



ADVANCEGeo
PARTNERSHIP

Bystander Intervention Training for Geoscientists: Short and Long-term Workshop Effectiveness

Understanding Interventions Conference
February 7, 2025

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ADVANCEGeo Partnership

Empowering (geo)scientists to transform workplace climate



NSF Awards HRD – 1725879, 1726021, 1725650, 1726163 and 1725424

Collect data and develop bystander intervention training with discipline-specific scenarios and that incorporate intersectionality.



NSF Awards HRD – 2204305, 2203917, 2204022, 2204073, 2204361, 2204431

Develop a train-the-trainer certification program and workplace climate intervention program for academic STEM departments and training programs to build inclusive, thriving workplace environments.

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ADVANCEGeo Partnership

Empowering (geo)scientists to transform workplace climate



Why the geosciences?



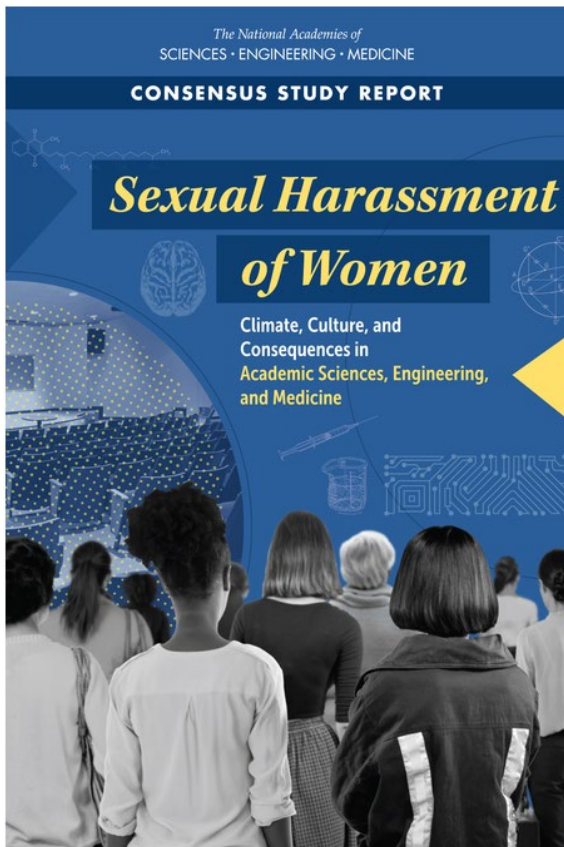
United States Geological Survey Group, Hayden Expedition, ca 1870-1875. (Photo by W.H. Jackson/The New York Historical Society/Getty Images)

ADVANCEGeo Training Overview

Improving workplace climate: Empowering individuals to become active bystanders

1. Present data and describe factors that contribute to the persistence of hostile workplaces in academia
2. Define and identify harassment, bullying and microaggressions as behaviors that create hostile workplaces
3. Discuss strategies that can be implemented at multiple levels
4. Learn and practice bystander intervention skills using real-world scenarios

What is bystander intervention?



ISSUE PAPER

Strategies for Developing, Implementing, and Sustaining Sexual Harassment Bystander Intervention Programs for Faculty, Staff, and Graduate Students

Jens-Uwe Kuhn, Nizam Arain, Justin Bell, Brianna Davis, Helen Kaiser, Devin Madden, Guilene Prepetit, and Kaaren Williamsen, Authors

Jeena M. Thomas, Editor

NATIONAL ACADEMIES Sciences
Engineering
Medicine

This individually-authored paper was conducted under the auspices of the Action Collaborative on Preventing Sexual Harassment in Higher Education, an activity of the National Academies of Sciences, Engineering, and Medicine. The Action Collaborative brings together academic and research institutions and key stakeholders to work toward targeted, collective actions on addressing and preventing sexual harassment across all disciplines and among all people in higher education. The authors are solely responsible for the content of this paper, which does not necessarily represent the views of the authors' organizations or of the National Academies of Sciences, Engineering, and Medicine.

Learn more: <http://www.nationalacademies.org/sexualharassmentcollaborative>



What is bystander intervention?

DIRECT - say or do something

DISTRACT - move attention away

DELEGATE - seek help

DOUBLEBACK - offer support

DOCUMENT - create a record to build a pattern of behavior



What makes Bystander Intervention Training effective?

Tailored for Relevance

- Geoscience specific data
- Real-world scenarios

Messenger Integrity

- Facilitated by geoscientists with leadership and fieldwork experience

Ecosystem/ Community Approach

- Group participation
- Power dynamics awareness

Social Interaction

- Discussion and practice BI strategies

(NASEM, 2018, Rawski et al., 2023; Kuhn et al, 2023, and Kalinoski, et al. 2013).

