

1. Record Nr.	UNINA9910842285603321
Autore	Hazari Animesh
Titolo	Research Methodology for Allied Health Professionals : A Comprehensive Guide to Thesis and Dissertation
Pubbl/distr/stampa	Singapore : , : Springer, , 2024 ©2023
ISBN	9789819989256
Edizione	[1st ed.]
Descrizione fisica	1 online resource (142 pages)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	<p>Intro -- Foreword -- Preface -- Acknowledgments -- Contents --</p> <p>Chapter 1: Introduction to Research Methodology -- 1.1 Overview --</p> <p>1.2 Defining Research Methodology -- 1.3 Significance of Research Methodology -- 1.3.1 Advancing Knowledge -- 1.3.2 Problem-Solving -- 1.3.3 Decision-Making -- 1.3.4 Validating Claims -- 1.4 Key Components of Research Methodology -- 1.5 Research Approaches --</p> <p>1.6 Research Design -- 1.7 Types of Research -- 1.7.1 Basic Research -- 1.7.2 Applied Research -- 1.7.3 Quantitative Research -- 1.7.4 Qualitative Research -- 1.8 Research Process -- 1.8.1 Formulating Research Questions -- 1.8.2 Literature Review -- 1.8.3 Research Design -- 1.8.4 Data Collection -- 1.8.5 Data Analysis -- 1.8.6 Drawing Conclusions -- 1.8.7 Reporting and Dissemination -- 1.9 Summary -- Chapter 2: Application of Research Methodology in Allied Health Profession: Thesis and Dissertation -- 2.1 Thesis and Dissertation -- 2.1.1 Thesis -- 2.1.2 Dissertation -- 2.2 Research Methodology in Health Organizations -- 2.3 Research Methodology in Academia -- 2.4 Research Methodology in Allied Health Profession: Thesis and Dissertation -- 2.4.1 Research Methodology in Physical Therapy -- 2.4.2 Research Methodology in Medical Lab Sciences -- 2.4.3 Research Methodology in Medical Imaging Sciences -- Chapter 3: Components of Research Methodology -- 3.1 Background -- 3.1.1 Research Philosophy -- 3.1.1.1 Positivism -- 3.1.1.2 Interpretivism -- 3.1.1.3 Critical Theory -- 3.1.1.4 Pragmatism -- 3.1.1.5</p>

Constructivism -- 3.1.2 Research Design -- 3.1.3 Research Approach -- 3.1.4 Review of Literature -- 3.1.4.1 Conceptual Gap Analysis -- 3.1.4.2 Empirical Gap Analysis -- 3.1.4.3 Methodological Gap Analysis -- 3.1.4.4 Theoretical Gap Analysis -- 3.1.4.5 Geographical or Cultural Gap Analysis -- 3.1.4.6 Interdisciplinary Gap Analysis -- 3.1.4.7 Policy and Practical Gap Analysis.
3.1.4.8 Temporal Gap Analysis -- 3.1.4.9 Technology Gap Analysis -- 3.1.4.10 Ethical and Social Gap Analysis -- 3.1.5 Sampling Strategy -- 3.1.6 Data Collection Tools/Instrumentation -- 3.1.7 Data Analysis Methods -- 3.1.8 Ethical Considerations -- 3.1.9 Data Interpretation -- 3.1.10 Research Limitations -- 3.1.11 Results -- 3.1.12 Conclusion -- 3.1.13 References and Citations -- 3.1.14 Summary -- Chapter 4: Formulating Research Hypothesis and Objective -- 4.1 Background -- 4.1.1 Understanding the Research Area -- 4.1.2 Identification of the Problem -- 4.1.3 Developing a Research Question -- 4.1.4 Formulating a Hypothesis -- 4.1.4.1 Null Hypothesis (H_0) -- 4.1.4.2 Alternate Hypothesis (H_1) -- 4.1.5 Designing