

# Research Philosophy and Literature Review

**MOHD DAHLAN A. MALEK**

DEAN

FACULTY OF PSYCHOLOGY &  
EDUCATION

POSTGRADUATE METHODOLOGY  
COURSE

CENTRE FOR POSTGRADUATE STUDIES



**UMS**  
UNIVERSITI MALAYSIA SABAH



SEKOLAH PSIKOLOGI DAN KERJA SOSIAL  
UNIVERSITI MALAYSIA SABAH

**CONGRATULATIONS & WELCOME!**

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- American Psychological Association, Division 38, Health Psychology, Member 2010-Present
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- International Association of Applied Psychology, Member, 2010-Present
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- Reviewer for Journal of Traumatic Stress, John Wiley & Sons Inc.
- Reviewer for the International Journal of Cross Cultural Management: Thousand Oaks, Ca 91320: Sage Publications.
- Reviewer for the International Journal of Wildland Fire (IJWF), the journal of the International Association of Wildland Fire.
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- External examiner PhD Thesis-UTM, UMS,UKM
- External examiner PhD Thesis-University of Victoria, Melbourne, Australia

- ◎ CONGRATULATION
- ◎ ONE OF THE MOST BEAUTIFUL  
CAMPUS
- ◎ 35 ETHNICS (236 SUB ETHNICS)

# STRUCTURE OF PRESENTATION

- PHILOSOPHY OF RESEARCH
- WHY DO WE NEED TO KNOW ABOUT THE PHILOSOPHY OF RESEARCH METHODS
- WAYS OF KNOWING & HISTORY OF SCIENCE
- SOCIAL SCIENCES
- SUBJECT MATTERS OF SOCIAL SCIENCES
- PROBLEMS / LIMITATIONS
- VARIOUS METHODS / APPROACHES

# Philosophy of Research

**Philosophy** is the study of general and fundamental problems concerning matters such as existence, knowledge, values, reason, mind, and language

**Research** can be defined as the search for knowledge or any systematic investigation to establish facts.



# Falsafah

berfikir secara falsafah -ciri-ciri seperti berikut,

**1.Berfikir secara radikal**,iaitu secara mendalam hingga keakar umbinya atau asal-usulnya dan hakikatnya.

**2.Berfikir secara universal**,iaitu menurut pengalaman manusia secara umum.Bukan khusus dan terbatas dengan ilmu tertentu sahaja.

**3.Berfikir secara integral**,iaitu berpadu secara lengkap pada mana-mana bahagian yang ada.

Dari segi sejarahnya, Falsafah merupakan induk kepada seluruh ilmu pengetahuan.

Daripada falsafah lahirlah cabang-cabang ilmu yang lain seperti matematik, perubatan dll.

Apakah  
Falsafah?????

## ILMU PENGETAHUAN DAN FALSAFAH

> Antara Sumber pengetahuan:

1. **Pengetahuan Indera**: Pengetahuan yang umum dan menjadi asas pengetahuan manusia.
2. **Pengalaman** pancaindera melalui induksi menjadi pengetahuan umum yang bersifat asas.
3. Lain-lain seperti.....

- Kita mengetahui setiap pagi matahari terbit di ufuk timur dan tenggelam di ufuk barat;
- Cermat dan rajin bekerja cepat kaya;
- Makin tinggi taraf pendidikan, makin tinggilah kedudukan seseorang;

Orang selalunya tertarik pada  
keindahan dan kecantikan;

Pada hari tua, orang lebih tertarik  
pada agama;

Apabila menghadapi kesusahan,  
orang kerap teringat pada  
Tuhan;

Apabila bercinta semuanya  
??????...

Research perlu mengikuti  
proses-

Research akan dinilai

# Falsafah Penyelidikan

Kenapa

Mengapa

Persoalan Kajian

Hipotesis

Keputusan

Analisis

Perbincangan

Sumbangan



# Mengapa perlu faham falsafah penyelidikan

1. Persiapan mental dan fizikal
2. Persiapan pengurusan
3. Keluarga
4. Kewangan
5. Bahan bahan untuk kajian
6. Mengetahui prosedur universiti/tambah masa/kelayakan biasiswa

- Kata **falsafah** (Melayu), **philosophie** (Belanda), **philosophie** (Jerman), **philosophy** (Inggeris), **philosophie** (Perancis) berasal daripada kata bahasa Yunani, iaitu: **Philien**: mencintai, **Sophia**: kearifan, kebijaksanaan, hikmat, kebenaran...
- **Falsafah** ialah satu disiplin ilmiah yang mengusahakan kebenaran yang umum dan asas.
- Sehingga kini, ahli-ahli falsafah masih belum mencapai kata sepakat mengenai takrifan falsafah. Malah ada yang mengatakan bahawa falsafah merupakan sesuatu yang tidak dapat ditakrifkan.

## CABANG FALSAFAH

Cabang falsafah dapat dirumuskan seperti yang berikut:

- \* Metafizika
- \* Logika
- \* Etika
- \* Estetika
- \* Epistemologi

# Metafizik

Bidang falsafah ini memikirkan tentang kewujudan. Contoh soalnya: Jenis benda yang wujud?

Apakah sifat "semulajadi - nature" benda tersebut? Adakah sesuatu wujud tanpa pergantungan kepada deria manusia?

Apakah sifat ruang dan masa? Apakah sifat akal dan berfikir? Apakah yang dikatakan manusia? Apakah yang dikatakan sedar? Adakah Tuhan wujud?

# Epistemologi

Bidang falsafah ini memikirkan tentang ilmu pengetahuan. Contoh soalnya adalah seperti: Apa itu pengetahuan? Adakah ada pengetahuan? Bagaimana kita tahu apa yang kita tahu? Bagaimana kita tahu terdapat minda yang lain?

# Etika

Bidang falsafah ini memikirkan tentang **kemoralan manusia**. Contoh soalnya: Adakah terdapat perbezaan antara tindakan bermoral dan tindakan yang salah ?

Jika ada, apakah perbezaannya?

Tindakan yang mana betul dan tindakan yang mana salah? Adakah nilai mutlak, atau perbandingan?

Bagaimana seseorang itu harus hidup?

# Estetika

Bidang falsafah memikirkan tentang keindahan. Contoh soalnya: Apakah itu indah? Pelbagai jawapan....

## ALIRAN / MAZHAB FALSAFAH

### **Pelbagai aliran/mazhab...antaranya:**

**Rasionalisme:** Dikenali juga sebagai intelektualisme, iaitu sumber pengetahuan manusia ialah fikiran, rasio dan jiwa manusia, dan bebas daripada pengamatan inderawi. Kebenaran tidak dapat diuji dengan prosedur, tetapi dapat diuji dengan kriteria tertentu

**Empirisisme:** Pengetahuan manusia berasal daripada pengalaman manusia, iaitu dari dunia luar yang ditangkap oleh pancaindera. Semua idea merupakan abstraksi yang dibentuk menerusi penggabungan apa-apa yang dialami

**Kritisisme:** Pengetahuan manusia berasal daripada dunia luar, dan berasal daripada jiwa atau fikiran manusia

**Realisme:** Pengetahuan manusia ialah gambar yang baik dan tepat daripada kebenaran, kerana gambar yang baik akan memancarkan kebenaran. Manifestasi daripada kebenaran ialah menerima apa-apa yang ada walaupun tidak menyenangkan



## ALIRAN / MAZHAB FALSAFAH

- Eksistensialisme:** Falsafah yang bertitik tolak pada manusia, yang eksistensi (konkrit), iaitu cara manusia berada dalam bentuk maujud, dan mendahului emosi. Oleh sebab pusat pemerhatiannya ialah manusia, maka aliran ini bersifat kemanusiaan
- Pragmatisme:** Benar atau tidaknya ujaran, dalil atau teori bergantung pada manfaat ujaran, dalil atau teori itu. Kebenaran praktis berasaskan kepentingan subjektif setiap individu
- Fenomenologi:** Hasrat sebenar akan tercapai jika kita cuba mengamati fenomena realiti yang sering terjadi di sekeliling kita. Aliran ini berpusat pada analisis gejala kesedaran manusia terhadap diri dan alam sekeliling
- Positivisme:** Peristiwa yang dialami oleh manusia dilihat dari perspektif yang positif berasaskan fakta pengetahuan. Ilmu alam merupakan sumber pengetahuan yang benar, dan menolak nilai kognitif

## ALIRAN / MAZHAB FALSAFAH

**Epistemologi:** Dikenali juga sebagai **Teori Pengetahuan**, iaitu pengetahuan tentang pengetahuan. Hal ini terlihat jelas dalam aliran Realisme dan Idealisme

**Logika:** Falsafah yang menekankan ujaran yang dapat difahami atau akal budi yang berfungsi dengan baik, dan sistematik. Asasnya ialah pernyataan premis ke suatu pernyataan selanjutnya, iaitu kesimpulan. Logika juga dikenali dengan nama **Instrumen Ilmu**

**Aliran Falsafah Hidup:** Falsafah yang baik wujud jika akal dipadukan dengan keperibadian atau seluruh kehidupan

Cabang falsafah yang menjadi sumber paling penting dalam aliran pemikiran dan kebahasaan ialah **metafizika**, **logika** dan **epistemologi**. Cabang falsafah ini dijemakan melalui **tiga** cara atau gaya, iaitu **falsafah Spekulatif**, **falsafah Preskriptif**, dan **falsafah Analisis**

