that their understanding of how gender, microaggressions, and/or implicit biases impact candidate evaluations increased, and that they learned ways to create a more equitable search process (Figure 3). Consistently across cohorts, the workshops were a bit more effective in increasing understanding of the issues overall than in providing participants with tools or strategies to achieve a more equitable search process. Nevertheless, outcomes for participant learning of how to reduce biases and support equitable discussions were still quite strong.



4.1.1.2 Evidence of Impact: Interviews

In annual interviews with the external evaluator, respondents who had attended GEAR UP articulated ways that they thought the workshops had impacted the search process. For example:

“Being explicit about the criteria for evaluation is important. Because of going through the training, there was extra attention to that—listing criteria for evaluation and an explicit rationale for why one candidate is chosen.” (Year 2)

“Let’s evaluate based on what was submitted—we kept going back to that. It’s not fair to bring in information and knowledge from other sources such as meeting people at conferences.” (Year 2)

“Faculty had not...in the past been empowered to understand the seriousness of unconscious biases, but now they are empowered. I have had a number of colleagues tell me that they had their first meeting as a search committee before the GEAR UP and they said when they came back and had their second meeting, everyone behaved differently. There was more questioning of CVs they were looking at, and so on.” (Year 2)

“I had served on search committees before this training. I would say that there were stark differences....One thing that I would attribute to the ADVANCE program was the ability to rein in discussion when perhaps it was digressing into areas that were illegal or not following the institutional norms. I think that that was something that I noticed was very different that we didn’t have before.” (Year 3)

“GEAR UP taught me to pay attention to how candidates are being evaluated. It also taught me to look at the larger context in terms of the political culture and the people involved. They are all human and have insecurities and fears. It helped me understand where others might be coming from, and I learned skills for listening and communicating.” (Year 4)

One of the reasons that GEAR UP was so impactful was it provided participants with a vocabulary for addressing inequities in the search process. Moreover, because the vocabulary was shared among participants who had attended training, it could be referenced to help bring committees back on track. For example:

“I’m in a department where sometimes I’m one of the few people saying we should actually follow the guidelines and we should not talk about fit or age or marital status. What I found really helpful is that, since the search committee had to attend the workshop, it kind of served as a reference. So, when somebody said, ‘I don’t want to hire somebody who is older,’ you could say, ‘Oh, remember in the workshop they talked about how we can’t base decisions by age?’ I felt that it was really helpful because it gave us something concrete to refer to and remind people what the rules of the game are....I think in the past, too, we had this dynamic where they’ll say, ‘Well, that’s your view, but his view is this, or her view is this.’ And now it’s, ‘Oh, no, it’s not a particular view. This is the *institution’s* view.’ So it’s also good to just remind, this is the way the institution governs these processes.” (Year 3)

“It provided a language, a set of vocabulary, that could be used to ensure the committee’s evaluation of candidates was fair. If someone raised an issue that was perhaps a source of bias, we could say, ‘Remember in the search committee training? We aren’t supposed to use that criteria.’” (Year 4)

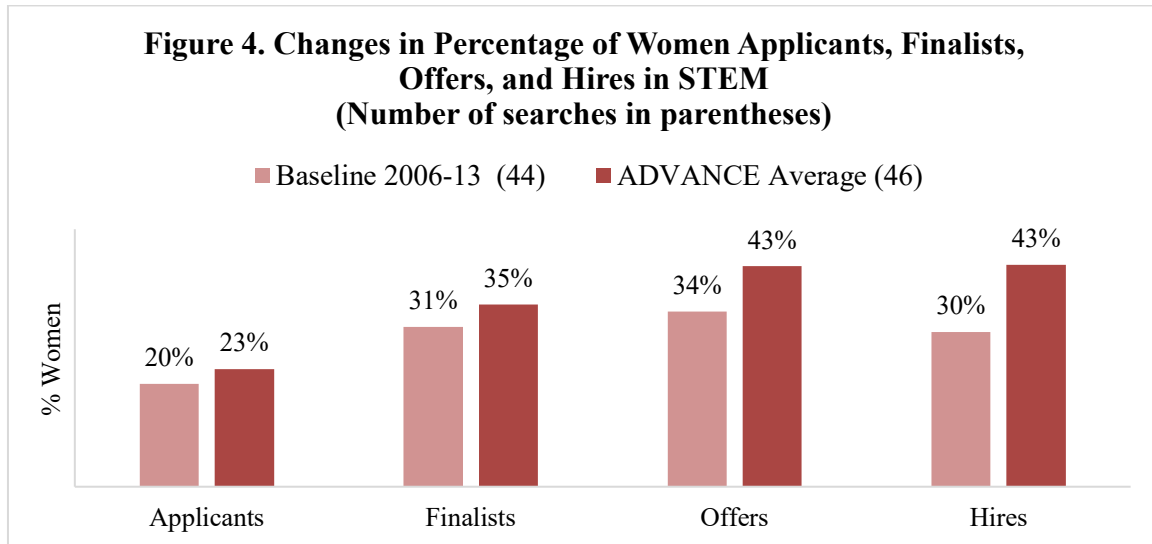
4.1.1.3 Evidence of Impact: Applicant Pool Data

Data on the percentage of women in the applicant pool, finalists, offers made, and hires for tenure-track faculty positions were provided by the UNH Office of Affirmative Action and Equity. The data provide information about changes over the grant period,

with baseline data coming from the 2006–2013 time period.³ The GEAR UP Faculty Search Committee Training Program began in the 2013–2014 academic year.

As shown in Figures 4 and 5, the percentage of women in STEM and SBS faculty search applicant pools increased during the ADVANCE years.⁴ The percentage of women applicants rose from 20% to 23% in STEM and from 36% to 37% in SBS.

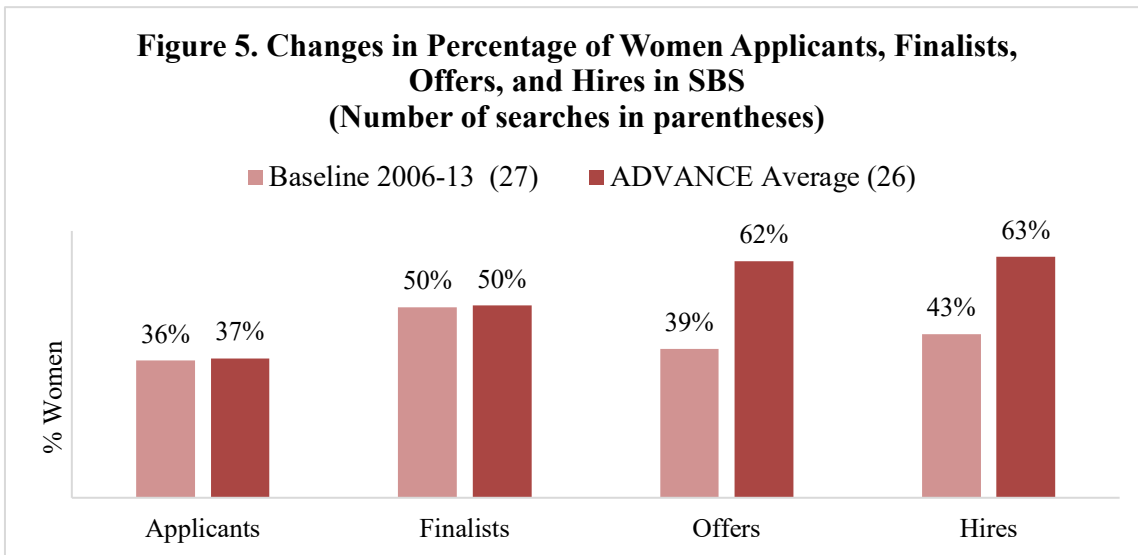
In STEM, in addition to more women in the applicant pools, there was an increase in the percentage of female finalists, offers, and hires (Figure 4). The overall figures indicate women went from 30% to 43% of total STEM faculty hires during the grant period.



In SBS, the proportion of women applicants increased by only 1%, and the percentage of finalists was stable overall. The percentage of women who received offers and were hired increased from the baseline period (Figure 5). On average in the grant period, 63% of new hires in SBS were women, in comparison to 43% during baseline.

³ Data reported here exclude searches for which no applicant pool and/or finalist data were available. In some cases, a small percentage of applicants did not provide their gender. As such, the percentage of women is calculated only for applicants whose gender is known; those with unknown gender are excluded from the total. Some searches included more than one position. No data are reported for the 2016–2017 academic year in SBS—searches were conducted, but none met the criteria outlined here.

⁴ The ADVANCE average represents the average for searches across five years (Years 2–6) for each metric. For annual data, see Figures A1 and A2 in the appendix.



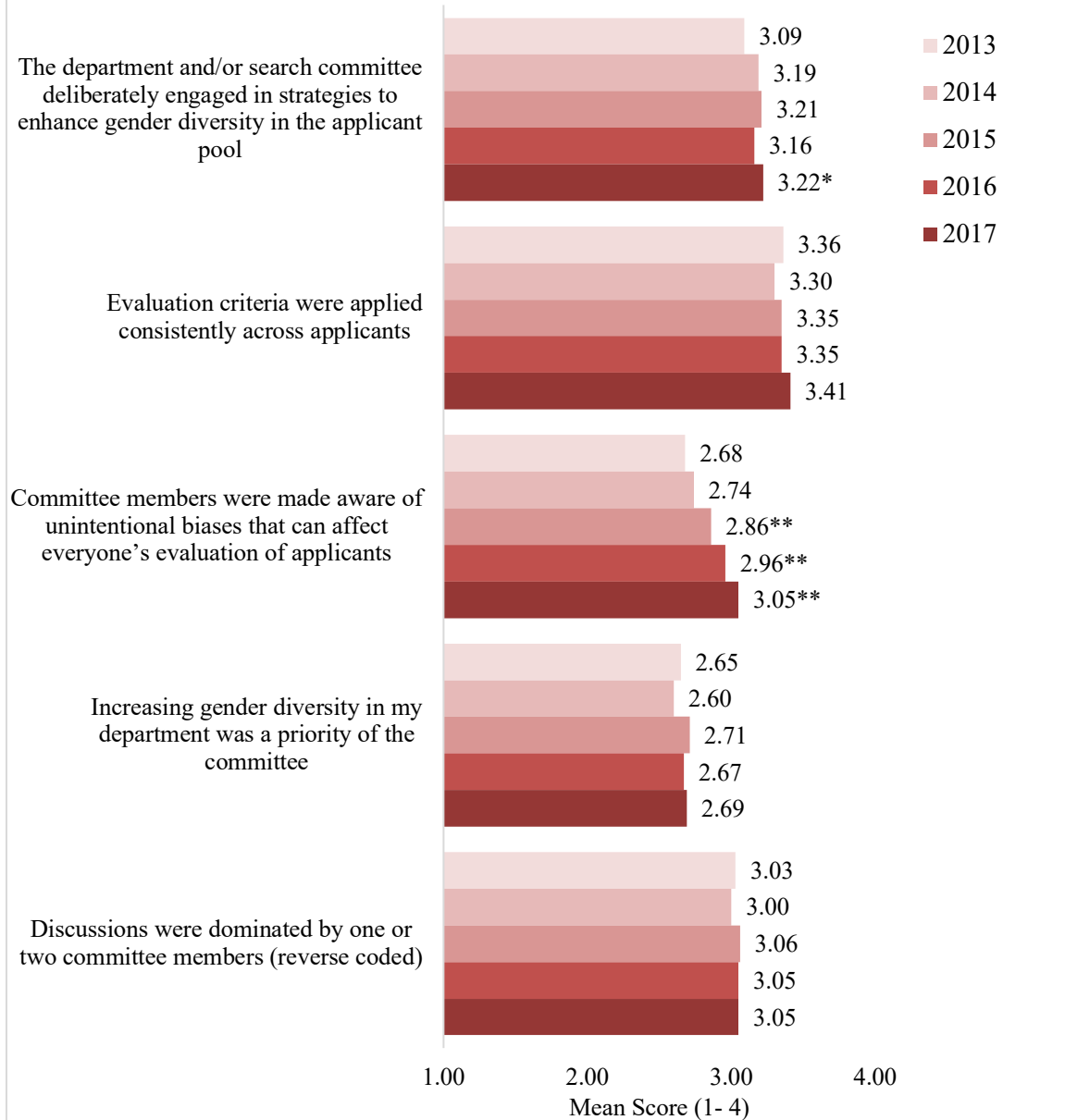
4.1.1.4 Evidence of Impact: Climate Survey Data

Several questions on the annual climate survey pertaining to perceptions of recruitment and search committee processes have been asked annually since fall 2013.⁵ For most items, there has been an increase in faculty perceptions of equity in the search process (Figure 6).

A statistically significant increase between 2013 and 2017 appears in two items: faculty perceptions that “committee members were made aware of unintentional biases that can affect everyone’s evaluation of applicants” and “the department and/or search committee deliberately engaged in strategies to enhance gender diversity in the applicant pool” (both $p < 0.1$).

⁵ These questions were included in the survey only for faculty serving on search committees.

Figure 6. Perceptions of Search Committee Work (2013–2017)



Source: UNH Climate Survey.

Note: Response scale: 1 = Strongly disagree, 2 = Disagree, 3 = Agree, 4 = Strongly agree.

* Mean is significantly higher versus 2013 mean, $p \leq 0.1$

** Mean is significantly higher versus 2013 mean, $p \leq 0.05$

It is important to point out that respondents' perceptions of these issues were different depending on whether they participated in GEAR UP and on their gender, at least among tenure-track faculty. Table 1 shows the mean ratings of the items from Figure 6 disaggregated by GEAR UP participation and gender. Overall, faculty who participated in GEAR UP reported more positive views of how evaluation criteria were being applied, whether committee members were aware of unintentional biases, and whether increasing

gender diversity in the department was a priority. In particular, women GEAR UP participants had the most positive perception of these aspects.

Table 1. Tenure-Track Faculty Perceptions of Search Committee Processes, by GEAR UP Participation and Gender

Participated in GEAR UP	All		Men		Women	
	No	Yes	No	Yes	No	Yes
The department and/or search committee deliberately engaged in strategies to enhance gender diversity in the applicant pool	3.16	3.32	3.37	3.22	2.96	3.41**
Evaluation criteria were applied consistently across applicants	3.35	3.55**	3.37	3.41	3.33	3.69**
Committee members were made aware of unintentional biases that can affect everyone’s evaluation of applicants	3.01	3.25*	3.09	3.19	2.94	3.31**
Increasing gender diversity in my department was a priority of the committee	2.61	2.85*	2.67	2.81	2.54	2.89
Discussions were dominated by one or two committee members (reverse coded)	3.08	3.11	3.07	3.04	3.10	3.17
Sample Size	95	56	46	27	49	29

Source: 2017 UNH Climate Survey.

Note: N as indicated, except for “Increasing gender diversity in my department was a priority of the committee” item, with N = 48 among female non-participants and N = 27 among female participants. Response scale: 1 = Strongly disagree, 2 = Disagree, 3 = Agree, 4 = Strongly agree. Significant differences as reported by UNH social science research team.

* Mean is significantly different between Yes/No, to $p \leq 0.1$

** Mean is significantly different between Yes/No, to $p \leq 0.05$

4.1.1.5 Speaking Up to Bias Workshop

In feedback on the GEAR UP workshops, faculty expressed the need for more practical information on what they could do when faced with bias incidents in search committee meetings. In response to this need, the team designed the Speaking Up to Bias workshop, which was offered for the first time in spring 2018. Two sessions of the workshop were held on the same day, one in the morning and a second in the afternoon.

