

**For industry, commerce, scientists, engineers, clinicians
and other healthcare professionals**

Vital Statistics!

Analysing Percentage & Proportion Data

A Brief Introduction to Modern Practice

An Introductory Hands-on Interactive Training Workshop

Presented by Dr John M. Thompson, C.Chem., F.R.S.C., F.R.Stat.Soc.

Tracer Measurement Systems Ltd.

At The Institute of Research and Development, Birmingham Research Park,

Vincent Drive, Edgbaston, Birmingham B15 2SQ

This one-day self-contained introductory workshop is designed to provide hands-on experience building your understanding and skills in modern statistical methods of analysing, exploring and displaying percentage and proportion data.

This type of data is found very commonly in many areas of research, in business, finance, science, engineering, manufacturing and clinically. It is now often called compositional data and it was recognised over 120 years ago as problematic by English statistician Karl Pearson. When it is analysed using statistical methods, the results were shown to be spurious and misleading. We have all ignored this difficulty and just hoped the results were not really a problem after all.

Until the 1980s, nobody had successfully solved this difficult problem of how to adjust and transform such data for us to reliably and safely get any meaningful interpretations of results of standard statistical analyses.

This training workshop will help build your confidence in choosing and using two of the new methods of adjusting and transforming percentage and proportion data that are appropriate for particular kinds of analysis and display, knowing about the strengths and weaknesses of each of those methods. You will also learn how to interpret and effectively present the results of your data explorations and analyses in a meaningful, sound way.

You will be “learning by doing” with some tutorial exercises which follow on from some of the presentations and you will be able to take away with you copies of all presentations, tutorial exercises and their solutions for future reference.

This enables each delegate to build skills and understanding about many important statistical concepts and methods for compositional data to be developed further throughout the workshop.

For the workshop, everyone will use a digital electronic calculator to build understanding of this modern way of transforming such data before learning how this transformed data is analysed using standard statistical methods. This will be illustrated with examples using the excellent MS Excel add-in Analyse-It.

The workshop is limited to a maximum of 10 delegates to give an adequate opportunity for personal instruction, as well as small group team-working.

Dr John Thompson, who will present this workshop, has taught statistics in the Schools of Mathematics and Statistics in the Universities of Birmingham and Keele, as well as in the School of Chemistry and the Medical School of the University of Birmingham. He has been a frequent tutor for many years on training workshops run by Statistics for Industry Ltd. and he was a Medical Statistician in the Research and Development Department of the University Hospital of North Staffordshire. He has also run his own commercially-based statistics training workshops for more than couple of decades.

He is a Chartered Chemist and Fellow of the Royal Society of Chemistry and a Fellow of the Royal Statistical Society and has 5 book chapters on various statistical topics published in 4 multi-author advanced texts on statistics, chemometrics and healthcare, as well as a major multi-chapter statistical report for the UK Health and Safety Executive. He has a wide range of experience at senior levels in large and small business and as a consultant clinical scientist and engineer in two major NHS Hospital Trusts. He has also worked for many decades as an independent consultant in applied statistics and chemometrics with clients in industry, commerce, the EA, the HSE and the NHS.

Fees, payable in advance per delegate, for this one-day workshop: £330 incl. VAT

For booking forms and available dates contact Dr John Thompson at:

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