Reporting Data for Research

PRESENTED AT THE SUMMER SEMINAR
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GARDNER-WEBB UNIVERSITY
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WHY ARE YOU HERE?
WHAT DO YOU ALREADY KNOW?
WHAT DO YOU WANT TO LEARN?
6 Steps to Completing Your Dissertation

1. DRUDGERY
2. PROCRASTINATION
3. PANIC
4. DESPAIR
5. DRUDGERY
6. PRINTING
Definitions

DATA: factual information (as measurements or statistics) used as a basis for reasoning, discussion, or calculation

RESEARCH: investigation or experimentation aimed at the discovery and interpretation of facts, revision of accepted theories or laws in the light of new facts, or practical application of such new or revised theories
1. Pose significant questions that can be investigated empirically

2. Link research to relevant theory

3. Use methods that permit direct observation of the question

*Scientific Inquiry in Education*, National Research Council (2001)
4. Provide coherent, explicit chain of reasoning

5. Replicate and generalize across studies

6. Disclose research to encourage professional scrutiny and critique
Chapter Four
Results or Findings
• Write an introduction that includes the purpose of the study
• Display data by research question
• Develop charts and displays that report the data clearly
• Summarize the data, but do not conclude
• Follow APA format and style guide
Reporting should reflect your methodology.

Quantitative = More charts and graphs

Qualitative = More words, figures and diagrams
What about tables and figures?

- Look backward: What charts, tables, figures or graphs will help answer your research questions?
- Look forward: What charts, tables, figures or graphs will explain your findings?
- What figures will tell your story?
A figure can graphically convey the coding and themes found in qualitative research.

**Figure 5.2. An Empirical Typology of Teacher Roles in Dealing With High School Dropouts**

<table>
<thead>
<tr>
<th>Teachers' beliefs about how to intervene with dropouts</th>
<th>behaviors towards dropouts</th>
</tr>
</thead>
<tbody>
<tr>
<td>teachers' beliefs about how to intervene with dropouts</td>
<td>taking responsibility ↔ shifting responsibility to others</td>
</tr>
<tr>
<td>rehabilitation</td>
<td>counselor/friend: help kids directly</td>
</tr>
<tr>
<td>maintenance (caretaking)</td>
<td>referral agent: refer them to other helping agencies</td>
</tr>
<tr>
<td>punishment</td>
<td>traffic cop: just keep them moving through the system</td>
</tr>
<tr>
<td></td>
<td>ostrich: ignore the situation and hope someone else does something</td>
</tr>
<tr>
<td></td>
<td>old-fashioned school master: make them feel the consequences</td>
</tr>
<tr>
<td></td>
<td>complainer: somebody should remove the problem kids</td>
</tr>
</tbody>
</table>
Quantitative data charts and figures may be included in the body or saved for the appendix.

**FIGURE 3.** Observed distribution of teacher Washington Educator Skills Test—Basic score in fourth-grade classrooms by student free/reduced-price lunch status
A scatter plot is a quick visual interpretation of possible correlation.
## Clear reporting of significance

### Table 1

*Pearson correlations for main study variables*

<table>
<thead>
<tr>
<th></th>
<th>Time watching TV</th>
<th>Cholesterol</th>
<th>CRP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cholesterol</td>
<td>.371*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRP</td>
<td>.341*</td>
<td>.886*</td>
<td></td>
</tr>
<tr>
<td>TAG</td>
<td>.312*</td>
<td>.858*</td>
<td>.981*</td>
</tr>
</tbody>
</table>

*Note.* CRP = C-Reactive Protein, TAG = Triglyceride, * = statistically significant at $p < .05$ level.
Basic descriptive statistical displays add to reporting for all methods of research.

**Group Statistics**

<table>
<thead>
<tr>
<th>gender</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>engagement Male</td>
<td>20</td>
<td>5.5589</td>
<td>.29190</td>
<td>.06527</td>
</tr>
<tr>
<td>Female</td>
<td>20</td>
<td>5.2999</td>
<td>.39339</td>
<td>.08797</td>
</tr>
</tbody>
</table>

**Physical Activity Level**

<table>
<thead>
<tr>
<th>Physical Activity Level</th>
<th>Mean</th>
<th>Std. Error</th>
<th>95% Confidence Interval</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sedentary</td>
<td>4.151</td>
<td>.530</td>
<td>3.064</td>
<td>5.239</td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>5.879</td>
<td>.467</td>
<td>4.920</td>
<td>6.838</td>
<td></td>
</tr>
<tr>
<td>Moderate</td>
<td>7.123</td>
<td>.496</td>
<td>6.106</td>
<td>8.140</td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>7.505</td>
<td>.530</td>
<td>6.418</td>
<td>8.593</td>
<td></td>
</tr>
</tbody>
</table>

Mean = 5.015
Mean = 7.314
Recommended Length

- Dan Butin in *The Education Dissertation* recommends that findings be about 30% of your completed dissertation.
- This is where you are reporting your important findings! You should have a lot to say here!
APA Style

Consult APA for "Displaying Results". Use correct format and follow guidelines for displays.
DO YOU HAVE THIS SITE BOOKMARKED?

HTTP://GWUDISSERTATIONON.WIKISPACES.COM/GWU+DISSERTATION+INFORMATION

GWU Style Guide
The best way to understand dissertations is to read them!
Write successive drafts
Choose data displays with a purpose

- FIND YOUR VOICE AND A STYLE THAT MATCHES YOU (THE WRITER) AND YOUR PURPOSE
- CHOOSE DATA DISPLAYS THAT WILL TELL YOUR STORY CLEARLY AND ANSWER YOUR RESEARCH QUESTION(S)
- SEND TO YOUR CHAIR FOR FEEDBACK
Good luck!

Write on!