



MASTERING THE ART OF WRITING AND STRUCTURING THESIS/DISSERTATION

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WHAT IS A THESIS?

- **“A written work resulting from original research, especially one submitted for higher degree in a university”.**
- A thesis is a document submitted in support of candidate for an academic degree or professional qualification presenting the author's research and findings.
- **A dissertation on a particular subject in which one has done original research**, as one presented by a candidate for a degree or Master.
- In some countries/universities, the word "thesis" is used as part of a bachelor's or master's course.
- **Thesis is just like a book, a detail document covering all the aspects of research.**
- Addresses a problem or series of problems.
- Describes what was known about the problem(s)
- What you did to solve the problems...

Getting started

- **Prepare a thesis outline**
 - Break the thesis into chapters; list the major sections in each
- **Discuss with your supervisor**
- **Prepare a chapter outline**
 - Assemble all the data, tables, figures
 - Organise them into a sensible sequence
- **Write**
 - Do a section at a time
 - **Start with something easy**

Parts of a Thesis

▪ INITIAL PAGES

- Title Page

- Approval Sheet

- Abstract

- **Acknowledgment** (Page enables the author to express his/her appreciations to those who have helped him/her in completing the study.)

- Dedication

- **Table of Contents** (comprises the titles of parts, sections or chapters and their subdivisions.)

- List of Tables

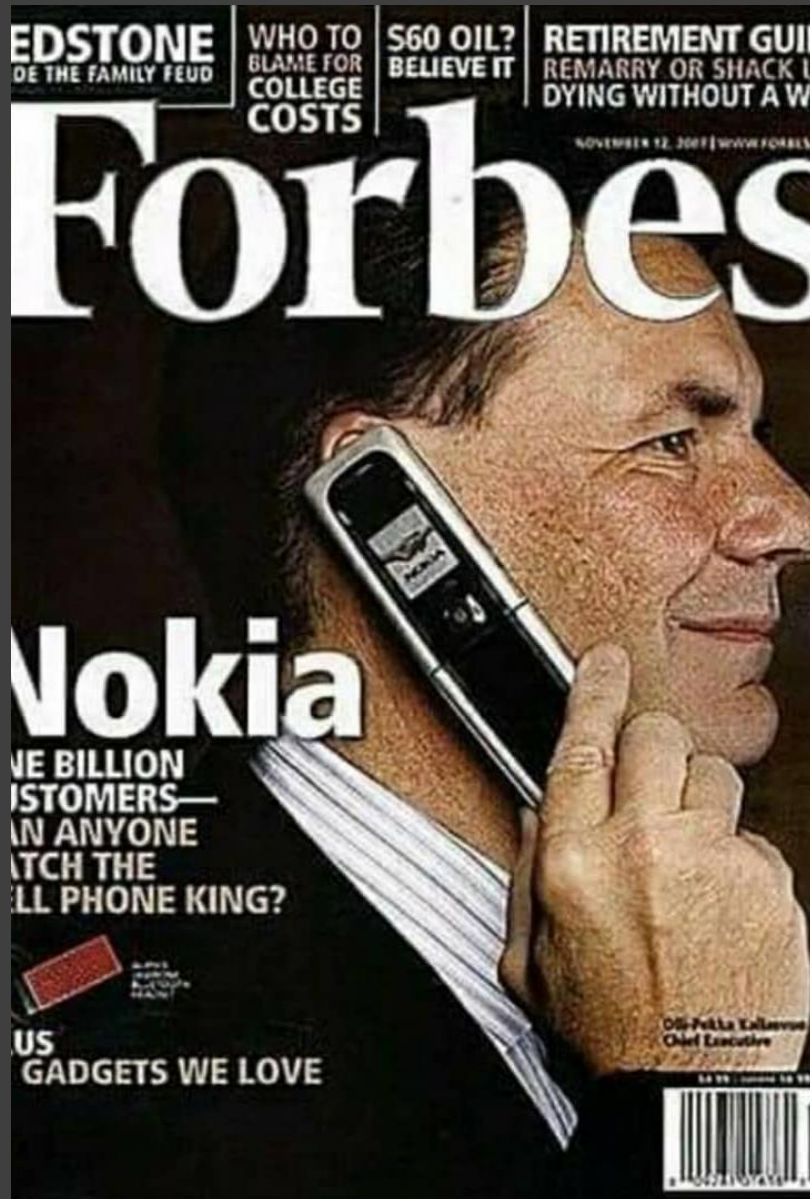
- List of Figures

- List of Abbreviations



Thesis title

- This is the first step and yet the most important decision to be made towards successful completion of your dissertation. You must analyze the following factors before finalizing the topic of research: **academic interest, availability of literature and specialization.**
- The title in itself is a summary of the dissertation; while it should be kept concise it should also attract the reader and should distinguish the contents of the dissertation from any similar dissertation.
- Title should reflect content of the thesis.
- Use concise but informative title. For Example: “IPO Underpricing And Earning Management Among The Listed Companies In Malaysia”.
- Be specific & accurate.
- Avoid phrases such as “A study of...”, “An investigation of...”
- Avoid jargon and acronym



"NOKIA. CAN ANYONE CATCH THE CELL PHONE KING?"

- Forbes, November 12, 2007
- iPhone had been released 5 months earlier, but Forbes did not see the revolution yet and was admiring Nokia's almost-monopoly. RIM's BlackBerry too loomed unbeatable and supreme.
- Just a couple years later, Nokia and RIM would effectively be out of the cell phone business and the kids won't even know those brands.

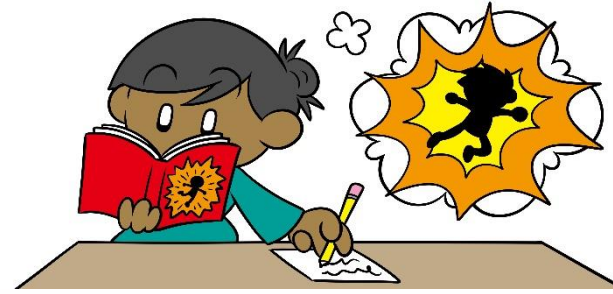
COMFORT vs GROWTH ZONE



read



write



Read to Write™



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CHAPTER 1

INTRODUCTION



Chapter 1: Introduction

CHAPTER OUTLINES

- Introduction
- Background of the research
- Statement of the Problem
- Research Objectives
- Research Questions
- Scope of the Study
- Significance of the Study
- Definition of key terms
- Organization of the thesis/report

The first chapter of your thesis is your introduction.

- This is where you provide an introduction to the topic of your thesis: you give the context in terms of content of the research project.
- Introduction: "The purpose of the Introduction should be to supply sufficient background information to allow the reader to understand and evaluate the results of the present study without needing to refer to previous publications on the topic.
- The Introduction should also provide the rationale for the present study. Choose references carefully to provide the most salient background rather than an exhaustive review of the topic."



What to write in the Introduction?

- What do we know about the topic?
- Provide comprehensive & critical review of the major findings in the area
- What we don't know (gap in knowledge)
- Identifying what the gaps in our current understanding of the field are, and why it is important that these gaps be closed
- A clear statement summarizing what's known, what needs to be learned, and what your paper aims to accomplish

Writing Good Introduction

- The first paragraph should provide a brief background in present tense to establish context, relevance, or nature of the problem, question, or purpose (what is known)
- The second paragraph may include the importance of the problem and unclear issues (what is unknown)
- The last paragraph should state the rationale, main objective, or purpose (why the study is undertaken).
- Writing good introduction start by giving a general background...

For Example: (In Bangladesh, companies are under criticisms for manipulation of their business activities. Some large organizations collapsed recently due to several corporate misconducts and this has raised serious questions about the effectiveness of different monitoring policies presumed to protect stakeholders' interests and control organizational unscrupulous behavior. As a result, the practice of CSER disclosure is of great importance and value to the users of CSER reporting as their decisions are based on them. Thus, this research study has started off with the aim of investigating the financial factors affecting CSER reporting with moderating effect of industry sector).



Background of the study

Introduce the subject or problem to be studied. This might require the identification of key managerial concerns, theories, laws and governmental rulings, critical incidents or social changes, and current environmental issues, that make the subject critical, relevant and worthy of managerial or research attention.

▪ *Questions to be answered*

- What is the subject area of study?
- What is the background of the subject studied?
- Why is it important and worthy of study?

