Statistics for Consumer Research

Duration 1-3 days
(CON2-0)

Pre-requisite

Only the most basic statistical knowledge is assumed.

Course Summary

We offer training in three, one day modules, any one of these can be run on its own or combined with the other modules into a two or three day training course. Each module covers key statistical techniques used in the analysis of data collected in consumer research studies to compare products or brands. Emphasis is placed on the interpretation of the statistical tests and mathematical details are kept to a minimum. The training is suitable for both market researchers and consumer scientists working on product evaluation and optimisation.

Software

We base the training around a suitable statistical software package. We recommend XLSTAT®, JMP® or EyeOpenR® but can advise on appropriateness of other software packages.

Flexibility

We can customise module content to specific requirements.

Course Content

Module 1 **Analysis of Consumer Data – testing for differences**

- Testing for differences in response between products
  - Precision of a mean – standard error and confidence interval
  - Analysis of Variance of hedonic scale data
    - How it works
    - Interpretation
    - Multiple Comparison tests and LSD's
  - Power and sample size
  - Non parametric methods for analysing scale data
  - Analysis of binary scale data (Paired preference CATA)
- Penalty Analysis
  - Measuring effects of attribute variables and their impact on acceptability

Module 2 **Multivariate methods**

- Introduction to multivariate data
  - Multivariate Data displays
  - Correlation
- Principal Component Analysis (PCA)
  - Producing product maps using PCA
  - Interpreting the map
- Cluster Analysis
  - Identifying groups of consumers with different preferences.
  - Demographic profiling and cluster validation
  - Internal preference mapping techniques for cluster visualisation
- Correspondence Analysis
  - Visualising brand attribute associations
  - Interpreting cluster solutions

Module 3 **Linking Sensory and Consumer Liking Data, Consumer Sensory Measures**

- Simple Regression Modelling
  - Predicting liking from key sensory variables, identifying key drivers
  - Principal Component Regression
- Preference Mapping
  - External and Internal mapping methods to link liking and product characteristics (sensory or analytic)
  - Comparison of methods
  - Identifying an "optimum" product and predicting its product characteristics

For further information and pricing contact:
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