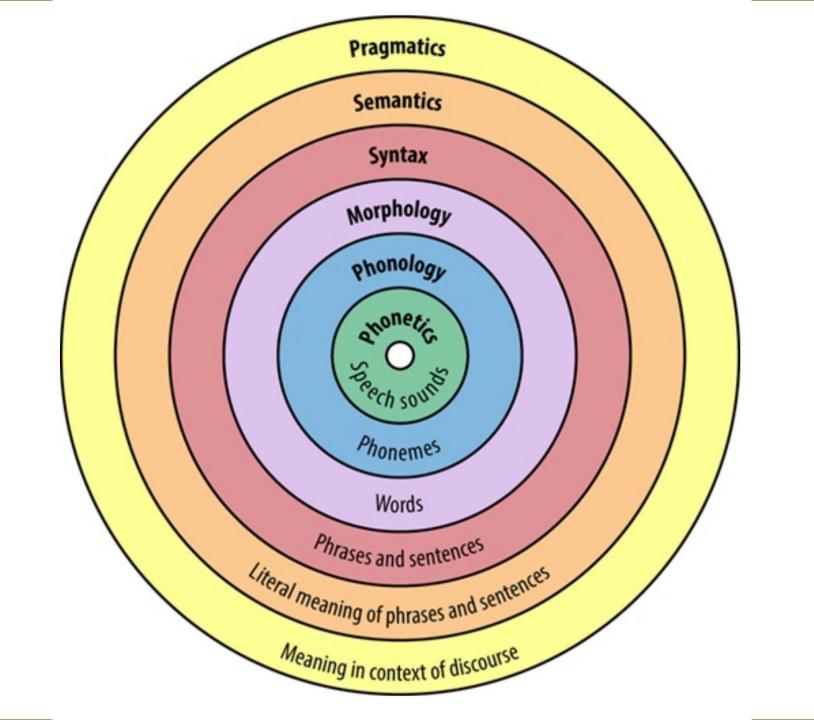
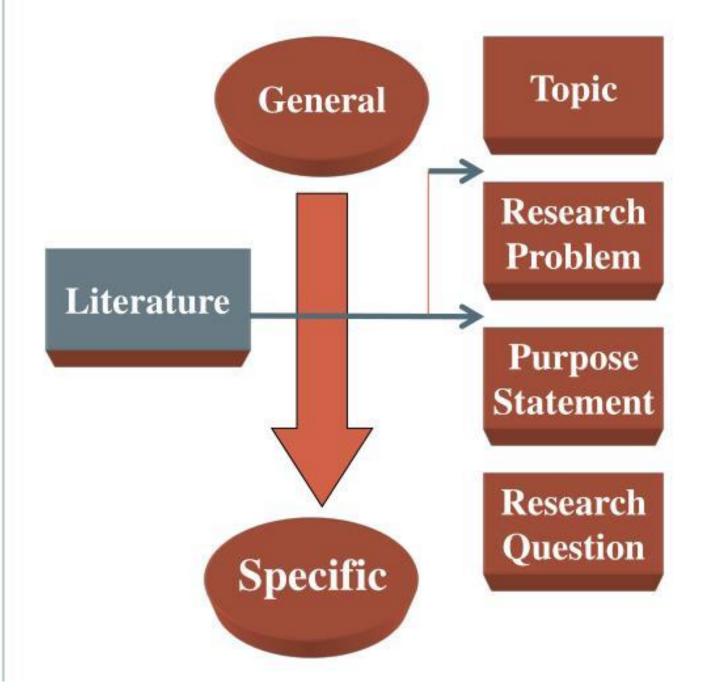
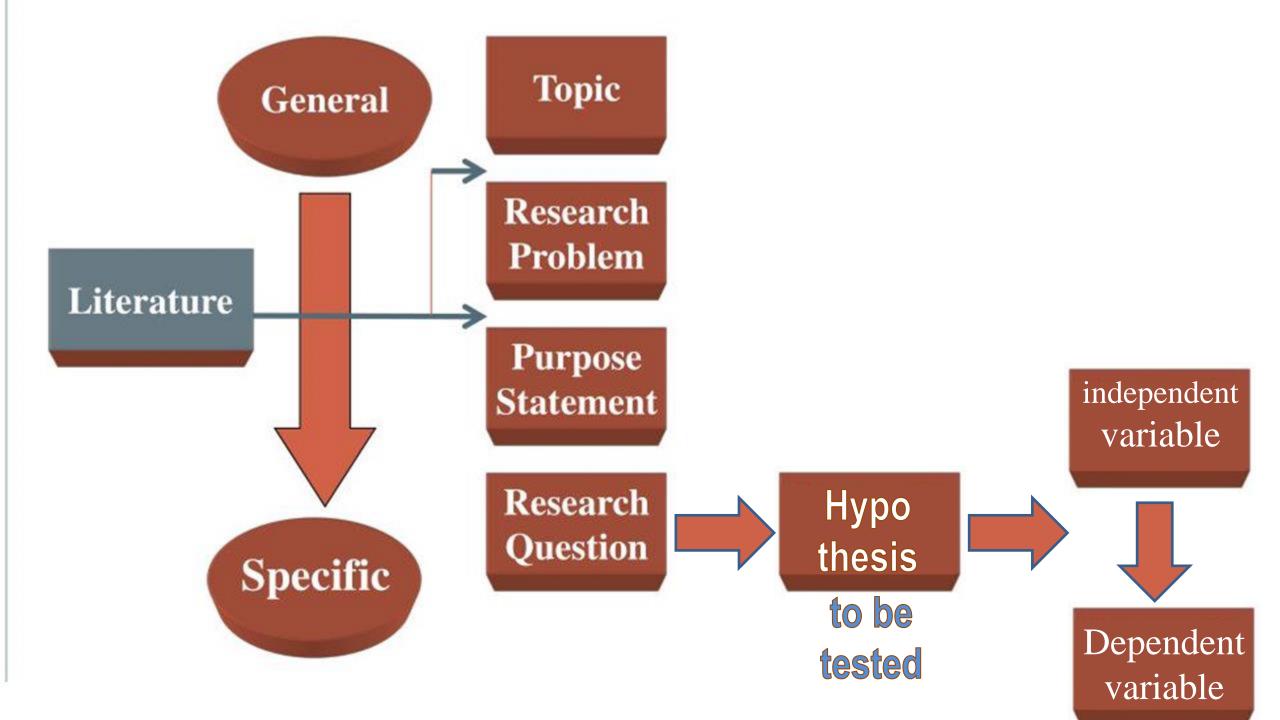
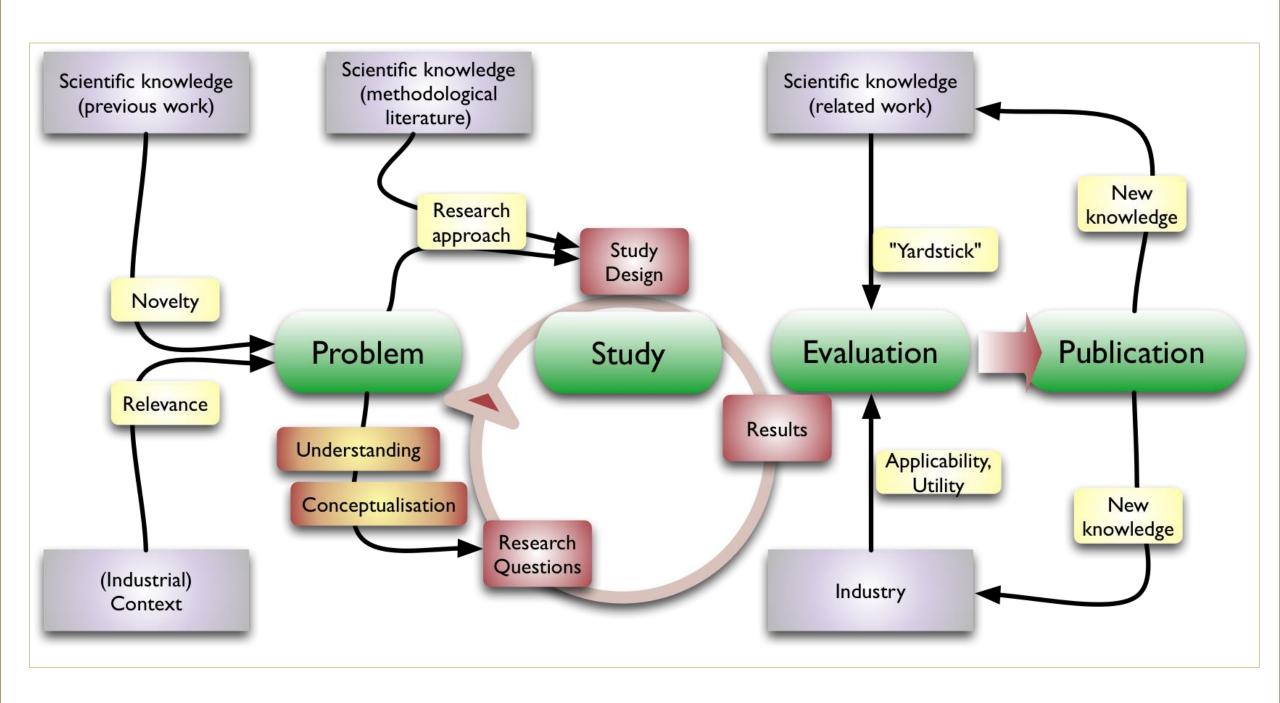
# 19-03-2022









