

## Getting facts out of figures; A beginner's practical guide to statistics

### A One Day Seminar

An introduction for anyone responsible for gathering, summarising, analysing, presenting or interpreting data. Following the day, delegates will be able to summarise data and detect differences between groups of informants or for the same group at different times. They will be able to assess and report the statistical significance (if any) of these differences. When looking at figures prepared by others, delegates will understand the distinction between a statistically significant difference and one which may be attributable to sampling error. The seminar assumes survey data as the raw material for analysis, but the principles are applicable to data drawn from other sources, including BVPIs, SAT results, etc

The day is illustrated throughout with on-screen worked examples, followed by practical exercises. Delegates receive a CD-ROM to take away and use, including an Excel workbook comprising all the worked examples and a set of easy-to-use practical tools for calculating confidence intervals, assessing required sample sizes, standard deviations, standard errors and standard errors and significance of differences. It is an introduction to simple statistics, so although delegates should be comfortable with arithmetic, including decimals and percentages, no previous knowledge beyond this is required.

### Leader

David Lusty Chartered MCIPD MMS(Dip) MIC CMC spent 11 years in personnel and management services with a number of local authorities and is a former Director of Personnel and Management Services with Avis Rent a Car Ltd; world leaders in service excellence. As founder and principal consultant of **QUANTIFY** he now provides consultancy and bureau services to clients conducting research among staff and customers, including stakeholder panel management for several clients. His lively presentation puts the emphasis on the practical use of statistics rather than dry theory.

### Seminar delivery

#### Location

London

#### Timetable

09:00 – 17:00

#### Number of delegates

We limit attendance to 20 delegates.

### Fee includes

- Face to face teaching
- Comprehensive handouts including CD-ROM and exercise worksheets
- Practical exercises throughout
- Refreshments and light lunch

### Delegates should bring

Calculator with square root ( $\sqrt{\quad}$ ) button

### Fee

£250 per delegate plus VAT

### Seminar content

#### Finding out

- Sampling
  - terminology
  - sampling frames
  - random, stratified, & sequential sampling

#### What's the average?

- Using one number to stand for many
  - The average of a sample
  - estimating the average of a population
    - confidence levels & confidence intervals
- Ways of expressing it
  - Units
  - Percentages
  - Percentiles

#### What's the variability?

- Distributions
  - The normal distribution
  - Standard deviation

#### What's the difference?

- Creating subsets of the total response
- Comparing one subset with another
- Comparing one occasion with another

#### What does it mean?

- Significance
  - sampling error
  - standard error of average
  - standard error of difference

#### Communicating the meaning

- Presentation of results
  - text and numbers

#### Graphical presentation