TAU DIVINITY UNIVERSITY

DOCTORATE OF EDUCATION (TAU)

TAU DIVINITY UNIVERSITY

REPORT 1

RESEARCH METHODOLOGY: How to choose the best?

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Advanced Course: Advanced Research Methodology

"I hereby swear and attest that I am the sole author of this report and that its content is the result of my work, experience and academic research"

Academic Direction: Dr. JR Rivas

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GENERAL INDEX

CHAPTER IV

INDEX OF FIGURES

Report No. 1

ADVANCED RESEARCH METHODOLOGY: Which is the best?

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SUMMARY

This paper aims to present an explanatory report on how to choose the best research methodology? The foundations for it are based on the following authors: (Carlos Sabino, 1992), (Fidias G. Arias, 2012), (Tamayo 2003), (Padua, 1982), (Rodríguez, 2005) in addition to other available resources. During the reading of the material exposed by the authors, it is concluded that the deciding what will be the best methodology to use during an investigation, will be the one that the researcher understands meets, covers the needs and answers all questions relevant to your investigation. Therefore, it is not intended in this report to be biased towards a particular methodology, but to present the different alternatives so that the researcher can decide which is the best in his particular case. The specific factors of an investigation will be the determiners.

Keywords: important factors, methodology, methods, types of research, methodological, qualitative, quantitative sequences.

INTRODUCTION

The Research Methodology is the discipline that elaborates, systematizes and evaluates the procedures for the search for data and the development of the scientific knowledge. It consists of a coherent set of techniques and procedures whose purpose is to establish collection processes, classification and validation of data and experiences that can also be part of the construction of scientific knowledge. (Mario Saravia (sf))

The methodology arises through the development of sciences, where the methodological knowledge, learning and experience of the techniques work as a continuous and progressive process in the construction of knowledge scientist. The acquisition of this knowledge happens with the passage of experience.

For an investigation to be successful, it is important to determine the plan or certain project. This in turn is part of the question being attempted. respond using the data and results found in the investigative process. It is at this point that the choice of methodology is transcendental for the obtaining the results.

The objective of this work is to present to the reader the topics relevant to the development of an investigation and that once the knowledge has been acquired can decide Which methodology is more viable and logical to develop your research. The The choice of methodology will determine the direction of the investigation. But the The decision of which methodology to use is a difficult one since the researcher needs know the factors that influence the decision such as what are the existing methodologies and what steps should be followed to select the best one to tailored to your needs with research in mind.

GOALS

GENERAL

Analyze the factors that make the difference between one methodology and another to facilitate the selection of the best one to use in the investigation that you want to carry out.

SPECIFIC

1. Determine the factors to take into account.
2. Specify the study area for the investigation.
3. Characterize and discuss the types of research.
4. Introduce the types of data collection.
5. Discuss how the methodology selection controversy is resolved.

METHODOLOGY

It is a summary, bibliographic report. Based on the following authors:
(Carlos Sabino, 1992), (Fidias G. Arias, 2012), (Tamayo 2003), (Padua, 1982), (Rodríguez, 2005) in addition to other available resources.

JUSTIFICATION

The scientific research methodology is the operational part (Marcelo A. Saravia p. 2), it is stable, it is know-how. Determine which is the best methodology depends on many factors that will guide the researcher in his process. For this reason, this decision should not be taken lightly.

It is necessary to use the rigorous procedures making it a systematic and controlled. This being so, one should not leave to chance the intrinsic aspects of realization. It is important to be able to identify the factors determinants that describe the best available methodology for the study. This facilitate the researcher the development of the investigative process.

CHAPTER I

DIFFERENCE BETWEEN METHODOLOGY AND METHOD OF INVESTIGATION

1.1. GENERAL

At the beginning of an investigation, ideas are general at random, so it is better to select those that are related to what is known, by experience work or because it is of personal interest to the researcher (Wikiversity, 2018).

The theoretical framework, according to Sampieri, Fernández & Baptista (2003), allows systematize the investigation and present a visualization of the problem to investigate. To investigate and achieve knowledge that is scientific, it is necessary follow certain procedures or follow some path that allows you to reach the goal desired.

The scientific method is the procedure or set of procedures that is used to obtain scientific knowledge (Carlos Sabino, 1992), the model or logical sequence that the investigation will follow.

Scientists commonly use the terms “research methodology” and “research methods” in the same way. But, although they are intimately interrelated, they do not mean the same thing.

1.2. EPISTEMOLOGICAL FOUNDATION

It is based on the differences in the objectives of each one. For the methodology is to find the correct procedures that should be used to determine the solutions to the research problem. And for the methods is how to apply the correct procedures that will determine the solution of the problem of investigation.

When we talk about research methodology we talk about the study of the steps, as well as the different techniques that can be used in the different stages of the investigation, from the collection of data to the analysis of the results. results.

If we talk about research methods, what is important is how they are applied in each part of the investigation from data collection, measurements experimental, questionnaires.

Five main differences between methods and methodologies:

a) The methodology is the theoretical and systematic framework used for the resolution of a problem during the investigation while the methods are procedures, techniques or tools used to perform the investigation.

b) The objectives of the methodology is to find the correct procedures to determine solutions to the research problem while The objectives of the methods is how to apply these procedures to determine the solution to the problem.

c) The methodology takes into account the steps, as well as the different techniques to use during the research stages, while for the methods of research we care about how the data collection steps are applied.

d) The methodology is used at the beginning when the problem is stated and planning how to solve it, while research methods are used when the tools are applied to solve each stage of the posed problem.

e) Finally, the methodology is the science of analysis, while the methods are the tools.

1.3. CHARACTERISTICS

At the beginning of the investigation, the methodology is used; when the problem and plan how to solve it.

