

Research Report Booklet

Guidelines for Research Report Writing

Prepared by
Dr. S. S. Aher, Dr. M. N. Deshpande
& Dr. A. D. Prabhu



Index

Sr. No	Detail	Page No
	Part One Guidelines for Internal Assignment	
1.	Internal Assignments	6
2.	Assignment 1: Research Proposal	7
3.	Assignment 2: Methodology of Research	8
4.	Assignment 3: Review of Related Literature	9
5.	Assignment 4: Content of Research Problem	10
6.	Assignment 5: Analysis of Data	11
7.	Assignment 6: Research Paper	12
	Part Two Guidelines for Writing of Research Report	
8.	A. Preliminary Section	14
9.	B. Main Body	14
10.	C. References Section	16
	Part Three Typographical Guidelines	
11.	Language	18
12.	Paper	18
13.	Margins	18
14.	Font Style	18
15.	Page Numbers	19
16.	Line Spacing	19
17.	Abstract	19
18.	Endnotes	19
19.	Figures and Tables	19
20.	Bibliography	20
21.	Appendices	20
	Part Four Sample Templates with Specifications	
22.	Sample Templates with Specifications	21

Dear Research Scholar,

Research is a systematic process and Rules and Procedures are integral part of the Research Process. There are different methods related to writing Research Report mentioned in different books, which creates confusion into the minds of a new researcher about which method to be employed for writing the report. In order to avoid this confusion the college has decided to prepare a booklet of Common Guidelines for Research Supervisor and Students related to Dissertation Writing and Submission. This booklet is divided into four parts:

- The **Part one** of the booklet is related to **Internal Assignments**. Detailed information about all assignments is given in this section.
- The **Part Two** of the booklet is about **Writing Research Report**. Detailed information about all chapters is given in this section.
- In the **Part Three** of the booklet all the **Typographical Rules** are given. For internal assignment and report writing students should follow these typographical rules.
- In the **Part Four** of the booklet **Sample Templates** of Title Page, Preliminary Section, Table and Graph are given with specifications.

We hope that this booklet will definitely guide you to complete your research work smoothly. The information given in this booklet is not the Ultimate Truth. Some Changes or modifications in the above can be done according to your Research Needs or advice from Research Supervisor. We hereby suggest the Research Supervisors to make minimum changes or modifications in the Research Work of the students.

Part One

Guidelines for Internal Assignment

Six Internal Assignments

A total of Six Assignments are planned in the academic year. The details of the Six Assignments are given below:

Assignment	Title of Assignment	Marks
1	Research Proposal	100
2	Methodology of Research	100
3	Revive of Related Literature	100
4	Content of Research Problem	100
5	Analysis of Data	100
6	Research Paper	100

Detailed guidelines of each of these assignments are as follows:

Assignment 1: Research Proposal

Following points and sequence should be followed in your Research Proposal. Some of the points may not be included in your research proposal due to the nature of your study.

Title Page

Index

1. Introduction

- 1.1 Statement of the Problem
- 1.2 Significance of the Problem
- 1.3 Objectives of the Study
- 1.4 Hypothesis (only for Comparative & Correlational study)

Research questions (only for Qualitative Study only)

- 1.5 Assumptions
- 1.6 Delimitations
- 1.7 Limitations
- 1.8 Operational Definitions

2. Review of Related Literature (at least 2 reviews)

3. Methodology

- 3.1 Design of Research (only for Experimental Research)
- 3.2 Variables of the Study (only for Experimental Research)
- 3.3 Population of the Study
- 3.4 Sampling Technique
- 3.5 Tools of Data Collection
- 3.6 Outline of Experimental Program (only for Experimental Research)
- 3.7 Procedure of the Study
- 3.8 Ethical Consideration
- 3.9 Method of Analysis of Data

References

- Research Proposal should be **handwritten** manuscript on fullscape paper (*One side only*).
- The Proposal should be duly checked and signed by Research Supervisor before submission.
- Submit Research Proposal to HOD, PG in two copies (*One original and one photo copy*).
- Last date of Proposal Submission is _____.

