

Now What?

Using Assessment Results to Improve Practice

Sarah Hansen, Director of Assessment, VPSS

Suzanne Fox, Graduate Assistant

Analyzing Data

Quantitative data

- Organize the data
- Give the data a “onceover,” noting your first impressions
- Calculate descriptive statistics:
 - Mean – the average score (sum of scores/number of scores)
 - Median – the middle score when scores are arranged from lowest to highest
 - Mode – the most common score
 - Standard deviation – the average amount scores deviate from the mean (if it is low, scores tend to cluster around the mean; if it is high, scores cover a wide range of values)
 - Sums and percentages (e.g., number of participants, percentage of participants who agreed or strongly agreed with a given statement)
 - Electronic survey design programs (e.g., Zoomerange, Websurveyor) will calculate most descriptive statistics for you
 - See “Resources” section for guides on how to use Microsoft Excel and SPSS to calculate descriptive statistics
- If comparing two sets of data (e.g., pre-test data and post-test data), use functions in Microsoft Excel and SPSS to calculate inferential statistics:
 - Goal: to answer the question of whether two sets of data are *statistically significantly* different (i.e., whether you can confidently *rule out* the possibility that differences between the two sets of data occurred by chance)
 - Common inferential statistics:
 - Two-tailed *t*-test for independent samples – use when comparing the means of two sets of data *from different groups of participants*
 - Two-tailed *t*-test for dependent samples – use when comparing the means of two sets of data *from the same group of participants*
 - See “Resources” section for guides on how to use Microsoft Excel and SPSS to calculate descriptive statistics
- Take a step back
 - What do the data tell you about your assessment question?
 - What are their implications for policy and/or practice?
 - What, if anything, will you change about the assessment process?

Qualitative (text or narrative) data

- Organize the data
- Give the data a “onceover,” noting your first impressions
- Categorize the data
 - You can (a) determine the categories ahead of time, (b) allow the categories to emerge from the data, or (c) do both
 - You may end up with “categories of categories” (i.e., categories and subcategories)
 - Remember: this is an *iterative* process
- Determine the relative significance of each category by counting the number of times it occurs
- Note responses that do not fit into the categories
- Take a step back
 - What do the data tell you about your assessment question?
 - What are their implications for policy and/or practice?
 - What, if anything, will you change about the assessment process?

Tips for Writing Assessment Reports

- Limit summary reports to 3 pages or less – shoot for a one pager
- Keep it simple. Key sections: 1) What you did 2) What you learned 3) What you’ll do about it – Use narrative (stories) and quantitative data (numbers) together when possible
- Include directions on how to obtain the full report in the summary reports
- Make the reports “reader friendly”
- Make recommendations: *Report writers often assume that the study speaks for itself or that it is inappropriate to write a report that advocates a position or recommended action.... The purpose of assessment is to inform policy and practice. In other words, an assessment study fails at its most basic level when recommended actions are omitted* (Schuh & Upcraft, 2001, p. 481).

Resources

Analyzing quantitative data

- Microsoft Excel:
 - How-to guide: <https://learningstore.uwex.edu/assets/pdfs/G3658-14.pdf>
- SPSS:
 - Access through UI’s Virtual Desktop: <https://virtualdesktop.uiowa.edu/Citrix/VirtualDesktop/auth/login.aspx>
 - How-to guides: <http://www.education.uiowa.edu/statoutreach/shortcourses/>;
<https://www.washington.edu/uware/spss/docs/SPSS%20Statistics%20Brief%20Guide%2017.0.pdf>

Analyzing qualitative data

- How-to guide: <http://learningstore.uwex.edu/assets/pdfs/g3658-12.pdf>