According to the article by Bastis (2020), the methodology and research methods are characterized by their differences, namely:

- the methodology groups the methods used scientifically to solve the research problem.
- The method, behavior or tool used to select and develop research technique.
- The methodology entails the analysis, the way in which the investigation is carried out appropriately.
- By means of the method, experiments, tests, surveys, interviews.
- The methodology is to learn various techniques that can be used in the execution of experiments, tests or surveys.
- The research methodology is the complete approach and aligned with the proposed.
- Investigative methods are used during the investigation through the application of necessary tools to solve the stages that are present the problem to be solved.

Knowing the characteristics of the methodology that differentiate it from the methods, for the investigation to be successful it is necessary to carry out a planning where the problem to be solved is analyzed and the tools to be used are decided wear.

Finally, since methodology is the science of analysis or that studies methods, which present the tools to solve the problem posed.

CHAPTER II

FACTORS TO TAKE INTO ACCOUNT TO SELECT THE BEST METHODOLOGY

2.1 GENERAL

To determine what will be the best research methodology, the researcher has to ask himself a series of questions that will be the factors determiners. These answers will help you determine what the course will be and the methodology that best applies and suits you.

The main factors will be to determine which is the area of study of this research, what are the objectives (that we want to achieve or achieve), what kind of of investigation will be carried out, what is the information from which it starts as premise, what is the time limit available for the collection or collection of data, how long the entire investigation is expected to last and finally and very Importantly, what resources are available to carry out the investigation.

All these factors are the basis for the researcher to determine and take the final decision of what will be the best methodology to follow in your research.

2.2 EPISTEMOLOGICAL FOUNDATION

Man has always had the curiosity to know, understand and explain his past and present, as well as the natural and social phenomena that surround it and that have shaped his life and those around him. The first contact of man happens through everyday experience; sensation, perception and the intuition that lead him to judge and reason.

The obligatory questions What?, How?, When?, Where? and who? Are the questions that according to Campos (2015) lead him to a permanent activity inquiry, discovering, inventing, confirming and rejecting axioms, premises, hypotheses and ideas. It is the product of this action that orders in a logical, systematic and proven that give rise to science and in turn to the research methodology, this being a tool that addresses the elements in a methodological way.

2.3 CHARACTERISTICS

Study area - are the areas of knowledge or knowledge, which include the sciences classic and emerging According to Morales (2008) it is the thematic unit of the knowledge, of a general nature, from which the lines of investigation are derived.

Research objectives – It is to capture what we want to achieve, achieve or achieve with our studio. Through the research objective we managed to respond to the problem posed (Herrera, 2007).

Time limit – refers to how long we expect the data collection to last and how long the entire investigation lasts,

Available resources - Refers to the facilities to be used as laboratories, special information collection repositories, specialized equipment, and any other resources that the researchers request to use.

CHAPTER III

TYPES OF RESEARCH METDOLOGY

3.1 GENERAL

The discipline that is in charge of defining, classifying and systematizing the set of techniques and systems used in a given scientific investigation are known as the research methodology.

Depending on the field of action, the most important thing is to determine the methodology to use in each investigation since this methodology seeks to optimize the strategies for the analysis of the effectiveness of the methods of action.

It is important to point out that the formal sciences are the ones that contributed the most to the method development through methodology. It is by them that it is known the scientific method, which is based on the reproducibility of knowledge and its possibility of being refuted.

3.2. TYPES OF METHODOLOGIES

1. **Qualitative methodologies:** they are used to answer questions that they cannot be measurable. They focus on obtaining information from experiences and perceptions of participants that are of interest to the research.

2. **Quantitative methodologies;** are with which data can be obtained quantitative or measurable. Can be validated with models and principles scientists, but at the same time they can be inflexible and cold.

3. **Mixed methodologies:** are those that combine both the qualitative and quantitative methodologies that give flexibility in the investigative process.

3.3 SPECIFIC TECHNIQUES

3.3.1 Qualitative Methodologies:

- Direct exploration: can be recorded using recordings or written notes of conversations with subjects. They may have questions that can be open or closed.
- Focus groups: it is a methodology that works when you choose a typical representation of the target audience. (when many ideas are required or evaluate something as a product.)

Movement Patterns: Used when you want to investigate movement patterns. behavior like the flow of people.

- Social network analysis: it is a new methodology to collect information from users of social networks.
- Visual methods of participation: photographs or videos of the participants are requested. participants following some previous instruction.
- Internet search: Extract information from websites.
- Qualitative data analysis: it can be content (data classification), narrative (review of the stories), discourse (analysis of the narrative of texts), among others.