Assignment 2: Methodology of Research

- 1. Title page
- 2. Introduction of Chapter (without title and number)
- 3. Method of Research
- 4. Design of Research (only for Experimental Research)
- 5. Variables of the Study
 - a. Dependant
 - b. Independent
 - c. Controlling Variables
 - i. Extraneous
 - ii. Confounding
- 6. Population
- 7. Sample
- 8. Sampling Technique / Procedure of Sample Selection
- 9. Tools of Data Collection
- 10. Justification of Selecting Tool
- 11. Description of Tools
- 12. Procedure of developing Data Collection Tool (If any)
- 13. Validity of Teacher-Made tools (*If any*)
- 14. Description of Experimental Program (only for Experimental Research)
- 15. Procedure of Research
- 16. Ethical Consideration
- 17. Method of Analysis of Data

References

- The assignment should be **handwritten** manuscript on fullscape paper (*One side only*).
- The Assignment should be duly checked and signed by Research Supervisor before submitting.
- Submit Assignment to HOD, PG in two copies (One original and one photo copy)
- The last date for submission of assignment is ______

Assignment 3: Review of Related Literature

- 1. Title page
- 2. Introduction of Chapter (without title and number)
- 3. Theoretical Framework
- 4. Reviews Related to study (Area wise)
- 5. Summary
- 6. References

- The assignment should be **handwritten** manuscript on fullscape paper (*One side only*).
- The Assignment should be duly checked and signed by Research Supervisor before submission.
- Submit Assignment to HOD, PG in two copies (*One original and one photo copy*)
- The last date for submission of assignment is ______.

Assignment 4: Content of Research Problem

In this assignment, the researcher should write in detailed the theoretical content related to your research problem.

Example 1: "An Analytical Study of Relationship amongst Mental Health, Scholastic Achievement and Physical Fitness Components of Obese Boys":

- a) Obesity: An Overview
- b) A Global Epidemic
- c) Obesity in Youth
- d) Factors associated with obesity
- e) Physiological Aspects of obesity
- f) Development of fat cell
- g) Regional fat distribution
- h) Health risks of obesity
- i) Childhood obesity
- j) Etiology of childhood obesity

Example 2: "Effect of Video Feedback Teaching Method on Skill Performance of Football Players"

- a) Teaching method an overview
- b) Teaching methodologies in sports at global level
- c) Status of teaching methods in India
- d) Different sports skills and teaching methods
- e) Description of football skills
- f) Factors affecting on football skill performance
- g) Methods of measuring skill performance

- The assignment should include Citations and References.
- The assignment should be **handwritten** manuscript on fullscape paper (*One side only*).
- The Assignment should be duly checked and signed by Research Supervisor before submission.
- Submit Assignment to HOD, PG in two copies (*One original and one photo copy*)
- The last date for submission of assignment is ______.

Assignment 5: Analysis of Data

- 1. Title page
- 2. Introduction of Chapter (without title and number)
- 3. Analysis of Demographic Information
- 4. Descriptive Analysis (only for Quantitative Research) & its Description
- 5. Interpretation of Descriptive Analysis
- 6. Inferential Statistical Analysis
- 7. Hypothesis Testing
- 8. Interpretation of Major Findings
- 9. Discussion

- The assignment should be **handwritten** manuscript on fullscape paper (*One side only*).
- The Assignment should be duly checked and signed by Research Supervisor before submission.
- Submit Assignment to HOD, PG in two copies (One original and one photo copy)
- The last date for submission of assignment is .

Assignment 6: Research Paper

- 1. Research Paper Title
- 2. Name of the Researcher and Research Supervisor
- 3. Abstract (200-300 words)
- 4. Keywords
- 5. Introduction
- 6. Methodology of Research
- 7. Analysis with Tables and Description
- 8. Discussion
- 9. Conclusion and Recommendations
- 10. References

The total number of words for the above submission is 2500-3000 words.

- The assignment should be **Typed** (*Back to Back*).
- Follow Typographical rules given in this document.
- The Assignment should be duly checked and signed by Research Supervisor before submission.
- Submit Assignment to HOD, PG in two copies (One original and one photo copy)
- The last date for submission of assignment is ______.

