**CHAPTER 1** 

Descriptive Statistics Inferential Statistics Population

Sample Representative sample Biased sample

Random Sampling Convenience Sampling Parameter

Estimate Constant Variable

Qualitative variable Quantitative variable Continuous Variable

Discrete Variable Independent Variable (IV) Dependent Variable (DV)

Levels of the Independent Variable Extraneous Variable (EV) Subject Variable

True Independent Variable Experiment Quasi-experiment

Descriptive Research Confound Levels of Measurement

Nominal Ordinal Interval

Ratio

**CHAPTER 2** 

Frequency Frequency distribution Bar graph

Histogram Polygon Tails

Skew Positive skew Negative skew

Kurtosis Mesokurtic Leptokurtic

Platykurtic

**CHAPTER 3** 

Average Mean Consistent estimate

Deviation score Median Mode

Outlier

**CHAPTER 4** 

Dispersion Range Clumping or clustering

Mean Deviation Absolute Mean Deviation Variance

Standard Deviation Unbiased Exhaustive Sampling

## **CHAPTER 5**

Raw score distribution Standard score Z score distribution

Standard deviation unit Area under the curve Percentile

Outlier T score Degrees of freedom

## **CHAPTER 6**

Sampling Error Sampling Distribution Sampling Distribution of the Mean

Standard Error of the Mean (SEM)

Sampling Distribution of Differences between Two Sample Means

Point Estimate Interval Estimate Confidence Interval

# **CHAPTER 7**

Hypothesis Ho Alternate hypothesis Ha

Hypothesis testing Type I error Type II error

Level of significance (alpha) Hypothesis tests Test statistic

Critical value Rejection zone Beta

Power Absolute Effect size Relative effect size

Strong manipulation Power analysis Non-directional hypothesis

Non-directional test Directional hypothesis Directional test

Y-error bars

#### **CHAPTER 8**

Parametric test Non-parametric test Single-sample t-test

Cohen's d Between subjects Within subjects

Independent t-test Homogeneity of variance Levene's test

Dependent t-test Extraneous variable (EV) Confound

Pairing/matching

# **CHAPTER 9**

Single factor ANOVA Factor Per comparison alpha

Experiment-wise alpha One-way independent ANOVA One-way repeated ANOVA

One-way randomized blocks ANOVA Post hoc test Tukey, Newman-Keuls, Scheffe

Within group variability Pooled variance Error term

Between group variability Effect to be tested Partial eta squared

Sphericity Mauchly's test Greenhouse-Geisser

Pairwise comparisons Observed power

# **CHAPTER 10**

Factorial ANOVA Two-way Independent ANOVA Cell mean

Marginal mean Main effect Interaction effect

Tests of simple main effects

Two-way repeated ANOVA

Two-way mixed ANOVA

# **CHAPTER 11**

Chi square test Goodness of fit test Observed frequencies

Expected frequencies Contingency test Yates continuity correction

## **CHAPTER 12**

Pearson correlation Correlation coefficient Homoscedasticity

Linearity Positive correlation Negative correlation

Restriction of range Coefficient of determination Regression

Best fitting line Standard error of estimation Residual

Multiple regression Multicollinearity Y-prime (Y')