Background of the research

- Specifically highlights the background of your research topic.
- In depth , precise and specific identification of the research background.
- Highlights the importance and weightage of the research in contrast to national perspective.
- Background to have data and evidence too.
- Background to have few recent literature survey as well both in global context and your country context.
- Background not to be mixed with introduction and scope of the work.

Statement of the problem

- A problem statement is the description of an issue currently existing that needs to be addressed.
- It provides the context for the research study and generates the questions which the researcher aims to answer.
- The statement of the problem is the focal point of any research.
- A well articulated statement of the problem establishes the foundation for everything to follow in the proposal.
- You should be able to apply the 5 'W's (Who, What, Where, When and Why) to the problem statement.

The research problem

- The statement of the problem or problem statement should follow logically from what has been set forth in the background of the problem by defining the specific research need providing impetus for the study, need not met through previous research.
- Present a clear and precise statement of the central question of research, formulated to address the need.
- The problem must be reflected to your title or the readers must know your problem by just simply reading your topic.
- The problem must not be answerable by yes or no and must be arranged in the flow of your documentation or study.
- Connecting the problem statement to the objective (reason for undertaking the study) Therefore, the specific objectives of the present study were: •To differentiate the effects of; •To quantify... •To characterize...

KNOWLEDGE/THEORETICAL GAP

Main Problem

Organization performance

Sub-problem 1

Human Resource Management Practices

Sub-problem 2

Workplace Safety

Issue 1

Recruitment and Selection

Issue 2

Training and Development

Issue 3

Performance Appraisal

Issue 4

Reward and Benefits

METHODOLOGICAL ISSUES

NO ISSUES

CONTEXTUAL/INDUSTRIAL/PRACTICAL ISSUES

Main Problem

Labor Unrest

Issue 1

Dissatisfaction

Issue 2

Labor Strike

Issue 3

Vandalism

Issue 4

Employee
Turnover

Research Questions

What are the Research Questions to be investigated?

- RQ1: What are the factors affecting consumers intention to adopt and acceptance of fintech services in Bangladesh Insurance Industry?
- RQ2: Does consumer fintech services adoption is driven by the four constructs including performance expectancy, effort expectancy, social influence and facilitating conditions of UTUAT2 model?
- RQ3: Does risk moderates the relationship between behavioral intention to adopt fintech services and actual usage?
- RQ4: Is there any impact of personal innovativeness and perceived security on intention to adopt fintech services?



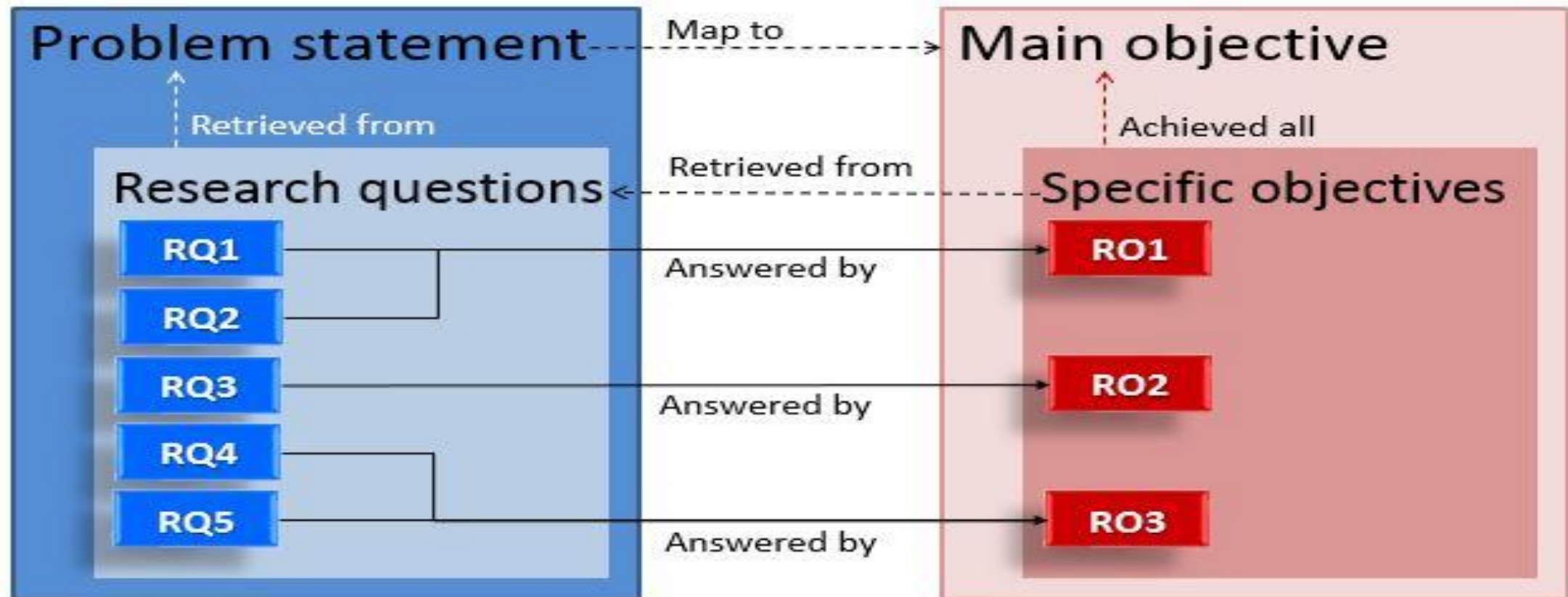
Research Objectives

Define the specific research objectives that would answer the research questions of the study. What are the specific objectives of the study?

- RO1: To determine the factors affecting consumers intention to adopt and acceptance of fintech services in Bangladesh Insurance Industry.
- RO2: To test whether intention to adopt is affected by the four constructs including performance expectancy, effort expectancy, social influence and facilitating conditions of UTUAT2 model.
- RO3: To verify whether risk moderates the relationship between intention to adopt and acceptance of fintech services.
- RO4: To investigate whether personal innovativeness and perceived security have impact on intention to adopt fintech services.

Alignment of Research Objectives with PS

ALIGNING



The Significance of the Study

- This section answers a basic question of any reader. Why in a general sense? One or two brief references to previous or theories critical in structuring this study to support /understand the rationale, to fully appreciate the need for the study. Its educational significance or own professional experience that stimulated the study or aroused interest in the problem.
- The significance of the study will mainly focus on the question “Who will benefit from the study?”.
- This section will state the contribution of your study and the usefulness of your study in the society.
- **Clearly describe the significance of the study.**
 - *Justify* why the subject requires attention.
 - Identify key contributions of the research that can be achieved.
 - **Highlight the contributions** that the study seeks to achieve towards: **management practices; theoretical and methodological applications; governmental procedures, policies and laws; nation building.**



Writing the Scope of the Work

- This is very important in a thesis where you specifically highlight your parameters of research.
- Scope in terms with area of the research under consideration.
- Scope in terms with unit of analysis.
- Scope in terms with geographical coverage of your research.
- Scope in terms of **depth and breadth** of your research.
- It is always advisable to narrow down a topic , narrow down does not mean less work. It comprehends in depth on an issue.
- One cannot be solving everything under the sun, so SCOPE is vital.

Definition of terms

- Define the important terms used in the study that are necessary for readers to understand the whole report.
 - All variables should defined with the support of literature.



The background of the slide is a blurred image of an open book on a desk. Overlaid on this are various white mathematical and scientific symbols, including a plus sign, a zero, a question mark, a magnifying glass, a pencil, and various letters and numbers. The symbols are scattered across the upper and middle portions of the image. On the right side of the slide, there are several yellow brushstroke-like decorative elements.

Organization of the Thesis/Report

A synopsis of the contents of the chapter that leads on to the introduction of the following chapter and the organization of subsequent chapters.

For Example:

Chapter 1 contains the background of the study, research questions, research objectives, significance of the study, scope of the study, and definitions of key terms.

Chapter 2 includes the fintech service adoption literature, relevant theories and models under technology adoption literature, discussion on independent variables literature, underpinning theory, and research gaps.

Chapter 3 comprises of theoretical framework, hypotheses developments, research paradigm, research approaches, research design, questionnaire development, sampling size, sampling technique, data collection method, statistical method, and software.

Chapter 4....

Chapter 5....