Part Two

Guidelines for Writing of Research Report

A. Preliminary Section

- Title Page
- Certificate of the Research Supervisor
- Declaration of the Candidate
- Acknowledgments (if any)
- Table of Contents
- List of Tables (if any)
- List of Figures (*if any*)
- List of Appendices (if any)
- Abstract (200-300 words)

B. Main Body

1. Introduction

Introduction / Background of study (without title and number)

- 1.1 Theoretical Concept Related to Problem
- 1.2 Statement of the Problem
- 1.3 Significance of the Problem
- 1.4 Objectives of the Study / Research Question
- 1.5 Hypothesis (only for Comparative & Correlational Study)
 Research Question (only for Qualitative Study)
- 1.6 Assumptions
- 1.7 Delimitations
- 1.8 Limitations
- 1.9 Operational Definitions

References

2. Review of Related Literature (and analysis of previous research)

Introduction of Chapter (without title and number)

- 2.1 Review related to study (Area wise)
- 2.2 Summary

References

Contd.

3. Methodology

Introduction of Chapter (without title and number)

- 3.1 Method of Research
- 3.2 Design of Research (only for Experimental Research)
- 3.3 Variables of the Study
 - 3.3.1 Dependant
 - 3.3.2 Independent
 - 3.3.3 Extraneous
 - 3.3.4 Confounding
- 3.4 Population
- 3.5 Sample
- 3.6 Procedure of Sample Selection
- 3.7 Tools of Data Collection
- 3.8 Justification of Selecting Tool
- 3.9 Description of Tools
- 3.10 Procedure of Developing Data Collection Tool (if any)
- 3.11 Validity of Teacher Made Tools (if any)
- 3.12 Description of Experimental Program (only for Experimental Research)
- 3.13 Procedure of Research
- 3.14 Ethical Consideration
- 3.15 Method of Analysis of Data

References

4. Analysis of Data

Introduction of Chapter (without title and number)

- 4.1 Analysis of Demographic Information
- 4.2 Descriptive Analysis (only for Quantitative Research)
- 4.3 Description of Descriptive Analysis
- 4.4 Inferential Statistical Analysis
- 4.5 Hypothesis Testing
- 4.6 Interpretation of Analysis
- 4.7 Discussion

References

5. Summary, Conclusion and Recommendations

- 5.1 Summary
- 5.2 Major Findings
- 5.3 Conclusions
- 5.4 Recommendations

C. References Section

Bibliography or Literature Cited Appendices

Instructions for Report Submission:

- Make sure your Research Report follows the Typographical rules as mentioned in Part Three.
- The report pages must be printed on one side of page only.
- Report must be checked and signed by Research Supervisor before submission.
- Submit TWO COPIES of Research Report to Library along with SOFTCOPY.
- Your Expected Report Submission date is ________

Part Three

Typographical Guidelines

Language

Only English and Marathi are acceptable as main language of Research Report. If candidate is writing in English then Quotations in languages other than English may require a translation and if he uses Marathi then quotations in language other than Marathi may require a translation.

Paper

A4 Size (8.27" x 11.69"), portrait (*vertical*) orientation. The Research Report must be printed on good quality white paper (*Executive bond*) on one side of the paper only. The report must be printed in black ink; printing should be laser printer or better quality.

Margins

Left-hand margins 1.5" wide,

Top – Right & Bottom 1"

Font Style

- For the main body of the text, a standard, easily legible, **12-point font** is preferred (e.g., *Times New Roman, Calibri, Arial or Helvetica*).
- For Marathi a 12-point font is preferred (eg. Only Google Input).

Font Size

• The Chapter titles and section (sub) headings should stand out clearly from the text and be as per the below specifications. Text styles and title / (sub) heading styles should be consistent throughout the report.

Title	Marathi	English
Chapter Number and Heading (Bold & Center Align)	16	14
Headings (Bold & Left Align)	12	12
Sub Headings (Bold & Left Align)	12	12
Body Text	12	12

Page Numbers

All pages should be sequentially numbered. There must be no missing, blank, or duplicate pages. Font size for page number is 12-point and must be consistent throughout the text.