# Research

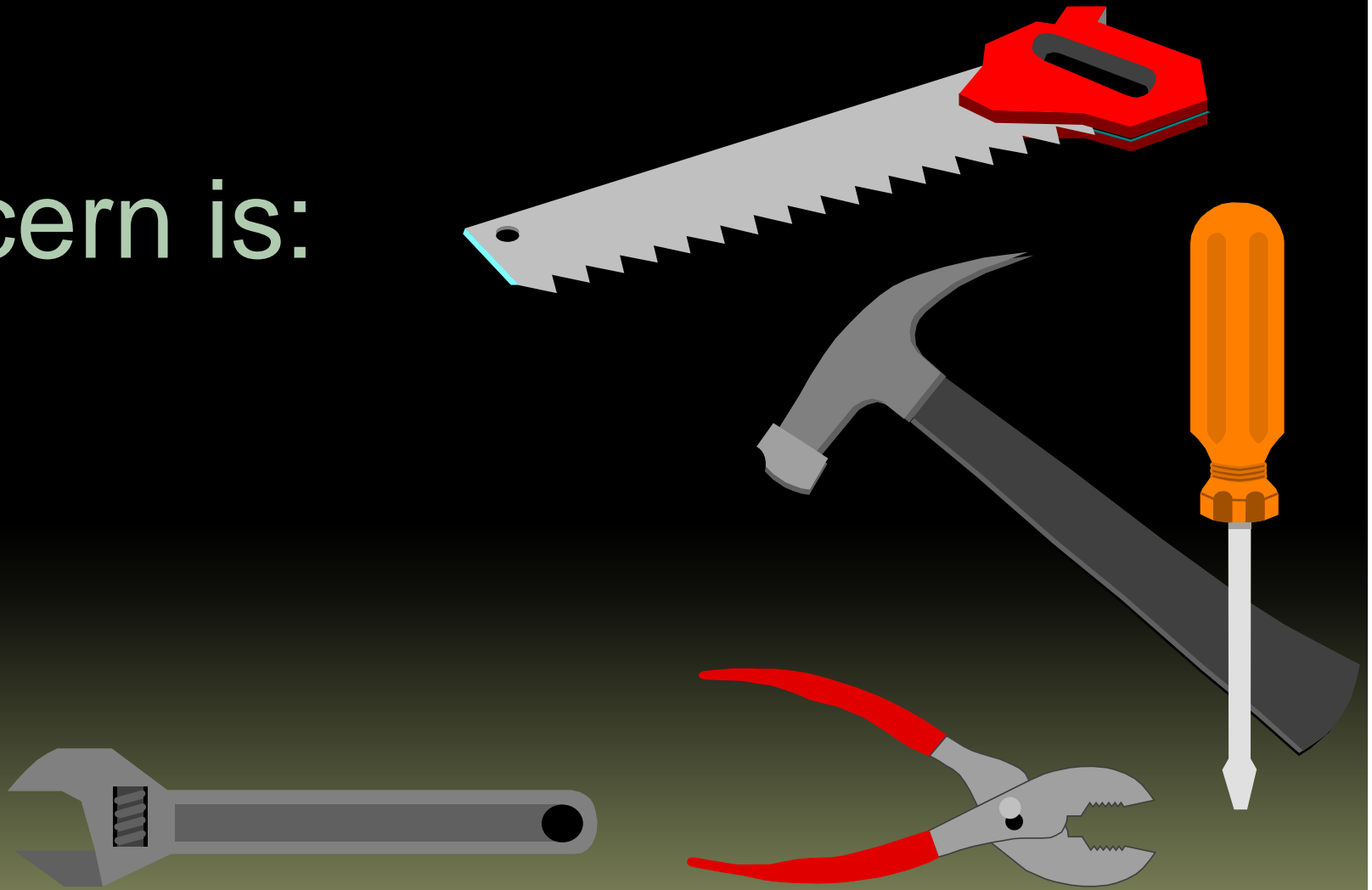
**Research** can be defined as the search for knowledge or any systematic investigation to establish facts.

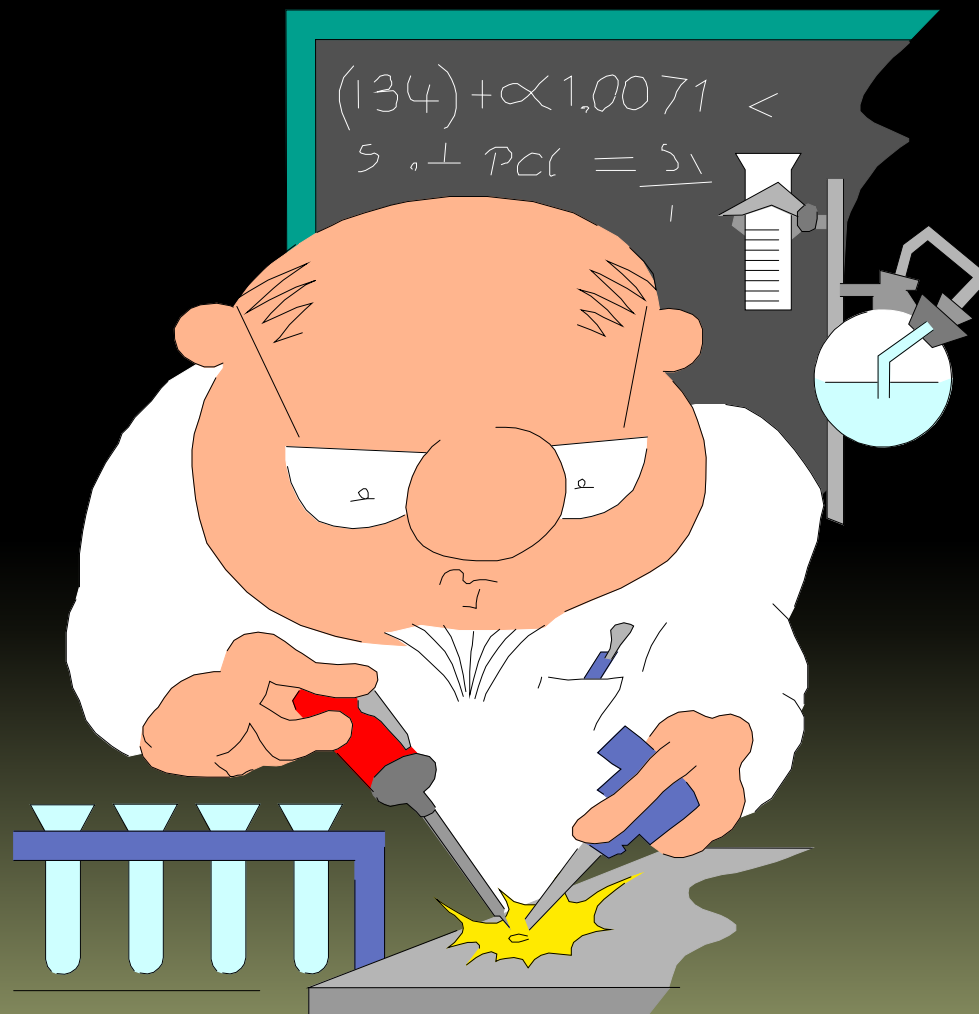
PhD

Master

# Research Methods and Statistics are **tools**.

Concern is:





Science is not a state;

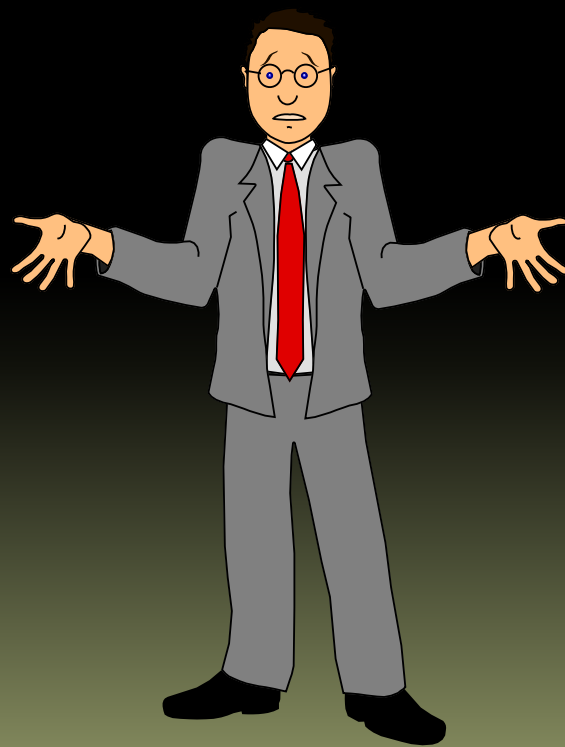
But a process by which one  
establishes knowledge or  
obtains information.



# Ways of Knowing (Kerlinger, 1986)

1. Method of Tenacity/drive (Always Believed)
2. Method of Intuition/feeling (Feels Good)
3. Method of Authority (Respected Source)
4. Method of Science (**Empirical/Objective**)







# Goals of Science:

1. Description
2. Explanation
3. Prediction
4. Control



## Description

**Try to characterize how people and other living beings think, feel, or act in various kinds of situations.**

**What happens? When and where does it happen? How does it happen?**

# Explanation

**Try to understand why living beings think, feel, or act as they do.**

**Why does it happen?**

# Prediction

**Attempt to predict behavior,  
based on available  
information about past  
performance.**

**What will happen next?**

**Control**

**Seek to influence behavior.**

**How can we influence this  
behavior or intervene in this  
situation?**

# Philosophy of Research

You probably think of research as something very abstract and complicated.

PhD

MA

BA

Process

Learning about research is a lot like learning about anything else. To start, we need to learn the jargon people use

## Epistemologi

- Objektif
- Konstruktif
- Subjektif

## Teori Perspektif

- Positivisme
- Interpretivisme
  - Interaktivisme Simbolik
  - Fenomenologi
- Kritis Inkuiri
- Feminisme
- Posmodernisme

## Metodologi

- Kajian Experimental
- Kajian Tinjauan
- Etnografi
- Kajian Fenomenologi
- Teori Grounded
- Inkuiri Heuristik
- Kajian tindakan
- Dll.

## Kaedah

- Persampelan
- Analisis Statistik
- Soalan
- Tinjauan
- Temuramah
- Kumpulan Fokus
- Kajian kes
- Analisis Dokumen
- Dll



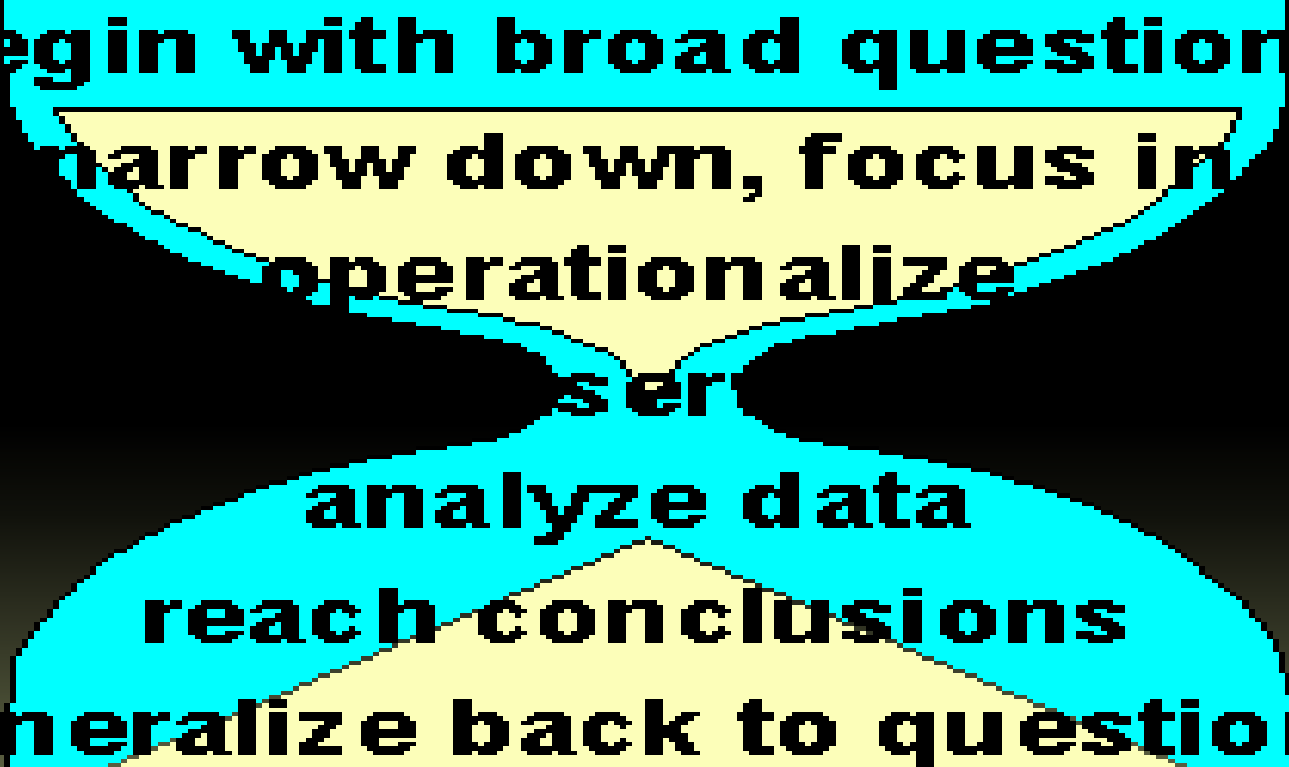
# Structure of Research

Most research projects share the same general structure

The research process usually starts with a broad area of interest, the initial problem that the researcher wishes to study