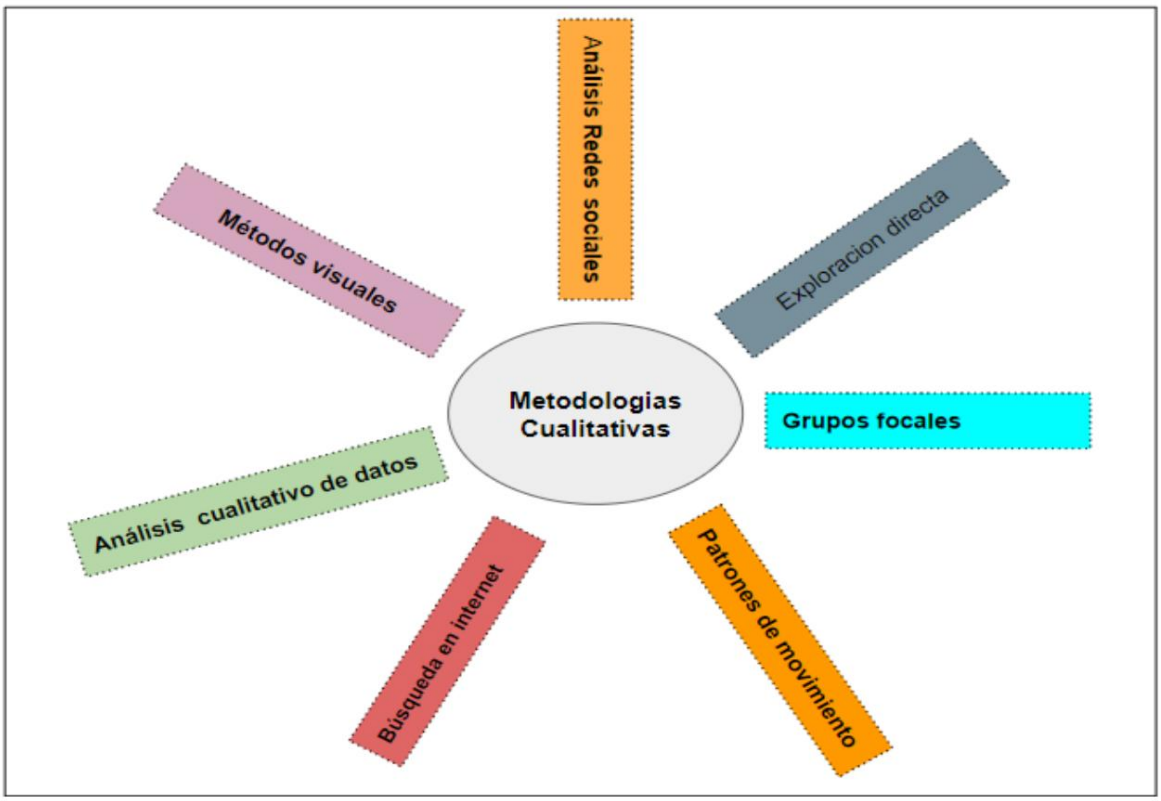

Fig. 1. Qualitative methodologies / Personal interpretation

3.3.2 Quantitative Methodologies:

- They are used to collect information from people with closed questions or open, but with measurable responses.
- Experimental design: to obtain measurements of variables that serve to establish a behavior or corroborate or rule out some hypothesis.

Comparative analysis: Comparison of measures between two or more groups of results.

Statistical analyses: Include correlation analysis or linear regression (study of the linear association between numerical variables) or regression polynomial (study of the polynomial association between numerical variables).

- Mathematical modeling: Involves the analysis of some behavior using mathematical equations that can be deduced from some type of ratio between variables (differential equations) or other relationship (Quezada, 2021).
- Market research methodologies: such as auditing retailer (small population of consumers), discovery of location (precise product information), logistics monitoring (information in the supply chain of a product).

3.3.3. Mixed Methodologies:

Recently there is a trend on the part of researchers to use the mixed methodologies because they give them the opportunity to carry out qualitative and quantitative research in parallel. One disadvantage is which can also be more expensive, complex and take longer than qualitative and quantitative methodologies if they are done separately.

Depending on the investigation, one could think of combining two or more types different from previous methodologies considering at least one qualitative methodology and a quantitative one (Quezada, 2021).

CHAPTER IV

DATA COLLECTION TECHNIQUES

4.1 GENERAL

Research techniques are the set of tools, procedures and instruments used to obtain information and knowledge. are used of according to the protocols established in a research methodology determined.

These are in turn the means through which the method is carried out. In this

In this sense, they only have value insofar as they allow us to traverse the path that the method traces.

In turn, the research method has value to the extent that it allows explaining and describe the phenomenon under investigation.

