



Results from Pilot of Anti-Harassment/Discrimination Curriculum Suggests It Hits Home with Undergraduate Geoscience Students

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Motivations

- Alarming rates of discriminatory and harassing behavior in the scientific workplace have been documented.
- Research indicates that relatively few individuals are aware of the mechanisms to report misconduct should they witness it or experience it.
- Participants in REU programs may be uniquely vulnerable. They are commonly away from their home campus where they are removed from usual support systems, and are unlikely to know institutional policies and procedures should incidents of harassment and discrimination occur.
- Desire for an in-person curriculum, built on educational best-practices and aligned with the cohort building spirit of REU sites, that also accounts for the spectrum of workplaces found in the geosciences (lab, field sites, conference hall, etc.).

Curriculum

Spring 2018 Alpha Development

- Developed using a backwards design, where the authors began by defining what undergraduates should know, understand, and be able to do after instruction.
- Activities, aligned with these outcomes, selected from existing materials (e.g. Anderson et al., 2009) or developed. Activities were connected through a learning cycle to create a cohesive instructional package, that engages the learner actively, relates new ideas to experiences, and integrates these ideas into a framework for understanding.

Spring 2019 Beta Development

Revised and expanded to include a bystander intervention component (Hollaback, n.d.; Cornell Health n.d.), in the spring of 2019.

Time: ~ 120-130 minutes in either one or two sessions

Learning Objectives:

Following instruction, participants will be able to:

- Describe a work environment that consists of mutual respect, promotes respectful and congenial relationships, and is free from all forms of harassment and discrimination
- Summarize who is responsible for creating the work environment described above
- Distinguish between behavior that is or is not harassing or discriminating.
- Describe how to report harassment or discrimination to the program, the program's investigation procedures, and possible disciplinary outcomes
- Plan how they would use the bystander interventions to respond to incidents of discrimination or harassment
- Apply the program's anti-harassment, anti-discrimination, and non-fraternization policy to a series of case studies



Methods

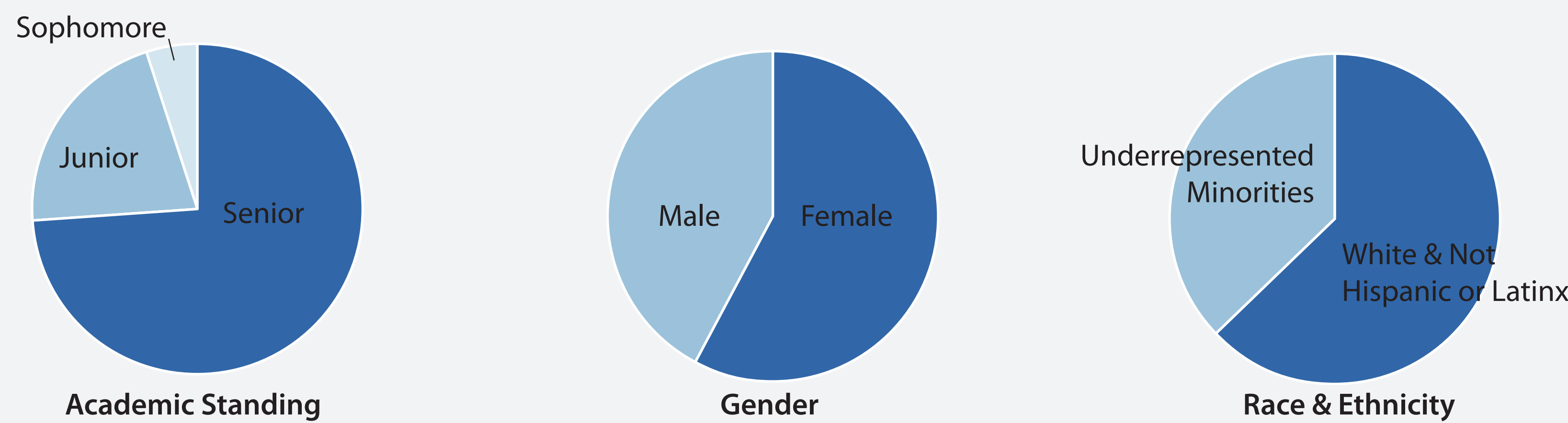
Expert Review

- Expert reviewers = Individuals with experience running an REU, and/or expertise in developing and implementing policies and trainings regarding harassment and discrimination in academia.
- Curriculum and corresponding participant handbook sent to each reviewer digitally.
- Reviewers were asked to:
 - Spend approximately one hour reviewing the curriculum
 - Respond to seven open-ended questions and if applicable, submit annotations plus any ancillary materials
- 3 Expert reviews returned

Curriculum Pilot

- Conducted at two of the authors' REU sites
- Pre and post survey of students
- Post only survey of instructors
- Analysis:
 - Descriptive statistics calculated for closed-ended items.
 - Open-ended items were analyzed with a thematic analysis approach.