Evaluation Methods

Survey 1

Immediately after the workshop

Satisfaction & relevance (Reaction)

- Quality of the workshop
- Would they recommend to others
- Relevancy of the scenarios

Changes in Knowledge (Learning)

- Pre/post change in knowledge for five learning objectives

Changes in Behavior (Behavior)

- Do participants intend to use the bystander skills

Kirkpatrick's Four Levels of Evaluation



<https://waterbearlearning.com/kirkpatrick-training-evaluation-model/>

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Survey 2

6+ months after the workshop

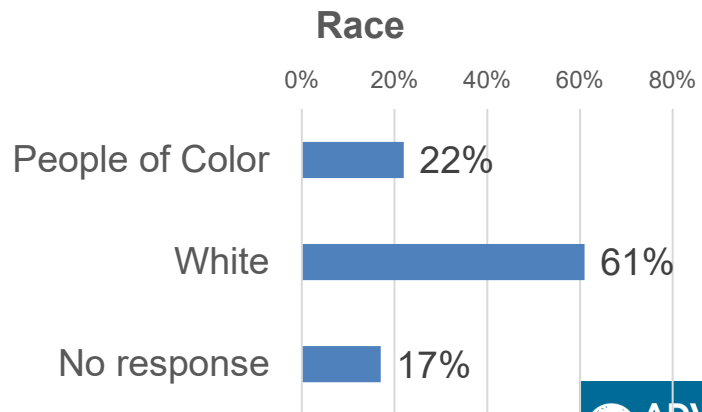
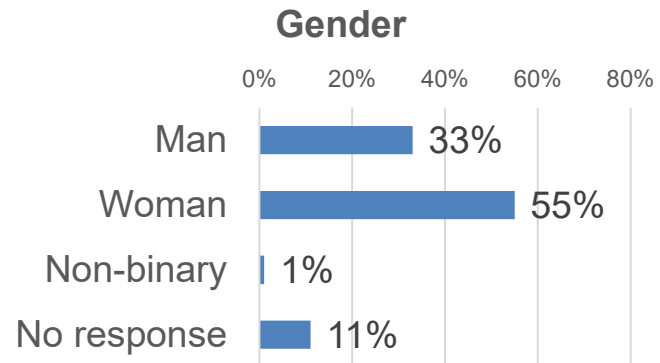
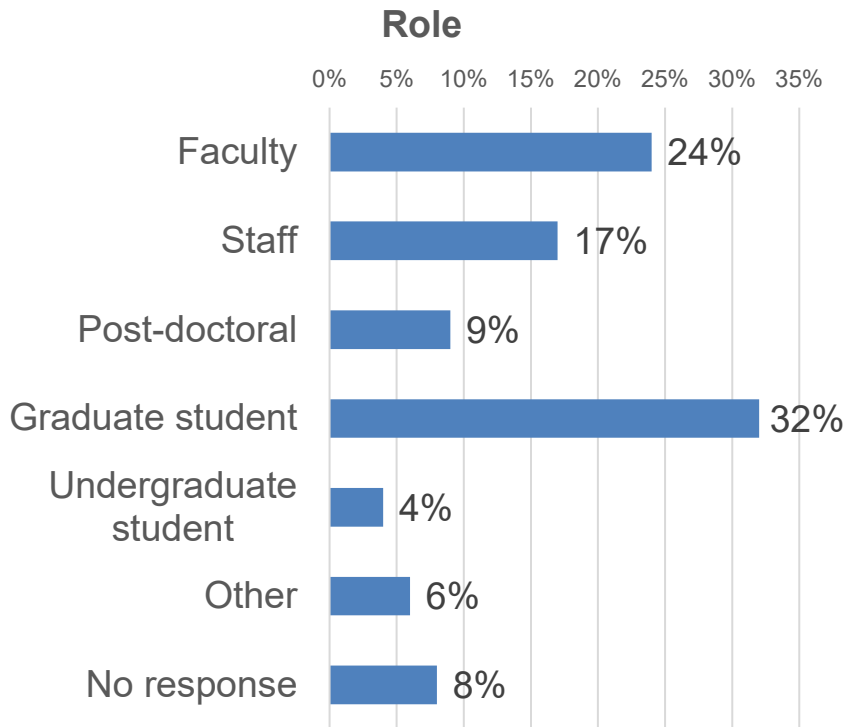
Long-term Reaction, Learning & Behavior

- Effectiveness of training
 - Reports of implementing strategies learned in training
 - Potential barriers to using strategies
-
- UW-Madison IRB: 2019-1108