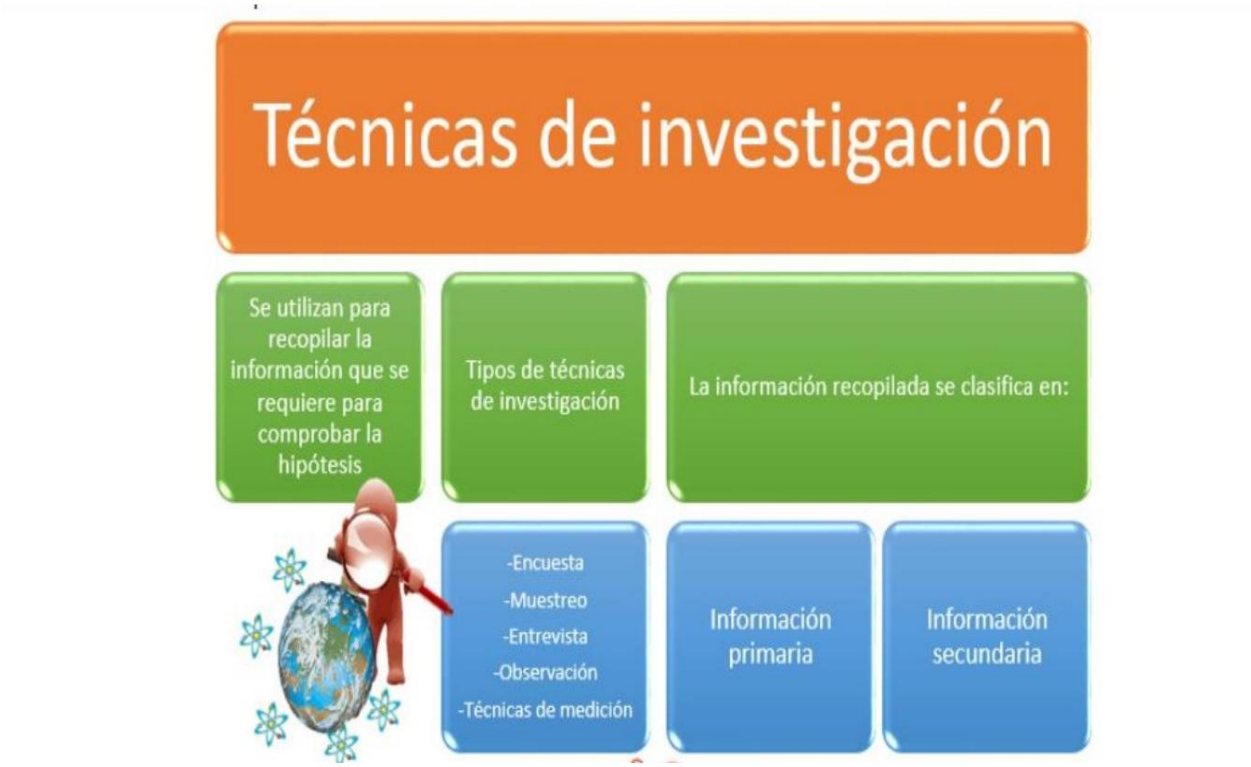

Figure 2. Taken from Research Techniques / Research Methodology / Source: Cibertareas

4.2 TYPES OF DATA

Data collection can produce two types of data: qualitative and quantitative. The qualitative ones are those that describe characteristics, qualities and other non-quantifiable traits. This data includes opinions, descriptions of a particular place, event or behaviour, or the quality of an item certain. Qualitative data is analyzed based on its qualities or patterns as they are often difficult to measure with numbers.

In contrast, quantitative data refers to data that can be count or that are quantifiable, such as statistics, the number of respondents or test subjects, and those who are under certain standards of measurement, such as temperature (it means that quantitative data is measurable). Both types of data, quantitative and qualitative often work together to create a deeper analysis of the data as they have similar collection techniques.

Figure 3. Quantitative VS Qualitative / Source: QuestionPro

4.3 SPECIFIC TECHNIQUES

4.3.1 Quantitative data collection methods

There are many quantitative methods for collecting data, but the most common and widely used are probabilistic sampling, interviews, surveys and questionnaires, observation, structured observation, and document review. These collection types are used for both offline data collection, as well as for online data collection.

(a) Probability sampling method

It is a definitive method of sampling in which some form of selection is used. random and allows researchers to make a statement of probability based on data collected from the target population. This sampling Probabilistic analysis allows data to be collected from representatives of the population that are interested in studying, which is one of its best characteristics. The data is collected randomly from the selected sample, which rules out the possibility of possibility of a sampling bias, would be implied by a pre or post selection of samples that may include preferences or exclude some type of result.

According to Quezada, the three main types of probability sampling are:

- **Systematic Sampling:** used when the population is large or will extend over time.
- **Simple random sampling:** It consists of extracting all individuals from randomly from a list.
- **Stratified sampling:** useful when you are selective about including a particular group of people in the sample, that is, only men or women, managers or executives, people who work in a specific industry.

(b) Surveys and questionnaires

Surveys or questionnaires are quantitative methods of data collection

that can be done using survey software. The polls are
designed to legitimize the behavior and trust of the respondents.
Rating scale questions often make up the bulk of the questions.
quantitative surveys, since they help to simplify and quantify the attitude or the
behavior of the respondents.

The main types of survey questionnaires used to collect data in
line in quantitative market research are:

- **Web survey:** it is one of the most reliable methods for the
  online research. These are cost-effective, fast, and larger-than-life surveys.
  range, which is why they are preferred by researchers.
- **E-mail survey:** is the survey that is sent by mail to
  a large amount of the sample population, which allows the researcher to
  connect with a wide spectrum of public.
  The questionnaire explains the reason why the survey is being carried out.
  research and offers benefits and incentives for completing the survey.
- **Survey through social networks:** It is carried out through social network platforms.
  and allows the collection of a large amount of valuable data from a large
  number of people, generally immediately, accessible and under
  cost.

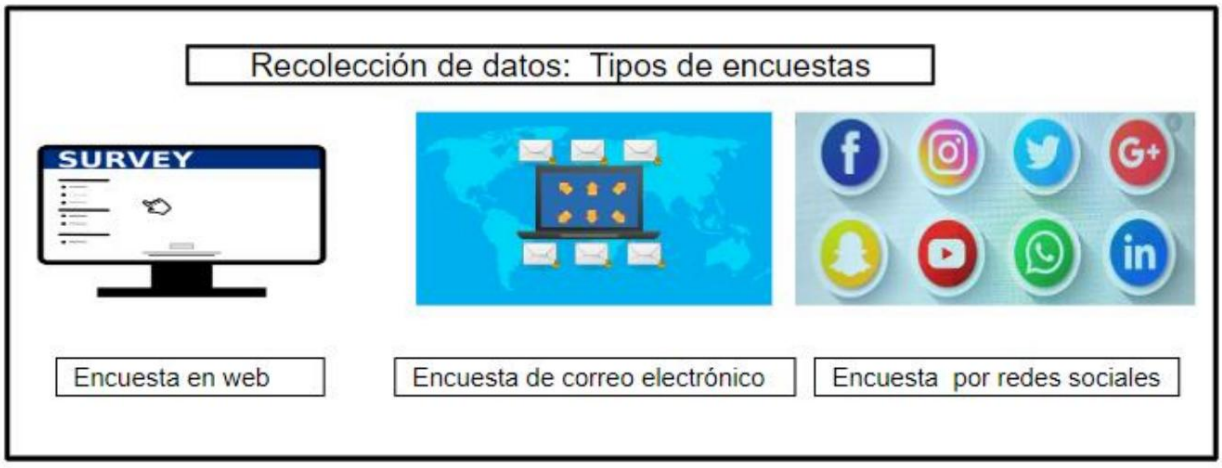

Fig. 4. Types of surveys/ Personal interpretation

(c) Quantitative Observation

It is a method in which researchers collect quantitative data through systematic observations using techniques such as counting the number of people present at a specific event and in a specific place or the number of people who attend to the event In a place designated. In collecting data through quantitative methods, researchers they need naturalistic observation skills and a keen sense to get the numerical data on the "what" and not on the "why" and "how".