The Speaking Up to Bias workshops attracted mostly administrators and staff—61 out of 74 participants, or 82% (Table 2). Eighty-nine percent of the participants were women.

Table 2. Characteristics of Bystander Intervention Participants (Spring 2018)

	TOTAL	
	#	%
College		
College of Engineering and Physical Sciences	2	3%
College of Health and Human Services	0	0%
College of Liberal Arts (including Carsey Institute)	2	3%
College of Life Sciences and Agriculture	3	4%
Institute for the Study of Earth, Oceans, and Space	0	0%
Peter T. Paul College of Business and Economics	2	3%
UNH at Manchester	1	1%
Administrators, Directors	10	14%
Other Non-Faculty, Staff	54	73%
Faculty Rank		
Assistant professor	2	3%
Associate professor	5	7%
Professor	3	4%
Non-Tenure Track Faculty (Lecturer, Research Faculty, etc.)	3	4%
Non-Faculty	61	82%
Gender		
Female	66	89%
Male	8	11%
TOTAL Number:	74	

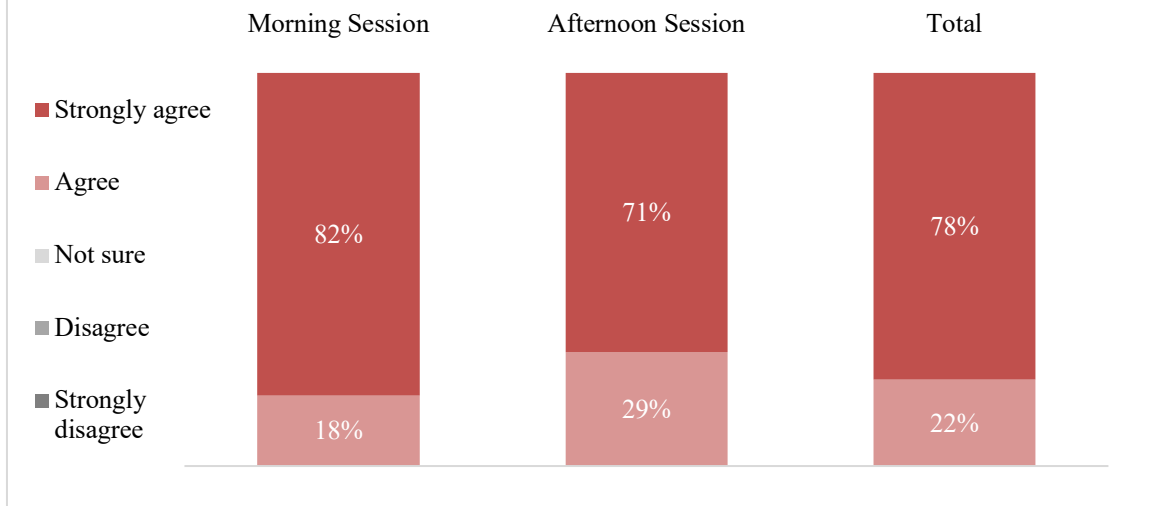
4.1.1.6 Evidence of Impact: Participant Feedback

Speaking Up to Bias participants were asked to fill out an anonymous paper evaluation form at the end of the workshop. All 39 morning session participants and 21 afternoon session participants responded to all or some questions, for an 81% response rate.

In terms of goals for attending, most participants mentioned the desire to learn how to respond to and learn about bias situations in general (69% of those who commented on their goal in open-ended comments). Many mentioned a desire to learn for personal growth and to be better allies, while some commented that they had been targets of bias as well (15%). Thirteen percent responded they were working to approach issues of bias in their departments or offices.

As shown in Figure 7, all participants agreed they would recommend the workshop to colleagues, with 78% strongly agreeing across the two sessions.

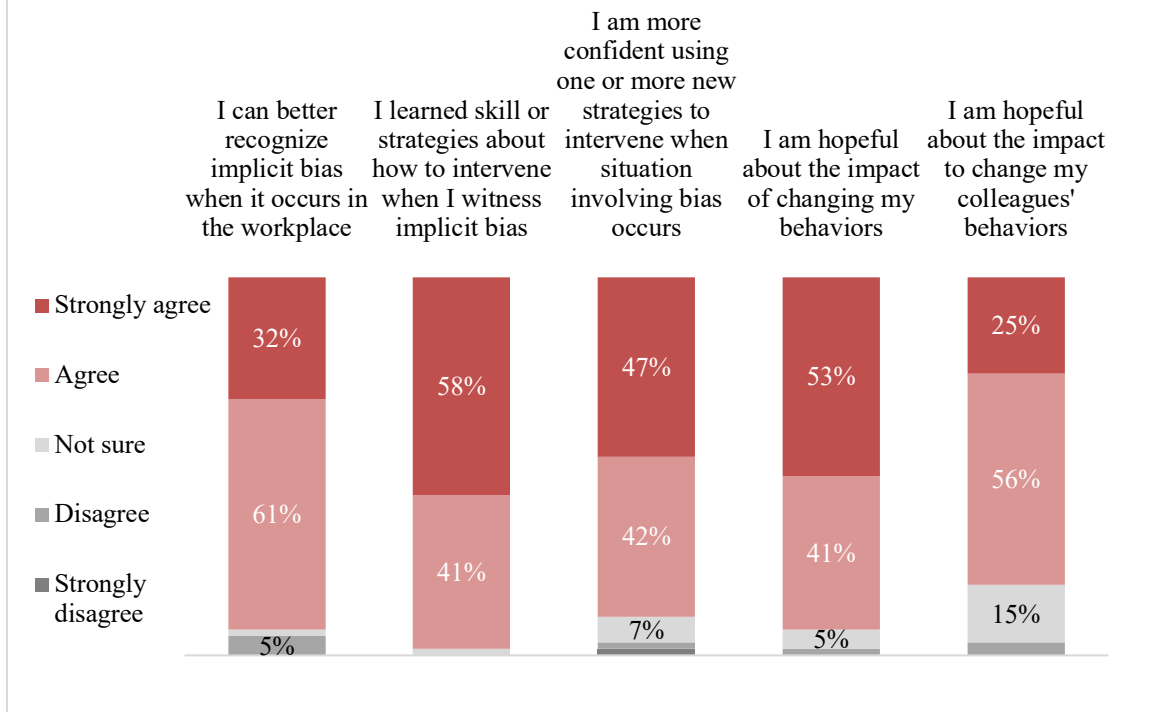
**Figure 7. Agreement With Statement:
“I would recommend this workshop to my colleagues”**



Note: Morning N = 38; Afternoon N = 21; Total N = 59. N represents total number answering questions.

Most participants agreed or strongly agreed that the workshop helped them to better recognize implicit bias (93%) and gain skills and strategies to intervene (99%), as well as to become more confident using these approaches (89%) and to feel hopeful about how new skills put to action could impact their own and their colleagues’ behavior (94% and 81%, respectively; Figure 8). The strongest agreement surfaced around new skills and strategies learned, the confidence gained to use them, and how participants’ own behavior would be impacted. For each of these items, around half of respondents strongly agreed.

Figure 8. Perceived Impact of Speaking Up to Bias Workshop on Recognition of and Intervention in Situations of Bias



Note: N = 59. N represents total number answering questions.

Open-Ended Comments

When asked about the most important concepts they learned, 43% of respondents mentioned strategies to intervene as a bystander. This was the most common type of response. For example:

“The four response options for speaking up to bias. [It is] helpful to put words to these strategies.”

“Conversation about content when more likely to have an impact. Timing matters.”

“That there is more than one way to address bias. I’m surprised that sometimes the target doesn’t want a bystander to say something in the moment.”

In terms of specific strategies that the participants felt confident to implement immediately, the approach of questioning or requesting the person to repeat or clarify was mentioned most often by respondents (25%). Other commonly mentioned strategies were arousing dissonance (15%), pivot (12%), and “ouch” or stop-the-harm (9%). Some respondents mentioned the importance of responding at all (8%) and of expressing their own feelings in the situation (5%).

4.1.1.7 Sustainability

The GEAR UP Faculty Search Committee Training Program and Bystander Intervention workshops will be sustained through an MOU signed by the interim provost. The training will continue to be administered by ADVANCE program staff, who will be supported at least through 2023. During the additional years ADVANCE program faculty and staff will be working with the Provost to find a longer-term institutional home for these activities.

4.1.2. Initiative 1.2: Increase the number of female faculty at the senior level through both promotion of existing mid-level faculty and targeting of new hires at the senior level, as possible.

The following program activities addressed Initiative 1.2:

- Visiting STEM Women Scholars Program
- Development for female faculty members
- Promotion and tenure policy alignment

4.1.2.1. Visiting STEM Women Scholars Program

The Visiting STEM Women Scholars Program, which launched in Spring 2014, sought to provide UNH faculty with exposure to and networking opportunities with senior female faculty in STEM disciplines at other institutions in order to build research collaborations. Over the term of the grant, a total of five host faculty received funding to bring Visiting STEM Women Scholars to UNH. (One faculty member received funding for two proposals.) The characteristics of the host faculty are presented in Table 3.

Table 3. Characteristics of Visiting STEM Women Scholars Program Hosts

	N
College	
College of Engineering and Physical Sciences	3
College of Life Sciences and Agriculture	2
Faculty Rank	
Assistant Professor	2
Associate Professor	1
Professor	1
Non-Faculty (Administrators, etc.)	1
Gender	
Female	4
Male	1
TOTAL Number:	5

The following individuals participated as Visiting STEM Women Scholars:

- Dr. Irene Beyerlein, Technical Staff Member, Los Alamos National Laboratory
- Dr. Kathryn Johnson, Associate Professor of Biology, Beloit College
- Dr. Melinda Smith, Associate Professor of Ecology and Evolutionary Biology, Colorado State University
- Dr. Jacqueline Greghegan, Professor of Economics, Clark University
- Dr. Natacha Thomas, Associate Professor of Civil and Environmental Engineering, University of Rhode Island

A. Evidence of Impact: Interviews

In interviews with the external evaluator, faculty who hosted visiting scholars noted several meaningful professional impacts, such as collaborations that have resulted in new grant proposals, opportunities to give symposia, invitations to serve on an advisory committee for a different grant, and new networks and collaborations. Many mentioned that the benefits extend beyond the host faculty member to additional faculty and graduate students at UNH. The following quotations illustrate some of the key impacts identified by faculty hosts:

“In terms of benefits, professionally, it’s allowed me to have some opportunities that I would not have had otherwise to speak and to develop collaborations that would expand my research.” (Year 3)

“We have a couple of seminars planned, meetings with my lab, a public seminar, and talk. And with the proposal that we’ll be working on, I think there will be opportunities for graduate students.” (Year 3)

“To have this collaboration, to have her visit was definitely beneficial. The research that will come out of this collaboration will have a positive impact on my promotion and tenure review. I believe it will make my packet stronger.” (Year 4)

“We are writing an NSF proposal that will be submitted in a couple of months; we wrote one article that has been published, with two more under review. We hope to generate more collaborative proposals and continue working together... Students are also involved and have exposure to—and now connections with—her.” (Year 4)

4.1.2.2. Women Faculty Development

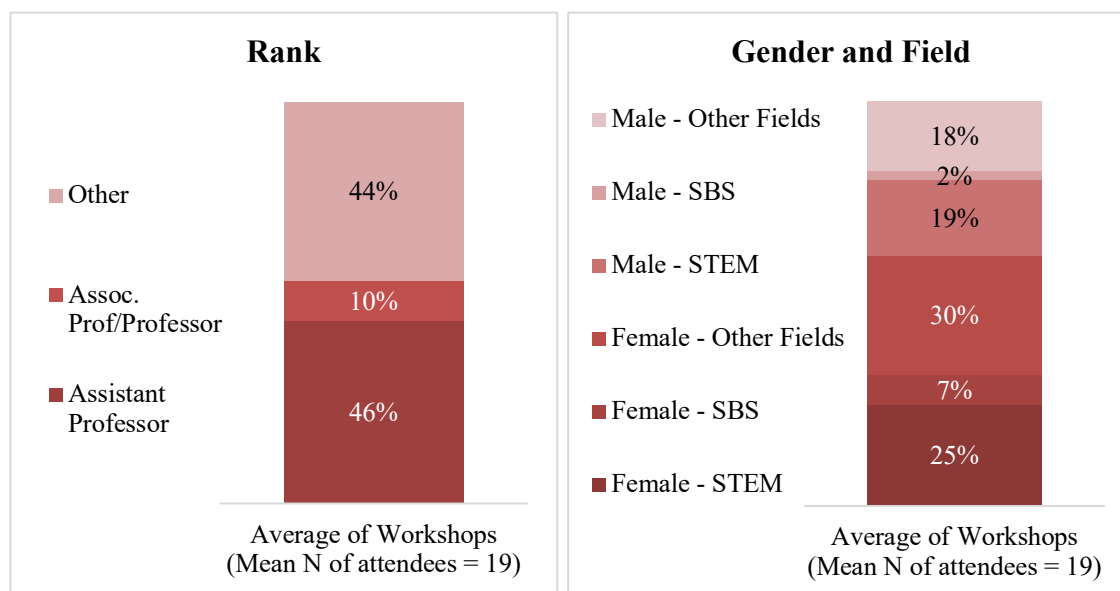
To meet the professional development needs of women faculty, the Building Blocks for Your Career lunch workshop series was launched in Year 4 in collaboration with the UNH Research Development Office. The following workshops were offered:

- Before You Write Your Next Proposal (Years 4, 5, 6)
- Finding Funding (Years 4, 6)
- Writing to Win (Years 4, 5, 6)
- Mentoring Graduate Students for Success (Year 4)
- Collaborating at UNH (Year 5)
- Building and Growing a Lab (Years 4, 5)

- Promoting Your Research (Years 4, 5)
- Resources for Managing Your Scholarly Output (Year 6)

Overall, as many as 155 people attended across the different workshops and years.⁶ On average, the majority of Building Blocks participants were women (63%), and 46% were assistant professors (Figure 9).

Figure 9. Building Blocks Participant Characteristics (Average of Workshops, Years 4–6)



Note: The average across workshops is used here, as pooled data could be misleading if individuals attended more than one workshop. It is assumed that faculty would have not attended the same workshop twice in different years.