Q&A



CHAPTER 2

LITERATURE REVIEW

Chapter 2: Literature Review

Chapter Outlines:

Introduction

Global Literatures

Regional Literature – except your country

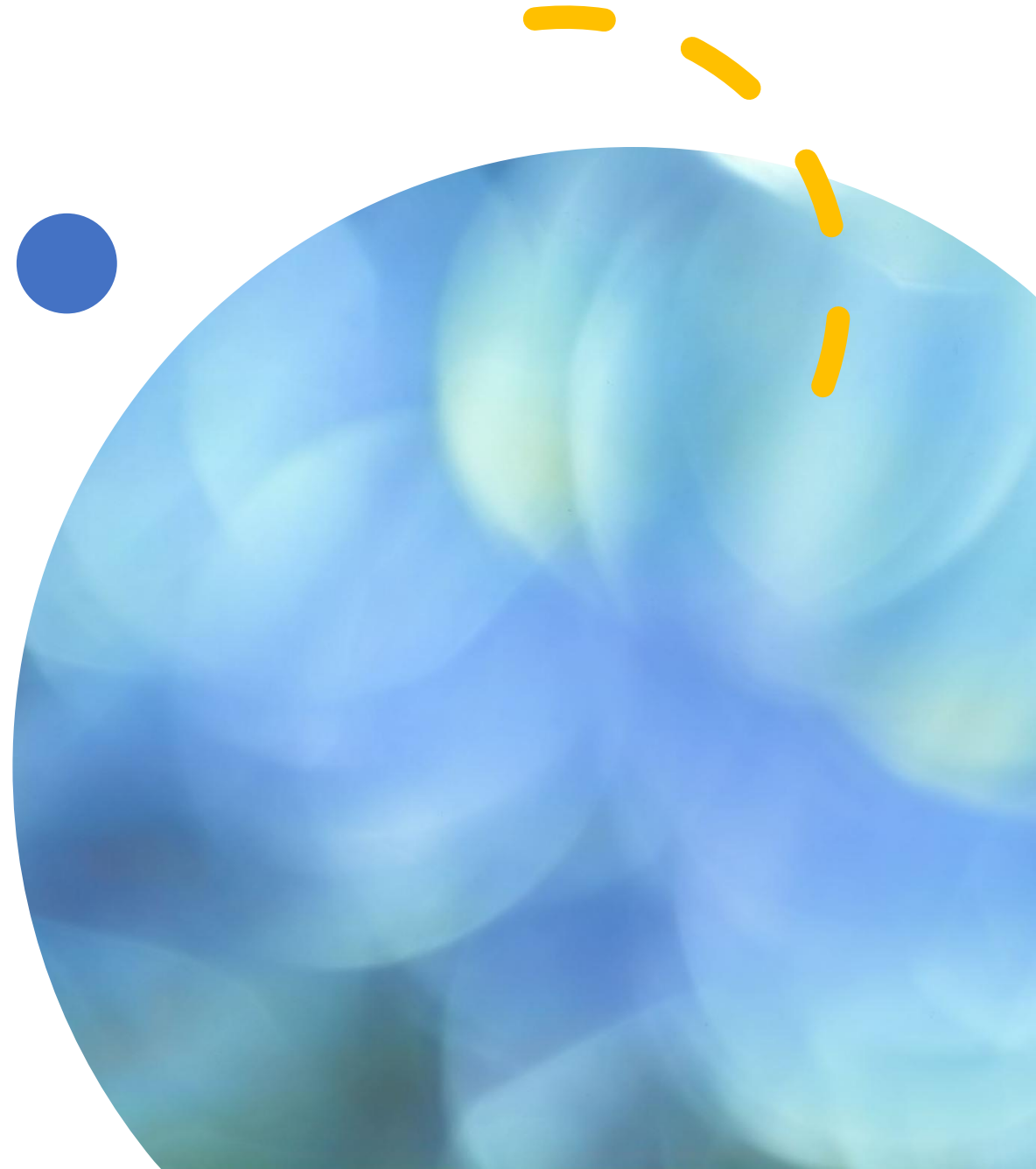
Country Specific Literature

Theories underpinning your research

Gap in the Literature

Theoretical framework and justification

Summary





Literature Review Identify issues, differences and similarities in others works, integrate key points of research and make relationship with your topic, review literature available from past and present; introduce the topic and describe the Scope.

In this part you must get your data and information from any **journals**, books, magazines, and news papers. You must label your published material with local or foreign.

- Must be also organized to cover identified and defined problem.
- Must take all the evidences about the problem with the author's experiences.
- As much as possible, get the latest published materials. Avoid old published materials.
- It must be related to your topic. If not, do not get it.
- On the last part of this part you must have a statement how this old published material helps the researcher in their current study and relate it to your study.



Some Useful Tips

- Identify the appropriate academic and/or professional fields
- Evaluate and critique the literature – challenge the assumptions
- Be highly selective, and include only those aspects of the Research Literature and non-research or Conceptual literature that are relevant to developing the foundation of the current study
- Must serve a specific study-oriented purpose
- **Each major/Key previous study is discussed in a separate paragraphs with the findings**
- Summarized collectively – same as with non-research or Conceptual literature by authorities who hold similar views.
- **A review of literature should read as a synthesis, written by some one who has read all of the literature and so is able to look across it all, select the highlights, and synthesize these into a totally integrated section in the context of the current study, for further use when writing the discussion of the results and conclusions.**

How do we organize our Literature Review?

Ensure good flow and logical sequence

- Start with Dependent variable (this is the central theme of our research)
- Followed by independent Variables (We may provide a summary table at the end)
- Then Moderating/Mediating Variables (if we have them)
- Control Variables (if we have them)
- An excellent summary as a conclusion of the chapter (Highlighting the research GAP).

How to organize LR

- ***History of Research***: Provide a brief history of the empirical research on the subject, pioneering studies, thrust of prior research on the subject, i.e. which issues have received attention, theories explored and viewpoints expressed.
- ***Review of key studies***: Identify and summarize the key empirical studies that have a bearing on the research, provide a tabular summary of the subjects, issues studied, research methods used and other pertinent details relating to the studies; and summarize the findings of the studies.
- **Evaluation of Key Studies**: Evaluate the findings of the studies in the light of your concerns:
 - What has been accomplished and what remains to be done?
 - How do you intend to use the experience of these studies in your research?

OUTLINES OF LITERATURE REVIEW

- **There are various approaches to organizing the body of a literature review.** You should have a rough idea of your strategy before you start writing.
- Depending on the length of our literature review, we can combine several of these strategies (for example, our overall structure might be thematic, but each theme is discussed chronologically).

1) Chronological

- The simplest approach is to trace the development of the topic over time. However, if you choose this strategy, be careful to avoid simply listing and summarizing sources in order.
- Try to analyze patterns, turning points and key debates that have shaped the direction of the field. Give your interpretation of how and why certain developments occurred.

OUTLINES OF LITERATURE REVIEW

2) Thematic

- If you have found some recurring central themes, you can organize your literature review into subsections that address different aspects of the topic.
- For example, if you are reviewing literature about inequalities in migrant health outcomes, key themes might include healthcare policy, language barriers, cultural attitudes, legal status, and economic access.

OUTLINES OF LITERATURE REVIEW

3) Methodological

- If we draw our sources from different disciplines or fields that use a variety of research methods we might want to compare the results and conclusions that emerge from different approaches.

For example:

- Looking at what results have emerged in qualitative versus quantitative research
- Discussing how the topic has been approached by empirical versus theoretical scholarship



OUTLINES OF LITERATURE REVIEW

4) Theoretical

- A literature review is often the foundation for a theoretical framework. We can use it to discuss various theories, models, and definitions of key concepts.
- We might argue for the relevance of a specific theoretical approach, or combine various theoretical concepts to create a framework for our research.

Underpinning Theory(s)



There should be a separate section to discuss theory/theories that underpin our research framework.



This section should provide a synopsis of theories derived from the researcher's experience from the readings of previous research.



Finally justifications of selected theory/theories should be incorporated in a sub-section.



