An Introduction to SPSS Data Entry and Analysis

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Empiricism

- Scientific evidence is observable and quantifiable
  - Not what you believe exists, but what you can measure.
  - Not just common sense or opinion, but conclusions supported by data.
- Some information is more easily quantified than others.
  - Operationalization – turning abstract concepts into measurable phenomena
    - Validity
    - Reliability
  - Some information cannot be perfectly operationalized.

What is data?

- Unit of analysis

- Samples and populations

- Variables
  - Scale of measurement
    - Quantitative: interval/ratio
    - Qualitative: nominal/ordinal
  - Independent and dependent, predictor and outcome

How do we get data?

- Research methods (primary data collection)
  - Surveys
  - Interviews
  - Field observation
- Secondary data analysis
  - Agency records
  - Prior research data (ICPSR)

What do we do with data once we have it?

- Descriptive vs. inferential statistics
- Programs for analyzing data
  - SPSS
  - R
  - SAS
  - Stata
  - Excel

Getting SPSS

- Purchasing a license
  - Direct from IBM
  - Student discount websites, like onthehub.com

- Using the Apporto portal (cuny.apporto.com)
  - CUNYFirst login
  - Getting data into and out of Apporto

The SPSS Environment

- Data editor
  - Data view
  - Variable view
- Syntax editor
- Output viewer

Variable View

- Coding qualitative variables

- Missing codes

- Cleaning/formatting variables
  - Type
  - Measure
  - Width/decimals

SPSS Variable Icons

An icon next to each variable provides information about data type and level of measurement.

	Numeric	String	Date	Time
Scale (Continuous)	📏	n/a	📏📅	📏🕐
Ordinal	📊	📊a	📊📅	📊🕐
Nominal	🔵🔴🟢	🔵🔴a	🔵🔴📅	🔵🔴🕐

SPSS Syntax

- Some things can only be run in SPSS using syntax
- Also good for
  - Repetitive tasks
  - Tasks in large data sets
  - A series of tasks that need to be run in order

Output viewer

- Getting output out of SPSS
  - Copy and paste
  - Exporting output
- The chart editor