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**Using the Chat feature:**
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Examining Engagement for Small Populations

NSSE Webinar
Thursday, March 9, 2017 at 2pm EST

Allison BrckaLorenz
NSSE Analyst, FSSE Project Manager

Sarah Hurtado
NSSE Institute Project Associate
• Why study small populations?
• Some context-setting examples
• Who are the small populations you want to learn about on your campus?
• What’s small?
• Administrative issues
• Analyzing data and communicating results
• Some small populations example results
• Validity and data quality
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
• Not ignoring small populations can go a long way towards building trust
• Looking within your data by department may result in small numbers, but it can help contextualize results
• Some schools are just small to begin with!
A series of incidents at NSSEville U have led to some climate issues related to race

- 6000 seniors; 720 seniors of color (12%)
- Survey response rate ~23% leads to 166 senior respondents of color

- 166 respondents is relatively large, but that group represents students with varied racial/ethnic identities who are likely experiencing the climate differently
NSSEville State has difficulty attracting and retaining students of color through graduation.

- 500 seniors; 60 seniors of color (12%)
- Survey response rate ~30% leads to 18 senior respondents of color
- 18 respondents is relatively small, but that doesn’t mean the experiences of students of color shouldn’t be examined or that African American (4 respondents) and American Indian (1 respondent) seniors experience NSSEville State the same
NSSEville College

• NSSEville College has had several incidents with students’ names not being correct on class rosters
• 600 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
Who are the small populations you want to know more about on your campus?
Who are some of the small populations we (Allison and Sarah) have studied?

- LGBQ 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
- Graduate students who teach
What’s Small?

• There’s no concrete definitive answer on this

• NSSE and FSSE are comfortable reporting simple descriptive information (counts and percentages) for groups as small as ten, for other descriptives and statistical comparisons (means, standard deviations, t-tests, etc.), we report for groups as small as 20
  • We’ll talk more about this in Validity and Data Quality

• Depending on the context, groups as small as five might start making people identifiable, be thoughtful about not outing anyone. Allison has the benefit of looking at data from multiple institutions, but you likely do not!
Administrative Issues

• It can be difficult to find and contact the people in small populations in order to study them
  • Think ahead of time about your small populations so strategic efforts can be made to recruit 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

• Given the population is already small, you may get very few participants
Administrative Issues

• Small groups of people can be quickly exhausted with survey and study burden

• **NSSEville University:** with the current chilly climate for students of color, they may feel disconnected from the institution and less likely to respond to study requests

• Other issues?

• Advice from the audience?
Analyzing Data and Communicating Results

• 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

• If you’re working with someone who says an analysis can’t be done, open the door to discussing options that could be done—there are always options!
Analyzing Data and Communicating Results

• 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.
  • Allison examines the experiences of subgroups to see if they’re similar before grouping them together to avoid unfortunate, ambiguous “other” categories or collapsed categories that hide the experiences of small groups.

• If necessary, leave small populations out of “fancy” statistical analyses and use more simple analyses to examine their experiences separately.
Analyzing Data and Communicating Results

• Reset the expectations of your audience before presenting results on small populations
  • No need to insist on generalizability, results may not be generalizable, but they’re still the experiences of some of your students
    • Do we wait for a large enough sample size of students to show up to office hours before helping clarify a concept?!
  • Take the focus off of statistical significance and put it on practical significance, it’s harder to find statistical significance for small groups
  • Focus your audience on having conversations, not on showing them proof or evidence. Often solutions for small populations improve conditions for everyone
Analyzing Data and Communicating Results

• **NSSEville College:** No trans students responded to their survey, but that doesn’t mean we should give up on learning about their experiences—we can still have a conversation about improvement!

• **NSSEville State:** Just because we only had 18 respondents of color doesn’t mean we shouldn’t talk about their experiences—their experiences matter!

• Other suggestions?

• Advice from the audience?
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

<table>
<thead>
<tr>
<th>Activity</th>
<th>Black or African American Women</th>
<th>Other GSIs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching</td>
<td>13.1</td>
<td>13.4</td>
</tr>
<tr>
<td>Research</td>
<td>12.0</td>
<td>15.0</td>
</tr>
<tr>
<td>Course work</td>
<td>14.5</td>
<td>14.7</td>
</tr>
</tbody>
</table>

Reflective & Integrative Learning by Gender Identity

Validity and Data Quality

- 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.
- Quantitative results from small populations are often nicely complimented and validated by qualitative studies.
Validity and Data Quality

• It’s possible that a small group of participants actually captures most or all of your entire population!

• Take a qualitative stance on interpreting quantitative results—you’re still telling the story of some students even if the results aren’t generalizable
  • Just be careful you’re not telling the story of an individual. It would be unkind to present results on “Sarah” when we can all figure out who “Sarah” is
• Response rate is not everything! Check your data for bias (do respondent proportions mirror your population proportions?) An unbiased small group can be better than a biased large group!
  • College student engagement has been shown to be reliable for response rates as low as 5-10% (for a sample of 500 students) and stable with respondent counts around 50 [http://muse.jhu.edu/article/640611]

• Other suggestions?
• Advice from the audience?
Small populations!

Final thoughts or questions?
Thank you for joining us!

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This presentation and more information about NSSE and research on small populations can be found at nsse.indiana.edu