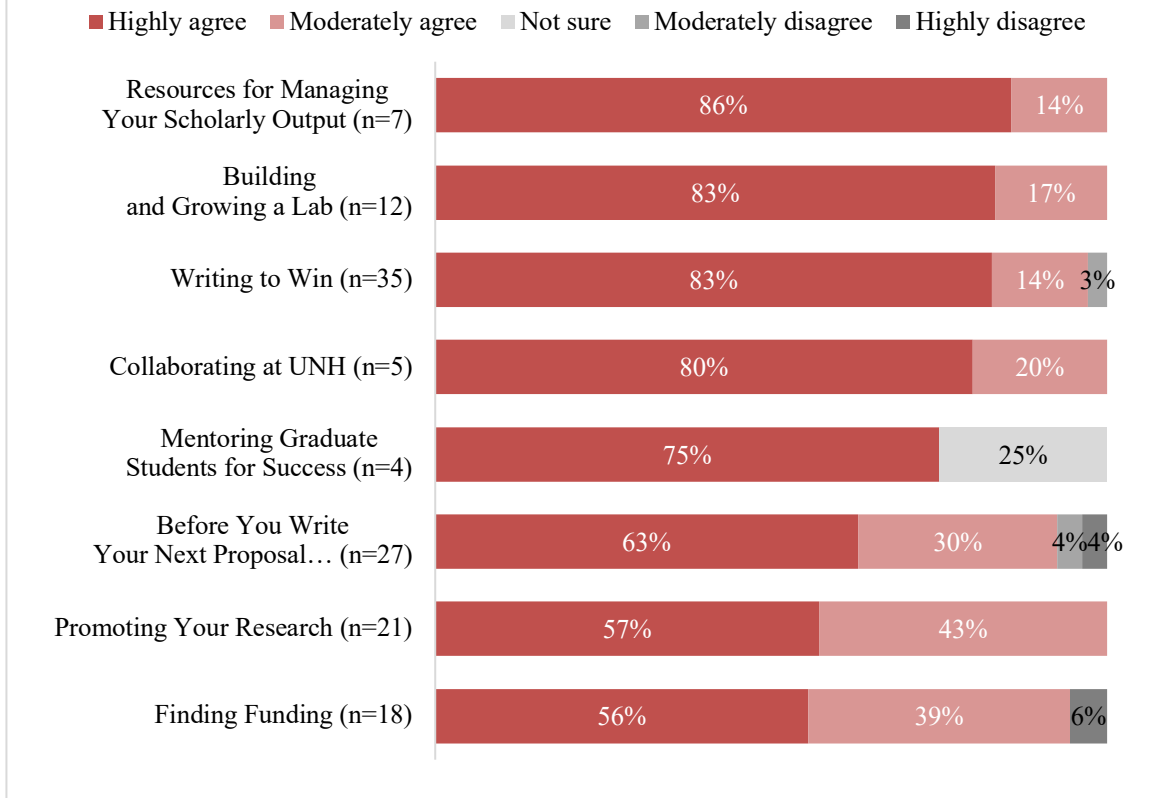
A. Evidence of Impact: Participant Feedback

Workshop attendees were given a paper feedback form to fill out at the end of each workshop. Of 155 attendees, 134 completed the form fully or partially (an 86% response rate).

Overall, throughout the different workshops and years, almost all attendees agreed the workshop would support them in advancing their career goals (Figure 10). Participants were especially likely to agree that the workshops on “Resources for Managing Your Scholarly Output,” “Building and Growing a Lab,” “Writing to Win,” and “Collaborating at UNH” would support their career advancement. On each of these items, 80% or more participants agreed highly.

⁶ Number of unique participants could be smaller, as faculty might have attended more than one workshop.

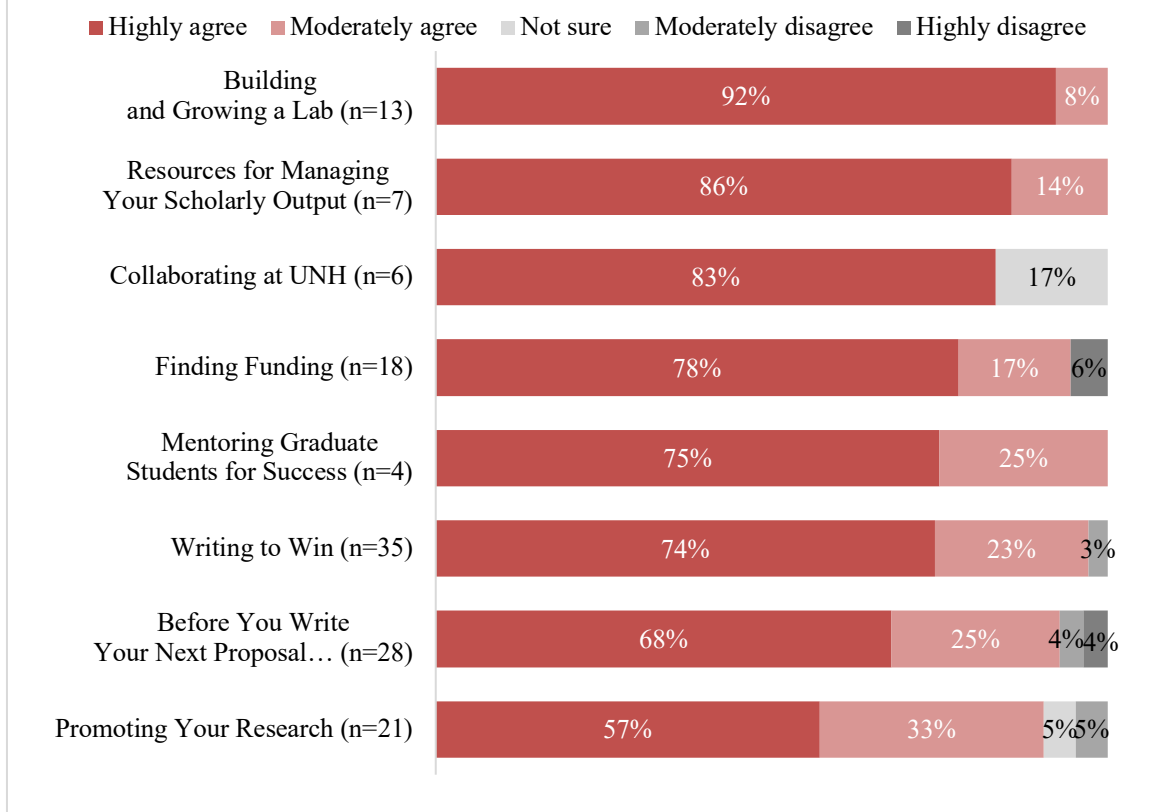
**Figure 10. Agreement with Statement:
“This program will support me in advancing my career goals”
(Years 4–6)**



Note: N represents the number who responded to each item.

Similarly, participants were likely to recommend all workshops to colleagues (Figure 11). The workshops generally ranked similarly in terms of recommendation and in terms of satisfaction.

**Figure 11. Agreement with Statement:
“I would recommend this workshop to a colleague”
(All cohorts, Years 4–6)**



Note: N represents the number who responded to each item.

4.1.2.3. Promotion and Tenure Policy Alignment

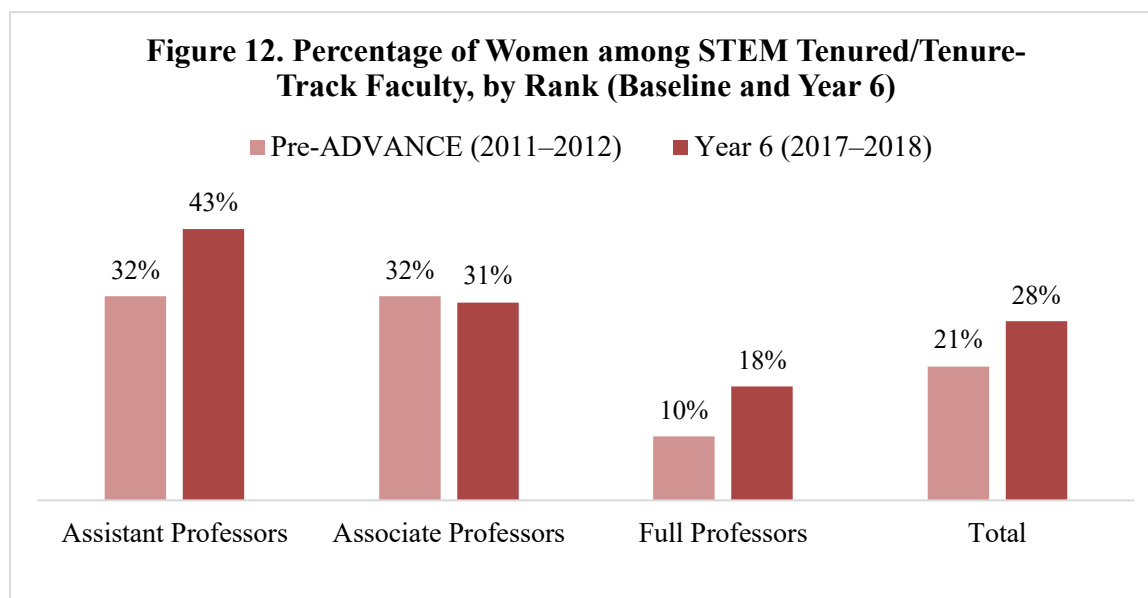
The recommendations for promotion and tenure guidelines developed by the Career Progression Subcommittee (in collaboration with the Faculty Senate Ad Hoc Committee on Promotion & Tenure Standards) were approved by the Faculty Senate in March 2015. Since that time, stakeholders have been unsure of the extent to which departments have acted to review their own guidelines and ensure they are aligned with those approved by the Faculty Senate. A Faculty Senate subcommittee has been charged with addressing the implementation of the guidelines and examining how this plays out across colleges and departments. Stakeholders noted that there is no system of accountability in place to ensure that departmental guidelines are aligned with those approved by the Faculty Senate.

4.1.2.4. Evidence of Impact: Hires, Tenure, and Promotion

Progress toward increasing the number of female faculty at the senior level through new hires and promotion of existing faculty can be gleaned from the annual Indicators Toolkit data provided by the UNH ADVANCE team.⁷

Faculty Composition

In STEM, the share of women among tenured and tenure-track faculty rose from 21% at baseline to 28% in Year 6 (Figure 12).⁸ Increases in women's representation were especially notable among assistant professors (from 32% to 43%) and full professors (from 10% to 18%). Women's representation among associate professors remained stable (32% at baseline; 31% in Year 6).

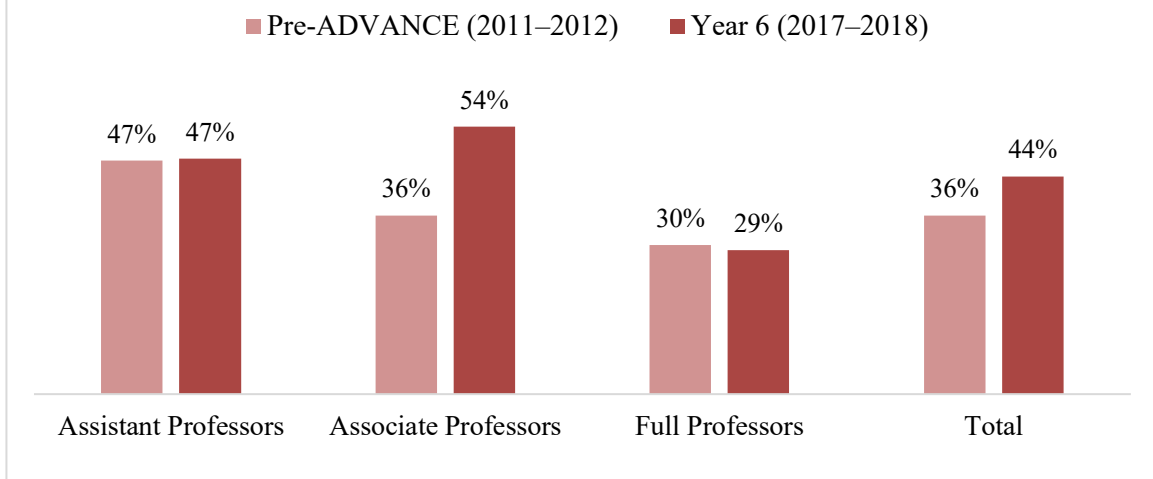


In SBS, the share of female faculty overall rose from 36% to 44% (Figure 13), due to the increase in the percentage of women at the associate professor rank (36% to 54%). The percentage of women remained stable at the assistant professor rank (47%) and among full professors (30% to 29%).

⁷ Five Toolkit sets were received: 2012–2013 (updated to May 2014), 2013–2014 (updated to March 2015), 2015–2016 (hires and promotions updated to July 2015; attrition to April 2016), 2016–2017 (hires updated to September 2016; promotions to July 2016; attrition to April 2017), and 2017–2018 (hires updated to January 2018; promotions to July 2018; attrition to August 2018).

⁸ The number and percentage of STEM and SBS women by rank and in total for each of the grant years is presented in the appendix, Table A1.

Figure 13. Percentage of Women among SBS Tenured/Tenure-Track Faculty, by Rank (Baseline and Year 6)



As shown in Table 4, the number and percentage of women among STEM and SBS faculty increased across almost all departments. Moreover, three of the four departments with only one woman tenured/tenure-track faculty in Year 1 had at least two women faculty by Year 6.

Table 4. Number and Percent Women Faculty in STEM and SBS, by Department (Years 1 and 6)

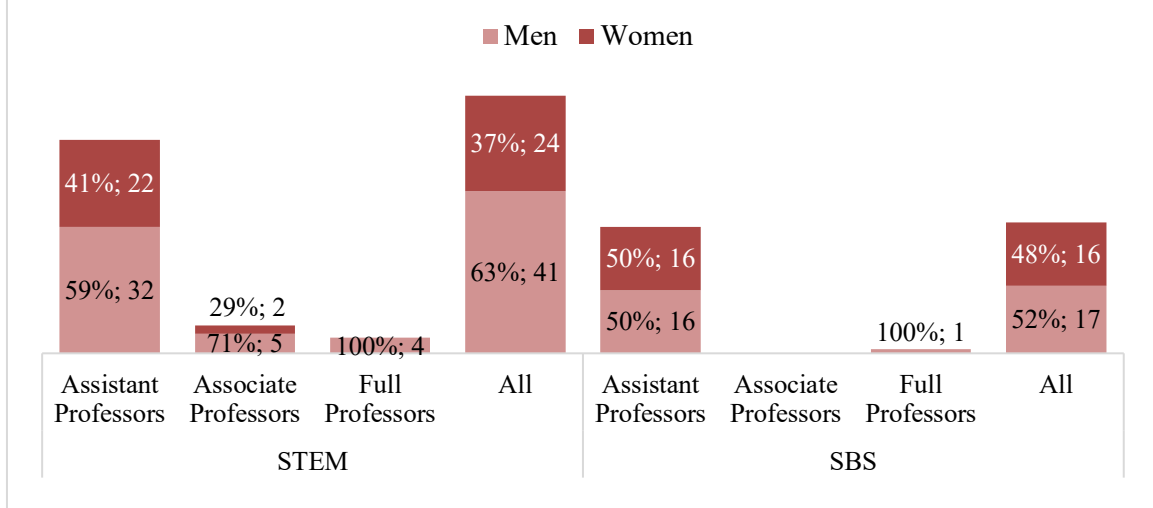
	# Women		% Women	
	Year 1	Year 6	Year 1	Year 6
STEM	42	53	21%	28%
Engineering and Physical Sciences	25	32	20%	25%
Mathematics and Statistics	5	7	26%	39%
Computer Science	1	3	13%	33%
Chemical Engineering	2	2	29%	20%
Civil Engineering	4	6	27%	33%
Electrical and Computer Engineering	1	1	10%	9%
Mechanical Engineering	3	3	16%	16%
Chemistry	1	2	7%	12%
Physics	3	3	13%	19%
Earth Science	5	5	50%	50%
Life Science and Agriculture	17	21	23%	34%
Natural Resources and the Environment	6	9	23%	36%
Molecular, Cellular, and Biomedical Sciences	7	6	30%	33%
Biological Sciences	4	6	16%	33%
SBS	32	39	38%	44%
Management	4	6	36%	43%
Decision Sciences	3	4	30%	33%
Economics	3	5	25%	38%
Psychology	7	6	37%	33%
Sociology	5	5	42%	42%
Political Science	5	7	42%	58%
Geography	1	2	33%	67%
Anthropology	4	4	80%	80%

Hires, Promotions, and Attrition

In STEM fields, a total of 65 hires were reported during the UNH ADVANCE period (Figure 14). A large majority of these (n = 54) were for assistant professor positions. At this rank, women represented 41% of all hires during the period. Among seven associate professor hires, two were women (29%). No women full professors were hired (out of four hires overall).

