

CHOOSING YOUR ANALYSES

Things to Consider

- Is the IV continuous or categorical?
- Is the DV continuous or categorical?

CONTINUOUS (sometimes called **quantitative** variables): Called **Scale** data in SPSS. **Interval** or **ratio** data where the values can change continuously and you cannot count the number of different values. (e.g., weight, price, profits, counts, etc.)

- **Interval** variables that can be measured along a continuum and they have a numerical
 - ✓ Intelligence
 - ✓ Aptitude
 - ✓ Temperature
- **Ratio** variables are interval variables, but with the added condition that **0 (zero)** of the measurement indicates that there is none of that variable.
 - ✓ Reaction time
 - ✓ Weight
 - ✓ Age
 - ✓ Frequencies of Behavior

CATEGORICAL (sometimes called **qualitative**, **discrete**, or **dichotomous** variables): Called **Ordinal** and **Nominal** data in SPSS.

- **Ordinal** data that has a distinct order. There's a meaning to the order.
 - ✓ Two, Three, And Four Star Restaurants
 - ✓ Ranking TV Programs By Popularity
- **Nominal** data are distinct groups with no meaning to the order.
 - ✓ Sex
 - ✓ States
 - ✓ Colors

DATA ENTRY, CODING, & MANIPULATION

- **Overview of SPSS**
 - [Basic Introduction to the SPSS Interface](#)
- **Getting Started:**
 - [How to Create Variables in SPSS](#)
- **Import, Export, & Saving in SPSS: SPSS, Excel, CSV, Text Files**
 - [Importing, Exporting, & Saving Data](#)
- **File Manipulation: Select Cases, Split File**
 - [Select Cases](#)
 - [Split File](#)
- **Transformation of Variables: Compute & Recode**
 - [Recode](#)
 - [Compute](#)
- **Formatting Tips for Frequency Tables with SPSS, Excel, & Word – Skills Building for Statistics**
 - [Formatting Tips for APA Format Frequency Tables](#)

UNIVARIATE ANALYSIS

- Used to examine **individual variables**

IV or DV	Analyses
Categorical	Frequency (Video)
Continuous	Descriptives (Video)
Continuous	Explore-Scale Data
Categorical	Explore-Categorical Data

BIVARIATE ANALYSIS

- Used to examine the relationship between **two variables**
- Typically examined at one point in time (cross-sectional)

IV	DV	TEST
Continuous	Continuous	Correlation
Categorical (Two or More Groups)	Categorical (Two or More Groups)	Chi-Square
Categorical (2 Groups)	Continuous	Independent Samples T-Test And Paired (Dependent) Samples-Test
Categorical (>2 Groups)	Continuous	One-Way Between Subjects ANOVA

MULTIVARIATE ANALYSIS

- Used to examine the relationship between ≥ 3 variables
- Can be cross-sectional or longitudinal

IV ₁	IV ₂	DV	TEST
Continuous	Continuous	Continuous	Simple Linear Regression (Video)
Continuous (3 or More)		Continuous	Multiple Regression and Path Analysis (a.k.a. SEM) and One-Way Within Subjects (Repeated Measures) ANOVA
Continuous	Continuous or Categorical	Continuous	Stepwise Regression and Hierarchical Regression (Controlling for a variable, doesn't matter if controlled variable is categorical or continuous)
Continuous (1 or More)	Categorical (1 or More)	Categorical	Logistic Regression Multinomial Logistic Regression
Categorical	Categorical	Categorical	Log-Linear Regression
Categorical	Categorical	Continuous	2 X 2 ANOVA (with Interaction) and One-Between-One-Within ANOVA (a.k.a. Mixed Factorial)
Categorical	Categorical or Continuous	Continuous	ANCOVA (Controlling for a variable, doesn't matter if controlled variable is categorical or continuous)
Categorical (1 or more IVs)	Categorical (Optional)	Continuous (2 or More)	MANOVA Repeated Measures MANCOVA