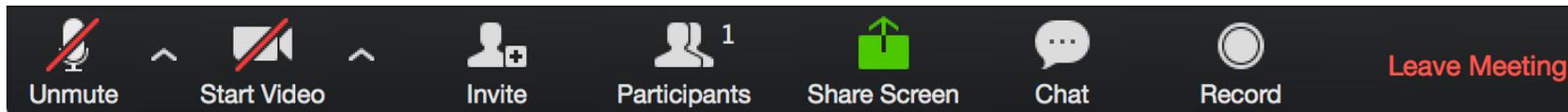# Strategies for more inclusive data sharing and analysis

**Webinar will begin at 2 pm EST.**

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Please leave your audio muted and video off (both indicated by a red slash)

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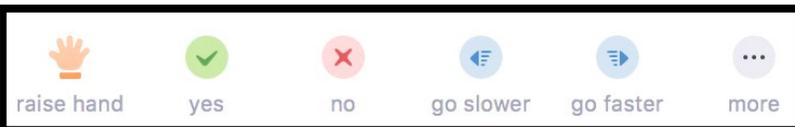
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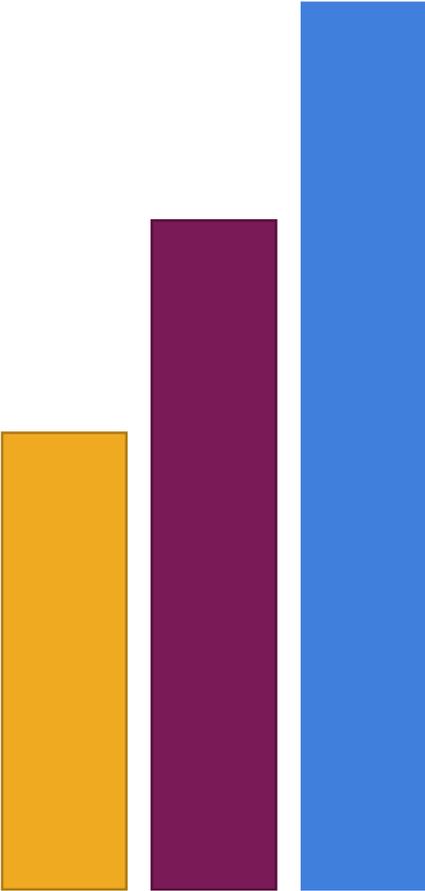
Strategies for more inclusive data sharing and analysis

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Webinar Recorded October 30th, 2018 at 2pm

Inclusive Data Sharing and Analysis

- Data is an invaluable, powerful, and necessary. Let's strive to use this power for good!

- The way we collect, analyze, interpret, and share data can perpetuate limited understanding of already marginalized groups. Quantitative methods have some built-in limitations for being inclusive.

- Whether we are preparing internal documents or conducting research, we have a responsibility to be conscious of the ways that we engage in this work.