Research Objectives -- 4.1.5.1 Criteria for Designing Good Research Objectives: SMART Criteria -- 4.1.6 Summary -- Chapter 5: Research Designs -- 5.1 Background -- 5.2 Components of Research Design -- 5.2.1 Research Questions or Hypotheses -- 5.2.2 Research Approach -- 5.2.2.1 Quantitative Research Approach -- 5.2.2.2 Qualitative Research Approach -- 5.2.2.3 Mixed-Methods Approach -- 5.2.3 Variables -- 5.2.4 Sampling Strategy -- 5.2.5 Data Collection Methods -- 5.2.6 Data Analysis Techniques -- 5.3 Types of Research Designs -- 5.3.1 Experimental Research Design -- 5.3.1.1 Randomized Controlled Trial (RCT) -- 5.3.1.2 Pre-post Design -- 5.3.1.3 Quasi-Experimental Design -- 5.3.2 Observational Research Design -- 5.3.2.1 Cohort Study -- 5.3.2.2 Case-Control Study -- Chapter 6: Sampling Types and Methods -- 6.1 Background -- 6.2 Need for Sampling -- 6.3 Sampling Types and Methods -- 6.4 Probability Sampling -- 6.4.1 Simple Random Sampling -- 6.4.2 Stratified Random Sampling -- 6.4.3 Systematic Random Sampling -- 6.4.4 Cluster Random Sampling -- 6.5 Non-probability Sampling -- 6.5.1 Purposive Sampling -- 6.5.2 Convenience Sampling.
6.5.3 Snowball Sampling -- 6.5.4 Quota Sampling -- 6.6 Process of Advanced Randomization in Sampling: Block Randomization -- 6.7 Blinding in Sampling -- 6.8 Summary -- Chapter 7: Review of Literature: Search Engines and Strategies -- 7.1 Background -- 7.1.1 Identification of Search Engine and Strategy -- 7.1.2 Screening of Search Data -- 7.1.3 Data Reporting -- 7.1.4 Synthesis of Literature -- 7.1.5 Critique and Analysis -- 7.1.6 Summary -- References -- Chapter 8: Developing Research Proposal -- 8.1 Background -- 8.1.1 Title of the Research Project -- 8.1.2 Introduction of the Research Project -- 8.1.2.1 Example: Writing Research Proposal Introduction for Physical Therapy Project-Word Limit 500-600 -- Research Objectives -- Rationale/Need of the Study -- 8.1.2.2 Example: Writing Research Proposal Introduction for Medical Lab Project-Word Limit 200-300 -- Research Question and Hypothesis -- 8.1.2.3 Example: Writing Research Proposal Introduction for Anesthesia Technology-Word Limit 1000-1500 -- Need of the Study -- Problem Statement -- Objectives -- Primary Objective -- 8.1.3 Research Methods -- 8.1.3.1 Research Approach -- 8.1.3.2 Research Design -- 8.1.3.3 Research Setting -- 8.1.3.4 Ethical Approval and Issues -- 8.1.3.5 Sample Population (Inclusion and Exclusion Criteria) -- 8.1.3.6 Sample Size Calculation -- 8.1.3.7 Sampling Method -- 8.1.3.8 Outcome Variables and Outcome Measures -- 8.1.3.9 Data Collection Procedure -- 8.1.3.10 Research Timeline -- 8.1.4 Writing Research Proposal

Methodology for Physical Therapy Project: Worked Sample -- 8.1.5
Summary -- References -- Chapter 9: Conducting Research: Scientific Methodological Rigor in Data Collection -- 9.1 Background -- 9.1.1 Standardization -- 9.1.2 Instrumentation -- 9.1.3 Questionnaire for Data Collection -- 9.1.4 Developing Research Questionnaire -- 9.1.4.1 Open-ended.
