Practical Approaches to Measurements, Sampling Techniques and Data Analysis

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Dedication

This book is dedicated to parents, relatives and all well wishers of the authors.

Preface

Measurements, sampling and data analysis remain very crucial if not the fulcrum of research activities. There is not a research study for which measurement and analysis is not done. For every research study undertaken, the researcher must have a concept for which he or she needs to find a way of measuring. However concepts are vague ideas and thus must be reduced to variables for them to be measured. It is thus only variables that can be measured for data to be collected as empirical evidence to support a research study being conducted.

Many novices find it difficult about how to reduce their concepts to variables to enable their measurability. This book contains several chapters on plethora of issues very vital to research that have being arranged in a systematic and logical way to aid the understanding of its readers. As if that is not enough, it provides hypothetical data and presents practical approaches for analyzing it with the appropriate statistical tools.

It contains chapters that explain how concepts can be reduced to variables and also help identify the levels of measurement each variable being studied in a research falls into. This is to help readers understand and use data analysis software applications that allow users to identify the levels of measurements of data to be analysed such as SPSS.

Sampling and sampling techniques in research is explained with a practical touch to enable the readers know where and when appropriately to use them to achieve the objectives for a research study. There are varied data collection methods and data collection instruments used in research. These methods and instruments are to be chosen based on the study being undertaken. The book gives a detailed explanation on how to choose the appropriate instrument for a particular study.

The book gives a detailed coverage to topics such as data analysis and tests; transformation of data from that which is not normal distributed to that which is normally distributed; tabular and graphical data summarizing tools; and the researcher's use of descriptive and inferential statistics for data analysis.

It is a complete book with several book chapters vital to understanding research through measurements, sampling and its techniques, data transformation and data analysis in a practical and comprehensive way. The book is intended to equipped lecturers, researchers, tertiary students and all those interested in conducting research studies. It would be of immense help to final year tertiary students conducting their research studies; and writing their research reports.

It is written in a way that can provide self-tutorials to readers and also spare them the ordeal of learning or equipping themselves with the requisite research skills through searching of different books.

The authors of the book acknowledge the support of every individual for their diverse roles played in getting the book published. We are indeed indebt to the Science Publishing Group for quality of their services and their unremitted efforts and drive towards achieving excellence and success.

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