- I have identified several tips that can allow us to be more attentive to this work. (Shout-out to Dr. Sarah Hurtado!)
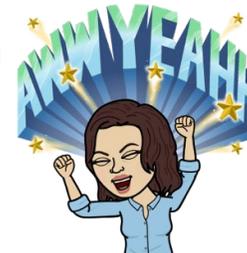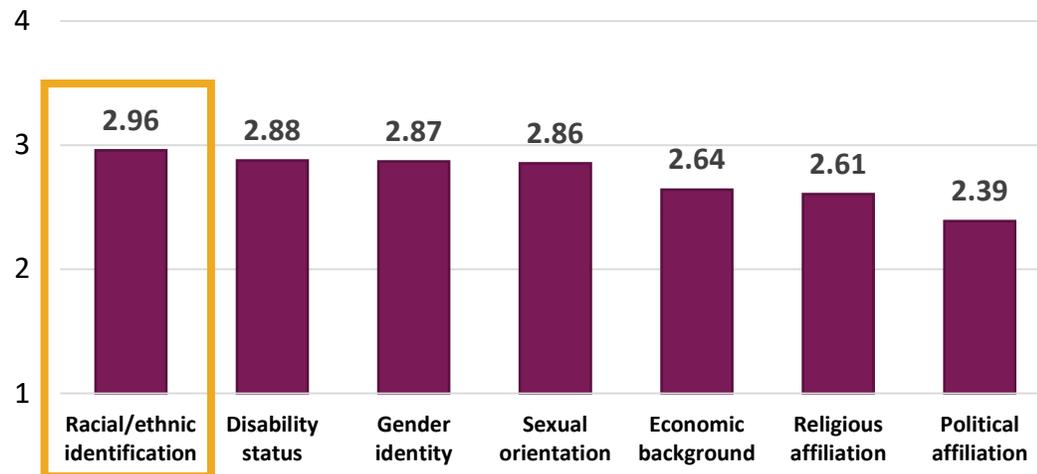
Tip 1: Disaggregate Your Data

- There is danger in relying on the results of the "average" student in our analyses of results. The average student is likely reflective of majority populations. This masks the experiences of our small, and likely most vulnerable, populations.
  - Let your overall averages *start* the conversation
- If possible, disaggregate within your small populations!
- Disaggregation can occur in a variety of ways, by
  - Identity characteristics
  - Student characteristics
  - Engagement (or other behavioral or perception) characteristics
  - The intersection of these and other characteristics

Tip 1: How This Can Help

Identifying more specific information can better inform data use. It's easier to know where to start making improvements when you have a more specific direction. Improvements for subgroups are likely improvements for all!

How much does your institution provide a supportive environment for the following forms of diversity?
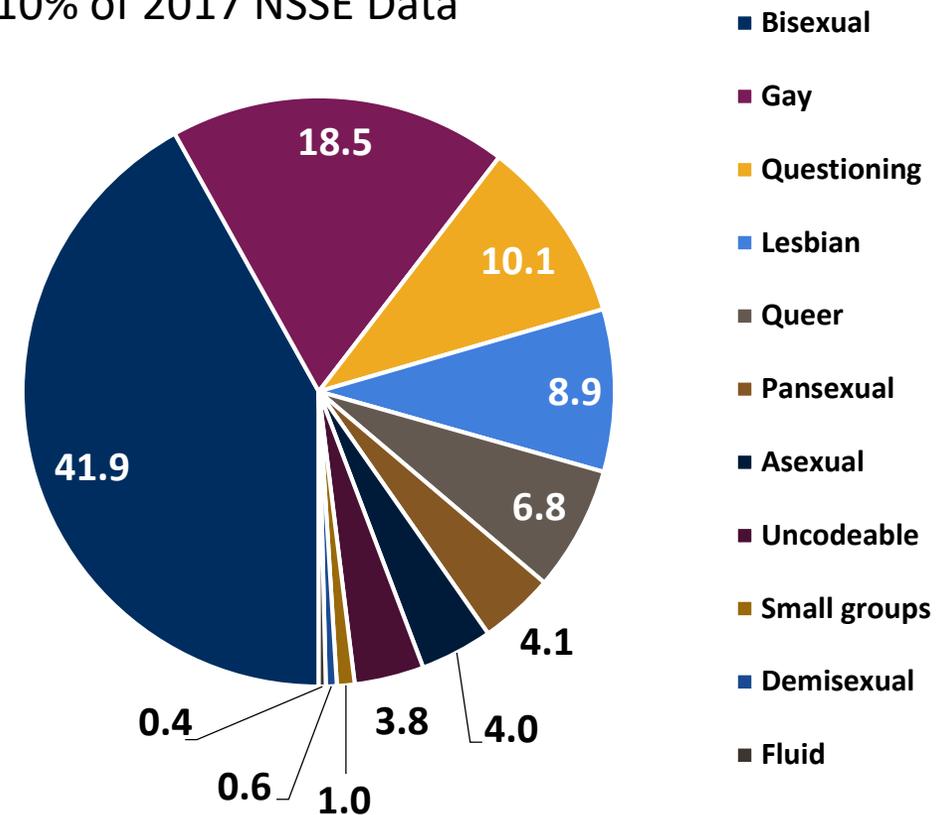
	2.96	2.88	2.87	2.86	2.64	2.61	2.39
	Racial/ethnic identification	Disability status	Gender identity	Sexual orientation	Economic background	Religious affiliation	Political affiliation