Survey 1: Immediately After the Workshop,
Over 1200 participants completed the evaluation survey
for a 44.9% response rate

Audience Type	# Workshops	Estimated # Attendees	# Evaluation Forms Returned	Response Rate (%)
Professional Conference	30	924	423	45.8%
Academic department or university group	42	1609	668	41.5%
Fieldsite	9	322	192	59.6%
Total	81	2855	1283	44.9%

Survey 1: Demographics of respondents (percentage of total respondents, n = 1283)



Quality of Workshop Overall In Person & Virtual

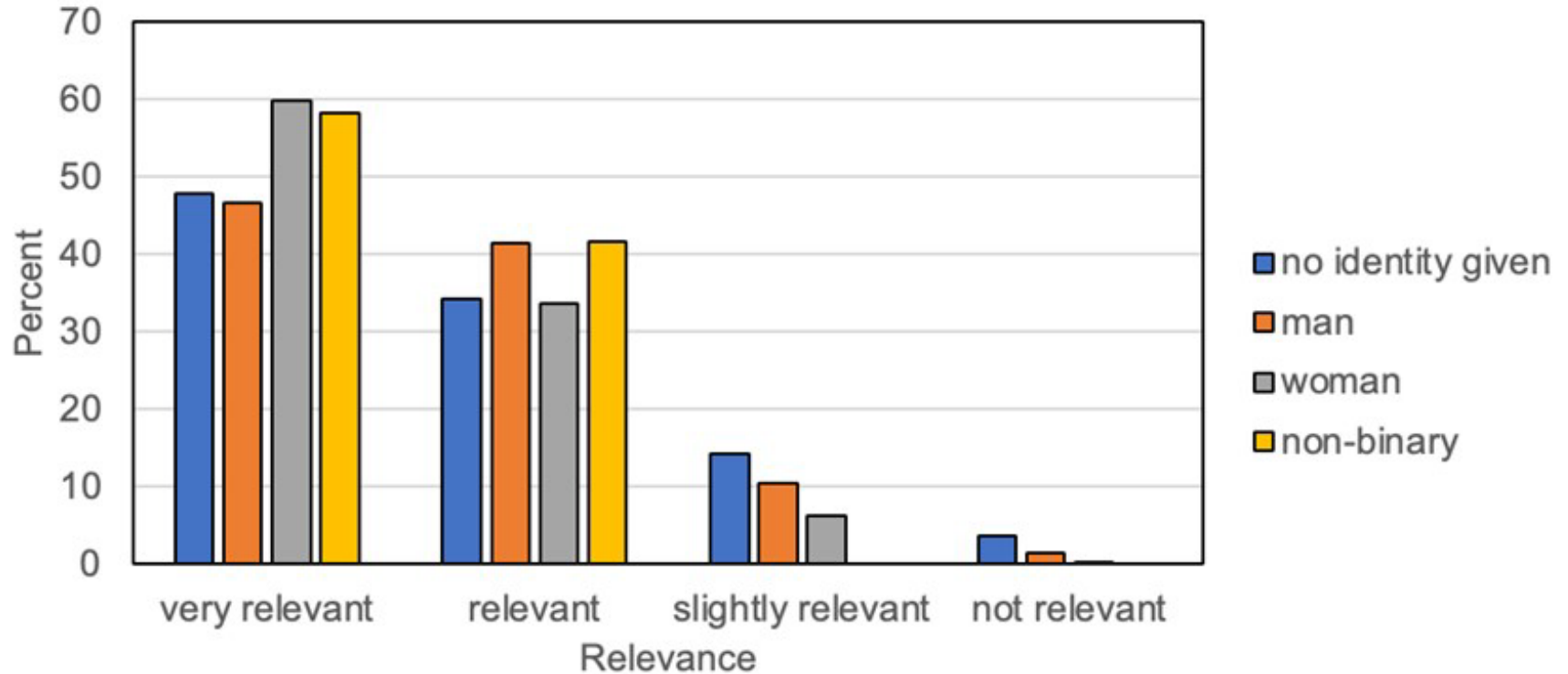
	Poor	Fair	Good	Excellent	Total
In Person	<1%	2%	35%	63%	100% 826
Virtual	-	1.5%	27%	72%	100% 450
Combined In Person + Virtual	<1%	2%	32%	66%	100% 1276

