Data Analysis SKILLS Using SPSS STATISTICAL Software







(ADVANCED)

1: Introduction to SPSS
2: Interpretation of univariate results formats
3: Practice
4: Variable properties: Format, coding, and labelling
5: Data and Database Management in SPSS
6: Practice
7: Data analysis – Univariate
8: Using Univariate Analysis to Understand the data
9: Practice

Day 1

Session 1: Introduction to SPSS Software

- Univariate analysis – frequency tables, summary/descriptive statistics, charts

1

Session 2: Interpretation of univariate results formats

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2

Session 3: Practice

- 1.Define all variables properties in practice dataset as learnt in session 1
- 2.Conduct quality checks
- 3.Transform variables e.g. from scale to ordinal variable
- 4.Use own research data

3

Day 2

Session 4: Variable properties: Format, coding, and labelling

- Understanding scales- factor analysis and rotation options
- Hypothesis setting and testing – interpretation of hypothesis based on statistics [significant levels]

1

Session 5: Data and Database Management in SPSS

- Measuring association- correlation [spearman rho and Pearson r], chi-square
- Determining existence of association, strength of association and pattern of association
- When to use which test: relationship between levels of variable measurement and the different tests available in SPSS: A Cheat sheet

2

Session 6: Practice

- 1.Analyse data using frequency tables, charts, and descriptive statistics
- 2.Interpret the results
- 3.Identify any errors e.g. coding errors and correct them
- 4.Use own research data

3

Day 3

Session 7: Data analysis – Univariate

- T-tests for means: one, two independent, two dependent/repeated samples tests
- Analysis of Variance – one way ANOVA
- Post Hoc Analysis- tests and interpretations [including graphics]

1

Session 8: Using Univariate Analysis to Understand the data

1.Check for data errors using univariate analysis & error correction
2.Consideration for bi-variate analysis: Identifying the correct test to conduct
3.Three Cardinal questions in bi-variate analysis
4.Merging and splitting databases

2

Session 9: Practice

1.Analyse data using frequency tables, charts, and descriptive statistics
2.Interpret the results
3.Identify any errors e.g. coding errors and correct them
4.Use own research data

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