How much does your institution provide a supportive environment for people based on racial/ethnic identity?

	Low	High
Am. Indian or Native American	=	=
Asian	+	-
Black or African American	+	-
Hispanic or Latinx	+	-
White	-	+
Other	-	+
Multiracial	-	+

Tip 1: How This Can Help

- In order to disaggregate, you need to ask for more specific information (such as sexual orientation). Seeing such questions, when written well, can send an important message to students that you value this aspect of their identity or experience.

- Talking about the experiences of often silenced students can go a long way in providing a sense of care and support

10% of 2017 NSSE Data

Pie chart values: 18.5, 10.1, 8.9, 6.8, 4.1, 4.0, 3.8, 1.0, 0.6, 0.4, 41.9

Legend:
- Bisexual
- Gay
- Questioning
- Lesbian
- Queer
- Pansexual
- Asexual
- Uncodeable
- Small groups
- Demisexual
- Fluid

Tip 1: How This Can Help

Be thoughtful about your disaggregation! Often subgroups by identity or student characteristics do not have monolithic experiences! Especially if you don't know much about a subgroup, disaggregate your outcome and then see where the people fit. This approach can point out hidden issues as well as point to starting points for solutions.

	High Support	Moderate Support	Low Support
Asexual			
Bisexual		+	x x x
Gay	+ +	x x x x	+ + +
Lesbian	+ +	x x	
Pansexual			
Queer	x x x x	+ + +	+
Questioning			
Another	x		+ +

**+ Overrepresentation in category**
x Underrepresentation in category

Tip 2: Pay Attention to Small Populations

- We might encounter small populations for a variety of reasons such as a low response rate, a small population from which to elicit responses, data collection methods that make subpopulation respondents difficult to contact or create difficulties for subpopulations to respond, etc.

- Think about ways to pay them special attention:
  - Be strategic about collecting data from small groups to increase responses
  - Consider combining responses from multiple cohorts
  - Triangulate your findings with other data
  - Your small numbers might capture all or most of your population! Gather any population information that you can!
  - Make sure the questions that pertain to them (identity-based especially) are written well!
  - Get creative with your analyses!

Tip 2: How This Can Help

- Being strategic about soliciting responses from small populations (advertising at cultural or other centers where they go, writing good identity questions, promoting the use of collected data) can go a long way towards getting buy in and increased responses

- Showing these populations that you intend to use their information for change is another way to capture more responses—people are more likely to take part in something they know matters