Concluding LR Chapter

Summary

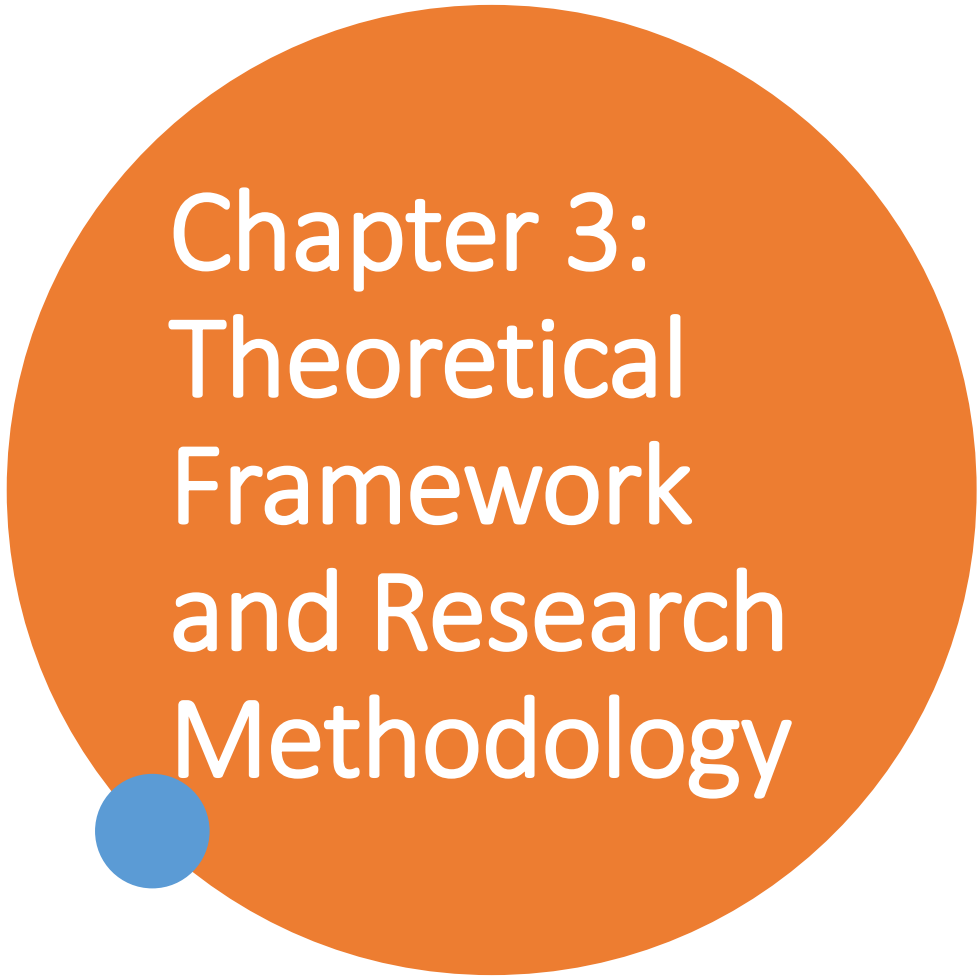
- The LR Chapter should end with an excellent summary.
- This section should provide a synopsis of contents derived from the researcher's experience from the readings of research and conceptual literatures should be stated effectively at the conclusion of the review of literature chapter.
- This section should highlight the research gap identified and justifications of variables selected to develop the theoretical/Conceptual/Research framework.





CHAPTER 3
THEORETICAL FRAMEWORK
AND RESEARCH
METHODOLOGY





Chapter 3: Theoretical Framework and Research Methodology

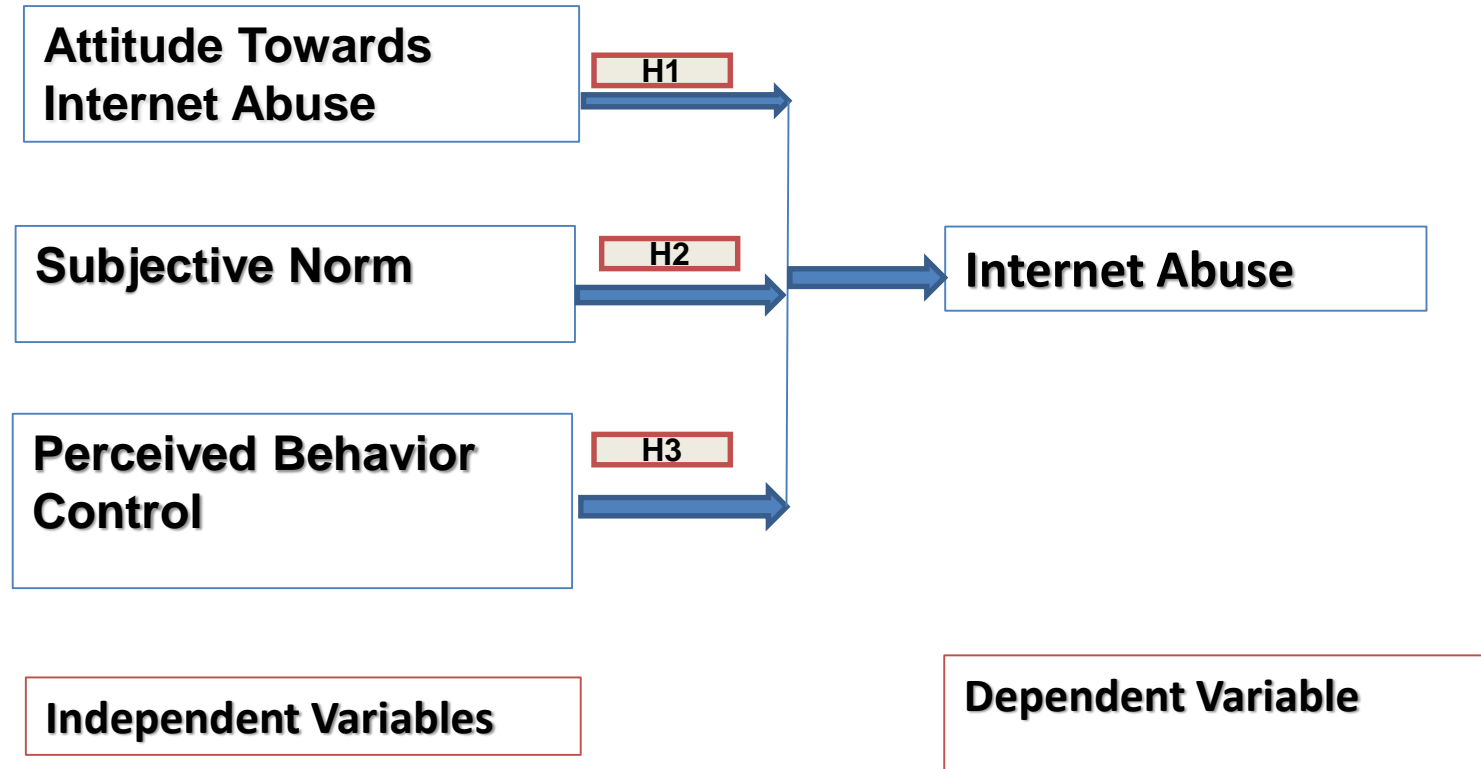
Chapter Outlines

- Introduction
- Theoretical/Conceptual Framework
- Construction of Hypotheses Statements
- Research Philosophies & Justification
- Research Approach & Justification
- Research Design & Justification
- Research Methods & Justification
- Population of the study & Unit of Analysis
- Sample technique & Justification
- Determination of Sample size
- Data Collection Methods
- Data Analysis
- Summary

Theoretical Framework

- **Theoretical / conceptual framework** – using material from the previous chapter, produce the working definition *of the main concepts you will use in your study*. If possible, form them into a conceptual framework of theory or hypothesis to be tested.
- ***Theoretical Framework***: Identify the Variables investigated in the study. Illustrate how the Variables interact with each other as hypothesized in the research by the aid of diagrams (if possible).