In SBS, 33 hires were reported during the UNH ADVANCE period, and all except one were at the rank of assistant professor. Of the 32 assistant professors hired, half were women. The one full professor hired was a man.

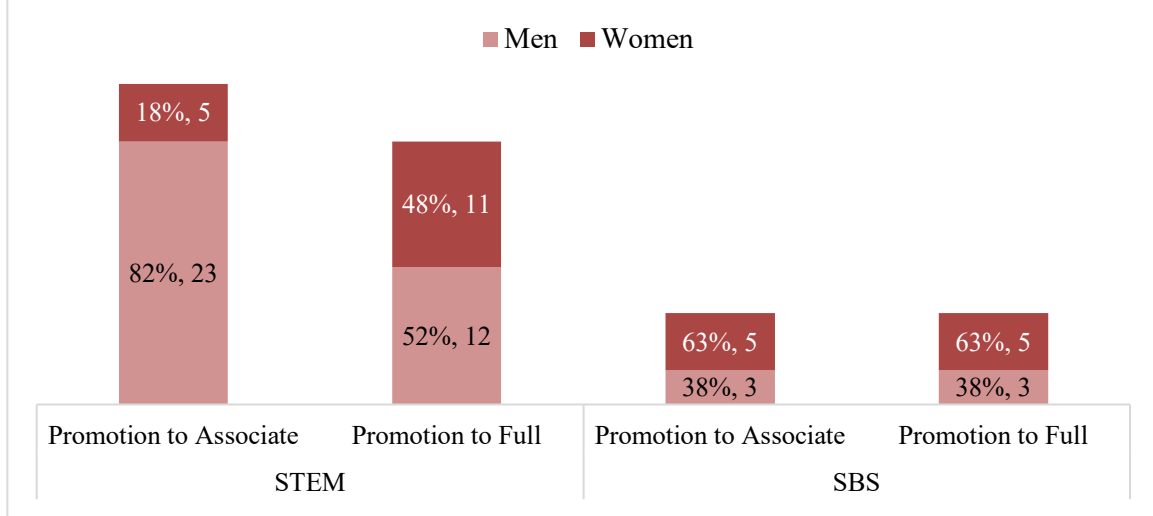
Figure 14. Gender Composition of Hires in STEM and SBS, by Rank (Years 1–6)



Twenty-eight promotions to associate professor were approved in STEM across the ADVANCE years. Women received 18% of these promotions and remained underrepresented (Figure 15). On the other hand, 23 promotions to full professor were approved, with 48% going to female faculty.

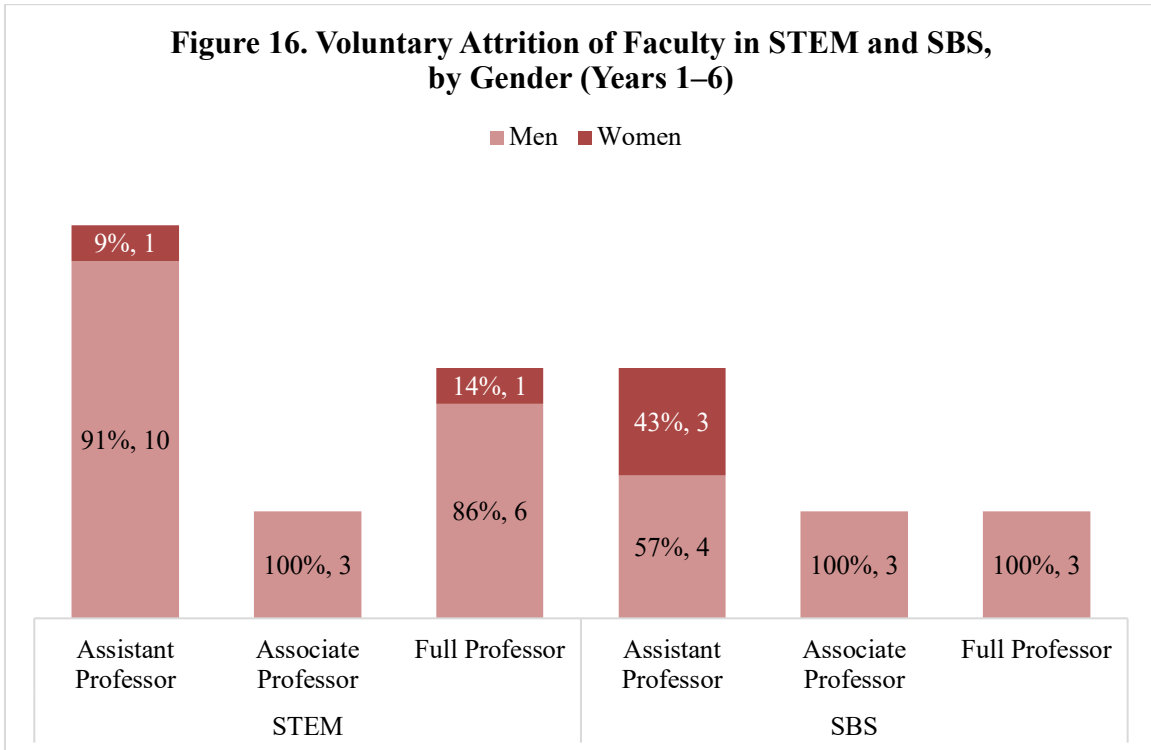
Eight promotions to associate professor were approved in SBS, with 63% awarded to female faculty. Likewise, eight promotions to full professor were approved; again, women received 63% of these.

Figure 15. Gender Composition of Promotion Approvals in STEM and SBS, by Rank (Years 1–6)



In general, voluntary attrition in STEM during UNH ADVANCE years was lower for women than for men, with two women and 19 men leaving across ranks (Figure 16). Attrition was highest overall for assistant professors, followed by full professors.

In SBS, 10 men and three women faculty left during the UNH ADVANCE years. All women who left during this period were assistant professors. As a whole, most SBS faculty who left were assistant professors, and nearly half of them were women.



Faculty Composition, Hires, Promotions, and Attrition – Summary

The tenured and tenure-track faculty composition at UNH has improved its gender balance during UNH ADVANCE years in both STEM (21% to 28% women faculty) and SBS fields (36% to 44% women faculty).

In STEM, the percentage of women increased among assistant and full professors, remaining stable for associate professors. The increase in the percentage and number of women at the rank of assistant professor appears to be driven by hiring (43% of new hires at this rank were women), as well as by the higher voluntary attrition of men (10 of the 11 assistant professors who left during this period were men). The improved gender balance at the full professor rank is primarily the result of increases in women’s promotion to full professor as well as of women’s lower attrition from this rank.

In SBS, the percentage of women faculty increased among associate professors while remaining stable for assistant professors (47% women at Year 6) and full professors (29% women at Year 6). The improved gender balance at the rank of associate professor (from 36% to 54% women) stemmed from women’s promotion to the associate professor rank and their lack of attrition.

4.1.2.5. Sustainability

There are currently no plans to sustain the Visiting STEM Women Scholars Program or the Building Blocks for Your Career workshops. The UNH Research Development Office continues to offer workshops, however, and may address these topics in future programming.

4.2. Goal 2: Improve support and department-level climate for STEM faculty women through increased department chair professional development and assessments, and formal mentoring policies and practices.

Goal 2 had two initiatives:

Initiative 2.1. Develop and implement a leadership professional development program for chairs. Implement a policy that requires this training of all chairs and emerging future leaders at UNH.

Initiative 2.2. UNH ADVANCE will work with the Office of the Vice Provost for Faculty Development and Inclusive Excellence and with deans and directors to establish a formalized mentoring program and policy.

4.2.1. Initiative 2.1: Chair Professional Development

The Chair Professional Development Committee launched Reaching Excellence in Academic Leadership (REAL) in spring 2014. This training was designed to:

- increase department chairs' awareness of implicit assumptions and unconscious biases and their effect on decision making and behavior;
- guide them in an exploration of their own implicit assumptions to see how they may be impacting departmental climate and hiring and promotion decisions; and
- help them develop skills and tools to overcome their own biases or assumptions.

As originally formulated, the training consisted of three components:

- **Seminar 1:** An interactive theater-based training workshop in the spring.
- **Booster Sessions:** Readings, video clips, and an implicit association test during the summer months.
- **Seminar 2:** A workshop for discussing case studies in the fall semester.

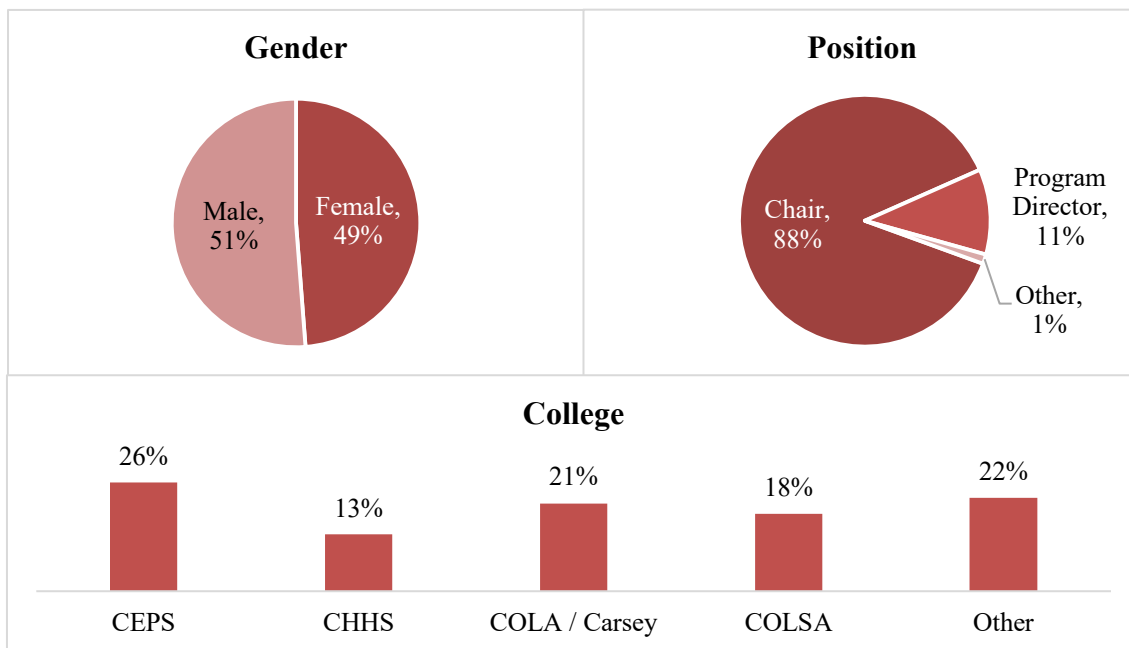
In the 2015–2016 academic year (Year 4), the REAL training was integrated into a new four-day workshop series for department chairs and program directors offered in collaboration with the Office of Engagement and Faculty Development. The new training, Advancing Chairs as Leaders (ACL), comprises four workshops:

- **Workshop 1:** Exploration of Management and Leadership
- **Workshop 2:** Creating an Inclusive Climate
- **Workshop 3:** Faculty and Staff—The Core of the Department
- **Workshop 4:** Strategic Leadership

Workshop 2 incorporates interactive theater training and Workshop 4 includes discussion of case studies developed as part of REAL. Participants also received the booster session material, consistent with what was offered during the two prior implementations of REAL.

Overall, across the five REAL/ACL cohorts, there were 82 participants; most of these (88%) were department chairs. Men and women were represented nearly equally (Figure 17).

Figure 17. REAL/ACL Participant Characteristics (Years 2–6)



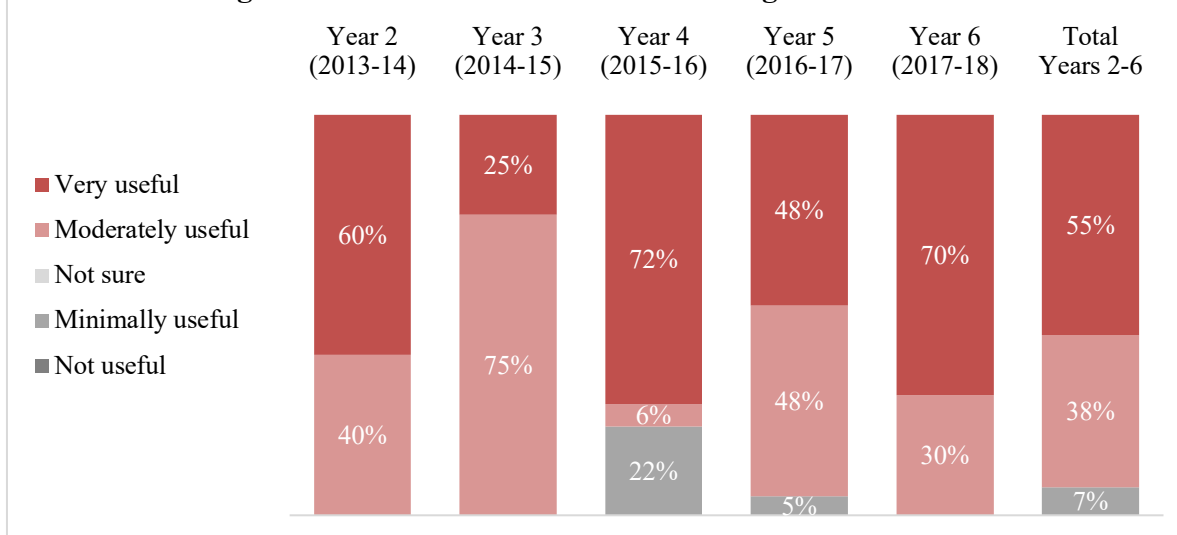
Note: N = 82. In College chart, “Other” includes Library, UNH at Manchester, Peter T. Paul College of Business and Economics, Office of the Provost, etc.

2.2.1.1 Evidence of Impact: Participant Feedback

The UNH ADVANCE team collected formative feedback at the end of each workshop session to obtain suggestions for improvement and understand how participants intended to use the information provided. At the end of the final workshop, participants were asked to complete a more comprehensive pen-and-paper evaluation and rate the usefulness of each program component. Across the five cohorts, 77 of the 82 participants completed the final evaluation form fully or partially (a 94% response rate).

Respondents were asked to rate the usefulness of the program in helping to facilitate “a positive climate for faculty, particularly women faculty.” Across Years 2–6, participants rated the program positively—93% reported the program was moderately or very useful (Figure 18).