Planning

Data collection

Data analysis

Sharing results

Reflect and Follow-up
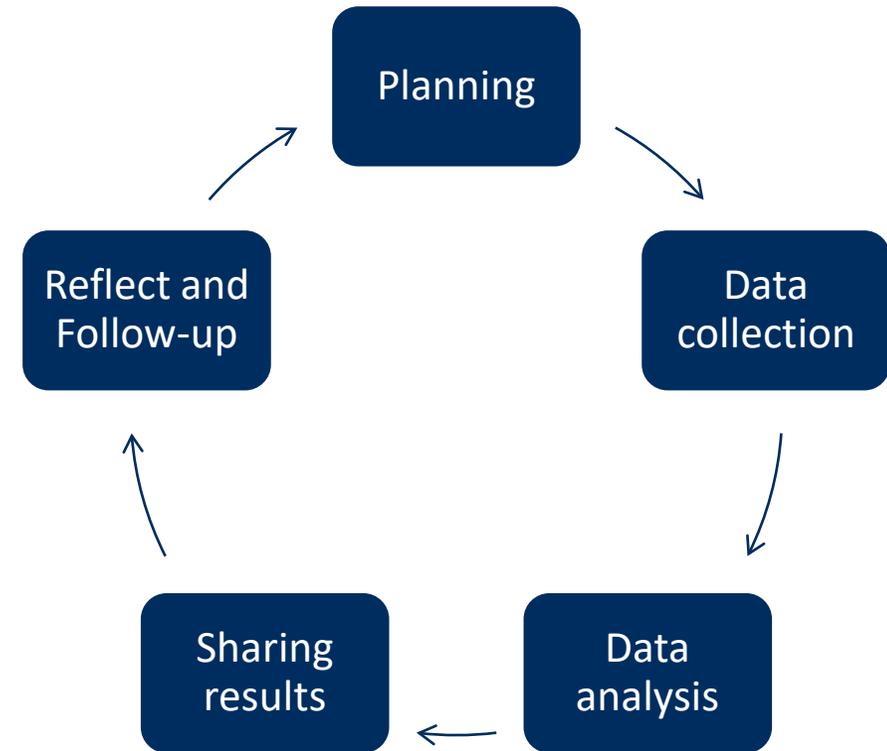
Tip 2: How This Can Help

- Your survey instrument must capture their experiences and identity characteristics well. Poorly written identity questions can be especially frustrating for small populations

- Be critical of "best practice" for writing identity questions. Best practices often contradict one another and don't take local context into account

What is your gender?
- Male
- Female

cringe

What is your racial or ethnic identification? (Mark only one.)
- American Indian or other Native American
- Asian, Asian American, or Pacific Islander
- Black or African American
- White (non-Hispanic)
- Mexican or Mexican American
- Puerto Rican
- Other Hispanic or Latino
- Multiracial
- Other
- I prefer not to respond

Which of the following best describes you?
- Heterosexual
- Gay/Lesbian
- Bisexual
- Transgendered
- Unsure

Tip 2: How This Can Help

We need to reset audience expectations and honor the voices of small populations

An institution called Allison with a question. How do we get faculty to take the results from our special population seriously with such small numbers?

Participation in a leadership experience (n=29)

- 9 students have or are in progress
- 18 do not plan to
- 2 have not decided

But…

THERE ARE ONLY 35 STUDENTS IN THE PROGRAM!!! The small numbers you have to work with might capture all or most of your population

Important stories can be told and conversations had with small numbers. Sometimes we may need to let go of statistical significance and focus on practical significance.

