









# Writing an introduction of a research protocol

## Objectives:

1. Understand the importance of writing the introduction for a research proposal
2. The structure of introduction section
3. The main components of introduction
4. The effective way of writing an introduction

17th lecture

## Color Index:

-  Boys' Slides
-  Girls' Slides
-  Doctors Notes
-  Golden Notes
-  Important
-  Extra



# What is a Research Protocol?

## Research protocol <sup>1</sup>

Boys' Slides

- **Definition** : A formal written record that one prepares BEFORE research fieldwork is undertaken it provide a clearly and plainly provides an overview of a proposed study.
- It satisfy an organization's guidelines for protecting the safety of human or animal subjects who might be adversely impacted by the research.

## Research proposal

Girls' Slides

- **Definition** : Detailed description of a proposed study designed to investigate a given problem.
- It is Intended to convince others that you have a worthwhile research project and that you have the competence and the work-plan to complete it.
- The research proposal must address the following questions (regardless of your research area and the methodology you choose):
  - What you plan to achieve? **The questions that you're going to answer**
    - Why do you want to do it? **Significance**
      - How are you going to do it ?  
method



## Identify your needs and focus

Girls' Slides

Answering the following questions may help you narrow it down:

- What is the topic? Why is this topic important?
- What are the research questions that you're trying to answer? What relevance do your research questions have?
- What are your hypotheses? **Based on the references**
- What are your research methods? **To collect the information**
- Why is your research/project important? What is its significance?
- Do you plan on using quantitative methods? Qualitative methods? Both?
- Will you be undertaking experimental research? Clinical research?

- 1) Why we have research protocol?
  - To provide a plan of what you will do
  - IRB
  - Funding

# What is the purpose of an Introduction ?

## Introduction

The contents of the introduction should lead the reader into the discussion



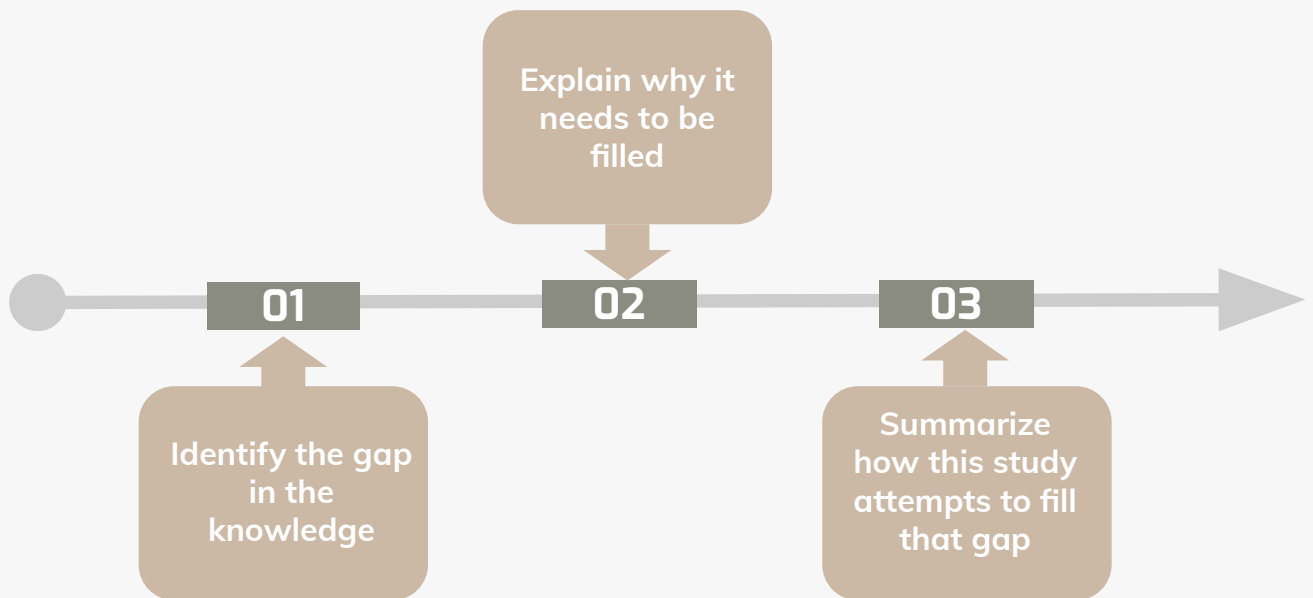
### Why it is important to writing a good introduction ?

