

Applied Data Analysis with SPSS: A Hands-On Training Program

Course Outline

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Content	
Session-1	<p>Introduction</p> <ul style="list-style-type: none"> • Basic introduction and definitions • Download and install SPSS • SPSS-related terms • Rules of variable names • Data type • Data file creation <p>Data Transformation and Manipulation</p> <ul style="list-style-type: none"> • Import files from several file formats • Missing value analysis • Data re-computing and re-coding • Data manipulation
Session-2	<p>Descriptive Statistics and Visualization</p> <ul style="list-style-type: none"> • Introduce to our data • Frequency analysis <ul style="list-style-type: none"> • Central tendency: mean, median, mode. • Variability analysis or Dispersion: range, variance, standard deviation, minimum, maximum. • Percentile Score • Chart Builder and Legacy Dialogues • Normality test & Outlier detection <p>Correlation</p> <ul style="list-style-type: none"> • Definition of correlation • Pearson correlation • Average correlation
Session-3	<p>Regression</p> <ul style="list-style-type: none"> • Definitions of regression • Types of regression • Simple linear regression • Multiple linear regression • Non-linear regression • Logistic & multinomial logistic regression <p>Statistical Inference & Tests</p> <ul style="list-style-type: none"> • Some definitions of related terms. • Distinguish between parametric and non-parametric tests. • Crosstabs analysis

	<ul style="list-style-type: none"> • Cronbach's alpha • Levene's test, Welch's test <p>Parametric Test</p> <ul style="list-style-type: none"> • One-sample t-test and z-test • Independent sample t-test • Paired samples t-test • ANOVA <p>Non-Parametric Test</p> <ul style="list-style-type: none"> • Chi-square • Mann-Whitney U Test, K-S test • Kruskal-Wallis Test
<p>Session-4</p>	<p>Project solve</p>