# Structure of Research

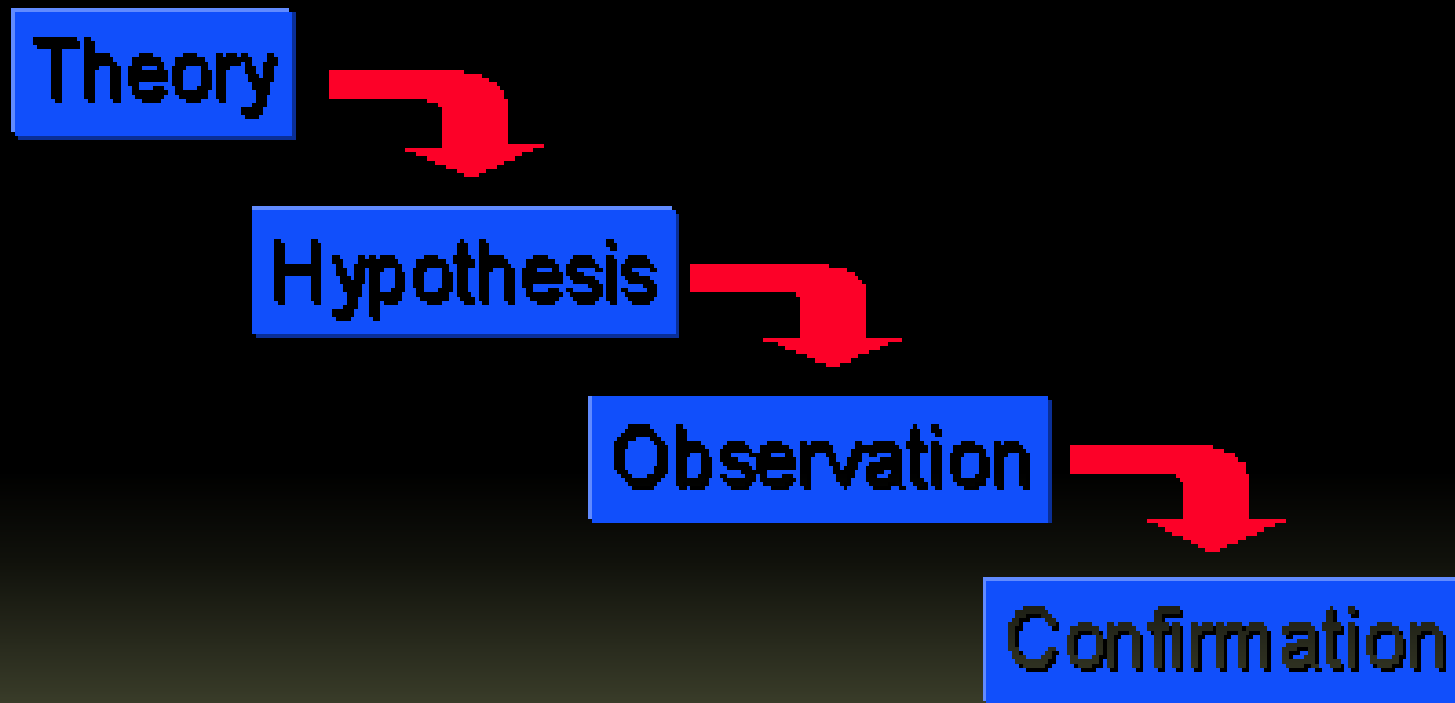
**The "hourglass" notion of research**



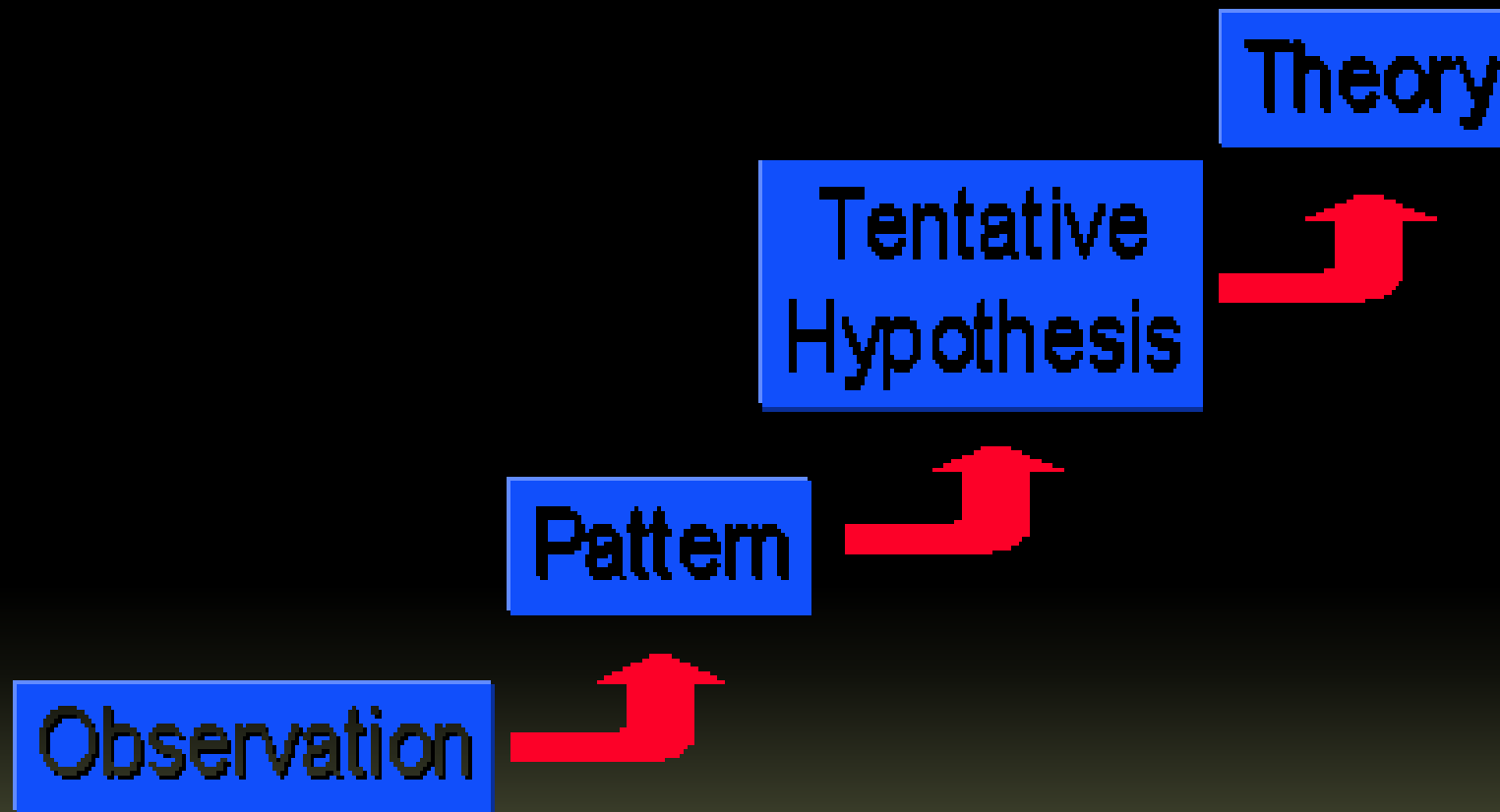
The diagram illustrates the 'hourglass' notion of research structure. It features a central hourglass shape with a yellow interior and a blue outline, set against a black background. The hourglass is flanked by two vertical brown bars. The text is arranged as follows: 'begin with broad questions' is in the top blue section; 'narrow down, focus in' is in the top yellow section; 'operationalize' is in the middle blue section; 'serve' is in the narrowest part of the hourglass; 'analyze data' is in the bottom blue section; 'reach conclusions' is in the bottom yellow section; and 'generalize back to questions' is in the bottom blue section.

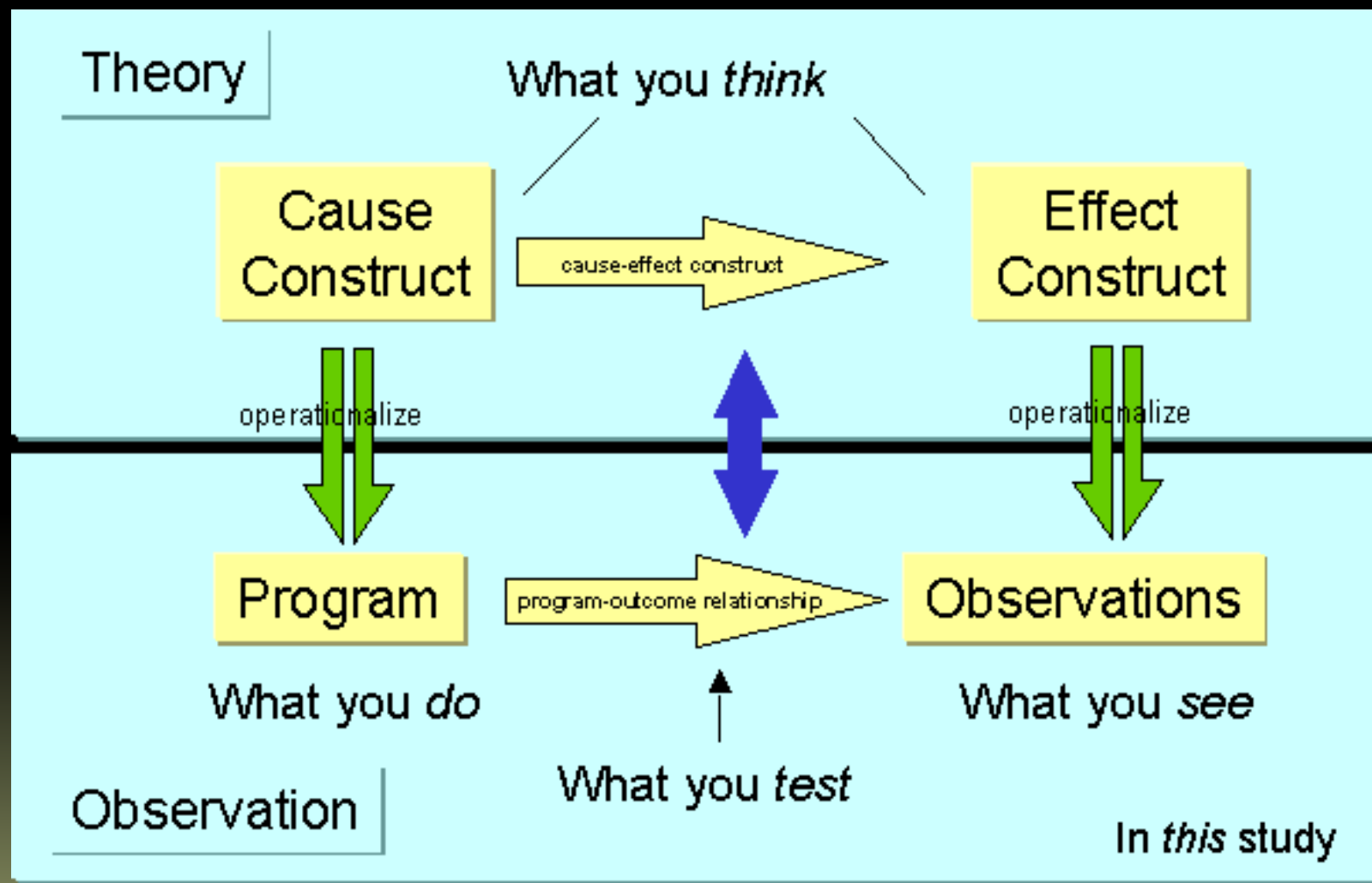
**begin with broad questions**  
**narrow down, focus in**  
**operationalize**  
**serve**  
**analyze data**  
**reach conclusions**  
**generalize back to questions**

