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BUILDING AND SUSTAINING A CULTURE OF HIGH-QUALITY DATA

No Response Is a Response: How Nonresponders Can Influence Your Data

June 21–23, 2022

IDC | IDEA DATA CENTER | Collect, Report, Analyze, and Use High-Quality Part B Data

Westat®

Presenters

Nashville, TN - June 6–7, 2022

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Virtual - June 21–23, 2022

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Participant Outcomes

- Describe the impact that nonresponse bias has on the quality and usefulness of state data
- Identify strategies to assess if nonresponse bias is affecting survey results
- Identify strategies to reduce potential bias and improve data quality

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Agenda

- Overview of nonresponse bias
- Discussion and state presentation
- Group activity
- Strategies and resources
- Wrap-up

Overview of Nonresponse Bias

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What Is Nonresponse Bias?

- A significant number of people do not respond to the survey
- Nonresponders have different characteristics from those who do respond
- These characteristics are important to the study
  - Bias is most likely to influence the results of a study when nonresponders differ in ways that are related to the outcome you are interested in (e.g., parental involvement, post-school outcomes)

How Does Response Rate Factor In?

- Response rate
  - The most widely used indicator of survey quality
  - A valuable data quality measure because of its relation to nonresponse bias
- High response rate limits the maximum nonresponse bias
- Low response rate increases the likelihood of potential for nonresponse bias in the survey
- However, response rate ≠ bias

Why Is Data Representativeness Important?

- Indicates extent to which the data that we collect reflect the population we are surveying on specific characteristics
- Informs if the results are generalizable (i.e., reflect reality for the entire target population) and can be interpreted meaningfully

Why Does Nonresponse Bias Matter?

- Our ability to generalize from the results is limited
- The data are not as complete, accurate, or useful
- Decisions we make based on the data are misinformed
- Considering response rate, data representativeness, and nonresponse bias helps to strengthen data use and data collection processes, including survey design

An Example: Indicator 8

Race	Percentage of child count	Percentage of survey respondents	Percentage agreement
American Indian/ Alaska Native	3.0%	2.5%	79.5%
Asian	5.9%	2.0%	77.3%
Black	39.5%	19.3%	80.5%
Hispanic	18.3%	8.9%	65.2%
Native Hawaiian/ Pacific Islander	1.1.%	0.9%	70.5%
Two+ Races	8.0%	6.0%	78.2%
White	25.3%	61.3%	89.8%

Overall percentage agreement 78.6%

What potential for nonresponse bias do you see?

Discussion

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OSEP Requirements Related to Nonresponse Bias

- Describe strategies that will be implemented that are expected *increase the response rate* year over year, particularly for those *groups that are underrepresented*

- Describe the analysis of the response rate including any *nonresponse bias that was identified,* and the steps taken to *reduce any identified bias* and promote response from a broad cross section of parents of children with disabilities/youth who are no longer in secondary school and had IEPs in effect at the time they left school

Indicator 8 in Washington State

- NCSEAM Survey (26 questions)—since 2006
- Paper/pencil, 12 languages
- Tied to monitoring
- 10,000–30,000 surveys per year
- Results analyzed by region, school building, race/ethnicity, home language, grade level, disability category, least restrictive environment (LRE) category, & school type

Current Strategies to Increase Representativeness

- Survey is available in the 12 most common languages in the state
- District partners send information to parents ahead of the surveys going out
- Several reminders are sent to parents during the survey window
- Collection of feedback from parents who have completed the survey

Washington's Indicator 8, 2020–21

Race/ethnicity	Percentage of total surveyed	Percentage of survey respondents	Percentage agreement
American Indian/ Alaska Native	1.7%	1.2%	33.3%
Asian	1.5%	2.3%	46.4%
Black or African American	2.8%	2.4%	50.0%
Hispanic	15.3%	12.9%	44.0%
Native Hawaiian/ Other Pacific Islander	0.7%	1.0%	75.0%
Two or more races	10.4%	10.9%	38.5%
White	67.6%	69.3%	41.4%

Overall percentage agreement 42.0%

Washington's Indicator 8, 2020–21

Disability	Percentage of total surveyed	Percentage of survey respondents	Percentage agreement
Autism	12.9%	**18.4**%	41.4%
Communication disorder	15.5%	15.3%	55.6%
Developmental delay	12.3%	14.8%	45.9%
Emotional disturbance	3.1%	2.7%	24.2%
Intellectual disability	3.6%	3.2%	43.6%
Multiple disabilities	2.3%	3.2%	35.0%
Other health impairment	19.8%	18.5%	36.2%
Specific learning disability	29.1%	**22.3**%	38.5%