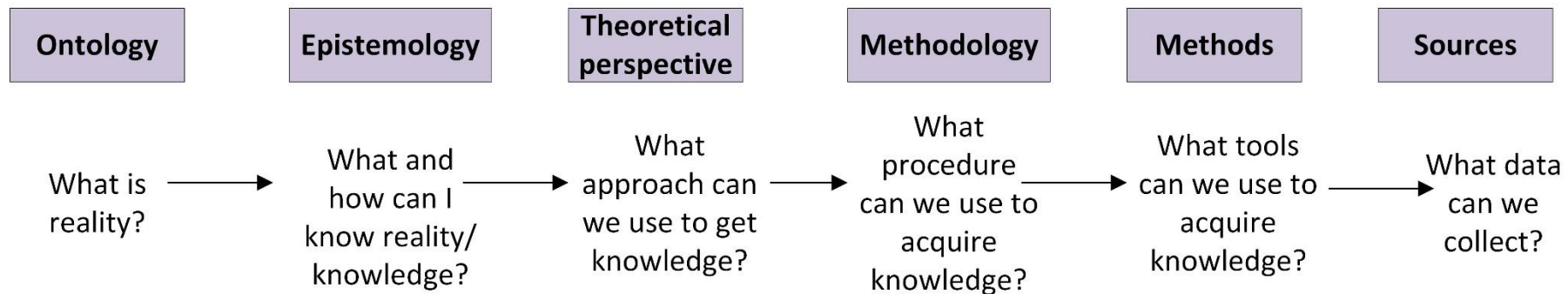
**THEORETICAL FRAMEWORK:
FACTORS AFFECTING INTERNET ABUSE AT
WORKPLACE**



HYPOTHESES

- **H1: Attitude towards internet abuse will contribute to internet abuse in workplace.**
- **H2: Subjective norms affect internet abuse in workplace.**
- **H3: There is a relationship between Perceived behavioral control and internet abuse in workplace.**

Philosophical Underpinning



Adapted from Hay (2002) pg. 64 and Crotty (1998)



Positivists believe that there is a single reality, which can be measured and known, and therefore they are more likely to use quantitative methods to measure this reality.

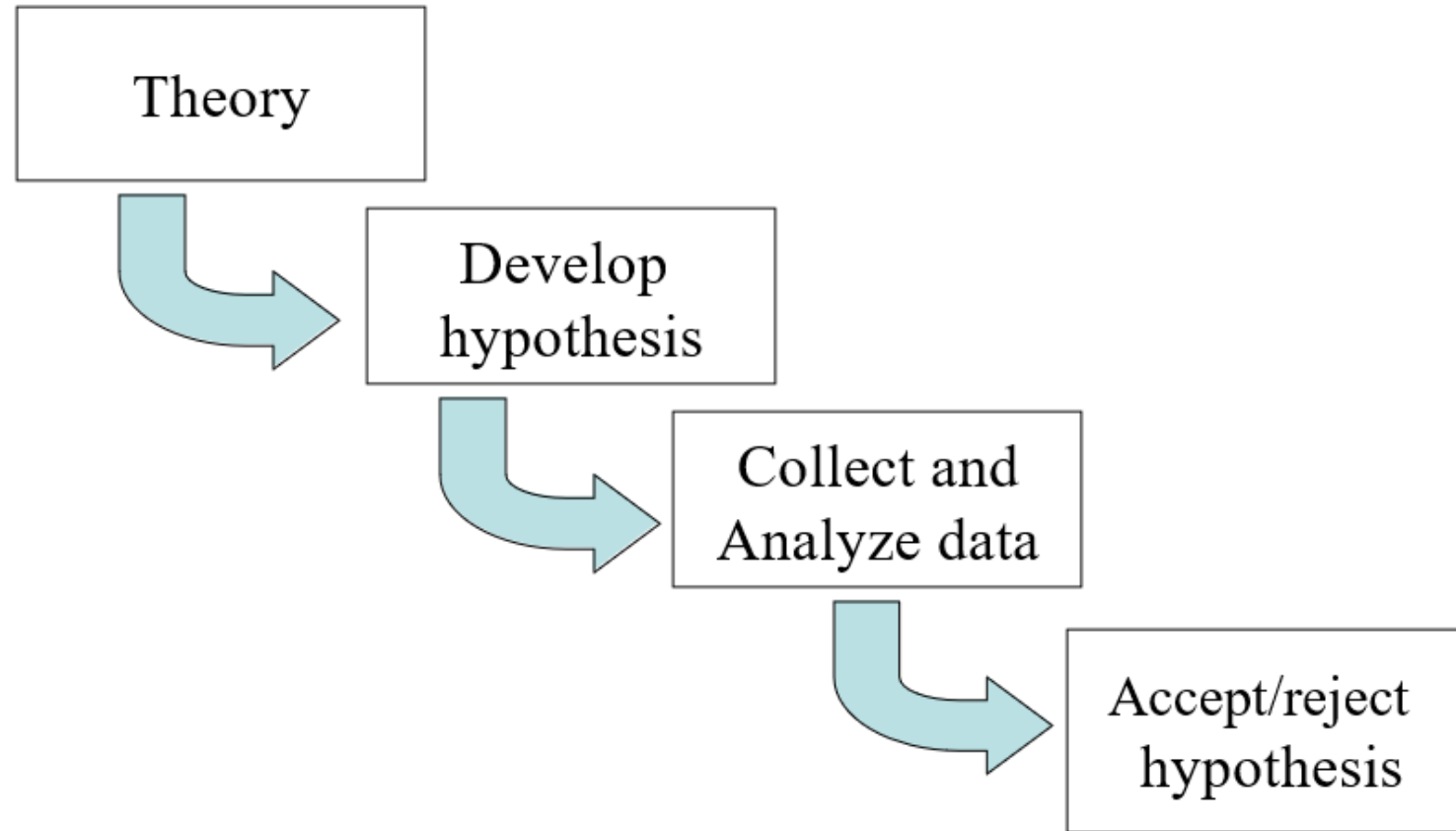


Constructivists believe that there is no single reality or truth, and therefore reality needs to be interpreted, and therefore they are more likely to use qualitative methods to get those multiple realities.

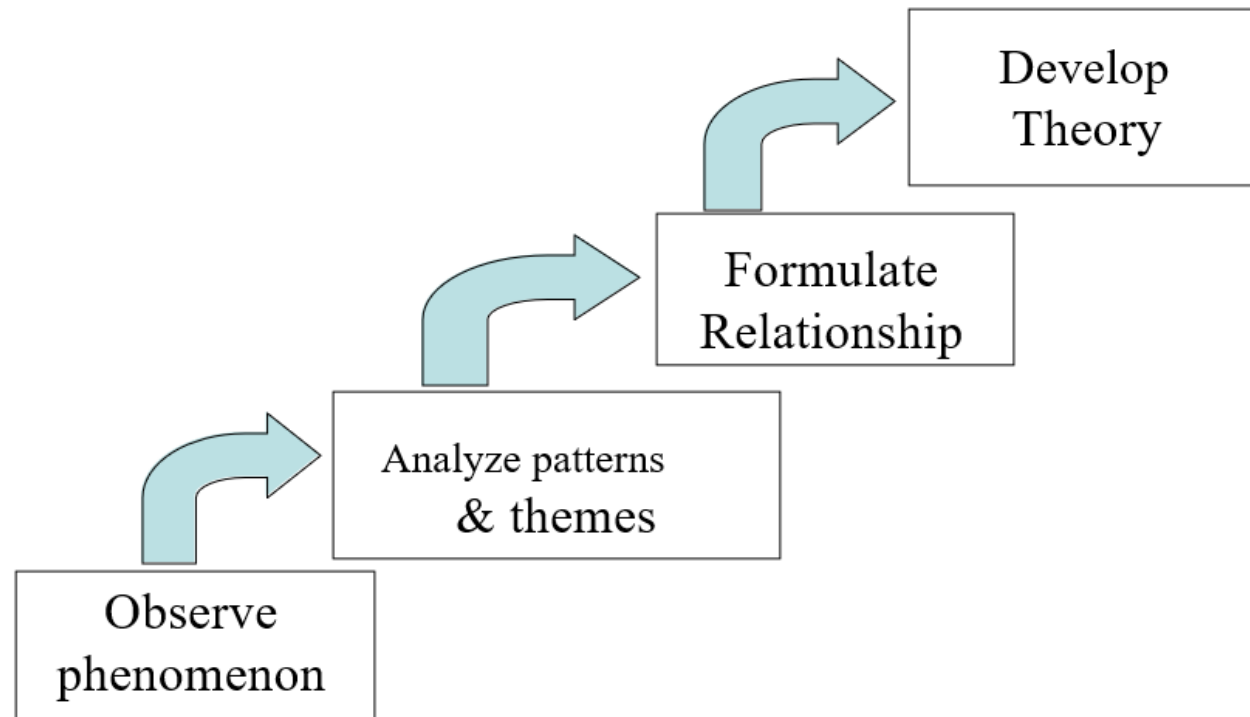


Pragmatists believe that reality is constantly renegotiated, debated, interpreted, and therefore the best method to use is the one that solves the problem

Deductive Approach



Inductive Approach





Research Design



Reporting

- Provide a summation of data, often recasting data to achieve a deeper understanding or to generate statistics for comparison.