Quality of Workshop Overall In Person & Virtual

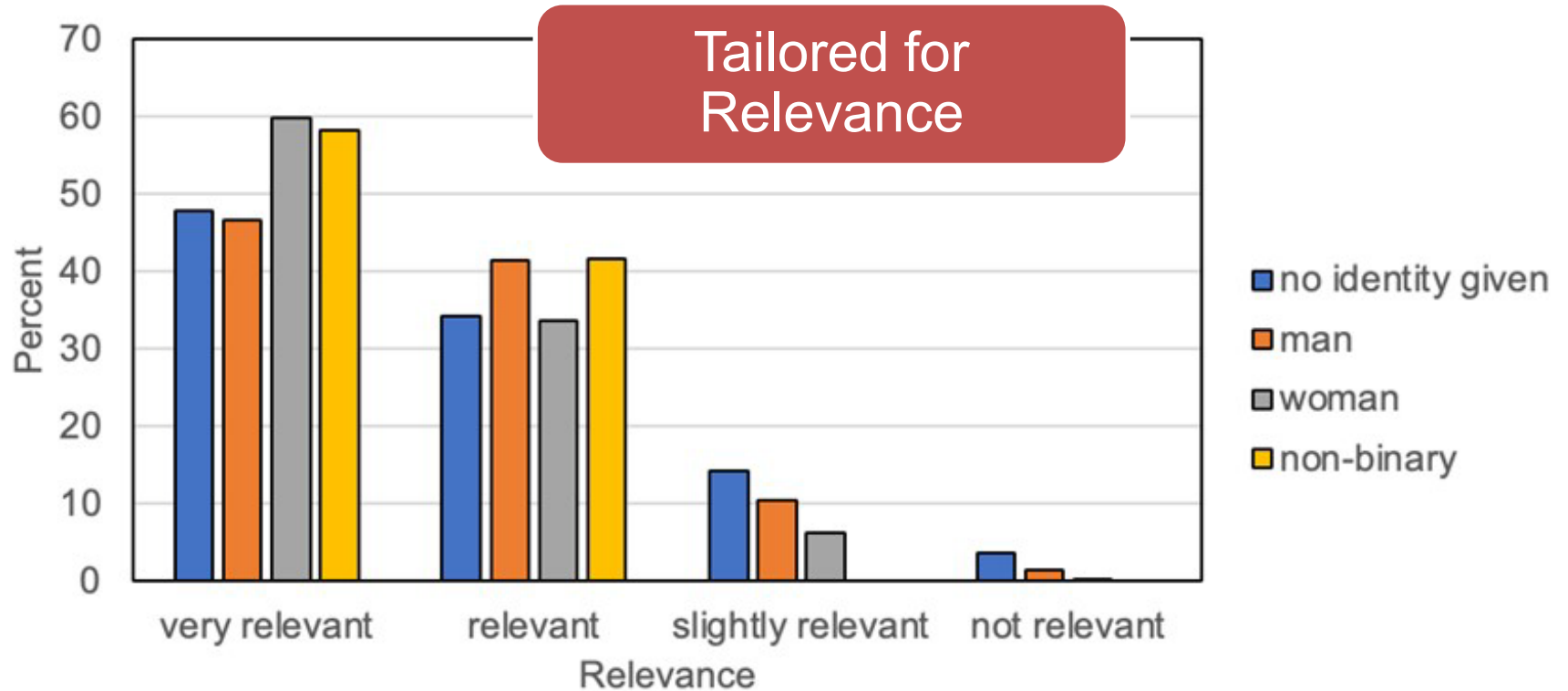
Social Interaction

	Poor	Fair	Good	Excellent	Total