(d) Review of Documents

Document review is one of the quantitative data collection methods. most used data. It is used to collect data after reviewing the existing documents. In this type of data collection, documents are manageable and they are a practical resource to obtain data of the past reason why it makes an effective and efficient way. In addition to strengthening and supporting research through the provision of supplementary data, the review of documentation of

research has emerged as one of the beneficial methods for collecting quantitative research data.

The three main types of documents that are analyzed to collect data from quantitative research are:

- **Public records:** the official and ongoing records of a company are analyzed. organization for further investigation. Example: annual reports, policy manuals, student activities, etc.
- **Personal Documents:** This type of document review deals with individual personal accounts of actions, behavior, health, physique, etc. of individuals. For example, the height and weight of the students, the distance they travel to attend school, etc.
- **Physical evidence:** This is the previous achievements of an individual or a organization in terms of monetary and scalable growth.

4.3.2 Qualitative data collection methods

Qualitative data collection methods refer to methods of traditional research or the set of specific techniques and materials used to facilitate the data collection process.

These methods are used to describe a context, an event, a group of people or a specific relationship in a broad way.

These methods collect data that is characterized more by being descriptive than numeric. They are based on texts and are often expressed in the words of the participants.

These methods help to understand the context and motivations. They are useful for gather the perceptions and motivations behind a certain behavior.

Qualitative data collection methods may include open questions and descriptive responses, which may have little or no numerical value.

Characteristics of qualitative data collection methods

Generally, the methods used in collecting qualitative data are characterized by:

(a) Be focused on exploring complex and large data
(b)Use a holistic perspective to approach the data (to collect data subjective).
(c) Use inductive reasoning.
(d) The knowledge base is meaning and discovery.
(e) Way to develop a theory.
(f) They can lead to a shared interpretation.
(g) They base their methods on communication and observation.
(h) Basic element of analysis: words instead of numbers.
(i) Interpretation is individual.
(j) Allow the collection of singular data.

4.3.3 Types of methods for qualitative data collection

Qualitative methods used as main means for data collection
the interview, surveys, discussion groups and the observation of participants.
You can also use new methods like neuromarketing.

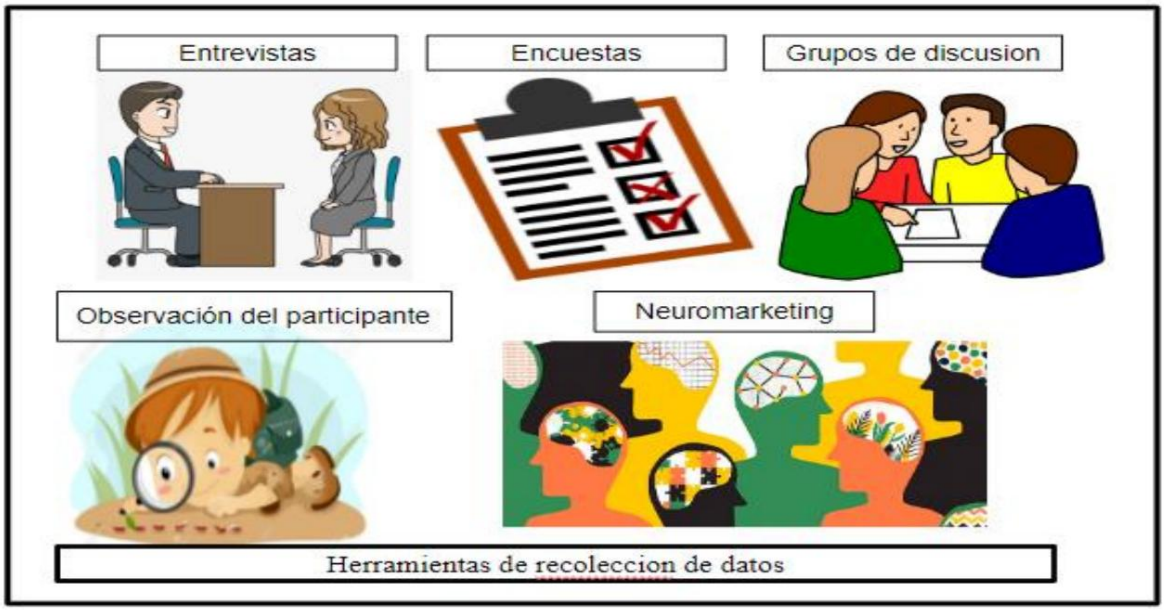

Fig. 5 Qualitative data collection tools/ interpretation/ Personal interpretation

(a) Interviews

Interviews are one of the most popular qualitative data collection methods.
common, and they collect personalized information in an excellent way.

Interviews can be of different types. informal interviews and
conversational methods allow a first approximation in field research
through open questions that allow obtaining a complete context and
detailed.

The in-depth interview is an agreed meeting between two people in which the interviewer uses a guide to help steer the conversation toward the themes of interest.

Most qualitative interviews use a list of topics (known as as guide call or agenda, audio or video recorders).

(b) Surveys and open questionnaires

Surveys and surveys are also used to collect qualitative data. questionnaires. Respondents have freedom and flexibility when it comes to giving their answers when using open questions. This gets them to respond with breadth rather than choosing from a set number of answers.

In this type of survey you can allow the answers to be descriptive, rather than just giving them a specific selection of answers to choose from.

Tools include online survey platforms as well as mobile applications to take surveys using the phone.

(c) Focus groups

Focus groups are similar to interviews, with the difference that they are They are carried out in a group format, and are usually made up of 8 or 10 people who participate in the conversation.