- ❖ It gives initial impressions of your argument, your writing style, and the overall quality of your work
- ❖ It is an important road map for the rest of your paper
- ❖ It makes the readers want to read your paper

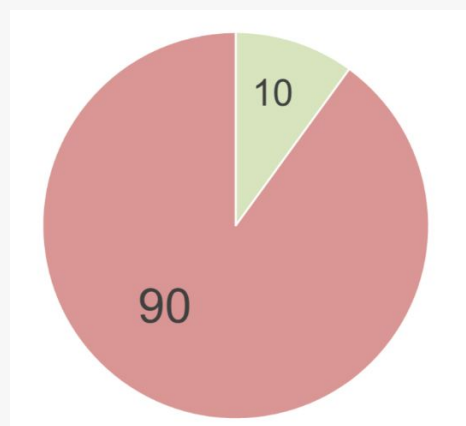
### What is the purpose of Introduction ?

- ❖ Get your readers' attention and interest
- ❖ Identify the specific topic of the report/ manuscript
- ❖ Conceptualize the arguments
- ❖ The Introduction should answer **2** major questions:

1- What was the gap in the scientific knowledge?    2-Why does this gap needs filling?



An introduction should be around 10% of the whole research

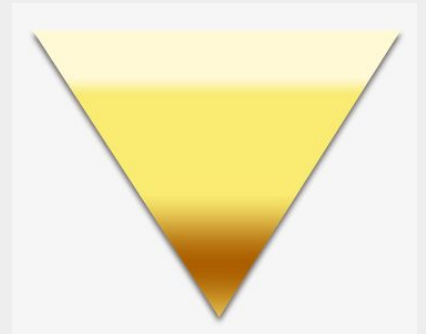


## Contents of Introduction

- Brief background information about the research topic
- Rationale for undertaking this study (reasons for filling the gap)
- Clarifications of terms, definitions and abbreviations
- Key references to preliminary work or closely related papers
- Review of related literature

## The Structure of Introduction

- Can be as an inverted triangle
- The broadest part at the top representing the most general information
- Focusing down to the specific problem you studied.
- Organize the information
- More general aspects of the topic
- More specific information that provides context,
- Your statement of purpose and rationale.
- Then state what is not known about the topic and why it is important to address this area.
- Finally, what is your plan to fill in this gap in knowledge



### What is Known about the Topic?

#### Background information:

- Give a strong statement that reflects the research subject area.
- State the topic and the problem explored in the study
- Use keywords from the title
- Do not state obvious or broad fact about the topic -> highly relevant information is always useful.
- Be sure to cite all of the sources referenced.
- Only give useful background information
- Only review relevant , up to date primary literature that support the knowledge

### How to evaluate your introduction draft?

- Ask a friend to read it and then tell you what he or she expects the paper will discuss
- If your friend is able to predict the rest of your paper accurately, you probably have a good introduction

### Introduction Writing Tips

- Write in active voice when possible
- Write concise sentences
- Use stronger verbs when possible
- Do not overuse first person pronouns
- Organize your thought from broad to specific

## Importance of Research Protocol <sup>1</sup>

- Develop novel ideas during writing proposal.
- Convince yourself and others that your research is worth doing.
- Keep you focused on your research work
- A manual for members of the research team to ensure they adhere to the methods outlined

## Research Significance

- State concisely and clearly the importance of your study.
- Emphasize on any novelty or innovation
- Convey the significance of your research to
  - 1) scientific contribution
  - 2) improving in public health
  - 3) change in health policies
  - 4) change in patient care etc...