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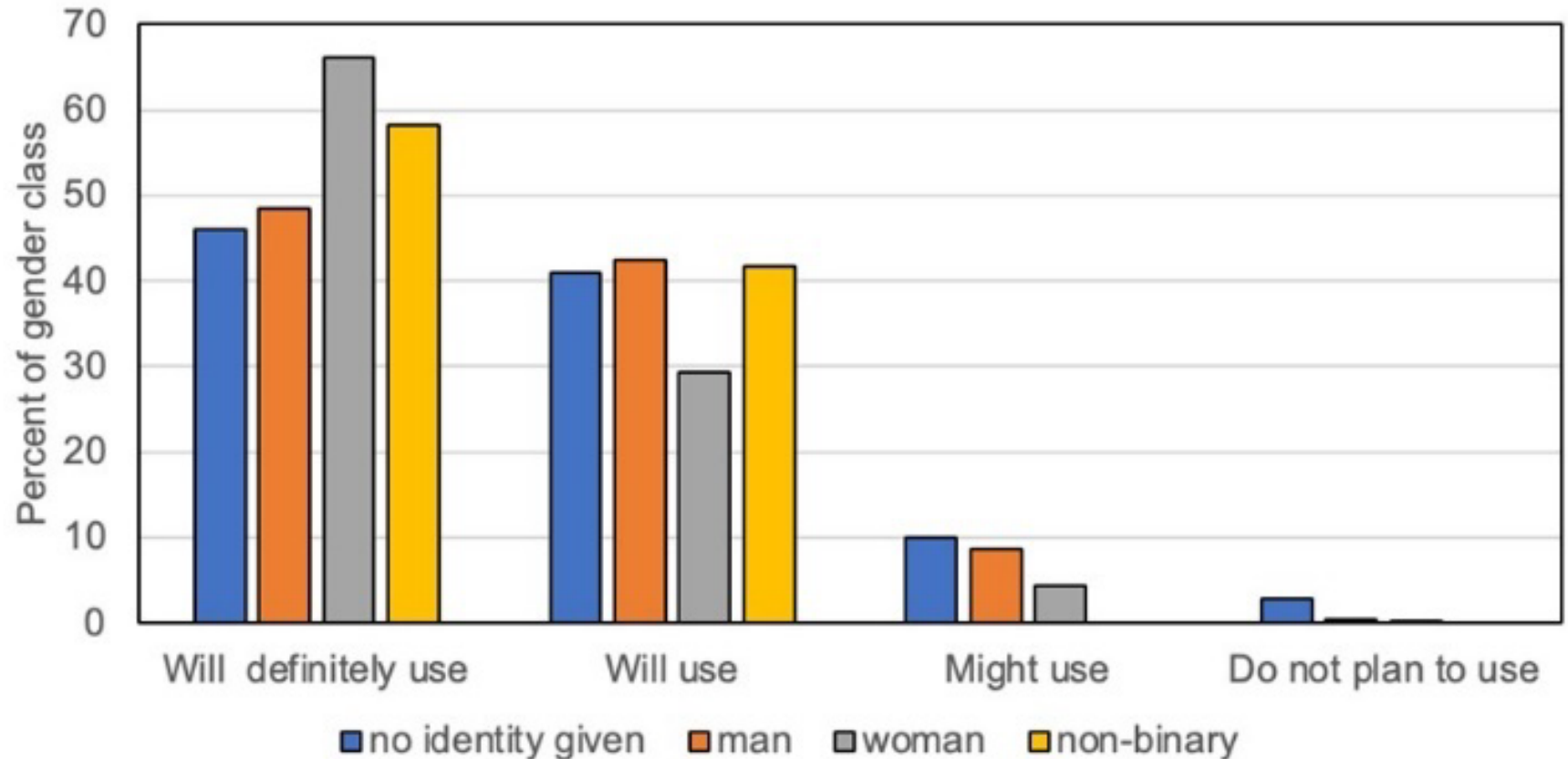
Relevance of bystander intervention scenarios