Time on Task for Graduate Student Instructors

Legend:
- Black or African American Women (n=45)
- Other GSIs (n=2,515)
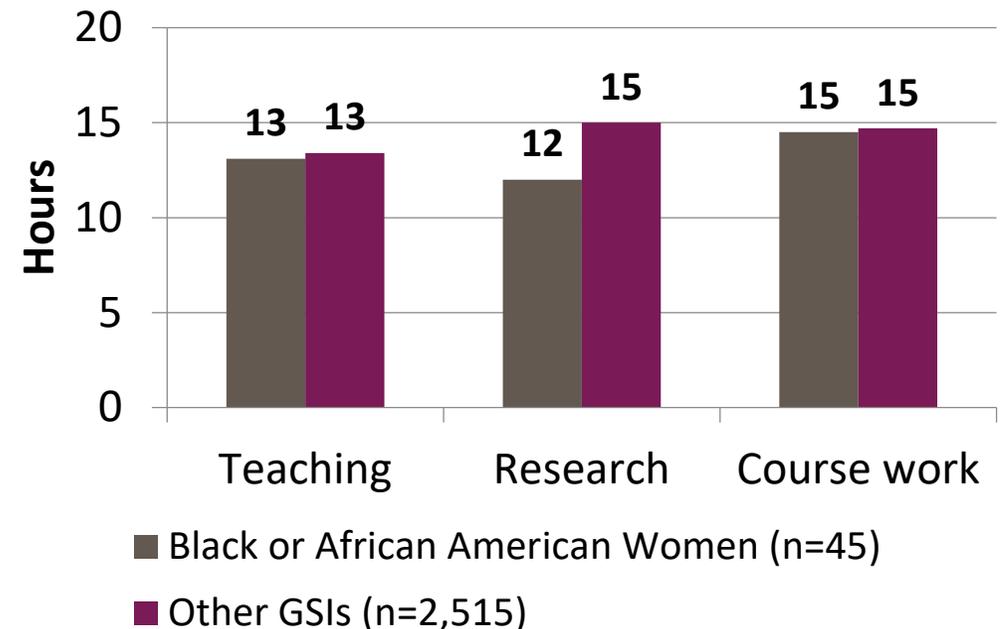
Tip 3: Consider your Framework

- Often, we approach assessment without a particular research framework in mind. If we do, it might be more related to the content of the analysis (which can help you with things like choosing what variables to include) than the methods used in the analysis

- Many frameworks don't fully consider the experiences of marginalized groups or approach these groups' experiences from a deficit perspective

- Traditionally, quantitative research has been viewed as objective and without need for researcher or audience positionality, but this doesn't have to be the case! Frameworks can give guidance on how the researcher or assessment professional fits in the storytelling

Tip 3: How This Can Help

- Your framework plays a role in how you interpret and present the data to others, it can provide you guidance on questions to ask and methods to choose

- A framework can help you focus your work and explore the data more efficiently as we often don't have the time and resources to meander around data looking for interesting things to report on

- The Model of Multiple Dimensions of Identity (Jones & McEwen, 2000) frameworks guided us to find this:
  - Students who are LGBQ+ and Latino are "out" to fewer people than the average LGBQ+ student
  - Students who are LGBQ+ and Asian feel a greater sense of support from their institution than the average LGBQ+ student
  - Students who are LGBQ+ and have a diagnosed disability or impairment are far more likely to have been discriminated against than other students

Tip 3: How This Can Help

- A framework can help **reset the expectations of your audience** (*this is critical!*), helping them to understand the purpose and intention of your small population analysis
- Frameworks that refocus efforts on intervention and practitioner actions can help audiences think about how the results can be used

- Critical quantitative framework (Stage, 2007)
  - Avoid dominant identity comparison groups
- Focus on practitioner knowledge (Bensimon, 2007)
  - Instead of focusing interventions on students think about practitioner actions
- Proactive philosophies (Museus, 2014)
  - Actively find ways to support students
- Person-centered approaches (Malcom-Piqueux, 2015)
  - Create groups based on behavior or experiences

Tip 4: Rethink Comparisons and Reference Groups

- Making comparisons between subgroups is a common strategy for analyzing and presenting data. It is natural for researchers and audiences to wonder—is that "normal"? Is that high? Is that low? Is that better or worse than other students?

- Unfortunately, this may implicitly position certain groups as normative. For example, when looking at sexual orientation, straight students are often held as the norm to which other groups are compared which implies that the experiences of straight students are "normal" or what should be achieved by other students

- Making thoughtful choices about the comparisons you make, particularly your choices of reference groups, can send a powerful message about our students and our beliefs as researchers and assessment professionals

Tip 4: How This Can Help

Choosing a normative reference before examining data can help answer the question "is that good?" without doing any comparisons between students. If your institution decides that at least 50% of your students should be participating in internship experiences, you won't need to compare students to know if subgroups are meeting expectations.