Population - Of the 26 students who participated in the pilots, 19 participated in the pre-survey, while 13 participated in the post survey. This resulted in only 11 matched pairs. Given the small number of matched pairs, we describe the population based on the pre-survey data only and results include all respondents to both the pre and post surveys.



Results

Expert Review (n=3)

Do you currently provide any anti-harassment/discrimination training at your REU site? If so, please describe.

- A discussion session on "Inclusive Interactions".
- A video ... though the reviewer noted that "students are quite shy to discuss this "topic".

Do you feel there is a need for this type of resource for REU sites? Why/why not?

- To communicate expectations and behaviors aligned with community core values.
- Undergraduates are among the most vulnerable and targeted populations in academia and empowering them now as bystanders prepares them.
- REU students are likely to be unfamiliar with students, staff, or the local culture, and don't have their normal support systems with them.

Would you use this curriculum (as is or with minor modifications) with your REU participants? Why or why not?

- An appreciation of interactivity of the curriculum was noted

Do you feel there are other resources missing that would make the curriculum more impactful?

- Increasing the emphasis on microaggressions as these effect the retention of underrepresented groups.

Would you recommend this curriculum to other REU PIs? Why or why not?

Reviewers noted that even if others wanted to add more or change things up, the curriculum provides a great baseline to begin discussions with students.

Is there anything we have missed or that you would like to add?

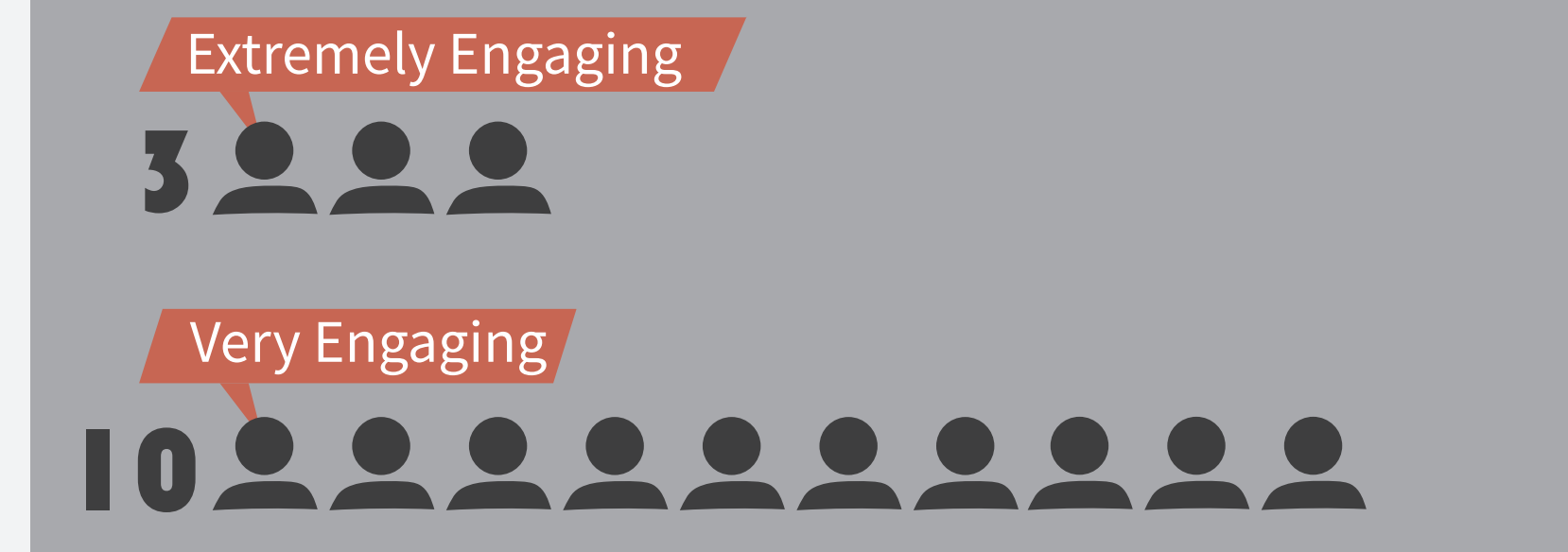
Resources on best practices for writing a policy manual could be a helpful addition. Only one of the two reviewers with REU sites had a handbook with policies on discrimination and harassment.