- a) The page numbers in the preliminary material are to be in **lower case Roman numerals**, centered at the bottom of the page, except for the title page, which is not numbered.
- b) The page numbers in the main part (all text pages) are to be in **Arabic numerals** numbered consecutively with. Placement of page numbers in main part is as follows:
 - i. The pages should be numbered ½ inch from top of page and aligned with right margin.
 - ii. Assign page numbers for chapter, bibliography, and appendix title pages but do not display it on the first page.

Line Spacing

- 1.5 for text
- 1.5 for Endnote
- 1 for Abstract

Abstract

The Research Report must include an abstract. This should occupy a single page, and may be single-spaced. There should be no illustrations or footnotes. Students are advised that, due to space limitations shorten abstract up to 200-300 words.

Endnotes

An 'endnote' is a reference, explanation or comment placed at the end of an article, research paper or report.

- Researchers use 'Endnote' to make references.
- The font size used for both the superscripts and the corresponding text should be the same as that used in the main body of the text (12-point minimum).
- Formatting is consistent throughout the report.

Figures and Tables

a) **General:** The content, placement and format of figures and tables are determined by discipline practice. Sources of any figures or tables not original to the report must be cited; in some cases copyright permission may be necessary. Lettering in tables and figures should be

- legible at the scale of reproduction in the report. Figures may be in colour or grey-scale, as appropriate to the subject matter.
- b) **Captions:** Captions may be 1.5 spaced and may appear directly above for tables and below for the figure.
- c) **Numbering:** All figures and tables are to be listed at the beginning of the report except those appearing in the appendices.
 - **Figures:** All illustrative materials other than tables are considered figures. These may include charts, graphs, drawings, etc. All figures must conform to margins specified for the text of the document.
 - **Tables:** Tables consist of data arranged in horizontal and vertical rows; the data may be numeric, verbal, or a combination. Organize the table with your reader in mind. Allow quick and unambiguous access to the information. Information presented in the table must be within the margins specified for the text of the document

(Sample below in Part Four)

Bibliography

The Bibliography lists all materials the author found useful in preparing the document. It follows the last page of text and usually contains an alphabetical listing of references.

Appendices

An appendix is a collection of supplementary material appearing at the end of a Report. Appendix contains material that is too detailed to include in the main report, such as long mathematical derivations, table or raw data, etc.

- Each appendix must be labelled with a alphabet and title (e.g. Appendix A, B...)
- The appendix numbers and titles must be listed on the contents page under the heading Appendix

Part Four

Sample Templates with Specifications

A Study of the Physical Fitness of Undergraduates of C.A.C.P.E Admitted Through Common Entrance Test and Admitted

Through Physical Fitness Tests

Double spaced
All first alphabets of each word should
be in Upper Case except adjectives.

Bold & Inverted Pyramid

A Research Report submitted to the

Savitribai Phule Pune University

for the Degree of

Master in Physical Education

Researcher

Ameet Dattaram Prabhu

Researcher Name

Bold & Centred

Research Guide Single Space & Centred Venkatesh Wangvad, Ph.D.

Research Centre

Chandrashekhar Agashe College of Physical Education Pune-37,

Maharashtra, India

Name of Research Centre and University Name **Bold &** Centred

Guide Name

April, 2065

Month and Year of Submission

23

Certificate

This is to certify that Mr. Ameet Dattaram Prabhu, the student of University of

Pune has written the thesis entitled, "A Study of the Physical Fitness of Undergraduates of

C.A.C.P.E Admitted Through Common Entrance Test and Admitted Through Physical

Fitness Tests," for the degree of Master in Physical Education. The study done by him is his

original work and has not been copied or performed for the award of degree, associate title in

this or any other University.

Mr. Ameet Dattaram Prabhu has worked under my supervision for the required

period as per the ordinance. The thesis is satisfactory from the language point of view and

presentation of the subject matter. It is logical & sequential. I am forwarding the same for the

evaluation.

I further declare that the material obtained from other sources has been obtained from

other sources and has been duly acknowledged.