#### Exercise

This exercise is intended to give you some idea of how language attitude data is collected and of the kind of results which emerge. In order to make the exercise manageable, I suggest you use just two taped voices and ask for responses from a small number of people. To obtain results you could generalise from, it would be necessary to use more voices and many more respondents.

Tape a person from your community with a local accent telling you a story from their personal experience. Then tape someone with a standard accent (such as RP in England) from the television or radio, if possible talking on a similar personal topic.

Then play excerpts from the two speakers to two or three of your friends or family and ask them to rate the speakers on the following scale.

Speech rating scale

Listen to the tape and then indicate with a tick where you would place the speakers on the following scales.

Speaker 1 2 3 4 5

#### Exercise



New York is a very big city and lots of people live there. Lots of people go to see

New York when they go on holiday.

There is a lot to see in New York. You can see the Statue of Liberty, the Brooklyn Bridge, Central Park, the Empire State Building, the World Trade Centre, City Hall, Carnegie Hall and the New York Stock Exchange. You can also go to Broadway and Yankee Stadium. If you don't want to see any of those you can just walk around. You can also go to a restaurant or a bar or a nightclub.

New York is very big. It has got a lot of cars and buildings and a lot of people. New York also has a lot of roads and noise.

New York is a very nice city and everyone loves it very much. Everyone must go to New York because it is good and you can see everything there.



New York City isn't a city that can easily be ignored even by the most demanding visitor. Located on the east

coast of the United States with a population of over ten million people, it is the destination of thousands of visitors who come every year to experience the excitement of one of the busiest cities in the world.

The streets of New York are incredibly noisy, with the sounds of car horns beeping, people shouting and police car sirens wailing. Amazingly tall skyscrapers rise up everywhere.

The most exciting thing about New York is how much there is to see and do there. For sightseers there is the Statue of Liberty, the Brooklyn Bridge and Central Park, while lovers of culture can visit the theatres of Broadway or some of the city's hundreds of art galleries. Alternatively, if you are a sports fan you can even catch a game of baseball at Yankee Stadium. The night life in New York is equally brilliant, with a wide variety of restaurants, bars and nightclubs to choose from.

New York is a lively and exciting city to visit with something for everyone, and is recommended to anyone seeking fun, variety and adventure.

#### Speech rating scale

Listen to the tape and then indicate with a tick where you would place the speakers on the following scales.

### Speaker 1 2 3 4 5

pleasant —— —— —— —	— unpleasant
attractive —— —— —— —	— unattractive
self-confident —— —— —	— — un-self-confident
likeable —— —— —— ——	— unlikeable
fluent —— —— —— ——	not fluent
reliable —— —— —— ——	– unreliable
sincere —— —— —— ——	– insincere
ambitious —— —— —— –	
friendly —— —— —— ——	<ul><li>unfriendly</li></ul>
intelligent —— —— —— –	<u> </u>
good sense of humour —— —	– — — no sense of humour
leadership skills —— ——	• • • • • • • • • • • • • • • • • • •
highly educated —— ——	uneducated
high status job —— —— –	—— low status job
What differences are there in the	e ratings? How would you explain the

- 1. What is Scientific Knowledge? What features seem specific for it?
- 2. What is a scientific method? Why do we need it?
- 3. What features should scientific results have to fit a notion of a method-based study?
- 4. What is methodology? What meaning does English word 'methodology' have?
- 5. What levels of methodological thought can you name?
- 6.Are all possible methodological approaches just the same?
- 7. What is a scientific approach? Is it just a system of belief? Is it a sort of a model?
- 8. What is Meta-Language? Why do we need it?
- 9. Are all methods equivalent in Research?
- 10. What are key stages of scientific research?
- 11. What is the difference between theory analytical review and empirical research?
- 12. What is the difference between qualitative and quantitative methods in English Research tradition?
- 13. Can you name various qualitative and quantitative methods in English Research tradition?
- 14. What role should an observer play in the research? Should one stay visible or invisible?
- 15.Can observer influence research results?
- 16.Can you tell the difference between linguistic scientific research methods and general research methods?

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## WHAT IS RESEARCH?

 Research is "creative and systematic work undertaken to increase the stock of knowledge, including knowledge of humans, culture and society, and the use of this stock of knowledge to devise new applications."

# WHAT IS RESEARCH?

Research [rI's3:tʃ]

is a systematic investigation to establish facts or principles (or to collect information on a subject).