Figure 18. Usefulness of REAL/ACL Program as a Whole

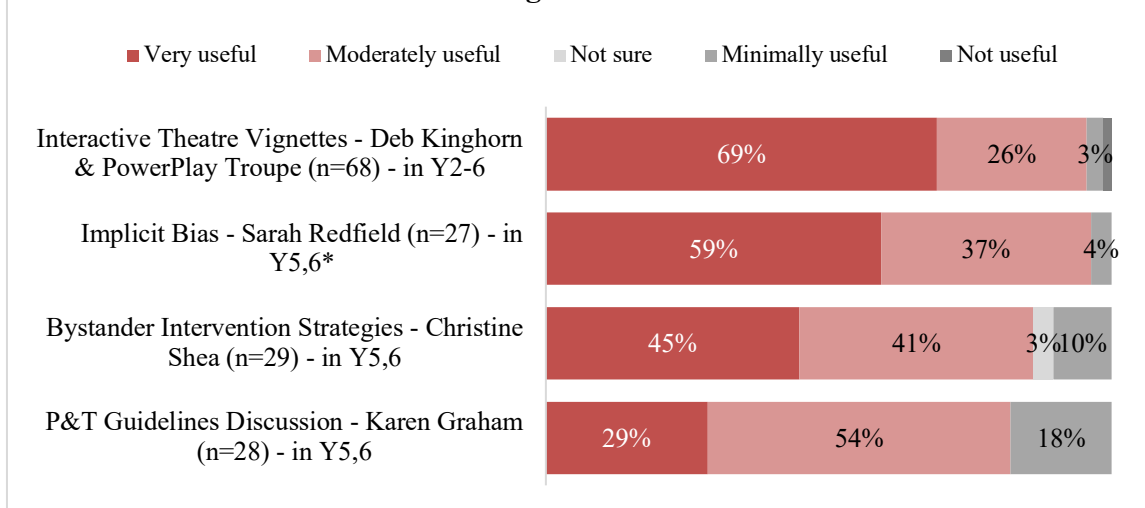


Note: Year 2 N = 10; Year 3 N = 12; Year 4 N = 18; Year 5 N = 21; Year 6 N = 10; Total N = 71.

Participants also rated the usefulness of each program component in helping them facilitate a positive climate for faculty, particularly women faculty. Findings for the original REAL content developed by UNH ADVANCE are summarized here. (Findings from the other program components are provided in Figures A3–A6 in the appendix.)

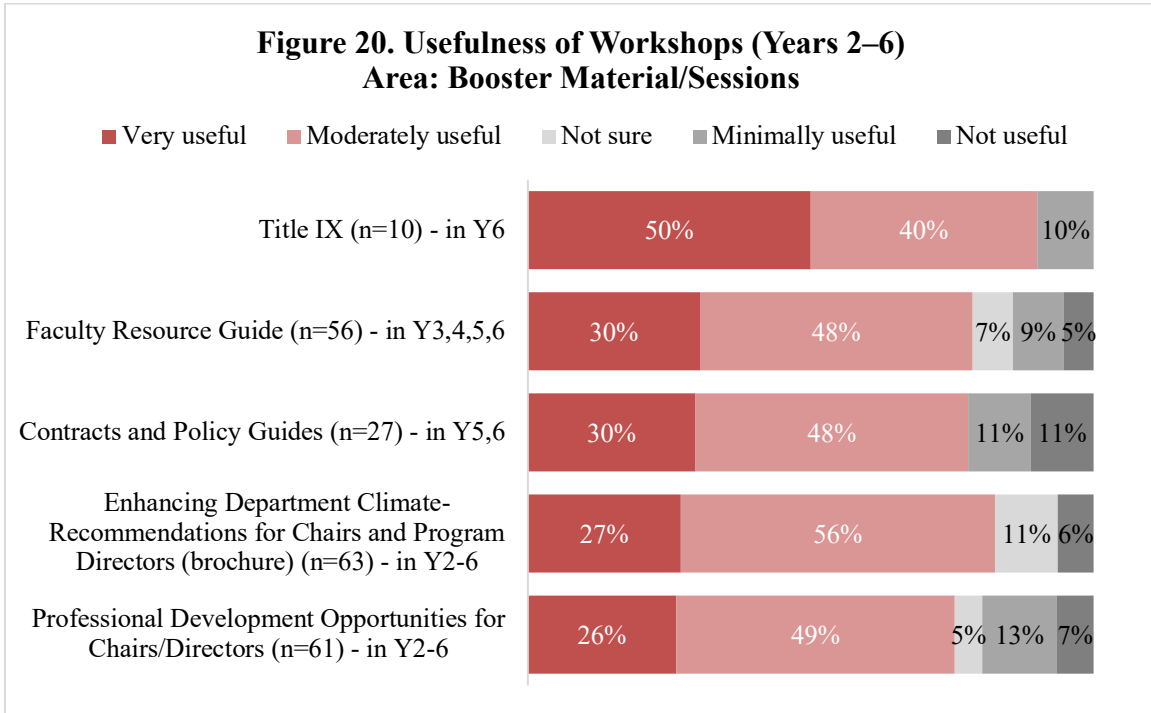
The “Creating an Inclusive Climate” session (mostly covered in Workshop 2) contained one of the signature components developed as part of the ADVANCE grant: interactive theater vignettes. A full 95% of participants found this at least moderately useful; 69% found it very useful (Figure 19).

**Figure 19. Usefulness of Workshops (Years 2–6)
Area: Creating an Inclusive Climate**



Note: N in parenthesis represents number answering item. The years each workshop was offered are indicated at the end of each bar label. Workshop presenter/leader names refer to Year 6. *Implicit Bias session was included in Session 4 in Year 5 (not in Session 2, as in Year 6).

In addition to the main sessions, booster materials were offered to participants. Information on Title IX was added in Year 6 and received high ratings in usefulness (Figure 20). Overall, the remaining booster materials were considered moderately or very useful by over 70% of participants.



Note: N in parenthesis represents number answering item. The years each workshop was offered are indicated at the end of each bar label.

2.2.1.2 Evidence of Impact: Interviews

Interviews conducted by the external evaluator throughout the grant period revealed several impacts of the department chair trainings, such as helping them support a positive climate, providing information and resources about policies and campus resources, and providing a network. Some examples of these impacts are highlighted in the following interview excerpts:

“I learned so much. The content was valuable, very comprehensive. Another especially valuable benefit was the sharing of resources and information with the others. There aren’t other opportunities for us [chairs and directors] to meet with other chairs informally without the deans.” (Year 4)

“Simply being a chair is one thing, and having the right information about policies and procedures and the things that are necessary to just do the job. But the chair also shapes the department subcultures. If there are groups that don’t feel that it’s a welcoming environment in their department, then this has to be front and center in terms of how we work with our leadership. It’s very important to make sure that chairs have tools to improve the environment of their department.” (Year 5)

“In many colleges, chairs don’t have a lot of formal authority. So, they have to operate through consensus and informal example as opposed to being able to dictate to their colleagues. That’s all the more reason why the training is important, so that chairs can figure out how to make the most of the limited resources of authority that they have—especially when dealing with some of the important issues that ADVANCE has been dealing with.” (Year 5)

“What stands out to me is the interactive theater part about subtle biases, particularly around conversations with workload assignments. The other part that was particularly helpful for me is being mindful about the network that you have on campus. The chair is, in some ways, I think, a lonely position. Because you can’t really talk to your colleagues in your department about issues and things that are going on. But the training highlighted resources across campus where you did have the ability to have some of those confidential conversations as well as the network of chairs in the room, that you could reach out to, that have likely experienced some of the same things. The program fills an important need.” (Year 5)

2.2.1.3 Evidence of Impact: Social Science Research

Department chair professional training was the focus of the grant’s social science research component (see Section 4.6). A quasi-experimental design was utilized to empirically test the impact of the training on the representation of and departmental-level climate for female faculty at UNH. Research findings indicate that workshops led to a statistically significant improvement in self-efficacy. Prior research indicates that there is a strong and positive relationship between leaders’ self-efficacy and faculty perceptions of climate, consistent with the intended grant goal of helping department chairs and other unit/program leaders improve departmental climate.

2.2.1.4 Sustainability

The ACL program has been expanded to encompass a broader array of academic leaders; it has been aptly renamed Advancing Academic Leaders (AAL). AAL is operating out of the Office of Engagement and Faculty Development, sustaining the ADVANCE-related content in the department chair training workshops.

4.2.2. Initiative 2.2: Formal Mentoring Program

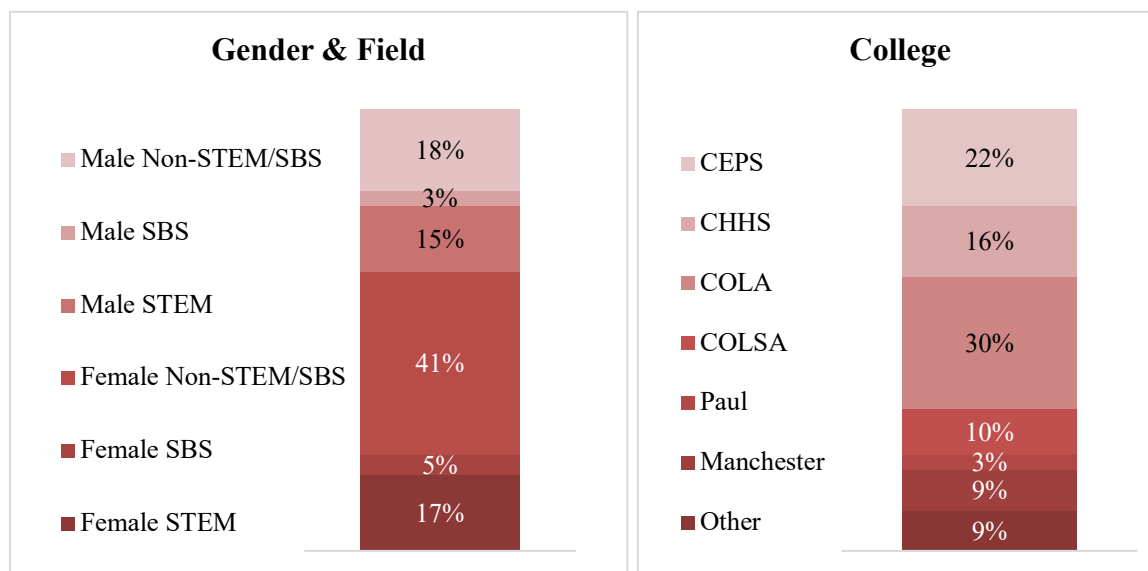
The Pathways to Tenure program was instituted in Year 3 and has been operating annually since.⁹ The program consists of a series of three workshops that faculty complete as a cohort. The following topics are addressed:

⁹ The team had originally planned to provide mentoring targeted at associate professors to help them achieve promotion to professor. However, in fall 2014, the Office of Engagement and Academic Outreach initiated the Pathways to Professorship program to address the needs of associate professors. With this need met, the UNH ADVANCE team pivoted to target the mentoring needs of assistant professors.

- **Workshop 1:** Navigating Your Department and Finding Advice Inside and Outside of Your Department
- **Workshop 2:** Navigating the College and University and Creating a Visible Presence in Your Field
- **Workshop 3:** Finding Work–Life Balance and Mentoring Best Practices

In the four years that the program has been offered, a total of 19 STEM and SBS women have attended, making up 22% of total participants (Figure 21). Across all disciplines and cohorts, 63% of participants have been women. Most participants (30%) were from the College of Liberal Arts (COLA), followed by the College of Engineering and Physical Sciences (22%) and the College of Health and Human Services (16%).

Figure 21. Characteristics of Pathways to Tenure Workshop Participants



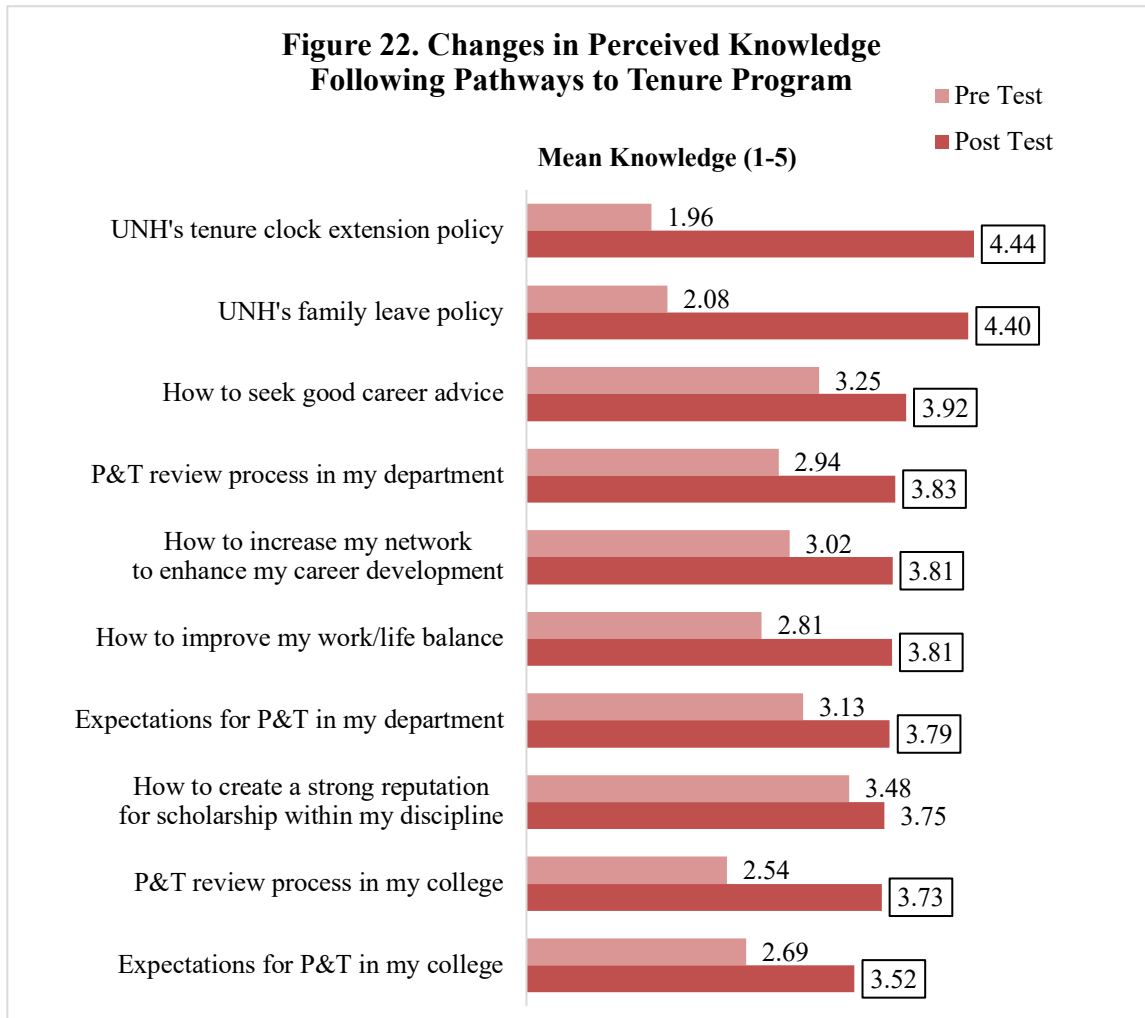
Note: N = 87.

2.2.2.1 Evidence of Impact: Participant Feedback

Pathways participants were asked to complete pre- and post-surveys to provide formative feedback and allow for the measurement of any changes in knowledge and satisfaction over the course of the program. Across the four cohorts, a total of 73 faculty completed the pre-survey and 57 completed the post-survey. Overall, 48 pre- and post-surveys could be matched either by identification code or a combination of other demographic information and/or partial codes, representing 55% of participants.¹⁰ To examine pre- and post-survey changes across the four cohorts, the mean difference for participants whose pre- and post-surveys could be matched was used.

