PHD CHAMBER
HARMONY
DEVELOPMENT
PROGRESS
Estd. - 1905

NATIONAL APEX CHAMBER

Five days hands on Online Workshop on

SPSS Applications in Data Analysis

▶ **Day 1: 28.07.2020 (Tuesday)**   **11:00 am to 2:00 pm**

▶ **Day 2: 29.07.2020 (Wednesday)**   **11:00 am to 2:00 pm**

▶ **Day 3: 04.08.2020 (Tuesday)**   **11:00 am to 2:00 pm**

▶ **Day 4: 05.08.2020 (Wednesday)**   **11:00 am to 2:00 pm**

▶ **Day 5: 06.08.2020 (Thursday)**   **11:00 am to 2:00 pm**

Introduction

After an overwhelming response of the 'Three days hands-on Online Workshop on SPSS Application in Data Analysis', the Education Committee of PHD Chamber of Commerce and Industry (PHDCCI) is presenting a 'Five days hands-on Online workshop on SPSS Application in Data Analysis'.

Analytics-driven decision is the secret of boosting performance of organisations. Whether it is to attract and retain customers, enabling businesses from boardrooms to the shop floor or researchers doing data analysis. SPSS application helps to make informed decisions in every field of study and business. The concepts of SPSS when understood with comprehensive practical application can enable one to use SPSS output regularly as a data analysis tool, to effectively summarize research findings, to enter, reorganize and integrate information.

The paradigm shift in the modern world of business and research has made managers, engineers and researchers more inclined towards analytical decision making. The world is evolving with data driven decision making with new techniques, mixed methods and applications emerging both from academia and practitioners.

Objectives

- To understand basic theoretical and practical implementation of SPSS
- To learn methods of data management and analysis with the help of SPSS application
- To educate learners on sampling processes, types of tests and correlation in SPSS
- To benefit learners on practical usage of ANOVA in SPSS
- To understand the use of Factor Analysis in SPSS
- To learn concepts of cluster Analysis in SPSS and its importance

For whom

- Academicians who want to enhance their research skills
- Students and Research Scholars for improving their quantitative skill
- Industry personnel in learning analytical and presentation skills for sound decision making
- Training institutes, learners from different fields of social sciences, market research, Information technology, health sciences, data miners,
- Marketing organisations, government functionaries

Workshop Delivery Mode

The online workshop will be in Device-to-Device (D2D) mode on the Zoom platform with adequate security features. The participants will attend the sessions by logging in from their computers.

Certification

On completion, the participants will be awarded a certificate of Participation in the Five days hands on Online Workshop on SPSS Application in Data Analysis.

HURRY UP LIMITED SEATS AVAILABLE!

BATCH SIZE 40

PHDCCI reserves the right to close the registrations before 26.07.2020

Registration Fee: 2000 + GST

REGISTER ME

Last date of Registration: 26.07.2020

After successful registration, you will receive a confirmation email with the access link.

FOR ADDITIONAL INFORMATION ABOUT THE WORKSHOP, PLEASE CONTACT

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WORKSHOP AGENDA

DAY 1 - 28.07.2020 (Tuesday) | Time - 11:00 am to 2:00 pm
COMPONENTS OF THE WORKSHOP

1   A Brief Introduction of SPSS (30 min)
1.1   What is SPSS?
1.2   Who uses it?
1.3   Where is it used?
1.4   Why is it used?
1.5   How is it used?

2   SPSS - A Tool of Statistical Study (30 min)
2.1   Introduction
2.2   Getting Help
2.3   Data Entry
2.4   SPSS Menu Bar
2.5   Importing and Exporting Data

3   Statistics - The Main Function of SPSS (30 min)
3.1   Types of Statistics
3.2   Types of Data
3.3   Basic Properties of Data
3.4   Level of Measurement and Statistical Methods
3.5   Statistical Research Process

4   Descriptive Statistics in SPSS (60 min)
4.1   Frequencies
4.2   Descriptive
4.3   Crosstabs

DAY 2 - 29.07.2020 (Wednesday) | Time - 11:00 to 2:00 pm
COMPONENTS OF THE WORKSHOP