# Deduction

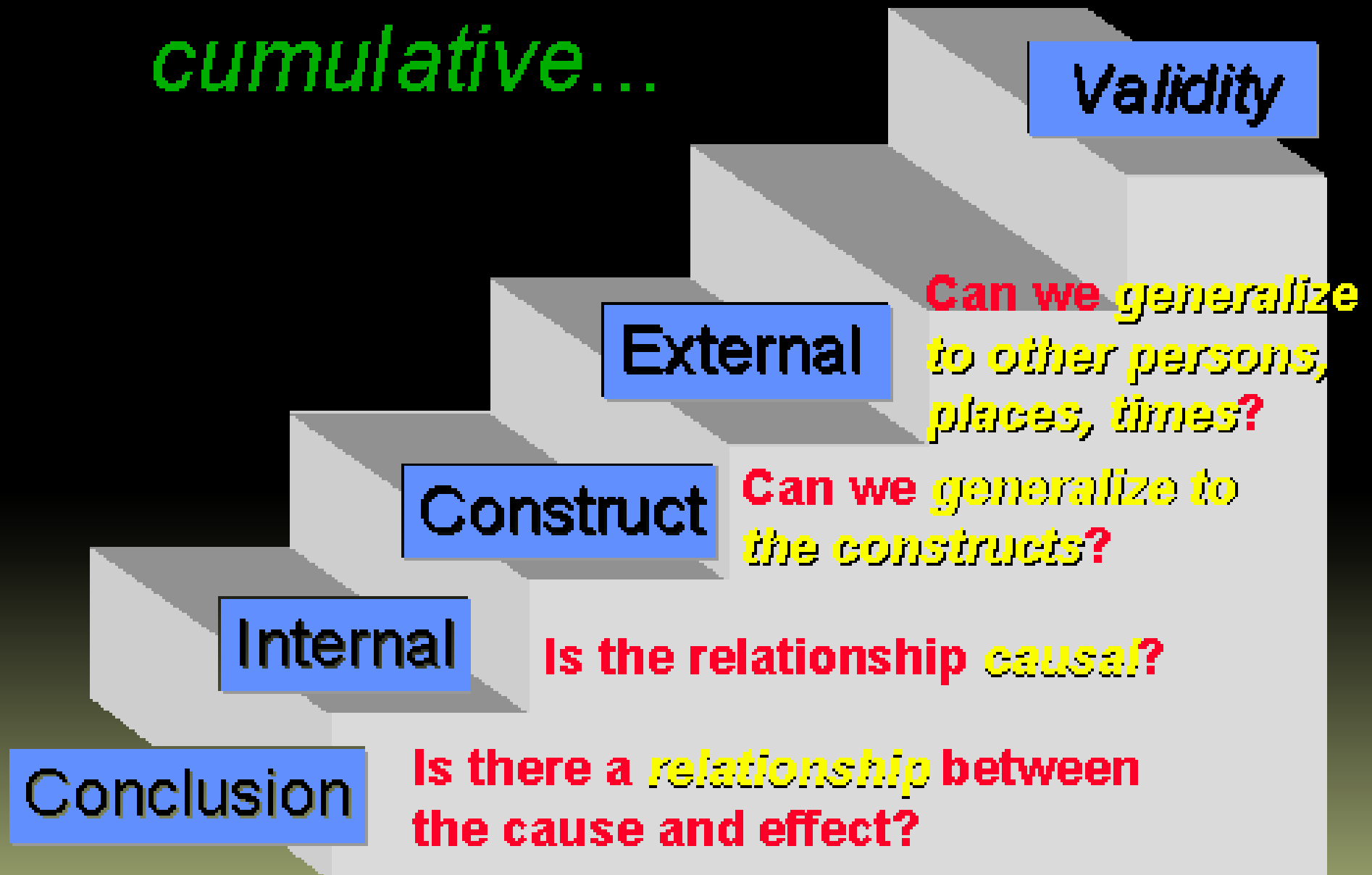


# Induction





# The Validity Questions are *cumulative...*



STA  
RES  
DEF

Understand the Problem

Identify Questions

Refine/Revise Questions

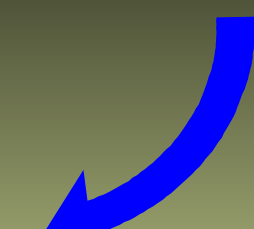
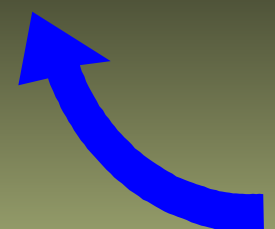
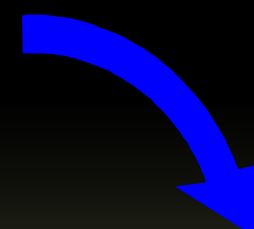
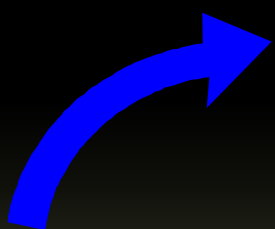
STA  
RES  
PLA

Choose Design

Determine Trade-offs

Inventory Resources

Assess Feasibility



# Ethical Issues

Phd/MA is a process

Ethic form

Research-FRGS



# Ethical Standards

## APA Ethics Code

# steps

1. Identified research problem
2. Develop hypothesis
3. Definition –concept & operation (variables)
4. Observation- data collection-  
survey/experiment/case study etc
5. Analysis data
6. Discussion-interpretation

# PHILOSOPHY OF RESEARCH

When you start doing academic research you need to grip with some basic concepts of research philosophy.

# What is Research?

The Longman dictionary (1995) defines research as “the studious study of a subject, that is intended to discover new facts or test new ideas; the activity of finding information about something that one is interested in or needs to know about”

The process of finding solutions to a problem after a thorough study and analysis (Sekaran, 2006)

Systematic inquiry that provides information to guide decision (Cooper & Schindler, 2001)

Is research always problem-solving based? Yes.

Paradigm is an interpretative framework, which is guided by "a set of beliefs and feelings about the world and how it should be understood and studied." (Guba, 1990).

Denzin and Lincoln (2001) listed three categories of those beliefs:

- 1) **Ontology**: what kind of being is the human being. Ontology deals with the question of what is real.
- 2) **Epistemology**: what is the relationship between the inquirer and the known: "epistemology is the branch of philosophy that studies the nature of knowledge and the process by which knowledge is acquired and validated" (Gall, Borg, & Gall, 1996)

### 3) **Methodology**: how do we know the world, or gain knowledge of it?

- Research Paradigm
  - **Scientific**
  - **Interpretive**
  - **Critical**

# What is Scientific Research

- Application of scientific method to the investigation of relationships among natural phenomenon, or to solve a medical or technical problem.
- The scientific method is the means by which researchers are able to make conclusive statements about their studies with a minimum of bias.

# Interpretative Research

- Interpretive research focuses on analytically disclosing those meaning-making practices, while showing how those practices configure to generate observable outcomes.
- Interpretive research is an approach to research in the human sciences that recognizes the paradigmatic character of all research.



# Critical Research

- Research that involves a formal analysis and evaluation of a text, production, or performance.
- *Critiquing criteria* are the standards, rules, or tests that serve as the bases for judgments.

# Research Paradigm: Schools of thought

## Empiricism

Empiricism proclaims that experiments and observation are the main instruments for the acquisition of knowledge

## Positivism

Exploring social reality based on philosophical ideas with the emphasis of observation and reason as means of understanding human behaviour. Scientific methods are used as a means of knowledge generation.

# Research Paradigm: Schools of thought

## Anti-positivism

Social reality is viewed and interpreted by the individual according to his or her ideological positions. Therefore, knowledge is of person's experience rather than acquired from or imposed from outside. Reality is multi-layered and complex and a single phenomenon is having multiple interpretations.

## Critical Theory

Exploring an existing phenomena to develop theory

# Epistemology, Ontology and Methodology

- Epistemology: To do with our beliefs about how one might discover knowledge about the world
- Ontology: To do with our assumptions about how the world is made up and the nature of things
- Methodology: To do with the tools and techniques of research
- Relationship of the three: Epistemological and ontological positions should have some bearing on the methods that you select for your research

# What is knowledge?

- **Knowledge** is a familiarity with someone or something, which can include information, facts, descriptions, or skills acquired through experience or education.
- Plato defined knowledge as "justified true belief."
- Theoretical or practical understanding of a subject.
- Implicit knowledge (as with practical skill or expertise)
- Explicit knowledge (as with the theoretical understanding of a subject)

# Defining Knowledge

- Knowledge is sometimes considered as justified true belief.
- However this is insufficient because one must have a reason or justification for that belief.
- There are situations in which a belief may be justified and true and yet not as knowledge.
- Knowledge is distinct from belief and opinion.
- In philosophy, the study of knowledge is called epistemology.

# What is Epistemology

- The study of our method of acquiring knowledge.
- The explanation of how we think.
- It answers the question, "How do we know?"
- It encompasses the nature of concepts, the constructing of concepts, the validity of the senses, logical reasoning, as well as thoughts, ideas, memories, emotions, and all things mental.
- It is concerned with how our minds are related to reality, and whether these relationships are valid or invalid.

# Epistemology

- Epistemology comes from the Greek words episteme (knowledge) and it is a branch of philosophy that deals with the ratio, origin and scope of knowledge.
- It attempts to answer the basic question of what distinguishes true (adequate) knowledge from false (inadequate) knowledge.
- It relates to truth and belief.



# Importance of Epistemology

To determine the true from the false by determining a proper method of evaluation.

# Key Elements of a Proper Epistemology

- **What are the key elements of a proper Epistemology?**
- Senses are used to gain information about the world.
- Reason is the method of gaining knowledge, and acquiring understanding.
- Logic is the method of maintaining consistency within the set of knowledge.
- Objectivity is the means of associating knowledge with reality to determine its validity.
- Concepts are abstracts of specific details of reality, or of other abstractions. A proper epistemology is a rational epistemology.

