

# LIMINAL RESEARCH CONSULT

## WORKSHOPS

Face-to-face / Online  
Flexible times

### QUANTITATIVE RESEARCH WORKSHOP SERIES

1. Quantitative research design for researchers using questionnaires: 1 day
2. Essential statistical analysis using a questionnaire as an instrument: 1 day
3. Intermediate statistical analysis using a questionnaire as an instrument: 1-2 days
4. Structural Equation Modelling and Confirmatory Factor Analysis for Questionnaire-Based Researchers: 1 day
5. Interpretation and write-up of quantitative results generated from questionnaires: 1 day

### QUANTITATIVE RESEARCH STAND ALONE WORKSHOP

1. Data Gathering in Quantitative Research: 1 day
2. Data Analysis with Microsoft Excel: 1 day

### ANALYSIS WITH A STATISTICAL PACKAGE

1. Introduction to 'R': 2.5 - hours online
2. Essential statistical analysis using the statistical language 'R': 3 days
3. Intermediate statistical analysis using the statistical language 'R': 2 days
4. Introduction to 'SPSS': 2 - hours online
5. Essential statistical analysis using the statistical language 'SPSS': 3 days
6. Intermediate statistical analysis using the statistical language 'SPSS': 2 days

### QUALITATIVE WORKSHOPS

1. Guiding Principles for a Qualitative research Design: 1 day
2. Developing an Interview framework: 1 day
3. Roadmap to writing a qualitative proposal: 1 day
4. Understanding and Implementing Qualitative Questionnaires: 1 day
5. Insights to Thematic Content Analysis: 1 day
6. Key Considerations for Writing Your Qualitative Research Study: 1 day

### QUALITATIVE DATA ANALYSIS SOFTWARE (QDA'S)

1. Coding and reporting in 'ATLAS.ti': 2 days
2. Qualitative Coding interviews in excel: 1 day
3. AI in ATLAS.ti for Qualitative Research: 1 day

### ADDITIONAL WORKSHOPS

1. Supervising a quantitative research project: 1 day
2. Introduction to Quantitative Research: 1 day
3. Optimising Statistical Analysis using AI (collaborating with WWIS): 1 day
4. Integrating approaches: Unleashing the Power of Mixed-Methods Research: 2 days with 2 presenters



# QUANTITATIVE OUTLINE OF

# WORKSHOPS



## QUANTITATIVE RESEARCH DESIGN FOR RESEARCHERS USING QUESTIONNAIRES

\*Proposal

- The research process
- The research problem
- Research hypotheses
- Research approaches
- Research design
- Experimental design
  - Repeated measures
- Questionnaire validity and reliability
- Choosing a validated scale
- Online questionnaires and data format
- Sampling
- Statistical techniques for the questionnaire

1 full day

## ESSENTIAL STATISTICAL ANALYSIS USING A QUESTIONNAIRE AS INSTRUMENT

\*Analysis

- The statistical analysis process.
- Reading raw data into a statistical package.
- Cleaning and verification of data.
- Validation of the research instrument.
- Descriptive statistics and graphs.
- Draw customized tables.
- Exploratory analysis.
- Hypothesis testing.
- Conduct a proper statistical analysis
- Decide on a statistical technique.
- Statistical techniques:
  - Exploratory Factor Analysis
  - Cronbach Alpha Coefficient
  - Independent T-test
  - Paired T-test, ANOVA
  - Pearson Chi-square test
  - Correlation
  - Simple Linear Regression.

1 full day

## INTERMEDIATE STATISTICAL ANALYSIS USING A QUESTIONNAIRE AS INSTRUMENT

\* Analysis

- Pitfalls in the analysis process.
- Assumption of the statistical techniques and remedies when assumptions cannot be met.
- Deciding on a statistical technique.
- Non-parametric techniques such as the Kruskal-Wallis Test and Mann Whitney test TWO-WAY ANOVA with interactions Multiple Linear Regression and dummy variables
- Hierarchical Regression
- Confirmatory Factor Analysis
- Structural Equation Modeling (SEM) with output from 'R.'

1-2 full days

## Advanced: Structural Equation Modelling and Confirmatory Factor Analysis for Questionnaire-Based Researchers

\* Analysis

- Validity and reliability with Exploratory Factor Analysis & Cronbach Alpha Coefficient
- Factor Scores and composite scores
- Multiple Linear Regression
- Introduction to Confirmatory Factor Analysis and Structural Equation Modeling
- Basics of CFA & SEM
- Application CFA & SEM
- Confirmatory Factor Analysis Model with lavaan output
- Structural Equation Modeling with lavaan output
- Mediation and Moderation
- Briefly Discussing R lavaan and AMOS
- Show AMOS screens for a practical example

1 full day

## INTERPRETATION AND WRITE-UP OF QUANTITATIVE RESULTS: GENERATED FROM QUESTIONNAIRES

- Structure of reporting
- Reporting on a research methodology
- Reporting of statistical techniques for comparing groups
- Reporting of statistical techniques for relating variables
- Writing up of a Structural Equation Model (SEM), using a template provided
- Discussion of participants own writing up (if time permits)