1   Statistical Estimation and Sampling Process (30 min)
1.1   Types of Statistical Estimates
1.2   Criteria for a good Estimator
1.3   Types of Hypothesis Testing
1.4   Types of Error
1.5   Null and Alternate Hypothesis
1.6   Confidence Interval and Confidence Level

2   Practical example on T – Tests (60 min)
2.1   Understanding why and where the T Test is used?
2.2   Assumptions of T Tests
2.3   Conducting T Tests
2.4   Understanding Output
2.5   Interpretation of different parts of Output

3   Practical example on Chi square Test (Non parametric) (60 min)
3.1   Types of Chi Square Test
3.2   Understanding why and where Chi square - Goodness of Fit test is used?
3.3   Assumptions of Chi square - Goodness of Fit Test
3.4   Conducting Chi square - Goodness of Fit Test
3.5   Understanding Output
3.6   Interpretation of different parts of Output
3.7   Understanding why and where Chi square - Test of Independence is used?
3.8   Assumptions of Chi square - Test of Independence
3.9   Conducting Chi square - Test of Independence
3.10   Understanding Output
3.11   Interpretation of different parts of Output

DAY 3 - 04.08.2020 (Tuesday) | Time - 11:00 to 2:00 pm
COMPONENTS OF THE WORKSHOP

1.   Practical examples on ANOVA (50 min)
1.1   Understanding why and where ANOVA is used?
1.2   Assumptions of One way ANOVA
1.3   Conducting One way ANOVA
1.4   Understanding Output
1.5   Interpretation of different parts of Output

2   Practical examples on Correlation (50 min)
2.1   Understanding why and where Correlation is used?
2.2   Assumptions of Correlation
2.3   Conducting Correlation
2.4   Understanding Output
2.5   Interpretation of different parts of Output

3   Practical examples on Linear Regression (50 min)
3.1   Understanding why and where Regression is used?
3.2   Assumptions of Simple Linear Regression
3.3   Conducting Simple Linear Regression
3.4   Understanding Output
3.5   Interpretation of different parts of Output

WORKSHOP AGENDA

DAY 4 - 05.08.2020 (Wednesday) | Time - 11:00 am to 2:00 pm
COMPONENTS OF THE WORKSHOP

1. **Practical examples on FACTOR ANALYSIS (FA) (50 min)**
1.1 Understanding why and where Factor Analysis is used?
1.2 What is Exploratory Factor Analysis & Confirmatory Factor Analysis
1.3 Conducting Factor Analysis
1.4 Understanding Output
1.5 Interpretation of different parts of Output **(50 min)**

2 **Practical examples on Factor Analysis**
2.1 Understanding communality
2.2 Understanding Eigen Values **(50 min)**
2.3 What is a Scree Plot?
2.4 Understanding correlation Matrix
2.5 Interpreting Kaiser-Meyer-Olkin Test

Day 5 - 06.08.2020 (Thursday) | Time - 11:00 to 2:00 pm
COMPONENTS OF THE WORKSHOP

1 **Practical examples on CLUSTER ANALYSIS (50 min)**
1.1 Understanding why and where Cluster Analysis is used?
1.2 Assumptions of Cluster Analysis
1.3 Conducting Cluster Analysis (**50 min**)
1.4 Understanding Output
1.5 Concept of Similarity Matrix (**50 min**)
1.6 Understanding Hierarchical and Non-hierarchical Clustering
1.7 What is Dendogram?

About Us

PHDCCI, established in 1905, is a proactive and dynamic National Apex Chamber, working at the grass-root level across India and develop strong national and international linkages. Through policy interventions, it acts as a catalyst in the promotion of industry, trade and entrepreneurship.

The Chamber acts as a catalyst in the promotion of industry, trade and entrepreneurship. PHDCCI, through its research-based policy advocacy role, positively impacts the economic growth and development of the nation. PHDCCI proactively participates in the policy formulation process of government and acts as its bridge when it comes to interface industry and civil society.

PHDCCI has special focus on the following thrust areas:

- Economic & Business Policy Advocacy
- Industry
- Infrastructure
- Housing
- Health

- Education & Skill Development
- Agriculture & Agri-business
- ICT
- International Trade

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