Students' Perceptions of Curriculum (n=13)

How would you describe the amount of time spent on anti-harassment/discrimination discussions and activities? (5-Point Likert - Far too much > Far too little)



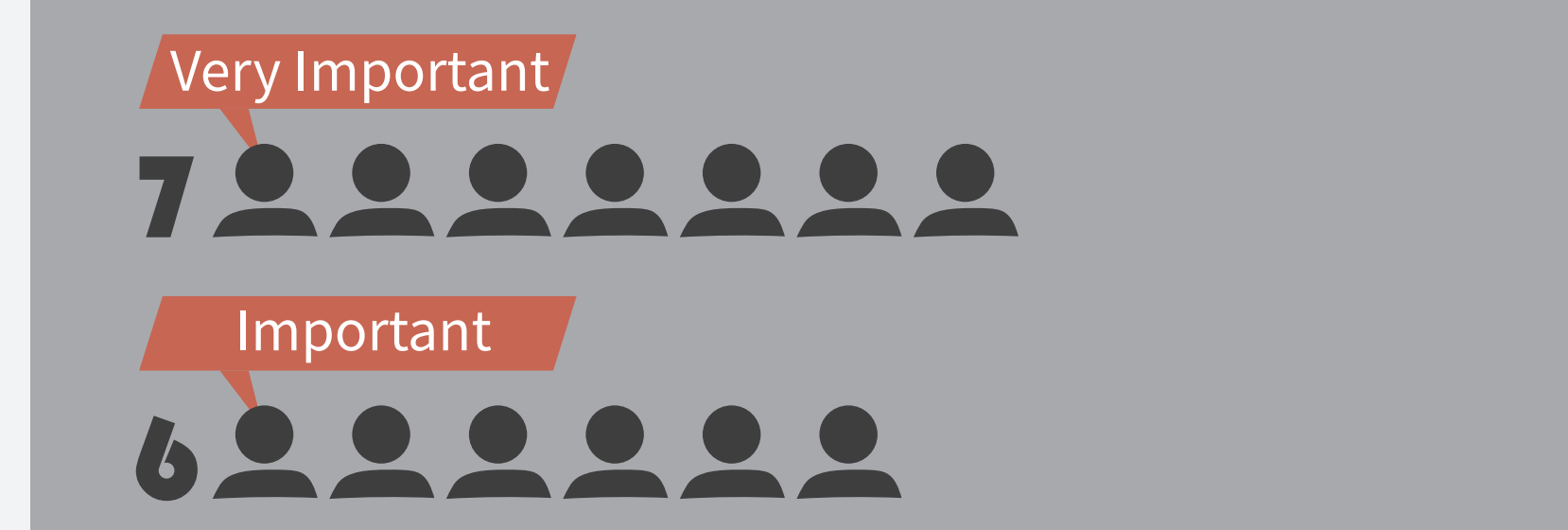
How engaging was the anti-harassment/discrimination instruction? (5-Point Likert - Extremely > Not at all)



Overall, rate the quality of the anti-harassment/discrimination activities? (5-Point Likert - Very good > Very poor)



How important would the anti-harassment/discrimination instruction be for other geoscience undergrads to participate in? (5-Point Likert > Very to Not at all)



Based on your experience with the anti-harassment/discrimination curriculum, what was positive about it and should be maintained? (6 of 11 responses shown)

"The curriculum regarding this subject was eye-opening to the number of forms it can appear in."

"I enjoyed the fact it was not just here is harassment, it made us draw from our experiences."

"The 'what to do,' was very helpful. Explaining how to report and how to help someone else was helpful."

"I think the interactiveness was the most positive part of seminar that we did. The focus on personal issues helps to hit home with people more than just sitting in a space and being lectured for an hour about a topic."