¹⁰ In the pre-survey, participants created a code based on the day and month of their mothers' birthdays and the first three letters of the location where they were born. Participants were asked for this same code in the post-survey so that responses could be matched. The codes matched perfectly for 32 participants; 16 others were matched by partial ID and demographic characteristics.

Figure 22 presents changes in participants' self-reported knowledge after attending Pathways to Tenure. Statistically significant increases in knowledge occurred for participants in all areas measured, except about how to create a strong reputation for scholarship within their discipline.



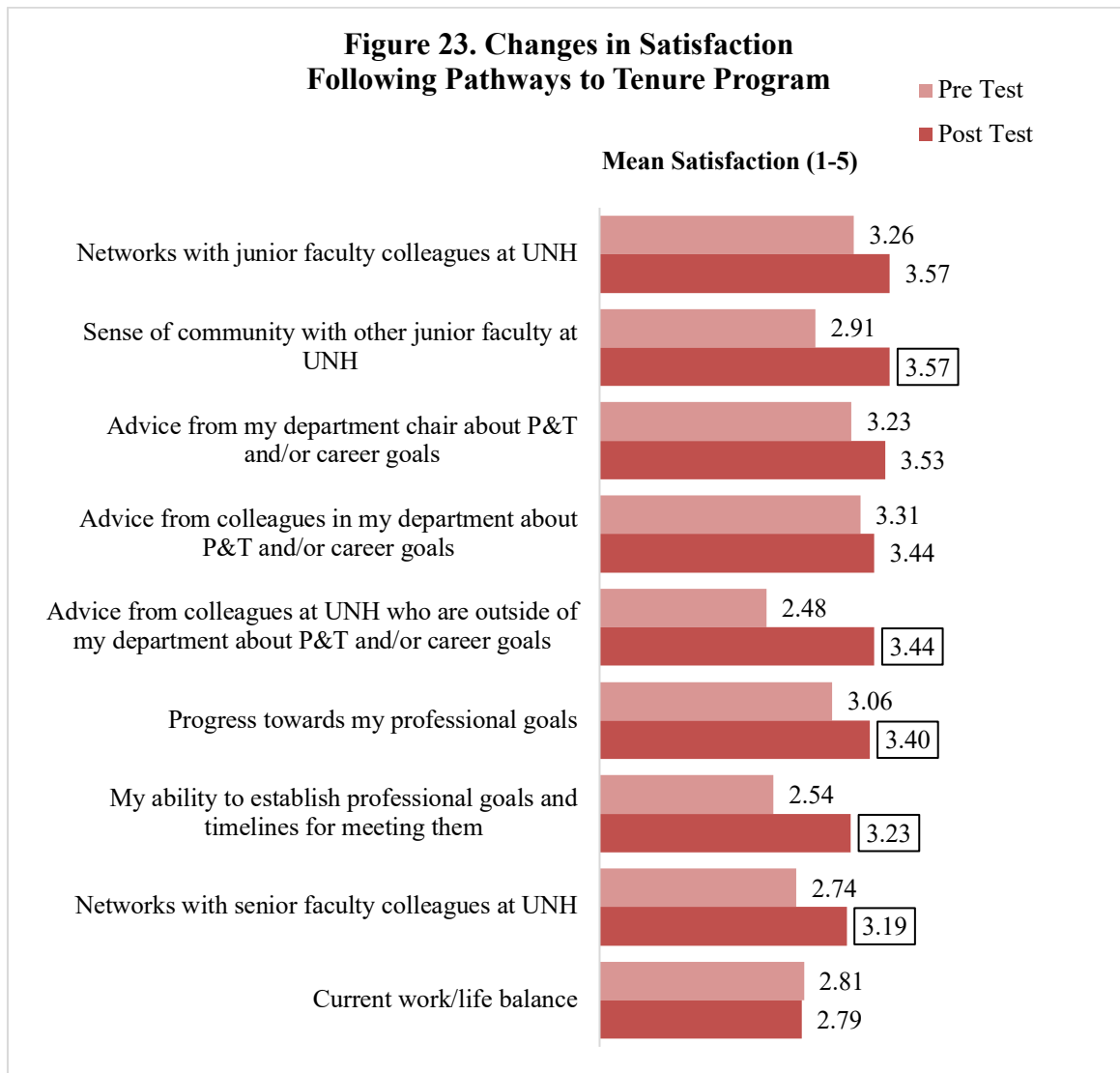
Note: N = 48 for all items, except for “How to improve my work/life balance,” where N = 47. N represents individuals answering both pre- and post-survey items. Response scale: 1 = Not at all knowledgeable; to 5 = Extremely knowledgeable.

□ Post-test mean is significantly different from pre-test mean to $p \leq 0.05$.

The largest improvements occurred in knowledge about UNH’s tenure clock extension and family leave policies, followed by understanding of the promotion and review process on the college level and knowing how to improve work–life balance. These findings are generally similar across the four cohorts (data not shown).

Satisfaction in most areas also increased over the course of the program (Figure 23), with statistically significant increases in participants’ satisfaction with advice from UNH colleagues outside of their own departments, participants’ ability to establish professional goals and timelines and progress towards their professional goals, sense of community with other junior faculty, and networks with senior faculty. By the end of the program,

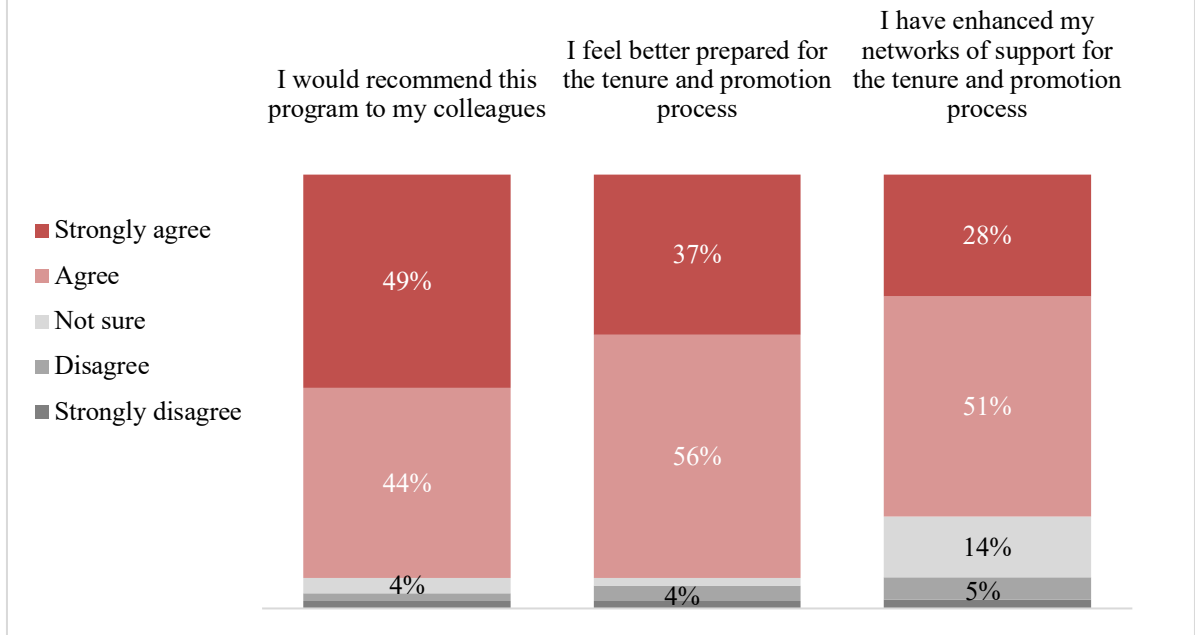
faculty were least satisfied with their current work–life balance. Again, these outcomes were similar across the four cohorts (data not shown).



Note: N = 48 for all items, except for “Advice from my department chair about P&T and/or career goals,” “Networks with junior/with senior faculty colleagues at UNH,” and “Sense of community with other junior faculty at UNH,” where N = 47. N represents individuals answering both pre- and post-survey items. Response scale: 1 = Not at all satisfied; 5 = Extremely satisfied. □ Post-test mean is significantly different from pre-test mean to $p \leq 0.05$.

Overall, 93% of post-test respondents agreed or strongly agreed they would recommend the Pathways to Tenure program to their colleagues (Figure 24). Almost all respondents (93%) felt better prepared for the promotion and tenure process and 79% had enhanced their networks of support.

Figure 24. Overall Perceptions of Pathways to Tenure Program (Post-Test)



Note: N = 57.

Open-Ended Comments

Of all 57 post-test respondents, 53 (93%) mentioned specific gains and/or useful aspects of the workshops in their open-ended comments. The most common gains participants reported were:

- an increased understanding of the promotion and tenure process (51%);
- connections with junior and senior colleagues (30%); and
- increased confidence in facing the promotion and tenure process (25%).

Respondents noted that the most useful elements were:

- panel discussions (30%);
- information and nuts and bolts about the promotion and tenure process (26%);
- information on work–life balance policies, such as family leave and tenure clock extension (23%);
- opportunities to network (18%); and
- learning how to plan, set goals, and organize parts of the tenure package (16%), as well as recommendations for identifying good external reviewers (9%).

In explaining how the workshop impacted how they would approach the promotion and tenure process, 40% indicated that they would set related goals and priorities differently after the workshops. Less often they indicated they would make more specific changes, like focusing on documenting (19%), seeking advice or support (18%), seeking mentors/balance mentoring portfolio (11%), and increasing their scholarly presence via the internet, conferences, and dissemination of work, for example (11%).

2.2.2.2 Evidence of Impact: Interviews

In interviews conducted by the external evaluator, participants reiterated some of the key benefits of the workshop noted in the pre- and post-surveys, including expanding their networks, an enhanced sense of community, a better understanding of the promotion and tenure process, and increased awareness of work–life policies. For example:

“I found out that there were at least a couple of things that I thought I knew that I didn’t know. And I hadn’t even thought about the external letter writers before, but they are so critical to the process.” (Year 3)

“There were tenure-track faculty there who didn’t even realize there was a parental leave, and two male faculty whose wives were expecting that had no idea they had parental leave they could access.” (Year 3)

“I feel better prepared to go through the tenure process now. And I have a cohort of people I connected with. We can support each other. I really value those personal connections.” (Year 4)

“Some parts were incredibly enlightening and I learned a lot about the union context. Certain departments will say that you need to publish in certain journals, but that actually clashes with some of the union language as far as intellectual freedom and where you decide you want to publish. I felt that meeting was spectacular and incredibly important.” (Year 5)

“As far as setting up progress and identifying what the next milestones are, that was pretty helpful. I think it was really helpful to get tips from people on the panels about what a successful tenure package or portfolio looks like, to get ideas about how to pull things together. I also appreciated information on family leave policies.” (Year 5)

2.2.2.3 Sustainability

The Pathways to Tenure Program will be supported through 2023 with an MOU from the interim provost. Longer-term institutionalization has not yet been decided. Some stakeholders reported that Pathways to Tenure would potentially fit well with the suite of other programs currently being offered by the Office of Engagement and Faculty Development, such as Pathways to Professorship. Additional financial resources and support would be needed to sustain and administer the program within this office after funding from ADVANCE has ceased, however.

4.3. Goal 3: Conduct a wage equity analysis and recommend any policy changes that might be indicated.

Two wage equity studies were conducted during the grant period—one in Year 3 and another in Year 4. Gender differences in salary were found in both years (although differences were smaller in Year 4), with differences remaining after controlling for years of service, rank, college, past administrative appointments, and other factors that can

account for salary differentials. The 2015 analyses revealed a gender difference favoring male faculty of between \$1,113 and \$1,771 that was left unexplained by the model.

The UNH ADVANCE team has raised this issue with deans and provided a list of faculty by college, department, and gender with estimated residuals. Some deans were concerned that the models did not include other factors related to salary and had questions about the data. While they were generally receptive to the idea that some salaries may need to be adjusted, they thought factors in addition to the analyses would need to be considered before any adjustments could be made. They emphasized that doing so would require resources and a charge from the provost.

4.4. Goal 4: Develop more flexible workplace policies that support career advancement for STEM faculty women.

By Year 5, several key workplace policies had been put in place and were implemented in the new five-year faculty contract during Year 4 of the grant. The key work–life balance policies include:

- a revision to the tenure clock extension policy, from “opt-in” to “opt-out”;
- a change to parental leave, making it an employee benefit rather than a family benefit (both parents can now take leave rather than sharing the leave between them); and
- the allowance of modified duties (to be approved by the dean and the chair).

The UNH ADVANCE Career–Life Balance Subcommittee also added important information to the human resources website, including a list of resources to help faculty find child care and elder care. The Subcommittee also convened a parent support network to provide parents the opportunity to network and share resources.

4.5. Goal 5: Create and maintain campus-wide awareness of the issues addressed and policy changes made under the ADVANCE IT initiative.

Throughout the grant period, the UNH ADVANCE website has been populated with new content and kept up to date with current information. It contains information on policy changes, including work–life policies related to the tenure clock, parental leave, and modified duties. It also includes resources to support work–life integration, such as Wildcat Working Parents Network and other resources developed by the Career–Life Balance Subcommittee, and information related to the goals of UNH ADVANCE.

The UNH ADVANCE team has been very strategic in its use and distribution of climate survey findings to the UNH community, including timing the release of topical reports based on previous climate survey findings to coincide with the launching of the annual fall surveys. Over the grant term, the following topics were addressed in climate survey reports, all of which are available on the UNH ADVANCE website:

- *Tenure Track Faculty Perceptions of Department Influence, Fit, and Fairness* (2014)
- *Non-Tenure Track Faculty Perceptions of Department Influence, Fit, and Fairness* (2014)
- *Faculty Career Life Balance: Findings from the 2013 and 2014 UNH ADVANCE Annual Faculty Climate Survey* (2015)
- *Bias Incidents and Bystander Intervention at UNH: Results from the 2015 Faculty Climate Survey* (2016)
- *Demystifying the Promotion and Tenure Process* (2017)

A university-wide climate survey (for faculty, staff, and students) is being planned. Dr. Christine Shea, the UNH ADVANCE co-PI, is chairing the Climate Survey Committee. Investment in a university-wide climate survey can allow the university to maintain its awareness of key topical areas addressed in the UNH ADVANCE faculty climate survey. Providing current information on the UNH ADVANCE website about policies and resources will continue to be essential to fostering campus-wide awareness and transparency of policies and processes.

4.6. Goal 6: Conduct a longitudinal field experiment to assess Goal 2 by investigating the impact of department chair professional development on department-level climate at UNH.

The UNH ADVANCE social science research study investigates the impact of the department chair professional development program on the representation of and departmental-level climate for female faculty at UNH. A quasi-experimental design was proposed to test the following hypotheses:

Hypothesis 1: There will be a significant gender difference in baseline measures of perceived departmental climate and degree of influence, such that female STEM faculty will perceive a more negative climate and less ability to influence departmental decisions than male STEM faculty.

Hypothesis 2: Baseline institutional data will reveal significantly higher male-to-female ratios in every college (except Health and Human Services) at senior ranks and compared to national averages.

Hypothesis 3: There will be no significant gender difference in faculty's perceived departmental-level climate and degree of influence subsequent to the implementation of department chair professional development programs.

Hypothesis 4: There will be a significant reduction in male-to-female ratios in the STEM disciplines at senior ranks subsequent to the implementation of department chair professional development programs.