\*Write-up

1 full day

# QUANTITATIVE OUTLINE OF

## WORKSHOPS: Hands-on computer-based instruction

### INTRODUCTION TO R (FOR BEGINNERS)

\* Analysis

- Installation Importing raw data
- Working with datasets, variables and objects.
- Choose variables and rows
- Calculate descriptive statistics.
- Do a basic plot
- Save output

2.5 hours online

### ESSENTIAL STATISTICAL ANALYSIS USING THE STATISTICAL PACKAGE R

\* Analysis

- What is R?
- The components needed
- R basics
- The R Studio environment
- Reading in Excel data with R
- Work with variables in R
- Labeling in R
- Descriptive statistics with R
- Plots with R
- Barchart
- Clustered Barchart
- Histogram
- Scatterplot
- Boxplot
- Statistical techniques:
  - Exploratory Factor Analysis
  - Cronbach Alpha Coefficient
  - Pearson Chi-square test
  - Independent T-test Paired
  - T-test ANOVA Correlation
  - Multiple Linear Regression

2-3 full days

### INTERMEDIATE STATISTICAL ANALYSIS USING THE STATISTICAL PACKAGE R

\* Analysis

- Pitfalls in the analysis process
- Statistical analysis process followed in R
- How statistical techniques work and assumptions
- Remedies when assumptions cannot be met
- Decide on a statistical technique
- Non-parametric techniques:
  - Kruskal-Wallis Test and Mann Whitney test
- Two-Way ANOVA with interactions
- Multiple Linear Regression with dummy variables and interaction terms
- Hierarchical Regression

1 full day

## QUANTITATIVE OUTLINE OF

# WORKSHOPS Stand-alone workshops

### INTRODUCTION TO SPSS

\* Analysis

- Import raw data, for example MS Excel data files, into SPSS Work with datasets and variables.
- Select variables from a dataset.
- Calculate descriptive statistics.
- Conduct basic plots.
- Save output from SPSS

2.5 hours online

### ESSENTIAL STATISTICAL ANALYSIS USING THE STATISTICAL PACKAGE SPSS

\* Analysis

- Reading in raw data
- Cleaning and verification
- Validation of the research instrument
- Calculate descriptive Statistics and graphs.
- Draw customized tables.
- Conduct Exploratory analysis
- Statistical techniques:
  - Exploratory Factor Analysis
  - Cronbach Alpha Coefficient
  - Independent T-test, Paired T- test, ANOVA
  - Pearson Chi-square test,
  - Correlation
  - Simple linear regression

3 full days

### INTERMEDIATE STATISTICAL ANALYSIS USING THE STATISTICAL PACKAGE SPSS

\* Analysis

- Pitfalls in the analysis process
- Statistical analysis process followed in SPSS
- How statistical techniques work and assumptions
- Remedies when assumptions cannot be met
- Decide on a statistical technique
  - Non-parametric techniques: Kruskal-Wallis Test and Mann Whitney test
- TWO-WAY ANOVA with interactions
- Multiple Linear Regression and dummy variables
- Hierarchical Regression

1 full day

**NEW!****DATA GATHERING IN QUANTITATIVE RESEARCH**

- Introduction to quantitative research
  - Measurement or variable types
  - Research questions and hypotheses
  - Research design types
  - Sampling
  - Questionnaires(validity and reliability etc)
  - Experiments
  - Intended data analyses
  - Aligning research hypotheses and analyses
  - Data collection
  - Paper based questionnaires
  - Online questionnaires
  - Data from experiments
  - Secondary data
  - Data capturing
  - Data format for analysis
  - Statistical packages
- 1 full day

**NEW!****SUPERVISING A QUANTITATIVE RESEARCH PROJECT****\*General**

- The research process
  - The research problem
  - Research hypotheses
  - Research approaches
  - Research design
  - Experimental design
  - Repeated measures
  - Questionnaire validity and reliability
  - Choosing a validated scale
  - Online questionnaires and data formatting
  - Sampling
  - Statistical packages
  - Choose a statistical technique
  - How to conduct a proper statistical analysis
- 1 full day

**NEW!****INTRODUCTION TO QUANTITATIVE RESEARCH****\*General**

- Alignment of design and analysis
  - Types of data
  - When to use Quantitative research
  - When to use Qualitative research
  - Mixed methods strategies
  - Types of research design
  - Measuring instruments and experiments
  - Validity and reliability of questionnaire
  - Variables and levels of measurement
  - Choosing a validated scale
  - Online questionnaires and data format
  - Sampling
  - Statistical packages
  - Choose a statistical technique
  - How to conduct a proper statistical analysis
  - Reporting example in quantitative research
- 1 full day

**NEW!****DATA ANALYSIS WITH MICROSOFT EXCEL****\* Analysis**

- Learn how to organise, clean, and analyse data in Excel using formulas, charts, pivot tables, and basic statistics. You'll also explore filters, conditional formatting, macros, and techniques for presenting your analysis effectively.

