

## Paying Attention to Often Ignored Small Sub-Populations in Assessment Work



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### Example: Campus X

- Campus X has difficulty attracting and keeping students of color through graduation
- 600 seniors; 72 seniors of color (12%)
- Survey response rate ~30% leads to 22 senior respondents of color
- Just because there are few students of color, it does not mean African American (4 respondents) and American Indian (1 respondent) seniors experience Campus X the same OR that race/ethnicity does not matter
  - Researchers may be tempted to group all students of color together OR not look at race/ethnicity at all

### Example: Campus Y

- Campus Y has climate issues related to race that may be influencing retention
- 6000 seniors; 720 seniors of color (12%)
- Survey response rate ~23% leads to 166 senior respondents of color
- Just because there are few students of color in some groups, it does not mean Southeast Asian American (12 respondents) and American Indian (2 respondents) seniors experience Campus Y the same OR that their race/ethnicity does not matter
  - Again, researchers may be tempted to group all students of color together

### Example: Campus Z

- Campus Z has had several incidents with students' names not being correct on class rosters
- 30,000 undergraduates; 11 known trans students
- The survey response rate for this group could easily be 0%
- Just because no one responds to a survey does not mean there are not important issues to address

### What assessment questions are you or your campus pursuing?

- At the system level, looking at the achievement gap, where is it, when does it happen, how does this vary?
- When are students leaving? DFW rates, who's affected?
- Looking at new programs, small programs, starter projects
- Small groups of students of color lead to trouble with calculating percentages, wild variation due to the small numbers
- Differing demographics at two different campuses, data is often combined and less useful at each campus
- Looking at the sense of community for different groups
- Looking at faculty of color at different ranks, why so few attain higher ranks

### Who are the small populations you need to study?

- Full professors of color
- Immigrants or children of immigrants
- Hmong population
- English as an additional language learners
- Gender, gender identity
- First-generation students in particular outreach efforts
- Hispanic males
- Adult learners
- Veterans
- Women of color in STEM
- Muslim students

## Who are the small populations we've studied?

- LGBTQ students and faculty
- Gender variant students and faculty
- Students and faculty of color
- Biracial and multiracial students and faculty
- Students and faculty with intersecting complex identities
- Students and faculty at small institutions
- Gender variant, LGBTQ, and nonreligious students and faculty at religious institutions
- Graduate students who teach
- Students and faculty in small fields/disciplines
- Faculty teaching large courses

## Example Questions

- How does participation in high-impact practices vary for gender variant students?
- How do biracial students from divergent racial/ethnic makeups engage differently than one another and their monoracial peers on campus?
- How do various aspects of civic engagement compare for Black or African American men faculty and women and White men and women faculty?
- What are the occupational goals of African American women graduate students who teach?
- Who are the faculty who report experiencing discrimination, harassment, or isolation?

## Session Plan

- What are potential administrative issues with studying small populations?
- What are some analysis and communication issues for results from small populations?
- What are potential validity and data quality issues for small populations?
- Why study small populations?
- How do we build public trust?

## What are potential administrative issues with studying small populations?

- Think ahead of time about your small populations so strategic efforts can be made to recruit them
- It can be difficult to find and contact the people in small populations in order to study them
- It can be difficult to get the people from small populations to buy in to studies (particularly when they already feel marginalized)
- You may not want to 'out' people from small populations

## What are potential administrative issues with studying small populations?

- Given the population is already small, you may get very few participants
- Small groups of people can be quickly exhausted with survey and study burden
- **Campus Z:** To better understand effects of gender on feelings of support, folks work hard to encourage participation from gender variant students by reaching out to gender-related student groups and offices.
- Other issues?

## What are some analysis and communication issues for results from small populations?

- Statistically, methods for analyzing small populations are limited, but it's important to not disregard them
  - Percent differences and descriptive analyses are legitimate forms of analysis!
- Very few resources exist to guide researchers in examining small populations, often the focus of research is on having obtained large sample sizes
- Comparing small populations to the general population does not have to be the standard for analysis. Their story alone is enough
- Be wary of clumping together small groups to increase your counts
- Just because a certain statistical method won't work, that doesn't mean the study is over!

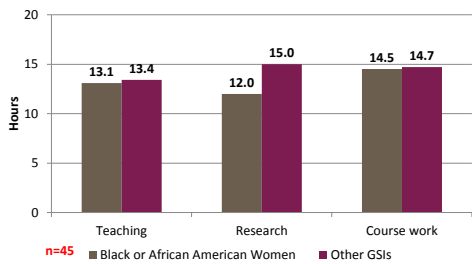
### What are some analysis and communication issues for results from small populations?