April, 2005

Signature of the Research Guide

Dr. V. S. Wangwad

Declaration by the Candidate

As required by the university ordinances, I wish to state that the work embodied in this thesis entitled, "A Study of the Physical Fitness of Undergraduates of C.A.C.P.E Admitted Through Common Entrance Test and Admitted Through Physical Fitness Tests," forms my own contribution to the research work carried out under the guidance of Dr. V. S. Wangwad at Chandrashekhar Agashe College of Physical Education, Pune. This work has not been submitted for any other degree of this or any other University. Whenever references have been made to previous works of others, it has been clearly indicated as such and included in the bibliography.

April, 2005

Researcher Ameet D. Prabhu

Acknowledgements

The research scholar is indebted to Dr. V. S. Wangwad, H.O.D., M. Ed. (Phy. Edn.), C. A. C. P. E. Pune for giving the opportunity to work on the study and for the valuable impetus and facilities made available to him for carrying out this study successfully. The author expresses a deep sense of gratitude to Dr. V. S. Wangwad, H.O.D. M. Ed (Phy. Edn.), C. A. C. P. E. Pune for his generous advice, competent guidance, encouragement and invaluable help in formulating and successful completion of this study.

Thanks are also due to Dr. Mahesh Khetmalis, lecturer, C.A.C.P.E. Pune for his advice and enormous help in the statistical analysis of the study and in step to step guidance and motivation in completion of the study. Deep sense of gratitude is expressed by the research scholar in these few lines for the timely suggestions offered and encouragement given to him by lecturers of C.A.C.P.E. Pune.

The author expresses his grateful thanks to Mr. Dinesh Kumar, Mr. Amol Tisge, for having rendered all possible help and motivation for the completion of the study. Thanks are also due to Mr. Khedkar and other library staff of C. A. C. P. E. for their timely assistance. Thanks are also rendered to college authorities who provided the raw score data for the study. Without their voluntary and wholehearted support the study could not have been completed.

Ameet D. Prabhu

Abstract

The twenty first century is witnessing a shocking rise in the prevalence of diabetes, obesity, metabolic syndromes and other lifestyle related diseases. As a result there is a sharp escalation in the number of local fitness centres and health clubs, leading to a rampant employment in fitness industry. The purpose of this thesis is to find the reasons of fitness industry upsurge (gyms and fitness centres) with the help of two questionnaire, one for the clients/ members (N=108) who pay the dues and one to the employees (N=51) who work in this industry. The tool developed was based on the aspects identified with the help of reviews and previous study done in this industry. The tool developed for the study was valid and reliable as it was checked by the experts. The analysis was done using descriptive statistics to find the frequency and percent using SPSS software. From the analysis we understand that there is awareness about fitness and people are willing to invest large amount on their general health and as there is increase in people moving and investing towards fitness there is increased opportunity for people to build career in this industry as there is more income and scope for career growth since it is rapidly growing.

Key words: Upsurge, gyms, fitness centres, market size, general health and fitness, investment, lifestyle dieases.

Table of Contents

				Page No.
Certificate			ii	
Declaration			iii	
Ackı	nowled	gements	S	iv
Abst	tract			vi
Tabl	le of co	ntents		viii
List	of Tab	les		X
List	of Figu	res		xiii
List	of App	endices		XV
1	Introd	luction		1
	1.1		ing Activities	7
		1.1.1	Hiking	7
		1.1.2	Rock Climbing	10
		1.1.3	Indoor Climbing	11
		1.1.4	Ice Climbing	11
		1.1.5	Mountaineering	12
	1.2	Histor	y of Mountaineering	14
	1.3	Famous Ascents Indian Mountaineering Foundation		16
	1.4			17
	1.5	Nehru Institute of Mountaineering		18
	1.6	Mountaineering Courses		19
	1.7	Statement of the Problem		21
	1.8	Significance of the Study		22
	1.9	Objectives		23
	1.10	Assumptions		23
	1.11	Limitations		23
	1.12	Delimitations		23
	1.13	Definitions		24
	1.14	Opera	tional Definitions	25
2	Revie	w of Rel	lated Literature	28
3	Methodology			51