Overall percentage agreement 42.0%

Moving Forward—State Design Team

Washington State

4.9% 2.0% 8.9% 3.9% 1.1% 13.0% 0.6% 67.3%

Parent Engagement

4.4% 2.2% 6.7% 2.2% 4.4% 6.7% 2.2% 71.1%
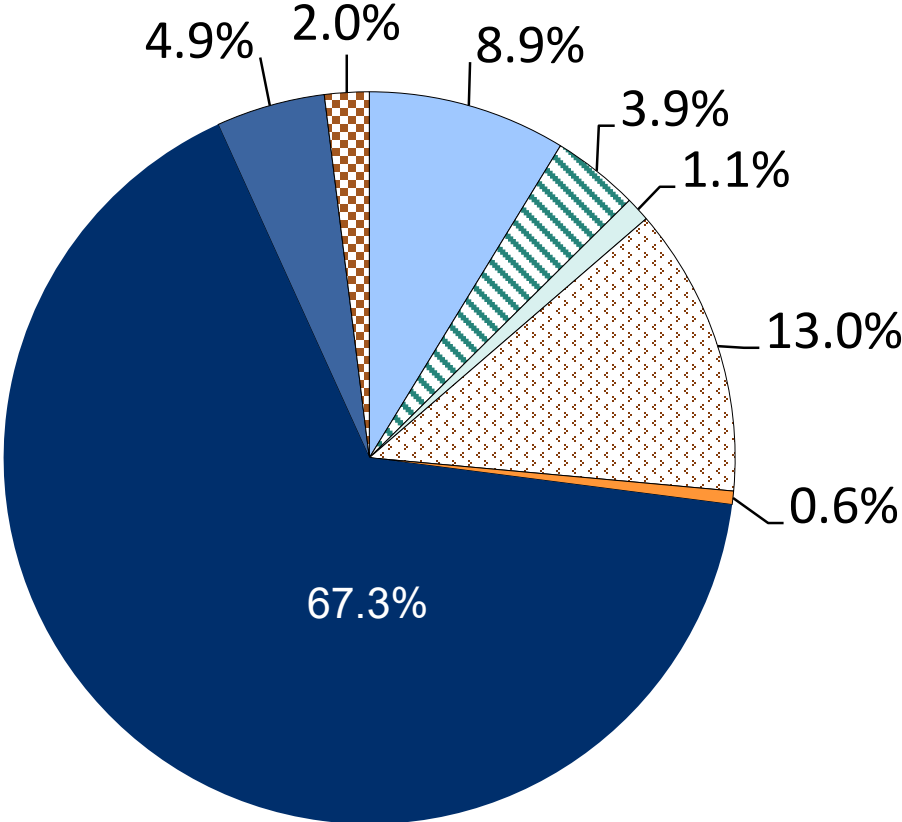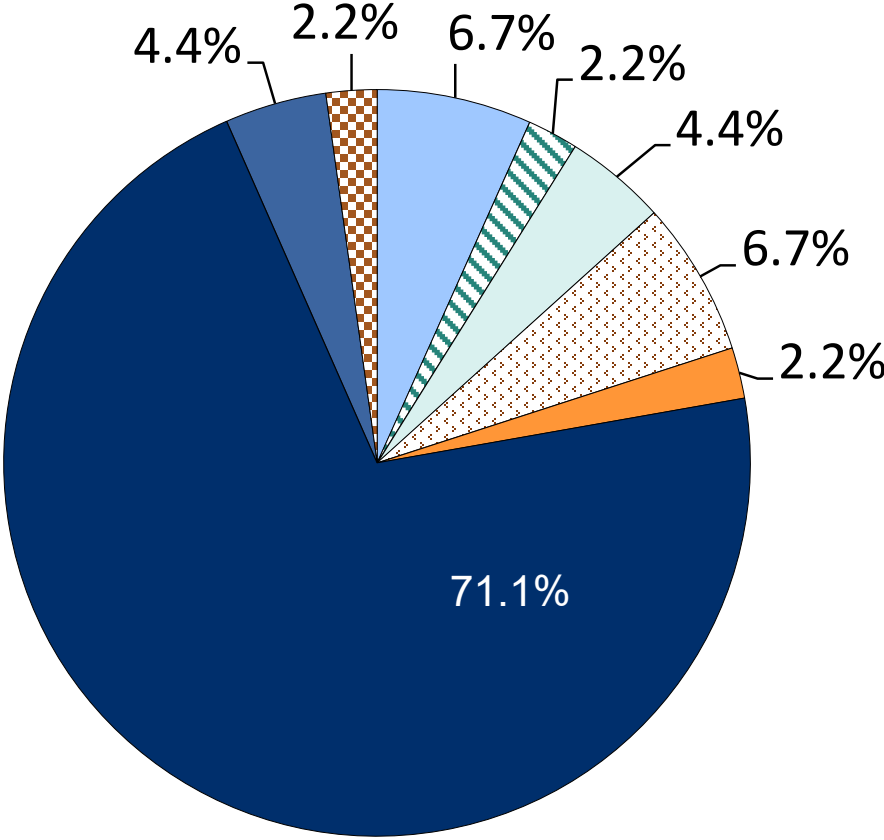
Legend:
- Asian
- African American
- Am Ind/AK Native
- Hispanic
- Native HI/Pac Isl
- White
- Two or more
- NA