Descriptive

- Tries to discover answers to the questions who, what, when, where, and, sometimes, how.





Predictive



Attempts to predict when and in what situations an event will occur. May also be described as applied research/basic research.



Explanatory

Explanatory Research is conducted for a problem which was not well researched before, demands priorities, generates operational definitions and provides a better-researched model.



Exploratory



Exploratory research is defined as a research used to investigate a problem which is not clearly defined. It is conducted to have a better understanding of the existing problem, but may not provide conclusive results.



Researcher starts with a general idea and uses this research as a medium to identify issues, that can be the focus for future research.



An important aspect here is that the researcher should be willing to change his/her direction subject to the revelation of new data or insight.

Categories of Research

-
- **Qualitative research:** understanding of human behavior and the reasons that govern such behavior.
 - **Quantitative research:** systematic empirical investigation of quantitative properties and phenomena and their relationships.
 - **Mixed methods research:** uses a combination of quantitative and qualitative methods for data collection and analysis.



Qualitative Study

Yes, but we also saw another trend. Why do our users do that?

Insight-Driven Hypothesis, does our telemetry data confirm this in a larger population?

Quantitative Study

Triangulation: Merging Qualitative and Quantitative

Triangulation is the term used to describe the combining of several qualitative methods or combining qualitative and quantitative methods.

Conduct studies
simultaneously

Ongoing
qualitative
with multiple
waves
of quantitative

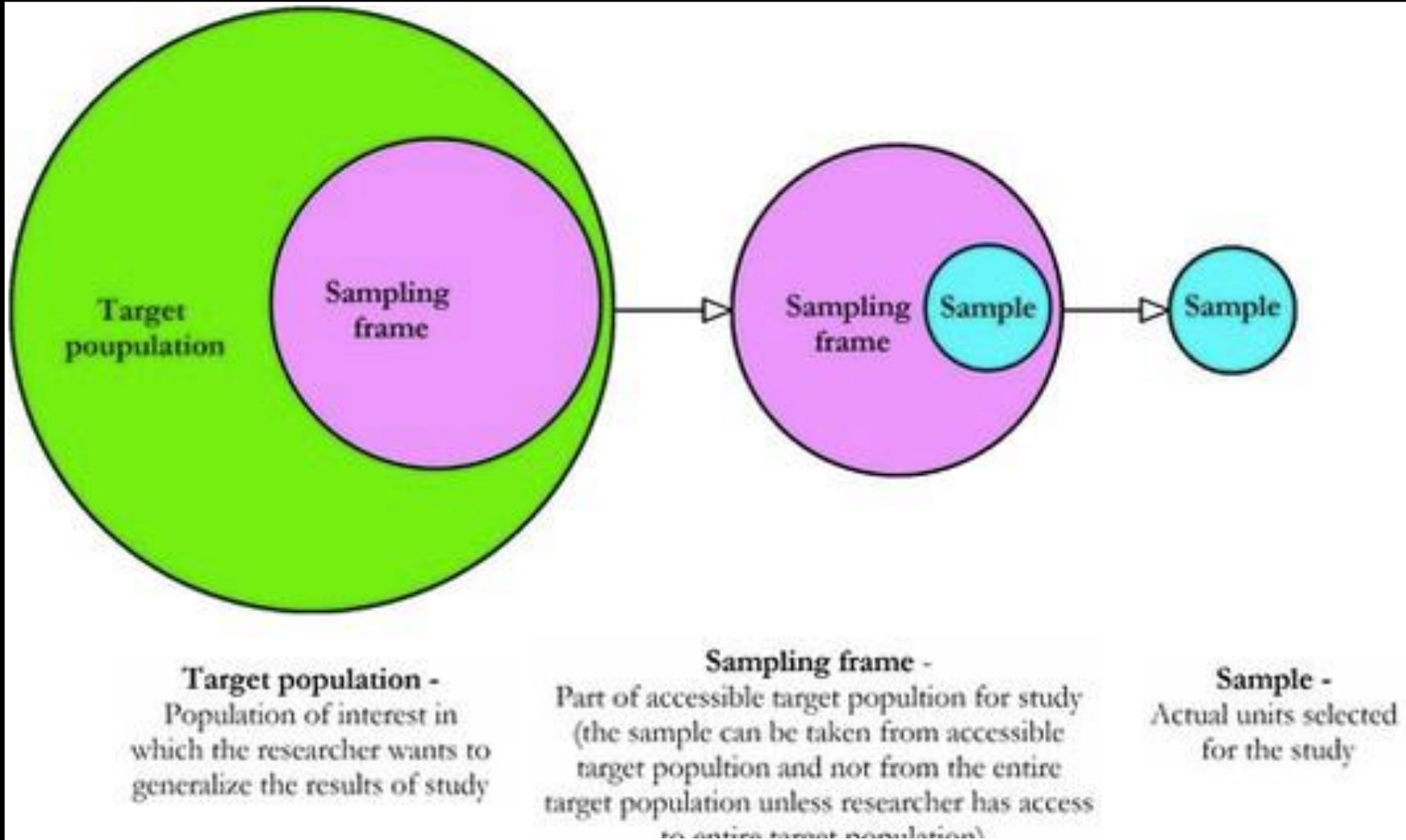
Perform series:
Qualitative,
Quantitative,
Qualitative

Quantitative
precedes
Qualitative

Determination of Unit of Analysis

- **Unit of Analysis** – The target population from whom data needs to be collected to serve the research objectives. These could be:
 - Individuals (such as customers, employees, and owners)
 - Households (families, extended families, and so forth)
 - Organizations (businesses and business units)
 - Departments (sales, finance, and so forth)
 - Geographical areas
 - Objects (products, advertisements, and so forth).

***INDIVIDUAL LEVEL VS ORGANIZATIONAL LEVEL
THEORIES***



IDEA OF SAMPLING.....

SAMPLING METHODS

PROBABILITY (RANDOM) SAMPLES

- Simple random sample
- Systematic random sample
- Stratified random sample
- Multistage sample
- Multiphase sample
- Cluster sample

NON-PROBABILITY (NON-RANDOM) SAMPLES

- Convenience sample
- Purposive sample
- Quota
- Panel Sampling
- Snowball Sampling

Determining Sample Size

- An important step in planning a statistical study.
- Part of designing a high-quality study.
- A study must be of adequate size, relative to the goal of the study.
- An under-sized study is a waste of resources for not having the capability to produce useful results.
- An over-sized study uses more resources than necessary.

Table for Determining Sample Size for a Given Population:

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	346
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	351
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	181	1200	291	6000	361
45	40	180	118	400	196	1300	297	7000	364
50	44	190	123	420	201	1400	302	8000	367
55	48	200	127	440	205	1500	306	9000	368
60	52	210	132	460	210	1600	310	10000	373
65	56	220	136	480	214	1700	313	15000	375
70	59	230	140	500	217	1800	317	20000	377
75	63	240	144	550	225	1900	320	30000	379
80	66	250	148	600	234	2000	322	40000	380
85	70	260	152	650	242	2200	327	50000	381
90	73	270	155	700	248	2400	331	75000	382
95	76	270	159	750	256	2600	335	100000	384

Note: "N" is population size
 "S" is sample size.

Source: Krejcie & Morgan, 1970

SAMPLE SIZE DETERMINATION (1)

KREJCIE & MORGAN 1970

Table for Determining Sample Size from a Given Population

<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	1000000	384

N is population size.
S is sample size.

SAMPLE SIZE DETERMINATION (2)

(UMA SAKARAN 2009)



Data Collection Methods

Data collection protocols, Data collection period and Data collection procedures must be explained in details.

- Secondary Data (Data Stream etc.)
- Primary Data
 - Interview
 - Focus Group Discussion
 - Survey with Questionnaire
 - Personally Administered
 - Using Internet
- ***Questionnaire***:- Describe the questionnaire used in the study – Background of the questionnaire: Is it original?; if any items are taken from existing questionnaire, identify the sources; describe the question categories, describe the scaling methods used and state the reasons for choosing them; and describe issues on validity and reliability.
- ***Administration of the Questionnaire***: Describe how the questionnaire was administered. Discuss problems encountered, if any, that affected the results relating to sample characteristics and their potential impact on reliability and validity of the data.



Data Analysis

- Pilot Testing/Pre-Testing
- Need to describe the whole procedures of data analysis.
- ***Statistical Methods***: Discuss the selected Descriptive Statistical and Inferential Statistical methods [SPSS/PLS/STATA etc] used in analyzing the results.
- ***Summary***
This chapter would end with a synopsis of the contents of what has been written about in the Research Methodology chapter.