The quasi-experimental design was to stagger the “treatment” (the department chair professional development program) over time by college to create a control group of departments that had not yet received the treatment. Grouped by college, chairs

completed the training over a three-year period, and the final cohort was part of the new Advancing Chairs as Leaders training during Year 4.

Research findings indicate that workshops led to a statistically significant improvement in self-efficacy. Prior research indicates that there is a strong and positive relationship between leaders' self-efficacy and faculty perceptions of climate, consistent with the intended grant goal of helping department chairs and other unit/program leaders improve departmental climate.

The Research Committee is analyzing the impact of the chair training on climate using annual climate survey data and will shortly have findings to report and disseminate. In addition, the Research Committee has been actively engaged in related research, which has resulted in numerous presentations and several papers that are at various stages of publication. To date, completed and pending publications include:

Jha, Y., & Shea, C. (2014). The effects of demographic composition and faculty departures on the hiring of STEM women faculty. In K. N. Miner (Chair), *ADVANCE(ing) women: From fixing women to transforming organizations*. Symposium conducted at the meeting of the Society for Industrial and Organizational Psychology, Honolulu, HI.

Shea, C., Young, J., Malone, M., Graham, K., & Banyard, V. (2018). *Bystander Intervention in Bias Incidents in the Academic Workplace: Interrupting incivility*. Manuscript under revision.

Shea, C. M., Young, J., Banyard, V., Malone, M., & Graham, K. (2018). Recognizing and intervening in bias incidents in the academic workplace: A self-categorization theory perspective. *ADVANCE Journal*, 1/1. <http://dx.doi.org/10.5399/osu/ADVJRN.1.1.2>.

Shea, C., Malone, M., Young, J., & Graham, K. (in press). Interactive theatre: An effective tool for reducing gender bias in faculty searches. *Equality, Diversity, and Inclusion: An International Journal*.

Additional Dissemination and Impacts

ADVANCE activities and partnerships have resulted in several additional NSF-funded grants, including:

- The findings from the research on bystander intervention formed the basis of a proposal for an NSF ADVANCE Partnership grant (with Ohio State University, University of Virginia, and University of California, Riverside), which received funding and is beginning its second year.
- The work of ADVANCE's interactive theater component has been expanded to industry and lab mentors as part of an INCLUDES grant that was awarded to UNH in fall 2017.
- Partnerships with Dartmouth College, Keene State, and the Community College System of New Hampshire have resulted in an EPSCoR grant, awarded fall 2018.

5. EVIDENCE OF INSTITUTIONAL CHANGE

5.1. Transtheoretical Model of Institutional Change

The process of organizational change can be depicted using a variety of models that have overlapping constructs. One such model, the Transtheoretical Model of Change (TTM), is used widely for individual-level change and has been adapted to examine multicultural organization change.¹¹ According to TTM, individuals and organizations experience five stages of change:

1. Precontemplation—no intention to take action in the immediate future
2. Contemplation—intention to take action in the near future
3. Preparation—intention to take action in the immediate future
4. Action—makes overt changes
5. Maintenance—works to prevent relapse into old behaviors

Examples drawn from interviews during the grant period document the ways in which the institution has progressed from the Precontemplation, Contemplation, and Preparation Stages in the early grant years to the Action and Maintenance Stages in later grant years. These stages are indeed fluid, and not all individuals or aspects of the organization started in the same stage or reached the same stage by the end of the grant. Nevertheless, analysis of the qualitative interview data suggests there was indeed movement over the grant term.

In many ways, the preparation for and the awarding of the ADVANCE IT award marked the Preparation stage, where UNH moved from considering action to taking action. With the funding of the grant, people, resources, and organizational structures were aligned to support organizational change. Teams of individuals (faculty and administrators) were established and given a charge to work on different components of organizational change.

5.1.1 Precontemplation, Contemplation, and Preparation Stages

According to TTM, some of the processes that occur at the beginning of the Precontemplation, Contemplation, and Preparation stages include consciousness raising (helping people become aware of the problem and potential solutions), environmental reevaluation (appreciation that change will have a positive impact on the social and work environment), and self-liberation (belief that change can succeed and making a commitment to change). While many at UNH were already committed to the goals and interventions proposed in the grant, there were still stakeholders who were in the Precontemplation, Contemplation, and Preparation stages when the grant started, as some of the interview data suggest.

Typical of the Precontemplation stage is that some individuals at the institution may be resistant, may not see the need for change, or may be ambivalent about whether to act or

¹¹ Levesque, D. A., Prochaska, J. M., & Prochaska, J. O. (2001). Organizational stages and processes of change for continuous quality improvements in health care. *Counseling Psychology Journal: Practice and Research*, 53(3), 139–183; Mayeno, L. Y. (2007). Stages of multicultural organizational change. Oakland, CA: CompassPoint Nonprofit Services; Prochaska, J. M., Prochaska, J. O., & Levesque, D. A. (2001). A transtheoretical approach to changing organizations. *Administration and Policy in Mental Health*, 28(4), 247–261.

what actions to take, as acknowledged in this quote from a Year 1 interview:

“The reaction of faculty members [to a search committee training] could be ‘not another training.’ But...if the ADVANCE training gets marketed as a tool that we can use, and not something that tells us how wrong we’re doing things, I think that flips the impression, and it’s something you can look forward to learning.”

Further illustrating that some may be unsure about what actions to take or whether there is a need for changing current processes, in an interview conducted in Year 3, a participant mentioned disagreement about what to do to address the results of the salary study:

“The wage equity study showed a lot of variability in salaries, but folks may not think they need to look into it further because the differences were not statistically significant. But there still may be meaningful discrepancies that need to be addressed. We need to have tools for chairs and deans so they know how to look for inequities and how to address them.”

Most stakeholders in the early years of the grant articulated being aware of the need for change and were able to point to areas where change was needed—characteristics of the Contemplation stage. For example, in the early years of the grant, stakeholders pointed to search committee training, support for families, mentor training, and the potential impact of bias in letters in the promotion and tenure process:

“The gatekeepers to universities are faculty search committees....If UNH is interested in institutional transformation, to me the most important is how we hire people....Requiring that all people undergo training before they serve on a search committee is critical.” (Year 1)

“Flexibility with regard to family issues is critical—child care, afterschool care, elder care, and spousal care.” (Year 1)

“Having support for hiring and keeping couples is important....UNH has lagged behind [other institutions]. Part of it may be resources, but part of it is just not making it a high enough priority.” (Year 1)

“Mentor training would be useful. I didn’t know how to be mentored and mentors didn’t know how to mentor me....My department mentor always had all of the information I needed, but I didn’t know what I needed, and so I didn’t always ask.” (Year 2)

“In looking at the annual letters, I’ve noticed differences in language, that kind of thing....We need to make sure that there isn’t bias creeping in, language that could be harmful for when it gets to the P&T committee....Sometimes just a slight alteration in tone can make a huge difference. Some discussions around that at the dean’s and chair’s level could be very helpful to make sure we’re giving similar messages of the same level of performance across different individuals.” (Year 3)

In Year 2 there was evidence of movement into the Preparation stage, during which there begins to be a transition from considering taking action to actually taking action, through the mobilization of staff and resources and changing organizational structures. In particular, stakeholders noted that top administration supported ADVANCE goals:

“It helps to have people in positions of leadership who get it and can speak eloquently about the problem. We all feed off of that.”

“They get it. They are really committed. Upper administration really reinforces it.”

The GEAR UP search committee training helped to raise consciousness and encourage participants to take action. Commitment to action also characterizes the Preparation phase, when individuals intend to take action in the near future and make a commitment to change. In Year 2, these participants stated:

“As a result of [the GEAR UP workshop], I felt empowered. The take-home for me was not to let people intimidate you as they push their agenda.... You have a responsibility to step in when you see it and you have to call it.”

“I think people were more aware [than in prior searches]. The committee openly discussed biases and the importance for the university of addressing them. Everyone had a heightened awareness.”

There is clear evidence that two important elements of the early stages of the TTM—awareness of the need for change and commitment to action—were exhibited in the early years of the UNH ADVANCE grant. These are essential steps early in the change process and precursors to the later stages.

5.1.2 Action and Maintenance Stages

Typical of the Action and Maintenance stages, by the second half of the grant period stakeholders were able to articulate changes that had occurred and the need to maintain them. For example, Pathways to Tenure was successful in inspiring participants to change their behaviors. In evaluation forms completed in Year 4, many participants reported that because of their participation in the training, they would approach mentoring differently (such as finding people to fill the gaps on their mentor map) and would engage in more advance planning. Participants advocated for continuing Pathways to Tenure to ensure that all faculty would receive mentoring. For example:

“[Pathways to Tenure] should continue; it’s a super valuable thing to have—especially for people who are in departments that don’t provide a lot of information or who aren’t so good at mentoring. Some people don’t have mentors to help them figure out the process.” (Year 5)

Participants perceived the GEAR UP search committee training as particularly impactful. Interviewees mentioned it was influential in changing behaviors and committee discussions by setting parameters and enforcing best practices, as these representative quotations indicate:

“I can see the impact of ADVANCE in my department. There’s way more discussions about things such as implicit bias. These discussions were non-existent before; now they’re definitely prevalent.... Even if it’s uncomfortable to talk about, people are willing to combat these things and discuss them. People are empowered and speak up now.” (Year 5)

“Even in departments where women are the majority, GEAR UP is really important. We want to hire the best person and we need to keep the issue of microaggressions front and center, not just for search processes but across the board. Even in departments that are majority female, microaggressions are still a problem. But because of the increased awareness that programs such as GEAR UP provided, when microaggressions do occur, people are willing to call it out. Not just in hiring, but in other areas as well, people are saying, ‘That’s not right.’ It’s an outgrowth of the GEAR UP training.” (Year 5)

Another key area where stakeholders saw changes in organizational policies and practices was in training for chairs. Participants mentioned the importance of the Advancing Chairs as Leaders program:

“The chair leadership training has been really powerful; it’s been a welcome addition. Before ADVANCE, there was no training for chairs. We weren’t developing our current leaders or our next generation of leaders. Now we have chair leadership training and it’s because of ADVANCE that it’s in place. It’s essential that we maintain that program moving forward.” (Year 5)

“The chair training should never sunset. In fact, you could probably build on it because chairs are important and they have a lot to learn, and most chairs know very little going in to it. In fact, the training should be developed even further. It is certainly one of the more vital pieces that we should figure out a way to continue.” (Year 5)

In the second half of the grant period, several key workplace policies were put in place, including a revision to the tenure clock extension policy, from “opt-in” to “opt-out,” a change to parental leave, making it an employee benefit rather than a family benefit (both parents can now take leave rather than sharing the leave between them); and the allowance of modified duties (to be approved by the dean and the chair). These policies demonstrate steps that were taken to implement long-term change at the university, a key characteristic of the Action stage and of movement toward Maintenance.

In Year 5, stakeholders thought ahead to the end of the ADVANCE grant. In the TTM, this is referred to as the Maintenance phase, when the organization works to consolidate changes made during the Action stage and tries to prevent relapses into old behaviors. Interviewees emphasized the need for continued oversight and accountability:

“I think we need some kind of sustained ADVANCE presence. As long as there’s some sort of office or organization or person whose charge it is to make sure that the ADVANCE goals are continued, then we can continue to make progress and sustain the efforts.” (Year 5)

“I think there needs to be somebody who wakes up every day with ADVANCE on their mind—someone who shepherds it, makes sure things are getting done, makes sure that the essential content is not getting watered down. I think when you just solely put it into all these different units, it loses its specificity and loses the rationale behind what you’re doing and why you’re doing it. I think by having somebody in ADVANCE either co-branding or making sure that somebody’s there, [it] keeps the initiative at the forefront of people’s minds. Some things, like the chair leadership training, could potentially be taken over by other entities, but others can’t. And even for things like the chair leadership training which have a

logical home in a particular office, it still would benefit by being co-branded by ADVANCE and having someone ensure that issues of gender equity remain a main focus.” (Year 5)

Changes and progress made in faculty searches, hiring, and tenure and promotion will continue to have a positive impact for years to come; steps have been taken to maintain some aspects of ADVANCE initiatives in these areas. For example, a Faculty Senate subcommittee was charged with addressing the implementation of new promotion and tenure guidelines and examining how this plays out across colleges and departments.

To summarize, qualitative data suggest there has been organizational change at UNH as a result of UNH ADVANCE. Interviews with stakeholders document how the institution moved through the early stages of change (Precontemplation, Contemplation, and Preparation) to the final two stages of change (Action and Maintenance). While not all change has been uniform across all dimensions or across all individuals, the shift in knowledge about why change was needed, how to achieve change, and how to maintain change was observed. Stakeholders pointed to the importance of continued vigilance and efforts to ensure that this change is sustained.

6. CONCLUSION

Key Accomplishments

Over the course of the ADVANCE grant, UNH (a) mobilized resources to provide training to chairs and directors to support an inclusive unit environment; (b) instituted training for search committees to address unintentional biases; (c) improved faculty mentoring for achieving tenure and transparency in the promotion and tenure process; and (d) improved policies to support work–life balance. Key accomplishments are highlighted below.

There have been important changes in search committee processes and outcomes:

- The percentage of STEM and SBS women in the applicant pool, among finalists, among those receiving offers, and among hires has increased during the UNH ADVANCE years.
- Faculty reported their departments and/or search committees are now more likely to deliberately engage in strategies to enhance the gender diversity of the applicant pool, and that search committee members are made aware of unintentional biases that can affect the evaluation of applicants. These increases are statistically significant (2017 vs. 2013; $p \leq .10$ and $p \leq .05$, respectively).
- Members of search committees pointed to improved ability to address microaggressions and address gender disparities that affect hiring processes due to the information and the common vocabulary provided in the GEAR UP search committee training.

Chairs and directors have been provided with resources to improve unit climate:

- The majority of ACL participants (93%) reported the program was useful for helping them facilitate a positive climate for faculty, particularly women faculty.
- Participants reported the resources, information, and networks provided in the chair training provided much-needed professional development that increased their awareness of implicit bias and ways to address it.

Improved transparency in the promotion and tenure process has been supported by access to mentoring and professional development as well as attention to departmental guidelines:

- Pathways to Tenure participants reported statistically significant increases in their knowledge of the promotion and tenure process and expectations, of UNH’s policies on tenure clock extension and family leave, of how to improve their work–life balance, and of how to seek good career advice and enhance their networks. After participation, attendees were also more satisfied with their ability to establish professional goals and timelines, their progress toward their goals, and their sense of community and networks with others at UNH.
- The Faculty Senate approved recommendations for promotion and tenure guidelines and requested that departments review (and adjust) their guidelines for alignment.

New and revised policies support work–life balance:

- The tenure clock extension policy has been revised, from “opt-in” to “opt-out.”
- Parental leave is now an employee benefit rather than a family benefit—both parents can now take leave rather than being required to share the leave between them.
- Modified duties are now allowed (as approved by the dean and the chair).

Women’s representation in STEM and SBS has increased from baseline to Year 6:

- The percentage of women STEM tenure/tenure track faculty rose from 21% to 28%; the percentage of women SBS faculty rose from 36% to 44% over this same period.
- The increase in women’s representation was especially pronounced for STEM assistant professors (32% to 43%), STEM full professors (10% to 18%) and SBS associate professors (36% to 54%).

