



Research Methods

The Skills You Need
Guide for Students

The Skills You Need Guide for Students

RESEARCH METHODS

Skills You Need

This is one of a series of eBooks by Skills You Need available for sale at:
www.skillsyouneed.com

All rights reserved. No part of this publication may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, or other electronic or mechanical methods, without the prior written permission of the publisher, except in the case of brief quotations embodied in critical reviews and certain other non-commercial uses permitted by copyright law.

ISBN: 978-1-911084-12-9

Published by Skills You Need Ltd

© 2016 Skills You Need Ltd

CONTENTS

Introduction	7
Chapter 1 An Introduction to Research Methods	8
The Basic Principles of Research Design	9
The Underlying Philosophy	10
A Note on Data Sources	11
The Role of the Researcher	11
Ethical Issues in Research	12
Chapter Summary	13
Chapter 2 Designing Research	14
Approaching Research: Five Questions	15
Some Basic Research Designs	16
Experimental Designs	16
Quasi-Experimental Designs	16
Survey Research	16
Action Research and Cooperative Inquiry	16
Ethnography	17
Narrative approaches	17
Case studies	17
Grounded theory	17
Mixing and Matching: A Word of Warning	18
Chapter Summary	18
Chapter 3 Sampling and Sample Design	19
Principles Behind Choosing a Sample	20
Bias and precision	21
Selecting a Sample	21
Probability Sampling	21
Non-Probability Sampling	22
Chapter Summary	22

Chapter 4 Quantitative and Qualitative Research Methods	23
Quantitative Research	24
Sources of Quantitative Data	25
Analysing Quantitative Data	25
Qualitative Research	26
Sources of Qualitative Data	26
Analysing Qualitative Data	27
Chapter Summary	27
Chapter 5 Surveys and Survey Design	28
Types of Survey	29
Self-Completed Surveys	29
Interviewer-Administered Surveys	30
Principles of Survey and Questionnaire Design	31
Types of Answer Scale	34
Piloting and Testing	34
Chapter Summary	34
Chapter 6 Observational Research and Secondary Data	35
Collecting Observational Data	36
Endless Observations	36
Other Factors Affecting Observational Data	36
Using Secondary Data	38
Chapter Summary	39
Chapter 7 Interviews for Research	40
Level of Structure	41
Face-to-Face or Telephone?	42
Skills Needed for Effective Interviewing	43
Chapter Summary	44

Chapter 8 Focus Groups	45
Using Focus Groups	46
Organising a Focus Group: Some Practical Thoughts	47
On the Day: Running a Focus Group	48
Possible Problems	49
Chapter Summary	49
Chapter 9 Analysing Qualitative Data	50
Systems for Analysis of Qualitative Data	51
Involving Language	51
Computer-Aided Analysis	53
Chapter Summary	53
Chapter 10 Qualitative Data from Interactions	54
Repertory Grid Analysis	55
Cognitive Mapping	57
Individual Maps	57
Dominoes	57
Group Maps	57
Chapter Summary	58
Chapter 11 Analysing Quantitative Data	59
Summarising Data: Grouping and Visualising	60
Measures of Location: Averages	62
Measures of Spread: Range, Variance and Standard Deviation	63
Skew	64
More Advanced Analysis	64
Comparing Groups	65
Choosing the Right Test	66
What Test?	66
One- or Two-Tailed Test	67
Calculating the Test Statistic	67
Comparing Variables	68
Seeing an Association	68

Statistical Tests for Associations	68
Analysis with Multiple Variables	70
Simplifying Analysis	70
Multivariate Analysis	71
Two Types of Variables	71
Using Measurement Models: Factor Analysis	72
Cluster Analysis	73
Chapter Summary	74
Conclusion	75

INTRODUCTION

Many undergraduate courses, and most postgraduate courses, require participants to carry out a substantial piece of original research, to be written up as a dissertation or thesis.

This eBook, one of a series designed for students, aims to help you design your research and choose the most appropriate methods to explore your research question. Together with its ‘partner’ book, the *Skills You Need Guide to Writing Your Dissertation or Thesis*, it aims to simplify the process of researching and then writing up your dissertation or thesis.

Its main focus is research methods in social sciences and humanities, including management research, although it may also be useful for healthcare research. It does not cover laboratory research, or advanced computer modelling, such as that required for mathematics or physics, although some of the principles on research design in Chapter 2 may be useful.



WARNING!

This book is designed as an introduction to research methods. If you wish to explore particular methods in more detail, you are advised to consult a more rigorous academic text book, or the study of the original researcher.

We hope that you find it useful in considering how to carry out your research.

The Skills You Need Team

The full book is available in the [SkillsYouNeed Shop](#)

Part of The Skills You Need Guide for Students