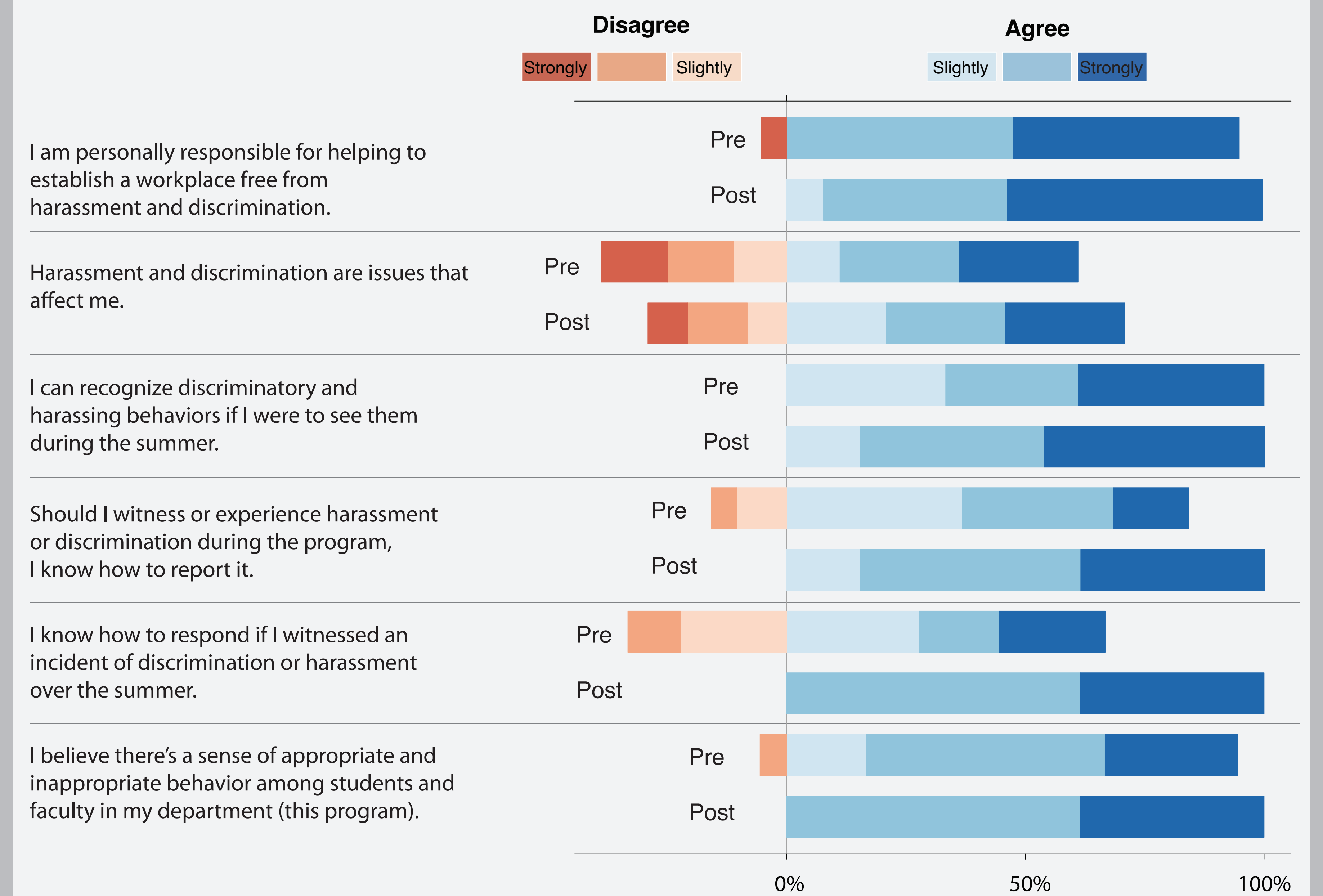
"I liked establishing (that) it was a safe space before we began talking. Defining terms in our own words was a good activity."

"Showing students the data from archaeology was a good way to start as there may be students who are unaware that this is as widespread of an issue that it is. I think the quantity of time spent on it was really important and makes be glad to be a part of the program."

Results

Curriculum Impact: Pre (n=19) and Post (n= 13)

	Pre	TRUE	FALSE
Creating a respectful work or academic environment means each member is responsible for ensuring that the community is free from discrimination and harassment. (Note: Other items with similar response patterns were omitted)	Pre: 100% Post: 100%	100%	0%
If asked by a victim of harassment or discrimination to keep a complaint secret, a Manager or Supervisor should not tell anyone.	Pre: 44% Post: 17%	55%	83%
Changing the work assignments of an graduate student who has recently made a discrimination complaint to an advisor could be seen as illegal retaliation.	Pre: 79% Post: 100%	21%	0%
If an affair between a faculty member and a graduate student is entirely consensual, there is no cause for concern by the school.	Pre: 11% Post: 0%	89%	100%



Discussion

- Expert reviewers perceive a need for the curriculum, would use it with their students, and recommend it to peers.
- Student participants appeared to appreciate many aspects of the curriculum and described it as engaging, of high-quality, about the right length, and important for their peers. There was also some indication that the curriculum may positively influence participants' perceptions of the program's culture.
- Formative assessment of learning objectives suggests the curriculum is on the right track
 - Many respondents arrived aware that a workplace with mutual respect is important to them, and that everyone is responsible for creating this. The data suggests participants leave slightly more aware that they don't have to directly experience harassment and discrimination for it to affect them.
 - Most respondents arrived with a reasonable understanding of behaviors that are discriminatory and harassing vs. those that are not. However there were some post-instruction gains.
 - Post instruction, participants agree that they know how to report harassment or discrimination.
 - Post instruction, participants agree that they know how ways they could respond should they witness harassment or discrimination.

Future Work

- Revisions to further emphasize microaggressions and the development of handbook/policy manual templates.
- Refine evaluation items to better measure the impact of the program and its effectiveness in achieving its ultimate goals.
- Conduct a larger pilot in summer 2020! To participate sign up here!

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