Group Activity

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Group Activity: Thinking About Survey Nonresponse

- Scenario: Making decisions based on data

- True–False activity on representativeness and nonresponse bias

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Another Example: Indicator 14

Exit reason	Percentage of total leavers	Percentage of survey respondents
High School Diploma	53.8%	76.3%
Certificate	7.2%	3.5%
Dropped Out	38.9%	20.2%

Overall response rate: 54.8%

Indicator results:
14A: 35.6%
14B: 58.9%
14C: 84.6%

How does your state collect post-school outcome data?
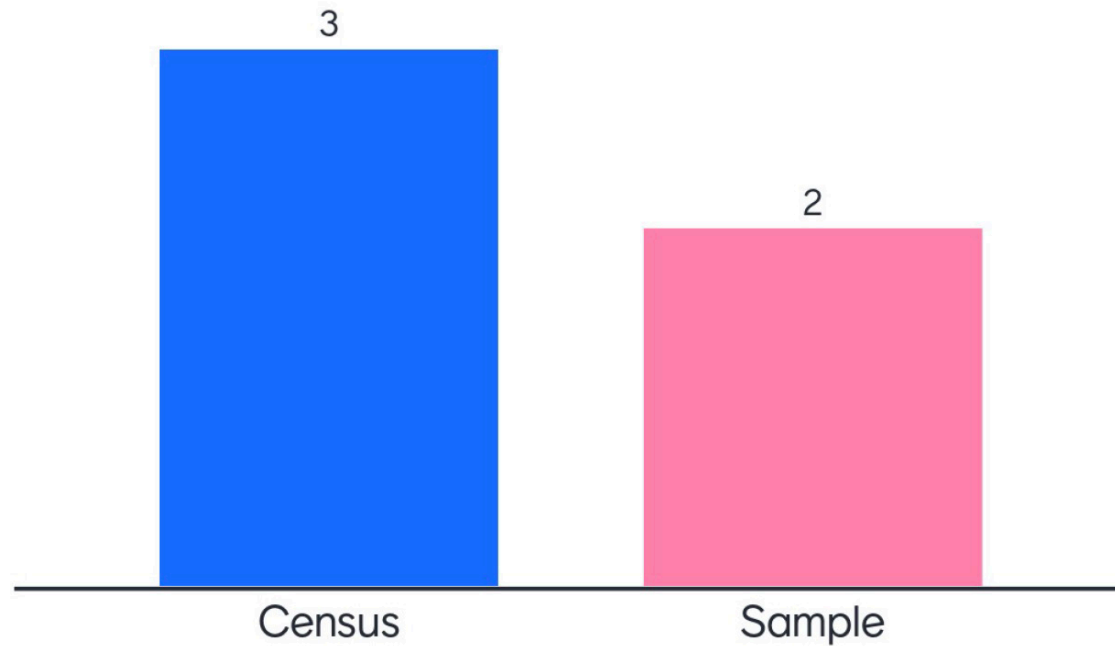
Source: Third-party application (Mentimeter).

Strategies and Resources

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Strategies Before/During Data Collection

- Remember: Prevention is the best remedy!
- Assess risk of nonresponse so you can mitigate it
- Design your sample for best coverage/representativeness
- Use good survey design
- Use collection and follow-up best practices

Strategies After Data Collection

- Assess nonresponders through follow-up or level of effort analysis
- Use postsurvey adjustment techniques to help reduce nonresponse
  - Statistical weighting
  - Imputation of missing data

Resources

- *SEA Data Processes Toolkit* (Protocols for Indicators 8 and 14)
- *Parent Involvement Data: How to Measure and Improve Representativeness for Indicator B8*
- *Post-School Outcomes: Response Rates and Nonresponse Bias*
- *Response Rate, Representativeness, and Nonresponse Bias— They All Matter*
- Forthcoming: IDC Nonresponse Bias Analysis Tool

Contact Us

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What actions will you take to commit to being a Data Quality Influencer?

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For More Information

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