# Knowledge Acquisition

It involves complex cognitive processes:

- Perception
- Communication
- Association
- Reasoning

# What is an Ontology

- Ontology is the study or concern about what kinds of things exist.
- Ontology comes from the Greek words onto which means something that exists, and logos which means logical knowledge.
- Definition: An ontology may take a variety of forms, but necessarily it will include a vocabulary of terms, and some specification of their meaning.
- This includes definitions and an indication of how concepts are inter-related which collectively impose a structure on the domain and constrain the possible interpretations of terms

# What is an Ontology - Cont

- Gruber defines an ontology as “the specification of conceptualisations, used to help programmes and humans share knowledge.
- The conceptualization is the couching of knowledge about the world in terms of entities (things, the relationships they hold and the constraints between them).
- Explaining / describing in terms of etymology, terminology, philosophy of the research variables, research title, problem statement, research questions and research objectives.

# Selection of Research Paradigm and research methods

- Research paradigm: Positivism
- Research Approach: Quantitative
- Research Methods: Survey, longitudinal, cross-sectional, correlation, experiments
- Examples:
  - Attitude of foreign students towards UMS registration system,
  - Relationship between student's financial position and their academic performance,
  - Effect of emotional intelligence on learning effectiveness.

# Selection of Research Paradigm and research methods (2)

- Research paradigm: Anti positivism
- Research Approach: Qualitative
- Research methods: Biographical, phenomenological, ethnological, case-study
- Examples:
  - A study of autobiography of Ibn Khaldun or Ahmad Nejad or Zia ul-Haq,
  - A study of effective management among female managers,
  - A case-study of UMS distance learning programme.

# Selection of Research Paradigm and research methods (3)

- Research paradigm: Critical Theory
- Research Approach: Critical and Action-oriented
- Research methods: ideology critique and action research
- Examples:
  - A study of industrial development in Malaysia during the Mahathir's time;
  - A study class absenteeism among Muslim students during the month of Ramadan.



# Types of Research

## Applied Research

Applying the result of research finding to solve specific problem happening in an organization. The aim is to solve current problem.

## Basic Research

Enhancing the understanding of certain problem that commonly occur in organization setting and seek method of solving them. The aim is to generate knowledge, understand phenomena/problem that occur in various organization setting.

# Scientific Research

- ▶ Provides scientific information and theories
- ▶ Follows a certain structural process though the step order may vary depending on the subject matter and researcher
- ▶ The following steps are usually part of the most formal research both basic and applied
  - ▶ Observations and Formation of the topic
  - ▶ Hypothesis
  - ▶ Conceptual definitions
  - ▶ Operational definition
  - ▶ Gathering of data
  - ▶ Analysis of data
  - ▶ Test, reviving of hypothesis
  - ▶ Conclusion

# Research Methods

The goal of the research process is to produce new knowledge.

This process takes three main forms:

1. Exploratory research which structures and identifies new problems
2. Constructive research which develops solutions to a problem
3. Empirical research which tests the feasibility of a solution using empirical evidence.

# Level of Research

PhD : Theoretical Gap: Improving the latest theory on research focus; There is contribution of new knowledge.

Master: Empirical gap: Application of tested theoretical framework to solve current problems.

# Research Process

**Step 1** – Choose your topic.

**Step 2** – Find basic information.

**Step 3** – Refine your topic.

**Step 4** – Locate and retrieve materials.

**Step 5** – Evaluate relevancies of materials.

**Step 6** – Take notes.

**Step 7** – Construct your project. Writing



You are in the process of becoming

SCHOLARS / SCIENTISTS



Right Attitude & Commitment  
towards knowledge  
production

# WHY DO WE NEED TO KNOW ABOUT THE PHILOSOPHY OF RESEARCH METHODS

- To make us aware and practice of the way of science in doing research
- Be serious and committed when doing scientific research
- Especially when choosing and applying research method/s
- The underlying reasons / justification for choosing a certain research method and not others
- To enjoy the freedom in choosing & designing research methods / to admit the limitation
- To make a good social scientists – Attitude & Commitment

# PHILOSOPHY OF RESEARCH METHODOLOGY

- Research Methods
  - Ways of doing research / Methods used to do research
- Philosophy
  - Thoughts / Applying rational or logical thinking
- Philosophy of Research Methodology
  - Thoughts that form the basis for various ways of doing research
  - Thoughts that justify research methodology
  - Rationale for using certain methods in research



# SCIENCE / SOCIAL SCIENCE

- Observation-based knowledge
- Often changing / Falsifiable

SCIENCE – GENUINE KNOWLEDGE /TRUTH

TO UNDERSTAND / EXPLAIN - THE WAY ANY  
REALITIES / PHENOMENON OPERATE

- **Optimism** about Perfectibility of Knowledge and achievement of progress through intellectual effort
- **Confidence** in discovering causality – the way the natural and social world operates

# SCIENCE AND RESEARCH

- NO SCIENCE WITHOUT RESEARCH
- Research is the cornerstone of any science
- It refers to the organized, structured, and purposeful investigation
- Aimed at discovering, interpreting, and revising human knowledge on different aspects of the natural /social/human world by someone first hand
- Structured attempt at gaining knowledge

# What is Research

“Research is to see what everybody else has seen, and to think what nobody else has thought”

Albert Szent-Gyorgyi

Hungarian physiologist who won the Nobel Prize in Physiology or Medicine in 1937

Going beyond experience, thoughts,  
personal feelings  
and opinions



Basis of scientific knowledge  
production

Philosophy of Rationalism

Philosophy of Empiricism



# SCIENCE : RATIONALISM



Faith in the autonomy of reason  
/rationalism

- Conviction that principles governing nature, man and society are knowable through Reasoning- Mind / Thinking is the starting point
- Rene Descartes (CARTESIAN)  
“ I THINK, THEREFORE I AM”

# Empirical Science/ Empiricism

Scientists are more inspired by Newton's  
scientific method of  
discovery rather than Descartes'  
"reason"

Not by abstraction and definition (via reasoning)  
but by **the method of observation**

**Based on Facts (Observable facts)**

# Empirical Science

- Newtonian discovery provided a rational foundation for empirical science
- Empirical ways and means of knowledge production and mathematical confirmation as exemplified by Newtonian Physics alone became recognized as 'scientific method.'
- Forms of knowledge based on non-empirical ways of knowing and nonmathematical ways of proving thus got excluded from science

## Empiricism / Positivism

Application of scientific method in understanding and explaining social world

Auguste Comte (SOCIOLOGIST)

“Positive philosophy” of science held that ONLY through objective, scientific method we could understand and solve society’s problems, and make progress toward enlightenment



# Production of social knowledge

The positivist method / empiricism : (Basic Assumptions)

Natural = Social (their existence governed by law)

- Unity of Science: All sciences must follow the same rules
- Direct observation (Experience) rather than rational speculation should be the basis of scientific discovery
- Observable facts of Social World

# The general elements of positivist philosophy

- **Methodological:** all research should be quantitative, and that only research which is quantitative can be the basis for valid generalisations and laws
- **Causality:** the aim should be to identify causal explanations and fundamental laws that explain human behaviour
- **Operationalisation:** concepts need to be operationalised in a way that enables facts to be measured quantitatively
- **Value-freedom:** the choice of what to study, and how to study it, should be determined by objective criteria rather than by human beliefs and interests
- **Independence:** the role of the researcher is independent of the subject under examination
- **Reductionism:** problems are better understood if they are reduced

## Perfect Observations (?)

### Observable facts

Record only what is directly observed with the senses

Can social scientist free from what their mind says?

### Value-free Knowledge:

The researcher must remain free of bias

can social scientists be value-free researcher?

# Production of social knowledge

## Problems in investigating subject matter that is 'social' in nature via Science

- Complexity of the subject matter and its irreducibility (the actual source/cause)

Interrelated phenomena, too many factors may involve to establish any causal sequence

(The chicken or the egg ? (causality dilemma))

- Every social event is unique

# Limitations of Social Science

## COMPLEXITY OF HUMAN SOCIAL WORLD

- Not an orderly cosmos but chaos

David Hume - An empirical study of the nature of man, reveals not an identical set of motives, ..

- Real life experiments are necessary for social knowledge to evolve as science. The lack of possibilities to conduct such experiments prevent the possibility

# Laws and ability to generalize Human Behavior – Impossible ?

‘In physics, it is possible ...to formulate laws relating to... the expansion of metal when heated. From such laws, the amount of expansion that will occur in particular circumstances can be predicted. However, when a man loses his job and becomes depressed, it does not mean that he will be depressed each time he loses his job, nor can we say that everyone who loses his job becomes depressed’ (Parahoo 1997).

# METHODOLOGY OF SOCIAL SCIENCES

Various research methodology in social sciences need be employed

## Complexity subject matters of social world

- Social behaviors, incidents, social problems, social changes, developments
- Individual, organizations, society, social structures, artifacts
- Tangible behaviors & materials, intangible social meanings
- Cultural, historical and situational differences from place to place

# Social World: Multiple Dimensions

- Attitudes/ Emotional /Perception / Ideas
- Culture
- Organization
- Relationships & Processes

Social

Economical

Political

Formal

Informal



# Multiple levels and properties

## Levels of operation:

- Micro (Individual/Interpersonal)
- Meso (Organizational and Groups)
- Macro (Wider community/ Higher social forces)

## Properties

- Social actor
- Social Organizations
- Process/Emergence/ Negotiation
- Events and practices
- Objective and Subjective elements

# Nature of the social phenomena

- Variety
- Complexity
- Absence of universality
- Dynamism
- Incomprehensibility
- Lack of objectivity
- Qualitative nature
- Difficulty in prediction

# Social Sciences: Diversity

- Variety of Philosophies & Methodologies
  - Positivist Science / Empirical / quantitative
- Interpretative Science / Understanding of the meanings / Qualitative
- Critical Science / Rationalism

## EMPIRICISM & RATIONALISM

# PHILOSOPHICAL FOUNDATIONS

Positivism

Hermeneutics/ Interpretivism

Critical Theory

Realism

Feminism

- Postmodernism

(Epistemology & Ontology / Aims/Methodology)

# Aims, Approaches & Methods

## Aims:

Why & How ?

- Explanation (Theory/Law?)

What

- Understanding (Social Processes & Meaning)

## Approaches:

Quantitative

-Using measuring tools

-Statistical Relationship

Qualitative

-Observation via direct participation

-Interpretation of Meaning

## Methods :

- Questionnaires
- Interviews
- Participation
- Observation
- Quasi –Experimental
- Content Analysis

# Varieties of Approaches & Methods

- Quantitative Methods
- Qualitative Methods
- Mixed-method research
- All research is quantitative, because anything can be counted - even purely verbal responses, perhaps after sorting comments into similar groups.
- All research is qualitative, because answers to even the firmest numeric questions may conceal a variety of meanings.

# The Strategies of Science in Social Sciences

## Induction

Observations Empirical Generalizations  
Theory

## Deduction

Theory Hypotheses Observations Testing of  
Hypotheses Theory  
(Statistical Analysis /significance)

<b>Qualitative Research</b>	<b>Quantitative Research</b>
<b>Interpretivism</b>	<b>positivistic</b>
<b>Inductive</b>	<b>deductive</b>
<b>Holistic</b>	<b>particularistic</b>
<b>subjective centered</b>	<b>objective centered</b>
<b>process oriented</b>	<b>outcome oriented</b>
<b>anthropological worldview</b>	<b>natural science worldview</b>
<b>relative lack of control</b>	<b>attempted control of variables</b>
<b>dynamic reality assumed</b>	<b>static reality assumed</b>
<b>discovery orientated</b>	<b>verification orientated</b>
<b>Exploratory / Understanding</b>	<b>Confirmatory/ Explanatory</b>



Choose a quantitative method  
when most following conditions apply

- The research is confirmatory/explanatory rather than exploratory

i.e. this is a frequently researched topic, and (numerical) data from earlier research is available..