	Most Supported LGBQ+	Least Supported LGBQ+
Higher-Order Learning	+	- - -
Ref. & Int. Learning	+	- -
Learning Strategies	+	- -
Student-Faculty Interaction	+	-
Effective Teaching Practices	+ + +	- - - - -
Perceived Gains	+ + + + +	- - - - - -

Tip 4: How This Can Help

Looking within subpopulations and making internal comparisons (if possible) can help show audiences that small populations are often not monolithic and can have a variety of experiences and perceptions

Major Field Representation by Gender Variant Students
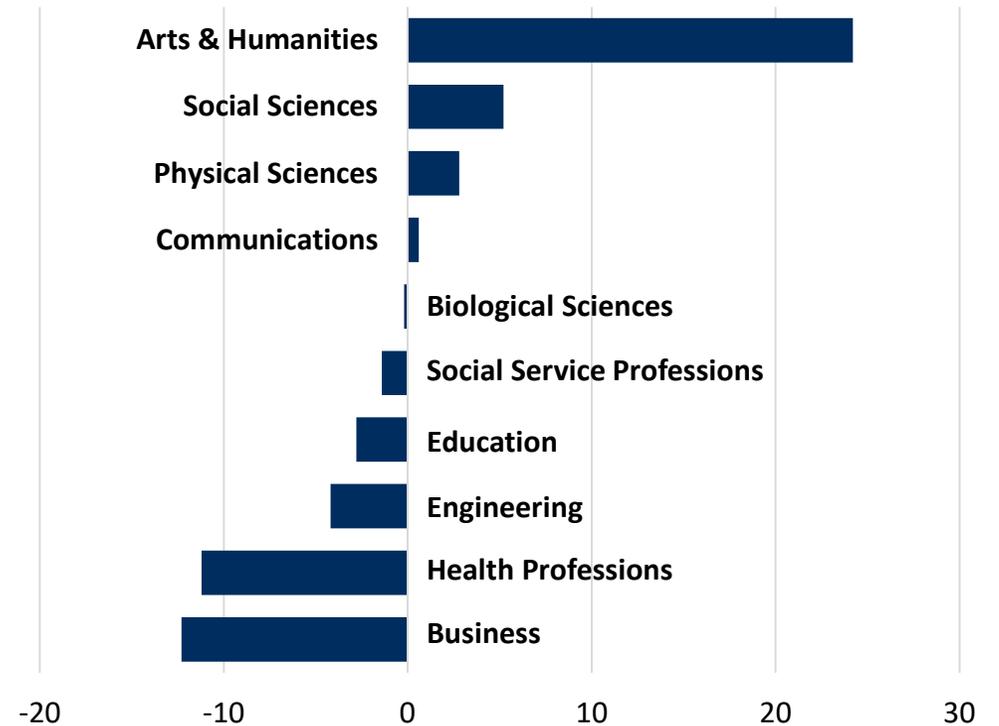
Tip 4: How This Can Help

If comparisons are necessary, think carefully about your reference group. Even using effect coding (Mayhew & Simonoff, 2015) where groups are coded to the average may essentially compare minority groups to majority. Consider doing your comparisons within marginalized subpopulations or creating a normative reference before looking at your data

Coefficients for Frequency of "Outness" using Effect Coding

Bisexual	+ + +
Gay	- - -
Lesbian	+ +
Queer	+ + +
Straight	+ +
Questioning	- - -
Another sexual orientation	- -

These coefficients would be interpreted as higher or lower compared to the "average student."

Tip 5: Responsible Aggregation

- Yes, in Tip 1 I told you to disaggregate.