9.1.4.2 Closed-ended -- 9.1.4.3 Categories of Closed-Ended Questions -- 9.1.5 Validating Research Questionnaire -- 9.1.5.1 Pilot Testing -- 9.1.5.2 Face Validity -- 9.1.5.3 Expert Review -- 9.1.5.4 Content Validity -- 9.1.5.5 Construct Validity -- 9.1.5.6 Criterion Validity -- 9.1.5.7 Reliability -- 9.1.6 Summary -- Chapter 10: Data Analysis: Descriptive and Analytical Statistics -- 10.1 Background -- 10.1.1 Data Redundancy -- 10.1.2 Data Integration and Filtration -- 10.1.3 Data Normalization -- 10.1.3.1 Min-Max Scaling (Normalization) -- 10.1.3.2 Z-Score Standardization -- 10.1.4 Statistical Analysis: Descriptive and Analytical -- 10.1.4.1 Descriptive Statistics -- Measures of Central Tendency -- Measures of Variability or Dispersion -- Measures of Shape and Distribution -- 10.1.4.2 Analytical Statistics -- Parametric Tests -- Nonparametric Tests -- 10.1.5 Statistical Analysis Software -- 10.1.6 SPSS -- 10.1.6.1 Defining Variables and Data Entry in SPSS -- Data Entry: Worked Example 1 -- Data Entry: Worked Example 2 -- 10.1.7 Conducting Descriptive Statistics in SPSS -- 10.1.8 Conducting Inferential Statistics in SPSS -- 10.1.8.1 Test for Normal Distribution of Data -- How to Calculate a Test of Normality of Distribution Using SPSS -- How to Interpret the SPSS Test of Normality of Distribution Output -- 10.1.8.2 Conduction and Interpretation of Independent T-Test -- How to Compute an Independent T-Test Using SPSS -- How to Interpret and Report the SPSS Output of an Independent T-Test -- 10.1.8.3 Conduction and Interpretation of Paired T-Test -- How to Compute a Paired T-Test Using SPSS -- How to Interpret and Report the SPSS Output of a Paired T-Test -- 10.1.8.4 Conduction and Interpretation of Analysis of Variance (ANOVA) -- How to Compute a Simple ANOVA Using SPSS -- How to Interpret and Report the SPSS Output of a Simple ANOVA.
How to Compute a Repeated Measures ANOVA Using SPSS -- How to Interpret and Report the SPSS Output of a Repeated Measures ANOVA -- 10.1.8.5 Correlation and Regression: Exploring the Relationship Between Two Variables -- How to Compute a Pearson Correlation Using SPSS -- How to Produce a Scatterplot Using SPSS -- How to Interpret and Report the SPSS Output for a Pearson Correlation -- 10.1.8.6 Regression Analysis -- How to Compute a Regression Line Using SPSS -- 10.1.8.7 Chi-Square Analysis -- How to Compute a Chi-Square Using SPSS -- 10.1.9 Summary -- Chapter 11: Manuscript Preparation and Writing -- 11.1 Background -- 11.1.1 Writing a Case Study -- 11.1.2 Writing an Original Article -- 11.1.2.1 Preparation of Title Page -- 11.1.2.2 Preparation of Cover Letter -- 11.1.2.3 Preparation of Main Text (Manuscript) -- Preparation of Results -- Preparation of Discussion -- Preparation of Conclusion -- Preparation of References -- 11.1.3 Writing a Review -- 11.1.4 Summary -- Chapter 12: Referencing: Use of Reference Manager -- 12.1 Background -- 12.1.1 Need for Referencing -- 12.1.1.1 Academic Integrity -- 12.1.1.2 Building on Existing Knowledge -- 12.1.1.3 Verification and Replication -- 12.1.1.4 Avoiding Plagiarism -- 12.1.1.5 Scientific Evidence and Support -- 12.1.2 Referencing Styles -- 12.1.2.1 Details of the Research: Example -- 12.1.2.2 APA (American Psychological Association) Style -- 12.1.2.3 MLA (Modern Language Association) Style -- 12.1.2.4 Chicago/Turabian Style --

12.1.2.5 Harvard Style -- 12.1.2.6 Vancouver Style -- 12.1.3 Reference Managers -- 12.1.3.1 Zotero -- 12.1.3.2 EndNote -- 12.1.3.3 Mendeley -- 12.1.3.4 RefWorks -- 12.1.3.5 Citation Machine -- 12.1.4 Using Mendeley as Citation Manager -- 12.1.5 Summary -- Chapter 13: Selecting Journals for Publishing: Avoiding Rejection -- 13.1 Background -- 13.1.1 Appropriate Journal for Your Work. 13.1.2 Avoiding Outright Rejection (Editorial Review).
