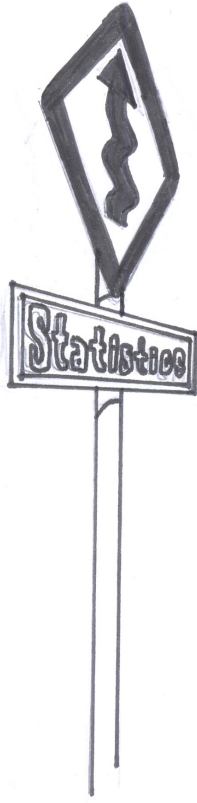


## Introduction



*Clarke's Second Law:* The only way of discovering the limits of the possible is to venture a little way past them into the impossible.

*Arthur C(harles) Clarke*

*Profiles of the Future: An Enquiry into the Limits of the Possible* (1962, rev. 1973), 21.

## Why a book on statistics for the Uninitiated?

Twenty years since starting analysing data, 15 years since initiating research projects in a leading agency and 10 years since lecturing on research methodology, it still strikes the authors on how students, particularly those reading for social sciences, change their colours gradually to lighter shades on the recognition that they need to carry out statistical analysis!

Having realised the need for an introductory book on research methodology, the hope of understanding statistical issues without shedding tears is still a dream for many. If one aspires to be successful at tertiary level, one certainly needs to know how to conduct research. However, fear of numbers is more widespread than most may realize. The mere 'auditory tickling' of a numerical equation is enough to send persons into fits. Thus the short-circuiting of research into other than quantitative methodology!

The quantitative–qualitative diatribe is there to stay. Perhaps finding the adapt research method might not be a Herculean challenge, once one follows courses in research methods. However, admittedly, the choice is not an easy one and it is not rare for students to find themselves in a dilemma ...bewildered and panic-stricken, before they even start their dissertations.

This book has been written with these students in mind. Yet, it attempts to bring statistics and research methods into the everyday realm not only of the student, but of the budding researcher and of the seasoned researcher/project manager. It is not an attempt to teach statistics and equations – there are hundreds of books specifically dealing with these. Instead, the aim here is to ensure that the reader understands what constitutes a statistic and what the actual research process is. It sets out to explain research methodology – the process that one needs to follow until, at the end, a numerical figure is reached and interpreted.

There are tuples, attributes, spatio-temporal issues, mind maps and a myriad of other items tackled in this book. It is hoped that this book's list of contents did not send any neo-researcher running in panic. Once readers start their research journey through this book, they should realise that every attempt was made by the authors to ensure readability and the presentation of research methods in a light-hearted, informal style. In fact, the authors strive to enable the reader to come to grips with the realities of statistics without fearing the worst. All that is required is an open mind, a willingness to learn, a strong doze of determination and a mug of coffee.

## Aims and Objectives

- **Aim:**

This publication aims to introduce statistics to higher education students who are not mathematically oriented and who have a perceived 'fear' of statistics. The book covers the basics as taken from the point of view of humanities/social and spatial sciences and delves into an 'operational process-aiding research'.

- **Objectives:**

- To introduce statistics to the uninitiated
- To discuss research methodology employing the data cycle and DIKA processes
- To understand visualization, mind mapping and conceptual modelling
- to understand database theory, information technology and systems
- to review the available tools and experience their employment
- to serve as a indicator for data sources