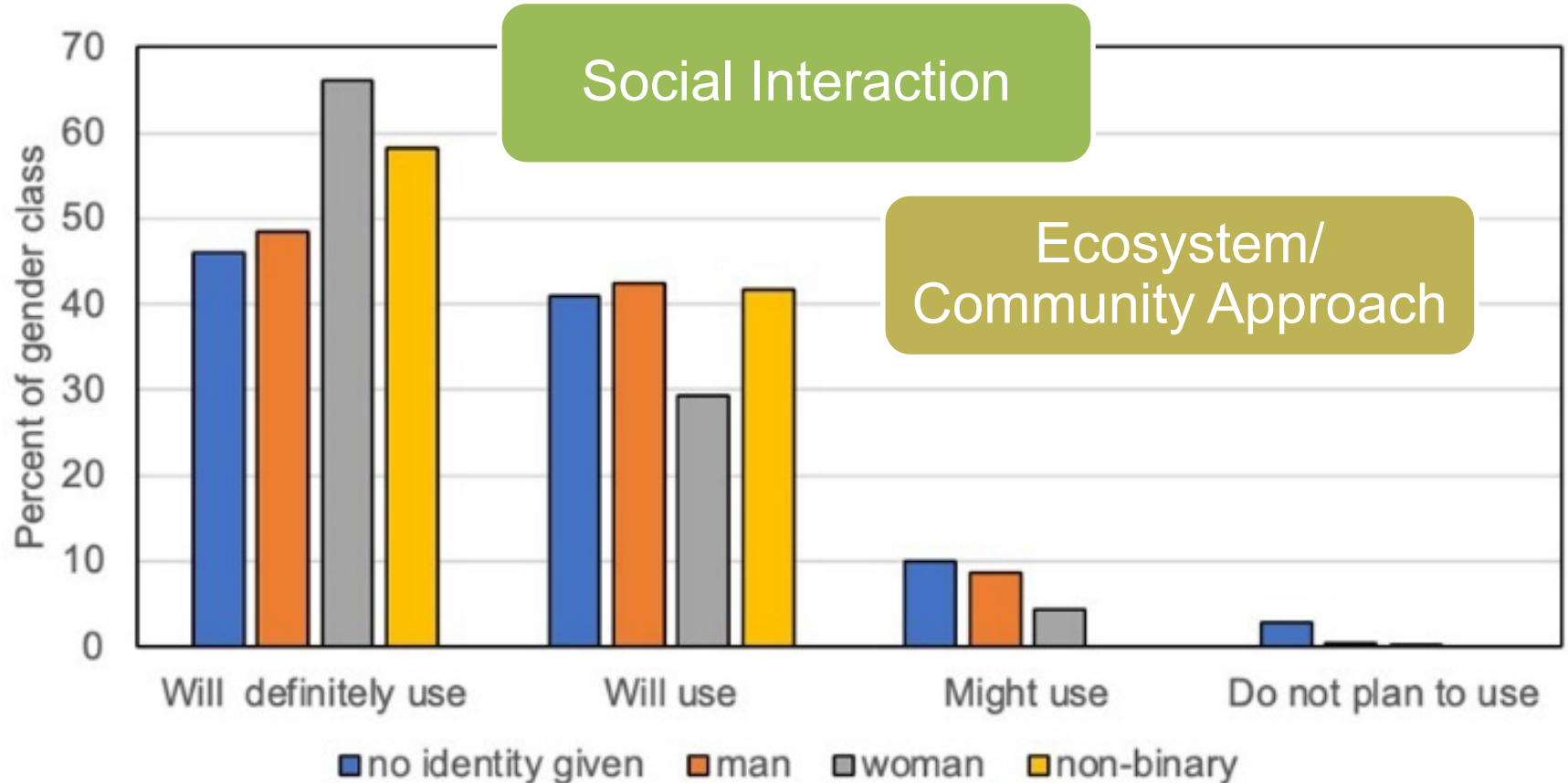
Relevance of bystander intervention scenarios



Intention to use bystander intervention strategies



Intention to use bystander intervention strategies



Messenger Integrity

Did the facilitator(s) use approaches that encouraged participation and respectful conversation? Please explain.

Social Interaction

What is the most important thing you learned during the workshop?



Ecosystem/ Community Approach

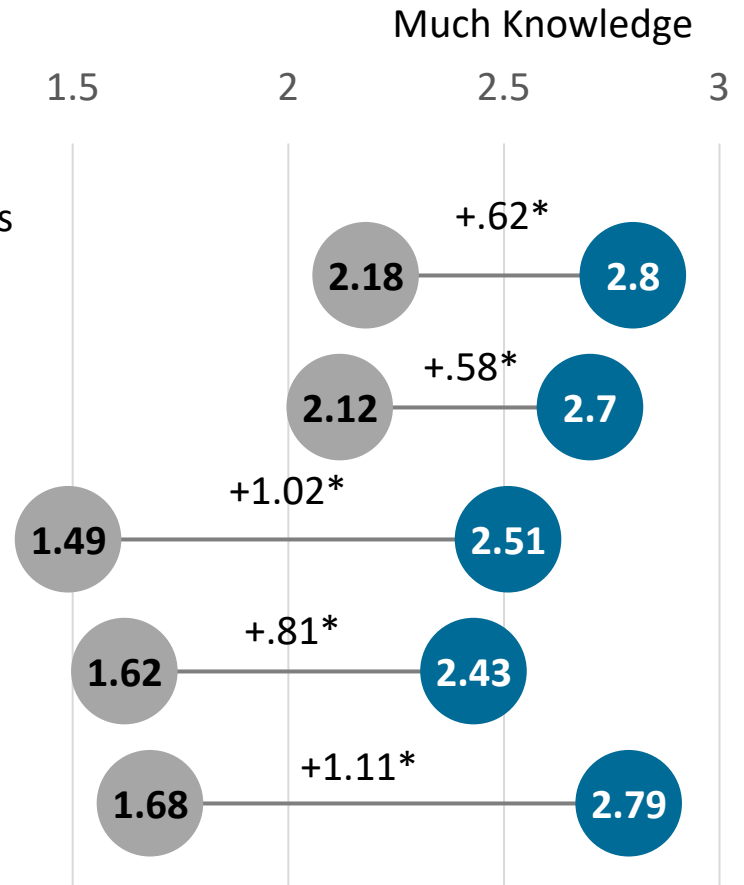
Prevalence of harassment and exclusionary behaviors in research and academia (n=1241)