### WHAT IS RESEARCH?

- Research [rɪ'sɜːtʃ]
- To research исследовать.
- to carry out investigations into (a subject, problem, etc.)
- Syn: investigate, study, enquire into, look into, probe, explore, analyse, examine, scrutinize, etc.

### **Criteria for Research Problems**

- Good research problems must meet three criteria (Kerlinger, 1973):
  - 1) First, the research problem should describe the relationship between two or more variables.
  - 2) Second, the research problem should take the form of a question.
  - 3) Third, the research problem must be capable of being tested empirically (i.e., with data derived from direct observation and experimentation).

# CHARACTERISTICS OF SCIENTIFIC METHOD

Most agree that it is characterized by the following elements:

- 1.• Empirical approach
- 2. Observations
- 3. Questions
- 4. Hypotheses
- 5. Experiments
- 6. Analyses
- 7. Conclusions
- 8. Replication

IMRAD	IMRAD		
типоль Стандартная структура научной статьи			
Title	Указывается тема исследования, автор, аффилиация.		
(Название статьи)	В студенческих сборниках также научный руководитель.		
Annotation	Конкретизирует содержание статьи и кратко отражает		
(Аннотация)	структуру IMRAD		
Key Words (Ключевые слова)	Указываются ключевые термины и понятия исследования		
Introduction	Проблема, актуальность, новизна, объект и предмет; цели и задачи;		
(Введение)	Аналитический обзор литературы; ключевые понятия исследования.		
Methods	Методы, материал анализа, условия эксперимента, методики и		
(Методы)	средства проведения исследования		
Results	Анализ, интерпретация и первичное обобщение полученных в		
(Результаты)	результате исследования новых данных.		
Discussion (Обсуждение)	Полученные ответы, их достоверность, значение,		
Conclusion (Заключение)	Обобщение полученных результатов и выводов по ним; перспективы дальнейших исследований.		
References (Литература)	Библиографические данные статей оформляются по требованиям издания (e.g. ГОСТ).		
	Указываются все процитированные и проанализированные источники.		





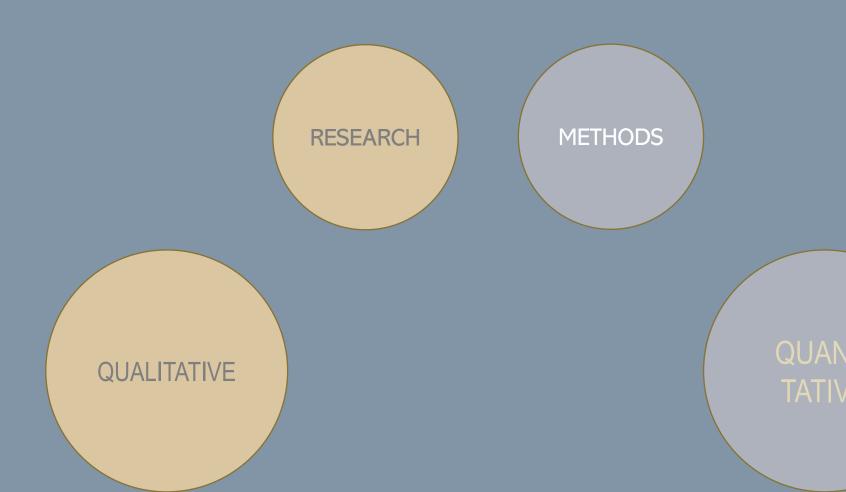
Scientific research manuscript structure (learningapps.org)

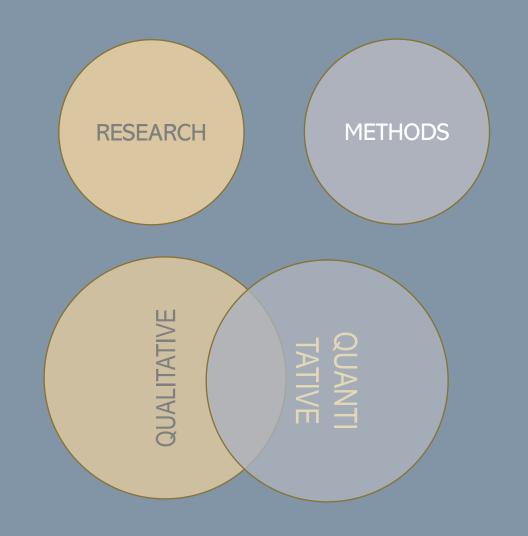
Работа с источниками		
Контрольное количество проанализированных источников не	0 баллов	
соответствует установленному количеству по плану.		
Контрольное количество проанализированных источников соответствует	1 балл	
установленному количеству по плану.		
Обозначенные точки зрения на вопрос не подтверждаются ссылками на	0 баллов	
источники.		
Обозначенные точки зрения на вопрос подтверждаются ссылками на	1 балл	
источники.		
Ссылки на источники не приводятся.	0 баллов	
Приводятся ссылки на источники.	1 балл	
Приводятся постраничные ссылки на источники.	2 балла	
Анализ источников не осуществляется.	0 баллов	
Анализ источников осуществляется по авторам.	1 балл	
Анализ источников осуществляется по концепциям.	2 балла	
Невозможно судить о концепции, лежащей в основе исследования.	0 баллов	
Автор принимает устоявшуюся концепцию (или одну из многих) за	1 балл	
основу своего исследования.		
Автор уточняет (и в чем-то дорабатывает) устоявшуюся концепцию (или	2 балла	
одну из многих) как основу своего исследования.		
Автор выступает с принципиально новой концепцией, ложащейся в	4 балла	
основу исследования.		
Возможная оценка:	от 0 до 10 баллов	

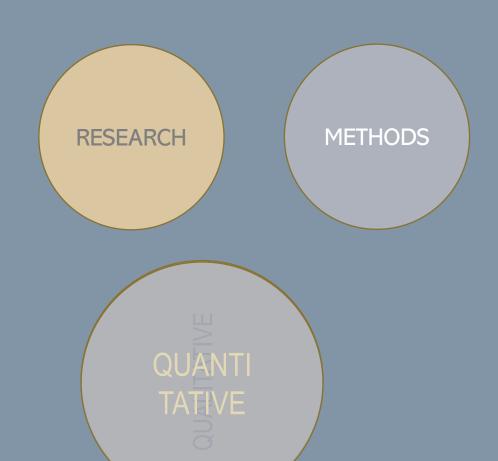
Работа с источниками		
Контрольное количество проанализированных источников не	0 баллов	
соответствует установленному количеству по плану.		
Контрольное количество проанализированных источников соответствует	1 балл	
установленному количеству по плану.		
Обозначенные точки зрения на вопрос не подтверждаются ссылками на	0 баллов	
источники.		
Обозначенные точки зрения на вопрос подтверждаются ссылками на	1 балл	
источники.		
Ссылки на источники не приводятся.	0 баллов	
Приводятся ссылки на источники.	1 балл	
Приводятся постраничные ссылки на источники.	2 балла	
Анализ источников не осуществляется.	0 баллов	
Анализ источников осуществляется по авторам.	1 балл	
Анализ источников осуществляется по концепциям.	2 балла	
Невозможно судить о концепции, лежащей в основе исследования.	0 баллов	
Автор принимает устоявшуюся концепцию (или одну из многих) за	1 балл	
основу своего исследования.		
Автор уточняет (и в чем-то дорабатывает) устоявшуюся концепцию (или	2 балла	
одну из многих) как основу своего исследования.		
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основу исследования.		
Возможная оценка:	от 0 до 10 баллов	

