

DATA Analysis with SPSS Software (BASIC)

Program Outline

1. Introduction to SPSS software...
2. Understanding Data: Levels of variable measurement and SPSS formats...
3. Variable management...
4. Data and database management...
5. Univariate data analysis and reporting...
6. Quality checking and reporting...

Day 1

Session 1: Introduction to SPSS Software

1.What is SPSS Interface?
- Data, Variables & Output view window
- Tool bar

2.Why use SPSS?
3.Common use of SPSS Software in Business & Social Research
4.Strengths of SPSS Statistical Software
5.Some Limitations associated with SPSS Statistical Software

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Session 2: Understanding data: levels of variable measurement and SPSS formats

1.Levels of Variables Measurement
- Nominal, Ordinal, Interval, Ratio measurement
- Moving from one level to the other
- Examples

2.SPSS Formats
- Nominal, Ordinal, Scale
- Variable naming

3.SPSS Data Entry
- Importing Data into SPSS
- Entering directly into SPSS
- Saving data file
- Repeated measures entry

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Session 3: Practice

1.Design a 10-variable questionnaire
2.Include all types of variables
3.Complete with hypothetical data
4.Capture the data in SPSS
5.Use own research questions

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Day 2

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

1.Variable format
2.Variable labelling
3.Coding responses in SPSS
4.Coding missing responses in SPSS
5.Understanding string variables
6.Other variable properties e.g. decimal places

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Session 5: Data and Database Management in SPSS

1.Data quality checks e.g. response sets, reliability, normality
2.Examples and Interpretation of quality checks
3.Variable's transformation- computing total scales, recoding, encoding
4.Examples and warnings on variable transformation
5.Handling missing and outlier observations

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Session 6: 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

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Day 3

Session 7: Data analysis – Univariate

1.Univariate analysis – frequency tables, summary/descriptive statistics, charts
2.Interpretation of univariate results

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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

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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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