A focus group can be used when individual interviews are too difficult or time consuming. When you need to collect data about a group specific people this type of interview is very useful.

Focus groups are a good way to get feedback on a new marketing campaign to a number of demographically similar people in

a target market, or have people share their views on a new product.

The focus group method generally uses guides that facilitate development of the debate and generate the necessary data. Today there are platforms for conduct focus groups online through forums and video calls.

(d) Participant observation

This method makes it possible to observe the environment in which the subjects are or interest groups while the researcher is an active part of the situations.

The possibility of having a bias in the research must be considered, since the participation can influence the attitudes and opinions of the researcher, which It makes your objectivity difficult.

The fact that the investigator is also a participant may affect the behavior of the subjects and naturalness of the actions knowing that they are observed.

The best part of participant observation is the field diary, in addition to taking of photographs and video and audio recordings that guarantees the veracity of the information obtained.

(e) Neuromarketing

This is the application of neuroimaging techniques to market research that seeks to understand the processes that occur at the unconscious level in decision-making decisions.

Ask questions through online surveys, interviews, or focus groups

during the development of market research does not always lead to the truth. For this reason, neuromarketing goes beyond rationalized responses and socially conditioned to find out what people really feel.

Neuromarketing includes a variety of different techniques that use assays implicit response, voice analysis, eye movement observation, (eye tracking), facial analytics (face analytics) and biometric data, or the joint use one or more of these tools.

CHAPTER V

STEPS TO FOLLOW TO DETERMINE THE BEST METHODOLOGY

5.1 GENERAL

According to Tamayo (2007). The methodology is a methodical process in which the scientific method to show step by step how an investigation is carried out scientific.

For this reason it is important to carefully plan the methodology to be used in around a problem that seeks to create an objective discernment and at the same time reliable. This is why when creating a research structure it is necessary to present all the procedures used and disclosure of the results and/or conclusions of said investigation.

It is important to know the research paradigms that will dictate the steps to continue in the selection of methods, techniques and instruments to achieve the aim. Here is the importance of selecting a methodology in order with the goals set by the researcher.

5.2 CHOOSING THE BEST METHODOLOGY

Keeping the above in mind, let us consider the following steps to
choose the best research methodology:

Step 1. Choose the research topic and objectives.

As a first step, it is necessary to identify what is going to be investigated and the variables that they must be studied.

The initial stage of any investigation is the selection of the topic, which implies following a process, be creative, determine priorities and most importantly set goals. He
The first step in conducting research is choosing the topic.
This consists of clearly and precisely determining the area or field of work of
a researchable problem.

The research topic is an idea or area of interest that is defined at the beginning of the an investigation and that serves as an orientation to the rest of the work carried out by the researchers.

The choice of topic should be related to something that can be found
literature and that is of interest or importance to the field of research and is
manageable within limited time and resources.

Some aspects that should be taken into account for the good choice of a theme
are:

(a) Preference for topics of personal concern.

(b) There must be some personal experience on the subject.

(c) Consult experts and/or professors of the subject, and notes or class notes.

(d) Examine publications and available bibliography.

(e) Learn about related topics.

(f) Connect with institutions related to the chosen topic.

Step 2. Establish the scope of the investigation.

It is important in this step to estimate the time required for the investigation and Consider your budget.

When writing the scope of the study that is planned to be carried out, the clear the research parameters that will be considered and those that will not. These Parameters consist of sample size, duration, criteria for inclusion and exclusion, methodology, and any geographic or monetary.

Each parameter will have limits so that the study can be carried out practice and the results can be interpreted in relation to the limitations defined. Parameters help shape the direction of each research question. research considered.

The term “limitations” describes the restrictions of any parameter that can be consider and clarify which have not been considered.

Step 3. Determine the type of investigation.

Research may be exploratory, confirmatory, or a combination of both.

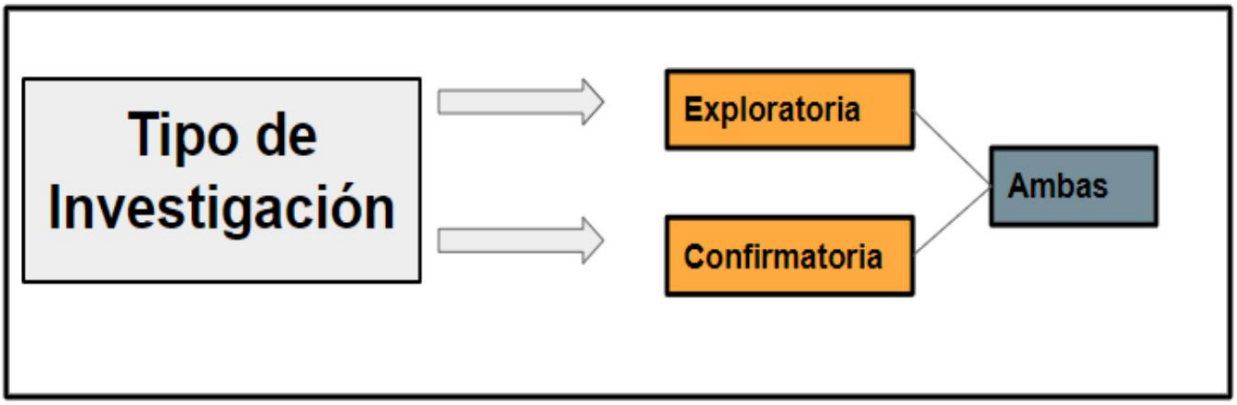

Fig. 6 Types of Research / Personal Interpretation

There are different types of research, which is why many authors have classified depending on various factors, including: the stage of studies in the that you find, the subject and its nature, the purpose of the work, the methodology selected research, the way to collect the information, the purpose, among others (Moisés, 2018). The key is where the data will be obtained from

Step 4. Establish a strategy for the investigation.