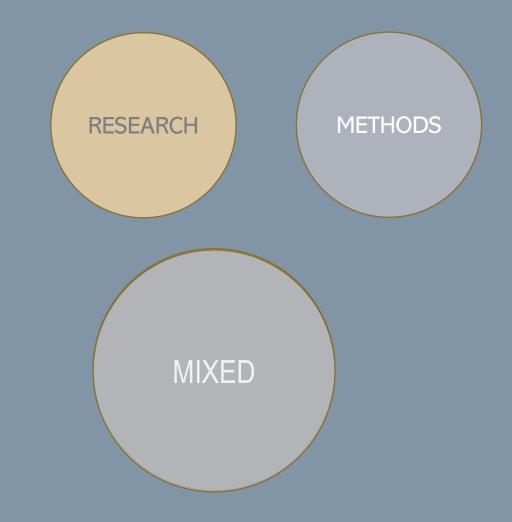














### Research

```
exploratory [Ik'splɔrət(ə)rɪ], [ek-], [-splɔː-]
explanatory [Ik'splænət(ə)rɪ], [ek-]
descriptive [dɪ'skrɪptɪv]
Qualitative ['kwɔlɪtətɪv]
Quantitative ['kwɔntɪtətɪv]; ['kwɒntɪˌtətɪv, -ˌteɪtɪv]
experiment [Ik'sperɪmənt],
quasi ['kweɪzaɪ], ['kwɑːzɪ]
```

#### METHODS

Type of scientific	Example of the kind of
procedure	scientific procedure
Empiric	Observation, measuring,
	experiment
Theoretical	Inductive, deductive
"Other"	e.g. heuristic

	Description	Example
THEORETICAL	<ul> <li>uses purely theoretical methods (analysis, synthesis, induction, deduction, modeling)</li> <li>usually does not work with specific data</li> <li>specific phenomena are viewed from a theoretical point of view</li> </ul>	Pedagogical behavior of a teacher is clarified through models or constructions It can be described verbally or with a scheme It is treated only theoretically regardless of specific agents
EMPIRIC	<ul> <li>always works with specific data</li> <li>reaches specific pieces of knowledge via exact methods</li> <li>its subjects are animate subjects (teachers, students) or inanimate objects (textbooks, essays written by students)</li> </ul>	A novice teacher (Šimoník, 1994). Specific teachers, specific methods (questionnaire), arrives at specific results.

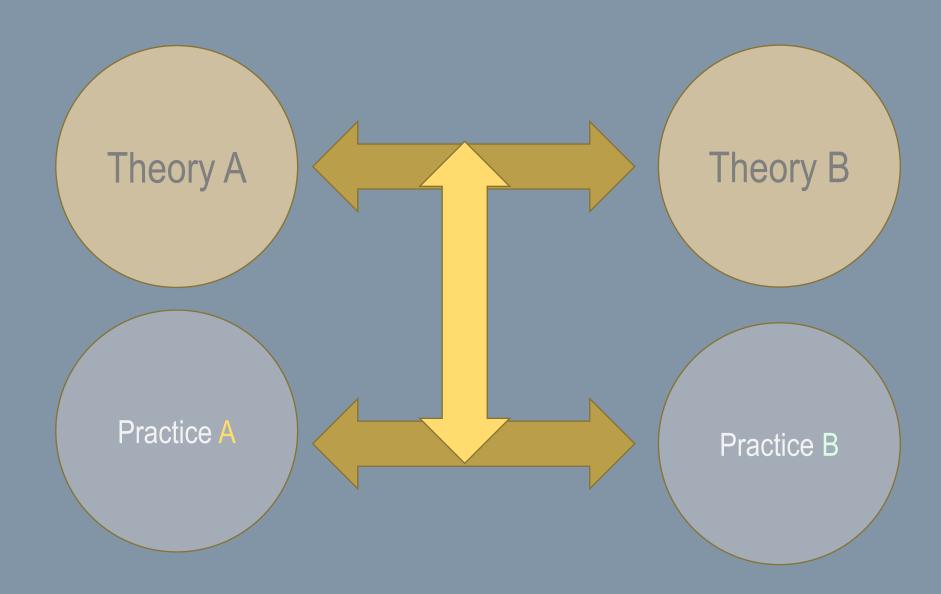
#### DIFFER ENTIATION OF GENER AL SCIENTIFIC METHODS R FLATIVE TO EXPLANATION AND INTER PRETATION

Types of methods	Kinds of methods	Example of individual kinds of methods
Explanation	Empiric	Observation
		Measuring
		Experiment
	General-theoretical	Analysis
		Synthesis
		Induction
		Deduction
		Analogy
		Comparing
		Specific
Interpretation	Narrative	Narration
	Hermeneutic	Understanding a text

### Features of A Good Problem Statement

- 1. It should be clear and precise.
- 2. It should be able to identify the problem, examine the problem, its key fact and perimeter to be studied.
- 3. It deals with the gap in information.
- 4. The statement of problem should be short and snappy
- 5. It should be adequately important to add to the available body of the work.
- 6. It should lead to further research.
- 7. The problem statement should be for the audience.
- 8. The problem should submit itself for inquiry during the data collection.
- 9. It should be importance to the researcher and go well with his/her skills, time, and resources
- 10. The advance towards resolving the problem should be fair.
- 11. The writing style should be dignified.
- 12. Your terminologies should be well explained.
- 13. The range of the problem statement should be kept under control.
- 14. The problem statement should be compelling and researchable.
- 15. It should be able to address the five Ws (who, when, why, where, and what)

## Research Problem highlights a contradiction



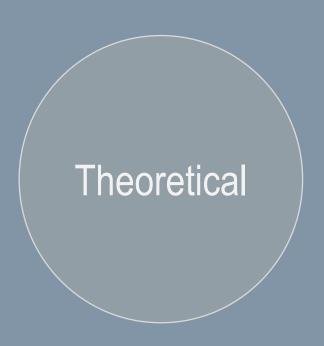


There are various types of research that are classified according to their objective, depth of study, analysed data, time required to study the phenomenon and other factors.

It's important to note that a research project will not be limited to one type of research, but will likely use several.

Theoretical

Applied



#### Theoretical

Theoretical research, also referred to as pure or basic research, focuses on generating knowledge, regardless of its practical application. Here, data collection is used to generate new general concepts for a better understanding of a particular field or to answer a theoretical research question.

Results of this kind are usually oriented towards the formulation of theories and are usually based on documentary analysis, the development of mathematical formulas and the reflection of high-level researchers.

