





Analyzing qualitative data





Qualitative data

- Do not have numerical meaning
- Usually collected via
 - Questionnaire
 - Categorical or ordinal
 - Open-ended
 - Interview
 - ← Non-numerical observation
 - Artifacts created during intervention
 - Worksheets, journals, logs, audio/video records, etc.



Descriptive statistics

Inferential statistics

	Nominal	Ordinal
Categories	✓	✓
Rank order		✓
Frequency	✓	✓
Mode	✓	✓
Median		√
Range		✓

	Instead of
Chi-square (fit/indep)	Pearson's correlation
Spearman's corr.	Pearson's correlation
Mood's median	Independent t
Sign	One-sample/paired t
Wilcoxson signed-rank	Paired t
Mann-Whitney <i>U</i>	Independent t
Kruskal-Wallis H	ANOVA
ANOSIM	MANOVA



Analyzing text

- Transcribe to text verbatim if necessary
- Select an analysis method
 - Content analysis
 - Have preconceived notion of what the data will be like
 - Thematic analysis
 - Let the data tell us what it is
 - Narrative analysis
 - Extract personal experiences and viewpoints from the data



Content vs thematic analyses

	Content analysis	Thematic analysis
Purpose	Systematically categorize content	Identify themes
Coding	Based on predefined categories	Based on emerging themes
Focus	Objective assessment of content	Understanding underlying meanings
Level	Surface	Deep
Emphasis	Frequency distribution	Themes and patterns
Context	Limited emphasis on context	Consideration of relevant context
Flexibility	Rigid coding scheme	Flexibility in identifying themes
Subjectivity	Low	High
Application	Quantitative and qualitative	Qualitative and narrative



Activity 8: Thematic analysis

- Think about a survey question requiring long answers
- Ask a GenAI to help generate the answers
 - No more than 10 participants
- Analyze your data
 - —What are the common themes?
- Ask AI to perform thematic analysis on the data
 - Be sure to make it explain the steps in detail
- Compare the results



Activity 9: Content analysis

- Use themes from Activity 1 as the predetermined codes
- Analyze the same data using the codes
 - How frequent are the codes encountered?
- Come up with a different coding scheme based on the survey question
- Perform content analysis again
- How do coding schemes affect the results?



Finding/selecting a journal for publication



Journal finding tools

- Journal / Author Name Estimator (biosemantics.org)
- Journal Finder | ScienceGate
- Journal Finder | Find Journals | Charlesworth Author Services (cwauthors.com)
- JournalGuide Home
- Journal Selector (edanz.com)
- Web of Science Master Journal List Manuscript Matcher (clarivate.com)



Journal finding tools (cont.)

- Find journals | Elsevier® JournalFinder
- <u>Taylor & Francis Journal Suggester (taylorandfrancis.com)</u>
- Wiley Journal Finder | Find a journal match for your manuscript



Activity 10: Finding journals

- Select a few journal finding tools
- Create a short abstract from your research idea and design (You already have research questions)
- Use the tools
- Read the abstract/full text if available
 - Find the most relevant references
 - Find newer articles that cite this article



Selecting a journal

- Is the research fit with the scope of the journal?
 - → What is the target audience?
- What is the quality of the journal?
 - Ranking, Impact factor, h-index, etc.
 - Does it look professional?
- What is the quality of your research compared to other articles in the journal?
- How rigorous is the review process?



Selecting a journal (cont.)

- How long is the reviewing process?
- What is the acceptance ratio?
- How often is the journal published?
- Is there any publication fee? How much?
- Is it available online?



Journal checklist

- Do you or your colleagues know the journal?
 - Can you cross check in the **ISSN** portal?
- Can you easily identify and contact the publisher?
- Is the journal clear about the type of peer review it uses?
- Are articles indexed and/or archived in dedicated services?
 - Does the publisher use permanent digital identifiers?
- Is it clear what fees will be charged?
 - Does the publisher explain whether waivers are available?



Journal checklist (cont.)

- Are guidelines provided for authors on the website?
- Does the publisher have a clear copyright/license policy?
- Is the publisher member of an industry initiative?
 - Committee on Publication Ethics (COPE)
 - Directory of Open Access Journal (DOAJ)
 - Open Access Scholarly Publisher's Association (OASPA)



Activity 11: Using the checklist

- Select a journal from Activity 10
- Go to the website
- Answer all the questions in the checklist
- Would you submit your manuscript for publication in the journal?