It is important to review previous research-related literature to Determine what is the best strategy to follow.

The research strategy should present an overview of the media that you will use to conduct your research. The researcher must describe where and when the research will be carried out, the sample to be used and the approach and methods that will be used in it.

This is accomplished by answering the questions below:

Where?

In what place or situation will the investigation be conducted?

When?

When or in what period will the investigation be carried out?

Who or what?

What individuals, groups or events will be examined (as a sample)?

As?

What research approaches and methods will be used to collect and analyze the data?

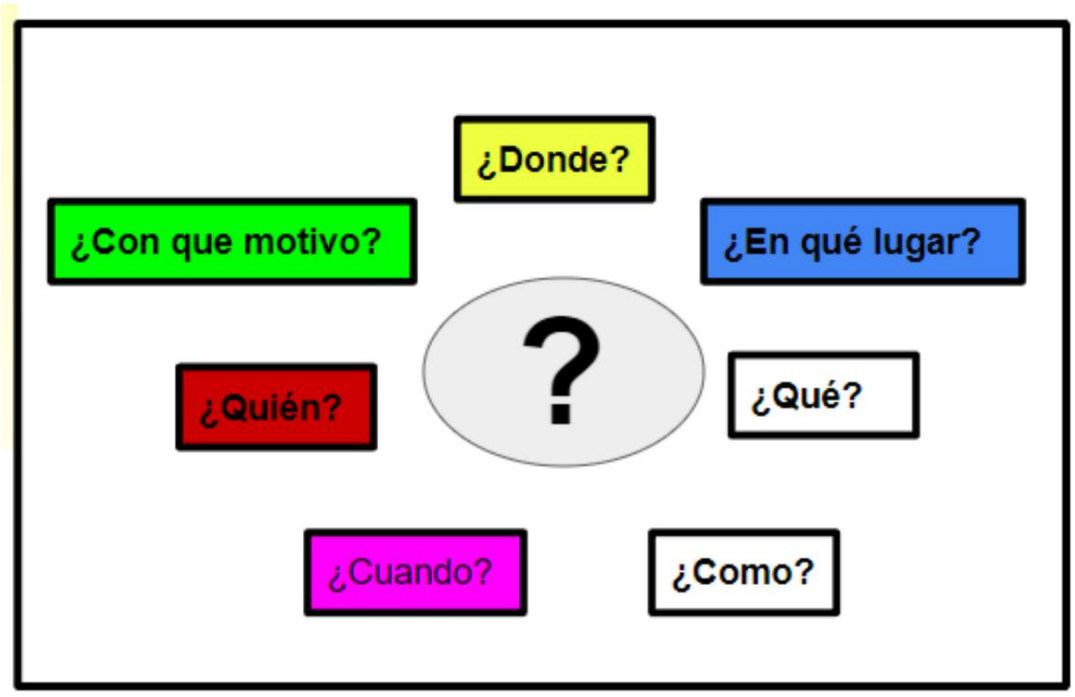

Fig. 7 Questions for research strategy / Personal interpretation

Step 5. Select the research methodology.

Firstly, it is necessary to review which methodology is suitable for the data collection. Qualitative methodologies are more widely used in social sciences, while in the areas of mathematics, physics, chemistry and engineering, quantitative methodologies are used. It is important to establish the methodology for data analysis that could be quantitative. if it has been done qualitative data collection, then a methodology would have been used mixed.

The type of study will determine the decision in the choice of the type of tools to be used for research. This element is fundamental, since with

Based on this, it is possible to choose whether the analysis instruments are appropriate for the collection of quantitative or qualitative material.