CHAPTER 4

DATA ANALYSIS

AND FINDINGS



Chapter 4: Data Analysis & Findings

Chapter Outlines

- Introduction
- Present the data
- Analysis Of Data & Interpretation Of Data
- Descriptive Analysis
- Testing of Reliability and Validity
- Testing of Hypotheses
- **Presentation of Findings**
- Chapter Summary

Presentation of data and findings

▪ **Presentation Of Data**

Present the data in these forms: – Tabular – Textual – Graphical (optional).

▪ **Analysis Of Data & Interpretation Of Data**

- Present the findings in the form of Tables, figures, charts or other illustrations as needed in terms of the Research Questions or Hypotheses tested
- Analyze in depth to give meaning to the data presented in the table. Avoid table reading.
- Discuss your findings in terms of what the data actually means in terms of each segment or cell of data gathered.
- State the conclusions as concretely as possible in terms of each segment or cell of data gathered to answer the Research Questions and Hypotheses.

Some tips on presentation of findings

Results section

- It contains all of the data to support (or refute) the hypothesis that was proposed in the introduction section
- It serves to weave a coherent story and must communicate the findings to the reader in a logical, transparent manner

Data presentation – Graph/Table/Figure?

- Tables can be used to display precise numeric values
- Figures are better for conveying trends or proportions
- Clear, succinct graphs, charts, photographs, and drawings can quickly convey the primary findings of research
- The figure legends should provide a detailed description of the corresponding figure

Some tips on presentation of findings

Data presentation – Graph/Table/Figure?

- Explain each symbol in the figure (typically arrow heads, arrows, asterisks)
- Label should be clear (e.g., scale bar on SEM)
- Tables should be self-explanatory
- Textual description should summarise & highlight table content (not to repeat)
- Cross-check reference to figures/tables in the text
- All statistical analyses, where appropriate, should be described
- Describe specific trends, significant effect, similarity/contrast, exception, limitation, etc.



Common pitfalls

- The same data are presented in figure (graph) and table
- Data presented in the table are simply stated (without describing the trend, making comparison, highlighting anomaly, etc.)
- Unusual trend in data is ignored (not highlighted)

Summary

- This chapter should end with an excellent summary highlighting key findings of this research including acceptance and rejection of constructed hypotheses.
- The accepted/rejected hypotheses can be presented in a table.

Q & A

QUESTIONS &
ANSWERS



CHAPTER 5

DISCUSSION AND CONCLUSIONS

Chapter 5

Discussion and Conclusions

Chapter Outlines

- Introduction
- Recapitulations of the study
- Discussions in alignment with each research Questions.
- Contributions of the study/Significance of the findings
 - Theoretical Contributions
 - Methodological Contributions
 - Contextual/Practical Contributions
- Recommendations
- Limitations of the Study
- Suggestions for future study
- Conclusions

Introduction and recapitulations of the study

- This chapter starts with an introduction by describing sections of this chapter and recapitulations of the study.
- Summarize [recapitulate] the argument of the dissertation in terms of what you attempted to find out and what you accomplished i.e. Address the Research Questions/Hypothesis (es). The final chapter should have special focus on ‘conclusions and recommendations’.

Discussion

How to Discuss?

How thorough is your discussion & interpretation?

Have the main point to emerge from the results been picked for discussion?

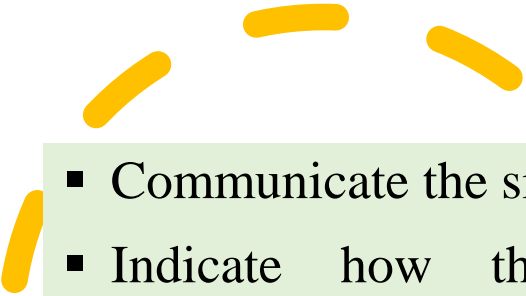
Are there links made to the literature?

Is there enough evidence in your data to attempt at theory building or reconceptualization of the problems?

Are there speculations?

Are they well grounded (can be substantiated with your own data)?

- Discuss the findings of Study in terms of the main Research Questions and Hypotheses as well as the Title of the Research and relate the findings to the Literature Review.
- In addition, **try to explain the significance and non-significance of the results using available theory, data and facts** as well as the validity and reliability of the findings and arguments in the dissertation as a whole.

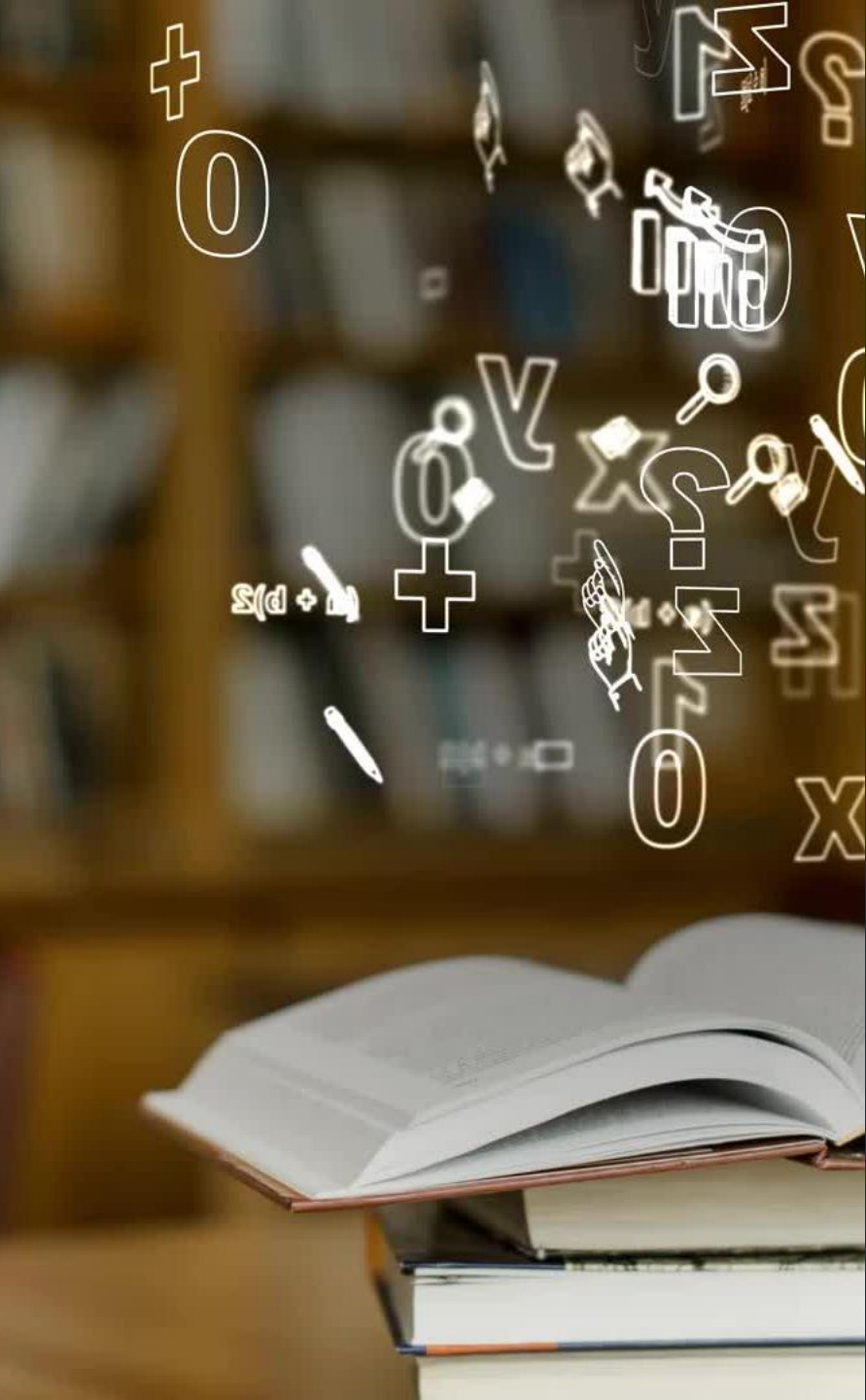
- 
- Communicate the significance of your findings
 - Indicate how they support (or refute) the experimental hypothesis
 - Describe how these results advance the field of study
 - Give supporting evidence/information from previous works
 - Use phrases such as... One possible interpretation of the results shown in Figure...include the possibility that... ...The results shown in Figure 5 are in contradiction to the work of Islam et al. (2000)... These data suggest that... In contrast, Williams et al. (1998) reported that...