Theoretical

For example, a philosophical dissertation, since the aim is to generate new approaches from existing data without considering how its findings can be applied or implemented in practice.

Theoretical

Basic research

Basic research is the research to find the basic knowledge or to refine the basic knowledge. Basic research is also called pure research and fundamental research.

For example, an airplane is already flying but now today we want to research how airplane can fly.

Applied

Here, the goal is to find strategies that can be used to address a specific research problem. Applied research draws on theory to generate practical scientific knowledge, and its use is very common in STEM fields such as engineering, computer science and medicine.

#### Applied

This type of research is subdivided into two types:

1. Technological applied research: looks towards improving efficiency in a particular productive sector through the improvement of processes or machinery related to said productive processes.

#### Applied

#### This type of research is subdivided into two types:

2. Scientific applied research: has predictive purposes. Through this type of research design, we can measure certain variables to predict behaviours useful to the goods and services sector, such as consumption patterns and viability of commercial projects.

#### Applied

Note: In fact, it is common for research projects to first establish the theoretical framework both to define the field of study and to identify possible theories that could be tested or applied to solve the specific problem posed in the project.



Research

Exploratory •

Explanatory

Descriptive

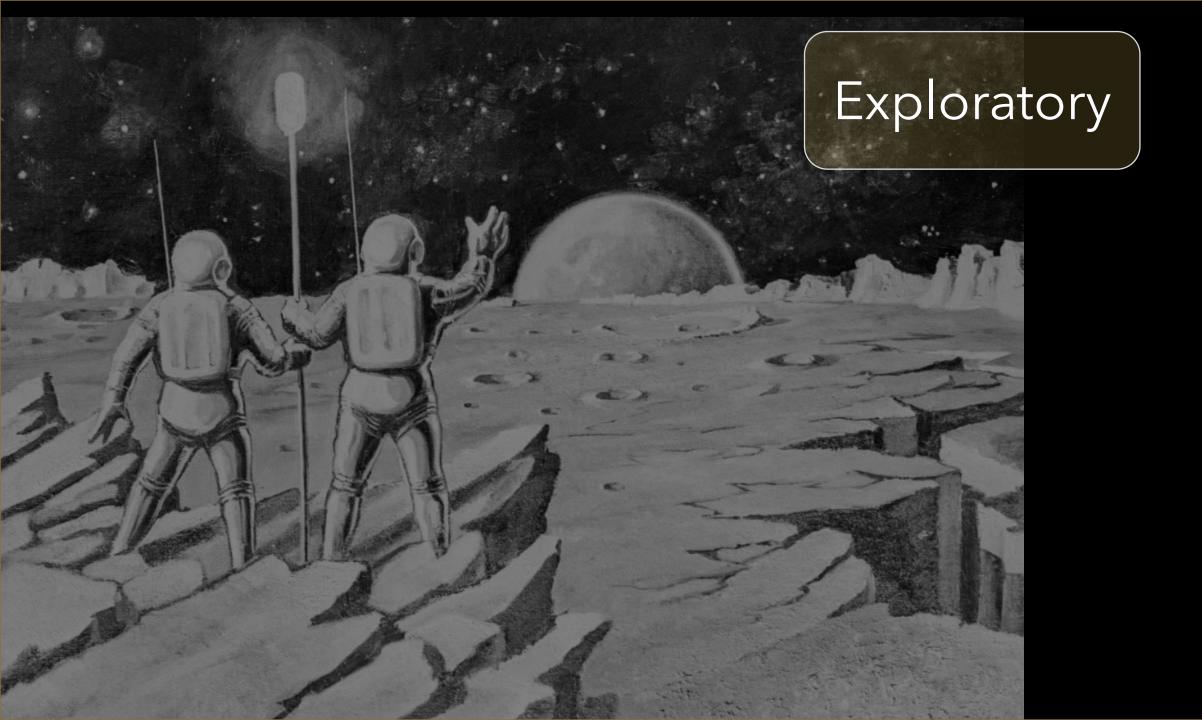
Correlational

Research

Exploratory





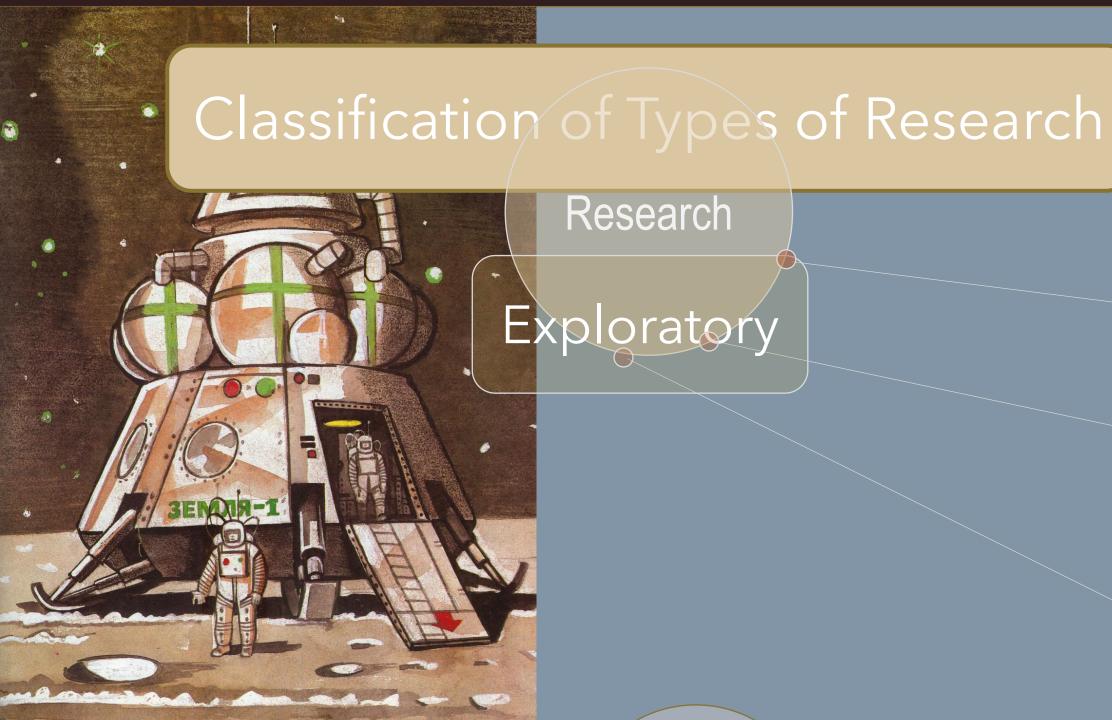


«Задач и вопросов было хоть отбавляй. Какова поверхность Луны? Вдруг космический аппарат утонет в тоннах пыли? Вдруг под тонкой поверхностью окажутся пустоты? Как управлять аппаратом с Земли? Успехи в проектировании сменялись поражениями, которых было много: три первых запуска аппаратов серии Е-1 закончились аварией ракеты-носителя. Во время четвёртого запуска в январе 1959 года удалось вывести в космос "Луну-1", но станция прошла мимо Луны: инженеры не учли время прохождения командного сигнала с Земли до Е-1 и обратно.»

