“I’ve got the data, now what?:” Making Sense of Assessment Data

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“I’ve got the data. Now what?”
Making Sense of Assessment Data

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Overview

- Types of Data
- Analyzing Qualitative Data
- Analyzing Quantitative Data
- Identifying Areas of Improvement
Take aways

- **Identify themes** in qualitative data
- The **standard deviation** tells you the degree of variation in the responses
- Compare the performance/experience/satisfaction of **subgroups** to see if there are differences
- If using factors or scales, look at the **factor/scale components** to identify areas of improvement
## Types of Data

<table>
<thead>
<tr>
<th>Qualitative:</th>
<th>Quantitative:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transcripts</td>
<td>Survey Data</td>
</tr>
<tr>
<td>Observations</td>
<td>Attendance</td>
</tr>
<tr>
<td>Text</td>
<td>GPA</td>
</tr>
<tr>
<td>Articles</td>
<td>Retention</td>
</tr>
<tr>
<td>Pictures</td>
<td>Room Assignments</td>
</tr>
</tbody>
</table>

Room Assignments – could study move out trends; experience of triples; sociogram
Pictures – Environmental analysis
Analyzing Qualitative Data

Identify themes (coding)

Apple
Orange
Tennis ball
Pine apple
Cleats
## Analyzing Qualitative Data

Identify themes (coding)

<table>
<thead>
<tr>
<th>Round objects:</th>
<th>Not round objects:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apples</td>
<td>Pine apples</td>
</tr>
<tr>
<td>Oranges</td>
<td>Cleats</td>
</tr>
<tr>
<td>Soccer balls</td>
<td></td>
</tr>
</tbody>
</table>

Could group by roundness — > not practical and has little meaning
Context matters. The question can aid you in categorizing the responses. The implication would be to provide some type of fruit and athletic equipment to improve athletic performance.

### Analyzing Qualitative Data

**Identify themes (coding)**

**What can we provide to help you improve your performance?**

<table>
<thead>
<tr>
<th>Fruit (3):</th>
<th>Athletic equipment (2):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apples</td>
<td>Cleats</td>
</tr>
<tr>
<td>Oranges</td>
<td>Soccer balls</td>
</tr>
<tr>
<td>Pine apples</td>
<td></td>
</tr>
</tbody>
</table>
Analyzing Qualitative Data

How can we support you in using Restorative Justice tools and applying the Restorative Justice philosophy in your work?

1. Better examples of how it applies to everyday situations.
2. I don't think it works.
3. Make a website about the information.
4. I would like pre-made kit or bulletin board would be helpful.
5. Find ways to make it meanwhile for residents.
6. Help me define what the program and process is to my residents.
7. Give us examples for when we would actually use it

Activity: Identify themes and then place the statements within the categories.
Analyzing Qualitative Data

How can we support you in using Restorative Justice tools and applying the Restorative Justice philosophy in your work?

Doesn’t work: I don’t think it works.

Resource Idea:
Make a website about the information.
I would like pre-made kit or bulletin board would be helpful.

Clarify use of RJ:
Better examples of how it applies to everyday situations.
Find ways to make it meanwhile for residents.
Help me define what the program and process is to my residents.
Give us examples for when we would actually use it

Sample coding structure
You might choose to display your categories graphically (consult a book on quantitative or qualitative content analysis).
From a reporting standpoint, I would still show the actual responses near the graph.
Analyzing Quantitative Data

Frequency
Central Tendency
Dispersion
Analyzing Quantitative Data

Frequency
  Counts

Central Tendency
  Mean, Median, Mode

Dispersion
  Standard deviation, range
I am satisfied with my on-campus housing experience

Example of frequencies
Crosstabulation of satisfaction with perception of safety when walking on campus at night and gender.

How to read: compare the male percentage to the female percentage for each row. As one moves down, first the female percentage is higher than the male percentage (e.g., 3.73 > 1.85) and then the male percentage is higher than the female percentage (e.g., 42.47 > 22.80). This shows that males tended to be more satisfied than women.

When doing this, ensure the percentages add up to 100 along the demographic variable (i.e., gender).
Example of interpreting means and standard deviations. The standard deviation of “How safe you feel walking on campus at night” is larger than the other items. This shows that there was more variation in the responses. The standard deviation can help identify items where subpopulations might have different experiences. As we know from the previous example, there is a gender difference.

The low mean for the same item tells me that to improve the overall factor score (M=5.77), I should devote resources to improving how safe people feel walking on campus at night (especially women).
Identifying Needs

- Analyze by subgroup
- Who performs well?
- Who performs poorly?
- How big are the differences?
Identifying Needs

- Analyze by subgroup
  - Gender
  - Race
  - Year-in-school
  - Living arrangement
  - Involvement/participation
  - Satisfaction

Can dichotomize or recode into smaller categories
Example

Personal Growth Factor – M = 5.32, SD = 1.53

<table>
<thead>
<tr>
<th>Personal Growth</th>
<th>Response Categories*</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>To what degree has living in on-campus housing enhanced your ability to:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Understand the consequences of alcohol use and abuse</td>
<td>5.13</td>
<td>1.85</td>
</tr>
<tr>
<td>Understand the consequences of drug use and abuse</td>
<td>5.09</td>
<td>1.87</td>
</tr>
<tr>
<td>Respect other races/ethnicities</td>
<td>5.52</td>
<td>1.59</td>
</tr>
<tr>
<td>Improve communication skills</td>
<td>5.47</td>
<td>1.56</td>
</tr>
</tbody>
</table>

a 1– Not at all; 4–Moderately; 7–Extremely. Percentages may not add up to 100, due to rounding error.

Look at factor components with the lowest mean
Example

Personal Growth Factor – $M = 5.32$, $SD = 1.53$

Look at differences by subgroup
Example

Personal Growth Factor – $M = 5.32$, $SD = 1.53$

Recommendation:

Can improve the personal growth factor by providing more alcohol and drug education.
Now what?

- Develop recommendations
- Share the results and recommendations with constituents
- Incorporate “assessment updates” in your meetings
Take aways

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