Sustainability

Key programmatic components of the UNH ADVANCE grant will be sustained at least through 2023, per the MOU signed by the interim provost, supported with indirect funds accrued from the ADVANCE IT grant and additional funding as part of the 2017 ADVANCE Partnership grant.

The UNH ADVANCE office and key staff (i.e., program manager, research assistance) will be sustained through 2023, per the MOU signed by the interim provost. ADVANCE staff will oversee the continued implementation of the GEAR UP search committee training, the Bystander Intervention Training, and the Pathways to Tenure program, and will continue to advise the chair/director professional development program (now referred to as Advancing Academic Leaders) to include managing for inclusion.

Advancing Academic Leaders Program will be sustained through the Office of Engagement and Faculty Development. Key data collection efforts—such as a campus climate survey and annual reporting of the gender representation of faculty and administrators—in line with the Toolkit data reported to NSF during the grant term—will be continued as well.

The MOU affirms that longer-term sustainability (past 2023) as well as institutional homes for GEAR UP, Bystander Intervention Training, and Pathways to Tenure will be discussed.

Recommendations

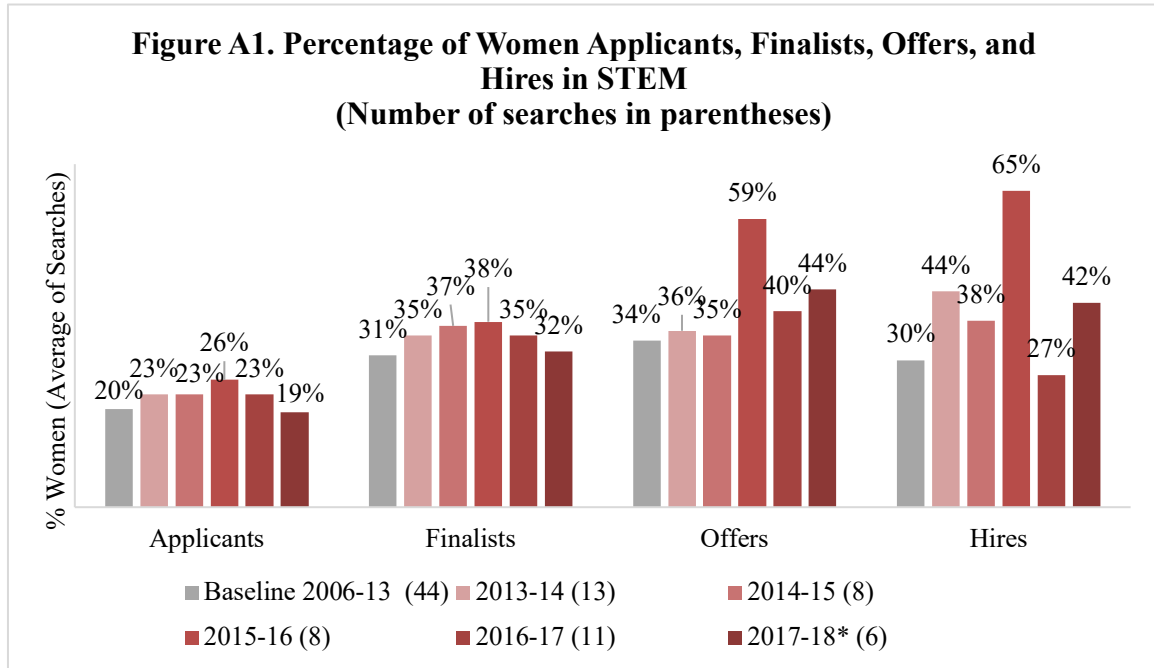
While UNH ADVANCE has led a successful institutional transformation effort, it is now up to UNH to ensure these changes are maintained in the long term. To facilitate institutionalization, the following recommendations should be considered:

- While much has been achieved, UNH cannot be complacent; it is essential for the institution to continue to support efforts and measures of accountability.
- Work with the Office of the Provost on ways to institutionalize the goals and activities of UNH ADVANCE should become part of the fabric of the university.
- Data should continue to be used as a tool for institutional reflection and excellence. As new data become available, they can help identify areas for improvement and the knowledge and structures generated through the UNH ADVANCE grant can be used to address them
- UNH ADVANCE-related research findings—and its relevance to researchers, administrators, organizations, and the general public—should continue to be disseminated.
- Strategies to incorporate systems of accountability for UNH ADVANCE-related goals and practices should continue to be sought to ensure they remain a priority.
- Non-tenure-track faculty should be incorporated into institutional transformation efforts.
- The success of UNH ADVANCE should be leveraged to increase the university's ability to support other forms of faculty diversity (racial/ethnic, sexual identity/orientation, etc.).

Conclusion

UNH has made meaningful changes to its policies and practices to support institutional transformation in order to increase the number, retention, and success of female STEM faculty. With continued support and accountability, these changes are likely to be sustained and integrated into the fabric of the institution.

7. APPENDIX



Note: One search was ongoing when data were provided, and there were therefore no data on applicants to date.

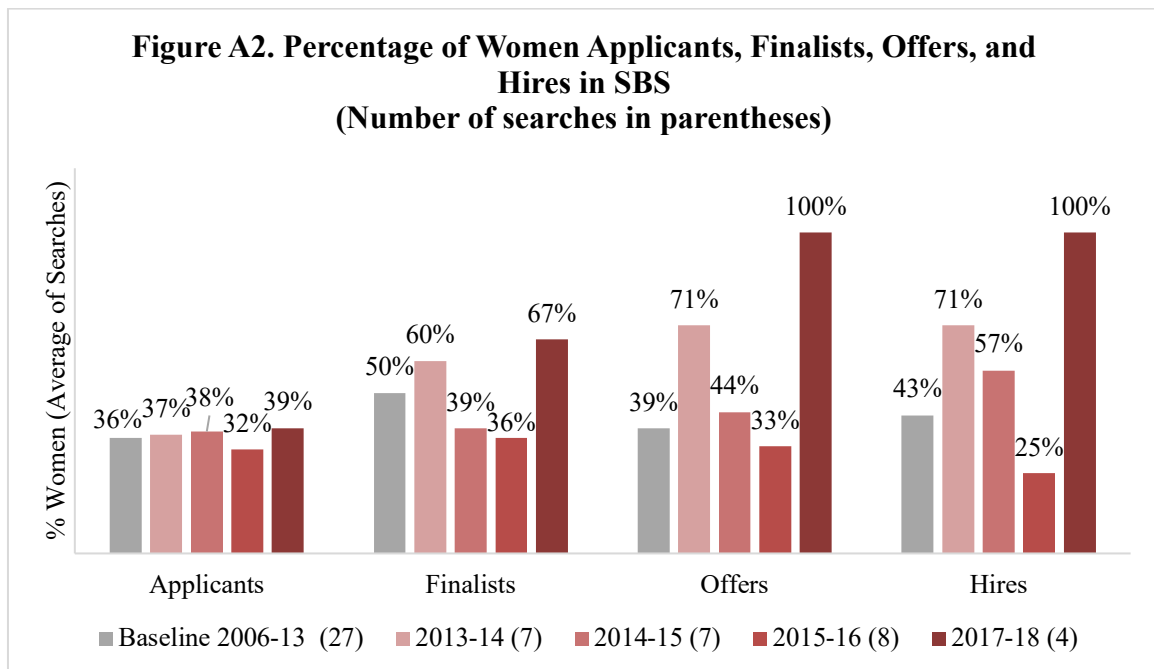
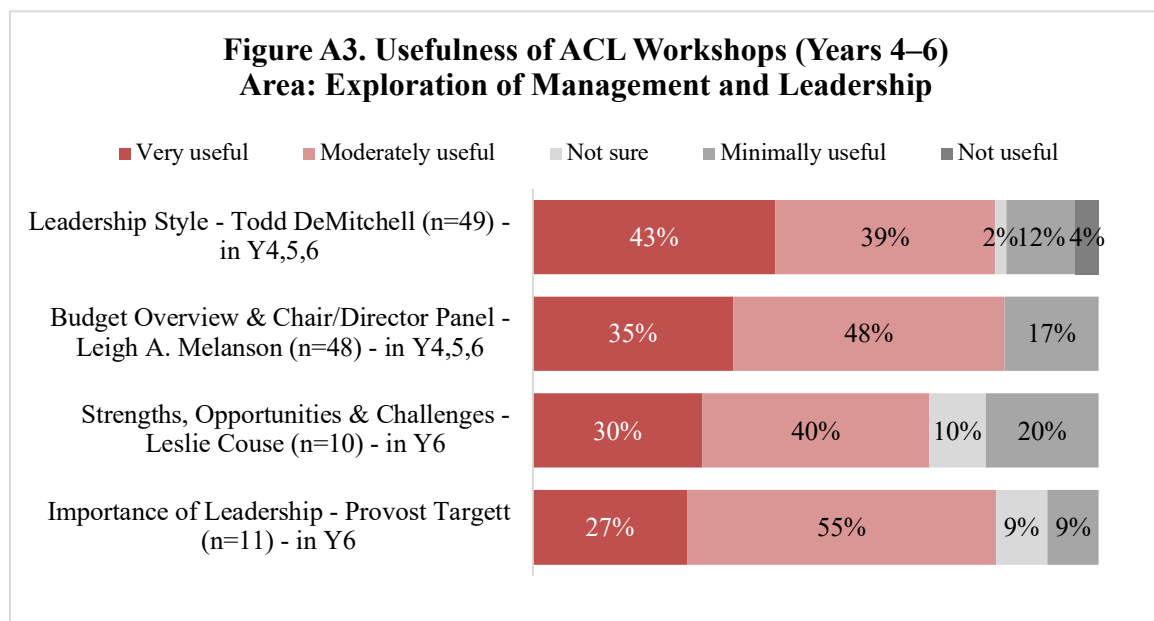


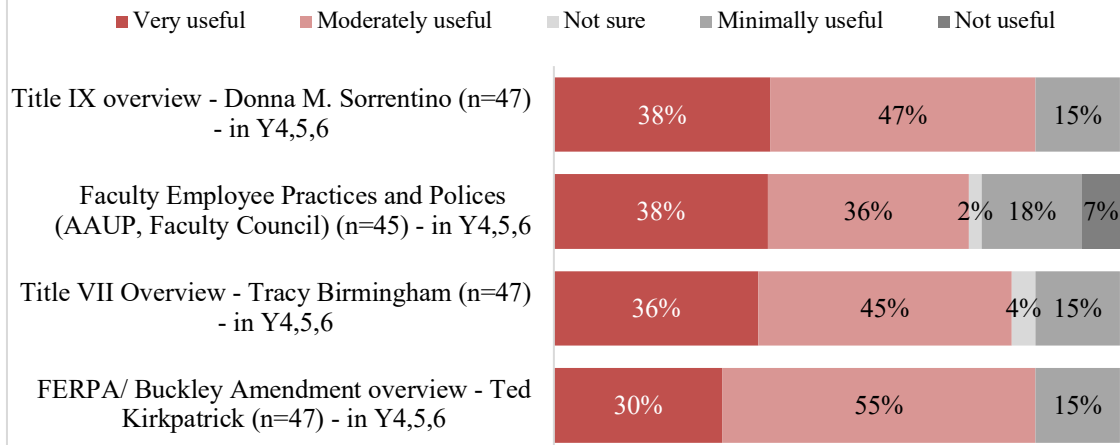
Table A1. Number and Percentage of Women Tenured/Tenure-Track Faculty in STEM and SBS, by Year and Rank

	# Women				% Women			
	Asst.	Assoc.	Full	Total	Asst.	Assoc.	Full	Total
STEM								
Pre-ADVANCE (2011–2012)	11	21	10	42	32%	32%	10%	21%
Year 1 (2012–2013)	10	20	12	42	28%	33%	12%	21%
Year 2 (2013–2014)	14	17	13	44	35%	30%	14%	23%
Year 3 (2014–2015)	17	19	16	52	37%	30%	15%	24%
Year 4 (2015–2016)	16	18	15	49	36%	31%	15%	24%
Year 5 (2016–2017)	19	17	16	52	41%	29%	18%	27%
Year 6 (2017–2018)	20	18	15	58	43%	31%	18%	28%
SBS								
Pre-ADVANCE (2011–2012)	8	14	10	32	47%	36%	30%	36%
Year 1 (2012–2013)	7	16	9	32	58%	40%	28%	38%
Year 2 (2013–2014)	9	20	10	39	60%	48%	31%	44%
Year 3 (2014–2015)	9	21	9	39	53%	51%	27%	43%
Year 4 (2015–2016)	9	21	9	39	53%	51%	27%	43%
Year 5 (2016–2017)	11	21	9	41	50%	53%	28%	44%
Year 6 (2017–2018)	9	21	9	39	47%	54%	29%	44%



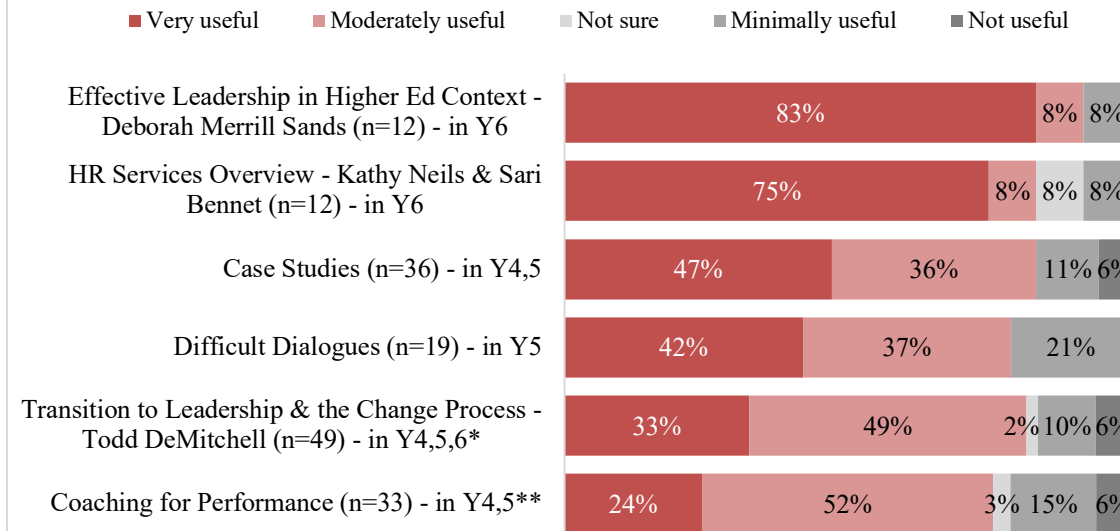
Note: N in parenthesis represents number answering item. The years each workshop was offered is indicated at the end of each bar label. Workshop leader names refer to Year 6. Chair/Director Panel included in Year 6.

**Figure A4. Usefulness of ACL Workshops (Years 4–6)
Area: Faculty and Staff—The Core of the Department**



Note: N in parenthesis represents number answering item. The years each workshop was offered is indicated at the end of each bar label. Workshop leader names refer to Year 6.

**Figure A5. Usefulness of ACL Workshops (Years 4–6)
Area: Strategic Leadership**



Note: N in parenthesis represents number answering item. The years each workshop was offered is indicated at the end of each bar label. Workshop leader names refer to Year 6.

* “The Change Process” was offered in Years 4 and 5; “Transition to Leadership & the Change Process” was offered in Year 6.

** “Performance Management” was offered in Year 4; “Coaching for Performance” was offered in Year 5.