1 full day



# QUALITATIVE OUTLINE OF WORKSHOPS

## GUIDING PRINCIPLES FOR QUALITATIVE RESEARCH DESIGN

- Qualitative research design
- Overview of the research process in qualitative studies
- Developing research questions for qualitative research
- Selection and collection of appropriate data
- Ensuring data quality in qualitative research
- Brief exploration of qualitative data analysis

\*Proposal

1 full day

## DEVELOPING AN INTERVIEW FRAMEWORK

- Developing a robust interview framework
- Exploring the art of crafting effective interview structures
- Gaining insights into formulating clear research objectives
- Structuring the interview flow
- Ensuring trustworthiness

\*Proposal

1 full day

## ROADMAP TO WRITING A QUALITATIVE PROPOSAL

Gain the necessary skills to craft a comprehensive and compelling qualitative research proposal.

\*Proposal

- Inquiring the research problem.
- Literature review's role
- Objectives.
- Theoretical framework.
- Research questions.
- Methodology.
- Data collection.
- Analysis techniques.

1 full day



# QUALITATIVE OUTLINE OF WORKSHOPS

## Insights to Thematic Content Analysis

\*Analysis

Delve into the thematic basis of coding interviews in qualitative analysis.

- Principles and techniques of coding qualitative data.
- Identifying themes.
- Creating a deductive coding framework.
- Coding inductively

Practical Experience:

- Analysing interview transcripts.
- Identifying meaningful themes.
- Organising themes into a coherent coding structure.

1 full day

## CODING AND REPORTING IN ATLAS.TI V25 (WINDOWS)

\*Analysis & write-up

Comprehensive 2-day workshop focusing on coding and reporting qualitative data using ATLAS.ti. V25

Explore ATLAS.ti functionalities: creating coding schemes. Applying codes to data. Organizing coding hierarchies. Retrieving coded information.

Insights into:

- Data management.
- Exploring relationships between codes.
- Visualising data through ATLAS.ti's reporting features.

2 full days

## QUALITATIVE CODING INTERVIEWS IN EXCEL

\*Analysis

Hands-on 1-day workshop. Focus on coding qualitative interviews using Excel.

- Setting up macros for MS word interviews / documents
- Sorting and editing coding scheme in excel
- Setting up a coding system in Excel.
- Assigning codes to interview data.
- Organizing and managing coded data.
- Identifying patterns and themes.
- Filtering valuable insights from qualitative interview data.

1 full day

# QUALITATIVE OUTLINE OF WORKSHOPS

## UNDERSTANDING AND IMPLEMENTING QUALITATIVE QUESTIONNAIRES

\*Proposal

- Exploring the characteristics and applications of qualitative questionnaires.
- Learning about types of qualitative questionnaires, including open-ended and semi-structured formats.
- Crafting questions that elicit detailed and meaningful responses.
- Structuring questionnaires for engagement and clarity.
- Analyzing qualitative questionnaire data with thematic analysis techniques.
- Ensuring trustworthiness and reflexivity in questionnaire-based research.
- Addressing common concerns about data quality and effective reporting.

1 full day

## AI IN ATLAS.TI V25 FOR QUALITATIVE RESEARCH: 1 DAY

\*Analysis

Delve into the power of AI in qualitative analysis with ATLAS.ti.

- Guiding AI for intentional, research-specific coding.
- Generating AI summaries for large datasets.
- Exploring data with conversational AI commands.

Practical Experience:

- Coding qualitative data using AI.
- Summarising datasets to extract key insights.
- Interacting with data through natural language queries.
- 

2 full days

## KEY CONSIDERATIONS FOR WRITING YOUR QUALITATIVE RESEARCH STUDY

\*Proposal / dissertation

- Crafting a research background and rationale.
- Developing research aims and questions.
- Reviewing and synthesizing relevant literature.
- Selecting qualitative research designs.
- Outlining data collection and analysis methods.
- Presenting findings with thematic support.
- Interpreting findings and linking to literature.
- Highlighting implications and limitations.
- Offering actionable recommendations and future research directions

1 full day

# MIXED-METHOD

# WORKSHOPS

## INTEGRATING APPROACHES: UNLEASHING THE POWER OF MIXED-METHODS RESEARCH

\*Analysis & write-up

- Overview of both quantitative and qualitative design
- Explore the synergistic potential of combined data collection and analysis techniques.
- Choosing a mixed strategy
- Analysis: practical examples and step by step outline Write-up Joint Displays

2 full days with Hennie & Monique

## BACKGROUND OF THE PRESENTERS

### Mrs. Monique van der Walt

Research Psychologist

Qualification: Master of Arts in

Research Psychology

#### Experience:

7years in the field of Research Psychology.  
Extensive knowledge in research methodologies and qualitative approaches.  
Consulting roles in higher education and the private sector.



LIMINAL RESEARCH CONSULT

### Mr. Hennie Gerber

Statistician

Qualification: Masters degree in Statistics

#### Experience:

27 years of consulting experience. Provides guidance to students, lecturers, and researchers in both academic and private sectors. Since 2008, has been developing comprehensive workshops on the research process for participants of various skill levels.



WORKSHOP OUTLINE