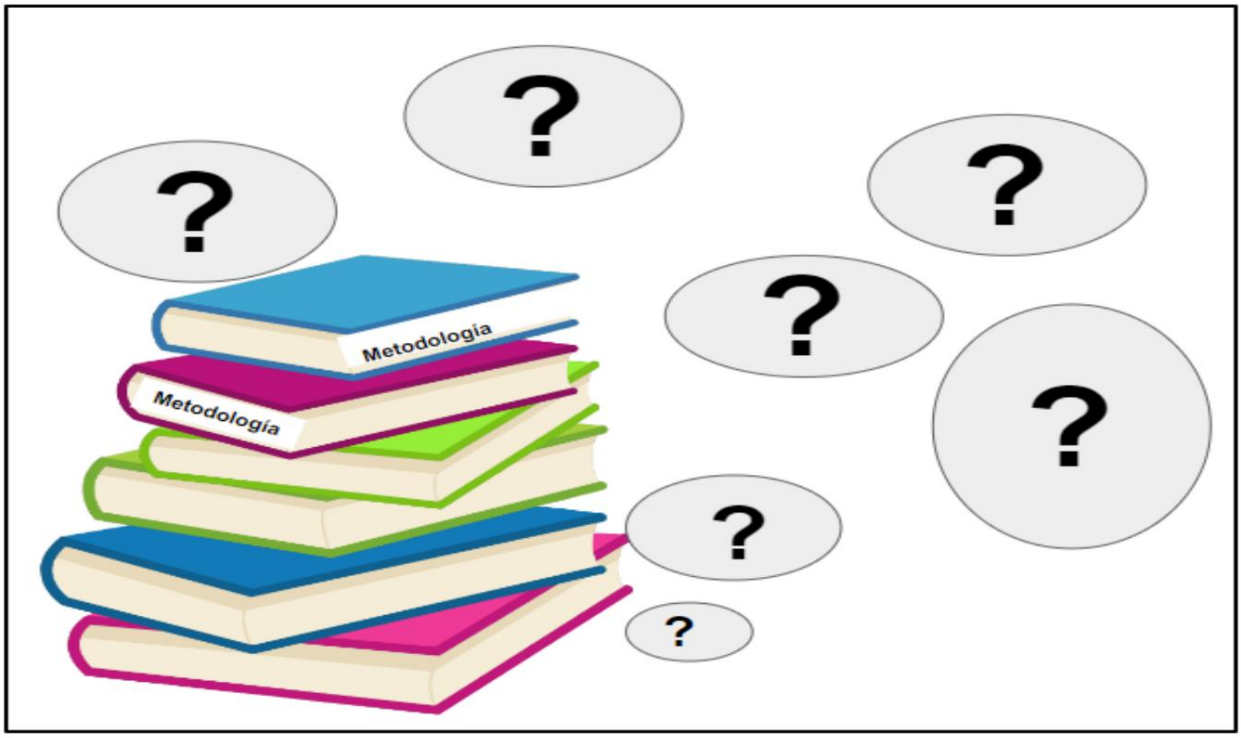

Fig. 8 Selection of research methodology / Personal interpretation

Step 6. Detail the methodology to be followed in the research plan.

It is imperative to write the methodological approach in detail and review it. For one better vision of the selected methodology for the development of the project, must keep in mind the costs and time of the investigation to prevent any possible problems in the future.

When reporting on research, writing the methodology is a part essential for the presentation of the results. The methodology (the description detail of the research process) supports the results by explaining the investigative techniques and providing the path to conclusions. A effective and well-written methodology describes the tactics used, explains the why the methods chosen and how they lead directly to the answers to the questions posed in the research.

CONCLUSIONS

This chapter presents the conclusions generated from the analysis of the investigation. They are grouped according to the general and specific objectives, to know:

Regarding the general objective of analyzing the factors that make the difference between one methodology and another, this objective was achieved since:

Scientific research is a process with a set of steps governed by norms and generic rules of scientific action. Indicates basic steps that depend on the particular scientific discipline, the problem, the degree of knowledge and idea of the desired procedures for the investigation.

As a result of the study, one of the most important things when carrying out or planning to carry out an investigation is to have the idea of the methodology to be used, to have the mastery of this and practice it in order to get closer to a result or new knowledge.

Regarding the specific objectives:

- Determine the factors to take into account, it was achieved by that choosing the research topic defines the principle of investigation.
- Referring to determining the area of study of the investigation was achieved since the best methodology can be chosen; qualitative, quantitative or mixed.
- In terms of presenting the different types of data collection, it was achieved since the different types of data collection were presented data according to the methodology.

- Finally, as regards how the controversy of
  selection of methodology, was achieved since this is the prerogative of the
  researcher decide which one will best suit what you want
  achieve.

Scientific research is a process with a set of steps governed by
norms and generic rules of scientific action. Indicates basic steps that
depend on the particular scientific discipline, the problem, the degree of

The selection of the best research methodology will be determined by the
knowledge of the different types of methodologies and complemented by the
knowledge of the problem to be solved. This is why it is important
know in depth the aspects of the set of coherent decisions,
general and abstract about how to obtain the data of what is studied. It's here
when the researcher determines which is the best methodology to use in his
private investigation.

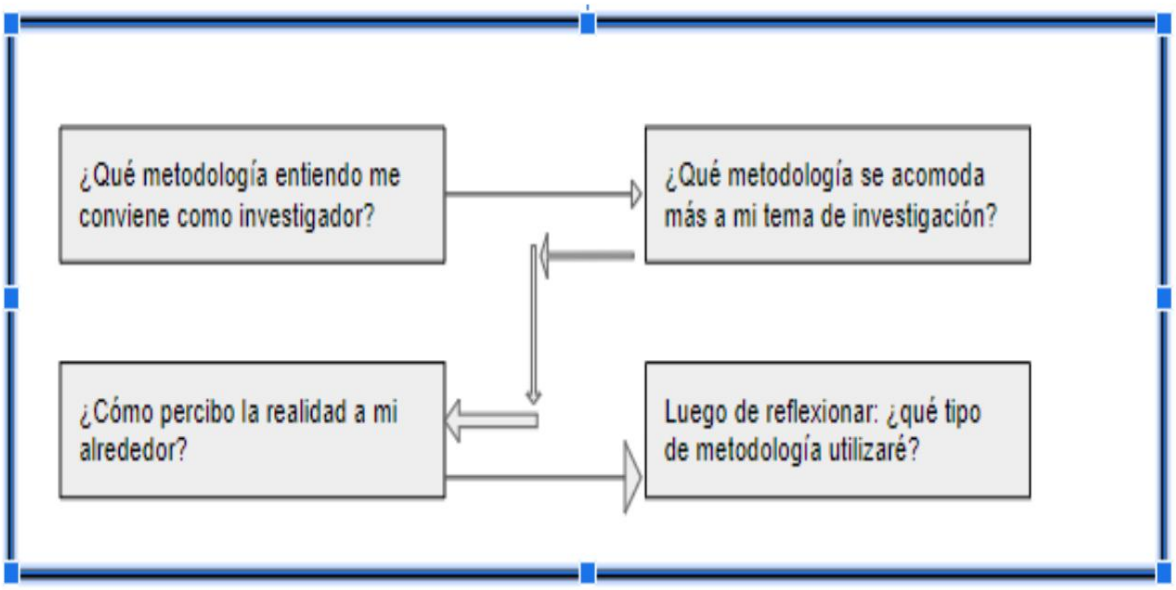

Fig. 9 Reflection on selection of research methodology. (personal interpretation)

In conclusion, for the investigation to be successful, one of the most important is the planning of what is intended to be investigated based on the data and results found during the process. If the researcher knows and masters The factors that must be taken into account in the choice of a methodology of research, then you can choose the best one that suits your need investigative.

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