- You are trying to measure a trend (almost impossible with qualitative research)
- There is no ambiguity about the concepts being measured, and only one way to measure each concept

## Choose a qualitative method when most of these conditions apply

- The research is exploratory/ understanding than explanatory/confirmatory
- You have no or very little data existing research data on this topic.
- The most appropriate unit of measurement is not certain (Individuals? Households? Organizations?)
- The concept is assessed on a nominal scale, with no clear demarcation points.
- You are exploring the reasons why people do or believe something.

# Types of Research Orientations

- Basic Research
- Applied Research
- Exploratory Research
- Descriptive Research
- Explanatory Research
- Case Studies

# Basic & Applied Research

- Social research is often considered to have 2 orientations: applied and basic (or pure)
- In reality, these orientations intertwine
- Most basic research contributes to our understanding of the social world
- Most applied research is applicable to policy situations

# Basic Research

- Focuses on refuting or supporting theories about social life
- Source of most new ideas and theories
- Theory construction, in particular, can take years of work
- Builds these ideas through cycles of research, replication, and revision
- Also produces most of the new methods in the discipline
- Usually the testing ground for new methods and instruments
- Mostly performed & consumed by academics
- Some basic research crosses disciplines
- A small percentage of this research reaches the mass media and public

# Applied Research

- Conducted to address a specific concern or to develop solution

## Types of Applied Research

### **Evaluation**

Evaluates a program—does it work?

### **Action Research**

Research tied to social action and change Advance causes through public awareness

### **Social Impact Assessment Research**

Estimates the consequences of a planned program

## Exploratory Research

- For new or undiscovered topics
- Uncovers basic facts about the topic
- Formulates and focuses questions for later studies
- Suggests directions and feasibility of future research
- Usually focused on the “what,” not the “why”
- May not have a specific research question

# Descriptive Research

- Presents a picture with specific details of the situation or behavior
- Requires a focused research question/topic
- Focuses on “how” and “who” questions
- Is necessary for good explanatory research



## Explanatory Research

- Focuses on “why”, or the reason a situation or behavior occurs
- Builds on descriptive research, and other explanatory research
- Uses theory & Hypotheses

# Time Dimension-Based Research

Some research neglects the element of time, other research focuses heavily on time

## Cross-Sectional

- Observations at a limited point in time
- Frequently used by social scientists
- Although it does not capture time, change, or process, it is often used in explanatory research

## Longitudinal Research

- Much more expensive and time-consuming than cross-sectional
- Time-series: multiple observations over time of the several units
- **Panel Study**: multiple observations over time of the same units
- **Cohort Study**: multiple observations over time of similar groups

# Case Studies

- Investigates only **one or a few cases** but in depth
- Data is more varied, detailed and extensive
- Just start with research questions
- Researchers do not focus on the discovery of a universal, generalizable truth, nor do they typically look for cause- effect relationships; instead, emphasis is placed on **exploration and description**
- Can be used to build theory
- May be cross-sectional or longitudinal, exploratory, descriptive or explanatory

# Basic form of Research Designs

## Main Types of Quantitative Research

- Survey
- Hypothetical-deductive theory
- Descriptive / Correlations
- Quasi-experimental
- **Experimental**

## Main Types of Qualitative Research

- Case Study (presentation of detailed information)
- Grounded Theory (inductive method)
- Phenomenology (As perceive and understood by human)
- Ethnography (everyday life and practices)
- Historical (study of past and changes)

# Data Collection Methods

- Observation
- Interviews
- Questionnaires
- Focus group discussion
- Projective techniques

# Then What ' s t h e P r o b l e m?

- Lack of real understanding of the scientific methodology of various methods
- Uncritically adopted scientific methodology to study social phenomenon that may challenge the validity and reliability of methods used and its consequent results
- Blindly applying "standard" data collection and analytic strategies

WHAT KIND OF  
SCIENCE IS  
SOCIAL  
SCIENCE?

SOFT SCIENCE OR SLOPPY SCIENCE?

# What social scientists must do?

- Avoid sloppy practices in the name of doing research

Be serious in the practices of knowledge production/ truthful researcher

- Social science knowledge, though ‘constructed’, but it should be constructed scientifically

- Know the methods /approaches/strategies /theories / the nature of subject matters/ and be critical in your thinking/be objective critically

- Pseudo Scholars ( ‘cut and paste’ knowledge)



## AT THE END OF THE DAY

No Study is perfect, however:

- Knowledgeable and be skillful
- Professionalism & Honest
- Committed /Keen observer
- Willing to tries new approaches / methods (creative)
- We needs scientific social scientists, not indoctrinated social scientists.

THANK YOU

# Literature Review



Mohd Dahlan A. Malek  
2017



# Sinopsis kursus

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- Ringkasan sinopsis kursus



# Philosophy of Research

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- **Philosophy** is the study of general and fundamental problems concerning matters such as existence, knowledge, values, reason, mind, and language



# Research

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- **Research** can be defined as the search for knowledge or any systematic investigation to establish facts.
- The originality of work



---

What is  
literature?????

- 
- 
- FRGS
  - MA
  - PhD
  - Process
  - Sample
  - Sample UTM
  - Sample UTM2





# Working with Literature

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What should I be reading and  
what do I do with it all?

Lecture note



# Isu

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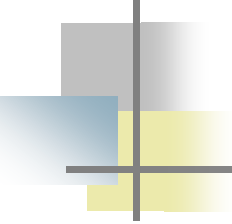
- Menulis sorotan literatur bukanlah sesuatu yang mudah.
- Ini kerana penulisan sorotan kajian memerlukan anda membahaskan kajian-kajian lepas bagi menjelaskan kedudukan kajian anda dalam konteks semasa.
- Anda perlu mengkritik kajian-kajian lepas untuk memberikan laluan kepada kajian anda **mengisi gap** yang belum terjawab sepenuhnya oleh kajian-kajian tersebut.



# Structure of the thesis

---

- INTRODUCTION TO RESEARCH TOPIC
- LITERATURE REVIEW
- OBJECTIVES/ RESEARCH QUESTIONS
- METHODOLOGY
- RESULTS

- 
- A literature review IS NOT a straightforward
  - summary of everything you have read on the
  - topic and it is not a chronological description
  - of what was discovered in your field.
  - Combines both summary and synthesis

# LITERATURE REVIEW: WHAT IT IS?

AN EXAMINATION OF RESEARCH THAT HAS BEEN CONDUCTED IN A PARTICULAR FIELD OF STUDY

- MORE THAN THE SEARCH FOR INFORMATION, AND
- GOES BEYOND BEING DESCRIPTIVE
- EVALUATING AND SYNTHESISING AVAILABLE
- INFORMATION RELATED TO YOUR STUDY
- ALL WORKS INCLUDED IN THE REVIEW
- ALL WORKS INCLUDED IN THE REVIEW MUST BE
- READ, EVALUATED AND ANALYSED

- ILLUSTRATE HOW THE SUBJECT HAS BEEN STUDIED PREVIOUSLY
- GIVE READER/EXAMINERS AN OVERVIEW OF SOURCES YOU HAVE EXPLORE
- TO DEMONSTRATE HOW YOUR RESEARCH FITS INTO THE LARGER FIELD OF STUDY
- AVOID DUPLICATION / AVOIDING FROM MAKING THE SAME MISTAKES AS OTHERS



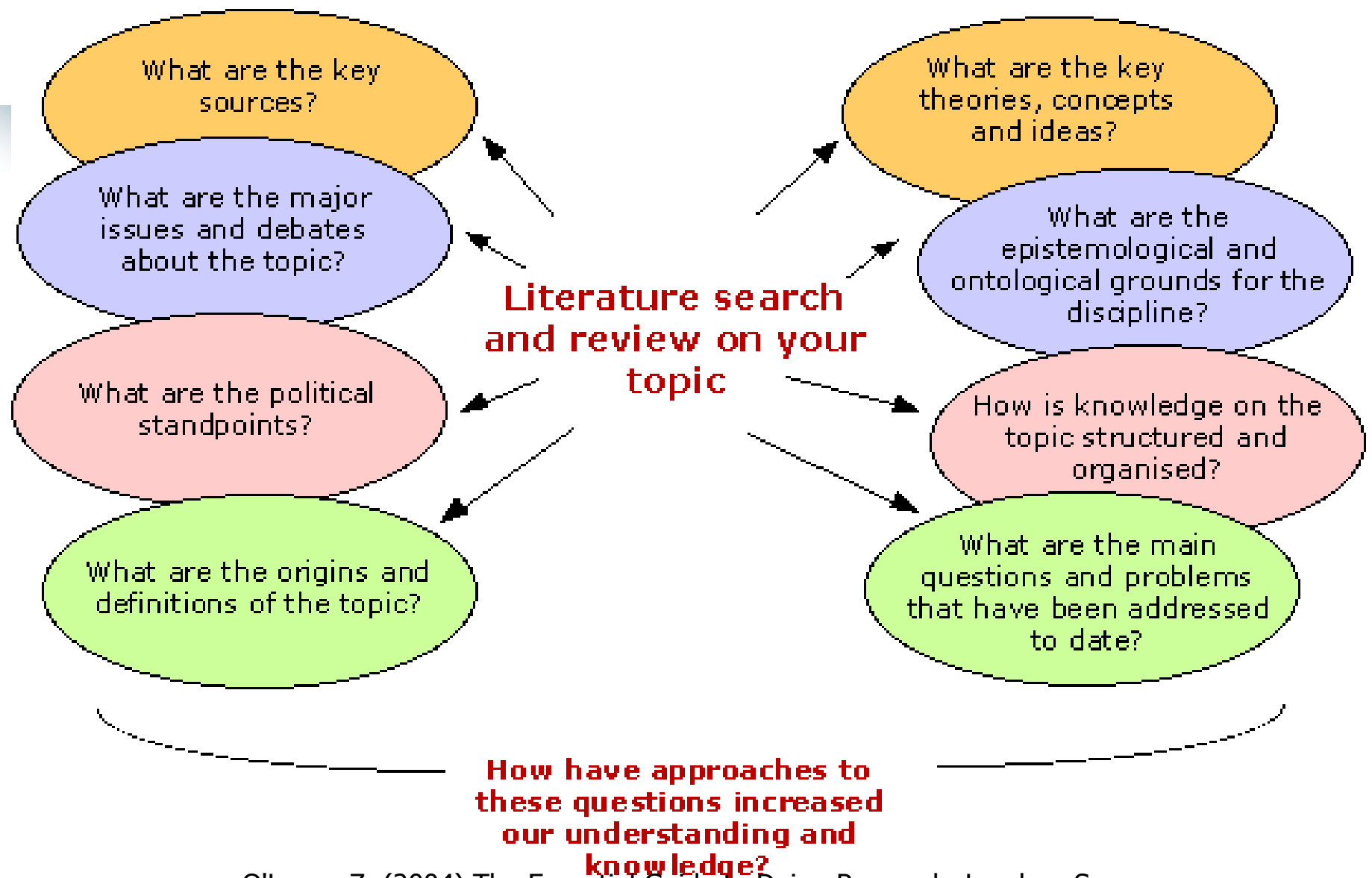
- POSITIONING YOURWORK IN THE  
CONTEXTOF PREVIOUS RESEARCH

- CREATING 'RESEARCH SPACE' FOR YOUR  
WORK /TO IDENTIFYGAPS IN THE  
LITERATURE

- TO PROVIDE INTELECTUALL CONTEXT  
FOR YOURWORK

- TO CARRY ON FROM WHERE OTHERS HAVEALREADY REACHED / BUILD ON THE PLATFORM OF EXISTING KNOWLWDGE AND IDEAS
- TO PROVIDE RATIONALE / JUSTIFICATION FOR YOUR STUDY
- IDENTIFY KEY CONTACT / TO IDENTIFY OTHER PEOPLE WORKING IN THE SAME FIELDS / NETWORKINGAMONG RESEARCHERS







