On Rutgers-Newark Campus, Dana Library’s Data Services provide introductory workshops on statistical software packages to graduate students.

**Research Question:** what can library instruction do to improve graduate students’ learning experience, in addition to technical training?

### Technical Training Features

**Observational Learning Process**

- **Activities**
  - Observe Demonstration → Practice → Observe Demonstration → Practice

### Library Instruction Features

**Broader Information Resources for Active and Long-Term Learning Process**

- **Before-Training Preparation**
  - Comparison of statistical software packages
  - Limitation of software as a calculating tool
  - Big picture of the software’s input-output structure

- **During the Training**
  - How to use “help”
  - How to make “comments”
  - Alternative ways to perform a task: menu, interactive commands & programming

- **Post-Training Resources on LibGuide**
  - Links to Additional Online Tutorials
  - Links to Online Software Documentation
  - Workshop notes and sample programming code

- **Additional Background Information**
  - Data analysis best practices
  - ICPSR’s data preparation guide
  - LibGuide on Data Management

### Immediate, Delayed & Related Task Performance

- Procedural Knowledge
- Post-Training Software Self-Efficacy
- Reference Knowledge

### Percentage of Students Who Think the Following Instructional Features are Useful/Very Useful

<table>
<thead>
<tr>
<th>Feature</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comparison of Statistical Software Packages</td>
<td>93.10%</td>
</tr>
<tr>
<td>LibGuide for Data Services</td>
<td>92.96%</td>
</tr>
<tr>
<td>Hands-on Exercise</td>
<td>91.67%</td>
</tr>
<tr>
<td>The Whole Workshop</td>
<td>90.54%</td>
</tr>
<tr>
<td>Other Online Tutorials and Resources</td>
<td>86.96%</td>
</tr>
<tr>
<td>LibGuide for Data Management</td>
<td>86.11%</td>
</tr>
<tr>
<td>Data Analysis Best Practice</td>
<td>85.71%</td>
</tr>
<tr>
<td>Limitation of Statistical Software as a Tool</td>
<td>76.09%</td>
</tr>
<tr>
<td>ICPSR’s Data Preparation Guide</td>
<td>73.81%</td>
</tr>
</tbody>
</table>

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