"Луна-1" сделала несколько открытий: зарегистрировала наличие у Земли радиационного пояса, обнаружила отсутствие магнитного поля у Луны, нашла в космосе ионизированный газ и сумела измерить параметры "солнечного ветра". Американцы, узнав об этом, заявили, что Советы лгут, но вскоре лаборатория реактивного движения в Калифорнии приняла сигнал от "Луны-1" — и скептикам пришлось умыться.

Следующие два запуска окончились авариями. 12 сентября 1959 года СССР запустил к Луне аппарат "Луна-2", который через двое суток врезался в поверхность спутника Земли на скорости 3,3 км/сек. Облако лунной пыли можно было видеть во все телескопы мира. Так в СССР выяснили, что поверхность луны твёрдая, и "пометили" территорию, доставив на спутник "вымпелы" — металлические шары из пластин с гравировкой (название страны, герб и пятиконечная звезда).

США были раздавлены. Запуск "Луны-1" и "Луны-2" доказывал, что у Хрущёва есть баллистические ракеты, способные долететь до Вашингтона, и что Америка проигрывает. А СССР, словно в издёвку, уже 10 октября запустил станцию "Луна-3", которая первой в мире выполнила гравитационный манёвр вокруг спутника и отсняла его обратную сторону двумя камерами, отправив на Землю 17 фотографий. Советы, как первооткрыватели, получили право именовать открытые объекты, и тут же на Луне появились море Мечты и море Москвы, кратеры Менделеев, Складовская-Кюри, Джордано Бруно и другие.





Research

Exploratory

Exploratory research is used for the preliminary investigation of a subject that is not yet well understood or sufficiently researched. It serves to establish a frame of reference and a hypothesis from which an in-depth study can be developed that will enable conclusive results to be generated.

Research

Exploratory

Because exploratory research is based on the study of little-studied phenomena, it relies less on theory and more on the collection of data to identify patterns that explain these phenomena.

For example, an investigation of the role social media in the perception of self-image.

Research

Descriptive

The primary objective of descriptive research is to define the characteristics of a particular phenomenon without necessarily investigating the causes that produce it.

Research

Descriptive

In this type of research, the researcher must take particular care not to intervene in the observed object or phenomenon, as its behaviour may change if an external factor is involved.

For example, investigating how the public census of influential government officials differs between urban and non-urban areas.

Research

Correlational

The purpose of this type of scientific research is to identify the relationship between two or more variables. A correlational study aims to determine whether a variable changes, how much the other elements of the observed system change.

Research

Explanatory

Explanatory research is the most common type of research method and is responsible for establishing cause-and-effect relationships that allow generalisations to be extended to similar realities. It is closely related to descriptive research, although it provides additional information about the observed object and its interactions with the environment.

Research

**Exploratory** •

• Explanatory

Descriptive

Correlational



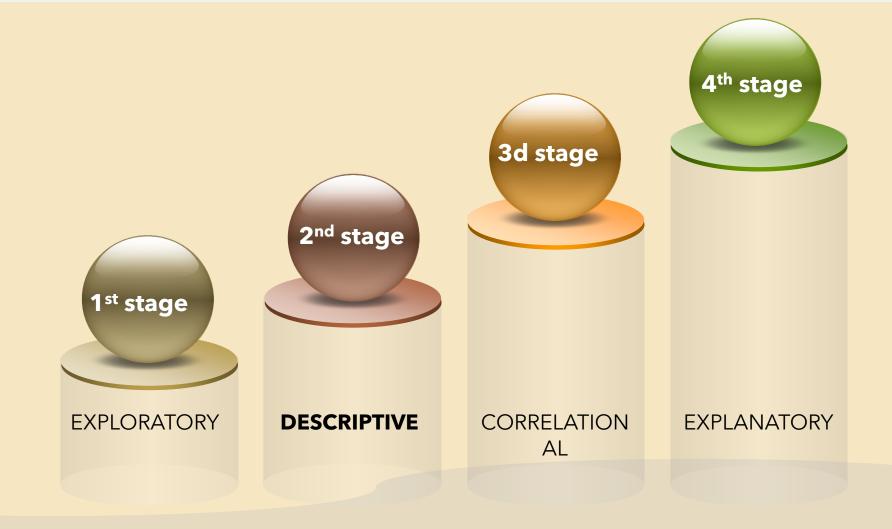
#### "Methodology" yersus "Research Design"

Methodology refers to the principles, procedures, and practices that govern research, whereas research design refers to the plan used to examine the question of interest.

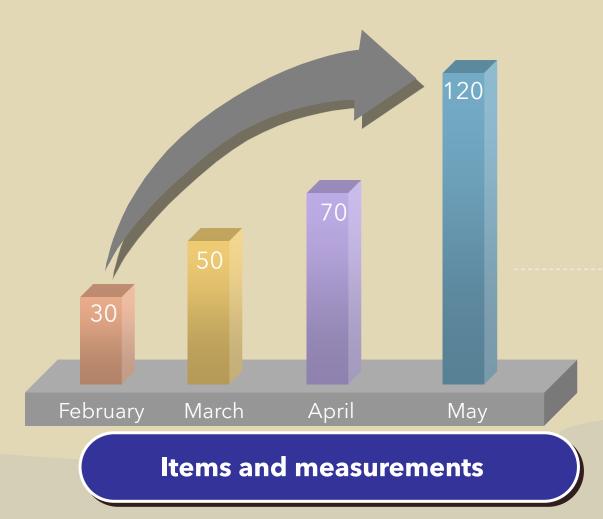
"Methodology" should be thought of as encompassing the entire process of conducting research (i.e., planning and conducting the research study, drawing conclusions, and disseminating the findings).

By contrast, "research design" refers to the many ways in which research can be conducted to answer the question being asked.

#### KEY STAGES AND DIALECTICS OF RESEARCH PROGRAMME



#### RELATIONSHIP BETWEEN HYPOTHESES AND RESEARCH DESIGN



1. It is standardly expected that dependent variable dynamics is measured

The variation should be explained in detail Требуется детальное описание показателей и критериев

2. It is standardly expected that the dynamics is associated with variation of some sort of independent variable

Требуется детальное описание изменений в воздействии независимой переменной на зависимую

#### KEY STAGES AND DIALECTICS OF MEASURED VARIABLES

Hypotheses can take many different forms depending on the type of research design being used.

Some hypotheses may simply describe how two things may be related. For example, in correlational research, a researcher might hypothesize that alcohol intoxication is related to poor decision making. In other words, the researcher is hypothesizing that there is a relationship between using alcohol and decision making ability (but not necessarily a causal relationship).

#### KEY STAGES AND DIALECTICS OF MEASURED VARIABLES

Hypotheses can take many different forms depending on the type of research design being used.