- Reset the expectations of your audience before presenting results on small populations
- **Campus Y:** Studying the results for some of their students of color is better than not studying them at all! Issues raised by some of their students of color should still be addressed even though they are a small group of students. Examining the survey responses for this small group on their own allows researchers to get a glimpse of the experiences of these students even if they are not included in statistical models
- Other suggestions?

### Examples

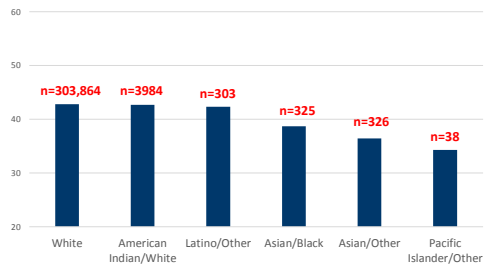
The following slides give some example findings from studies of small populations. These findings come from real data examined by researchers at the Center for Postsecondary Research.

### Time Spent Per Typical Week by Graduate Students Who Teach



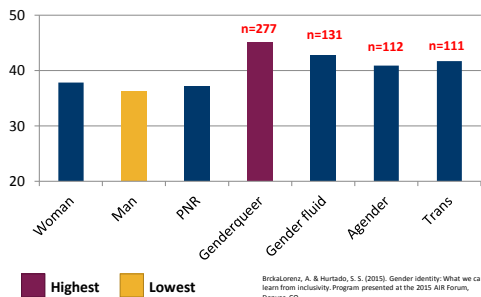
Wheatle, K. & Brick Lorenz, A. (2015). Socializing maminies? Examining graduate student engagement of black women graduate instructors. Program presented at the 28th Annual National Conference on Race & Ethnicity in American Higher Education, Washington, DC.

### Quality of Interactions by Select Racial/Ethnic Identification



Harris, J., Brick Lorenz, A., & Nelson Laird, T. (2014). Engaging in the margins: Exploring differences in bicultural students' engagement by racial/ethnic makeup. Paper presented at the Association for the Study of Higher Education Annual Conference, Washington, DC.

### Reflective & Integrative Learning by Gender Identity



Brick Lorenz, A. & Hurtado, S. S. (2015). Gender identity: What we can learn from inclusivity. Program presented at the 2015 AIR Forum, Denver, CO.

### What are potential validity and data quality issues for small populations?

- Data collection from multiple cohorts can help strengthen the findings from small populations. This may mean collecting data more frequently, if possible.
- An expanded evidence base with a triangulation of results from multiple sources can strengthen the validity of smaller sample sizes
- Take a qualitative stance on interpreting quantitative results—you're still telling the story of some students even if the results aren't generalizable

### What are potential validity and data quality issues for small populations?

- It's possible that a small group of participants actually captures most or all of your entire small population!
- **Campus X:** Analyzing multiple sources of data, seriously considering the results of their 1 American Indian student, and being careful about not trying to generalize to all students gives strength to findings about students of color at Campus X.
- Other suggestions?

### Why study small populations?

- Groups experience higher education differently; when we disaggregate data, some groups are small
- The experiences of small populations can be lost in aggregate results
- Not studying small populations can further marginalize often-marginalized groups
- Results from small groups are often the most revealing
- Some schools are just small to begin with!

### Building trust with small populations?

- Not ignoring them goes a long way
- Demonstrating how their responses make a difference and/or affect change can help
- Involving members of these groups in collecting and analyzing data, planning, and action steps builds good will
- Explaining how methods of assessment can vary in order to capture experiences builds understanding
- Other suggestions?

### Building trust internally?

- Working up and down the chain (not everyone gets it, but everyone can get it)
- Connecting this work to core institutional values makes it hard to ignore
- Moving to actions, not just discussion, makes positive change felt
- This is worth it so give people the space and resources needed (at least not fewer resources)
- Other suggestions?

### Building trust externally?

- Simply making results public shows what your institution values
- Demonstrating institutional strengths and areas for improvement shows you care and are invested in the success of all those on your campus
- Demonstrating effects for all requires going beyond the "typical" or "average" person and illustrates your understanding of how complex things are
- Bringing your institution's story to many groups helps them connect
- Demonstrating your commitment publicly brings you to the communities you serve
- Other suggestions?

### What's you plan?

- What questions will you pursue?
- What small populations will you try to learn more about?
- Who will you involve in doing this work?
- How will you build trust?
- What will you do next week? And the next?
- How will you measure success?

# Final thoughts and questions?

Thank you for joining us!

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This presentation and more information about  
NSSE, FSSE, and research on small populations  
can be found at [nsse.indiana.edu](http://nsse.indiana.edu)