Discussion

Implications of the findings

- Describe the significance of research findings
- Discuss significance to theory/theories
- What are the substantive implications of the experience for; Management, Unions and other interest groups; for public policy; Nation building.
- The Methodological or procedural implications of the experience for other researchers.
- Show how results progress field of study



CONTRIBUTIONS OF THE STUDY

**Testing
Effectiveness
of a Theory**

**Verifying a
Theory**

**Nullifying a
Theory**

**Validating
a Theory**

**KNOWLEDGE/
THEORETICAL
CONTRIBUTIONS**

**Modifying a
Theory**

**Integrating
Theories**

**Extending a
Theory**

**Proposing a
New
Methodology**

**Testing a
proposed
methodology in a
New Context**

**Validating
Instruments in
a new context**

**METHODOLOGICAL
CONTRIBUTIONS**

**Integration/T
riangulation**

**Developing New
Instruments**



**New Issues
Arise**

**Problems
Reoccur**

**INDUSTRY/
PRACTICAL/CONTEXTUAL
CONTRIBUTIONS**

**Changes of
Policy
required**

**Changing
Mindsets**

**Adapting/Adopting
policies from other
industry or country**

Recommendations

- Recommendations mean that for each conclusion, the researcher suggests a recommendation.
- Recommendations may be specific or general or both addressing to all stakeholders of your research.

They may include suggestions for further studies.

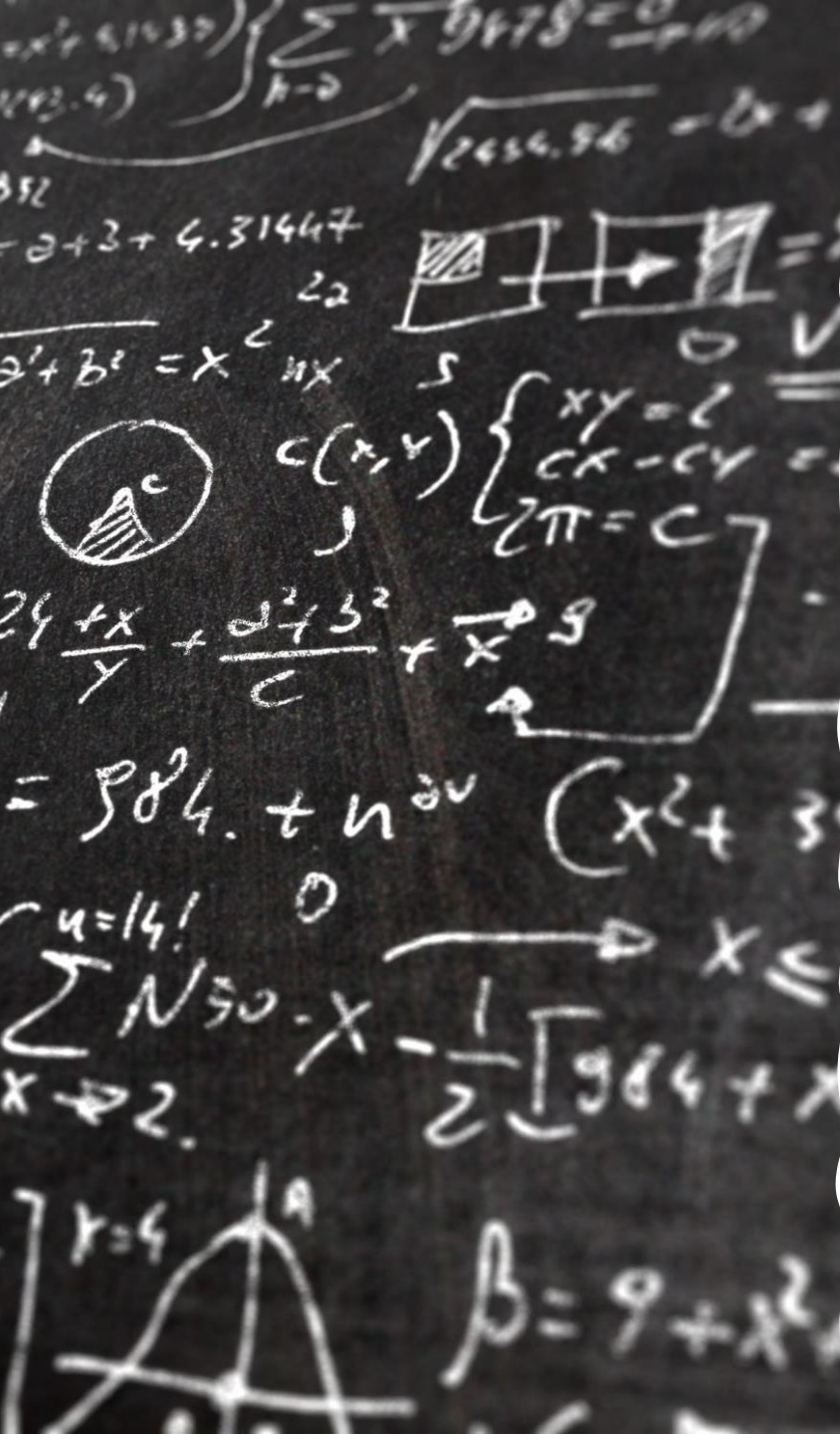
- They should be in non-technical language.
- They should be feasible, workable, flexible, doable, adaptable.

Limitations and suggestions for further research

- **Limitations of research:** Describe the possible limitations faced in the study especially from the methodological perspective.
- **Suggestions for further research:** Provide concrete suggestions for further research in the field or additional research (if possible) in the research methodological areas encountered in the study. The researcher's last Recommendation will be 'Suggestions for Further Research'.
 - Does your work suggest any interesting further avenues?
 - Are there ways in which your work could be improved by future researchers? •

Conclusions

- The **final conclusion** to the chapter addresses the title of the Research as the title reflects the whole study.
- Discuss how the objectives and research questions of the study have been met with the research. Highlight the key findings, implications, etc. that the research has revealed.
- Conclusions here mean that for each of the findings that address the research questions / hypotheses, the researcher draws a conclusion.
- These are brief, generalized statements in answer to the general and each of the specific sub-problems.
- Conclusions may be used as generalizations from a micro to a macro-level or vice versa (ZOOM LENS approach).



Conclusions

How to write a conclusion?

Should include the followings:

- What is the strongest and most important statement that you can make from your observations? Take away statements...
- Refer back to problem posed, and describe the conclusions that you reached from carrying out this investigation
- Summarize new observations, new interpretations, and new insights that have resulted from the present work.

How to Write Abstract

Writing an effective abstract

Abstract: an executive summary of the research project of approximately 300 words. It is a summary of the whole report and should contain a brief write-up of the purpose, research methodology, data, and summary of findings in context of the whole study. The abstract is indenter to give potential readers an overall picture of the entire report and the opportunity to decide whether to read and study it more.

Start out the Abstract by telling exactly what you did and how you did it. Focus on the rationale and ideas of the study and why it's important in the first two sentences
Example: The effects of oxidation by ozone gas on some physicochemical and functional properties of starch (corn, sago, and tapioca) were investigated. Starch in dry powder form was exposed to ozone for 10 min at different ozone generation times

- Identify the major objectives and conclusions
- Identify phrases with keywords in the methods section
- Identify the major results from the discussion or results section
- Assemble the above information into a single paragraph
- State your hypothesis or method used in the first sentence
- Omit background information, literature review, and detailed description of methods • Remove extra words and phrases • Revise the paragraph so that the abstract conveys only the essential information
- Check to see if it meets the guidelines
- Make sure no grammar or spelling errors!
- Give the abstract to a colleague (preferably one who is not familiar with your work) and ask him/her whether it makes sense

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Some other guidelines

Length of dissertation

Generally dissertation of a postgraduate student should be in the range of 20,000 to 30,000 words. (About 200 pages for PhD and over 100 pages for Master)

- **Printing**

- All copies must be clean and legible. Use 80 gm, A4 size (210 x 297mm) white paper. Print one side only.

- **Cover**

- The cover must contain the following:

- Full thesis title
- Your full name
- School and University name
- Year of submission

REFLECTIONS



