

## The Different Types of Research



## Objectives



- Know the different types of research.
- → Understand the characteristics of each type of research.
- Distinguish the scenarios in which these would be useful.
- Identify the type of questions and tools that distinguish the different types of research.



## Types of research



Research is classified according to the type of methodology used.

**Quantitative Research** 

**Qualitative Research** 

Mixed Methods Research







## Quantitative Research

#### **Quantitative Research**



This type of research uses the collection of data to prove an hypothesis based on statistical analysis and numerical measurement, with the goal of proving theories or behaviors.



#### Characteristics



- Used to measure phenomenons
- → Uses statistics
- → Puts hypothesis and theories to the test
- → Uses a sequential process
- Analyzes reality objectively
- → Allows the researcher to make predictions
- → Results are precise
- Allows investigations to be replicated

## **Quantitative process**



Comienza aquí

Idea

Identify the problem

Literature
Review and
theoretical
framework

Scope of research

Development of a hypothesis and definition of variables

Termina aquí

Development
of report and
results of
research

Data analysis

Data collection

Statistical sample selection

1

Development of research design

### **Examples of questions and tools**

- How many positive case COVID 19 presented themselves in an asymptomatic manner in Puerto Rico during the summer of 2021?
- How does learning strategies relate to skills presented by students when first being admitted to university?

- Surveys
- Standardized tests
- Electronic instruments
- Census
- Inventory



## Qualitative Research

#### **Qualitative Research**



This type of research uses the collection and analysis of data to fine tune the research question or reveal new interrogatives in the process of interpretation.

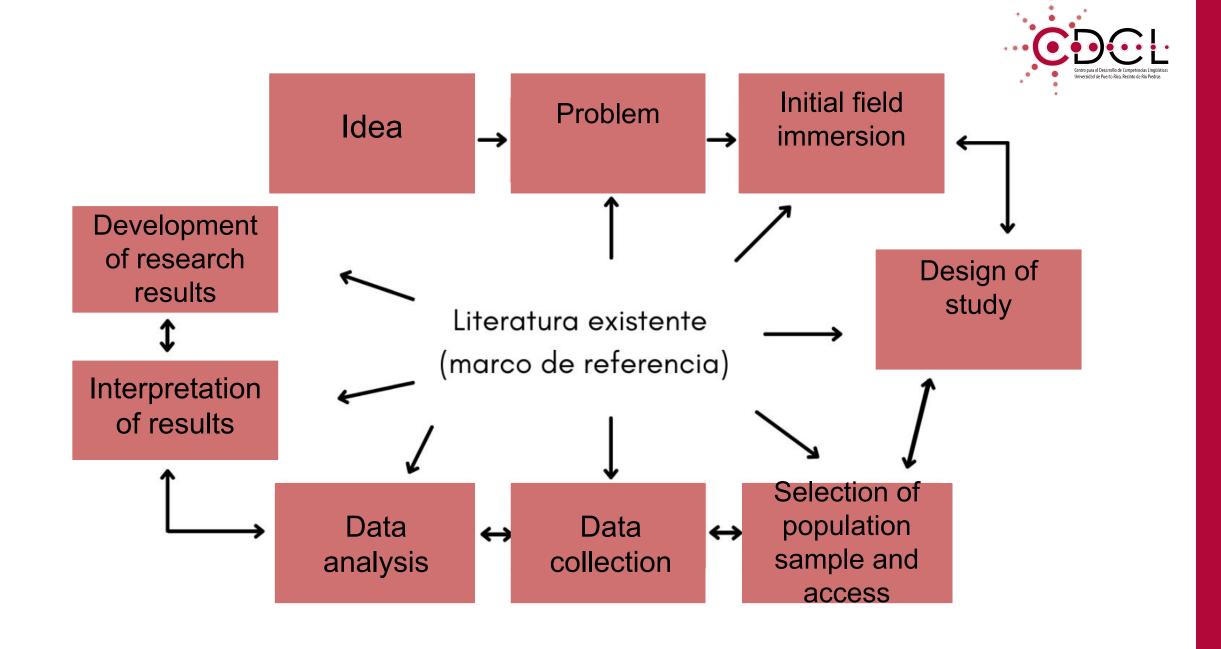






Some characteristics that distinguish qualitative research are:

- Used to analyze subjective realities
- → It follows an inductive process
- → It is carried out within natural environments
- → It is contextualizes the phenomenon
- → It allows for interpretation
- → It does not follow a linear sequence



### Ejemplos de preguntas y herramientas

 ¿Cómo comparan los resultados académicos de los estudiantes que asisten al programa de tutoría en relación a los que no?

 ¿Qué efectos produce el divorcio reciente en el autoestima de mujeres de mediana edad?

- Entrevistas
- Grupos focales
- Estudios fenomenológicos
- Técnicas etnográficas
- Observación
- Documentales



## Mixed Methods Research

#### **Mixed Methods Research**



This type of research uses a combination from the qualitative approach and the quantitative approach.

Its goal is not to replace quantitative research, but to use the strengths of both kinds of research, combining them and trying to minimize their potential weaknesses (Hernández-Sampieri et al., 2014).

#### Benefits and characteristics



- Allows for a wider and more in-depth perspective of the topic
- It allows greater development of theories
- Data obtained is more varied
- → The research process is more dynamic
- Provides greater depth of research
- Promotes greater exploration of data

### Types of mixed methods research

- → Concurrent
- → Sequential
- → Conversion
- → Integration

In these research designs the researcher defines the number of phases, the approach that has greater weight (quantitative or qualitative), or if they are given the same priority, the functions to be carried out, and what is the theoretic perspective.

#### Results and inferences



When a mixed methodology is used, the researcher usually obtains three types of results and inferences:

- 1. Quantitative
- 2. Qualitative
- 3. Mixed

The report may present the joint methods, and then present them separately or vice versa. Or it may present the results according to the three types of inferences in each area.

### **Examples of questions and tools**

¿How do the experiences of managers compare to those of employees during the COVID 19 pandemic?

¿How often do people with intellectual functional diversity visit the mall?

¿How does the emotional state impact high performance athletes?

questionnaire + interviews

observation + census

 focal groups + standardized tests







Hernández-Sampieri, R., Fernández-Collado, C., Baptista-Lucio, P. (2014). Metodología de la Investigación (6ta Ed.). McGrawhill.

# Para finalizar, haga clic sobre el enlace para tomar la prueba y enviar el informe a su profesor(a):

Quiz: https://forms.gle/1CgkLYXAyY9iwKBV9

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