

COURSES:

1. Quantitative research design
2. Statistical analysis(not hands-on theoretical discussion)
3. Data analysis with a statistical package
(Usually hands-on with SPSS)
4. Interpretation and write-up of quantitative results

LIMINAL

RESEARCH CONSULT

1. Quantitative research design

ONE DAY WORKSHOP:

Who should attend: Everyone considering quantitative research using the questionnaire as an instrument including lecturers, students, as well as other quantitative researchers.

“To consult the statistician after an experiment is finished, is often merely to ask him to conduct a post mortem examination. He can perhaps say what the experiment died of.” This quote is from Ronald A. Fisher a famous Statistician

The goal of this course is to help prepare the researcher/student with the design of a research project to ensure that the sample, experimental design (if necessary) and questionnaire is done in such a way that the statistical analysis of the results may be optimized.

Research design, questionnaire design, sampling and other related issues for quantitative research will be discussed.

CONTENTS:

- Research design
- Sampling
- Experimental design
- Questionnaire design(Validity and Reliability of the questionnaire)
- Align the questionnaire to the research questions and analyses
- Data capturing and coding
- Web questionnaires and other research related issues

A pdf manual will be provided

OUTCOMES:

- Participant must be aware of all the pitfalls regarding quantitative design especially sampling and the questionnaire.
- Participant must be able to:
 - design the questionnaire in such a way that: reliability and validity and can be tested, the research questions can be answered and the statistical analyses can be optimized
 - choose the correct sampling technique and sample size
 - code the questionnaire for data capturing
 - understand the capturing process if it is on paper or the internet

2. Statistical analysis(not hands-on theoretical discussion)

ONE DAY WORKSHOP:

Who should attend: Everyone embarking on quantitative research including lecturers, students as well as other quantitative researchers.

The goal of this course is to help the researcher analyze data. The emphasis will be on the interpretation of results and not on the computer package employed. The mostly used statistical techniques for analyzing questionnaires will be discussed. Note that this is not a Statistics course, but rather a practical approach. The structure of the course will follow the data analysis cycle.

CONTENTS:

- Read raw data into a statistical package
- Cleaning and verification of data
- Validation of the research instrument
- Descriptive statistics and graphs
- Exploratory analysis
- Statistical analysis techniques
- Interpretation of results

A pdf manual will be provided

OUTCOMES:

- Participant must be aware of all the pitfalls regarding the analysis process.
- Participant must be able to follow the statistical analysis process.
- Participant must have an understanding of how the statistical techniques works as well as the assumptions of the techniques.

3. Data analysis with a statistical package(Usually hands-on with SPSS)

THREE DAY WORKSHOP:

Who must attend: Everyone busy with quantitative research including lecturers, students as well as other quantitative researchers.

The goal of this course is to help the researcher analyze data with a statistical package. The emphasis will be on the practical application of the statistical package. The mostly used statistical techniques for analyzing questionnaires will be applied with either user's data or hypothetical data.

CONTENTS:

DAY 1: Introduction, Data input into the statistical package, Value and variable labels, Data verification and cleaning.

DAY 2: Validation of the questionnaire, Recoding and transformation of variables, Descriptive statistics and graphs, Tables and graphs and Exploratory analysis.

DAY 3: Statistical analysis techniques and interpretation of results. Techniques discussed will be Exploratory Factor Analysis (for validation of the constructs in the questionnaire), the Cronbach alpha (for testing reliability of the constructs in the questionnaire), Analysis of Variance(ANOVA) and the T-test, The Pearson Chi-square test, Correlation analysis and Multiple Linear Regression

A pdf manual will be provided

OUTCOMES:

- Participant must be able to conduct the statistical analysis process with a statistical package.
- Participant must be able to:
 - read in raw data into the statistical package
 - test reliability and validity of the constructs in the questionnaire with the statistical package
 - recode and transform variables if necessary with the statistical package
 - calculate descriptive statistics with the statistical package
 - draw graphs and tables with the statistical package
 - conduct exploratory data analysis on a provided dataset
 - conduct the discussed statistical techniques in the statistical package
 - interpret the results

4. Interpretation and write-up of quantitative results

ONE DAY WORKSHOP:

Who should attend: Everyone busy with quantitative research including lecturers, students as well as other quantitative researchers.

The goal of this course is to help the researcher interpret and write-up the results of quantitative analyses. The emphasis will be on the correct scientific write-up of the results for an article or dissertation. The most commonly used statistical techniques for analyzing questionnaires will be discussed

CONTENTS:

A pdf template will be provided that provides a standardized way of reporting statistical findings. A session on general interpretation will be done and the facilitator will give each participants the change to discuss their own research.

OUTCOMES:

- Participant must be able to write-up the statistical techniques discussed in a scientific manner by using the provided template
- Participant must be able to interpret the discussed statistical techniques