## Research Problem <sup>2</sup>

- A situation for which we have no ready & successful response by instinct or by previous acquired habit
- An area of concern where there is a gap in the knowledge base needed for professional practices.
- This is where you explain the research problem and question
- This section states the problem that you are exploring.
- It must consist of or address five components:
  1. Defining the problem
  2. showing the severity of the problem
  3. showing the extent of the problem
  4. showing the gap analysis
  5. set the research questions.
- The research question is specific, concise, and clear. The research question can be expanded upon by stating sub-questions.
- Note: The difference between the research problem and research question is that the problem is broader, while the research question represents the “one question that you will answer at the end of your research

## Research Objectives

- This is the place where you have to describe the research aim as it relates to solving the uncertainty or burning question you are interested in.
- It should explicitly hint towards the contribution you want to make with the intended study.
- Need to set both major and specific objectives in a very harnessed way
- Specific objective should not go beyond the major objective even in using action words
- The research objective should be **SMART**
  1. Specific,
  2. Measurable *To measure the difference.*
  3. Achievable,
  4. Relevance
  5. Time bound

- 1) *Can you change in your research after getting IRB approval? No*
- 2) *What is the difference between research question and research problem? Research question shows points required to find a solution for the problem*

## Literature Review <sup>1</sup>

- A critical, objective summary of the known extent of the problem and confirms that the research question is appropriate
- Reference should be made to the findings of studies performed internationally and locally to address the problem
- Attention should be drawn to the positives, negatives and limitations of the studies quoted
- The review should include the most recent publications in the field
- Go from general to specific
- Novel methods and those particularly suited to local circumstances should be highlighted
- Relate key words to dependent and independent variables
- By the end of the review it should be clear that the researcher has a thorough understanding of the problem and why the proposed study design has been chosen, based on gaps in knowledge and conflicting results
- Logical Flow
- Keep related ideas together under the same subheading
- Literature review is a summary of other's findings
- Methods are those chosen for the thesis
- Results are new findings of the study
- Discussion is about the results of the study, new literature should not be included
- Conclusions are related to research question/ hypothesis/ objectives
- It should not be a series of unconnected summaries of studies, but rather a synthesis of previous related literature.

## Boy's doctor notes

- Q\ How to write your literature review?  
You start by global studies then middle eastern studies and ending by the Saudi studies. You must have a reference number for each statement you put in the literature. At the end of the literature, you will reach the aim and gap you have chosen and state what you expect to get out of the study.
- Q\ Common mistakes in the literature:
  - 1 - Using old studies (better to make 80% of studies from the last 10 years)
  - 2 - Full copying (you should write in your own words)
- Q\ Common mistakes in the title:
  - 1 - Using abbreviations
  - 2 - Spelling mistakes (That change the meaning)

## girl's doctor notes

- Imp : Introduction is an advertisement for your research (it's like first impression)
- It is a guidance for the rest of your paper
- The contents of the introduction should lead the reader into the discussion so They can imagine your methodology
- Make sure you get more than just two or three related paper and distribute the workload
- What is the difference between background, LR and introduction ?
- LR : what are the previous published paper that are related to your topic
- Background : overview about the topic. eg : colon cancer prevalence, risk factors
- Introduction : both the background and LR

1) To start from where others ended

# Questions\*

(1) What shape describes the structural flow of the introduction?

- A) A triangle
- B) An inverted triangle
- C) A rectangle
- D) An hourglass

(2) What section of the paper answers the question “what is the problem”?

- A) Introduction
- B) Discussion
- C) Method
- D) Results

(3) What to avoid in developing your protocol?

- A) Avoid abbreviations as far as possible
- B) Repeat material which is in all the textbooks
- C) Convince your readers of the importance of the question
- D) State the gaps in the literature

(4) what of the mentioned sections is optional in a scientific paper?

- A) Abstract
- B) Acknowledgements
- C) Discussion
- D) References

(5) What to avoid while writing the introduction

- A) Explain why it is important
- B) Make it long
- C) Convince the readers
- D) Write the objectives

(6) what is a part of the skeleton of the introduction?

- A) Rationale
- B) Results
- C) Study setting
- D) Methods

Answers:

1: B| 2: A| 3: B| 4: B| 5: B| 6: A



# Thank you for checking our work!

## **Leaders:**

Shuaa Khdary      Sarah AlQuwayz  
Abdulrhman Alsuhaibany

## **Member:**

Abdulaziz Alomar

## **Note Taker:**

Abdulaziz Alamri      Lama alahmadi

## **Contact us:**

[Research4390@gmail.com](mailto:Research4390@gmail.com)