How structures allow hostile behaviors to manifest in research & academia (n=912)

Stances taken by professional societies to address harassment (n=1229)

Strategies for departments & institutions to address harassment (n=1229)

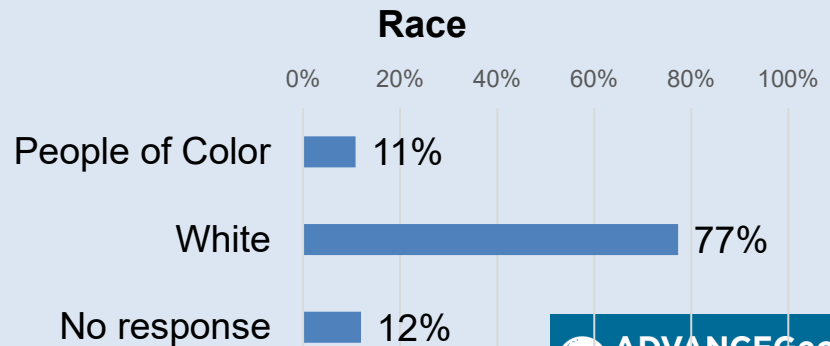
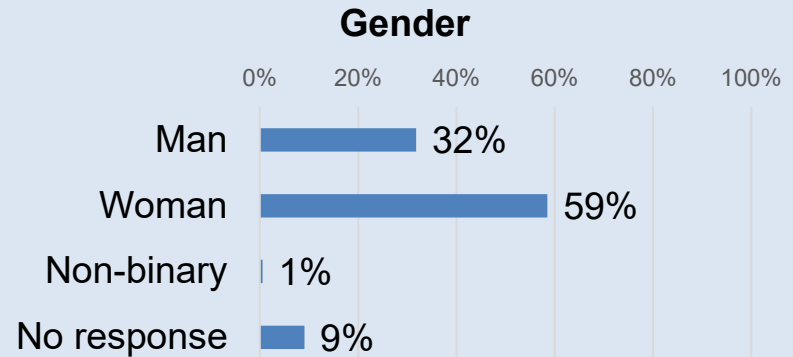
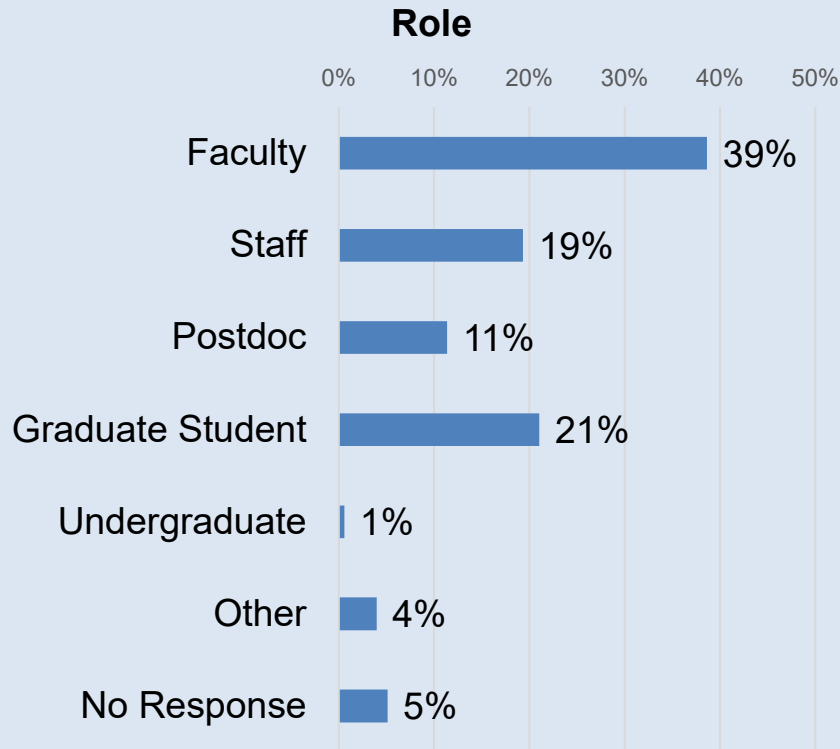
Strategies for individuals to address harassment (n=1231)