However, in a study using a randomized controlled design, the researcher might hypothesize that using alcohol causes poor decision making.

Therefore, as may be evident, the hypothesis being tested by a researcher is largely dependent on the type of research design being used.

#### FALSIFIABILITY OF HYPOTHESES

According to the 20th-century philosopher Karl Popper, hypotheses must be falsifiable (Popper, 1963). In other words, the researcher must be able to demonstrate that the hypothesis is wrong. If a hypothesis is not falsifiable, then science cannot be used to test the hypothesis. For example, hypotheses based on religious beliefs are not falsifiable.

Therefore, because we can never prove that faith-based hypotheses are wrong, there would be no point in conducting research to test them. Another way of saying this is that the researcher must be able to reject the proposed explanation (i.e., hypothesis) of the phenomenon being studied.

#### THE NULL HYPOTHESIS

#### The null hypothesis

always predicts that there will be no differences between the groups being studied.

By contrast, the alternate hypothesis predicts that there will be a difference between the groups.

In our example, the null hypothesis would predict that the exercise group and the no-exercise group will not differ significantly in the level of performance.

#### THE RESEARCH STUDY

After articulating the hypothesis, the next step involves actually conducting the experiment (or research study). For example, if the study involves investigating the effects of exercise on levels of cholesterol, the researcher would design

and conduct a study that would attempt to address that question. A key aspect of conducting a research study is measuring the phenomenon of interest in an accurate and reliable manner. In this example, the researcher would collect data on the performance levels of the study participants by using an accurate and reliable measurement device.

Then, the researcher would compare the levels of the two groups to see if exercise had any effects.

#### ANALYSES

After conducting the study and gathering the data, the next step involves analyzing the data, which generally calls for the use of statistical techniques.

The type of statistical techniques used by a researcher depends on the design of the study, the type of data being gathered, and the questions being asked.

It is important to be aware of the role of statistics in conducting a research study. In short, statistics help researchers minimize the likelihood of reaching an erroneous conclusion about the relationship between the variables being studied.

### Comparing Research Methods

Table 2.3, p. 36

COMPARING RESEARCH METHODS					
Research Method	Basic Purpose	How Conducted	What Is Manipulated	Strengths	Weaknesses
Descriptive	To observe and record behavior	Case studies, surveys, or naturalistic observations	Nothing	Case studies require only one participant; surveys may be done fairly quickly and inexpensively (compared to experiments); naturalistic observations may be done when it is not ethical to manipulate variables.	No control of vari- ables; single cases may be misleading
Correlational	To detect naturally occurring relationships; to assess how well one variable predicts another	Compute statistical association, some- times among survey responses	Nothing	Works with large groups of data, and may be used in situations where an experiment would not be ethical or possible	Does not specify cause and effect
Experimental	To explore cause and effect	Manipulate one or more factors; use random assignment	The independent variable(s)	Specifies cause and effect, and variables are controlled	Sometimes not fea- sible; results may not generalize to other contexts; not ethical to manipu- late certain variables

	Phenomena	Issues	Methods
Structure	typography, orthography, morphology, syntax, discourse schemata	genre characteristics, orality, efficiency, expressivity, complexity	Structural/Descriptive Linguistics, Text Analysis
Meaning	meaning of words, utterances (speech acts), macrosegments	what the speaker intends, what is accomplished through language	Semantics, Pragmatics
Interaction	turns, sequences, exchanges, threads	interactivity, timing, coherence, interaction as co-constructed, topic development	Conversation Analysis, Ethnomethodology
Social Behavior	linguistic expressions of status, conflict, negotiation, face-management, play; discourse styles, etc.	social dynamics, power, influence, identity	Interactional Sociolinguistics, Critical Discourse Analysis

### Fundamental Research

### **Applied Research**

- 1. Tries to eliminate the theory by adding to the basics of a discipline
- 2. Problems are analysed from the point 2 Often several disciplines work of one discipline
- 3. Generalisations are preferred;
- 4. Forecasting approach is implemented 4 Aims to say how things can be hanged
- 5. Assumes that other variables do not change
- 6. Reports are compiled in a language of technical language of discipline

- 1 Aims to solve a problem by adding to the field of application of a discipline
- together for solving the problem
- 3 Often researches individual cases without the aim to generalise
- 5 Acknowledges that other variables are constant by changing
- 6 Reports are compiled in a common language

	Exploratory research	Conclusive research
Structure	Loosely structured in design	Well structured and systematic in design
Methodology	Are flexible and investigative in methodology	Have a formal and definitive methodology that needs to be followed and tested
Hypotheses	Do not involve testing of hypotheses	Most conclusive researches are carried out to test the formulated hypotheses
Findings	Findings might be topic specific and might not have much relevance outside of researcher's domain	Findings are significant as they have a theoretical or applied implication

### OBSERVATION

Process type	Example (Process + participants underlined; <b>Process</b> in Bold; <i>circumstances</i> in italics)
material	the negotiations go on forever
behavioural	everybody laughed
mental	you have to understand what he is trying to say to us
verbal	in this region we usually say that it takes a longer time to sell a project than it takes to build it
relational	the total contract figures is split up in a few different companies
existential	there is quite a large group of ethnic Chinese in Singapore

Qualitative

Quantitative



Qualitative

Qualitative methods are often used in the social sciences to collect, compare and interpret information, has a linguistic-semiotic basis and is used in techniques such as discourse analysis, interviews, surveys, records and participant observations.

Qualitative

In order to use statistical methods to validate their results, the observations collected must be evaluated numerically. Qualitative research, however, tends to be subjective, since not all data can be fully controlled. Therefore, this type of research design is better suited to extracting meaning from an event or phenomenon (the 'why') than its cause (the 'how').

Qualitative

For example, examining the effects of sleep deprivation on mood.



Quantitative

Quantitative research study delves into a phenomena through quantitative data collection and using mathematical, statistical and computer-aided tools to measure them. This allows generalised conclusions to be projected over time.

Quantitative

For example, conducting a computer simulation on vehicle strike impacts to collect quantitative data.

Qualitative

Quantitative

QUANTITATIVE – based on positivism, uses deduction (Theory – forming hypotheses – observation – testing hypotheses – interpretation and generalization). It is based on theory and presupposes a research project.



QUALITATIVE - based on phenomenology, ethnomethodology, symbolic interactionism (interpretative paradigm), uses induction (observation - revealing regularity - conclusions - theory). The aim is to reveal the meaning of information (narrative sociology).

QUANTITATIVE - Quantitative research means collecting and analyzing numerical data to describe characteristics, find correlations, or test hypotheses.



QUALITATIVE - Qualitative research involves collecting and analyzing non-numerical data to understand concepts, opinions or experiences.

#### QUALITATIVE RESEARCH -

Qualitative research involves collecting and analyzing non-numerical data (e.g., text, video, or audio) to understand concepts, opinions, or experiences. It can be used to gather in-depth insights into a problem or generate new ideas for research.

