

Descriptive & Graphical Analyses

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Data

- Any pieces/collection of info
- E.g.:
 - What is your age?
 - Your gender?
 - Are you married?
 - And so on ...

Measurement levels

Nominal measurement

- No natural ranking for the data
- No indication of importance
- E.G.: Gender, religious groups, race

Ordinal measurement

- Has some natural ranking.
- Rank ordered according to magnitude
- E.G.: Performance, qualifications

Interval measurement

- Has numerical, interval value and some natural ranking
- E.G.: Grade category, age group, temperature

Ratio measurement

- Same as interval measurement and the ratio of 2 values is meaningful.
- A zero value is meaningful.
- E.G.: The # of cigarettes a person smokes per day; the # of times Nicodemus went to the hospital last month.

Descriptive analysis (overview)

- Numerical & graphical techniques used to describe, show, summarize & convey info about the data.

- Why?
 - Conclusion of your data distribution
 - Detect typos & outliers – even mistakes
 - Identify variable similarities in the data

Types of descriptive analysis

➤ 4 types:

(i) Tabulation: freq table & cross-tabulation

(ii) Graphical: pie chart, bar plot, boxplot, etc.

(iii) Summary statistics: mean, std. Deviation, range, median, min, max, etc.

(iv) Association & variation: correlation, anova, t-test etc.

All data analysis
Computer software

In short...