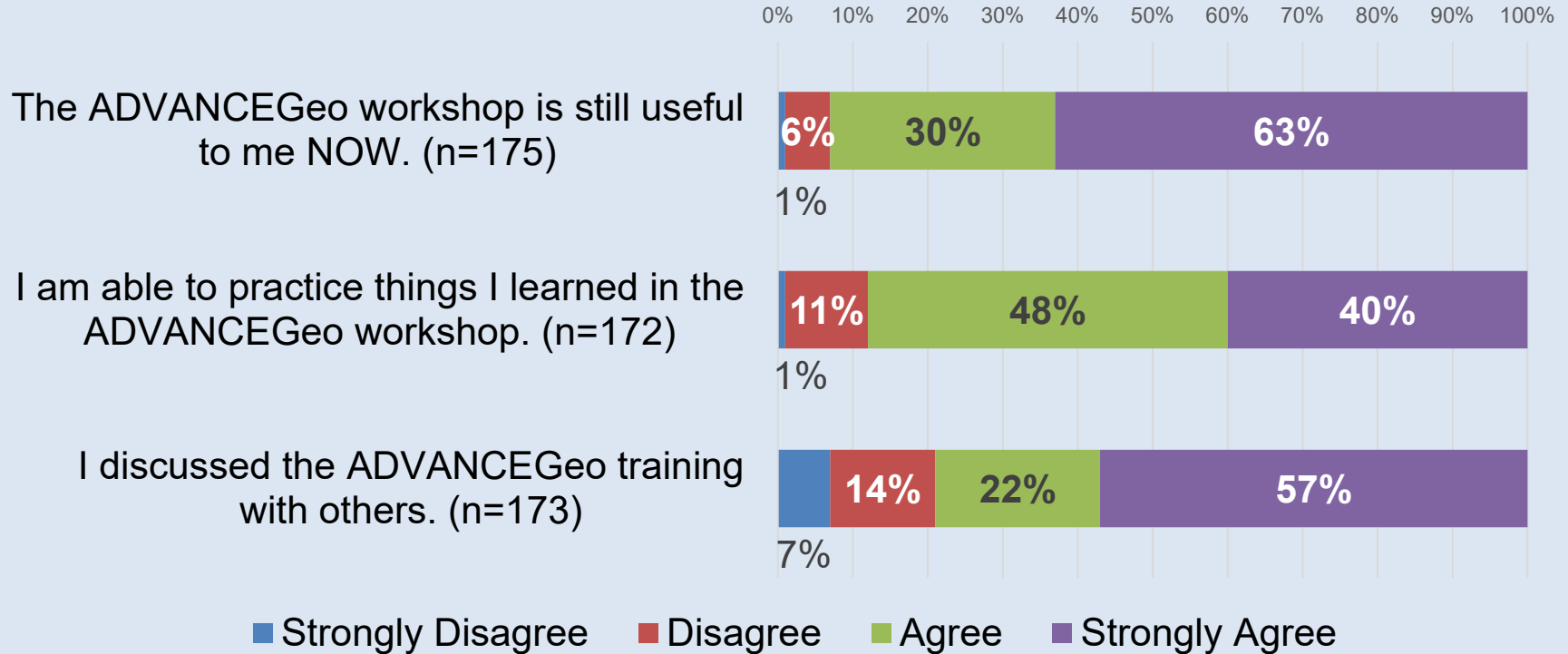
*Wilcoxon Signed-rank Test $p < .001$

Survey 2: 6+ Months After the Workshop

176 Responses

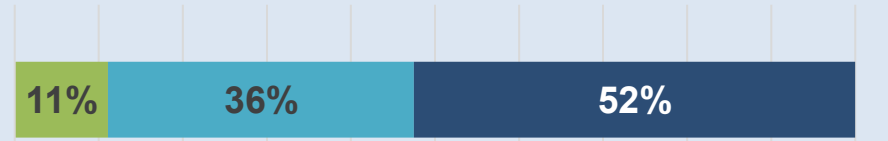


Survey 2: 6+ Months After the Workshop



44 respondents said they had an opportunity to use bystander intervention strategies

I felt more confident implementing bystander intervention techniques because of the workshop



I was able to successfully implement bystander intervention techniques learned in the workshop



Bystander intervention techniques learned in the workshop were applicable/useful for the situation



■ Strongly Disagree ■ Disagree ■ Agree ■ Strongly Agree

Barriers to Intervention

A more powerful bystander is not intervening, am I overreacting?

Power Dynamics

Will I be labeled as sensitive and subject to future negative repercussions?

Offender is Resistant

Confidence

Negative Repercussions

Unsure what's happening, don't want to harm the perceived "target"

ADVANCEGeo Bystander Intervention Training



In conclusion, bystander intervention training tailored to a geoscience audience and facilitated by geoscientists has positive short and long-term outcomes. Additional practice and training refreshers can boost confidence and reduce barriers to intervention.

serc.carleton.edu/advancegeo

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