Qualitative research is the opposite of quantitative research, which involves collecting and analyzing numerical data for statistical analysis.

Qualitative research is commonly used in the humanities and social sciences, in subjects such as anthropology, sociology, education, health sciences, history, etc.



#### QUALITATIVE RESEARCH -

#### Qualitative research question examples

- . How does social media shape body image in teenagers?
- . How do children and adults interpret healthy eating in the UK?
- . What factors influence employee retention in a large organization?
- . How is anxiety experienced around the world?
- . How can teachers integrate social issues into science curriculums?



**Qualitative VS Quantitative:** Qualitative research methods focus on words and meanings, while quantitative research methods focus on numbers and statistics.



So ask yourself and answer the question first. Is your research more concerned with measuring something or interpreting something? One can also create a mixed methods research design that has elements of both.

#### QUAN TITATI VE

### Advantages of quantitative research

- A. Testing and validating theories.
- B. Can be generalized for population.
- C. The researcher can construct situations in such a way to eliminate interfering variables and prove the relation cause-consequence.
- Relatively fast and direct data collection.
- E. Provides precise, numeric data.
- F. Relatively fast data analysis (use of computers).
- G. Results are relatively independent from the researcher.
- H. It is useful while examining large groups.

### Disadvantages of quantitative research

- A. Categories and theories used by the researcher do not need to reflect local specialties.
- B. The researcher may disregard phenomena because he/she is focused only on certain theory and its testing and not on developing the theory.
- C. Acquired knowledge may be too abstract and general to be applied in local conditions.
- D. In a reductive way, the researcher is restricted in data gathering.

#### Examples of quantitative Examples of qualitative research methods research experiment, (quasi-experiment) Case study correlative examination Ethnography (including observation and participation more specialized normative examination observation) longitudinal study Grounded theory time series analysis Examining narrations based on Q-methodology language examination Cluster analysis Ethnomethodology and One-dimensional and multiconversation analysis dimensional scaling Discourse analysis, semiotics perative research Document and text analysis

/ OU	AN \	
TITA	Quantitative research	Qualitative research
Philosophical source	positivism	Phenomenology, anthropology, hermeneutics
Aim	Gaining an objective proof, verifying theory / hypotheses	Understanding human behavior in natural environment
Character	objective	subjective
Relationship to a theory	Verifying or rejecting a theory	theory creation
Thought procedure	deduction	induction
Starting point/ the beginning of research	Draws on theory and hypotheses	Starts with entering the ground space
Planning research	Is thoroughly prepared at the beginning, written project following a given structure	The plan is formed during work, research questions and methods may be subject to change => more flexible
Course of research	Systematically tests hypotheses for being correct, finds causal relationships	Gathers a large number of data on specific human behavior and its context, it is recorded and interpreted; hypotheses spring up along the way
Number of examined persons	Representative samples, large number (usually)	Student, class, school
Techniques, methods	experiment (manipulating with variables), questionnaire, testing, standardized observation etc.	Long-term practical research, observation with different levels of participation, the researcher communicates with informants during gathering data without interfering in events

	Quantitative research	Qualitative research
Data processing	Quantitative, computer, statistical, data interpretation	Qualitative encoding, analysis, interpretation
Reliability of results	Done with standard procedures, found statistically (validity, reliability); the research can be repeated	Problematic - the results are subjective; secured via a triangle of data, methods, researchers, theory (data are interpreted by more researchers, comparing with similar results, similar individuals in similar context, using more methods, participants' approving of final report)
Results	Generalization of results for population,	Explaining human behavior in a
Form of final report	finding rules; Brief, apposite research report following widely accepted structure: 1/ research topic 2/ methodology 3/ data analysis 4/ results discussion	certain context; detailed, ether interpretation or only descriptive report, deep narration
Validity of results	Attempt to arrive at results valid for the whole population	Validity for a given class, student or school
Meaning	Prediction, rules	Description, understanding, meaning

### Advantages of qualitative research

- I. It provides detailed description and form during examining an individual, group, event or phenomenon.
- II. It treats a phenomenon in natural environment.
  - It makes it possible to study processes.
- IV. It makes it possible to propose theories.
- V. It reacts well to local situations and conditions.
- VI. It looks for local (idiographic) causative relationships.
- VII. It assists in initial exploration of phenomena.

### Disadvantages of qualitative research

- I. It may not be possible to generalize the acquired knowledge for population and in different environment.
- II. It is difficult to make quantitative predictions.
- III. It is more difficult to test hypotheses and theories.
- IV. Data analysis and collection are often time consuming stages.
- V. Results are easily influenced by the researcher and his/her personal preferences.



quantitative	mixed	qualitative
research	research	research
methods	methods	methods
Descriptive; Exploratory; Quasi- experimental; Experimental;	Interview; Questionnaire;	Classroom observations; Interactional analysis; Discourse analysis; Case studies;

#### Философия

#### Философия науки

#### Методология

Ф. – теоретическая форма мировоззрения, сосуществующая в человеческой культуре наряду с другими формами мировоззрения (обыденным опытом, религией, мифологией, искусством). Предмет философии рациональная форма мировоззрения, включающая в себя три основные структуры: 1) общую теорию бытия (в частности, общие представления об окружающем человека объектном мире -Космосе); 2) общую теорию человека, включающую в себя общую теорию сознания и познания; 3) общую теорию отношения человека к миру, т. е. структуру мировоззрения.

Философия науки – дисциплина, предметом которой являются общие закономерности и тенденции научного познания как особой деятельности по производству научных знаний, взятых в их историческом развитии и рассматриваемых в исторически изменяющемся социокультурном контексте. Ф. науки – область прикладной философии, предметом которой является общая структура, закономерности функционирования и развития науки как системы научного знания, когнитивной деятельности, социального института, основы инновационной системы современного общества.

Методология - общая теория предметно-практической и познавательной деятельности человека, их специфики и взаимосвязи. Методология науки – раздел общей методологии познания, а также часть теории научного познания как учение о методах, средствах и процедурах научной деятельности. Методология - тип рациональнорефлексивного сознания, направленный на изучение, совершенствование и конструирование методов в различных сферах духовной и практической деятельности. Понимание М. как науки о методах мышления, когда-то весьма плодотворное сегодня отходит на второй план?????

### 3D Pyran LEVEL 01 / 5 J rels философия методологии

**LEVEL 02** 

**LEVEL 03** 

**LEVEL 04** 

**LEVEL 05** 

философская методология

общенаучная методология

конкретно-научная методология

методика и техника исследования

1	2	3	4	5

A	методика и техника
	исследования
В	философская методология
С	конкретно-научная методология
D	философия методологии
Е	общенаучная методология

- А. включает общие принципы познания и категориальный строй науки в целом.
- В. содержит уровень содержательных общенаучных концепций
- С. совокупность методов, принципов исследования и процедур специальной научной дисциплины.
- D. набор процедур, обеспечивающих получение единообразного и достоверного эмпирического материала и его первичную обработку
- Е. выступает как содержательное основание всякого методологического знания.