# WHAT YOU NEED TO DO?

---

- READING BROADLY ON THE TOPIC
- REFINING TOPIC AND ESTABLISH THEORETICAL PERSPECTIVE
- IDENTIFY YOUR RESEARCH QUESTION/S
- IDENTIFY EXTENT AND QUALITY OF WORK ALREADY
- CARRIED OUT IN THE SUBJECT AREA

# WHAT YOU NEED TO DO?

- DESCRIBE, SUMMARISE, EVALUATE AND CLARIFY THESE LITERATURE

---

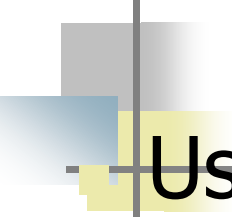
- READ AND CRITICALLY EVALUATE THE INFORMATION THAT YOU LOCATE

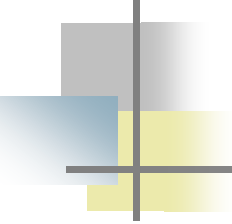
- PLAN, ORGANISE AND WRITE CRITICALLY ABOUT THE LITERATURE

- FILE AND STORE YOUR READINGS AND NOTES

- ADDING AND REWRITE LITERATURE REVIEW

# Plagiarism includes

- 
- Using another writer's words without proper citation
  - Using another writer's ideas without proper citation
  - Citing a source but reproducing the exact word without quotation marks
  -

- 
- 
- Borrowing the structure of another author's phrases/sentences without giving the source
  - Using paper-writing service or having a friend write the paper



# STRUCTURING LITERATURE REVIEW

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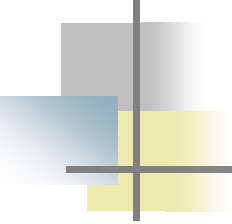
- IT IS A SYSTEMATIC WRITE-UP
- LITERATURE REVIEW HAS A LOGICAL
- AND COHERENT STRUCTURE
- THIS STRUCTURE IS CLEARLY  
APPARENT TO THE READER



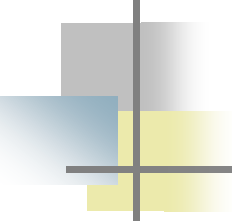
# Timbul persoalan!!!!

---

- Siapalah saya untuk mengkritik kajian lepas oleh pakar-pakar?
- Mampukan saya untuk menganalisis dan seterusnya mensintesis kajian oleh pakar-pakar tersebut?
- Ini belum termasuk lagi sungutan pelajar seperti berikut:

- 
- 
- Bagaimana hendak memulakan sorotan literatur ?
  - Apa yang perlu ditulis dalam sorotan literatur ?
  - Berapa banyak artikel yang perlu di baca?



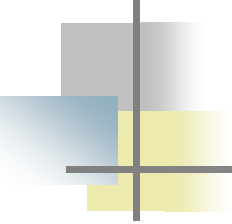
- 
- Bagaimana hendak menyusun kandungan sorotan literatur?
  - Bagaimana hendak mengetahui bahawa kajian ini belum dilakukan di mana-mana di dunia ini?
  - Macamana hendak mengkritik kajian lepas?
  - Bagaimanakah cara untuk mengemukakan hujah?



Apakah yang dimaksudkan dengan mensintesis kajian lepas?

---

- Bagaimana hendak mengulas pendapat yang berbeza-beza dalam artikel-artikel yang berbeza?
- Apakah kerangka teoritikal dan konseptual yang digunakan dalam bidang yang anda kaji?

- 
- 
- Mana satukah metodologi yang penting?
  - Siapakan penulis utama kerana terlalu banyak yang menulis isu yang sama?
  - Mengapa ada artikel-artikel yang mempunyai dapatan yang bercanggah



# questions

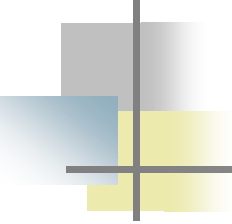
- How much literature do I need to look at?
- How far back do I need to go in reviewing the literature?
- What related ideas do I need to explore (subtopics or overarching ideas)
- What literature provides a framework for my research?
- Why use a particular instruments for my study



# Isu utama

---

- Menjadi asas kepada anda (dan pembaca) mengetahui kedudukan kajian anda dalam perkembangan pengetahuan dan kajian-kajian lepas dalam bidang yang sama sejak dulu hingga sekarang.
- Menjadi asas penentuan skop dan fokus kajian anda kerana bidang yang anda kaji adalah luas. Penentuan ini dilakukan dengan mengambil teori tertentu sahaja, menghadkan pemilihan variabel, penggunaan sampel tertentu, pemilihan metodologi kajian dan teknik analisis data.

- 
- 
- A **literature review** is a body of text that aims to review the critical points of current knowledge including substantive findings as well as theoretical and methodological contributions to a particular topic. Literature reviews are secondary sources, and as such, do not report any new or original experimental work.

- A literature review is an account of what has been published on a topic by accredited scholars and researchers.
- We will be required to write a chapter on literature review.
- In writing the literature review, our purpose is to convey to our reader what knowledge and ideas have been established on the topic you have chosen, and what their strengths and weaknesses are.
- As a piece of writing, the literature review must be defined by a guiding concept (e.g., your research objective, the problem or issue you are discussing, or your argumentative thesis).
- It is not a descriptive list of the material available, or a set of summaries



# Purpose

---

- ❖ to discover what is known about a certain topic

We should look for 4 things about the topic:

- Theory
- Facts
- Opinions
- Method





# purpose

---

- Established what is already known about a particular topic and what methods have been used in researching the topic
- Prevents you from reproducing what is already known
- **Exposes gaps** in literature and help you in position your research

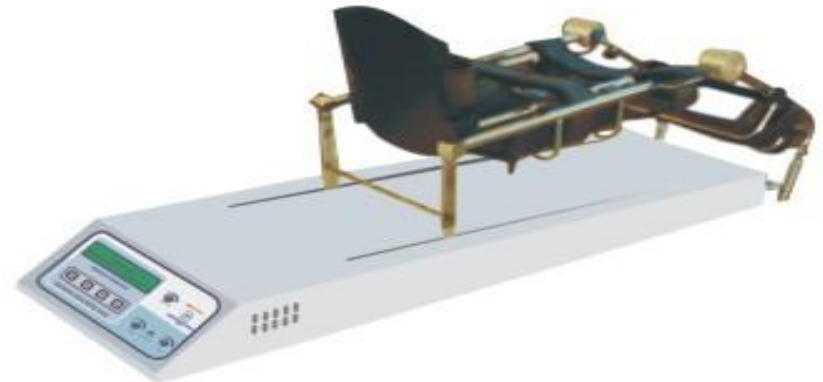


example

A physiotherapist wanting to treat patients with continuous passive motion (CPM) needs to know:

- **Theories** about how CPM works
- **Facts** about protocols and results
- **Opinions** of therapists on the future of clinical use of CPM
- **Methods** that others used to assess effects of CPM

## CONTINUOUS PASSIVE MOTION



# Types of literature

- **Primary sources:** original reports of research (journal articles, theses and dissertations, conference abstracts and proceedings)
- **Secondary sources:** in which authors summarize their own work and the work of others (book chapters, review articles)

# Evaluating the literature



- 1. Classify the variables
- 2. Compare purposes and conclusions
- 3. Describe design and control elements
- 4. Identify threats to validity
- 5. Compare the study with other research  
(does it add new information?)
- 6. Evaluate the utility of the study



# Conducting a Literature Review

- Obtain a “relatively” complete set of articles on the topic
- Decide which articles are relevant to your research question
- Identify the designs and variables used previously to address the question
- Determine the validity of the studies
- Make comparisons across studies
- Specify problems that need further study



# Finding the literature

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- Consult your subject specialist reference librarian
- Check cited by list in Google Scholar
- Previous thesis (pro Quest )



# The Importance of Working with Literature

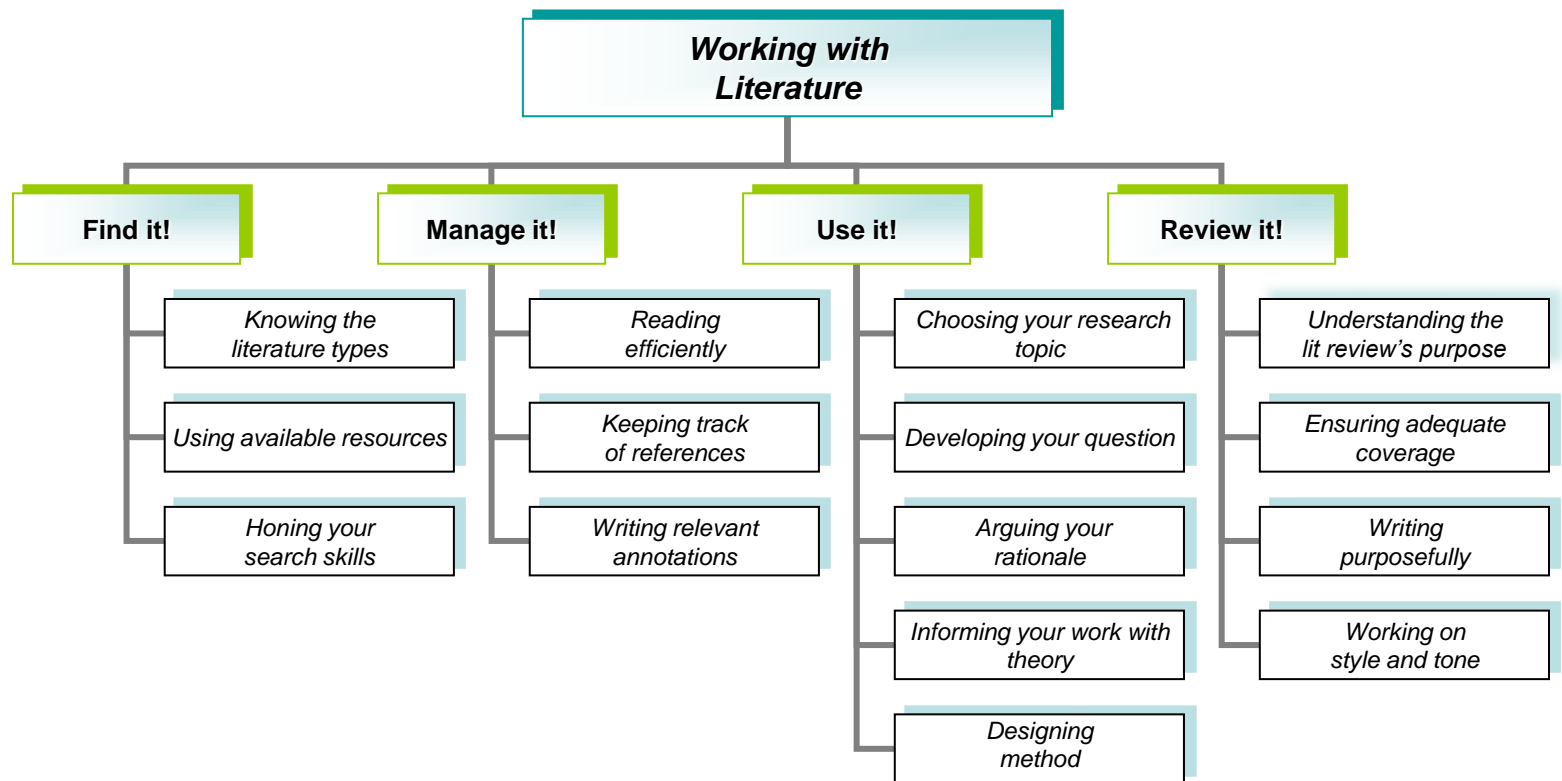
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Working with literature is an essential part of the research process that:

- generates ideas
- helps form significant questions
- is instrumental in the process of research design



# Working with literature





# Important

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- Plan
- Systematic search
- Timeline



# Finding literature

---

Finding relevant literature can be made easier if you are able to readily access and draw on a wide variety of resources such as:

- reference materials
- books
- journals
- grey literature
- official publications
- archives



# Grey literature

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- **Grey literature** is informally published written material (such as reports) that may be difficult to trace via conventional channels such as published journals and monographs because it is not published commercially or is not widely accessible.



# Finding literature

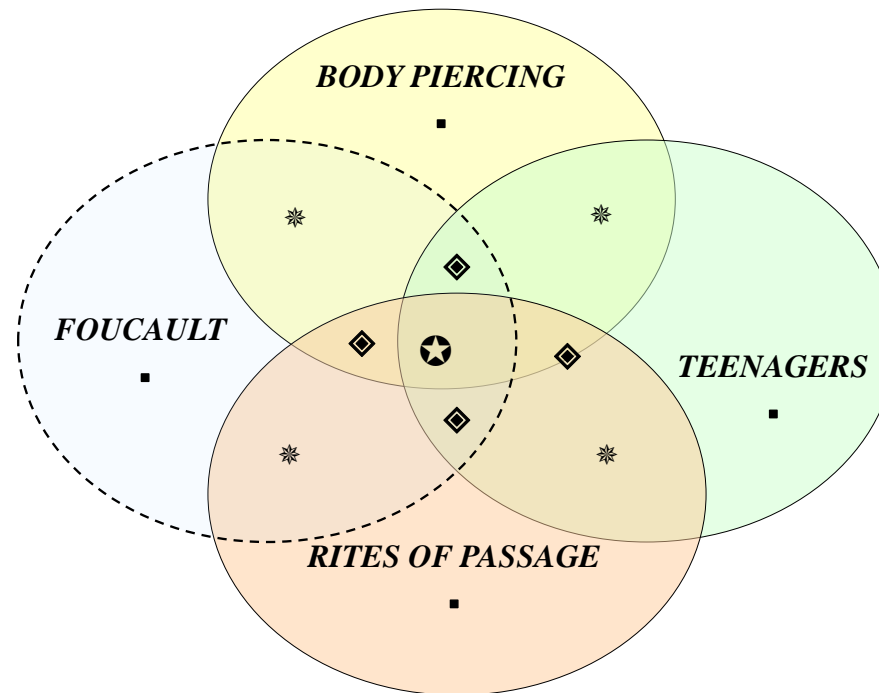
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## **Don't go it alone!!**

When looking for literature be sure to call on the experts such as:

- librarians
- supervisors
- other researchers
- practitioners

# Intersecting Areas of Literature



- *background literature*
- ✱ *moderate relevance*
- ◆ *high relevance*
- ★ *highest relevance*



# Managing the literature

It also pays to be organized and diligent when it comes to keeping references.

- Keep and file copies of relevant books, articles, etc.
- Avoid lending out your 'only copies'
- Find out about the recommended referencing style and use it from the start
- Consider using bibliographic file management software such as *Procite*, *Endnote*, or *Reference Manager*



# Annotating Sources

---

Annotating your sources provides you with a record of relevant literature. It should include:

- the citation
- articulation of the author and audience
- a short summary
- critical commentary
- notes on relevance that remind you of the significance, accuracy, and quality of the sources cited





# Using the Literature

---

Literature is used for disparate purposes throughout the research process. Whether it be:

- focusing interests
- defining questions
- arguing a rationale
- theoretically informing your study
- developing appropriate design, or writing a formal literature review

every stage of the research process demands literary engagement



# The Formal Literature Review

---

Most find the writing of a literature review a difficult task that takes patience, practice, drafts, and redrafts



# The Formal Literature Review

---

The formal literature review is a very specific piece of writing designed to:

- inform your readers of your topic
- establish your credibility as a researcher
- argue the need for, and relevance of, your work

# Reviewing the Literature vs. ‘The Literature Review’

**TABLE 6.1** REVIEWING THE LITERATURE VS ‘THE LITERATURE REVIEW’

<b>Reasons for reviewing the literature</b>	<b>Purposes of the ‘literature review’</b>
<ul style="list-style-type: none"><li>• Informing yourself of what is happening in the field</li><li>• Gaining a level of topical and methodological knowledge and expertise</li><li>• Finding potential gaps in the literature that may point to potential research questions</li><li>• Critically evaluating common/ typical methods</li><li>• Facilitating the development of your own methodological approaches</li></ul>	<ul style="list-style-type: none"><li>☑ Informing your audience of what is happening in the field</li><li>☑ Establishing your credibility as a knowledgeable and capable researcher</li><li>☑ Arguing the relevance and the significance of your research question(s)</li><li>☑ Providing the context for your own methodological approach</li><li>☑ Arguing the relevance and appropriateness of your approach</li></ul>



# Writing your Literature Review

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A good literature review is an *argument* that is more purposeful than a simple review of relevant literature



# Writing your Literature Review

---

Writing a good review requires you to:

- read a few good reviews
- write critical annotations
- develop a structure
- write purposefully
- use the literature to back up your arguments
- review and write throughout the research process
- get feedback
- and be prepared to redraft



# Writing your Literature Review

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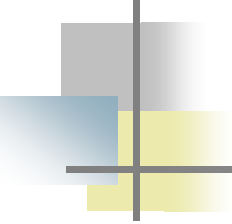
## Style and Tone...

- Writing a good literature review can be likened to holding a good dinner party conversation
- They both require individuals who can engage, learn, debate, argue, contribute, and evolve their own ideas, without being hypercritical or sycophantic

# A Good Literature Review is:

- **Focused** - The topic should be narrow. You should only present ideas and only report on studies that are closely related to topic.
- **Concise** - Ideas should be presented economically. Don't take any more space than you need to present your ideas.
- **Logical** - The flow within and among paragraphs should be a smooth, logical progression from one idea to the next
- **Developed** - Don't leave the story half told.
- **Integrative** - Your paper should stress how the ideas in the studies are related. Focus on the big picture. What commonality do all the studies share? How are some studies different than others? Your paper should stress how all the studies reviewed contribute to your topic.
- **Current** - Your review should focus on work being done on the cutting edge of your topic.



- 
- 
- Research Problem
  - Research question
  - Definition –concept and operation
  - Hypothesis/objectives

# Now you can start writing

- DECIDE ON A TOPIC

- NARROW YOUR TOPIC

- CREATE AN INTRODUCTION FOR YOUR LITERATURE REVIEW

- ORGANIZE THE BODY OF YOUR PAPER

- **Scan each article to get an overview of each one.**

- **Group the articles by categories.**

- **Read each article carefully, taking notes on each one.**

- WRITE THE BODY OF YOUR PAPER

- **Make the structure and organization of your write-up explicit.**

- **Integrate the studies you summarize in your paper.**

- At the end of each section wrap up studies in a paragraph that tells the reader how the studies relate and address your topic.

- **Make sure you take note of key terms and definitions.**

- **Identify landmark studies in your write-up**

- **Identify major trends across the studies you are reading.**

- WRAP THE PAPER UP

- **Present your conclusions.**

- **Present implications.**

- **Present suggestions for future research.**



Persoalan yang dulu menghantui saya adalah:

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- Bagaimana nak tulis sorotan literatur
- - Apa isi sorotan literatur?
- - Bila nak kritik secara mendalam dan bila nak sekadar cite sahaja kajian lepas?



# Aspek penting dalam LR

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- 5 aspek sorotan literatur:
- (1) sejarah perkembangan / latarbelakang / epistemology berkaitan kajian anda
- (2) perbincangan berkaitan teori / konsep / variabel yang relevan yang mendasari kajian anda termasuk kerangka teoritikal
- (3) perbincangan kritis kajian lepas dalam bidang berkaitan
- (4) sorotan perkembangan terkini (jika boleh 5 tahun kebelakangan) berkaitan kajian yang melibatkan perbahasan / isu / persoalan / terminology baru yang timbul
- (5) bagaimana kajian anda mengisi ruang (gap) dari perkembangan terkini tersebut.



JANGAN menulis seperti membuat sebuah laporan sebab sungguh MEMBOSANKAN dan menjadikan anda sebagai seorang yang hanya meringkaskan kajian terdahulu. Ramai pelajar suka menulis seperti:

- Suyansah (2008) menyatakan bahawa....Ini disokong oleh kajian Azizi Wafa (2009).
- Ismail Ali (2010) menambah bahawa....Seterusnya Suyansah (2008)....
- Azizi Wafa (2009) menegaskan bahawa.....Kajian ini selari dengan kajian Ismail Ali (2010)....
- Akhirnya yang ditulis adalah ringkasan kajian lepas.... bukannya kajian anda yang menjadikan kajian lepas sebagai sokongan....kerana suara anda tidak kedengaran dalam sorotan literatur !

Kalau setakat meringkaskan kajian lepas "sesiapa pun boleh buat" ..... betul tak....ini yang membezakan keserjanaan....

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- Contoh sintesis
  - Contoh kelemahan



# Final checklist

- Have I fulfilled the purpose of the literature review?
- Is it written at a level appropriate to its audience?
- Are its facts correct?
- Is all the information included relevant?
- Are the layout and presentation easy on the eye?
- Is the language clear, concise and academic?
- Does the abstract summarise the entire review?
- Does the introduction adequately introduce the topic?
- Is the body organised logically?
- Does the conclusion interpret, analyse and evaluate?
- Are the recommendations reasonable?
- Does the table of contents correspond with the actual contents?
- Are page numbers correct?
- Have I acknowledged all sources of information through correct referencing?
- Have I checked spelling, grammar and punctuation?
- Have I carefully proof-read the final draft?



# tools

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- Atlas.ti.
- <http://www.atlasti.com/demo.html>
- Mendeley
- <http://www.mendeley.com/features/>