3.1 Su		Subject	Subjects	
		3.1.1	Population	51
		3.1.2	Sample	51
	3.2	Proced	ure	52
	3.3	Physica	al Fitness Tests	53
	3.4 Psychological Test		ological Test	59
		3.4.1	Sixteen Personality Factor Test	59
	3.5	Data A	nalysis	63
	3.6	Time S	chedule	63
4	Analy	Analysis and Interpretation of Data		
	4.1	Scoring	65	
4.2 Analysis of the Data		Analys	is of the Data	66
	4.3	Results of the Study		111
	4.4	Gradin	g Scale	114
5	Summary, Conclusions and Recommendations			116
	5.1	Summa	ary	116
	5.2	Conclu	sions	117
	5.3	Recom	mendations	119
	Refer	ences		122

List of Tables

Table No.	Title of Table	Page No.
1.1	Psychological Variables	27
3.1	Details of Sampling	52
3.2	Physical fitness tests	53
3.3	Description of Psychological Variables	62
3.4	Short Description of Psychological Variables	63
3.5	The Detailed Testing Schedule	64
4.1	Scoring of Tests	66
4.2	The Descriptive Statistics of Height of the Groups	67
4.3	Percentile Norms of Height of Groups	68
4.4	Descriptive Statistics of Weight of the Groups	69
4.5	Descriptive Statistics of Body Mass Index of the Groups	70
4.6	Descriptive Statistics of Body Fat of the Groups	71
4.7	Descriptive Statistics of Handgrip Strength Test (Right Hand) of the	
	Groups	72
4.8	Percentile Norms of Handgrip Strength test (Right Hand) Groups	73
4.9	Descriptive Statistics of Handgrip Strength test (Left Hand) of the	
	Groups	74
4.10	Percentile Norms of Handgrip Strength Test (Left Hand) of Groups	75
4.11	Descriptive Statistics of V-Sit Test of the Groups	76
4.12	Percentile Norms of V-Sit Test of Groups	77
4.13	Descriptive Statistics of Wall Sit Legs Strength of the Groups	78
4.14	Percentile Norms of Wall Sit Legs Strength Test of Groups	79
4.15	Descriptive Statistics of Standing Stork Balance test of the Groups	80
4.16	Percentile Norms of Standing Stork Balance test of Groups	81
4.17	Descriptive Statistics of Scale Catch test of the Groups	82
4.18	Percentile Norms of Scale Catch test of Groups	83
4.19	Descriptive Statistics of Push-ups of the Groups	84

List of Figures

Figure No.	Title of Figures	Page No.
1.1	Hiking/Trekking	8
1.2	Himalayas	9
1.3	Rock Climbing	10
1.4	Indoor Climbing	11
1.5	Ice Climbing	12
1.6	Mountaineering	13
1.7	Sir Edmund Hillary and Sherpa Tenzing Norgay	16
3.1	Marking of V-Sit Test	55
3.2	Starting and Execution Position of V-Sit Test	55
4.1	Graphical representation of the Mean and Standard Deviation of scores	
	of Height (M) of Group I and Group II	67
4.2	Graphical representation of the Mean and Standard Deviation of scores	
	of Weight (Kg) of Group I and Group II	69
4.3	Graphical representation of the Mean and Standard Deviation of scores	
	of Body Mass Index (Kg/m²) of Group I and Group II	70
4.4	Graphical representation of the Mean and Standard Deviation of scores	
	of Percent Body Fat of Group I and Group II	71
4.5	Graphical representation of the Mean and Standard Deviation of scores	
	of Right Hand Grip Strength (Kg) of Group I and Group II	72
4.6	Graphical representation of the Mean and Standard Deviation of scores	
	of Left Hand Grip Strength (Kg) of Group I and Group II	74
4.7	Graphical representation of the Mean and Standard Deviation of scores	
	of V-Sit test (cm) of Group I and Group II	76
4.8	Graphical representation of the Mean and Standard Deviation of scores	
	of Wall Sit Legs Strength (Sec) of Group I and Group II	78
4.9	Graphical representation of the Mean and Standard Deviation of scores	
	of Stork Balance (Sec) of Group I and Group II	80

List of Appendices

		Page No.
Appendix A	Letter for Permission	129
Appendix B	Sixteen Personality Factor Test	130
Appendix C	Testing Slip	137
Appendix D	Acknowledgement Letter	138