- But sometimes disaggregation might cause more harm. Make sure that when you share data and findings that responses are not identifiable and attributed to a specific person! Ethically, you should even avoid circumstances where a small group of students could be pinpointed and have feedback used against them

- Depending on your data and research questions, you may need to use sophisticated statistical methods that require dropping especially small groups from the analyses or creating larger aggregated groups. When this is necessary, acknowledge these limitations and be open about how small populations were dropped or aggregated so that their voices are not completely forgotten

Tip 5: How This Can Help

- Masking or aggregating identifying characteristics may be less satisfying and feel impractical when trying to create change, but these findings can still be useful in starting conversations

- Resist the urge to group without some investigation, defaulting to "students of color" can be damaging—aggregate responsibly!

I found that American Indian, Alaska Native, Black or African American, and Other faculty had lower perceptions of community. Asian, Hispanic or Latinx, and Multiracial had higher perceptions of community.

How much does your institution emphasize creating an overall sense of community among faculty?

.3 effect size!

2.4 — Am. Indian, Alaska Native, Black or African Am., Other

2.74 — Asian, Hispanic or Latino, Multiracial
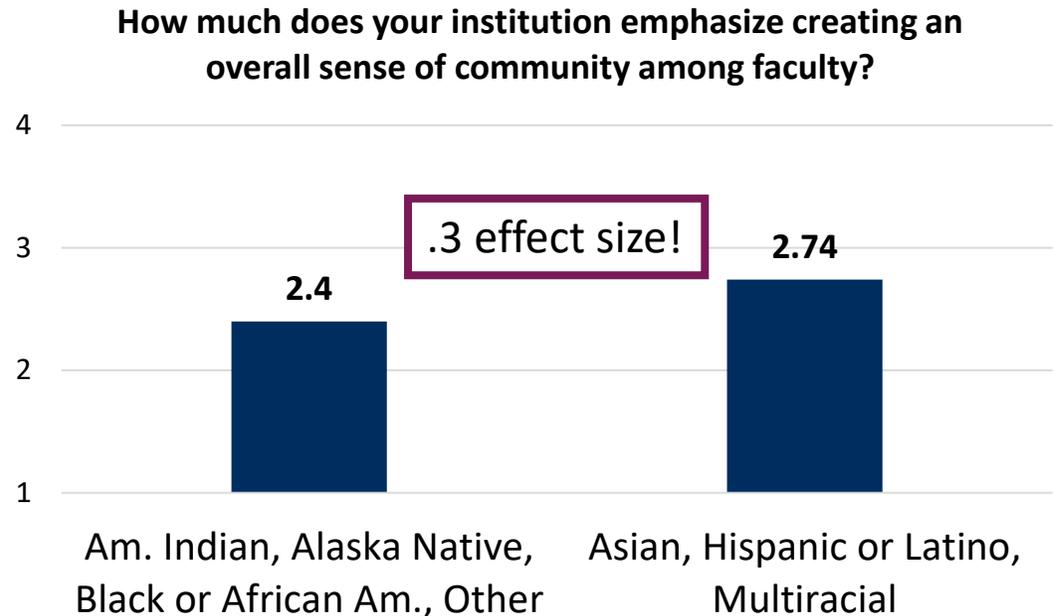
Tip 5: How This Can Help

Acknowledging how small groups were either not included or how they were combined with other groups can help add context to findings, can bring clarity to ambiguous "other" groupings, and can be used to start conversations about how to examine the experiences of these students. Transparency in methodological choices with attention to limitations and future research plans can turn less inclusive analyses into more inclusive conversations.

Out of 7,183 faculty members who indicated their gender identity. **How many identified as gender variant?**

- 48% Man
- 47% Women
- 5% Prefer not to respond
- Sooo < 1% gender variant but…**how many**?

20 faculty!

I may not use these faculty in my analysis, but I won't pretend they don't exist!

A Parting Thought...

Think of one thing can you do after this webinar to start or enhance an inclusive data sharing or analysis conversation with one of these tips.

http://nsse.indiana.edu/pdf/Inclusive_Tips.pdf

http://nsse.indiana.edu/html/webinars.cfm

Final thoughts and questions?

Thanks for joining me!

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References & Resources

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