

STATISTICAL TOOLS ENABLEMENT IN-DEPTH TRAINING WORKSHOP

Course Description:

Statistical Tools Enablement in-depth Training Workshop - in this workshop participants will learn how to manage and prepare data before the statistical analysis. Further, participants will also learn and understand each statistical test aims to test(ex. relationship, causation, or difference). Participants of this course will also learn how to interpret the results and write narratives. The software that the participants will use are JAMOVI and JASP, these are freeware and user-friendly.

Course Objectives:

1. Learn how to manage and prepare data using JASP and JAMOVI.
2. Learn how to run the statistical test using JASP and JAMOVI. Further, understand the practical application and assumptions of each statistical test.
3. Learn how to report and write the narrative on each statistical tests result.
4. Identify the right statistical test depending on the characteristics of the variables.

Course Outline

Day 1

- *Introduction to Jasp and JAMOVI
- *Data Encoding using JAMOVI
- *Running and Interpreting Frequencies using JAMOVI
- *Introduction to basic statistics:mean, median, mode and normal distribution
- *Identifying and treating outliers in a distribution

Day 2

- *Test of independence: Chi-square test of independence and Correlation: Pearson, Spearman and Kendall Tau
- *Test of difference: Paired t-test and Wilcoxon signed-rank
- *Comparison of Means (2 groups): Independent T-test and Mann-whitney U test
- *Comparison of Means(More than 2 groups): One-way ANOVA and Kruskal Wallis-H

Day 3

- *Regression Analysis: Linear and Logistic
- *ANCOVA
- *Reliability



*Factor Analysis

PROGRAM OF ACTIVITIES: STATISTICAL TOOLS ENABLEMENT IN-DEPTH TRAINING WORKSHOP

Day 1: Basics

<i>Opening of the workshop (Doxology, National Anthem and opening remarks)</i>	8:45AM to 9:00AM
<i>Introduction to Jasp and JAMOVI</i>	9:01AM to 10:30AM
Recess/Break	10:31AM to 10:45AM
<i>Data Encoding using JAMOVI</i>	10:46AM to 11:59AM
Lunch Break	12:00PM to 1:00PM
<i>*Running and Interpreting Frequencies using JAMOVI</i> <i>*Introduction to basic statistics: mean, median, mode and normal distribution</i>	1:01PM to 2:30PM
<i>Identifying and treating outliers in a distribution</i>	2:31PM to 4:00PM
Dismiss	

Day 2: Workshop

<i>Consultation</i>	8:45AM to 9:00AM
<i>Test of independence: Chi-square test of independence and Correlation: Pearson, Spearman and Kendall Tau</i>	9:01AM to 10:30AM
Recess/Break	10:31AM to 10:45AM
<i>Comparison of Means (2 groups): Independent T-test and Mann-Whitney U test</i>	10:46AM to 11:59AM
Lunch Break	12:00PM to 1:00PM
<i>Comparison of Means (More than 2 groups): One-way ANOVA and Kruskal-Wallis-H</i>	1:01PM to 2:30PM
Break/Recess	2:31PM to 2:45PM
<i>Continuation of Workshop/Hands-on activities</i>	2:46PM to 4:00PM
Dismiss	

Day 3: Workshop (Advanced Statistics)

<i>Regression Analysis: Linear and Logistic</i>	9:01AM to 10:30AM
Recess/Break	10:31AM to 10:45AM
<i>Analysis of Covariates/ANCOVA</i>	10:46AM to 11:59AM
Lunch Break	12:00PM to 1:00PM
<i>Reliability Test and Exploratory Factor Analysis</i>	1:01PM to 2:30PM
Break/Recess	2:31PM to 2:45PM
<i>Confirmatory Factor Analysis</i>	2:31PM to 4:00PM
Dismiss	



THE SPEAKER



JEROME L. BUHAY

- Researcher/Statistician/Consultant
- Professor at De La Salle University – Dasmariñas
- PhD in Mathematics Education (Ongoing)
- PhD in Statistics (with earned units)
- Master of Arts in Mathematics
- BS in Applied Mathematics maj. In Statistics

REQUIRED SOFTWARE FOR THIS WORKSHOP:

- **Zoom**
- **Jasp (Freeware Statistical Software)**
- **JAMOVI (Freeware Statistical Software)**
- **Gmail account for Google Classroom**

